<u>INSTRUCTIONS</u>

ABOUT IDOT PROPOSALS: All proposals are potential bidding proposals. Each proposal contains all certifications and affidavits, a proposal signature sheet and a proposal bid bond.

PREQUALIFICATION

Any contractor who desires to become pre-qualified to bid on work advertised by IDOT must submit the properly completed pre-qualification forms to the Bureau of Construction no later than 4:30 p.m. prevailing time twenty-one days prior to the letting of interest. This pre-qualification requirement applies to first time contractors, contractors renewing expired ratings, contractors maintaining continuous pre-qualification or contractors requesting revised ratings. To be eligible to bid, existing pre-qualification ratings must be effective through the date of the letting.

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.

REQUESTS FOR AUTHORIZATION TO BID

Contractors wanting to bid on items included in a particular letting must submit the properly completed "Request for Authorization to Bid/or Not For Bid Status" (BDE 124) and the ORIGINAL "Affidavit of Availability: (BC 57) to the proper office no later than 4:30 p.m. prevailing time, three (3) days prior to the letting date.

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?: When a prospective prime bidder submits a "Request for Authorization to Bid or Not for Bid Status" (BDE 124) 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 an Authorization to Bid or Not for Bid Report, approved by the Central Bureau of Construction and the Chief Procurement Officer that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Authorization to Bid or Not for Bid Report will indicate the reason for denial.

ABOUT AUTHORIZATION TO BID: Firms that have not received an Authorization to Bid or Not For Bid Report within a reasonable time of complete and correct original document submittal should contact the department as to the status. Firms unsure as to authorization status should call the Prequalification Section of the Bureau of Construction at the number listed at the end of these instructions. These documents must be received three days before the letting date.

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

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

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

IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL FAILURES.

Addenda questions may be directed to the Contracts Office at (217)782-7806 or D&Econtracts@dot.il.gov

Technical questions about downloading these files may be directed to Tim Garman at (217)524-1624 or Timothy.Garman@illinois.gov.

BID SUBMITTAL GUIDELINES AND CHECKLIST

In an effort to eliminate confusion and standardize the bid submission process the Contracts Office has created the following guidelines and checklist for submitting bids.

This information has been compiled from questions received from contractors and from inconsistencies noted on submitted bids. If you have additional questions please refer to the contact information listed below.

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

STANDARD GUIDELINES FOR SUBMITTING BIDS

- All pages should be single sided.
- Use the Cover Page that is provided in the Bid Proposal (posted on the IDOT Web Site) as the first page of your submitted bid. This page has the Item number in the upper left-hand corner and lines provided for your company name and address in the upper right-hand corner.
- Do not use report covers, presentation folders or special bindings and do not staple multiple times on left side like a book. Use only 1 staple in the upper left hand corner. Make sure all elements of your bid are stapled together including the bid bond or guaranty check (if required).
- Do not include any certificates of eligibility, your authorization to bid, Addendum Letters or affidavit of availability.
- Do not include the Subcontractor Documentation with your bid (pages 33-41). This documentation is required only after you are awarded the contract.
- Use the envelope cover sheet (provided with the proposal) as the cover for the proposal envelope.
- Do not rely on overnight services to deliver your proposal prior to 10 AM on letting day. It will not be read if it is delivered after 10 AM.
- Do not submit your Substance Abuse Prevention Program (SAPP) with your bid. If you are awarded the contract this form is to be submitted to the Division Construction Engineer at the pre-construction conference.

Use the following checklist to ensure completeness and the correct order in assembling your bid

□ Illinois Office Affidavit (Not applicable to federally funded projects) Insert your affidavit after page 4 (if applicable).
□ Cover page (the sheet that has the item number on it) followed by your bid (the Pay Items). If you are using special software or CBID to generate your schedule of prices, do not include the blank schedule of prices.
□ Page 4 (Item 10) - Check "YES" if you will use a subcontractor(s). Include the subcontractor(s) name, address, general type of work to be performed and the dollar amount (if over \$50,000). If you will use subcontractor(s) but are uncertain who or the dollar amount; check "YES" but leave the lines blank.
□ Page 10 (Paragraph J) - Check "YES" or "NO" whether your company has any business in Iran.
□ Page 10 (Paragraph K) – (Not applicable to federally funded projects) List the Union Local Name and number or certified training programs that you have in place. Your bid will not be read if this is not completed. Do not include certificates with your bid. Keep the certificates in your office in case they are requested by IDOT.
□ Page 11 (Paragraph L) - A copy of your State Board of Elections certificate of registration is no longer required with your bid.
□ Page 11 (Paragraph M) – Indicate if your company has hired a lobbyist in connection with the job for which you are submitting the bid proposal.
□ Page 12 (Paragraph C) - This is a work sheet to determine if a completed Form A is required. It is not part of the form and you do not need to make copies for each Form A that is filled out.

□ Pages 14-17 (Form A) - One Form A (4 pages) is required for each applicable person in your company. Copies of the Forms can be used and only need to be changed when the financial information changes. The certification <u>signature and date must be original</u> for each letting. Do not staple the forms together.
If you answered "NO" to all of the questions in Paragraph C (page 12), complete the first section (page 14) with your company information and then sign and date the Not Applicable statement on page 17.
□ Page 18 (Form B) - If you check "YES" to having other current or pending contracts it is acceptable to use the phrase, "See Affidavit of Availability on file". Ownership Certification (at the bottom of the page) — Check N/A it the Form A you submitted accounts for 100 percent of the company ownership. Check YES if any percentage of ownership falls outside of the parameters that require reporting on the Form A. Checking NO indicates that the Form A you submitted is not correct and you will be required to submit a revised Form A.
□ Pages 20-21 (Workforce Projection) - Be sure to include the Duration of the Project. It is acceptable to use the phrase "Per Contract Specifications".
□ Bid Bond - Submit your bid bond using the current Bid Bond Form provided in the proposal package. The Power of Attorney page should be stapled to the Bid Bond. If you are using an electronic bond, include your bid bond number on the form and attach the Proof of Insurance printed from the Surety 2000 Web Site.
□ Disadvantaged Business Utilization Plan and/or Good Faith Effort - The last item in your bid should be the DBE Utilization Plan (SBE 2026), followed by the DBE Participation Statement (SBE 2025) and supporting paperwork. If you have documentation for a Good Faith Effort, it should follow the SBE Forms.
The Bid Letting is now available in streaming Audio/Video from the IDOT Web Site. A link to the stream will be placed on the main page of the current letting on the day of the Letting. The stream will not begin until 10 AM. The actual reading of the bids does not begin until approximately 10:20 AM.
Following the Letting, the As-Read Tabulation of Bids will be posted by the end of the day. You will find the link on the main page of the current letting.
QUESTIONS: pre-letting up to execution of the contract
Contractor/Subcontractor pre-qualification
QUESTIONS: following contract execution
Including Subcontractor documentation, payments217-782-3413 Railroad Insurance217-785-0275

25A

Proposal Submitted By	
Name	
Address	
City/State	9 Digit Zip Code
Telephone No.	Fax No.
Federal Employer Identificat	on No. (FEIN)
Email Address	

Letting June 14, 2013

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.

BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL

Notice to Bidders, Specifications, Proposal, Contract and Contract Bond



Contract No. QU015
Quad City International Airport
Moline, Illinois
Rock Island County
Illinois Project No. MLI-4080
AIP Project No. 3-17-0068-XX

For engineering information, contact Jeff McKay, P.E. of Missman, Inc. at (309) 283-1588.

FAA	rules	prohibit	the	use	of
escala	ation	clauses	for	mater	ials.
There	fore, th	e Division	of A	eronau	ıtics
canno	t offe	er any	mate	rial (cost
adjust	ment	provision	s for	proj	ects
that u	tilize Fe	deral fund	ds.		

PLEASE MARK THE APPROPRIATE BOX BELOW:
A Bid Bond is included.
A <u>Cashier's Check</u> or a <u>Certified Check</u> is included.



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1.	Proposal of	
Taxpaye	er Identification Number (Mandatory)	

For the improvement identified and advertised for bids in the Invitation for Bids as:

Contract No. QU015
Quad City International Airport
Moline, Illinois
Rock Island County
Illinois Project No. MLI-4080
AIP Project No. 3-17-0068-XX

RGL, ALCMS, and Pavement Marking

- 2. The undersigned bidder will furnish all labor, material and equipment to complete the above described project in a good workmanlike manner as provided in the contract documents provided by the Department of Transportation. This proposal will become part of the contract and the terms and conditions contained in the contract documents shall govern performance and payments.
- 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 Base Bid: 176 calendar days; Additive Alternate 1: 10 additional calendar days; Additive Alternate 2: 8 additional calendar days, unless additional time is granted by the Engineer in accordance with the provisions of the specifications. In case of failure to complete the work on or before the time named herein, or within such extra time as may have been allowed by extensions, the bidder agrees that the Department of Transportation shall withhold from such sum as may be due him/her under the terms of this contract, the costs, as set forth 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.

	Schedule of Deduct Day of Overrun in C		
Original Cor	ntract Amount	Daily Cha	arges
From More Than	To and Including	Calendar Day	Work Day
\$ 0	\$ 100,000	\$ 475	\$ 675
100,000	500,000	750	1,050
500,000	1,000,000	1,025	1,425
1,000,000	3,000,000	1,275	1,725
3,000,000	6,000,000	1,425	2,000
6,000,000	12,000,000	2,300	3,450
12,000,000	And over	5,800	8,125

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

- 4. **ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER.** The undersigned further declares that he/she has carefully examined the proposal, plans, specifications, supplemental and applicable recurring special provisions, addenda, form of contract and contract bond, 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 BOND.** The undersigned further agrees to execute a contract for this work and present the same to the department within fifteen (15) days after the contract has been mailed to him/her. The undersigned further agrees that he/she and his/her surety will execute and present within fifteen (15) days after the contract has been mailed to him/her contract bond satisfactory to and in the form prescribed by the Department of Transportation, in the penal sum of the full amount of the contract, guaranteeing the faithful performance of the work in accordance with the terms of the contract.
- 6. PROPOSAL GUARANTY. Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

<u>A</u>	mount (of Bid	Proposal <u>Guaranty</u>	<u>Am</u>	ount o	of Bid	Proposal <u>Guaranty</u>
Up 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	of the proposal guaranty shall become
the property of the State of Illinois, and shall be considered as payment of damag	jes due to delay and other causes	s suffered by the State because of the
failure to execute said contract and contract bonds; otherwise, the bid bond shall	Il become void or the proposal gu	uaranty check shall be returned to the
undersigned.		

Attach Cashier's Check or Certified Check Here In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual proposal. If the guaranty check is placed in another proposal, state below where it may be found. The proposal guaranty check will be found in the proposal for: Item Airport Airport

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

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

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		Combination	Bid
No.	Sections Included in Combination	Dollars	Cents
			+

- 8. SCHEDULE OF PRICES. The undersigned submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices shall govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
- 9. AUTHORITY TO DO BUSINESS IN ILLINOIS. Section 20-43 of the Illinois Procurement Code (the Code) (30 ILCS 500/20-43) provides that a person (other than an individual acting as a sole proprietor) must be a legal entity authorized to do business in the State of Illinois prior to submitting the bid.
- 10. The services of a subcontractor will be used.

Check box Check box	
	subcontractors with subcontracts with an annual value of more than \$50,000, the contract shall include their name, neral type of work to be performed, and the dollar allocation for each subcontractor. (30 ILCS 500/20-120)

11. EXECUTION OF CONTRACT. The Department of Transportation will, in accordance with the rules governing Department procurements, execute the contract and shall be the sole entity having the authority to accept performance and make payments under the contract. Execution of the contract by the Chief Procurement Officer (CPO) or the State Purchasing Officer (SPO) is for approval of the procurement process and execution of the contract by the Department. Neither the CPO nor the SPO shall be responsible for administration of the contract or determinations respecting the performance or payment there under except as otherwise permitted in the Code.

STATE JOB #- - -

ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - QU015

ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 05/21/13 RUN TIME - 183134

COUNTY NAME CODE DI	ST AIRPORT NAME	FED PROJECT	ILL PROJECT
ROCK ISLAND 161 C	QUAD CITY INTERNATIONAL	3-17-0068-XX	ML-I -4080

***** BASE *****

ITEM		UNIT OF		UNIT PRIC		TOTAL PRIC	
NUMBER	PAY ITEM DESCRIPTION	<u>MEASURE</u> _	QUANTITY	DOLLARS	CENTS	DOLLARS	CTS
AR108051	POWER CABLE IN UNIT DUCT	L.F.	4,500.000 X		 	:	
AR108258	2/C #8 5 KV UG CABLE IN UD	L.F.	37,500.000 X			:	
AR108962	REPLACE CABLE	L.F.	13,100.000 X			:	
AR109210	VAULT MODIFICATIONS	L.S.	1.000 X		=	:	
AR109301	4 KW REGULATOR, STYLE 1	EACH	2.000 X		 	· · · · · · · · · · · · · · · · · · ·	
AR109630	LIGHTING CONTROL COMPUTER SYSTEM	L.S.	1.000 X		=	:	
AR109907	REMOVE TRANSFORMER	EACH	1.000 X			:	
AR109962	RELOCATE ELECTRICAL EQUIPMENT	L.S.	1.000 X		=======================================	:	
AR110014	4" DIRECTIONAL BORE	L.F.	6,330.000 X		=	:	
AR110710	ELECTRICAL MANHOLE	EACH	3.000 X		= = =	:	
AR125902	REMOVE BASE MOUNTED LIGHT	EACH	1.000 X		=======================================	:	
AR125906	REMOVE SPLICE CAN	EACH	6.000 X		=	:	
AR125966	RELOCATE SPLICE CAN	EACH	2.000 X		 	:	
AR150510	ENGINEER'S FIELD OFFICE	L.S.	1.000 X		= = = =		
AR150530	TRAFFIC MAINTENANCE	L.S.	1.000 X		 	:	
I					I		.

QUAD CITY INTERNATIONAL ROCK ISLAND

ILLINOIS DEPARTMENT OF TRANSPORTATION ECMSO02 DTGECM03 ECMR003 PAGE SCHEDULE OF PRICES CONTRACT NUMBER - QU015

RUN DATE - 05/21/13 RUN TIME - 183134

ITEM	DAY ITEM DECORIBITION	UNIT OF	OLIANITITY	UNIT PRI		TOTAL PRIC	
NUMBER	PAY ITEM DESCRIPTION	_ MEASURE _	QUANTITY	DOLLARS	CENTS	DOLLARS	CTS
AR156500	TEMPORARY EROSION CONTROL	L.S.	1.000 🐰	(=		
AR620510	PAVEMENT MARKING	S.F.	2,715.000	(=		
AR620900	PAVEMENT MARKING REMOVAL	S.F.	41,590.000	(=		
AR801603	FIBER OPTIC CABLE IN 2" UD	L.F.	9,550.000	(=======================================		
AR801634	RUNWAY GUARD LIGHT	EACH	55.000 X	(=		
AR801639	REFURBISH RUNWAY GUARD LIGHT	EACH	1.000 X	(
AR801640	PREFORMED THERMOPLASTIC MARKING	S, F.	37,600.000 X	([
AR801645	FO JUNCTION ENCLOSURES	L.S.	1.000 X	(=		
					[.1

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

3

QUAD CITY INTERNATIONAL ROCK ISLAND

ILLINOIS DEPARTMENT OF TRANSPORTATION ECMS002 DTGECM03 ECMR003 PAGE SCHEDULE OF PRICES CONTRACT NUMBER - QU015

RUN DATE - 05/21/13 RUN TIME - 183134

***** ALT 1 *****

ITEM		UNIT OF		UNIT PRI		TOTAL PRIC	
NUMBER	PAY ITEM DESCRIPTION	MEASURE _	QUANTITY	<u>DOLLARS</u>	CENTS	DOLLARS	CTS
AS150530	TRAFFIC MAINTENANCE	L.S.	1.000 X	(
AS620510	PAVEMENT MARKING	S.F.	69,850.000 X	(=		
AS620900	PAVEMENT MARKING REMOVAL	S.F.	71,970.000 X		=		- [

SUBTOTAL ALT 1

QUAD CITY INTERNATIONAL ROCK ISLAND

ILLINOIS DEPARTMENT OF TRANSPORTATION ECMS002 DTGECM03 ECMR003 PAGE SCHEDULE OF PRICES CONTRACT NUMBER - QU015

RUN DATE - 05/21/13 RUN TIME - 183134

***** ALT 2 *****

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE DOLLARS CENTS	TOTAL PRICE DOLLARS CTS
AT101510	AIRPORT ROTATING BEACON				=
AT103410	BEACON TOWER	EACH	 1.000 X		[
AT103900	REMOVE BEACON TOWER	EACH	1.000 X		=
AT110212	2" STEEL DUCT, DIRECT BURY	L.F.	42.000 X		=
AT110217	1 1/2" STEEL DUCT, DIRECT BURY	L.F.	 18.000 X		
AT110710	ELECTRICAL MANHOLE	EACH	1.000 X		=
AT150530	TRAFFIC MAINTENANCE	L.S.	1.000 X		=
AT152419	UNCLASSIFIED DISPOSAL OFFSITE	С.Ү.	7.000 X		
AT 162510	CLASS E FENCE 10'	L.F.	65.000 X		=
AT 162604	CLASS E GATE-4'	EACH	1.000 X		=
AT209510	CRUSHED AGGREGATE BASE COURSE	TON	16.000 X		
AT209600	GEOTEXTILE FABRIC	S.Y.	40.000 X		=
AT801641	REPLACE TOWER FOUNDATION	EACH	1.000 X		 =
					I I

SUBTOTAL	ALT	2	\$
			:

5

QUAD CITY INTERNATIONAL ROCK ISLAND

ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - QU015

ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 05/21/13 RUN TIME - 183134 CONTRACT - QU015

SUMMAF	RY OF	=	TOTA	\L	ALTERNATES		Γ
 TOTAL	BASE	=	\$		DOLLARS	CTS	
TOTAL	ALT	1	\$				_
TOTAL	ALT	2	\$ \$				

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.

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

I. GENERAL

- **A.** Article 50 of the Code establishes the duty of all State CPOs, SPOs, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.
- **B.** In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. Except as otherwise required in subsection III. paragraphs J-M, by execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances has been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.
- **C.** In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for the CPO to void the contract, and may result in the suspension or debarment of the bidder or subcontractor. If a false certification is made by a subcontractor, the contractor's submitted bid and the executed contract may not be declared void unless the contractor refuses to terminate the subcontract upon the States' request after a finding that the subcontractor's certification was false.

II. ASSURANCES

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

A. Conflicts of Interest

1. The Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

- (a) Prohibition. It is unlawful for any person holding an elective office in this State, holding a seat in the General Assembly, or appointed to or employed in any of the offices or agencies of state government and who receives compensation for such employment in excess of 60% of the salary of the Governor of the State of Illinois, or who is an officer or employee of the Capital Development Board or the Illinois Toll Highway Authority, or who is the spouse or minor child of any such person to have or acquire any contract, or any direct pecuniary interest in any contract therein, whether for stationery, printing, paper, or any services, materials, or supplies, that will be wholly or partially satisfied by the payment of funds appropriated by the General Assembly of the State of Illinois or in any contract of the Capital Development Board or the Illinois Toll Highway Authority.
- (b) Interests. It is unlawful for any firm, partnership, association or corporation, in which any person listed in subsection (a) is entitled to receive (i) more than 7 1/2% of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.
- (c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than 15%, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.
- (d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.
- (e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 days after the officer, member, or employee takes office or is employed.

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

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

B. Negotiations

1. The Code provides in pertinent part:

Section 50-15. Negotiations.

- (a) It is unlawful for any person employed in or on a continual contractual relationship with any of the offices or agencies of State government to participate in contract negotiations on behalf of that office or agency with any firm, partnership, association, or corporation with whom that person has a contract for future employment or is negotiating concerning possible future employment.
- 2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-15, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

C. Inducements

1. The Code provides:

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

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

D. Revolving Door Prohibition

1. The Code provides:

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

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

E. Reporting Anticompetitive Practices

1. The Code provides:

Section 50-40. Reporting anticompetitive practices. When, for any reason, any vendor, bidder, contractor, CPO, SPO, 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 CPO.

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

F. Confidentiality

1. The Code provides:

Section 50-45. Confidentiality. Any CPO, SPO, 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.

G. Insider Information

1. The Code 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

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

A. Bribery

1. The Code provides:

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
 - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
 - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
 - (1) the business has been finally adjudicated not guilty; or
 - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.
- 2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

B. Felons

1. The Code provides:

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

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

C. <u>Debt Delinquency</u>

1. The Code provides:

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

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

D. Prohibited Bidders, Contractors and Subcontractors

1. The Code provides:

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

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

E. Section 42 of the Environmental Protection Act

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-14 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the CPO may declare the contract void if this certification is false.

F. Educational Loan

- 1. Section 3 of the Educational Loan Default Act provides:
- § 3. No State agency shall contract with an individual for goods or services if that individual is in default, as defined in Section 2 of this Act, on an educational loan. Any contract used by any State agency shall include a statement certifying that the individual is not in default on an educational loan as provided in this Section.
- 2. The bidder, if an individual as opposed to a corporation, partnership or other form of business organization, certifies that the bidder is not in default on an educational loan as provided in Section 3 of the Act.

G. Bid-Rigging/Bid Rotating

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

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

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

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

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

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

H. International Anti-Boycott

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

I. Drug Free Workplace

- 1. The Illinois "Drug Free Workplace Act" applies to this contract and it is necessary to comply with the provisions of the "Act" if the contractor is a corporation, partnership, or other entity (including a sole proprietorship) which has 25 or more employees.
- 2. The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace by:
- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the contractor's workplace; specifying the actions that will be taken against employees for violations of such prohibition; and notifying the employee that, as a condition of employment on such contract, the employee shall abide by the terms of the statement, and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- (b) Establishing a drug free awareness program to inform employees about the dangers of drug abuse in the workplace; the contractor's policy of maintaining a drug free workplace; any available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug violations.
- (c) Providing a copy of the statement required by subparagraph (1) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.
- (d) Notifying the Department within ten (10) days after receiving notice from an employee or otherwise receiving actual notice of the conviction of an employee for a violation of any criminal drug statute occurring in the workplace.
- (e) Imposing or requiring, within 30 days after receiving notice from an employee of a conviction or actual notice of such a conviction, an appropriate personnel action, up to and including termination, or the satisfactory participation in a drug abuse assistance or rehabilitation program approved by a federal, state or local health, law enforcement or other appropriate agency.
- (f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.
- (g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the actions and efforts stated in this certification.

J. Disclosure of Business Operations in Iran

Section 50-36 of the Code, 30ILCS 500/50-36 provides that each bid, offer, or proposal submitted for a State contract shall include a disclosure of whether or not the Company acting as the bidder, offeror, or proposing entity, or any of its corporate parents or subsidiaries, within the 24 months before submission of the bid, offer, or proposal had business operations that involved contracts with or provision of supplies or services to the Government of Iran, companies in which the Government of Iran has any direct or indirect equity share, consortiums or projects commissioned by the Government of Iran and either of the following conditions apply:

- (1) More than 10% of the Company's revenues produced in or assets located in Iran involve oil-related activities or mineral-extraction activities; less than 75% of the Company's revenues produced in or assets located in Iran involve contracts with or provision of oil-related or mineral-extraction products or services to the Government of Iran or a project or consortium created exclusively by that government; and the Company has failed to take substantial action.
- (2) The Company has, on or after August 5, 1996, made an investment of \$20 million or more, or any combination of investments of at least \$10 million each that in the aggregate equals or exceeds \$20 million in any 12-month period, which directly or significantly contributes to the enhancement of Iran's ability to develop petroleum resources of Iran.

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

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

	of having done business in trait will be provided to the state comptioner.
	Check the appropriate statement:
	// Company has no business operations in Iran to disclose.
	// Company has business operations in Iran as disclosed in the attached document.
٠.	Apprenticeship and Training Certification (Does not apply to federal aid projects)
	In accordance with the provisions of Section 30-22 (6) of the Code, the bidder certifies that it is a participant, either as an individual or as participant, in the approved apprenticeship and training programs applicable to each type of work or craft that the bidder will perform with its own forces. The bidder further certifies for work that will be performed by subcontract that each of its subcontractors submitted frapproval either (a) is, at the time of such bid, participating in an approved, applicable apprenticeship and training program; or (b) will, prior commencement of performance of work pursuant to this contract, begin participation in an approved apprenticeship and training program applicable to the work of the subcontract. The Department, at any time before or after award, may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and an or all of its subcontractors. Applicable apprenticeship and training programs are those that have been approved and registered with the United States Department of Labor. The bidder shall list in the space below, the official name of the program sponsor holding the Certificate Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's forces. Type of work or craft work that will be subcontracted shall be included and listed as subcontracted work. The list shall also indicate any type of work or craft job category that does not have an applicable apprenticeship or training program. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project as reported on the Construction Employee Workforce Projection (Form BC-1256) and returned with the bid is accounted for and listed.
	NA-FEDERAL
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The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. In order to fulfill this requirement, it shall not be necessary that an applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract.

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

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

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

The undersigned business entity certifies that it has registered as a business with the State Board of Elections and acknowledges a continuing duty to update the registration in accordance with the above referenced statutes. If the business entity is required to register, the CPO shall verify that it is in compliance on the date the bid or proposal is due. The CPO shall not accept a bid or proposal if the business entity is not in compliance with the registration requirements.

These requirements and compliance with the above referenced statutory sections are a material part of the contract, and any breach thereof shall be cause to void the contract under Section 50-60 of the Code. This provision does not apply to Federal-aid contracts.

M. Lobbyist Disclosure

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

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

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

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

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

All cos	ts, fees, compensation, reimbursements and other remuneration paid to said person:
Name	contract: and address of person:
	Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with the
	Or
	Bidder has not hired any person required to register pursuant to the Illinois Lobbyist Registration Act in connection with this contract.

IV. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Code provides that all bids of more than \$25,000 shall be accompanied by disclosure of the financial interests of the bidder. This disclosed information for the successful bidder, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the contract. Furthermore, pursuant to Section 5-5, the Procurement Policy Board may review a proposal, bid, or contract and issue a recommendation to void a contract or reject a proposal or bid based on any violation of the Code or the existence of a conflict of interest as provided in subsections (b) and (d) of Section 50-35.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

The current annual salary of the Governor is \$177,412.00

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. <u>Disclosure Forms</u>. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. A separate Disclosure Form A must be submitted with the bid for each individual meeting the above requirements. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies and a total ownership certification. **The forms must be included with each bid.**

C. <u>Disclosure Form Instructions</u>

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

1.	Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO
2.	Does anyone in your organization have a direct or beneficial ownership share of less than 5% , but which has a value greater than 60% of the annual salary of the Governor? YES NO
3.	Does anyone in your organization receive more than 60% of the annual salary of the Governor 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.) YESNO
4	Does anyone in your organization receive greater than 5% of the hidding entity's or parent entity's total distributive income, but which is less

 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 60% of the annual salary of the Governor? YES ______ NO _____

(Note: Only one set of forms needs to be completed <u>per person per bid</u> 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 <u>NOT APPLICABLE STATEMENT</u> of Form A must be signed and dated by a person that is authorized to execute contracts for your company.

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

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

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

Contractor Name				
Legal Address				
City, State, Zip				
Telephone Numb	per	Email Address	Fax Number (if available)	
desiring to ent nterest inform contract file. T traded compa forth in Form	ter into a contract with the lation as specified in this This Form A must be compl	State of Illinois must dis Disclosure Form. This leted for bids in excess o sclosure (or equivalent Instructions.	the Section 50-35 of the Code (30 ILCS sclose the financial information and pote information shall become part of the perf \$25,000, and for all open-ended contraining if applicable) in satisfaction of the research	ential conflict ublicly availab acts. A public
	DISC	CLOSURE OF FINANCIA	L INFORMATION	
terms of owner annual salary o each individu	rship or distributive income	share in excess of 5%, opies of this form as neonets)	d below has an interest in the BIDDER (or an interest which has a value of more ressary and attach a separate Disclos	than 60% of th
ADDRESS	3			
Type of ow	/nership/distributable incom	ne share:		
stock % or \$ valu	sole proprietorship e of ownership/distributable in	partnership come share:	other: (explain on separate sheet)	
			o indicate which, if any, of the following poten attach additional pages and describe.	itial conflict of
(a) Sta	ate employment, currently o	or in the previous 3 years	including contractual employment of se	
ans	swer is yes, please answer	each of the following que		NoIf your
1.	Are you currently an offic Highway Authority?	er or employee of either	the Capitol Development Board or the Illi Yes	
2.	appointed to or employed	d by any agency of the St	y agency of the State of Illinois? If you a ate of Illinois, and your annual salary ex me of the State agency for which you are	ceeds 60% of

your annual salary.

3.	If you are currently appointed to or employed by any agency of the State salary exceeds 60% of the annual salary of the Governor, are you entitle of the total distributable income of your firm, partnership, association or excess of 100% of the annual salary of the Governor?	ed to rec	eive (i) m	ore tha	an 7 1/2%
4.	If you are currently appointed to or employed by any agency of the State salary exceeds 60% of the annual salary of the Governor, are you and yentitled to receive (i) more than 15 % in the aggregate of the total distrib partnership, association or corporation, or (ii) an amount in excess of tw Governor?	our spou outable in	ise or min	nor chi your fir	ldren m,
	te employment of spouse, father, mother, son, or daughter, including coprevious 2 years.	ntractual Yes		nent fo	
If yo	our answer is yes, please answer each of the following questions.				
1.	Is your spouse or any minor children currently an officer or employee of or the Illinois State Toll Highway Authority?	the Capi	tal Devel Yes	opmen –	t Board No
2.	Is your spouse or any minor children currently appointed to or employed Illinois? If your spouse or minor children is/are currently appointed to or State of Illinois, and his/her annual salary exceeds 60% of the annual saname of your spouse and/or minor children, the name of the State agen and his/her annual salary.	employed alary of the	ed by any ne Gover	agend	cy of the ovide the
3.	If your spouse or any minor children is/are currently appointed to or emp State of Illinois, and his/her annual salary exceeds 60% of the annual sa are you entitled to receive (i) more than 7 1/2% of the total distributable firm, partnership, association or corporation, or (ii) an amount in excess annual salary of the Governor?	alary of the	ne Gover of your		the
4.	If your spouse or any minor children are currently appointed to or emplostate of Illinois, and his/her annual salary exceeds 60% of the annual sand your spouse or minor children entitled to receive (i) more than 15% aggregate of the total distributable income of your firm, partnership, asset (ii) an amount in excess of two times the salary of the Governor?	alary of the	ne Gover	nor, ar	e you
, ,	ctive status; the holding of elective office of the State of Illinois, the gany unit of local government authorized by the Constitution of the Staf Illinois currently or in the previous 3 years.		iois or th		ites of the
(d) Relation	ationship to anyone holding elective office currently or in the previous 2 yighter	/ears; spo Yes		ner, mo No	
Americ State of	pointive office; the holding of any appointive government office of the State, or any unit of local government authorized by the Constitution of the State of Illinois, which office entitles the holder to compensation in excessing of that office currently or in the previous 3 years.	tate of Illi	inois or the expenses	ne stati	utes of the red in the
	ationship to anyone holding appointive office currently or in the previous 2 daughter.	years; s Yes		ther, n	
 (g) Em	ployment, currently or in the previous 3 years, as or by any registered lob	byist of t Yes		govern No	

(n) Relationship to anyone who is or was a registered lobbyi son, or daughter.	st in the previous 2 years; s Yes	
(i) Compensated employment, currently or in the previous committee registered with the Secretary of State or any count committee registered with either the Secretary of State or the F	ty clerk of the State of Illinois	
	Yes	No
(j) Relationship to anyone; spouse, father, mother, son, or data a years by any registered election or re-election commic county clerk of the State of Illinois, or any political action commithe Federal Board of Elections.	ittee registered with the Sec	retary of State or any ne Secretary of State or
3. Communication Disclosure.		
Disclose the name and address of each lobbyist and other agent of the of this form, who has communicated, is communicating, or may concerning the bid or offer. This disclosure is a continuing obligation throughout the process and throughout the term of the contract. If no process are continuing of the contract.	communicate with any Staten and must be promptly supp	e officer or employee elemented for accuracy
Name and address of person(s):	_	

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity;

professional licensure discipline; bankruptcies; adverse civil judgments and administrativ convictions. This disclosure is a continuing obligation and must be promptly supplement procurement process and term of the contract. If no person is identified, enter "None" on the	ed for accuracy	
Name of person(s):		
Nature of disclosure:		
APPLICABLE STATEMENT		
This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous penalty of perjury, I certify the contents of this disclosure to be true and accurate to knowledge.		
Completed by:		
Signature of Individual or Authorized Officer	Date	
NOT APPLICABLE STATEMENT		
Under penalty of perjury, I have determined that no individuals associated with this of the criteria that would require the completion of this Form A.	organization me	et
This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the pre	evious page.	
Signature of Authorized Officer	Date	

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Procurement Related Information Disclosure

Contractor Name									
Legal Address									
City, State, Zip									
Telephone Number	Email Address	Fax Number (if available)							
Disclosure of the information contained in this Form is required by the Section 50-35 of the Code (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 \$25,000, and for all open-ended contracts.									
DISCLOSURE OF OTHER	CONTRACTS AND PROCUREM	IENT RELATED INFORMATION							
 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 suinformation such as bid or project nun INSTRUCTIONS:									
THE FOLL	OWING STATEMENT MUST BE	CHECKED	THE FOLLOWING STATEMENT MUST BE CHECKED						
Siq	gnature of Authorized Representative								
Sig	gnature of Authorized Representative	Date							
Sig	gnature of Authorized Representative	Date							
Sig	gnature of Authorized Representative	Date							
Sig	gnature of Authorized Representative OWNERSHIP CERITIFICATION								
Please certify that the following statement of ownership.	OWNERSHIP CERITIFICATION	<u>N</u>	100%						
Please certify that the following statement of ownership.	OWNERSHIP CERITIFICATION is true if the individuals for all substitute is held by individuals receiving le	N omitted Form A disclosures do not total of ss than \$106,447.20 of the bidding entit							

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.



Contract No. QU015 Quad City International Airport Moline, Illinois Rock Island County Illinois Project No. MLI-4080 AIP Project No. 3-17-0068-XX

BC 1256 (Rev. 12/11/07)

PART I. IDENTIFIC	CATION									Ai		501 140. 5	-17-00	, OO-,	// /			
Dept. Human Right	s#						_ Dur	ation o	f Proje	ct:								
Name of Bidder: _																		
PART II. WORKFO A. The undersigned which this contract wo projection including a	l bidder ha	as analyz e perform	ed mir ed, an	d for th d fema	ne locat	ions fro	m whi	ch the b	idder re	cruits	employe	es, and he	reby su	ıbmi	ts the foll	owii con	ng workfo	n orce
		TOTA	AL Wo		Projec	tion for	Contra	act						С	URRENT	ΕN		S
				MINI	ORITY	EMPL C	YEES	<u> </u>		TR	AINEES				TO BE			
JOB CATEGORIES		TAL OYEES F	BL/	ACK F	HISP		*OT	HER NOR.	APPF TIC	REN-	ON T	HE JOB INEES F	EN	MPL	TAL OYEES F		MINC EMPLO M	RITY DYEES F
OFFICIALS (MANAGERS)	101	,	141	Ċ	141	·	101				141	'					101	
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		
	ΙΑΙ ΓΟΤΑL Tr	BLE C	nioctio	n for C	ontract				1			FOR 1	DEPAF	RTM	ENT US	ЕΟ	NLY	
EMPLOYEES		TAL	Jectio	11010	Onliaci		*0	THER	-									
IN		OYEES	BLA	ACK	HISF	ANIC		INOR.										
TRAINING	М	F	М	F	М	F	М	F	1									
APPRENTICES																		
ON THE JOB TRAINEES																		
*	Other minor	ities are de	fined as	Asians	(A) or Na	tive Ame	ericans ((N).										

Please specify race of each employee shown in Other Minorities column.

Note: See instructions on page 2

Contract No. QU015
Quad City International Airport
Moline, Illinois
Rock Island County
Illinois Project No. MLI-4080
AIP Project No. 3-17-0068-XX

BC-1256 (Rev. 12/11/07)

PART II. WORKFORCE PROJECTION - continued

В.		ed in "Total Employees" under Table A is the total number of new hires that would be ensigned bidder is awarded this contract.	mployed in the event the
	The ur area ir recruit	ndersigned bidder projects that: (number) new hire a which the contract project is located; and/or (number) ed from the area in which the bidder's principal office or base of operation is located.	es would be recruited from the new hires would be
C.		ed in "Total Employees" under Table A is a projection of numbers of persons to be emploas well as a projection of numbers of persons to be employed by subcontractors.	oyed directly by the undersigned
	The ur emplo	ndersigned bidder estimates that (number)persons will be	persons will be directly employed by subcontractors.
PART	III. AFFII	RMATIVE ACTION PLAN	
A.	project and in and su wherel	ndersigned bidder understands and agrees that in the event the foregoing minority and fection included under PART II is determined to be an underutilization of minority persons of the event that the undersigned bidder is awarded this contract, he/she will, prior to complemit a written Affirmative Action Plan including a specific timetable (geared to the complementary deficiencies in minority and/or female employee utilization are corrected. Such Affirm roval by the contracting agency and the Department of Human Rights .	or women in any job category, mencement of work, develop letion stages of the contract)
B.	and th	ndersigned bidder understands and agrees that the minority and female employee utilizate goals and timetable included under an Affirmative Action Plan if required, are deemed cations.	ation projection submitted herein, to be part of the contract
Comp	any	Telephone Number	
Addre	ss		
		NOTICE REGARDING SIGNATURE	
	The Bid needs to	der's signature on the Proposal Signature Sheet will constitute the signing of this form. be completed only if revisions are required.	The following signature block
	Signatu	re: Title:	Date:
Instruc	tions:	All tables must include subcontractor personnel in addition to prime contractor personnel.	
Table A	۸ -	Include both the number of employees that would be hired to perform the contract work and t (Table B) that will be allocated to contract work, and include all apprentices and on-the-job traines should include all employees including all minorities, apprentices and on-the-job trainees to be en	ees. The "Total Employees" column
Table I	3 -	Include all employees currently employed that will be allocated to the contract work including any currently employed.	apprentices and on-the-job trainees
Table (C -	Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.	

21

ADDITIONAL FEDERAL REQUIREMENTS

In addition to the Required Contract Provisions for Federally funded airport construction contracts, all bidders make the following certifications.

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.

В.	CE	RTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY
	1.	Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause? Yes No
	2.	If your answer 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

Contract No. QU015 Quad City International Airport Moline, Illinois Rock Island County Illinois Project No. MLI-4080 AIP Project No. 3-17-0068-XX

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)		
	Firm Name	
(IF A CO-PARTNERSHIP)		
,		
	Name and Address of	All Members of the Firm:
	-	-
	Corporate Name	
	Бу	Signature of Authorized Representative
(IF A CORPORATION)		Typed or printed name and title of Authorized Representative
(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING	Attest	Signature
PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)	Business Address	•
SHOOLD SIGN BELOW)	Dusiness Address	
	Corporate Name	
	z,	Signature of Authorized Representative
(IF A JOINT VENTURE)		Typed or printed name and title of Authorized Representative
	Attest	
		Signature
	Business Address	
If more than two parties are in the joint ve	nture, please attach additio	onal signature sheet



Division of Aeronautics Proposal Bid Bond

Sponsor		item iv	·
IL Proj. No.	AIP Pr. No.	Letting	Date
KNOW ALL MEN BY THESE P	RESENTS, That We		
DDINOIDAL and			
as PRINCIPAL, and			
specified in Section 6, Proposa	I Guaranty of the Proposal Documen		as SURETY, are of the total bid price, or for the amount truly to be paid unto said SPONSOR,
SPONSOR through its AGENT,			submitted a bid proposal to the for the improvement designated by the
and as specified in the bidding the award by AGENT on behalf documents, including evidence faithful performance of such cothe failure of the PRINCIPAL to pays to the SPONSOR the differance.	and contract documents, submit a D f of SPONSOR, the PRINCIPAL shall of the required insurance coverages ontract and for the prompt payment of make the required DBE submission because the penalty her contract with another party to perform	BE Utilization Plan that is accepted and enter into a contract in accordance wit and providing such bond as specified labor and material furnished in the pr or to enter into such contract and to gi of between the amount specified in the	INCIPAL; and if the PRINCIPAL shall, approved by the AGENT; and if, after the the terms of the bidding and contract with good and sufficient surety for the osecution thereof; or if, in the event of the specified bond, the PRINCIPAL be bid proposal and such larger amount al, then this obligation shall be null and
orth in the preceding paragrap SURETY does not make full pa	h, then SURETY shall pay the penal ayment within such period of time, th	sum to the SPONSOR within fifteen (1 AGENT may bring an action to collec	o comply with any requirement as set 5) days of written demand the refor. It the amount owed. SURETY is liable in which SPONSOR or AGENT prevails
In TESTIMONY WHERE	OF the said PRINCIPAL and the sai	SURETY have caused this instrument	t to be signed by
their respective officers	day of	A.D.,	t to be digited by
PRINCIPAL		SURETY	
(Compa	any Name)	(C	ompany Name)
D.,		D.v.	
3y(Si	gnature & Title)	By:(Signa	ture of Attorney-in-Fact)
	Notary Certificati	n for Principal and Surety	
STATE OF ILLINOIS,	-	•	
County of			
		,a Notary Public in and for said	County, do hereby certify that
<u></u>		, a Notary Public in and for said	County, do hereby certify that
<u> </u>			
who are each personally knowr	(Insert names of individuals sign on to me to be the same persons who de me this day in person and acknowle	and ing on behalf of PRINCIPAL & SURET e names are subscribed to the foregoi	Y) ng instrument on behalf of PRINCIPAL
who are each personally knowr	(Insert names of individuals sign to me to be the same persons who are me this day in person and acknowle and purposes therein set forth.	and ing on behalf of PRINCIPAL & SURET e names are subscribed to the foregoi	Y) ng instrument on behalf of PRINCIPAL I delivered said instrument as their free
who are each personally knowr and SURETY, appeared before and voluntary act for the uses a	(Insert names of individuals sign to me to be the same persons who are me this day in person and acknowle and purposes therein set forth.	and and ing on behalf of PRINCIPAL & SURET e names are subscribed to the foregoi dged respectively, that they signed and	Y) ng instrument on behalf of PRINCIPAL I delivered said instrument as their free A.D.
who are each personally known and SURETY, appeared before and voluntary act for the uses a Given under my hand an My commission expires	(Insert names of individuals sign to me to be the same persons who eme this day in person and acknowle and purposes therein set forth. d notarial seal this	and ing on behalf of PRINCIPAL & SURET e names are subscribed to the foregoi dged respectively, that they signed and day of	Y) ng instrument on behalf of PRINCIPAL I delivered said instrument as their free A.D. Notary Public
who are each personally knowr and SURETY, appeared before and voluntary act for the uses a Given under my hand an My commission expires In lieu of completing the above marking the check box next to	(Insert names of individuals sign to me to be the same persons who eme this day in person and acknowle and purposes therein set forth. It denotates the proposal by the section of the Proposal Bid Form, the Signature and Title line below, the signature and Title line below, the signature and section of the proposal by the sectio	and ing on behalf of PRINCIPAL & SURET e names are subscribed to the foregoi dged respectively, that they signed and day of the Principal may file an Electronic Bi	ng instrument on behalf of PRINCIPAL delivered said instrument as their free A.D. Notary Public d Bond. By signing the proposal and electronic bid bond has been executed





(1) Policy

It is public policy that disadvantaged businesses as defined in 49 CFR Part 26 and the Special Provision shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal or State funds. Consequently the requirements of 49 CFR Part 26 apply to this contract.

(2) Obligation

The contractor agrees to ensure that disadvantaged businesses as defined in 49 CFR Part 26 and the Special Provision have the maximum opportunity to participate in the performance of contracts or subcontracts financed in whole or in part with Federal or State funds. The contractor shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 and the Special Provision to ensure that said businesses have the maximum opportunity to compete for and perform under this contract. The contractor shall not discriminate on the basis of race, color, national origin or sex in the award and performance of contracts.

(3) Proj	ject and Bid Identification			
Complet	te the following information concerning the project and bid:			
Route	Quad City International Airport	Total Bid		<u></u>
Section		Contract DBE Goal	10.0%	
Project	MLI-4080		(Percent)	(Dollar Amount)
County	Rock Island County			
Letting [Date June 14, 2013			
Contract	t No. QU015			
Letting I	tem No. 25A			
(4) Ass	urance			
	in my capacity as an officer of the undersigned bidder (or bidder my company: (check one) Meets or exceeds contract award goals and has provided document of the contract award goals and has provided document of the signed participation percent. Attached are the signed participation statements, forms SBE 2 use of each business participating in this plan and assuring that work of the contract. Failed to meet contract award goals and has included good fait provided participation as follows: Disadvantaged Business Participation percent The contract goals should be accordingly modified or waived. Support of this request including good faith effort. Also attache required by the Special Provision evidencing availability and us business will perform a commercially useful function in the work.	umented participation as for 2025, required by the Spect each business will perform the effort documentation to represent the signed participate of each business participate of the contract.	ial Provision even a commercian meet the goals required by the tion statements pating in this plant	videncing availability and ally useful function in the and that my company has a Special Provision in 5, forms SBE 2025, an and assuring that each
Ву	Company	The "as read" Low Bidder is re		·
-		Submit only one utilization plate submitted in accordance with		
Title		Bureau of Small Business Ent 2300 South Dirksen Parkway Springfield, Illinois 62764	erprises	Local Let Projects Submit forms to the Local Agency

The Department of Transportation is requesting disclosure of information that is necessary to accomplish the purpose as outlined under State and Federal law. Disclosure of this information is **REQUIRED**. Failure to provide any information will result in the contract not being awarded. This form has been approved by the State Forms Manager Center.



DBE Participation Statement

	or Registration	Le	etting June 14, 20	13			
	n Statement	Item No. 25A					
(1) Instructi	ons	С	ontract QU0	15			
be submitted	ust be completed for each disadvantaged business pard in accordance with the special provision and will be a eded complete an additional form for the firm.						
(2) Work							
Pay Item No.	Description	Quantity	Unit Price	Total			
			Total				
amount: (4) Commitre The undersit has agreed execute a committed to the	 (3) Partial Payment Items For any of the above items which are partial pay items, specifically describe the work and subcontract dollar amount: (4) Commitment The undersigned certify that the information included herein is true and correct, and that the DBE firm listed below has agreed to perform a commercially useful function in the work of the contract item(s) listed above and to execute a contract with the prime contractor. The undersigned further understand that no changes to this statement may be made without prior approval from the Department's Bureau of Small Business Enterprises and 						
	Signature for Prime Contractor	Sigr	nature for DBE Firm				
Title	Titl	e					
Date	Da	te					
Contact	Co	ntact					
Phone	Pho	Phone					
Firm Name	Firm	Firm Name					
Address	Add	dress					
City/State/Z	p City	y/State/Zip					
			E				
federal law. Disclosur	ansportation is requesting disclosure of information that is necessary to accomplish the statutory pur e of this information is REQUIRED . Failure to provide any information will result in the contract not Forms Management Center.						

SBE 2025 (Rev. 11/03.09)



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

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

NOTICE

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

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

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.

Contract No. QU015
Quad City International Airport
Moline, Illinois
Rock Island County
Illinois Project No. MLI-4080
AIP Project No. 3-17-0068-XX



SUBCONTRACTOR DOCUMENTATION

Public Acts 96-0795, 96-0920, and 97-0895 enacted substantial changes to the provisions of the Code (30 ILCS 500). Among the changes are provisions affecting subcontractors. The Contractor awarded this contract will be required as a material condition of the contract to implement and enforce the contract requirements applicable to subcontractors that entered into a contractual agreement with a total value of \$50,000 or more with a person or entity who has a contract subject to the Code and approved in accordance with Section 80-01 of the Illinois Standard Specifications for Construction of Airports.

If the Contractor seeks approval of subcontractors to perform a portion of the work, and approval is granted by the Department, the Contractor shall provide a copy of the subcontract to the Illinois Department of Transportation's CPO upon request within 15 calendar days after execution of the subcontract.

Financial disclosures required pursuant to Section 50-35 of the Code must be submitted for all applicable subcontractors. The subcontract shall contain the certifications required to be made by subcontractors pursuant to Article 50 of the Code. This Notice to Bidders includes a document incorporating all required subcontractor certifications and disclosures for use by the Contractor in compliance with this mandate. The document is entitled <u>State Required Ethical Standards Governing Subcontractors</u>.

STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

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

The certifications hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed should the Department approve the subcontractor. The CPO may terminate or void the contract approval if it is later determined that the bidder or subcontractor rendered a false or erroneous certification. If a false certification is made by a subcontractor the contractor's submitted bid and the executed contract may not be declared void unless the contractor refuses to terminate the subcontract upon the State's request after a finding that the subcontractor's certification was false.

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

A. Bribery

1. The Code provides:

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
 - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
 - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
 - (1) the business has been finally adjudicated not guilty; or
 - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract to which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.
- 2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

B. Felons

1. The Code provides:

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

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

C. <u>Debt Delinquency</u>

1. The Code provides:

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

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

D. Prohibited Bidders, Contractors and Subcontractors

1. The Code provides:

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

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

E. Section 42 of the Environmental Protection Act

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-14 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the CPO may declare the contract void if this certification is false.

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

Name of Subcontracting Company	
Authorized Officer	Date

SUBCONTRACTOR DISCLOSURES

I. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Code provides that all subcontracts with a total value of \$50,000 or more from subcontractors identified in Section 20-120 of the Code shall be accompanied by disclosure of the financial interests of the subcontractor. This disclosed information for the subcontractor, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the Prime Contractor's contract. Furthermore, pursuant to this Section, the Procurement Policy Board may recommend to allow or void a contract or subcontract based on a potential conflict of interest.

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

The current annual salary of the Governor is \$177,412.00.

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

2. <u>Disclosure Forms</u>. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. A separate Disclosure Form A must be submitted with the bid for each individual meeting the above requirements. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies and a total ownership certification. **The forms must be included with each bid.**

C. <u>Disclosure Form Instructions</u>

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

١.	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 60% of the annual salary of the Governor? YES NO
3.	Does anyone in your organization receive more than 60% of the annual salary of the Governor of the subcontracting entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES NO
١.	Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES NO
	ote: Only one set of forms needs to be completed <u>per person per subcontract</u> even if a specific individual would require a yes answer to more an one question.)

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

If the answer to each of the above questions is "NO", then the <u>NOT APPLICABLE STATEMENT</u> 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: Instructions for Identifying Other Contracts & Procurement Related Information

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

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

Disclosure of the information contained in this Form is required by the Section 50-35 of the Code (30 ILCS 500). Subcontractors desiring to enter into a subcontract of a State of Illinois contract must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for subcontracts with a total value of \$50,000 or more, from subcontractors identified in Section 20-120 of the Code, and for all openended contracts. A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.

The current annual salary of the Governor is \$177,412.00.

FOR INDIVIDUAL (type or print information)

DISCLOSURE OF FINANCIAL INFORMATION

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

NAN	1E:
ADE	PRESS
Туре	of ownership/distributable income share:
	sole proprietorship Partnership other: (explain on separate sheet): \$ value of ownership/distributable income share:
	sure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following onflict of interest relationships apply. If the answer to any question is "Yes", please attach additional describe.
(a) State	employment, currently or in the previous 3 years, including contractual employment of services. Yes No
If your	answer is yes, please answer each of the following questions.
1.	Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes No
2.	Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, provide the name the State agency for which you are employed and your annual salary

	3.	8. If you are currently appointed to or employed by any agency of the State of Illinois, and you salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) m 1/2% of the total distributable income of your firm, partnership, association or corporation amount in excess of 100% of the annual salary of the Governor? Yes No	ore than 7 n, or (ii) an
	4.	If you are currently appointed to or employed by any agency of the State of Illinois, and y salary exceeds 60% of the annual salary of the Governor, are you and your spouse or min entitled to receive (i) more than 15 % in the aggregate of the total distributable income of partnership, association or corporation, or (ii) an amount in excess of two times the sa Governor? Yes No	or children f your firm, lary of the
(b)		te employment of spouse, father, mother, son, or daughter, including contractual employment previous 2 years. Yes No	services in
	If your	our answer is yes, please answer each of the following questions.	
	1.	. Is your spouse or any minor children currently an officer or employee of the Capitol De Board or the Illinois State Toll Highway Authority? Yes No	
	2.	2. Is your spouse or any minor children currently appointed to or employed by any agency of the Illinois? If your spouse or minor children is/are currently appointed to or employed by any the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the provide the name of your spouse and/or minor children, the name of the State agency for whis employed and his/her annual salary.	agency of Governor,
	3.	3. If your spouse or any minor children is/are currently appointed to or employed by any age State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governmentitled to receive (i) more than 7 1/2% of the total distributable income of your firm, p association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes No	or, are you artnership,
	4.	If your spouse or any minor children are currently appointed to or employed by any age State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governand your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of distributable income of your firm, partnership, association or corporation, or (ii) an amount in 2 times the salary of the Governor? Yes No	or, are you of the total n excess of
(c)	unit of	ctive status; the holding of elective office of the State of Illinois, the government of the United State of Illinois or the statutes of the state of Illinois or the state of Il	
(d)		ationship to anyone holding elective office currently or in the previous 2 years; spouse, father, m , or daughter. Yes No	other,
(e)	Americ of the	ointive office; the holding of any appointive government office of the State of Illinois, the Unitederica, or any unit of local government authorized by the Constitution of the State of Illinois or the State of Illinois, which office entitles the holder to compensation in excess of the expenses discharge of that office currently or in the previous 3 years. Yes No	he statutes
(f)		ationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, and aughter.	er, mother,
(g)	Emplo	oloyment, currently or in the previous 3 years, as or by any registered lobbyist of the State government, currently or in the previous 3 years, as or by any registered lobbyist of the State government, currently or in the previous 3 years, as or by any registered lobbyist of the State government, currently or in the previous 3 years, as or by any registered lobbyist of the State government, currently or in the previous 3 years, as or by any registered lobbyist of the State government, currently or in the previous 3 years, as or by any registered lobbyist of the State government.	rnment.

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

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of the following has occurred within the previous 10 years: debarment from contractin professional licensure discipline; bankruptcies; adverse civil judgments and administratic convictions. This disclosure is a continuing obligation and must be promptly supplement procurement process and term of the contract. If no person is identified, enter "None" on the	g with any governmental entity; ive findings; and criminal felony nted for accuracy throughout the
Name of person(s):	
Nature of disclosure:	
APPLICABLE STATEMENT	
This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on penalty of perjury, I certify the contents of this disclosure to be true and accumulation knowledge.	
Completed by:	
Signature of Individual or Authorized Officer	Date
NOT APPLICABLE STATEMENT	
Under penalty of perjury, I have determined that no individuals associated wit the criteria that would require the completion of this Form A.	h this organization meet
This Disclosure Form A is submitted on behalf of the SUBCONTRACTOR liste	d on the previous page.
Signature of Authorized Officer	Date

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Subcontractor: Other Contracts & Procurement Related Information Disclosure

Subcontractor Name				
Legal Address				
City, State, Zip				
Telephone Number	Email Address	Fax Number (if available)		
Disclosure of the information contained in this Form is required by the Section 50-35 of the Code (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for subcontracts with a total value of \$50,000 or more, from subcontractors identified in Section 20-120 of the Code, and for all open-ended contracts. DISCLOSURE OF OTHER CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION				
1. Identifying Other Contracts & Procure any pending contracts, subcontracts, incluany other State of Illinois agency: If "No" is checked, the subcontractor only	ement Related Information. The Siding leases, bids, proposals, or of Yes No	SUBCONTRACTOR shall identify whether it has ther ongoing procurement relationship with		
	2. If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:			
THE FOLLOWING STATEMENT MUST BE CHECKED				
	Signature of Authorized Officer	Date		
	OWNERSHIP CERITIFICATION			
Please certify that the following statement is of ownership.	strue if the individuals for all submit	tted Form A disclosures do not total 100%		
Any remaining ownership interest is parent entity's distributive income o		han \$106,447.20 of the bidding entity's or interest.		
☐ Yes ☐ No ☐ N/A (Form	A disclosure(s) established 100% of	ownership)		

Illinois Department of Transportation

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., June 14, 2013. 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 is identified and advertised for bids in the Invitation for Bids as:

Contract No. QU015 Quad City International Airport Moline, Illinois Rock Island County Illinois Project No. MLI-4080 AIP Project No. 3-17-0068-XX

RGL, ALCMS, and Pavement Marking

3. INSTRUCTIONS TO BIDDERS.

- (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 10-18 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 within 60 calendar days 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 <u>N/A</u> at the Quad City International Airport administration building. For engineering information, contact Jeff McKay, P.E. of Missman, Inc. at (309) 283-1588.
- **6. DISADVANTAGED BUSINESS POLICY.** The DBE goal for this contract is <u>10.0</u>%.
- 7. SPECIFICATIONS AND DRAWINGS. The work shall be done in accordance with the Illinois Standard Specifications for Construction of Airports, the Illinois Division of Aeronautics Supplemental Specifications and Recurring Special Provisions, the Special Provisions dated May 10, 2013 and the Construction Plans dated May 10, 2013 as approved by the Department of Transportation, Division of Aeronautics.
- 8. BIDDING REQUIREMENTS AND BASIS OF AWARD. When alternates are included in the proposal, the following shall apply:
 - a. Additive Alternates
 - (1) Bidders must submit a bid for the Base Bid and for all Additive Alternates.
 - (2) Award of this contract will be made to the lowest responsible qualified bidder computed as follows:

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

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

b. Optional Alternates

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

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

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

The contract time for this contract is <u>Base Bid: 176 calendar days</u>; <u>Additive Alternate 1: 10 additional calendar days</u>; <u>Additive Alternate 2: 8 additional calendar days</u>.

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

By Order of the Illinois Department of Transportation

Susan R. Shea, Ph.D., Director, Division of Aeronautics

ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF AERONAUTICS

REQUIRED CONTRACT PROVISIONS FOR FEDERALLY FUNDED AIRPORT CONSTRUCTION CONTRACTS

The work in this contract is included in the federal FAA 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.

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.

Provisions for all Construction Contracts

BUY AMERICAN PREFERENCE (Title 49 U.S.C., Chapter 501)

- (a) The Aviation Safety and Capacity Expansion Act of 1990 provides that preference be given to steel and manufactured products produced in the United States when funds are expended pursuant to a grant issued under the Airport Improvement Program (AIP).
- (b) Any and all steel products used in the performance of this contract by the Contractor, subcontractors, producers, and suppliers are required to adhere to the Illinois Steel Products Procurement Act, which requires that all steel items be of 100 percent domestic origin and manufacture. Any products listed under the Federal Aviation Administration's (FAA) nationwide approved list of "Equipment Meeting Buy American Requirements" shall be deemed as meeting the requirements of the Illinois Steel Products Procurement Act.
- (c) The successful bidder will be required to assure that only domestic steel and domestically manufactured products will be used by the Contractor, subcontractors, producers, and suppliers in the performance of this contract. The North American Free Trade Agreement (NAFTA) specifically excluded federal grant programs such as the AIP. Therefore, NAFTA does not change the requirement to comply with the Buy American requirement in the Act. Exceptions to this are for products, other than steel, that:
 - (1) the FAA has determined, under the Aviation Safety and Capacity Expansion Act of 1990, are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality;
 - (2) the FAA has determined, under the Aviation Safety and Capacity Expansion Act of 1990, that domestic preference would be inconsistent with the public interest;
 - (3) the FAA has determined that inclusion of domestic material will increase the cost of the overall project contract by more than 25 percent; or
 - (4) the FAA has determined, under the Aviation Safety and Capacity Expansion Act of 1990,
 - (i) the cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components of the facility or equipment, and
 - (ii) final assembly of the facility or equipment has occurred in the United States.

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

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

CIVIL RIGHTS ACT OF 1964, TITLE VI – CONTRACTOR CONTRACTUAL REQUIREMENTS (Title 49 CFR Part 21)

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

- 1.1 Compliance with Regulations. The contractor shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- 1.2 Nondiscrimination. The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- 1.3 Solicitations for Subcontracts, Including Procurements of Materials and Equipment. In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- 1.4 Information and Reports. The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Co-Sponsors or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the Co-Sponsors or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.
- 1.5 Sanctions for Noncompliance. In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the Co-Sponsor shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:
 - a. Withholding of payments to the contractor under the contract until the contractor complies, and/or
 - b. Cancellation, termination, or suspension of the contract, in whole or in part.
- 1.6 Incorporation of Provisions. The contractor shall include the provisions of paragraphs 1 through 5 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Co-Sponsor or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Co-Sponsor to enter into such litigation to protect the interests of the Co-Sponsor and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, SECTION 520 - GENERAL CIVIL RIGHTS PROVISIONS (Title 49 U.S.C. 47123)

The contractor assures that it will comply with pertinent statutes, Executive orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport a program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon. In these cases the provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits or (b) the period during which the airport sponsor or any transferee retains ownership or possession of the property. In the case of contractors, this provision binds the contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

LOBBYING AND INFLUENCING FEDERAL EMPLOYEES (Title 49 CFR Part 20)

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.

ACCESS TO RECORDS AND REPORTS (Title 49 CFR Part 18.36)

The Contractor shall maintain an acceptable cost accounting system. The Co-Sponsors, 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 <a href="https://documents.org/linearing/lin

DISADVANTAGED BUSINESS ENTERPRISES (Title 49 CFR Part 26)

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

ENERGY CONSERVATION REQUIREMENTS (Title 49 CFR Part 18.36)

The contractor agrees to comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Public Law 94-163)

BREACH OF CONTRACT TERMS (Title 49 CFT Part 18.36)

Any violation or breach of terms of this contract on the part of the contractor or their subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement. The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

RIGHTS TO INVENTIONS (Title 49 CFR Part 18.36)

All rights to inventions and materials generated under this contract are subject to Illinois law and to regulations issued by the FAA and the Co-Sponsors of the Federal grant under which this contract is executed.

TRADE RESTRICTION CLAUSE (Title 49 CFR Part30)

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 Co-Sponsors, 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 Co-Sponsors 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 Co-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.

VETERAN'S PREFERENCE (Title 49 U.S.C. 47112)

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)(1) and (2) 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.

Additional Provisions for Construction Contracts Exceeding \$2,000

DAVIS BACON LABOR PROVISIONS (Title 29 Part 5)

- (1) Minimum Wages.
 - (i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by 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.

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 therefore only when the following criteria have been met:
 - (1)The work to be performed by the classification requested is not performed by a classification in the wage determination; and

- (2) The classification is utilized in the area by the construction industry; and
- (3)The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (C) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding.

The Federal Aviation Administration 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.
- (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.
- (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 (3)(i) above 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.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.
- (D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.
- (iii) The Contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the (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 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for the compliance by an subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

(7) Contract Termination: Debarment.

A breach of these contract clauses paragraphs (1) through (10) of this section may be grounds for termination of the contract and for debarment as a Contractor and a subcontractor as provided in 29 CFR Part 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.

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.

Additional Provisions for Construction Contracts Exceeding \$10,000

EQUAL EMPLOYMENT OPPORTUNITY - 41 CFR PART 60-1.4(b)

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

- 1. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- 3. The contractor will send to each labor union or representative of workers with which s/he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, as amended, 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 procedure authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- 7. The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provision, 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.

CERTIFICATION OF NONSEGREGATED FACILITIES (41 CFR PART 60-1.8)

The federally-assisted construction contractor certifies that she or he does not maintain or provide, for his employees, any segregated facilities at any of his establishments and that she or he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally-assisted construction contractor certifies that she or he will not

maintain or provide, for his employees, segregated facilities at any of his establishments and that she or he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The federally-assisted construction contractor agrees that a breach of this 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, restrooms, and washrooms, restaurants and other eating areas, timeclocks, 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 directives or are, in fact, segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The federally-assisted construction contractor agrees that (except where she or he has obtained identical certifications from proposed subcontractors for specific time periods) she or he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause and that she or he will retain such certifications in his files.

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION (Title 41 CFR Part 60-4.2)

- 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 contact or subcontract.

AREA COVERED (STATEWIDE)

Goals for Women apply nationwide.

GOAL

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.

Goal

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

083 Chicago, IL: SMSA Counties: 1600 Chicago, IL - IL - Cook, DuPage, Kane, Lake, McHenry, Will	19.6
3740 Kankakee, IL - IL - Kankakee	9.1
Non-SMSA Counties IL - Bureau, DeKalb, Grundy, Iroquois, Kendall, LaSalle, Livingston, Putnam IN - Jasper, Laporte, Newton, Pulaski, Starke	18.4
084 Champaign - Urbana, IL: SMSA Counties: 1400 Champaign - Urbana - Rantoul, IL - IL - Champaign	7.8
Non-SMSA Counties - IL - Coles, Cumberland, Douglas, Edgar, Ford, Piatt, Vermilion	4.8
085 Springfield - Decatur, IL: SMSA Counties: 2040 Decatur, IL - IL - Macon	7.6
7880 Springfield, IL - IL - Mendard, Sangamon	4.5
Non-SMSA Counties IL - Cass, Christian, Dewitt, Logan, Morgan, Moultrie, Scott, Shelby	4.0
086 Quincy, IL: Non-SMSA Counties	3.1
IL - Adams, Brown, Pike MO - Lewis, Marion, Pike, Ralls	
087 Peoria, IL: SMSA Counties: 1040 Bloomington - Normal, IL - IL - McLean	2.5
6120 Peoria, IL - IL - Peoria, Tazewell, Woodford	4.4
Non-SMSA Counties - IL - Fulton, Knox, McDonough, Marshall, Mason, Schuyler, Stark, Warren	3.3
088 Rockford, IL: SMSA Counties: 6880 Rockford, IL - IL - Boone, Winnebago	6.3
Non-SMSA Counties - IL - Lee, Ogle, Stephenson	4.6
098 Dubuque, IA: Non-SMSA Counties - IL - JoDaviess IA - Atlamakee, Clayton, Delaware, Jackson, Winnesheik WI - Crawford, Grant, Lafayette	0.5

venport, 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
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

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.

EQUAL EMPLOYMENT OPPORTUNITY SPECIFICATION (Title 41 CFR Part 60-4.3)

- 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).

- Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000. the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
- 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction Contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.
- 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
- 6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
- 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.
 - Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractors may have taken.
 - d) Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e) Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

- f) Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreements; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g) Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h) Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i) Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship of 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.
- 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.
- Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction Contractors and suppliers, including circulation of solicitations to minority and female Contractor associations and other business associations.
- p) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
- 8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a Contractor association, joint Contractor-union, Contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
- 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specified minority group of women is underutilized).

- 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
- 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
- 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
- 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).

TERMINATION OF CONTRACT (Title 49 CFR Part 18.36)

- 1. The Co-Sponsor may, by written notice, terminate this contract in whole or in part at any time, either for the Co-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 Co-Sponsor.
- 2. If the termination is for the convenience of the Co-Sponsor, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.
- If the termination is due to failure to fulfill the Contractor's obligations, the Co-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 Co-Sponsor for any
 additional cost occasioned to the Co-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 Co-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 Co-Sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

Additional Provisions for Construction Contracts Exceeding \$25,000

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION (Title 49 CFR Part 29)

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, Ineligibility and Voluntary Exclusion 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.

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

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

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

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.

<u>Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion</u> <u>Lower Tier Covered Transactions</u>

- 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.

Additional Provisions for Construction Contracts Exceeding \$100,000

CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS (Title 29 CFR Part 5)

(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 paragraph (1) above, the Contractor and any subcontractor responsible therefore shall be liable for the 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, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) above, 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 paragraph (1) above.

(3) Withholding for Unpaid Wages and Liquidated Damages.

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

(4) Subcontracts.

The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) 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 paragraphs (1) through (4) of this section.

(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.

CLEAN AIR AND WATER POLLUTION CONTROL (Title 49 CFR Part 18.36(i)(12))

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 <u>et seq.</u> and Section 308 of the Federal Water Pollution Control Act, as amended, 33 USC 1251 <u>et seq.</u> 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.

ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF AERONAUTICS

REQUIRED CONTRACT PROVISIONS FOR STATE FUNDED AIRPORT CONSTRUCTION PROJECTS

The following provisions are State of Illinois requirements and are in addition to the REQUIRED CONTRACT PROVISIONS FOR FEDERALLY FUNDED AIRPORT CONSTRUCTION CONTRACTS

DISADVANTAGED BUSINESS POLICY

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

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

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

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

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

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

SPECIAL PROVISION FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION Revised: August 2, 2011

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

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

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

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

OVERALL GOAL SET FOR THE DEPARTMENT: As a requirement of compliance with 49 CFR part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to

achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

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

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

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

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

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

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

The Utilization Plan will not be approved by the Department if the Utilization Plan does not commit sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be

expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
 - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
 - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
 - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
 - (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable.

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

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

the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

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

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

- (a) <u>NO AMENDMENT</u>. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) <u>TERMINATION OR REPLACEMENT</u>. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in the Special Provision.
- (c) <u>CHANGES TO WORK</u>. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected

DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, then a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

- (d) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
 - (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
 - (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
 - (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonably competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

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

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

When a DBE is terminated, or fails to complete its work on the contract for any reason the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established contract goal.

- (f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <u>ENFORCEMENT</u>. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 50-17 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

SPECIAL PROVISION FOR SUBCONTRACTOR MOBILIZATION PAYMENTS Revised: April 1, 2011

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

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form AER 260A submitted for the approval of the subcontractor's work.

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

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

SPECIAL PROVISION FOR PAYMENTS TO SUBCONTRACTORS Revised: January 1, 2006

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

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

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

When progress payments are made to the Contractor according to Article 90-07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to

each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause.

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

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

Effective: February 1, 1969 Revised: January 1, 2010

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 Contractors 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.

SPECIAL PROVISION FOR NPDES CERTIFICATION

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

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

The Airport Owner or its Agent will:

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

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

State of Illinois Department of Transportation

SPECIAL PROVISION FOR SECTION 90 MEASUREMENT AND PAYMENT

This Special Provision amends the provisions of the Standard Specifications for Construction of Airports, adopted April 1, 2012 and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

90-07 PARTIAL PAYMENTS.

DELETE: The entire section.

ADD: Partial payments will be made to the Contractor at least once each month as the work progresses. The payments will be based upon estimates, prepared by the Resident Engineer, of the value of the work performed and materials complete and in place in accordance with the contract, plans, and specifications. Such partial payments may also include the delivered actual cost of those materials stockpiled and stored in accordance with the Section 90-08 PAYMENT FOR MATERIALS ON HAND. From the amount of partial payment so determined, there shall be deducted an amount up to ten percent of the cost of the completed work which shall be retained until all conditions necessary for financial closeout of the project are satisfied. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1,000.00 will be approved for payment other than the final payment.

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

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

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved. Furthermore, progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c).

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

90-10 TRUST AGREEMENT OPTION.

DELETE: The entire section.

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SECTION III SPECIAL PROVISIONS FOR

RGL, ALCMS & PAVEMENT MARKING

RUNWAY GUARD LIGHTS (RGL), AIRPORT LIGHTING CONTROL & MONITORING SYSTEM (ALCMS), CABLING, OTHER MISCELLANEOUS ELECTRICAL ITEMS, AND PAVEMENT MARKING (PTM & PAINT).

AT

QUAD CITY INTERNATIONAL AIRPORT MOLINE, ILLINOIS

ILLINOIS PROJECT: MLI-4080 A.I.P. PROJECT: 3-17-0068-XX

PREPARED BY:



CONSULTING ENGINEERS P.O. BOX 6040 ROCK ISLAND, ILLINOIS 61204-6040

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF AERONAUTICS POLICY MEMORANDUM

The following IDOT-DOA Policy Memorandums are applicable to this contract and are included in this contract by reference. The latest version of these documents may be viewed and downloaded off the Division of Aeronautics internet web site at http://www.dot.state.il.us/aero/iindex.html.

IDOT-DOA Policy Memorandum Numbers:

95-1 97-2 96-1 2001-1

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GENERAL

The following Section III Special Provisions supplement the "Illinois Standard Specifications for Construction of Airports", adopted April 1, 2012 by IDOT-DOA, the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2012 by IDOT, and IDOT-DOA's Policy Memorandum Numbers 95-1, 96-1, 97-2, and 2001-1, all of which shall govern the construction of Illinois Project No. MLI-4080, A.I.P. Project No. 3-17-0068-XX. In case of conflict with any part or parts of said specifications, the said Section III Special Provisions shall take precedence and shall govern.

DESCRIPTION OF WORK:

The proposed improvement at the Quad City International Airport in Moline, Illinois shall include, but not be limited to, the following major work items:

- 1. Removal of existing electrical equipment.
- 2. Earth excavation as required to install the proposed materials.
- 3. Refurbish, relocate, remove, and/or adjust the existing utilities as required.
- 4. Furnish and install proposed new runway guard lights, lighting control & monitoring system, beacon/beacon tower, RGL cabling, SCAN cabling, fiber optic cable, power cabling, and control cabling.
- 5. Removal of existing painted pavement markings as indicated on the plans and installation of new pavement markings (preformed thermoplastic markings and/or paint markings).
- 6. Erosion control as required.
- 7. Traffic maintenance for the duration of the project.

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DIVISION I - GENERAL PROVISIONS

SECTION 40 SCOPE OF WORK

40-05 MAINTENANCE OF TRAFFIC

ADD the following paragraphs to this Section:

- 40-05.1.1 This item shall include all work necessary to control and maintain aircraft, vehicle, equipment, and personnel traffic on the airfield during the duration of this project. The Contractor shall operate his construction activities in a manner that complies with the requirements of FAA Advisory Circular No. 150/5370-2F, "Operational Safety On Airport During Construction," latest edition at the time of bidding; and Subsection 40-05 and Subsection 80-05 of the Standard Specifications for Construction of Airports.
- 40-05.1.2 It is the desire of the Owner to complete this project in a timely and safety manner with the least possible disruptions to airport operations. maintain airport operations while the proposed construction work occurs, the proposed project work has been divided into separate phases in accordance with AC 150/5370-2F, "Operational Safety on Airports During Construction". The separate phases are detailed on the proposed construction safety and phasing plan (CSPP) which is found in the Construction Plans. References to CSPP found in AC150/5370-2F shall be interpreted to mean the phase construction activities area limits, barricade locations, access points, access routes and notes shown on the CSPP sheets included in the Construction Plans. When "safety" is used or referred to in the contract documents and/or the FAA Advisory Circulars, it shall be redefined by this contract as meaning "Operational Safety". The CSPP establishes the airport and project specific requirements, supplementing the requirements in the FAA Advisory Circulars that shall be included in the contractor's bid for maintaining operational safety during the construction of this proposed project.

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

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40-05.1.3 10 days prior to the preconstruction conference the Contractor shall submit a Safety Plan Compliance Document (SPCD) to the airport describing how he will comply with the requirements of the advisory circular plus the CSPP and supplying any details that could not be determined before contract award. The SPCD shall comply with the requirements found in Advisory Circular 150/5370-2F. The SPCD must include a certification statement by the Contractor that indicates he understands the operational safety requirements of the CSPP, that the Contractor has incorporated these requirements into their overall work plan and that the Contractor will maintain the right of control for all means, methods and details of the work performed by the Contractor and any of his subcontractors within the framework of the operational safety plan.

The Contractor shall be fully aware and continuously monitor all requirements and activities for compliance with the contract documents and Advisory Circular 150/5370-2F.

Ten days prior to the commencement of each phase the Contractor shall submit an updated Safety Plan Compliance Document for that phase that meets the requirement of Advisory Circular 150/5370-2F. The updated SPCD(s) shall detail implementation of the construction haul routes, procedures utilized by the Contractor to eliminate conflicts between construction operations and aircraft traffic shall be included.

- 40-05.1.4 Significant Changes to the CSPP may require aeronautical review by the Division through the FAA's OEAAA System. Modification of the CSPP and/or the critical points shown in the contract documents will require airspace approval from Division/FAA and may require the contractor to submit FAA Form 7460 for approval.
- 40-05.1.5 The Contractor's activities on the airfield shall be limited to the construction activities operation limits as identified on the CSPP. Beyond these limits, the Contractor shall <u>not</u> have access to any part of the active airfield with any equipment or personnel without the approval of the airport management.
- 40-05.1.6 Maintenance of Airport Systems is critical to the operation of the Airport and the safety and/or security of the traveling public. Prior to beginning the work, the Contractor shall investigate existing systems which may be located within the work area and locate all existing utilities. The Contractor may seek assistance from JULIE, the Resident Engineer, the Airport and the FAA with locating utilities but the final responsibility for all utility locates lies solely with the Contractor. If the Contractor's investigation reveals that a utility must be relocated to allow for the performance of the work in the plans, the Contractor shall immediately notify the Resident Engineer and

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remain clear of the utility until resolution has been determined by the Division and the Airport. Any system, including but not limited to systems associated with security, air navigation, weather, or airfield lighting damaged by the Contractor's operations shall be immediately repaired to the satisfaction of the Owner. No delay shall be taken in the repair of the damaged facility. The Contractor shall not be allowed to finish work for the day until the utility has been repaired.

The Contractor shall be required to provide aviation radio control for his operations and the operations of his subcontractors on this project. The Contractor and his subcontractors shall be required to complete the MAA airfield training in order to gain access to the airfield, drive on the airfield, and to be able to communicate with the air traffic control tower. The Contractor and his subcontractors shall provide their own aviation radios capable of transmitting and receiving on the control tower's frequencies.

40-05.1.7 <u>CONSTRUCTION LIMITS WITH RUNWAY 9-27 OPEN (PHASES 1, 2, 3, 6, 6A, 6B, 6C, 7, 7A AND 8):</u>

- 1. The Contractor shall not enter the safety area of any open runway unless authorized otherwise by the MAA/FAA.
- 2. The Contractor shall not enter the object free area of any open taxiway unless authorized otherwise by the MAA/FAA.
- 3. The Contractor shall not enter the Runway 9-27 ILS critical areas (R9 Glide Slope, R27 Glide Slope, R9 Localizer, and R7 Localizer) unless authorized otherwise by the MAA/FAA.
- 4. The Contractor shall not stockpile materials above the FAA Part 77 Civil Airport Imaginary Surface for Runway 9-27. The elevation of this surface shall be determined by the Resident Engineer. This includes soil materials.
- 5. The Contractor shall remain below (including the top of construction equipment) the OFZ (object free zone) surface for Runway 9-27 as determined by the Resident Engineer.
- 6. During Instrument Flight Rule (IFR) conditions, the Contractor shall remain below (including top of construction equipment and material stockpiles) the FAA Part 77 Civil Airport Imaginary Surface for Runway 9-27 as determined by the Resident Engineer.

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40-05.1.8 <u>CONSTRUCTION LIMITS DURING PHASE 4, 4A AND 5 (RUNWAY 9-27 CLOSED):</u>

A. <u>RUNWAY 9-27 SAFETY AREA CONDITIONS AND LIMITATIONS:</u>

- 1. The Contractor shall breakdown the proposed work within the Phase 4, 4A and 5 areas into units that can be accomplished in individual two day work periods. During these phases, as a minimum, the Contractor shall work fourteen hours per day until Runway 9-27 is reopened to aircraft traffic. Each work period shall include time to regrade, clean-up, inspect and re-open the safety areas for aircraft operations.
- 2. Based upon weather conditions and operational needs, the MAA will select the two day work periods to close Runway 9-27. Due to weather considerations, the Contractor will receive no more than a one day notice of each individual work period.
- 3. Work in the Runway 9-27 safety area <u>shall not occur</u> when Runway 13-31 is not available for aircraft operations. Runway 13-31 <u>shall be open</u> to aircraft traffic when Runway 9-27 is closed.
- 4. The Contractor shall install the Phase barricades and lath lines prior to the commencement of any work. The barricades shall be removed and reinstalled by the Contractor as required by the MAA and/or the Resident Engineer.
- 5. Contractor shall use the construction entrance as shown on the CSPP.
- 6. Runway 9-27 and Runway 13-31 shall remain open as much as possible during the construction of this project and aircraft traffic shall have priority over construction at all times. The Contractor's employees, equipment, and materials shall not enter or be left in the safety or critical areas; unless permission to do so has been granted to the Contractor by the MAA and contact has been made with the FAA Control Tower. When a runway is closed by the MAA, the Contractor may proceed with his work which requires manpower, equipment, and materials in the safety and/or critical areas. The MAA reserves and shall have the right to stop work and reopen a Runway at any time during the project as required by wind

conditions, weather conditions, or aircraft operations which requires the use of a runway. The Contractor shall remove all employees, equipment and materials, including stockpiles from the safety and critical areas and regrade the safety and critical areas <u>within one hour</u> of notification by the Resident Engineer.

- 7. Construction employees, equipment, and materials shall not be allowed in the Runway 9-27 safety area when weather conditions require the use of instrument flight rules on Runway 9-27 (approximately 11% of the time based upon historical data).
- 8. During the airfield operation hours, Runway 13-31 and Runway 9-27 shall not be closed to aircraft traffic at the same time. During the airfield operation hours, construction operations shall not occur in the Runway 9-27 safety area and the Runway 13-31 safety area simultaneously. During the airfield operation hours, the contractor shall schedule his construction activities so that only one of these runways is closed at any given time.
- 9. The Contractor shall schedule his construction activities so that the following conditions exist at the end of all work periods in the runway safety area, taxiway safety areas and ILS critical areas.
 - A. No exposed faces in excess of one and one-half (1-1/2) inches in height will be permitted in the safety / critical areas, either longitudinal or transverse to the edge of runway.
 - B. All excavations, trenches, and removal areas have been backfilled.
 - C. All shoulder areas have been backfilled and smoothly graded.
 - D. No mounds of dirt or irregularities greater than 3" shall exist in the safety / critical areas.
 - E. Haul roads have been re-graded to a level condition.
 - F. All items have been removed from the safety / critical areas.
 - G. All active airfield pavements and the runway have been broom clean.

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B. <u>RUNWAY 9-27 SAFETY AREA CONSTRUCTION OPERATIONS:</u>

- 1. The Contractor shall split the proposed construction operations in the Runway 9-27 safety area into segments of work that can be completed in non-consecutive two day work periods (maximum of six (6) each two day periods).
- 2. Two day work period activities sequence:
 - A. MAA selects period for two day Runway 9-27 closure. Runway 9-27 closed to aircraft by the MAA.
 - B. Contractor to install closed runway markers on Runway 9-27.
 - C. Complete Runway 9-27 safety area work (removal, boring, cabling, lighting, painting, seeding, etc.) that can be accomplished in the time frame allowed subject to the above conditions and limitations.
 - D. Clean-up work area and move all equipment out of safety / critical areas. All construction debris shall be totally removed from the safety / critical areas.
 - E. The Contractor's superintendent, Resident Engineer, and MAA/FAA representatives shall inspect the safety / critical areas to ensure the runway can be opened.
 - F. Remove the closed runway markings from Runway 9-27.
 - G. MAA opens Runway 9-27 to aircraft traffic.
- 3. Repeat cycle outlined in item 2 above until all Runway 9-27 safety area construction activities are complete.
- 40-05.1.9 The Contractor shall not be entitled to any extra compensation due to delays or inconveniences caused by above said necessary methods, procedures and measures required to protect air traffic.
- 40-05.1.10 This item shall also include the furnishing, installing, moving, maintaining and removal of all equipment, material, miscellaneous items, and incidentals necessary to control traffic to the satisfaction of the Metropolitan Airport Authority and the Resident Engineer.

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EQUIPMENT AND MATERIALS

This item shall include all work necessary to supply and maintain four (4) 40-05.2.1 each Runway Closure Markers (Neubert Aero Corp. model 31900XB or approved equal) and four (4) each Taxiway Closure Markers (Neubert Aero Corp. model CM32900TXY or approved equal) in accordance with AC150/5370-2F (latest revision), AC150/5340-1K (latest revision) and these special provisions to the satisfaction of the Resident Engineer. The markers shall be made of aviation yellow, durable, lightweight, vinyl coated, mildew resistant, ultraviolet resistant, windscreen mesh material, and be equipped with 6" black borders, anchor grommets, and heavy-duty storage bags. The contractor shall furnish NAC Closure Marker steel anchors as required for the installation of the Closure Markers. These Closure Markers shall be used for the duration of this project. The Contractor shall install, remove and reinstall the Closure Markers as required by working conditions and as approved by the Resident Engineer. Supplying these Closure Markers does not void the Contractor's responsibility to properly mark a closed runway / taxiway. The contractor shall maintain these Markers in excellent condition during this project. Following the completion of this project, these Closure Markers shall become the property of the MAA. The Contractor shall make all necessary repairs to the Closure Markers (as determined by the Engineer) to provide the MAA with complete and like new Closure Markers at the end of this project. The Contractor shall replace all items on the Closure Markers that are damaged during the construction of this project. The cost for these Closure Markers shall be included in the AR150530-TRAFFIC MAINTENANCE contract unit price.

If additional Closure Markers are needed (runway and / or taxiway), the Contractor shall supply the additional Closure Markers. Include cost for additional Closure Markers in contract unit prices. Upon completion of the project, the Contractor will retain possession of any additional Closure Markers supplied by the Contractor during this project.

- 40-05.2.2 This item shall include, but not be limited to, the following work and supplies:
 - (a) Barricades (drum, type II and low profile), cones, traffic signs, warning signs, and hazard markings: Provide placement and maintenance.
 - (b) Temporary runway (4 each) and taxiway (4 each) lightweight vinyl coated mesh closure markers (to be turned over to MAA at the end of the project).
 - (c) Traffic control devices for construction and airport vehicular traffic.
 - (d) Temporary traffic connections necessary for ingress to and egress from the airfield.

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- (e) Temporary security measures at the point(s) of ingress/egress to the airfield (guard, fencing, gates, chain, locks, etc.)
- (f) Cleaning and maintaining airfield pavements used during construction.
- (g) Constructing, cleaning and maintaining haul roads and/or service roads.
- (h) Radio equipment for communication with the FAA control tower.
- (i) Identification and marking devices for construction personnel and equipment.
- (j) All measures necessary to comply with the construction safety and phasing plan included in the Construction Plans.
- (k) All measures necessary to comply with the special provisions to Section 40-05 "Maintenance of Traffic" included in this Special Provision.
- (l) Restoration of staging areas, storage areas, haul roads, construction access roads, service drives, borrow areas, and any other areas damaged during construction.
- (m) Demobilization and mobilization of manpower and equipment to open and/or close runways and/or taxiways as required by the Metropolitan Airport Authority.
- (n) Installation and removal of any temporary electrical power and/or telephone facilities required by the Contractor and/or contract during construction to the satisfaction of the MAA and Resident Engineer.
- (o) Installation and maintenance of safety area lath lines as shown on the CSPP in the Construction Plans. Lath lines shall consist of 2"x2" wood posts spaced at 15' intervals and driven into the ground with rope or heavy twine tied between the posts. Six inch wide yellow plastic warning ribbon shall be wrapped around the rope or heavy twine between the posts.
- (p) Temporary jumper cables and/or cabling (including splicing).
- (q) Covering existing edge lights as required (install, maintain, and remove).
- (r) Covering existing guidance signs as required (install, maintain, and remove).
- (s) Temporary portable lighted runway closure markers (install, maintain, oil, gas, lamping, and remove).
- (t) Temporary marking & removal (paint) for temporary centerlines, temporary "black out" of existing centerlines, and reinstalling permanent centerlines (install, maintain, and remove).
- (u) All other items as necessary to maintain control of the project as outlined in the Construction Plans and specification or as directed by the Resident Engineers.

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CONSTRUCTION METHODS

- 40-05.3.1 The traffic maintenance equipment and materials shall be provided, placed, and maintained during the construction as indicated in the plans or as directed by the Resident Engineer.
- 40-05.3.2 The traffic maintenance equipment and materials shall be removed, and reinstalled by the Contractor during the construction of the project as directed by the Resident Engineer and/or as dictated by the current construction activity location.
- 40-05.3.3 After the construction has been completed and accepted by the Resident Engineer the traffic maintenance equipment and materials shall be removed by the Contractor. The removal of traffic maintenance equipment and materials shall not commence until approval by the Resident Engineer has been received. The Contractor shall clean up all debris resulting from maintaining traffic.
- 40-05.3.4 Work included in this item shall conform to applicable FAA Regulations and shall be approved in advance by the Resident Engineer and the MAA.

METHOD OF MEASUREMENT

40-05.4.1. The quantity of traffic maintenance to be paid for under this item shall be measured per lump sum for furnishing all materials, equipment, and labor required for this construction including, but not limited to maintenance of traffic, compliance with safety plan, compliance with Section 40-05 "Maintenance of Traffic" items, restoration, and all other necessary items to complete the construction operations for this project.

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BASIS FOR PAYMENT

40-05.5.1 Payment will be made at the contract unit price per lump sum for Traffic Maintenance. This price shall be full compensation for furnishing all materials and for all preparation, assembly, installation, removal, reinstallation as required of these materials and for all labor, equipment, tools and incidentals necessary to complete this item.

Payment will be made under:

ITEM AR150530 -- TRAFFIC MAINTENANCE -- per lump sum.

ITEM AS150530 -- TRAFFIC MAINTENANCE -- per lump sum.

ITEM AT150530 -- TRAFFIC MAINTENANCE -- per lump sum.

40-06 REMOVAL OF EXISTING STRUCTURES

REVISE the first paragraphs to read as follows:

All existing structures encountered within the established lines, grades, grading sections, or as indicated in the Construction Plans shall be removed by the Contractor, unless such existing structures are otherwise specified to be relocated, adjusted up or down, salvaged, abandoned in place, reused in the work or to remain in place. The cost of removing and disposing of such existing structures shall not be measured or counted for separately as a contract pay item. The cost for removing and disposing of such existing structures shall be included in the contract unit prices.

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SECTION 50 CONTROL OF WORK

50.01 AUTHORITY OF THE ENGINEER

ADD: The Resident Engineer shall not be allowed to modify the contract documents without the approval of the Division.

50-04 COOPERATION OF CONTRACTOR

ADD: The completion of this project prior to the contract completion date is of extreme importance to the Airport. The Contractor shall update his progress schedule as required for the scheduled progress meetings.

50-05 COOPERATION BETWEEN CONTRACTORS

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

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

ADD: The Contractor shall acquaint himself with all other contracts prior to bidding and shall cooperate with Airport management and any other contractors who may be working on other contracts.

50-06 CONSTRUCTION LAYOUT STAKES

DELETE: The first paragraph.

ADD: As the first paragraph:

The Contractor will be required to furnish and place construction layout stakes for this project.

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

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RESPONSIBILITY OF THE RESIDENT ENGINEER

DELETE: Lines A & B.

ADD:

- 1. The Resident Engineer will locate and reference three (3) control points within the limits of the project.
- 2. Benchmarks will be established along the project outside of construction lines.

DELETE: Line D.

REVISE: Line E to Read:

The Resident Engineer may make random checks....

DELETE: Line F.

DELETE: Line L.

ADD: As paragraph M.

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

RESPONSIBILITY OF THE CONTRACTOR

ADD:

- H. The Contractor shall immediately notify the Resident Engineer of conflicts or discrepancies with the established control points.
- I. Construction layout shall not be paid for separately, but shall be considered incidental to the pay item for which the layout is required.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

50-12 LOAD RESTRICTIONS

ADD the following to this Section:

The Contractor shall coordinate construction access with the County Superintendent of Highways and/or the Township Road Commissioner. The Contractor shall be responsible for damage to any public road caused by his construction operations. The Contractor shall repair any damage caused by his construction traffic to the satisfaction of the Owner. The Contractor shall provide and install any warning signs (trucks entering highway, etc.) as required by the County Superintendent of Highways.

ADD the following Sub-Section:

50-12.1 PERMITS

The Contractor shall procure all required permits for entering, operating, and hauling on public roadways. The Contractor shall meet all requirements of said permits.

50-13 MAINTENANCE DURING CONSTRUCTION

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

ADD: At all times, the Contractor shall have on site and available for use a self-propelled, vacuum or regenerative (recirculating) air pavement sweeper, a pavement blower or tractor mounted "sweeper box".

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

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

50-16 FINAL INSPECTION

DELETE: The first sentence of the first paragraph.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

ADD: As the first sentence of the first paragraph.

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

ADD: After the first sentence of the second paragraph:

The charging of Contract Time shall resume on the day following the inspection and shall continue until the remaining work, including the applicable requirements of Section 20-08, Final Clean-up, is completed to the Engineer's satisfaction.

50-18 PLANS AND WORK DRAWINGS

REVISE references to "approval" in first paragraph to "review".

ADD: After the third paragraph:

Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals.

Prior to submission, the Contractor shall review all shop drawing submittals for accuracy, completeness, and compliance with the contract requirements. The Contractor shall stamp, sign and date each submittal indicating Contractor approval of the submittal.

When submittals require close coordination of a number of products, the Contractor shall coordinate a concurrent submittal of such products. The Resident Engineer may withhold action on a submittal requiring coordination with other submittals until all related submittals are received.

Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Any deviation from contract requirements shall be clearly identified on the shop drawing submittal and supporting documentation for such deviation shall be attached. The Resident Engineer reserves the right to rescind inadvertent acceptance of submittals containing unidentified deviations.

REVISE: The second sentence of the sixth paragraph to read as follows:

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

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

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

PROJECT LOCATION: Quad City International Airport

PROJECT TITLE: RGL, ALCMS, & Pavement Marking

PROJECT NUMBERS: Illinois Project MLI-4080

AIP Project 3-17-0068-XX

CONTRACT ITEM: (E.G. 751-5.20)

SUBMITTED BY: (Contractor/Subcontractor Name)

DATE: (Date of Submittal)

ADD: The Resident Engineer shall return incomplete or vague material shop drawing submittals for completion prior to review.

Shop drawing submittals shall contain a letter of certification from the **producer** stating that all materials furnished for the project conform to the requirements of the plans and specifications including conformance with the Buy American Act. Letters of certification from the producer shall be dated no more than six (6) months prior to the date it is submitted to the Resident Engineer. Letters of certification from producers to verify submitted materials conforms to the requirements of the contract shall be submitted on company letterhead and include the project name, location and project numbers. Submittals not including this information shall not be reviewed and returned as incomplete. Incomplete shop drawing submits causing re-submittal(s) shall not be allowed as justification for additional contract time.

The Resident Engineer will review each submittal; mark corrections or modifications required and return it to the Contractor. The Resident Engineer will stamp each submittal with an action stamp and will mark the stamp appropriately to indicate action taken as follows. Submittals marked "Revise and Resubmit" or "Rejected" shall not be used as the project site. All submittals must ultimately receive "No Exceptions Taken" stamp from the Resident Engineer to be eligible for payment. Submittals stamped "Furnish as Corrected" are not considered approved shop drawings.

1. "No Exceptions Taken": Means fabrication/installation may be undertaken. Submittals stamped as such do not authorize changes to the contract price or time.

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- 2. "Furnish as Corrected": Same as "No Exceptions Taken" provided the Contractor complies with the corrections noted on the submittal by the Resident Engineer. The Contractor is still obligated to resubmit the submittal including the corrections made by the Resident Engineer so ultimately a shop drawing stamped "No Exceptions Taken" may be forwarded to the Division. Submittals stamped "Furnish as Corrected" at not considered approved shop drawings.
- 3. "Revise and Resubmit": Fabrication and/or installation MAY NOT be undertaken. Make appropriate revisions and resubmit limiting corrections to items marked.

ADD the following Section:

50-20 SECURITY AND MAINTAINING THE EXISTING AIRPORT PERIMETER FENCE LINE

Maintaining the security requirements of the Airport shall be a primary concern for the Contractor.

The Contractor will be responsible for maintaining airport security by maintaining the airport perimeter fence line at all times during the course of the work. All work shall be approved by the TSA and the Airport Operations Office. The Contractor shall maintain the existing airport perimeter fence line during the course of the work according to the following method:

The Contractor shall supply a 24-hours emergency contact that is capable of providing emergency fence repair.

Fines can be levied against the Contractor by the Transportation Security Administration (TSA) for negligence if the airport security is compromised and the airport perimeter fence line is not maintained as specified above. Fines can also be levied against the Contractor for failure to cooperate with the airport management as required to maintain airport security.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

SECTION 60 CONTROL OF MATERIALS

60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

REVISE: The first sentence of the third paragraph as follows:

...shall provide, prior to delivery...

ADD: At the end of this Section:

3. Meets "Buy America" requirements.

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

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

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

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

The FAA will conduct its review and approval based on the information provided by the grant recipient.

The information that must be provided for equipment shall include but not be limited to:

- Project Number
- Project Name
- Airport Name

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

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

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

60-11 CERTIFICATION OF MATERIALS

ADD: The Contractor shall certify all materials contained in the contract. Certifications and documentation shall be submitted to the Resident Engineer. It shall be the <u>sole</u> responsibility of the Contractor to ensure the delivery of adequate and accurate documentation <u>prior</u> to the delivery of materials. Materials incorporated into this project without approved certification and documentation will not be recommended for payment by the Resident Engineer.

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

As a guide to the certification process and requirements, the Contractor shall use the Illinois Department of Transportation/Division of Aeronautics MANUAL FOR DOCUMENTATION OF AIRPORT MATERIALS (latest edition). Copies of this manual are available from the Illinois Division of Aeronautics. The MANUAL FOR DOCUMENTATION OF AIRPORT MATERIALS defines the Resident Engineer's/Contractor's responsibilities (Sections 300/400). The Contractor shall have the sole responsibility to provide the Resident Engineer with appropriate documentation to satisfy the contract certification requirements prior to the delivery of materials.

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

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

All submittals shall contain the following information:

PROJECT LOCATION: Quad City International Airport

PROJECT TITLE: RGL, ALCMS, & Pavement Marking

PROJECT NUMBERS: Illinois Project MLI-4080

AIP Project 3-17-0068-XX

CONTRACT ITEM: (i.e. AR108158 - 2/C #8 5KV UG Cable in UD)

SUBMITTED BY: (Contractor/Subcontractor Name)

DATE: (Date of Submittal)

If the Division of Aeronautics requires additional documentation, they shall request it through the Resident Engineer.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

SECTION 70 LEGAL REGULATIONS & RESPONSIBILITY TO PUBLIC

70-10 BARRICADES, WARNING SIGNS, AND HAZARD MARKINGS

ADD the following paragraphs to this Section:

It will be the responsibility of the Contractor to properly mark a closed runway/taxiway; and, when the closed runway/taxiway is re-opened, to remove the markings. Detail drawings of closed runway/taxiway markings are included on the proposed CSPP in the Construction Plans. The Contractor will be responsible for installing and removing the closed runway/taxiway markings as the runway/taxiway is closed and opened.

The Contractor shall supply, install, and maintain lighted low profile barricades for this project as detailed in the Construction Plans. The barricades shall be lighted with a flashing red light supplemented with a 20"x20" orange flag. The barricades shall be able to withstand high winds or jet blast without dislocation. The Contractor will be responsible for placing and removing the lighted low profile barricades as the pavements are closed and opened.

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

Contractor identification shall be displayed on both sides of all contractor vehicles by labeling painted on the vehicles or by magnetically attached signs that are in conformance to FAA Advisory Circular 150/5370-2 (latest revision) as well as FAA Advisory Circular 150/5210-5 (latest edition).

The Contractor shall provide, install and maintain any warning signs (trucks entering highway, etc.) as required by the County Superintendent of Highways, the Township Road Commissioner and the City of Moline and/or the responsible agency that maintains the roadway. The cost of the warning signage as required by the agency responsible for the roadway for the duration of the contract shall be at no additional cost to the contract.

Any cost of labor and equipment which is necessary to insure safety at the airport during the duration of the project will be included in the Traffic Maintenance contract unit price. No additional reimbursement beyond the contract unit price shall occur.

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70-12 PROTECTION AND RESTORATION OF PROPERTY

ADD the following paragraphs to this Section:

The Contractor shall take special precautions during construction so as not to damage the existing roads, parking lots, runways, aprons, taxiways, building and other existing improvements.

Any such existing improvements damaged by the Contractor during construction shall be repaired or replaced by him at his own expense.

The Contractor shall take special care when working in the vicinity of existing airport lighting systems so as not to damage them. Should the Contractor damage any of the lighting systems and/or underground cables, he shall immediately repair or replace them, and make any necessary repairs to place them in working order. The cost of equipment and making the repairs will be the responsibility of the Contractor. If during the course of construction it is necessary to interrupt any lighting circuits, temporary cables shall be installed as needed to make the circuit operational.

The proposed minimum utility protection information shown on the Construction Plans is approximate and included for informational purposes only to help educate the Contractor on the scope of the work to be included in the contract unit prices. The Contractor is responsible to determine what additional protection is required to prevent damage to the existing utilities/improvements. The Contractor shall be responsible for all repair or replacement costs for damaged utilities/improvements.

The Contractor shall maintain the premises in reasonably clean condition and shall not allow any sizable accumulation of rubbish on the premises.

He shall leave the premises in broom-clean condition upon completion of the project.

70-13 RESPONSIBILITY FOR DAMAGE CLAIMS

REVISE the second line of the first paragraph to read as follows:

"...indemnify and save harmless the Division, the Owner, the Consultant Engineers, Subconsulting Engineer, and the F.A.A...."

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ADD the following three paragraphs between the first and second paragraphs of this Section:

To the fullest extent permitted by law, CONTRACTOR shall indemnify and hold harmless the OWNER, PARTICIPATING AGENCIES (the Division and the FAA), SUBCONSULTANTS, CONSULTANT ENGINEERS, and their respective agents and employees (indemnities) from and against any and all claims, damages, losses, economic losses and expenses, including but not limited to attorney's fees, arising out of or resulting from performance of the Work (including specifically claims arising under the Illinois Structural Work Act), provided that such claim, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury or destruction of tangible property (other than the Work itself), including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omission of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, excluding any proportionate amount of any claim, damage, loss or expense which is caused by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Paragraph.

In claims against any person or entity indemnified under this Paragraph by an employee of the Contractor, a Subcontractor, anyone directly employed by them or anyone for whose acts they be liable, the indemnification obligation under this Paragraph shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

This indemnification shall also include, but not be limited to, any penalties, fines or other actions imposed by the U. S. Department of Labor or the State of Illinois under the Occupational Safety and Health Act (O.S.H.A.) as a result of the Contractor's acts or omissions on this project.

REVISE the last paragraph of this Section to read as follows:

"The Contractor, prior to execution of the contract, shall file with the Division and the Consultant Engineer, copies of completed certificates of insurance, satisfactory to the Division and the Consultant Engineer, to afford protection against all claims for damages to public or private property, and injuries to persons, arising out of and during the progress of the work to its completion, as defined by Section 60-12. The policy of insurance shall include the Owner, the participating agencies (the Division and the FAA), Subconsultant Engineers, and Consultant Engineers, as additional insured or provide separate coverages with individual protective policies for all of the above named parties. The minimum amounts of insurance shall be as follows, except no restrictions or occurrence limits will be permitted:

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General Public Liability Insurance: \$1,000,000/Person

\$2,000,000/Occurrence

Property Damage Insurance: \$1,000,000/Occurrence

In addition to the above policies, Contractor shall provide an "Umbrella" policy covering his entire operation in the amount of \$3,000,000.

All such insurance must include an endorsement whereby the insurer agrees to notify the Division and the Consultant Engineer at least 30 days prior to nonrenewal, reduction or cancellation. Contractor shall furnish to the Division and the Consultant Engineer a copy of the endorsement in addition to any other insurance certificate required. The Contractor shall cease operations on the project if the insurance is canceled or reduced below the required amount of coverage. All costs for insurance as specified herein will not be paid for separately, but shall be considered as incidental to the contract."

70-17 CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS

REVISE: The second paragraph as follows:

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

DELETE: "Person To Contact" table after the second paragraph.

ADD: After the fifth paragraph:

The Contractor shall be responsible for locating Airport and FAA owned utilities / cables. The following table includes contact numbers that may provide assistance to the contractor in locating utilities / cables. The personnel listed in the table are in no way responsible for damage to existing utilities / cables.

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

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

Utility Service or Facility	Person to Contact	Telephone Number
Airport Facilities	Metropolitan Airport Authority	757-1743
Airport Lighting	Metropolitan Airport Authority	757-1752
FAA Control and Communications Cable	Airways Facility Unit	799-7303
Water Mains and Sanitary Sewers	City of Moline, II.	797-0489 / 797-0750
Electric Cables Mid-American Energy Company	JULIE (Joint Utility Locating Information for Excavators)	1-800-892-0123
Telephone Cables Illinois Bell	JULIE	1-800-892-0123
Telephone Company AT&T of Illinois Gas Mains Mid-American Energy Company	JULIE	1-800-892-0123

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

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

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

70-25 CONTRACTOR'S WARRANTY

ADD the following paragraphs to this Section:

Airport lighting equipment and materials covered by F.A.A. specifications that is to be supplied for this project shall have the prior approval by the F.A.A. and shall be listed in the most current Advisory Circular for Approved Airport Lighting Equipment.

All other equipment and materials covered by other referenced specifications shall be subject to acceptance through <u>manufacturer's certification of compliance</u> with the applicable specifications.

70-26 CONTRACTOR'S RESPONSIBILITY FOR SAFETY DURING CONSTRUCTION

REVISE this Section to read as follows:

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

- 1. Review the requirements in AC 150/5370-2 (current edition) and comply with items listed as Contractor's responsibility.
- 2. Implement a CSPP and SPCD as required in AC 150/5370-2 (current edition) and ensure that construction personnel are familiar with operation safety procedures and regulations on the Airport.
- 3. Provide a 24 hour point of contract that will coordinate an immediate response to correct any construction-related activity that may adversely affect the operational safety of the Airport.

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- 4. Provide a safety officer/construction inspector(s) trained in airport safety to maintain the CSPP and SPCD and to monitor all construction activities.
- 5. Restrict movement of construction vehicles to construction areas by erecting temporary lath lines, flagging and barricading, erecting temporary fencing, or providing escorts, as appropriate.
- 6. Ensure that no construction employees, employees of subcontractors or suppliers, or other persons enter any part of the aircraft operations area from construction site unless authorized.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

SECTION 80 PROSECUTION AND PROGRESS

80-05 LIMITATION OF OPERATIONS

ADD the following to this Section:

A minimum distance of 93' (65.5' for Taxiway K) shall be maintained between construction operations and the centerline of an active taxiway or taxilane. A minimum distance of 250' (150' for runway 5-23) from the centerline of an active runway and 1,000' (600' for Runway 5-23) from the end of an active runway. If work occurs within these limits, the pavements shall be closed prior to the commencement of work.

When a closed runway is being used for taxing of aircraft, the runway shall be treated as a taxiway for clearance requirements.

It is intended to plan, conduct, and complete the work in these critical traffic areas in such a manner that the length and amount of interruption to aircraft traffic at the Airport is minimized.

The Contractor shall comply with Federal Aviation Regulations Part 107 (Airport Security), Federal Air Regulation 139 (Airport Certification), and with all rules and regulations of the Airport, including, but not limited to, control and access to the airfield by Contractor's, employees and agents. In the event the Authority is Assessed a fine by the Federal Aviation Administration for breach of security resulting from actions of Contractor's employees and agents, the Contractor shall fully reimburse the Authority for the amount of such fine.

80-07 TEMPORARY SUSPENSION OF THE WORK

DELETE the first two paragraphs and INSERT the following:

The Contracting Agent (IDOT-DOA and/or the MAA) reserves the right to temporarily suspend the work wholly, or in part, for such periods as they may deem necessary, due to unsuitable weather, airport operation considerations, or other such conditions as are considered unfavorable for the prosecution of the work or for such time as is necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.

All measures necessary to comply with the temporary suspension of the work, as required by the Contracting Agent (IDOT-DOA and/or the MAA), shall be included in the traffic maintenance contract unit price. The Contractor shall not be entitled to any additional compensation (beyond this pay item) due to delays or inconveniences caused by the temporary suspension of the work.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

80-08 DETERMINATION AND EXTENSION OF CONTRACT TIME

ADD: After the fourth paragraph:

The Resident Engineer will make charges against the Contract Time after the presumptive completion of the entire project as provided for in Section 30-16, Final Inspection.

80-13 CONTRACTOR'S ACCESS TO AIRFIELD

ADD: After the third paragraph:

The Contractor's employees shall park their vehicles in the area designated for construction staging on the plans. The Contractor shall park his equipment and trailers in the area designated for construction staging on the plans. This area is shown on Sheet 3 of the Construction Plans.

Use of personal vehicles beyond the staging area will not be allowed.

The Contractor activity on the airfield shall be limited to the limits of construction identified on the construction activity plan and site plan drawings. Beyond the limits of construction, the Contractor shall not have access to any part of the active airfield pavements (runways, aprons or taxiway) with any equipment or by an personnel without the approval of the Airport management.

The Contractor and major subcontractors shall submit background and employment checks (as required by the Airport) for superintendents and supervising foremen and complete security forms for all personnel he proposes to use on the Airport. Key personnel shall be required to be fingerprinted, attend training classes, and pass tests as required by the Airport. The forms/training shall be completed prior to that person being issued an Airport identification badge and allowed on the airfield. The superintendents and foremen that are issued badges shall be directly responsible for the identification and location of those they are supervising while on the airfield. Sufficient personnel shall be badged to maintain continuous responsible control of all personnel, vehicles and equipment inside the AOA (Airfield Perimeter Fence). Badges shall be returned to the Airport once the project is complete or the person is no longer employed by the Contractor or subcontractor.

ADD the following to this Section:

80-14 SECURITY DURING CONSTRUCTION

The Contractor shall maintain security on the Airport as specified or as directed by Airport Management including adhering to all provisions of federal security regulations and all security requirements in the Airport Security Program and airport policies.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

The majority of the proposed project area lies within the airport's security fence. Access to this area is only by airport issued access cards. No access point may be left unsecured and unattended at any time. During hauling operations (and all other operations that require an access gate to remain open) a security guard shall be posted to maintain the security of the airport perimeter. The security guard must obtain an airport issued ID as specified below. The security guard must verify each vehicle and persons in the vehicle are authorized to enter the airfield by use of an authorized access lists and a stop lists provided by the Contractor and the Airport. The security guard shall be required to carry a cell phone at all times while guarding an opening. The Contractor's Superintendent, Foremen, Security Guards, Flagmen, and any other employee directed by Airport Management, must display a current photo I.D. badge, issued by the Airport. To obtain a photo I.D. badge for any of the Contractor's employees, the following is required:

- a. The Contractor will be responsible for certifying that all employees needing access and requesting an access ID are currently employed and require access by providing authorized signature forms and authorized subcontractor and employee lists directly to the Airport Security Coordinator.
- b. Each ID applicant must submit to a fingerprint based FBI Criminal History Records Check (CHRC) and successfully pass with no disqualifying crimes or the applicant will be prohibited from working in the secured area of the airport. A fingerprint fee will apply for each applicant.
- c. The employee must complete an Airport Safety and Security Training Session before issue of their ID.
- d. The Contractor will be responsible for all fees and costs associated with fingerprinting, issue of cards, and required security training for each applicant.

All ID applicants must complete their fingerprint checks and training before reporting for work. Due to the nature of the CHRC process and training requirements, the contractor is urged to have employees report to the Operations Office as soon as practical.

The Contractor shall submit a list of subcontractors a minimum of 10 days prior to the preconstruction meeting. Subcontractors shall have the same badging requirements as the prime contractor.

In addition, the Airport Security Coordinator will require that all Security Guards undergo additional training necessary to meet the Airport's security needs.

The Contractor is responsible for payment of Transportation Security Administration fines and penalties resulting from security infractions perpetrated by, caused by, or permitted by his personnel or work forces of his subcontractors or suppliers.

All costs relating to the Contractor's security shall be the responsibility of the Contractor.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

80-15 ACCESS/HAUL ROUTES

The Contractor <u>will use only</u> the designated haul routes as shown on Sheets 3 thru 17 of the Construction Plans. The Contractor's men and equipment shall not traverse outside the designated work areas to other locations on the airport or off of airport property. The designated haul routes will be the only vehicular access to the construction site.

It will be the Contractor's responsibility to procure all required permits from public agencies for entering, operating, and hauling materials on public roadways. The Contractor shall meet all requirements of said permits.

It will be the Contractor's responsibility to clear and build the haul routes and construction staging area as required to complete the contract work. The Contractor shall restore the haul routes and construction staging area upon completion of the project. All costs for clearing, maintaining, and restoring the haul routes and construction staging area shall be included in contract unit prices.

Failure to use the prescribed haul route or adhere to the safety requirements will result in the suspension of work.

80-16 SCHEDULING OF CONSTRUCTION ACTIVITIES

The Contractor shall coordinate all work on this project with the Resident Engineer and the Metropolitan Airport Authority to insure that the construction will cause the least amount of inconvenience possible to normal airport activity.

The Contractor will be required to submit a work schedule to the State of Illinois, Division of Aeronautics, and to the Resident Engineer showing proposed sequence of work.

In the event that other construction projects are in progress at the airport at the same time as this project, the Contractor will be required to cooperate with all other Contractors and the Metropolitan Airport Authority in the coordination of the work. The electrical Contractor shall cooperate and coordinate his electrical activities with the other Contractors' activities in order to provide an orderly and properly sequenced progression of construction. Any disagreement between Contractors will be settled by the Contracting Agent (IDOT-DOA). No extra compensation will be due to the electrical Contractor for delays caused by sequencing of construction events. Cooperation and coordination shall occur between the Contractors during the construction of these projects.

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The Metropolitan Airport Authority will at all times have jurisdiction over the safety of air traffic during construction. Whenever the safety of air traffic during construction is concerned, his decision as to methods, procedures, and measures used shall be final, and any and all Contractors performing work must be governed by such decisions.

The Contractor shall not be entitled to any extra compensation due to delays or inconvenience caused by said necessary methods, procedures, and measures to protect air traffic, delays caused by sequencing of construction events, and/or delays caused by coordination with others.

SITE INSPECTION

The Contractor shall be responsible for an on-site inspection (including the ATCT) prior to submitting a bid on this project. Upon receipt of a bid, it shall be assumed that the Contractor is fully familiar with the construction site (including the ATCT).

<u>DIVISION II – PAVING CONSTRUCTION DETAILS</u> <u>EARTHWORK</u>

<u>ITEM 150 – ENGINEER'S FIELD OFFICE</u>

ADD the following Section:

METHOD OF MEASUREMENT

150-3.1 The quantity of Engineer's Field Office to be paid for under this item shall be measured per lump sum for furnishing all materials, equipment, labor, and all other necessary items required to complete this item in accordance with this special provision.

BASIS OF PAYMENT

DELETE Section 150-3.1 and insert the following:

150-4.1 This item will be paid for at the contract price per lump sum for a field office, which price shall include all utility costs (including long distance telephone service for the Resident Engineer and his representatives) and shall reflect the salvage value of the building or mobile unit, equipment, and furniture which becomes the property of the Contractor after release by the Resident Engineer.

Payment will be made under:

ITEM AR150510 -- ENGINEER'S FIELD OFFICE -- per lump sum.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

ITEM 152-EXCAVATION AND EMBANKMENT

DESCRIPTION

152.1.1 ADD the following to this Section:

This item shall include, but not be limited to, all work necessary to remove existing soils from the proposed cut areas, stockpile soils as required, haul soils from the proposed cut areas or stockpile areas to the proposed embankment or soil disposal areas, installation of soils/topsoils, and backfill, compaction of soils where required, final grading, disposal of waste soils and other miscellaneous grading and backfilling as shown on the Construction Plans or as required by the Resident Engineer.

The Contractor shall remove existing topsoil materials, complete earthwork and then reinstall topsoil materials as required to guarantee the final 4" of soil materials will support vegetation growth. If Contractor installs soil that will not support vegetation growth, the Contractor shall remove the top 4" of the soil materials and haul in topsoil materials at his own expense without additional compensation beyond the contract unit prices.

The Contractor will be paid for hauling the soil materials one time only. The cost of moving, stockpiling, removing, reinstalling, etc. of the soil materials as required to complete the contract work shall be included in the 152 Earthwork cubic yard price as defined in this Special Provision.

152-1.2 CLASSIFICATION

ADD the following to this Section:

All materials excavated, regardless of the source and type, including vegetation strippings, concrete materials and solid rock materials shall be defined as "UNCLASSIFIED EXCAVATION". This contract item shall include the removal and off site disposal of existing concrete slabs, broken concrete, concrete footings, concrete drainage structures, seal coat/gravel service roads, solid rock materials and waste soils from the proposed excavation areas.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

CONSTRUCTION METHODS

152-2.1 GENERAL

ADD the following to this Section:

The payment under item 152419-Unclassified Disposal Offsite shall be based upon measuring the volume of cubic feet of soils removed as shown in the Construction Plans. Separate measurement for payments and/or payments shall not be made for the individual functions or steps required to complete the earthwork activities. The Contractor shall include all costs in the contract item 152419-Unclassified Disposal Offsite cubic yard price.

152-2.2 EXCAVATION

ADD the following to this Section:

Compaction control testing shall be accomplished for aircraft weights of 60,000 pounds or more.

152-2.4 DRAINAGE EXCAVATION

ADD the following to this Section:

The Contractor shall transport materials along the haul roads only. The locations of all haul roads shall be approved by the Resident Engineer prior to beginning any work on this item. The Contractor shall also be responsible for placing, maintaining, and removing any necessary drainage structures to allow crossing the various drainage ditches located on airport property. The Contractor shall take special precautions when hauling excavated materials so as not to create deep ruts. All existing graded, turfed, sodded and/or formed areas which are disturbed or rutted by the Contractor, during his hauling operations, shall be regraded, returfed and refinished at his own expense and to the satisfaction of the Resident Engineer. No additional payment for haul will be allowed the Contractor.

152-2.5 PREPARATION OF EMBANKMENT AREA

ADD the following to this Section:

All vegetation such as brush, heavy sods, heavy growth of grass, decayed vegetable matter, rubbish, and any other unsuitable material within 10' of the future paved areas shall be stripped or otherwise removed before embankment operations are started. Strippings from under the future paved areas may be stockpiled and used for topsoil

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and/or may be placed in the shoulder embankment area outside the limits of future pavement (as directed by the Resident Engineer), scarified, and broken by means of a disc harrow, plow or other approved equipment to the satisfaction of the Resident Engineer.

All vegetation such a brush, heavy sods, heavy growth of grass, decayed vegetable matter, rubbish, and any other unsuitable material 10' or more outside the future paved areas shall be stripped or otherwise removed before earthwork operations are started. Strippings from outside the future paved areas shall be stockpiled and used for topsoil upon the completion of the earthwork activities. These materials shall be scarified, and broken by means of a disc harrow, plow or other approved equipment to the satisfaction of the Resident Engineer.

No direct payment and/or measurements shall be made for the work performed under this section. The costs for all strippings, stockpiling, topsoil placement, and minor erosion control measures shall be included in the 152 Earthwork contract unit price.

152-2.7 PREPARATION AND PROTECTION OF THE TOP OF THE SUBGRADE

ADD the following to this Section:

At all times during construction, the ground surface shall be properly graded to promote rapid clearing of rainwater. The Contractor shall install temporary drainage ditches as requested by the Resident Engineer. Any water that accumulates on the ground surface shall be immediately removed by the Contractor. Excessively wet or disturbed soils at the base of any excavation or fill areas shall be removed prior to the placement of any additional fill. Any ground surface which will be exposed to weather and not immediately worked shall be bladed off with a motor grader and compacted with a smooth roller to seal the ground surface and prevent infiltration of moisture as approved by the Resident Engineer. When requested by the Resident Engineer and/or when it is predicted that inclement weather may develop, the Contractor shall cease embankment construction and seal the embankment ground surface.

152-2.10 TOPSOIL

ADD the following to this Section:

Topsoil shall be salvaged from strippings or other grading operations. Strippings shall be stockpiled during excavation operations so that soils can be removed. The strippings shall be reinstalled after excavation operations are complete. Grade stakes for topsoil placement shall not be set. No direct payment or measurements will be made for topsoil.

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No direct payment or measurements shall be made for the work performed under this section. The costs for all stripping, stockpiling, topsoil placement, and minor erosion control ditches shall be included in the 152 Earthwork contract unit price.

METHOD OF MEASUREMENT

152-3.1 DELETE:

The phrase "and stripped" from the last sentence of the first paragraph.

Add to this Section:

Excavation or handling of soils shall be paid for only once. Stockpiling of soils for later reuse and redistribution shall be done at the Contractor's expense. Redistribution or spreading of stockpiled soils shall be done at the Contractor's expense.

No direct measurements shall be made for stripping, stockpiling, topsoil placement, minor fill-in of abandoned structures and ditches, minor erosion control ditches, and the removal and disposal of existing concrete slabs, footings, drainage structures, and storm sewers. These items shall be considered incidental to the 152 Earthwork contract unit price.

152-3.2 DELETE the entire Article and insert the following:

Borrow material paid for shall be the number of cubic yards measured in its original position in excavation, and pay quantities shall be computed by the method of average end areas.

152-3.3 DELETE the entire Article.

BASIS OF PAYMENT

- 152-4.3 DELETE the entire Article.
- 152-4.4 DELETE the entire Article.

Payment will be made under:

ITEM AT152419 -- UNCLASSIFIED DISPOSAL OFFSITE -- per cubic yard.

ITEM 156000 – EROSION CONTROL

DESCRIPTION

ADD the following Section:

156-1.2 This item shall include temporary erosion drainage swales and all other temporary erosion control measures that are required to control storm water run-off and other pollutants from existing the construction site and/or staging/storage/parking area.

METHOD OF MEASUREMENT

DELETE Sections 156-4.1, 156-4.2 and 156-4.3 and INSERT the following:

156-4.1 The quantity of Temporary Erosion Control to be paid for under this item shall be measured per lump sum for furnishing all materials, equipment, overhead, and labor required for the construction and administration of this project including, but not limited to, compliance with the storm water pollution prevention plan, IEPA construction site activities NPDES Permit No. ILR100000, IEPA regulations, temporary seeding, and all other necessary items to complete this item. The contractor shall comply with the applicable provisions of the Illinois Environmental Protection Agency's "Standards and Specifications for Soil Erosion and Sediment Control" and the FAA's Advisory Circular 150/5370-10E "Standards For Specifying Construction of Airports".

BASIS OF PAYMENT

DELETE Section 156-5.1 and INSERT the following:

156-5.1 Payment will be made at the contract unit price per lump sum for Temporary Erosion Control. This price shall be full compensation for furnishing all materials and for all preparation, assembly, installation, removal, reinstallation as required of these materials and for all labor, equipment, tools, temporary seeding, and incidentals necessary to complete this item.

Payment will be made under:

ITEM AR156500 -- TEMPORARY EROSION CONTROL -- per lump sum.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

ITEM 209 – CRUSHED AGGREGATE BASE COURSE

DESCRIPTION

209-1.1 ADD:

Item 209510 Crushed Aggregate Base Course material will be used to fill construct an aggregate surface in the proposed beacon tower area. Maximum pay width for the base material shall be 18 inches beyond the edge of the proposed fence. Only aggregate base materials used to construct the aggregate surface in the proposed beacon tower area will be measured for payment/paid for under this item. Aggregate base materials installed outside of the proposed beacon tower area shall not be measured for payment/paid for under this item.

This item shall also include furnishing and installing geotextile fabric in the proposed beacon tower area as indicated on the Construction Plans or as otherwise required by the Resident Engineer. Geotextile fabric used for pipe installation shall not be included for payment in this item. Only geotextile fabric installed in the proposed beacon tower area will be measured for payment/paid for under this item. Geotextile fabric installed outside the proposed beacon tower area shall not be measured for payment/paid for under this item.

MATERIALS

209-2.1 ADD:

Sieve designation B, 1 1/2 inch maximum, TABLE 1, shall be used in the locations as indicated on the Construction Plans for the 209510 Crushed Aggregate Base Course.

In Table 1: 1. Change IDOT Gradation CM-4 to CA-4 for Sieve Designation A.

2. Change IDOT Gradation CM-6 to CA-6 for Sieve Designation B.

ADD the following Section:

209-2.3 GEOTEXTILE FABRIC

The geotextile fabric shall consist of woven or nonwoven filaments of polypropylene, polyester, nylon or polyethylene. Nonwoven fabric may be needle punched, heat-bonded, resin-bonded or combinations thereof. The fabric shall be inert to commonly encountered chemicals, rot proof, dimensionally stable (i.e. fibers must maintain their relative position with respect to each other), resistant to delamination, and conform to the following physical properties.

Section III Special Provisions
Quad City International Airport
Moline, Illinois

Weight (oz./sq. yd.)	4.0	- ASTM D3776
Grab tensile strength (lbs.)	200 min.*	- ASTM D4632
Grab Elongation at break (%)	12 min.*	- ASTM D4632
Burst strength (psi)	250 min.*	- ASTM D3786
Trapezoidal tear strength (lbs.)	75 min.**	- ASTM D4533
Equivalent opening size (AOS)		
Sieve No.		- ASTM D4751

^{*} For woven fabric, test results shall be referenced to orientation with warp or fill, whichever case may be. Both woven and nonwoven fabrics shall be tested wet.

<u>Handling and Storage:</u> Fabric shall be delivered to the job site in such a manner as to facilitate handling and incorporation into the work without damage. In no case shall the fabric be stored or exposed to direct sunlight that might significantly diminish its strength or toughness.

CONSTRUCTION METHODS

209-3.2 EQUIPMENT

ADD the following paragraphs to this Section:

Provisions shall be made by the Contractor for furnishing water at the plant <u>and</u> at the site of the work by equipment of ample capacity and of such design as to assure uniform mixing and application.

209-3.4 FINISHING AND COMPACTING

DELETE the fifth sentence in the first paragraph and insert the following sentence in its place:

Rolling shall continue until the base material has been compacted to not less than <u>95%</u> density, as determined by the compaction control tests specified in Division VII.

Compaction control testing shall be accomplished for aircraft weights of 60,000 pounds or more.

^{**} Manufacturer's certification of fabric to meet requirement.

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ADD the following Section:

209-3.13 GEOTEXTILE FABRIC

Prior to installation of the fabric, surface shall be cleared of debris, sharp objects and trees. Tree stumps shall be either removed or cut to the level of the ground surface. In the case of subgrades, all wheel tracks or ruts in excess of 2 inches in depth shall be graded smooth or otherwise filled with soil to provide a reasonably smooth surface.

Fabric sections shall be joined by overlapping the upper strip over the next lower strip, and also overlapping longitudinal edge joints by at least 2 feet. The fabric shall be held firmly in place by pinning the overlapped joints with wire staples made from No. 11 gage or heavier wire, width 1 or 2 inches at the throat and 6 inches from top to bottom after bending. The staples shall be packaged in cartons.

Torn fabric shall be repaired in place by cutting and placing a piece of the same fabric over the tear. The dimensions of the patch shall be at least two (2) feet larger than the largest dimension of the tear, and it shall be pinned securely to prevent the stone from causing lap separation.

METHOD OF MEASUREMENT

209-4.1 ADD the following to this Section:

The quantity of Crushed Aggregate Base Course to be paid for shall be the number of tons of material placed, bonded and accepted by the Resident Engineer in the completed base course. Aggregate in excess of 18" beyond the fence will not be measured for payment but shall be considered incidental to this pay item. Only aggregate base materials used to construct the aggregate surface in the proposed beacon tower area will be measured for payment/paid for under this item. Aggregate base materials installed outside of the proposed beacon tower area shall not be measured for payment/paid for under this item.

209-4.3 DELETE the first sentence and insert the following in its place:

Measurement for payment will not be made for any crush aggregate base course in excess of 105 percent of plan quantity plus (or minus) theoretical quantities authorized by the Resident Engineer.

ADD the following Sections:

209-4.4 The quantity of geotextile fabric to be paid for shall be the number of square yards as specified, in place, completed, and accepted. The overlapped areas will not be measured for payment, but shall be included in the contract unit price. Geotextile

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fabric used for pipe installation shall not be measured for payment under this item. Only geotextile fabric installed in the proposed beacon tower area will be measured for payment/paid for under this item. Geotextile fabric installed outside the proposed beacon tower area shall not be measured for payment/paid for under this item.

BASIS OF PAYMENT

209-5.1 ADD the following to this Section:

Payment will not be made for aggregate in excess of 105 percent of the amount specified by the Resident Engineer nor for aggregate placed outside the design width.

The tonnage of each type of aggregate base measured as provided above shall be paid for at the contract unit price per ton for each type of aggregate base course, which price and payment shall constitute full compensation for removal and disposal of existing materials as required to install proposed materials, preparing subgrade; furnishing, hauling and placing the materials; for spreading, sprinkling (if required), compacting and rolling, for refilling test holes (when necessary); and for furnishing all labor, equipment, tools, water and incidentals necessary to complete the work. Only aggregate base materials used to construct the aggregate surface in the proposed beacon tower area will be measured for payment/paid for under this item. Aggregate base materials installed outside of the proposed beacon tower area shall not be measured for payment/paid for under this item.

ADD this Section:

209-5.2 The number of square yards of geotextile fabric measured as provided above shall be paid for at the contract unit price per square yard for furnishing, storing, and installing the geotextile fabric. This price shall be full compensation for all labor, materials, and equipment necessary to complete this item. Geotextile fabric used for pipe installation shall not be paid for under this item. Only geotextile fabric installed in the proposed beacon tower area will be measured for payment/paid for under this item. Geotextile fabric installed outside the proposed beacon tower area shall not be measured for payment/paid for under this item.

Payment will be made under:

ITEM AT209510 -- CRUSHED AGGREGATE BASE COURSE -- per ton.

ITEM AT209600 -- GEOTEXTILE FABRIC -- per square yard.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

ITEM 610 – STRUCTURAL P.C. CONCRETE

DESCRIPTION

610-1.1 ADD:

This item shall include, but not be limited to, structural P.C. concrete used for constructing light bases, splice cans, drilled caisson foundations, foundations, sign pads, fence posts, and all other miscellaneous structural portland cement concrete items. Excavation, dewatering, bedding, backfill, concrete, reinforcing steel, wire mesh, jointing, anchor rods, anchor rod cages, conduits, conduit fittings, and all other materials and equipment required to construct the structural P.C. concrete items as detailed in the Plans and as directed by the Resident Engineer shall be included in this pay item.

The cost of furnishing and installing all items required to construct the structural P.C. concrete shall be considered incidental to the contract unit price for the item utilizing the Item 610 Structural P.C. Concrete unless indicated otherwise.

The cost of furnishing and install all items required to construct the beacon tower drilled caisson foundation shall be included in the AT801641-REPLACE TOWER FOUNDATION contract unit price.

MATERIALS

610-2.11 DELETE this entire Section.

ADD:

The use of calcium chloride shall not be permitted.

ADD the following Section:

610-2.12 DRILLED CAISSON FOUNDATION

Materials required for construction of the Beacon Tower Drilled Caisson Foundation shall conform to the provisions of Section 516 - <u>Drilled Shafts</u> of the "Standard Specifications for Road and Bridge Construction" adopted January 1, 2012, including all addendum at the time of bidding.

CONSTRUCTION METHODS

610-3.5 ADD:

Concrete (3500 P.S.I. at 28 days mix) shall have a slump no greater than 3", with 5.0% - 8.0% air entrainment.

ADD the following Section:

610-3.6 SUBMITTALS FOR DRILLED CAISSON FOUNDATION

Submittals: The Contractor shall submit according to Article 516.04 of the "Standard Specifications for Road and Bridge Construction" adopted January 1, 2012.

ADD the following Section:

610-3.7 CONSTRUCTION REQUIREMENTS FOR DRILLED CAISSON FOUNDATION

The method of construction for the Beacon Tower Drilled Caisson Foundation shall conform to the provisions of Section 516 - <u>Drilled Shafts</u> of the "Standard Specifications for Road and Bridge Construction" adopted January 1, 2012, including all addendum at the time of bidding.

Permanent casing is not allowed.

METHOD OF MEASUREMENT

ADD the following Sections:

610-4.3 AT801641-REPLACE TOWER FOUNDATION

The quantity of AT801641-Replace Tower Foundation to be paid for under this item shall be the number installed as completed units counted in place, ready for operation, and accepted by the Resident Engineer.

610-4.4 ALL OTHER 601-STRUCTURAL P.C. CONCRETE ITEMS

The Cost of furnishing and install all other structural concrete shall be considered incidental to the contract unit price for the item utilizing Item 610 Structural Portland Cement Concrete. This price shall be full compensation for furnishing all materials (including rebar and anchor rods) and for the preparation, dewatering, delivery and installation, labor, equipment, tools, testing and incidentals necessary to complete this item.

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BASIS OF PAYMENT

ADD the following Section:

610-5.2 AT801641-REPLACE TOWER FOUNDATION

Payment will be made at the "AT801641- Replace Tower Foundation" contract unit price for each complete beacon tower drilled caisson foundation installed in place by the Contractor and accepted by the Resident Engineer. This price shall be full compensation for furnishing all materials (including rebar and anchor rods) and for the preparation, dewatering, delivery and installation, labor, equipment, tools, testing and incidentals necessary to complete this item.

Payment will be made under:

ITEM AT801641 -- REPLACE TOWER FOUNDATION -- per each.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

ITEM 620 – PAVEMENT MARKING

DESCRIPTION

620-1.1 ADD the following to this Section:

This item shall also include the removal of existing pavement markings from the pavement surface as shown and detailed on the Construction Plans. The removal of the existing markings shall be accomplished with a high pressure/high capacity waterblasting system. The cleanup of waste materials shall be included in this item.

The installation and removal of pavement markings and temporary pavement markings required for construction safety and phasing (as indicated on the CSPP) shall be furnished and installed or removed in accordance with this special provision, but shall not be measured for payment and/or paid for under these pay items. The cost for temporary pavement markings and pavement marking removal required for CSPP shall be included in the 150530-Traffic Maintenance contract unit prices.

Prior to bidding, the pavement marking/pavement marking removal subcontractors shall review the Construction Safety and Phasing Plan (CSPP, Sheets 3 thru 19 of the construction plans). Multiple mobilizations/demobilizations will be required to complete the proposed work. Contractors shall not be entitled to any extra compensation for this condition.

The proposed pavement markings shown on the Construction Plans shall be applied as approved by the Resident Engineer.

MATERIALS

620-2.2 PAINT

ADD:

The paint for this project shall be Waterborne.

DELETE the entire paragraphs:

2. EPOXY

CONSTRUCTION METHODS

620.3.4 LAYOUT OF MARKINGS

ADD the following to this Section:

The Contractor or painting subcontractor shall be responsible for the layout of the proposed paint markings. Paint shall not be applied until the condition of the surface has been reviewed by the Resident Engineer. If, in the opinion of the Resident Engineer, the markings applied do not conform with these special provisions or the Construction Plans the Contractor shall remove and correct the markings at his own expense.

620-3.5 APPLICATION

CHANGE the first sentence of the second paragraph to read:

The paint shall be mixed in accordance with the manufacture's instructions and applied to the pavement with a marking machine in two separate applications, each at the rate(s) shown in Table 1.

Table 1. Application Rates for Paint and Glass Beads

Paint Type	Paint Square feet per gallon, ft ² /gal	Glass Beads, Type I, Gradation A Pounds per gallon of paint, lb/gal
Permanent Waterborne Markings	115 ft²/gal maximum	10 lb/gal minimum

DELETE the last sentence of the fourth paragraph.

ADD the following paragraphs:

A period of 24 hours shall elapse prior to the first application of paint if TT-P-1952 is used.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

620-3.7 PAVEMENT MARKING REMOVAL

REVISE this Section to read as follows:

The Contractor shall remove existing markings as shown and detailed on the plans or as directed by the Resident Engineer using waterblasting or other methods approved by the Resident Engineer. The Contractor shall be responsible for cleaning and drying the pavement surface.

In locations where the existing pavement markings are to be removed for the installation of proposed preformed thermoplastic markings (PTM), the removal contractor shall take care to insure that at least 98% of the existing painted markings are removed so that the existing pavement is exposed across the entire area to provide an excellent surface for the proposed PTM to bond to. Any residual paint in these areas must be properly bonded and not chipping or delaminating off of the pavement surface. The pavement marking removal contractor shall continue to remove the paint until the Resident Engineer and the PTM installation contractor are satisfied with the removal. See Item AR801640-Preformed Thermoplastic Marking for additional information and removal requirements for the areas that are scheduled to receive new PTM applications.

METHOD OF MEASUREMENT

620-4.1 ADD the following to this Section:

A. Pavement Marking:

The quantity of pavement marking to be paid for shall be the square footage of the final surface area of the permanent pavement markings installed and accepted by the Resident Engineer in accordance with these Special Provisions. Only permanent pavement markings will be measured for payment. Temporary pavement markings required for construction phasing will not be measured for payment.

Measurements for payment shall be made for the pavement marking surface area only once. The contract unit price shall include costs for all applications of paint on the pavement marking surface area.

B. Pavement Marking Removal:

The quantity of pavement marking removal to be paid for shall be the number of square feet of existing permanent markings removed in accordance with these Special Provisions and accepted by the Resident Engineer. Pavement Marking Removal required for construction phasing will not be measured for payment.

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Measurement for payment shall be made for the pavement marking surface areas removed only once.

C. Pavement marking, temporary pavement marking, pavement marking removal, and temporary pavement marking that is required for CSPP:

Pavement marking, temporary pavement marking, pavement marking removal, and temporary pavement marking that is required for the Construction Safety and Phasing Plan (CSPP, Sheets 3 thru 19 of the construction plans) shall not be measured for payment and/or paid for under these pay items. The cost of CSPP pavement marking items shall be included in the 150530-TRAFFIC MAINTENANCE contract unit prices.

BASIS OF PAYMENT

620-5.1 ADD the following to this Section:

Payment shall be made at the contract unit price per square foot for pavement marking and pavement marking removal. These prices shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary to complete this item. Traffic control shall also be included in these prices. Drying and cleaning of pavements shall also be included in these prices. The application of reflecting media shall also be included in these prices.

CSPP pavement marking/pavement marking removal items as detailed above shall not be include in these pay items.

Payment will be made under:

ITEM AR620510 -- PAVEMENT MARKING -- per square foot.

ITEM AR620900 -- PAVEMENT MARKING REMOVAL -- per square foot.

ITEM AS620510 -- PAVEMENT MARKING -- per square foot.

ITEM AS620900 -- PAVEMENT MARKING REMOVAL -- per square foot.

DIVISION III - FENCING (WIRE FENCES)

ITEM 162 - CHAIN-LINK FENCES (CLASS E)

DESCRIPTION

162-1.1 ADD the following to this Section:

This item shall include furnishing and installing Class E fencing and gate in the beacon area.

MATERIALS

162-2.1 FABRIC

ADD the following to this Section:

The chain link fence fabric shall be aluminum coated steel.

162-2.2 BARBED WIRE

DELETE the first sentence of first paragraph and add the following:

The barbed wire shall be aluminum coated steel.

162-2.3 FENCE POSTS, POST TOPS AND EXTENSIONS, GATES, BRACES, STRETCHER BARS, AND CLIPS.

REVISE the following items:

Fence posts shall be Type B of the sizes and weights shown on the plans.

Fence post spacing shall be 10' maximum.

Fence and gate shall be 10 feet high with 3 strands of barbed wire extending 13 inches above the top rail.

Fence shall include top rails of the size and weight shown on the plans and bottom tension wire.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

Item 610-Structural P.C. Concrete shall be used for installing fence and gate posts. This concrete will not be measured for payment and/or paid for separately, but will be considered as incidental to the unit price for this pay item.

162-2.3C. GATES

ADD the following to this Section:

Gate frames shall be made of 2 inch square aluminum tubing, allow 6063-T6, weighing 0.94 pound per lineal foot and shall be welded at all corners so as to form a rigid one piece unit.

Gates shall be installed on 4-inch OD Schedule 40 galvanized posts weighting 9.1 pounds per foot. All gate hangers, latches, brackets, guide assemblies and stops shall be galvanized after fabrication with malleable iron or steel. A positive latch shall be provided with provisions for padlocking.

METHOD OF MEASUREMENT

ADD the following to this Section:

Item 610-Structural P.C. Concrete used for installing fence and gate posts will not be measured for separate payment, but will be incidental to the unit price bid for the specific pay item.

BASIS OF PAYMENT

Payment will be made under:

ITEM AT162510 -- CLASS E FENCE 10' -- per lineal foot.

ITEM AT162604 -- CLASS E GATE - 4' -- per each.

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DIVISION V - TURFING

ITEM 901-SEEDING

DESCRIPTION

901-1.1 ADD to this Section as follows:

This item shall include, but not be limited to, all work necessary to seed all areas disturbed by the construction of this project. Seeding for this project shall be considered restoration seeding incidental to other construction activities such as lighting, trenching, cabling, signage, phasing, staging, etc. 901-Seeding will not be measured for payment and/or paid for separately, but will be considered as incidental to the contract unit price for the item utilizing Item 901-Seeding.

MATERIALS

901-2.1 SEED

ADD to this Section as follows:

In locations where poor soil conditions exist, the Resident Engineer may require that perennial ryegrass be substituted for annual ryegrass.

The seeds shall be planted at a depth between 1/4 inch and 1/2 inch below the final ground surface. All sowing of seed shall not begin prior to April 1 and shall be completed by June 1, or shall not begin prior to August 1 and shall be completed by November 1.

The seeding operation for any area shall be completed within forty-eight (48) hours following the application of fertilizer to that area.

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CONSTRUCTION METHODS

901-3.4 MAINTENANCE OF SEEDED AREAS:

ADD the following to this Section:

It will be the responsibility of the Contractor to establish a good stand of grass of uniform color and density to the satisfaction of the Resident Engineer. In areas where the seeds sown fail to grow, in the opinion of the Resident Engineer, the Contractor shall reseed the areas as required and as many times as required until the Resident Engineer is satisfied with the results. No measurements for payment or payments will be made for areas requiring reseeding.

METHOD OF MEASUREMENT

901-4.1 DELETE this entire Section and ADD the following:

No separate measurement for payment and/or payment shall be made for furnishing and installing seed. The cost associated with the furnishing and installing of seed shall be considered incidental to the contract unit price for item utilizing Item 901-Seeding.

BASIS OF PAYMENT

901-5.1 DELETE this entire section and ADD the following:

No separate payment will be made for 901-Seeding as detailed in paragraph 901-4.1 above.

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ITEM 908-MULCHING

DESCRIPTION

908-1.1 ADD to this Section as follows:

This item shall include, but not be limited to, all work necessary to hydraulic mulch all areas disturbed by the construction of this project. Mulching for this project shall be considered restoration mulching incidental to other construction activities such as lighting, trenching, cabling, signage, phasing, staging, etc. 908-Mulching will not be measured for payment and/or paid for separately, but will be considered as incidental to the contract unit price for the item utilizing item 908-Mulching.

CONSTRUCTION METHODS

ADD the following Sections:

908-3.3 CARE AND REPAIR

It will be the responsibility of the Contractor to establish a good stand of grass of uniform color and density to the satisfaction of the Resident Engineer. In areas where the seeds sown fail to grow, in the opinion of the Resident Engineer, the Contractor shall re-mulch the areas as required and as many times as required until the Resident Engineer is satisfied with the results. No measurements for payment or payments will be made for areas requiring remulching. Hydraulic mulch will be required in all areas where additional applications area necessary.

METHOD OF MEASUREMENT

908-4.1 DELETE this entire Section and ADD the following:

No separate measurement for payment and/or payment shall be made for furnishing and installing hydraulic mulch. The cost associated with the furnishing and installing hydraulic mulch shall be considered incidental to the contract unit price per the item utilizing item 908-Mulching.

BASIS OF PAYMENT

908-5.1 DELETE the entire Article and insert the following:

No separate payment will be made for 908-Mulching as detailed in paragraph 908-4.1 above.

DIVISION VI - LIGHTING INSTALLATION

ITEM 101 - AIRPORT ROTATING BEACONS

DESCRIPTION

101-1.1 ADD the following to this Section:

This item shall consist of furnishing and installing a L-802A airport rotation beacon with two L-810 LED obstruction lights. The work shall include the mounting, leveling, wiring, painting, enclosures, conduit, panel boards, breakers, switches, relays, shields, grounding, connection blocks, mounting platforms, photocells, control wiring to vault, power wiring to CAP building, servicing, and testing of the beacon system and all materials and incidentals necessary to place the beacon in operational condition as a completed unit to the satisfaction of the Resident Engineer.

EQUIPMENT AND MATERIALS

101-2.1 GENERAL

ADD the following to this Section:

C. Shop drawings and certifications (including all Buy American Certifications) shall be submitted for all components of this section.

101-2.2 BEACON

REVISE this Section to read as follows:

The airport rotating beacon shall conform to FAA Advisory Circulars 150/5340-30E (latest revision) and 150/5345-12F (latest revision), specifications for L-802A High Intensity Airport Beacon, Class 2 with photocell and tell-tale relay.

ADD the following to this Section:

The airport rotating beacon shall have a belt-drive system liquid-filled lamp connector, two 40,000 lumen, 400 watt pulse-start metal-halide lamps, one clear lens and one aviation green lens, permanently lubricated moving parts, thermally-protect motor, tested to wind velocities of 100 MPH, and equipped with a weatherproof steel cabinet that is powder coated international orange.

Beacon shall utilize 400 watt pulse-start metal-halide lamps and be suitable for 120V operation. Beacon shall be mountable on a tubular steel beacon pole tower.

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101-2.4 WEATHERPROOF CABINETS

ADD to this Section:

Weatherproof cabinets shall be NEMA-4 rated.

101-2.5 WIRE

ADD to this Section:

Service entrance wires shall be Type XHHW size as detailed. All other 600V rated wire shall be type THWN insulated. All wire shall be stranded copper.

ADD the following Section:

101-2.9 L-810 LED OBSTRUCTION LIGHTS

The L-810 LED obstruction lights shall conform to FAA Advisory Circular 150/5345-43 (latest revision), be equipped with thermostatically controlled arctic heaters, and be suitable for 120V operation. These obstruction lights shall be mountable on conduit and connected in series into a photocell control circuit with necessary relays and wiring connections.

CONSTRUCTION METHODS

101-3.5 BEAM ADJUSTMENT

ADD the following to this Section:

Furnish and install beacon beam shield between the beacon and the ATCT (Control Tower) of such size that will shield the beam from direct view from the control tower cab. Shield shall be mounted to beacon platform and shall be constructed of 1/16" aluminum plate.

101-3.7 WIRING

ADD to this Section:

The Contractor shall reuse the existing power service (circuit breaker) for the existing beacon that is located in the CAP building. Contractor shall replace the power wiring between the power service in the CAP building and the new beacon. Remove the old power wiring prior to installing the new power wiring. Provide service fused disconnect and install as detailed at the new beacon. All equipment enclosures shall meet NEMA-4 standards.

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Contractor shall replace the existing control wire between the existing vault and the new beacon. Remove the old control wiring prior to installing the new control wiring.

Obstruction lights shall be platform mounted as detailed and wired to operate through photocell control.

101-3.9 CONDUIT

CHANGE the first sentence to read as follows:

All exposed wiring shall be run in rigid steel conduit that is not less than 3/4" in diameter.

101-3.11 PHOTOCELL CONTROL

ADD the following to this Section:

Photocell control shall be wired to operate in conjunction with remote control switch located. It will be necessary to furnish relay and selector switch controllers, as detailed on the plans. Relays shall be square D Type X040 with three position selector switch for local-off-remote operation, or equal. Mount controls in NEMA-4 enclosures.

101-3.12 OBSTRUCTION LIGHTS

ADD the following to this Section:

Contractor shall install on the top of the mounting platform basket two each L-810 LED obstruction lights on opposite sides of the platform. The obstruction light assembles shall be mounted on conduit extensions to heights of not less than 4" above the top of the beacon. They shall operate through the use of a photoelectric control.

101-3.13 PAINTING

DELETE the use of red lead primer. Primer shall be non-lead based paint compatible with all finish paint coats.

101-3.14 TESTING

DELETE second sentence reference to lamp-changer operation.

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METHOD OF MEASUREMENT

101-4.1 ADD the following to this Section:

The quantity to be paid for under this item shall be the number of beacons installed as completed units in place, accepted and ready for operation, including all wiring-control and power (control wiring to vault and power wiring to CAP building), obstruction lights, enclosures, conduits, panel boards, circuit breakers, switches, relays, grounding, connection blocks, mounting platforms, shields, photocells, servicing and testing.

BASIS OF PAYMENT

101-5.1 Payment will be made under

ITEM AT101510 -- AIRPORT ROTATING BEACON -- per each.

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ITEM 103 - INSTALLATION OF AIRPORT BEACON TOWERS

DESCRIPTION

103-1.1 ADD the following to this Section:

This item shall also include the removal and disposal of the existing beacon tower PCC foundation, beacon pole tower, and beacon rotating light to the satisfaction of the Resident Engineer. After removal has been accomplished, the Contractor shall also restore all areas disturbed by the removal.

The existing equipment and materials scheduled to be removed shall be removed by the Contractor with care so that all materials considered suitable for future use by the Resident Engineer may be salvaged. Equipment and materials having salvage value shall be removed without damage and those having no salvage value shall be removed and disposed of by the Contractor in a suitable location off of airport property. The Contractor shall clean the salvageable materials and equipment to the satisfaction of the Resident Engineer. Any components damaged by the Contractor during removal shall be replaced or repaired by him at no additional cost with a similar unit (approved by the Resident Engineer) that is compatible with the remainder of the system. All salvageable equipment and materials removed and not reused shall remain the property of and be delivered to the Metropolitan Airport Authority. The Contractor shall deliver the salvaged items to a location designated by the Airport Maintenance Manager. All excavating required to remove existing equipment and materials shall be backfilled with compacted sand (IDOT classification FA-6).

EQUIPMENT AND MATERIALS

103-2.1 GENERAL

ADD the following to this Section:

Shop drawings and certifications (including all Buy American Certifications) shall be submitted for all components of this section.

103-2.12 TOWER

DELETE the first sentence and ADD the following:

The tubular steel beacon tower shall be 75' in height and shall conform to the details and requirements shown on the plans, FAA Advisory Circular 150/5340-30E (latest revision), and FAA Advisory Circular 150/5370-10F (latest revision).

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The steel beacon tower shall be a Hali-Brite, 16-75FP-RBB/86, 75 foot airport beacon pole with round service basket, galvanized service steps, pole climber safety cable assembly, reinforced handholes, anchor base, internal wire guide nipples, lighting rods (2 each) and have factory finish paint; or an approved equal of the type shown on the plans.

Beacon tower drilled caisson foundation, anchor rods, and anchor rod cage shall be furnished and installed per the manufacturer's requirements. Concrete for the foundation shall be 610-Structural P.C. Concrete materials.

CONSTRUCTION METHODS

ADD the following to this Section:

103-3.6 AT103900-REMOVE BEACON TOWER

This item shall include all work necessary to remove the existing beacon tower foundation, beacon pole tower, and beacon rotating light to the satisfaction of the Resident Engineer. The Contractor shall relocate and rewire the existing security camera (and camera electrical equipment) from the existing beacon pole tower to the proposed beacon pole tower. This work shall include, but not be limited to, disconnecting existing cables, relocating security camera / equipment, removing cables, removing beacon, removing tower, removal of all other miscellaneous electrical equipment, excavating PCC foundation, removing PCC foundation, backfilling excavation with compacted sand, topsoil, seeding, mulching, transporting electrical equipment, disposal of waste equipment, material, and PCC foundation, and all other incidentals necessary to remove the existing beacon, beacon equipment and beacon tower, and return the remaining electrical system (with camera / equipment) back into operation, complete to the satisfaction of the Resident Engineer.

The Contractor shall deliver the salvaged items to a location designated by the airport maintenance manager.

103-3.7 RESTORATION

Where sod has been removed or damaged, it shall be replaced as soon as possible after the backfilling is completed. All areas disturbed by the removal of items, trenching, excavating, storage, cable laying, conduit installation, pad construction, foundation installation or removal, and other construction work shall be restored to its original condition or better. The restoration shall include any necessary topsoiling, fertilizing, liming, seeding, sodding, mulching, and/or watering. All such work shall be performed in accordance with IDOT-DOA and FAA standard turfing specifications. The Contractor shall be held responsible for maintaining all disturbed surfaces and replacements until final acceptance by IDOT-DOA.

METHOD OF MEASUREMENT

103-4.1 DELETE this entire Section and ADD the following:

ITEM AT103410-BEACON TOWER:

The quantity of BEACON TOWER to be paid for under this item shall be the number of beacon towers installed as complete units in place, accepted and ready for operation.

ITEM AT103900-REMOVE BEACON TOWER:

The quantity of REMOVE BEACON TOWER to be paid for under this item shall be the number of beacon towers removed as complete removals, accepted and removal area restored. Remove beacon tower shall include removing the existing beacon, beacon pole tower, beacon PCC foundation, and restoration. The relocation of the existing security camera (and camera equipment) shall also be included in this item. The beacon and beacon PCC foundation shall not be measured for payment and/or paid for separately.

BASIS OF PAYMENT

103-5.1 Payment will be made under:

Item AT103410 – BEACON TOWER -- per each.

Item AT103900 – REMOVE BEACON TOWER -- per each.

DIVISION VI - LIGHTING INSTALLATION

ITEM 108 - INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS

DESCRIPTION

108-1.1 ADD the following to this Section:

This item of work shall consist of the installation of cable at the locations shown on the plans and in accordance with these specifications.

Contract Item AR108051-POWER CABLE IN UNIT DUCT consists of the installation of the relocated east SCAN RPU power feed cables (2-#1 + 1-#1 GRD, 600V, TYPE U.S.E. power cable in 1 ½" UD) in the locations shown on the Plans.

Contract Item AR108962-REPLACE CABLE consists of the replacement of existing Vaisala, Inc. Type V SCAN sensor extension cables in the locations shown on the Plans.

If the Contractor wishes to lay cable on a line other than that shown on the plans, he shall obtain approval of the Resident Engineer before doing so. Any additional cable or wire needed because of such change will be at the Contractor's expense.

Contract Item AR801603 -- FIBER OPTIC CABLE IN 2" UD consists of furnishing and installing 2 each fiber optic cables (one 24 strand single mode MAA cable for future use and one 12 strand multimode cable for the proposed ALCMS) in a common trench at the location shown on the plans and in accordance with these specifications. The proposed 6 strand multimode fiber optic telephone cable between the vault and the terminal building basement shall not be measured for payment or paid for under this item.

At locations where the existing cable to be replaced might obstruct or interfere with the efficient operation of the electrical system and in locations indicated on the Construction Plans, the existing cable shall be removed and disposed of by the Contractor. The Contractor shall install pull cords and plugs in the existing conduits where existing cables are removed and no new cable is proposed. The costs of removing and disposing of any existing cable, new pull cords, and new plugs shall be considered as incidental to the contract unit price and no additional compensation will be allowed.

When required, the Contractor shall pull out and reinstall existing cables in the existing facilities as indicated on the Construction Plans. The costs of pulling and reinstalling the existing cables and proposed cables shall be included in the 108 Underground Cable contract unit price.

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In areas where there is a congestion of buried cables or where the proposed cable crosses an existing cable, the Contractor shall be required to hand dig the proposed cable into place or hand dig to remove an existing cable. In all other areas, the Contractor has the option to either trench or plow the proposed cable in unit duct into place.

Prior to excavating any area, the Contractor shall be required to megger all existing light circuit cables at the regulators in the vault. The Contractor shall notify and coordinate with Airport maintenance and the Resident Engineer so that an Airport maintenance employee and the Resident Engineer may witness the megger readings. All readings shall be submitted to the Resident Engineer.

Upon completion of the project, similar megger readings shall be made on both new and existing light circuit cables to insure that existing cable has not been damaged due to construction. The Contractor shall notify and coordinate with Airport maintenance and the Resident Engineer so that an Airport maintenance employee and the Resident Engineer may witness the megger readings. All readings shall be submitted to the Resident Engineer.

The Contractor shall be required to provide a 24-hour answering service with a one hour response to enact repairs to existing lighting cable damaged due to construction as authorized by the Owner. All costs borne to repair such damaged cable shall be the responsibility of the Contractor.

In order to avoid existing underground cable, the Contractor shall connect a thumper to all existing circuits after which the cables shall be staked in all areas requiring trenching or excavation. Contractor shall also note that low voltage, FAA, cables also run underground throughout these areas.

EQUIPMENT AND MATERIALS

108-2.1 GENERAL

ADD the following to the end of this Section:

- F. Shop drawings and certifications shall be submitted for all components of this section. Included with the shop drawing submittal, the Contractor shall submit all Buy American Certifications.
- G. The Contractor shall provide a complete itemized listing of equipment and materials proposed for incorporation into the work. Each itemization shall include an item number, the quantity of items proposed, and the name of the manufacturer. Data composted of catalog cuts, brochures, circulars, specifications and product

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data, and printed information in sufficient detail and scope to verify compliance with requirements of the contract documents shall be provided.

- H. Special tools and test equipment required for maintenance and testing of the products shall be supplied by the Contractor.
- I. Instructions necessary to check out, troubleshoot, repair, and replace components of the systems, including integrated electrical and mechanical schematics and diagrams and diagnostic techniques necessary to enable operation and troubleshooting after acceptance of the system shall be provided.

J. BUY AMERICAN

All materials for this item shall meet the requirements of the FAA Buy American Preference as stated in Appendix 2. Contractor shall provide proof of 100% domestic materials prior to delivering materials to the site. Materials that are unable to meet this requirement shall be reported in the bid documents under Certifications Require by State and/or Federal Law, Buy American Certificate.

108-2.2 CABLE

REVISE this Section to read as follows:

Underground cable shall conform to the requirements of F.A.A. Advisory Circular 150/5345-7E, "Specifications for L-824 Underground Electrical Cable for Airport Lighting Circuits." L-824 cable shall be FAA approved and listed in the current AC 150/5345-53D (or latest edition), Airport Lighting Equipment Certification Program, Appendix 3 Addendum.

Cable used for the runway, taxiway and guard lighting circuits shall be (Draka Cable or approved equal) No. 8, 5000 Volt, non-shielded, EPR, L-824 Type B, one or two conductors, stranded, cable with PVC jacket meeting ICEA S-96-659, in unit duct. The proposed cable and unit duct shall be factory assembled and delivered to the site on reels. The unit duct shall be manufactured from black polyethylene complying with NEMA standard for high density, smooth wall, and coilable polyethylene electrical plastic duct Pub. No. TC7-1978. Airfield series circuit cables shall be unit assembly with one inch (1") diameter unit duct. Runway guard light cables, homerun cables, and cables to guidance signs shall be two of the above cables in one unit duct, 1-1/2" assembly. Field terminate homeruns in manholes or splice cans with a minimum of three each 2" diameter conduit openings.

Cable used for the low voltage SCAN east RPU power service (AR108051 Power Cable In Unit Duct) shall be Type C copper single conductor and XLP (thermosetting cross linked polyethylene insulation). Cable shall be UL listed as type USE or RHW-2 or RHH. The proposed three each single conductors shall be contained in unit duct.

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The proposed cable and unit duct shall be factory assembled and delivered to the site on reels. The unit duct shall be manufactured from black polyethylene complying with NEMA standards for high density, smooth wall, coilable polyethylene electrical plastic duct Pub. No. TC7-1978. Three of the above singles conductor cables shall be in one unit duct, 1 1/12" assembly. Field terminates in manholes or splice cans with a minimum of two each 2" diameter conduit openings.

Contract Item AR108962-REPLACE CABLE shall conform to the requirements of FAA Advisory Circular 150/5320-13B, "Runway Surface Condition Sensor Specification Guide" latest edition. The Type V sensor extension cable shall be supplied by Vaisala, Inc. of Minneapolis, MN (or approved equal). Splice kits shall be Vaisala P/N 24051016 (FP 2000) or approved equal. All splices shall be made in splice cans. All splices shall be per manufacturer's instructions.

It is the desire of the Owner to have interchangeable lighting cable throughout the airport, therefore the Metropolitan Airport Authority reserves the right to select and/or approve electrical cable and materials to be supplied for this project.

ADD the following Section:

108-2.14 ITEM AR801603 -- FIBER OPTIC CABLE IN 2" UD

ALCMS 12 STRAND MULTIMODE CABLE: The fiber optic cable shall comply to the requirements of "109-2.23-4 Communication Network" found in the special provision. The fiber optic cable shall be 62.5/125um multimode cable suitable for 850nm/1300nm optical wavelength and industrial fiber optic modules, in unit duct. Continuous length of cable shall be provided. Fiber optic cable shall be 12 fiber, gelflooded, direct burial grade with an operating temperature of -40°C to +80°C and suitable for installation in underground ducts, surface conduits, and cable trays. Inscribe "ALCMS" on the outside of the cable and on the outside of the unit duct at 2' intervals. The proposed cable and unit duct shall be factory assembled and delivered to the site on reels. The 2" unit duct shall be manufactured from black polyethylene complying with NEMA standard for high density, smooth wall, and coilable polyethylene electrical plastic duct Pub. No. TC7-1978. Field terminate cable in FO junction enclosures. The fiber optic cable shall be subject to the approval/acceptance of the manufacturer of the proposed ALCMS system.

MAA 24 STRAND SINGLE MODE CABLE: The fiber optic cable shall be 5/125um single mode cable suitable for 1300nm optical wavelength and industrial fiber optic modules, in unit duct. Continuous length of cable shall be provided. Fiber optic cable shall be 24 fiber, gel-flooded, direct burial grade with an operating temperature of -40°C to +80°C and suitable for installation in underground ducts, surface conduits, and cable trays. Inscribe "MAA" on the outside of the cable and on the outside of the unit duct at 2' intervals. The proposed cable and unit duct shall be factory assembled and delivered to the site on reels. The 2" unit duct shall be manufactured from black

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polyethylene complying with NEMA standard for high density, smooth wall, and coilable polyethylene electrical plastic duct Pub. No. TC7-1978. Field terminate cable in FO junction enclosures. The fiber optic cable shall be subject to the approval/acceptance of the MAA.

CONSTRUCTION METHODS

108-3.1 GENERAL

ADD the following to this Section:

The cable quantities as shown on the Construction Plans are based on straight line measurement and do not consider any vertical distances or the required cable slack as stated in Section 108-3.3 of the "Illinois Standard Specifications for Construction of Airports", adopted April 1, 2012 by IDOT-DOA.

All cable shall be installed direct buried or plowed as indicated on the drawings, using new and existing cable ducts under runways, roads, home runs to transformer vaults, etc.

Except for installation of cable (or cables) in unit duct, the Contractor shall <u>not</u> use a cable plow for installation of the cable.

Each day, prior to leaving the job site, the Contractor, in the presence of the Owner's representative, shall activate all airport lighting circuits to insure operation.

At base mounted lights and splice cans the unit duct shall be attached to the base can rigid steel conduits with fittings as indicated on the Construction Plans.

The unit duct shall be installed so that it is possible to withdraw cables and pull in new ones. Sweeping long radius bends shall be used. Any run with a kink or short radius bend will be rejected. The cables in unit duct will be installed continuously between lights without any splices in cables or unit duct. Splices in homeruns shall be made inside approved splice cans or manholes as directed by the Resident Engineer.

Color code all phase wiring by use of colored wire insulation and/or colored tape. Where tape is used, the wire insulation shall be black. Black and red shall be used for single-phase, three wire systems and black, red and blue shall be used for three-phase systems. Neutral conductors, size No. 6 AWG or smaller, shall be identified by a continuous white or natural gray outer finish along its entire length. Neutral conductors larger than No. 6 AWG shall be identified either by a continuous white or natural gray outer finish along its entire length or by the use of white tape at its terminations and inside accessible wireways.

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All branch circuit conductors connected to a particular phase shall be identified with the same color. The color coding shall be extended to the point of utilization.

Direction of primary cables shall be identified by color coding as follows: When facing light with back to pavement, cable to the left is coded red and cable to right is coded blue. This applies to stake mounted lights and base mounted lights where the base has only one entrance.

In control wiring the same color shall be used throughout the system for the same function, such as 10%, 30%, 100% brightness control, etc.

All power and control circuit conductors shall be copper, <u>aluminum shall not be accepted</u>. This includes wire, cable, busses, terminals, switch/panel components, etc.

Low voltage (600 V.) and high voltage (5000 V.) conductors shall be installed in separate wireways.

108-3.2 INSTALLATION IN DUCT OR CONDUIT

ADD the following to this Section:

The unit duct will run continuous through all ducts.

At locations, such as in an existing duct or wireway, in the existing electrical vault area, existing electrical manhole, utility tunnel, duct bank or near a proposed light location, where the existing cable to be replaced might obstruct or interfere with the efficient operation of the electrical system, it shall be removed and disposed of by the Contractor. The cost of removing and disposing of this existing cable shall be considered as incidental to the contract unit price per linear foot for underground cable installed in trench or duct, and no additional compensation will be allowed.

108-3.3 TRENCHING

ADD the following to this Section:

Where two or more cables are laid parallel in the trench, they shall be placed laterally a minimum distance of three (3) inches apart, and the trench will be widened sufficiently to accomplish this.

Any and all trenches will be backfilled to a smooth grade to the satisfaction of the Resident Engineer. The disturbed areas will be either sodded or seeded, limed and fertilized. Lime will be applied at the rate of two (2) tons per acre. Any combination of the following nutrient materials is acceptable providing the minimum requirements are met: complete fertilizer, sulphate of ammonia, ammonium nitrate, ammonium phosphate or muriate of potash.

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FERTILIZER APPLICATION RATES

Minimum Pounds of Available Nutrient		Plant Food Per Acre
N		135
P_2O_5		45
K_2O		90
	Total	270

The seed mixture used shall be applied at the following rate of live seeds per acre.

Seeds	Lbs./Acre
Inferno Tall Fescue or Tarheel II Fescue	60
Annual Ryegrass	20
Audubon Red Fescue	30
Rescue 911 Hard Fescue	30
Endophytic Fescue Cultivar	60

The sodding, seeding and fertilizing of trench areas as described will be incidental to Item 108 and no additional compensation will be allowed.

108-3.6 BARE COUNTERPOISE WIRE INSTALLATION FOR LIGHTING PROTECTION AND GROUNDING

ADD to this Section the following:

Bare copper counterpoise wire will not be required on the proposed light circuits.

GROUND CONDUCTOR INSTALLATION

- A. A ground shall be installed at each light fixture base can or mounting stake, at each lighted sign base can, and at each splice can.
- B. The ground shall be a #6 AWG bare copper wire jumper bounded to the internal ground lug at the light fixture base, lighted sign base or splice can, the stake of a stake-mounted light, and to a 5/8 inch by 8 foot long coppercial ground rod installed beside the fixture, sign or splice can.
- C. Installing the ground rod within the light base, sign base or splice can excavation is acceptable.
- D. The resistance from the ground rod to earth ground must be 25 ohms or less via measurement with a ground tester. If this measurement requirement is not met, an

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additional ground rod shall be installed 10 feet from the first and bonded to the first ground rod with a #6 AWG bar copper wire.

108-3.8 TESTING

ADD the following to this Section:

- K. Two types of tests are to be conducted on each existing circuit, which is to be added to or modified **before** any work is performed, as follows:
 - 1. Disconnect the cables from the constant current regulator and measure the end to end conductor resistance of the airfield lighting cable loop using an ohm meter and record the measured value. Compare the measured value with the value calculated by multiplying the total cable length (in thousand feet) times the published cable resistance in Ohms per thousand feet. Large discrepancies, 1k Ohms or more, indicate faulty connections, splices, or bad cable.
 - 2. With the airfield lighting cables disconnect, measure the cable insulation resistance, from the conductor to ground, using a 500V minimum megohmmeter (megger). Test each cable for a minimum of one minute to allow readings to stabilize before recording the test values. For new cable, insulation resistance should be 50 megohms for cable less than 10,000 feet long, 40 megohms for cable 10,000 to 20,000 feet long and 30 megohms for cable over 20,000 feet long. For cables 20 years old, the values would be approximately 0.5 megohms, 0.4 megohms and 0.3megohms respectively and values less than these indicate faulty cable insulation, connectors, splices or a damaged cable.

If the test measurements indicate a faulty existing cable, notify the Owner so repairs can be made.

New cables or cable segments shall be tested after installation as defined in 1. and 2. above. New cable insulation resistance should measure a minimum of 50, 40, or 30 megohms, depending upon length, as described in 2. above.

New cables installed by the Contractor that do not meet the requirements above shall be replaced by the Contractor at his expense.

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L. TESTING OF FIBER OPTIC CABLES:

A. General Requirements:

The Contractor is responsible to perform acceptance tests as indicated below for each optical fiber sub-system (e.g., backbone, horizontal, etc.) as it is completed.

- 1. The Contractor is responsible for supplying all equipment and personnel necessary to conduct the acceptance tests. Prior to testing, the Contractor should provide a summary of the proposed test plan for each optical fiber cable type including equipment to be used, setup, test frequencies or wavelengths, results format, etc. The method of testing shall be approved by the Engineer.
- 2. The Contractor shall visually inspect all optical fiber cabling and termination points to ensure that they are complete and conform to the standards defined herein. The Contractor shall provide the Engineer with a written certification that this inspection has been made.
- 3. The Contractor shall conduct acceptance testing according to a schedule coordinated with the Owner/Engineer. Representatives of the Owner may be in attendance to witness the test procedures. The Contractor shall provide a minimum of one (1) week's advance notice to the Engineer to allow for such participation. The notification shall include a written description of the proposed conduct of the tests, including copies of blank test result sheets to be used.
- 4. Tests related to connected equipment of others shall only be done with the permission and presence of the Contractor involved. The Contractor shall ascertain that testing only is required to prove that the optical fiber connections are correct.
- 5. The Contractor shall provide test results and describe the conduct of the tests including the date of the tests, the equipment used and the procedures followed. At the request of the Engineer, the Contractor shall provide copies of the <u>original</u> test results.
- 6. All optical fiber cabling shall be 100% fault-free unless noted otherwise. If any optical fiber cable is found to be outside the specification defined herein, that optical fiber cable and the associated connector(s) shall be replaced at the expense of the Contractor. The applicable tests shall then be repeated.

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- 7. Should it be found by the Engineer that the materials or any portion thereof furnished and installed under this Contract fail to comply with the specifications and drawings with respect or regard to the quality, amount, or value of materials, appliances, or labor used in the work, it shall be rejected and replaced by the Contractor and all work disturbed by changes necessitated in consequence of said defects or imperfections shall be made good at the Contractor's expense.
- 8. The optical fibers utilized in the installed cable shall be traceable to the manufacturer. Upon request by the Owner, the Contractor shall provide cable manufacturer's test report for each reel of cable provided. These test reports shall include manufacturer's on-reel attenuation test results at 850-nm and 1300-nm for each optical fiber of each reel prior to shipment from the manufacturer.
 - a. On-the-reel bandwidth performance as tested at the factory. Factory data shall be provided upon request.
 - b. The testing noted for optical fiber cabling utilizes an Optical Time Domain Reflectometer (OTDR). However, the Contractor may submit to the Engineer for pre-approval of alternate fiber optic testing equipment.

c. Tests Prior to Installation:

1) The Contractor, at their discretion and at no cost to the Owner, <u>may</u> perform an attenuation test with an OTDR at 850-nm or 1300-nm on each optical fiber of each cable reel prior to installation. The Contractor shall supply this test data to the Engineer prior to installation.

d. Tests After Installation:

- 1) Upon completion of cable installation and termination, the optical fiber cabling shall be tested to include:
 - a) Optical Attenuation ("Insertion Loss" Method):
 - (1) Optical Attenuation shall be measured on all terminated optical fibers in one direction of transmission using the "Insertion Loss" method measurement in accordance with the TIA/EIA 526-14, Method B, and be inclusive of the optical connectors and couplings installed at the system endpoints. Access jumpers shall be used at both the transmit and receive ends to ensure that an accurate

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measurement of connector losses is made. Multimode optical fibers shall be tested at 850 ± 30 nm.

(2) Attenuation of optical fibers shall not exceed the values calculated as follows:

Attenuation (max.) = 2*C+L*F+S dB

Where \underline{C} is the maximum allowable Connector Loss (in dB), \underline{L} is the length of the run (in kilometers), and \underline{F} is the maximum allowable optical fiber loss (in dB/km). \underline{S} is the total splice loss (# of splices * maximum attenuation per splice).

B. Optical Fiber Media Test Data:

- 1. Test results shall include a record of test wavelengths, cable type, fiber and cable (or Outlet) I.D., measurement direction, test equipment type, model and serial number, date, reference setup, and crew member name(s).
- 2. OTDR traces of individual optical fiber "signatures" obtained as specified above shall be provided to the Engineer in electronic form on CD-ROM for review. Trace files shall be so named as to identify each individual optical fiber by location in the cable system and optical fiber number or color. Where traces are provided in electronic form, the Contractor shall provide along with the above documentation, one (1) licensed copy of software that will allow for the display of OTDR traces provided. The software shall run on a DOS or Microsoft Windows-based personal computer.

108-3.11 TERMINATIONS AND CONNECTIONS

REPLACE:

"Cast Splice Kit" with "In-Line Splice Kit" in the third paragraph.

108-3.12 RESTORATION

ADD:

Restoration, seeding and mulching of disturbed areas for the construction/installation of electrical items shall be incidental to the project.

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METHOD OF MEASUREMENT

108-4.1 REVISE the first paragraph in this Section to read as follows:

The footage of cable or counterpoise wire installed or replaced in trench, duct, or conduit to be paid for shall be the number of linear foot of cable installed or replaced 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 required slack, turns, splices, etc. The Contractor shall take this into consideration in preparing his bid for the items concerned. Existing cables moved, replaced, and/or relocated as part of removing and replacing concrete duct banks, signs, lights, and/or splice cans shall not be measured for payment and/or paid for under this item.

The MAA 24 strand single mode and the ALCMS 12 strand multimode fiber optic cables in unit ducts shall both be measured and paid for under item AR801603. The proposed 6 strand multimode fiber optic telephone cable between the vault and the terminal building basement shall not be measured for payment and/or paid for under this item.

Cable trenching shall not be measured for payment or paid for separately. The costs of cable trenching shall be included in the cabling contract unit prices.

BASIS OF PAYMENT

Payment will be made under:

ITEM AR108051 – POWER CABLE IN UNIT DUCT -- per lineal foot.

ITEM AR108258 -- 2/C #8 5 KV UG CABLE IN UD -- per lineal foot.

ITEM AR108962 -- REPLACE CABLE -- per lineal foot.

ITEM AR801603 -- FIBER OPTIC CABLE IN 2" UD -- per lineal foot.

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ITEM 109 – INSTALLATION OF AIRPORT TRANSFORMER VAULT AND VAULT EQUIPMENT

DESCRIPTION

109-1.1 ADD to this section the following:

This item shall include, but not be limited to, all work necessary to remove existing electrical equipment, relocate existing electrical equipment, and furnish and install proposed electrical equipment in the vault, in the ATCT and on the airfield as shown in the construction plans and detailed in this special provision to the satisfaction of the MAA, the FAA and the Resident Engineer. Removed regulators shall be turned over to the MAA. Work that is to be included in this item is described as follows.

AR109210-VAULT MODIFICATIONS:

This item shall include all work necessary to modify the existing electrical vault and the existing electrical equipment inside the vault and ATCT as shown in the construction plans and detailed in this special provision to the satisfaction of the Resident Engineer and the airport.

AR109301 - 4KW REGULATOR, STYLE 1:

This item shall include furnishing and installing new proposed 4KW style 1 regulators with stacking kits as shown in the construction plans and detailed in this special provision to the satisfaction of the Resident Engineer and the airport.

AR109630-LIGHTING CONTROL COMPUTER SYSTEM:

This item shall include removing the existing Airfield PLC Lighting Control System and furnishing and installing a new L-890-B-B Airfield Lighting and Monitoring System (ALCMS) in the vault and ATCT as shown in the construction plans and detailed in this special provision to the satisfaction of the MAA, the FAA and the Resident Engineer. The cost for furnishing and installing the proposed shielded 6 strand multimode fiber optic telephone cable in 1" flex conduit between the vault and the terminal building shall be included in this AR109630 item.

AR109907-REMOVE TRANSFORMER:

This item shall include removing an existing MidAmerican Energy Company transformer (including foundation and support electrical equipment, located just south of Runway 9-27 and west of Taxiway N) as shown in the construction plans and detailed in this special provision to the satisfaction of the Resident Engineer and the airport.

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AR109962-RELOCATE ELECTRICAL EQUIPMENT:

This item shall include relocating the existing scan system east remote processing unit (RPU) as shown in the construction plans and detailed in this special provision to the satisfaction of the Resident Engineer and the airport. The relocation shall include furnishing & installing new power supply equipment for the RPU. This items shall also include the furnishing and installing of one (1) new SCAN sub-surface temperature probe.

All equipment relocated, moved, rewired, modified, and/or furnished and installed shall be complete and ready to operate as determined by the Resident Engineer and airport. Follows, is a list of the major components included under "Item 109 – INSTALLATION OF AIRPORT TRANSFORMER VAULT AND VAULT EQUIPMENT".

- A. Disconnect and remove existing spare 15KW regulator #17.
- B. Furnish, install, and connect light circuits, power feed, and control and monitoring systems to 2 each new stackable AR109301 4KW Style 1 regulators (Ferro-Resonant type with stacking kits). 480v input, 6.6 amp output, L-829 constant current, class 1, 3 steps.
 - B.1. Regulator #17 feeds the proposed R13-31 RGL circuit.
 - B.2. Regulator #17A feeds the proposed R5-23 RGL circuit.
- C. Switch airfield lighting circuits and re-label existing regulator #18.
 - C.1. Disconnect existing RGL circuit from existing RGL-29. (RGL-29 to new regulator #17).
 - C.2. Connect proposed R9-27 RGL circuit to existing regulator #18.
 - C.3. Re-label all items in vault and ATCT to reflect this change.
- D. Core through existing vault wall and add new GRS ceiling supported conduits for new airfield circuit cables and fiber optic cables.
- E. Remove old PLC system and install new L-890 ALCMS in the vault and ATCT.
- F. Remove existing MidAmerican Transformer from airfield.
- G. Relocate the existing east scan RPU. Furnish and install all proposed electrical equipment, conduit, and wiring required for new east scan RPU power feed from vault. Furnish and install one new SCAN sub-surface temperature probe
- H. All other miscellaneous work as required (wire, cable, fiber optic cable, conduits, wireway, enclosures, electrical equipment, circuit breakers, DCME's, unistruts, concrete, rock, etc.) in the vault and ATCT.

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This item includes all work necessary to modify the existing electrical systems in the existing airfield vault and ATCT as detailed in the Construction Plans, this specification and the recommendations of the equipment manufacturer to the satisfaction of the MAA and the Resident Engineer. All equipment and work necessary to completely connect and put into operation (with all existing control and monitoring systems working) the proposed electrical equipment shall be included in these items.

This work under this item shall include, but not be limited to, the necessary disconnecting, removing and relocating of existing electrical equipment and cables, furnishing and installing proposed electrical equipment, wiring, cables, conduits, fittings, enclosures, unistruts, grounding, cable splice kit installation, connections, switches, patches, computers, touch screens, DMCEs, terminal blocks, buses, replacing circuit breakers, supplying circuit blank fillers, distribution (ground) cutouts, series plug cutouts, painting of equipment and conduits, concrete, modules, programming, the marking and labeling of equipment, the labeling or tagging of wires, testing of the installation, and all other incidentals required for a complete and operational system. Any parts and labor required by the Contractor to make these changes shall be incidental to the contract pay items.

Conduits, cables, circuit breakers, circuit blank fillers, wires, concrete, all other incidentals required to complete the vault and ATCT equipment work shall be supplied and constructed in accordance with the applicable portions of Item 108, 110, 125, and 610 of the "Standard Specifications for Construction of Airport", these Special Provisions, and the details in the plans. However, these items shall not be measured for payment or paid for separately. The cost of all work items required to complete and put into operation the electrical equipment in the vault and ATCT shall be included in the contract Item AR109210-Vault Modifications and/or Item AR109630-Lighting Control Computer System lump sum unit prices.

EQUIPMENT AND MATERIALS

109-2.1 GENERAL

REVISE paragraph A. to read as follows:

A. Airport lighting equipment and materials covered by FAA specifications shall have prior approval of the Federal Aviation Administration, Airport Service, Washington, D.C. 20591, and shall be listed in the latest Advisory Circular 150/5345-53D, (or latest edition) Airport Lighting Equipment Certification Program, Appendix 3 Addendum.

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ADD the following to this Section:

- C. Shop drawings and certifications shall be submitted for all components of this section. Included with the shop drawing submittal, the Contractor shall submit all Buy American Certifications.
- D. The Contractor shall provide a complete itemized listing of equipment and materials proposed for incorporation into the work. Each itemization shall include an item number, the quantity of items proposed, and the name of the manufacturer. Data composed of catalog cuts, brochures, circulars, specifications and product data, and printed information in sufficient detail and scope to verify compliance with requirements of the contract documents shall be provided.
- E. Special tools and test equipment required for maintenance and testing of the products shall be supplied by the Contractor.
- F. Instructions necessary to check out, troubleshoot, repair, and replace components of the systems, including integrated electrical and mechanical schematics and diagrams and diagnostic techniques necessary to enable operation and troubleshooting after acceptance of the system shall be provided.

G. BUY AMERICAN

All materials for this item shall meet the requirements of the FAA Buy American Preference as stated in Appendix 2. Contractor shall provide proof of 100% domestic materials prior to delivering materials to the site. Materials that are unable to meet this requirement shall be reported in the bid documents under Certifications Required by State and/or Federal Law, Buy American Certificate.

The Contractor shall field inspect the existing vault and ATCT electrical equipment, prior to purchasing the proposed equipment, to ensure the new equipment is compatible with the existing equipment. Any noncompatible components furnished by the Contractor shall be replaced by him at no additional cost with a similar unit (approved by the Engineer) that is compatible with the remainder of the Airport Vault and ATCT Electrical Systems.

The Contractor shall ascertain that all system components furnished are compatible in all respects with each other and with the existing vault and ATCT electrical systems. Any noncompatible components furnished by the Contractor shall be replaced by him at no additional cost to the Owner with a similar unit that is compatible with the existing systems.

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The proposed new regulators shall be "Ferro-Resonant" type regulators with multioutput tapping capability (minimum increments of 20%). The new regulators shall be compatible and able to operate efficiently with LED signs / LED lights on the same circuit with incandescent signs / incandescent lights. The new regulators shall also be compatible and able to operate efficiently with an all-LED sign / light circuit.

109-2.18 FAA APPROVED EQUIPMENT

REVISE the fourth advisory circular reference to change "L-828" to read "L-828 and L-829."

ADD the following to this Section:

This item includes furnishing and installing L-829 regulators with 480 V primary and 6.6A secondary power as detailed in Section 109-1.1 above. New regulators shall match the existing regulators with the exception of the new regulators shall be "Ferro-Resonant" type with multi-output tapping capability (minimum increments of 20%). New regulators to be complete with regulator and circuit monitoring functions. All monitored functions to be available in dry contact output for remote alarm/monitoring system inputs. The manufacturer of the proposed new regulators shall provide integration drawings detailing the method of connection between the proposed new regulators and the proposed ALCMS as required for a complete and operational system.

It is the desire of the Owner to have interchangeable vault equipment at the airport, therefore the MAA reserves the right to select and/or approve vault equipment and materials to be supplied for this project.

The L-829 units shall be air-cooled constant current regulators with monitoring design to supply three precision output current levels for the taxiway medium intensity and RGL systems and/or five precision output current levels for the runway medium or high intensity systems (maximum of 6.6 amps). The regulators shall have a power rating as detailed on the plans and in Section 109-1.1 above, and be suitable for operation at 480 V, single phase input.

A monitoring module inside each L-829 regulator shall detect the status of the regulator and the series circuit that it powers. It a fault condition is detected by the monitor module, a fault indicating LED on the front panel of the monitor module shall indicate which type of fault has occurred, and an alarm signal shall be generated. Fault conditions detected by the monitor module shall include the following:

- 1. Loss of input power.
- 2. Regulator shutdown of either open-circuit or overcurrent protective circuits.
- 3. A volt-ampere drop of 5% or more to the series circuit.

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- 4. Failure of the regulator to deliver an output current corresponding to the brightness step selected.
- 5. The presence of 1 to 15 burned-out incandescent / LED lamps (used in L-804, L-850, L-842, L-861 and L-862 fixtures) in any series circuit if all the series transformers have the same wattage and are supplied by the same manufacturer.

For three-step regulator, brightness settings shall be 4.8, 5.5 and 6.6 amps; for five step regulators, brightness settings shall be 2.8, 3.4, 4.1, 5.2 and 6.6 amps.

Furnish current monitoring in the regulators for series circuit current output. Current monitor shall provide dry contact for each current step; 5 contact closures for 5 step regulator and 3 contact closures for 3 step regulator. The contractor will be required to rewire the factory furnished regulators to match the existing regulators in the vault. All costs to rewire the proposed regulators shall be included in the lump sum unit price for Item AR109210-Vault Modifications.

The regulators solid state control and monitoring logic shall be contained in easy to service plug-in modules installed in the front panel. The L-829 regulators shall be operated locally using the front panel rotary switch or by a 120V ac remote control system connected to a ALCMS with a (minimum 10,000 feet round-trip) fiber optic control cable connected to a remote ALCMS. The Contractor and regulator manufacturer shall review the requirements of the proposed ALCMS to insure that the new equipment being supplied through this project will operate correctly with the proposed ALCMS.

Protective circuits shall automatically shut down the regulators when an overcurrent or open-circuit occurs in the series lighting circuit. If an input power loss occurs, operation shall automatically resume at the same brightness level within 5 seconds after restoration of input power. Input and output lightning protection and output current surge protection shall be provided on all units.

The regulators shall have the following technical features and characteristics:

- 1. Built-in monitor's operation shall not be influenced by the resistance of lamp filaments or cable (with a steady dielectric strength). Operation shall be fully independent of temperature and filament life.
- 2. Monitor shall be designed to monitor all aviation incandescent / LED lights mandated by FAA; these include inset light fixtures (L-850's and L-852's) and elevated light fixtures (L-804's, L-861's and L-862's).
- 3. Monitor shall operate on top three brightness steps of the regulator.

- 4. The L-829 regulator's monitor shall be calibrated for a single load. Any changes in the load shall require a recalibration of the monitor.
- 5. Two user-set lamp failure detection levels shall be provided on the monitor module, allowing for a pre-alarm (normal mode) and a final alarm (degraded mode) lamp failure indication. The normal mode alarm shall be designed to indicate when an initial number of lamp failures have occurred, while the degraded mode alarm shall be activated when the number of lamp failures reaches a level which requires immediate action by maintenance personnel.
- 6. Built-in true RMS-reading ammeter.
- 7. Output current level shall be held constant to within ± 0.1 ampere at any intensity step.
- 8. Maximum Power Factor: 90% for 4.0, 7.5, and 10 KW regulators; 95% for 15, 20, and 30 KW regulators.
- 9. Minimum Efficiency: 90% for all regulators.
- 10. On-off switching under any load.
- 11. Output current surge limitation on all regulators to provide protection to lamps.
- 12. Regulator shall be equipped with internal control power, 120VAC and also be suitable for operation from an external 24VDC control power sources. Control shall be from either source but not both simultaneously.
- 13. Overcurrent protection.
- 14. Open-circuit protection.
- 15. Output lightning and transient protection.
- 16. Input lightning protection.
- 17. If an input power loss occurs, operation shall resume within 5 seconds after restoration of input power.
- 18. Pressure-type terminal blocks for connection of external remote control wiring.

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19. Environmental Operating Conditions:

Temperature (CCR): -40° C to $+55^{\circ}$ C $(-40^{\circ}$ F to $+131^{\circ}$ F)

Temperature (Monitor): 0°C to +55°C (+32°F to 131°F)

Relative Humidity: 10 to 100% Altitude: 0 to 6,600 feet (2,000 m)

20. Remote control and monitoring system that will function correctly with the proposed L-890 ALCMS.

Provide on series plug cutout for each regulator suitable to receive the #8 AWG, 5 KV homerun cables. Series plug cutouts shall be Crouse-Hinds Type S1, or equal, and be rated at 5 KV, 20A.

109-2.20 WIRE

REVISE paragraph A. "Control Circuits" first sentence to read:

Wire size shall not be less than #12AWG, unless otherwise detailed on the plans, and shall be insulated for 600 volts.

DELETE paragraph B. 2 and B. 3.

ADD paragraph B. 2.

5,000 volts maximum-Wire shall be #8 AWG or larger, and conform to FAA L-824 Type B specifications and ICEA S-96-659. Insulation shall be Ethylene Propylene Rubber (EPR) with overall outer jacket of polyvinyl chloride (PVC). All cable shall utilize stranded, bare copper conductor.

ADD paragraph (c).

- (b) Multi-Conductor Control Cables
 - 1. General Use Multi-conductor control cables shall be rated 75° C., 600 V and have 20-mil polyethylene conductor insulation with a 10-mil PVC insulation cover. The entire cable assembly shall be encased in a PVC jacket. Conductor size shall be #16 AWG. The number of conductors per cable shall be as indicated on the plans. Cable shall be Triangle PWC, Inc., Type PE/PVC 2010, Rome Cable Corp., Type CT-B, or equal.

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2. Tray Cable – Multi-conductor control cable suitable for use in cable tray shall conform to Articles 310 and 340 of the NEC. Cable shall be rated 90° C., 600 volt and be of conductor size and quantity as listed on the plans. Individual conductor shall have insulation Type XHHW or THWN/THHN/VE-1. Cable shall be UL listed by Type TC, and be Triangle PWC NA-Power and Control Tray Cable Type TC, Brand Rex Type XL-TC, or equal. Color coding of individual conductors shall be according to ICEA method K2 with no white or green insulated conductors; or other approved color coding method.

ADD the following to the end of this Section:

109-2.22 AR109962 – RELOCATE ELECTRICAL EQUIPMENT (SCAN SYSTEM)

Equipment and cables required for contract item "AR109962 – RELOCATE ELECTRICAL EQUIPMENT" shall conform to the requirements of the latest version of FAA advisory circular 150/5320-13B, -"Runway Surface Condition Sensor Specification Guide". The equipment and cables shall be supplied by Valisala, Inc. of Minneapolis, MN (or approved equal). Cable splice kits shall be Valisala P/N 24051016 (FP2000) or approved equal. All splices shall be per manufacturer's instructions.

109-2.23 AR109630 – LIGHTING CONTROL COMPUTER SYSTEM (L-890-B-B ALCMS)

109-2.23-1 OVERVIEW

- A. The ALCMS shall combine state-of-the-art programming intelligence with high quality industrial strength components.
- B. The system shall represent the leading edge in aviation lighting technology with innovative Touchscreen control stations; distributed control and monitoring; and powerful database storage and retrieval systems.
- C. The ALCMS manufacturer shall be ISO 9001 certified and provide a copy of the ISO certification during the submittal process.
- D. The ALCMS manufacturer shall be listed in the FAA Approved Equipment List, AC 150/5345-53 (current edition), be a FAA approved supplier of L-890 ALCMS in accordance with AC 150/5345-56 (current edition), and be a FAA approved supplier of Constant Current Regulator Monitors in accordance with AC 150/5345-10 (current edition).
- E. The ALCMS manufacturer shall have a minimum of five (5) years of experience in computerized ALCMS and shall have installed at least five (5) advanced control and monitoring systems of similar size and complexity to the one specified herein.

- F. The ALCMS Manufacture shall furnish and commission a complete and functional computerized distributed control and monitoring airfield lighting system based on an industry standard Ethernet network.
- G. This project shall include software, programming, computers, manuals, on-site commissioning, on-site testing, on-site training and any other materials, tools and equipment to provide a fully functional system to the satisfaction of the MAA, the FAA, and the Resident Engineer.
- H. The ALCMS Manufacturer shall provide an experienced and qualified Engineering, Sales and Service staff to support the Contractor and airport throughout the installation and life of the system.
- I. The ALCMS Manufacturer shall be responsible for verifying compatibility of the existing / proposed regulators and equipment (including telephone line) with the new ALCMS. The ALCMS Manufacturer must verify that appropriate monitoring points are available on the existing / proposed regulators and equipment (including telephone line). If required, the modifications to existing regulators and equipment (including telephone line) shall be incidental to the installation of proposed ALCMS.
- J. The project shall follow this basic cycle of events:

	Milestone	Description
1.	Submittal	The ALCMS Manufacturer shall submit
		ALCMS specifications to the Contractor.
2.	Submittal Review and Approval	Submittal is reviewed by the Contractor,
		Airport, and Resident Engineer.
3.	Production Release	The ALCMS Manufacturer shall release
		approved system to manufacturing.
4.	Demo CD 35% Software	The ALCMS Manufacturer shall send to the
	Completion	Contractor, Airport, and Resident Engineer a
		Demo CD of the planned layout of the
		touchscreen that will be used for the control of
		the ALCMS system.
5.	Production	System is manufactured.
6.	Production Testing	System is tested by the ALCMS Manufacturer.
7.	Factory Acceptance Testing	System is available for Factory Acceptance
		Testing (FAT) witnessed by Airport/Resident
		Engineer (at Airport/Engineers option).
8.	Shipment of system	Approved system is shipped to installation site.
9.	Installation	Contractor installs equipment and completes
		external wiring.

10.	Commissioning	The ALCMS Manufacturer shall arrive at installation site to complete commissioning of system and verify Contractor installation and wiring.
11.	System Cut-over	The ALCMS Manufacturer and Contractor shall cut over the new system and bring it online and operational.
12.	System Acceptance Testing	System is available for System Acceptance Testing (SAT) which may be witnessed by the Airport and/or Resident Engineer.
13.	Manuals/As-Built drawings	The ALCMS Manufacturer shall issue operator manuals, maintenance manuals, ATC manuals and final as-built drawings.
14.	On-Site Training	The ALCMS Manufacturer shall complete onsite training of maintenance, Operations, and ATC personnel.
15.	Final Owner Acceptance	Upon completion of all contractual requirements, system is accepted in writing by the IDOT-DOA/Airport/Resident Engineer.
16.	Warranty and Support	The ALCMS Manufacturer shall provide warranty and support per the contractual requirements.

109-2.23-2 FACTORY ACCEPTANCE TEST (FAT)

- A. Before shipment, the ALCMS system shall be assembled as an operating system at the ALCMS Manufacturer's test facilities.
- B. The ALCMS Manufacturer shall make the FAT available for representative(s) of the Airport and Resident Engineer to witness the testing of the system.
- C. As a minimum, the FAT shall allow for one (1) day of testing and review, but may require additional time depending on the results of the testing.
- D. The ALCMS Manufacturer shall incur the costs of setting up and performing the test excluding Airport and Resident Engineer related travel and accommodations.
- E. During the FAT, minor software comments shall be finalized and incorporated into the final system.

109-2.23-3 ALCMS EQUIPMENT AND MATERIALS

A. The ALCMS system shall be based on a network ready system that operates within a Windows XPTM operating environment.

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- B. The ALCMS shall be a PC-based system and shall not use any Programmable Logic Controller (PLC) components for control or monitoring.
- C. An Ethernet communication network shall be used for data transfer between the regulators and the ALCMS. An Ethernet communication network shall be used for data transfer between the ATCT cab touchscreen and the ALCMS system in the ATCT equipment closet. A fiber optic communication cable shall be used for data transfer between the ATCT and the vault.
- D. The computerized ALCMS shall consist of the following major hardware components:
 - 1. Touchscreen control station located in the tower cab.
 - 2. Tower computer subsystem consisting of an industrial enclosure and communication equipment located in the existing ALCMS equipment closet on the 5th floor of the ATCT. The proposed new wall mounted enclosure shall fit on the wall inside the existing ALCMS equipment closet. Contractor / Manufacturer shall field check all dimensions prior to furnishing new enclosure to ensure the new enclosure will fit in the allotted space.
 - 3. Vault computer subsystem consisting of industrial enclosures, industrial vault computer, laser jet printer, communication equipment and a redundant vault control/monitoring network.
- E. Within the airfield lighting vault shall be a distributed control and monitoring system which operates on a redundant communication network.
- F. The ALCMS shall include distributed control and monitoring equipment (DCME). The regulator DCME's shall be of a distributed nature that shall be installed at each controlled element within the vault. The DCME's for the utility power, automatic transfer switch, stand-by generator, beacon control, and wind tee control shall be wall mounted units and installed on the southwest wall of the regulator room in the vault. The vault industrial computer communicates to each DCME via two (2) 24AWG shielded cables each consisting of two (2) twisted pair with a common drain wire (Belden 9842 or as required by the ALCMS manufacturer).
- G. The system shall control and monitor the operation of the various systems per AC 150/5345-10 (current edition) requirements.

109-2.23-4 COMMUNICATION NETWORK

- A. The tower and vault computer shall communicate with each other via 12 strand multimode fiber optic communication networks. The fiber optic cable between the tower and the vault shall be constructed in accordance with the applicable portions of Item 108 of the "Standard Specifications for Construction of Airports", the details in the plans and the manufacturer's installation instructions. This fiber optic cable will be measured for payment and paid for under contract item "AR801630 -- FIBER OPTIC CABLE IN 2" UD".
- B. The fiber optic cables shall be multi-mode, 850nm/1300nm wavelength, 62.5/125 micron fiber cable. Each fiber communication link requires 2 fibers.
- C. All fiber optic cable shall be terminated at a fiber optic patch panel within each subsystem before being terminated at the communication equipment Cost of these ALCMS fiber optic patch panels to be included in item AR109630.
- D. Fiber optic jumper cables shall be provided from the fiber patch panel to the computer equipment enclosures.
- E. Fiber optic cable shall be terminated with ST style connectors at the fiber optic transceivers located within the vault computer cabinet.
- F. Fiber optic cable runs shall be direct point-point runs with no splices.

109-2.23-5 COMPUTERS

Industrial Computer

A. All the industrial-grade computers in the ALCMS system are identical and have the following technical specifications:

ID	Options	Description
a)	Type	Industrial-grade computer.
		Advantech or approved equal
b)	Processor Type	Intel Pentium® 4
c)	Processor Clock Rate	2.5 GHz or better
d)	Memory Capacity	1 GBytes RAM
e)	Hard Disk	64 GByte Solid State Flash Drive
	See details to follow	Standard rotating drives are not acceptable
f)	Hard Drive Bay	Flash Drive installed in a removable, front accessible
		drive bay with locking mechanism
g)	Compact Flash Card	2 GByte Compact Flash Card
	See details to follow	Stores compressed "Ghost" image of Flash Drive,
		airport specific programs and configurations

h)	CF Card Reader	Front accessible CF Card reader installed in a 5.25" drive Bay
i)	Floppy Diskette Drive	1.44 MB, 3.5"
j)	2 X USB Ports	2 Front accessible USB Ports
k)	Cache Memory	L2 512KB
1)	CD-ROM	52X
m)	Video (Integrated)	SVGA, 8MB VRAM, minimum support 1280 x 1024
n)	Operating System	Window XP TM Pro
o)	Lockable Drive Bay	Front accessible and lockable drive bay door that protects all drive bays
p)	Redundant Hot Swappable Fans	Front accessible and hot swappable CPU fans that can be removed and replaced while computer is running
q)	Redundant Power Supplies	Rear accessible and hot swappable CPU power supplies that can be removed and replaced while computer is running
r)	Front LED diagnostics	Front viewable LED diagnostic LEDS showing status of Hard Drive, Temperature, Fans and all power supply voltages (+3.3, 5V, +12V, -12V)
s)	Promise	FastTrak100 Pro Kit
t)	Duel Port USB Breakout	1700100120

Table 1: Industrial Computer Specifications

- B. All of the industrial grade computers in the ALCMS system shall be designed using a slot board computer.
 - 1. The computer back plane shall be passive, meaning a motherboard and daughter-board design is not acceptable.
 - 2. The central processing unit (CPU) shall be on a slot board type card that is installed on the back plane of the computer chassis.
 - 3. CPU upgrades shall be as simple as replacing the CPU of the slot board or removing the slot board card and plugging in a new one.
 - 4. To ensure stability, the slot board computers shall have undergone a 140°F (60°C) dynamic burin-in test.
 - 5. The slot board computer shall be designed to withstand harsh environmental conditions like shock, vibration, power surges and fluctuations, heavy dust, and extreme temperatures.

C. Flash Drive

- 1. The computer shall use a solid state Flash Drive (no moving parts) and it shall be a Samsung or approved equal.
- 2. The Flash Drive shall have a minimum of storage capacity of 64 GB SSD.
- 3. The Flash Drive shall operate at temperatures from 0 degrees C to +70 degrees C.
- 4. The Flash Drive shall have 1000G operating shock and 15G operating vibration rating.
- 5. The drive shall have a MTBF of greater than 1,000,000 hours.
- 6. The Flash Drive shall have a manufacture warranty of 3 years.
- 7. The Flash Drive shall store the operating system and any programs that require erase/read/write cycles.
- 8. Flash Drive specifications sheets shall be provided with Submittal showing proposed flash drive meets specification requirements.

D. Compact Flash Card

- 1. The computer shall use an external Compact Flash (CF) Card which shall be installed using either a PCMCIA Compact Flash Card Reader or an external 5 1/4" bay with a compact flash card reader.
- 2. The CF Card shall be a minimum of 2 GBytes.
- 3. No erase and/or write cycles shall occur to the Compact Flash Card.
- 4. The CF Card shall store programs and configuration files that are only read during power-up. These files should be the airport specific programs and configurations.
- 5. The CF Card shall contain "Ghost" image (Exact image of the original drive) of the Flash Drive which allows for easy Flash Drive replacement and repair.

E. Flash Drive Service / Repair

1. The touchscreen computer shall be able to be rebuilt using a new blank Flash Drive or blank standard Hard Drive.

- 2. The computer shall be able to boot from the CF Card and execute a "Ghost" image rebuild program.
- 3. The rebuild program shall extract and copy the "Ghost" image, all configurations and airport specific programs from the CF Card to the new blank Flash Drive.
- 4. Upon completion of the rebuild program, the touchscreen computer shall be able to be rebooted and be completely operational.

Vault Computer

- A. The vault computer shall be capable of independently carrying out the following functions:
 - 1. Decode all commands received and transfer them to the corresponding DCME unit for execution.
 - 2. Interrogate all the DCME units to determine the status for the Constant Current Regulators (CCRs) and other controllable items.
 - 3. Transfer the status of the CCRs and other controllable items to the control tower computer.
 - 4. Continuously check for proper operation of all the communication links connected to the computer.
 - 5. Continuously check for proper operation of the vault distributed control and monitoring network.
 - 6. Duplicate the tower control and graphical displays for allowing authorized control from the vault.
 - 7. Provide hard copies of real-time and historical information on the status of the airfield lighting systems and other controlled and monitored items.
 - 8. The vault computer application shall not be able to initiate lighting commands unless the control tower authorizes control to vault.
 - 9. Provide remote dial-in and diagnostics for the ALCMS manufacturer technical service personnel.

Tower Computer

- A. The Tower computer shall be capable of independently carrying out the following functions:
 - 1. Receive commands from the Touchscreen control station and transfer lighting control commands to the vault for execution.
 - 2. Receive the airfield lighting status information from the vault and transfer the status to the Touchscreen display.
 - 3. Decode all commands received and transfer them to the corresponding DCME units for execution.
 - 4. Interrogate all the DCME units to determine the status of the equipment.

109-2.23-6 TOUCHSCREEN CONTROL STATION

Technical Specifications

A. Touchscreen technology shall be integrated into the display monitor and shall have the following technical specifications:

	Options	Description
a.	Technology	AccuTouch™ Five-Wire Resistive
b.	Screen Resolution	1280 x 1024 (minimum)
c.	Touch Resolution	Touchpoint controller resolution of 4096 x 4096
d.	Input Method	Finger or stylus
e.	Positional Accuracy	Standard deviation error less than 0.080" (2mm)
f.	Agency Approvals	UL, CE, FCC Class A
g.	Chemical Resistance	The active area of the Touchscreen is resistant to
		all chemicals that do not affect glass.
h.	Temperature/Relative Humidity	-10°C to 50°C at 90% RH, non-condensing
i.	Electostatic	Per EN 61000-4-2
j.	Light Transmission	80% +/- 5% at 550nmwave length
k.	Face Plate	Anti-glare
1.	Expected Life	35 million touches in one location without failure

Touchscreen Monitor Specifications

A. The touchscreen video graphics display shall have the following technical specifications:

	Options	Description
a.	Type	LCD, active matrix
b.	Mounting	Flush Mount
c.	Size	19" Diagonal viewable
d.	Screen Resolution	1280 x 1024 (minimum)

- B. Installation of the touchscreen and all cabinetry work and modifications is the responsibility of the Contractor. A minimum Four (4) inch clearance must be provided around the perimeter of the touchscreen installation to allow for proper heat dissipation.
- C. The Contractor shall furnish and install new cabinets, cabinet work and countertop work that matches the existing cabinet construction and color. Coordinate all work in ATCT cab with FAA.

109-2.23-7 SUBSYSTEM EQUIPMENT

Tower Equipment

A. Computer

- 1. The tower computer shall be an industrial rack-mount type that fits in the allotted closet space.
- 2. The computer shall meet previously specified technical requirements.
- 3. 120 VAC, uninterruptible power shall be supplied to the computer and the Tower Touchscreen Monitor.

B. Touchscreen Monitor

- 1. Touchscreen shall be mounted in a proposed new countertop cabinet (or as directed by the Tower Chief) in the Tower cab.
- 2. 120 VAC, uninterruptible power shall be supplied to the Tower Touchscreen.

C. Video/Serial Communication Extension Equipment

- 1. A Video/Serial Communication extension Receiver box shall be installed in conjunction with each Touchscreen display under the tower cab console.
- 2. A Video/Serial Communication extension Transmitter box shall be installed in conjunction with the tower computer located in the 5th floor ALCMS equipment closet subsystem.
- 3. The video extension transmitter shall allow for simultaneous connection of the local service monitor and the remote touchscreen monitor.
- 4. A category 5 communications cable shall be installed between the Receiver and Transmitter.
- 5. A spare category 5 cable shall also be installed, for use as a future trouble shooting aid.

D. Service Monitor (LCD)

- 1. The service display shall use a 15" LCD monitor.
- 2. The monitor shall be located on a shelf within the tower equipment enclosure. Contractor / Manufacturer shall field check all dimensions prior to bidding to ensure new system will fit into the existing ALCMS equipment closet. If required due to space limitation, furnish and install a smaller monitor.
- 3. 120 VAC, uninterruptible power shall be supplied to the monitor.

E. Audible Alarm Assembly

- 1. An audible speaker shall be installed in conjunction with the Touchscreen display.
- 2. An audio and volume control cable shall be installed between the audible speaker and the tower computer located in the tower sub-junction.

F. Uninterruptible Power System

- 1. An uninterruptible power system (UPS) shall be provided for supporting power to the tower equipment, including a DCME for PCAL (if required).
- 2. The UPS shall be capable of supplying full load power for 10 minutes after loss of main input power.

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3. The UPS shall be a rack-mount unit installed in the tower computer equipment enclosure.

G. Industrial Enclosures

- 1. A NEMA 12 industrial enclosure shall be provided for housing associated tower computer equipment. The proposed new wall mounted enclosure shall fit on the wall inside the existing ALCMS equipment closet. Contractor / Manufacturer shall field check all dimensions prior to purchasing new enclosure to ensure the new enclosure will fit in the allotted space.
- 2. The enclosure shall be designed for indoor use to provide protection against dust, dirt, dripping water and external condensation of non-corrosive liquids.
- 3. The enclosure shall be an industry standard rack-mount type enclosure that fits in the allotted closet space.
- 4. The industrial enclosure shall include a pagoda top with exhaust fan and ventilation kit for proper convection cooling.
- 5. The environmental conditions within the area of the enclosure installation shall not exceed 140°F (60°C) or fall below 32°F (0°C). The proposed ALCMS equipment shall be able to withstand and operate within this range of temperatures without damage.
- 6. The Contractor shall coordinate the installation and location of the proposed new tower equipment with the FAA, the MAA, and the Resident Engineer.

Vault Equipment

A. Computer

- 1. The vault computer shall be a 19" industrial rack-mount type.
- 2. The computers shall meet previously specified technical requirements.
- 3. 120 VAC, uninterruptible power shall be supplied to the computer.

B. Monitor

- 1. The service display shall use a 19" LCD Monitor.
- 2. The monitor shall be located on a shelf within the vault equipment enclosure.
- 3. 120 VAC, uninterruptible power shall be supplied to the monitor.

C. Uninterruptible Power System: Vault Computer Equipment

- 1. An uninterruptible power system (UPS) shall be provided for supporting power to the vault ALCMS equipment.
- 2. The UPS shall be capable of supplying full load power for 10 minutes after loss of main input power.
- 3. The UPS shall be a 19" rack-mount unit installed in the vault computer equipment enclosure.

D. Uninterruptible Power System: DCME Control and Monitoring Equipment

- 1. An uninterruptible power system (UPS) shall be provided for supporting power to the DCME equipment.
- 2. The UPS shall be capable of supplying full load power for 10 minutes after loss of main input power.
- 3. The UPS shall be a 19" rack-mount unit installed in the vault computer equipment enclosure.

E. Industrial Enclosures

- 1. A NEMA 12 industrial enclosure shall be provided for housing associated vault computer equipment.
- 2. The enclosure shall be designed for indoor use to provide protection against dust, dirt, dripping water, and external condensation of non-corrosive liquids.
- 3. The enclosure shall be an industry standard 19" rack-mount type enclosure.
- 4. The industrial enclosure shall include a pagoda top with exhaust fan and ventilation kit for proper convection cooling.
- 5. The environmental conditions within the area of the enclosure installation shall not exceed 140°F (60°C) or fall below 32°F (0°C). The proposed ALCMS equipment shall be able to withstand and operate within this range of temperatures without damage.

F. Printer

1. The printer shall be a black and white Laser Jet Printer. The printer shall be located on a shelf within the vault equipment enclosure.

109-2.23-8 DISTRIBUTED CONTROL EQUIPMENT

- A. The control and monitoring equipment shall be of a distributed nature and shall not be PLC based.
- B. The regulator DCME's shall be installed locally at each device (i.e. CCR) which requires control and/or monitoring within the electrical vault. The DCME's for the utility power, automatic transfer switch, stand-by generator, beacon control and wind tee control shall be wall mounted units and installed on the southwest wall of the regulator room in the vault.

GENERAL

- A. Each CCR and each controllable item shall be connected to a DCME.
- B. The DCME shall be a microprocessor-based module that includes all of the communication control commands, input/output connections and failsafe functionality.
- C. The DCME shall communicate via a redundant (2 independent communication links communications network.
- D. Connections to the communication network shall be via quick disconnect terminal connectors that can easily be plugged and unplugged form the communication equipment.
- E. The DCME shall communicate back to the Vault computer via either of the networks.
- F. Removal of any DCME units from the vault network shall not affect the operation of the ALCMS system.
- G. The DCME shall be a universal device that can be used on any type of CCR and/or controlled element from any manufacturer. The ALCMS manufacturer shall verify the appropriate monitoring points are available on existing regulators, proposed regulators, utility power, automatic transfer switch, stand-by generator, beacon control, and wind tee control.
- H. Each DCME shall be identical and have interchangeable components.
- I. The DCME unit shall provide optical isolation from all high voltage equipment including the CCR output current, CCR output voltage and CCR input voltage.
- J. All high voltage interfaces to the DCME unit shall be via fiber optic cable.

Redundant Vault Control Network

- A. The DCME redundant communication network shall use two (2) independent communication network cables installed in the electrical vault.
- B. The vault network shall utilize two (2) cables each consisting of two (2), 24 AWG, shielded, twisted pairs with a common (drain wire) meeting EIA RS-485 applications (BeldenTM No. 9842 or an ALCMS manufacturer approved equivalent) to each DCME unit.
- C. The network shall be used to control and monitor all the various controllable elements located within the vault such as regulators, utility power switch, automatic transfer switch, stand-by generator, beacon control and wind tee control.
- D. Any malfunction in one network shall not affect the operation of the other communications network.
- E. Any malfunction in one of the DCME communication ports shall transfer communication to the remaining port without affecting system functions.

Overview of Operation

- A. Each DCME unit shall have a unique factory set address and a field programmable communication address.
- B. The DCME receives commands via the vault network, executes those commands, and transfers back the status of the element to the vault computer.
- C. The DCME shall perform the following functions:
 - 1. Brightness setting control of the CCRs or ON/OFF control as required by the controlled element (i.e. generator may only require ON/OFF control).
 - 2. Perform all failsafe functions.
 - 3. Communication via both networks to the vault computer.
 - 4. Self-diagnostic function to monitor for proper operation.
 - 5. Locally store all data and parameters specific to the controlled element.
- D. For maintenance purposes, the DCME shall have an internal ON/OFF switch and shall have a front hinged access door.

Basic DCME components

The DCME shall consist of the following basic components and functions:

A. Input/Output Board

- 1. Shall provide eight (8) mechanical latching output points. These control points shall also be self-monitored and provide back-indication to the Vault computer verifying proper execution of the control command.
- 2. Shall provide eight (8) optical-isolated input points.
- 3. Shall provide quick-disconnect terminal blocks that can be easily plugged and unplugged from the I/O board.

B. Monitor Board

- 1. Shall provide redundant communication network circuitry.
- 2. Shall provide quick-disconnect terminal blocks for redundant communication network connections.
- 3. Receives and transmits data to the vault computer.

C. Digital Display

- 1. Shall provide visual LED display of DCME status (Power, communication and monitoring).
- 2. Brightness Step: LED display indicating the commanded step of the CCR.
- 3. Channel A: LED display indicating the status of channel A of the redundant communication network.
- 4. Channel B: LED display indicating the status of channel B of the redundant communication network.
- 5. Ability to put the DCME into a "cycle mode" which alternately displays all monitored parameters.

109-2.23-9 DISTRIBUTED MONITORING EQUIPMENT

The DCME shall provide the following minimum monitoring:

L-829 Monitoring

- A. The DCME unit shall provide full FAA L-829 monitoring per FAA AC 150/5345-10 (current edition).
- B. The DCME shall include the monitoring board and provide the following information for each CCR:
 - 1. Loss of input power to the CCR.
 - 2. CCR shutdown by open-circuit/over-current protective devices.
 - 3. Drop of more than 10% in the CCR VA load.
 - 4. Failure of the CCR to deliver the selected output current.
 - 5. The number of burnt-out lamps (L-804, L-850, L-852, L-861, L-861 series) in each series circuit. For best accuracy, all lamps/transformers are the same wattage and no film disc cutouts are used.
 - 6. Remote/Local status of the CCR.
 - 7. Actual CCR output current.
 - 8. Actual CCR output voltage.
 - 9. Actual CCR output load wattage (W).
 - 10. Actual CCR output load Volts-Amps (VA).
- C. The DCME digital display shall provide local indication of the CCR status including:
 - 1. Remote/Local: LED display indicating the status of the remote/local switch of the CCR.
 - 2. Primary Power: LED display indicating the status of the input power to the CCR.
 - 3. Over current: LED display indicating over current, protective shutdown.
 - 4. Open Circuit: LED display indicating open circuit status.

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- D. The DCME shall include an internal current and voltage module (CVM) that is used to collect current and voltage information. The CVM shall meet the following minimum requirements.
 - 1. Collects analog current and voltage samples at a high sample rate of 50,000 samples/second.
 - 2. Transmits current and voltage samples to the low voltage side of the DCME.
 - 3. Provide digital fiber optical isolation between the low voltage side of the DCME and the output of the CCR.
 - 4. Quick disconnect fiber optic connections for interfacing to the low voltage side of the DCME if required.

If required, the ALCMS manufacturer shall provide the fiber optic cable between the CVM and the DCME.

Insulation Resistance Monitoring

- A. The DCME unit shall provide insulation resistance monitoring as an integral component of the DCME unit.
- B. The IRMS is capable of automatically or manually monitoring and reporting the insulation resistance value of the series circuit cabling (one IRMS per circuit).
- C. The measured resistance shall be displayed locally at the DCME digital display.
- D. The DCME unit shall be capable of reading and recording resistance values from less than 20k Ohms to 2G Ohms.
- E. The DCME shall include an internal insulation resistance module (IRM). The IRM shall meet the following minimum requirements.
 - 1. Collects insulation resistance samples.
 - 2. Transmits insulation resistance samples to the low voltage side of the DCME.
 - 3. Provide digital fiber optical isolation between the low voltage side of the DCME and the output of the CCR.
 - 4. Quick disconnect fiber optic connections for interfacing to the low voltage side of the DCME.

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If required, the ALCMS manufacturer shall provide the fiber optic cables between the IRM board and the low voltage side of the DCME.

- A. The IRMS system shall be capable of taking resistance readings on circuits that are energized or de-energized. This shall allow the system to be used as a troubleshooting tool for assisting in locating circuit faults.
- B. The IRMS system shall provide database record keeping that allows for graphical trend analysis of the insulation resistance readings.
- C. The IRMS shall provide configurable insulation resistance warning and alarm limit notification to the system.
- D. The IRMS shall be able to be configured for a minimum of two (2) reading times per day.
- E. The IRMS shall be able to be configured to take readings hourly, daily, weekly or monthly.
- F. All user programmable variables shall be able to be changed at any specified computer within the ALCMS system.
- G. All the IRMS data shall be viewable either as real-time or as historical data at any specified computer location. The IRMS information shall be available at all times and shall not require any special transfer of data between the IRMS system and the control system (since the IRMS is an integral component of the ALCMS).

DCME/CVM/IRM UNIT MOUNTING

The combination DCME/CVM/IRM units shall be mounted above each existing or proposed regulator using unistrut or mounting plate. The Contractor shall provide shop drawings of the unistrut or mounting plate system. The DCME/CVM/IRM unit mounting system is subject to the review and approval of the Resident Engineer / Airport. Maintain clearance between DCME/CVM/IRM unit and regulator to allow for heat dispersion.

109-2.23-10 FAILSAFE

- A. Each DCME unit shall provide a self-contained failsafe feature that shall perform the following functions:
 - 1. Insure default operation of the airport lighting, even if the entire airport lighting control system is not functioning.

- 2. Display the commands sent by the computer to the CCRs and/or to the other controllable items.
- 3. Adaptable to each CCR regardless of internal or external control voltage.
- 4. Permits maintenance of portions of the control system, without changing the operational status of the lighting system.
- B. The failsafe mode of each DCME unit shall be "Passive Failsafe" mode.
- C. If the CCR was switched ON before the failure, it shall remain ON at the same brightness level.
- D. If the CCR was switched OFF before the failure, it shall remain OFF.
- E. Failsafe shall be able to be bypassed by selecting the CCR locally to any desired brightness level.

Failsafe Technical Specifications

- A. The failsafe system shall operate independently of the computer, providing failsafe interfacing to the CCR and/or other controllable elements.
- B. The failsafe system shall be based on electromechanical latching relays with the following characteristics:

Specification	Rating
Maximum switching voltage	240VAC, 125VDC
Nominal switching capacity	8A/250VAC
	5A/30VDC
Rated current (resistive)	1A
Operational Life	Mechanical 5X10 ⁷
	Electrical 10 ⁵
Protection	IP67 (protection against ingress of dust and
	water in harmful quantities)

C. Mode of Operation

- 1. The commands executed by the DCME to switch the CCR and/or controllable element shall be momentary commands.
- 2. The control commands shall be mechanically latched upon execution.

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3. Failure of the DCME and/or loss of communication to the network shall not change the status of the airport lighting.

109-2.23-11 GRAPHICAL USER INTERFACE OPERATION

General

- A. The Tower Touchscreen display shall control and monitor the airfield lighting system. The display shall show real-time information on the operational status of the airfield lighting system.
- B. The Touchscreen control station shall consist of multiple Touchscreen 'pages' each with a specific function. These Touchscreen 'pages' are defined as follows:
 - 1. Preset: Consist of pre-defined preset buttons used to simplify airfield lighting control commands.
 - Runway Lights: Consist of runway control touch buttons used to individually control runway circuits. Multiple runway pages will be necessary for this airport.
 - 3. Taxiway Lights: Consist of taxiway control touch buttons used to individually control taxiway circuits if required.
 - 4. Utilities: Consists of miscellaneous functions for calibrating the Touchscreen, granting lighting control to other locations, setting the date and time, etc.
- C. All preset and control configurations shall be defined by the Airport/Owner in conjunction with Air Traffic Control requirements.
- D. The ALCMS manufacturer shall provide preset tables to be used by the Airport/Owner to define the configuration settings.

Overview of Operation

- A. Airfield lighting control commands are entered into the system by touching the corresponding touch button on the Touchscreen video display. When a command is entered, the Touchscreen shall respond by graphically displaying the button as being depressed and change the button color.
- B. The associated circuit graphics shall alternately flash indicating the airfield lighting section that shall be affected when this command is "confirmed".

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- C. Once confirmed, the Tower Touchscreen shall register the command, generate a data instruction and transmit the command to the vault computer for implementation. The command is also simultaneously transmitted to the vault computer and all other computers connected to the network.
- D. The Tower Touchscreen shall receive confirmation from the vault that the corresponding equipment has responded to the control command and displays the current system status on the Touchscreen display.
- E. In the event that communication is lost between the tower and vault, an alarm is indicated at each computer location.
- F. In the event of a predefined alarm condition, the effected airfield lighting circuit graphic shall flash red and an audible tone shall alert operators to the alarm condition.

109-2.23-12 ALCMS ALARM FUNCTIONS

Touchscreen Audible Alarm

- A. The audible alarm shall sound at each Touchscreen display when an alarm condition occurs. In addition, the 'ALARM ACK' button shall flash and the associated airfield circuit graphics shall change to red.
- B. The audible alarm shall stop automatically after three (3) seconds unless the 'ALARM ACK' button is pressed.
- C. IF the alarm is not acknowledged, the audible shall cease for sixty (60) seconds while the 'ALARM ACK' continues to flash. If the 'ALARM ACK' is still not pressed after the sixty (60) seconds, the audible shall sound again for three (3) seconds.
- D. This sequence shall repeat indefinitely until the alarm is acknowledged.

Circuit Alarms

- A. The ALCMS shall continuously monitor the status of all of the circuits per the monitoring requirements as specified previously.
- B. If there are any monitoring discrepancies (i.e. incorrect CCR output current, loss of primary power) an alarm shall be generated at the Touchscreen display for the associated circuit.

109-2.23-13 TOUCHSCREEN COMMAND SEQUENCES

- A. The Touchscreen control station shall allow the airfield lighting circuits to be controlled individually (i.e. RWY Edge) or as a group based on preset tables (See following section).
- B. Each control command shall require two distinct operator actions in order for the command to initiate any state changes in the airfield lighting. The command sequence shall be as follows:
 - 1. Select circuit: Operator selects the desired circuit to be changed.
 - 2. Select intensity: Operator selects the desired brightness step that the circuit is to be changed to.
 - 3. Graphics flash: The graphics associated with the selected circuit shall begin to flash visually indicating to the operator the airfield lighting section that is going to be affected by the command.
 - 4. Confirm/Reject: Operator selects the 'CONFIRM' button to accept the selection and initiate the lighting change. Operator selects the 'REJECT' button to cancel the selections and make another selection.

109-2.23-14 TOUCHSCREEN PRESET SEQUENCES

- A. The Touchscreen control station shall allow simultaneous airfield lighting circuit changes to be accomplished using preset lighting sequences.
- B. The preset lighting sequences shall be defined by the airport in airfield lighting preset tables.
- C. Each preset lighting change shall be based on the following operator inputs:
 - 1. Active Runway Selection: Operator selects the runway(s) that shall be active. This is based on runway direction (i.e. "RWY 27").
 - 2. Day/Night Setting: Operator selects the day/night setting. The day/night setting shall control the intensity of the circuits.
 - 3. Visibility: Operator selects a single visibility setting that is based upon the current airport visibility.
 - 4. Confirm/Reject: Operator selects the 'CONFIRM' button to accept the preset selections and initiate the lighting change. Operator selects the 'REJECT' button to cancel the selections and make another preset selection.

- D. Upon confirmation of the preset selections, the intensity of all the circuits associated with the preset condition shall automatically change to match the visibility requirement.
- E. The preset visibility setting of the CCRs is based on FAA document 7110.65J. Presets shall also be coordinated with the Airport and the FAA to properly define airfield lighting operational usage.
- F. The visibility settings shall include Intensity and Preset Invalid monitoring. This indicates when a preset or intensity setting on the airfield is different than the selected preset intensity.
- G. According to FAA document 7110.65J, the visibility settings for the 5-step CCRs shall be based on the following table:

Visibility	Day (Brightness Step)	Night (Brightness step)
Less than 1 mile	5	4
1 to but not including 2 miles	4	3
2 to but not including 2 miles	3	3
3 to 5 miles inclusive	0	2
More than 5 miles	0	1

Table 4: 5-step Regulators

H. following table:

Visibility	Day	Night
	(Brightness Step)	(Brightness step)
Less than 1 mile	3	2
1 to but not including 2 miles	0	1
2 to but not including 2 miles	0	1
3 to 5 miles inclusive	0	1
More than 5 miles	0	1

Table 5: 3-step Regulators

I. According to FAA document 7110.65J, the visibility settings for the 1-step CCRs shall be based on the following table:

Visibility	Day	Night
	(Brightness Step)	(Brightness step)
Less than 1 mile	1	1
1 to but not including 2 miles	0	1
2 to but not including 2 miles	0	1
3 to 5 miles inclusive	0	1
More than 5 miles	0	1

Table 4: 1-step Regulators

J. According to FAA document 7110.65J, the visibility settings for the Rotating Beacon shall be based on the following table:

Visibility	Day	Night		
	(Brightness Step)	(Brightness step)		
Less than 1 mile	ON	ON		
1 to but not including 2 miles	ON	ON		
2 to but not including 2 miles	ON	ON		
3 to 5 miles inclusive	OFF	ON		
More than 5 miles	OFF	ON		

Table 7: Beacon

109-2.23-15 GRAPHICAL AIRPORT PICTORIAL

- A. The ALCMS display screens shall display a graphical pictorial representation of the airport runways, taxiways and other requested airport features.
- B. When there is a change in lighting system status, the appropriate graphical detail shall indicate the status by changing color.

C. The circuit intensity display colors shall be represented as seen in the legend as follows.



Figure 1: Brightness Step Color Legend

D. The status monitoring display colors shall be represented as seen in the legend as follows. This includes ATS monitoring, generator monitoring and communications monitoring:



Figure 2: Status Monitoring Color Legend

109-2.23-16 VAULT EMERGENCY GENERATOR CONTROL

- A. The ALCMS shall provide control of the emergency diesel generator located next to the north apron from all of the control stations.
- B. The ALCMS shall provide one (1) optically isolated, dry-contact output point at the Automatic Transfer Switch in the Vault.
- C. The ALCMS shall close the output to command the generator ON and open the output to turn the generator OFF.
- D. The Tower shall only have generator monitoring capability at the time. However, the control of the generator can be added in the future.
- E. Locating and wiring of the output points within the Generator equipment shall be completed by the Contractor in coordination with the Airport/Resident Engineer and equipment manufacturer.

109-2.23-17 VAULT AUTOMATIC TRANSFER SWITCH (ATS) AND GENERATOR MONITORING

- A. The ALCMS system shall provide the optically isolated digital inputs to monitor the following feedback points:
 - 1. Utility Available
 - 2. Utility On-line
 - 3. Generator Available
 - 4. Generator On-line
 - 5. Generator Alarm
- B. Locating and wiring of the monitoring points within the ATS and generator equipment shall be completed by the Contractor in coordination with the Airport/Resident Engineer and equipment manufacturer.

109-2.23-17 BEACON CONTROL

- A. The ALCMS shall provide control of the rotating beacon from the ALCMS node.
- B. The ALCMS shall provide one (1) optically isolated, dry-contact output point at the Beacon Control in the vault. The Contractor shall install new contacts for Beacon control. The Beacon shall be controlled and monitored from the vault ALCMS rack.
- C. The ALCMS shall close the output to command the beacon ON and open the output to turn the beacon OFF. The Contractor shall provide an interface relay/contacts to connect power / controls to the beacon.
- D. Locating and wiring of the output points within the Beacon equipment shall be completed by the Contractor in coordination with the Airport/Resident Engineer and equipment manufacturer.

109-2.23-19 RADIO CONTROL ENABLED CONTROL METHODOLOGY

- A. The ALCMS shall provide an interface to the existing L-854 radio controller located in the ATCT.
- B. One (1) button labeled "Radio Control" will be programmed to allow air-to-ground radio control after normal operating hours.

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- C. When the radio control button is pressed, all preset settings are changed for radio operations according to the preset control methodology.
- D. Radio Control preset lighting settings shall be specified by the Airport / FAA.

Radio Control Interface

- 1. The ALCMS system shall provide three (3) inputs for Radio Control commands. Radio Control inputs shall be connected to a DCME in the ATCT.
- 2. The inputs shall be optically isolated and require the monitoring source and common from the monitored device.
- 3. The ALCMS DCME inputs shall be rated at 24-48VDC and 120-240VAC at 1 amp.
- 4. The ALCMS shall monitor the inputs and adjust the airfield lighting according to the Radio Control preset table.
- 5. The ALCMS shall only monitor for the radio control inputs when the "Radio Control" button is enabled at the Tower.
- 6. Locating and wiring of Radio Control output points shall be completed by the Contractor in coordination with the Airport/Resident Engineer and equipment manufacturer.

CONSTRUCTION METHODS

109-2.22 GENERAL

ADD the following to this Section:

The Contractor shall take such action as necessary to prevent damage to or destruction of existing vault and ATCT equipment. The Contractor shall be liable for such damage or destruction and shall promptly repair damage to original condition or better, at no cost to the Owner.

The Contractor shall install the proposed 4KW regulators for the proposed RGL R5-23 and RGL R13-31 circuits while providing the necessary power and control wires. The existing regulator shall be removed as shown on the plans.

All conduits and junction boxes shall be painted to match existing conditions. The cost of painting shall be incidental to Item AR109301.

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The existing PLC based airfield lighting control system shall remain in service until the new ALCMS is installed, tested and operational.

The equipment installation and mounting shall comply with the requirements of the National Electrical Code and local code agency having jurisdiction.

109-3.15 WIRING AND CONNECTIONS

ADD:

Plastic wire duct shall be used for routing wires inside control panels. After wiring is completed, covers are to be installed on all plastic duct.

109-3.16(b) ADD the following to this Section:

The Contractor shall supply and install new regulator name plates on regulators that are new or have been changed in the existing electrical vault. New name plates shall match the type and style of the existing name plates. Information on the new name plates shall match information on the existing name plates. Exact working on the name plates to be determined by the MAA in the field at the time of construction.

All new or relocated equipment, control wires, etc. installed under this contract shall be tagged, marked, or labeled as required.

109-3.18 TESTING

ADD:

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 MAA and/or the Resident Engineer. Testing equipment shall be furnished by the Contractor. Tests shall be conducted as directed by the MAA/Resident Engineer and shall be to their satisfaction. The Contractor shall be responsible for all 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.

All testing shall be in the presence of the Resident Engineer and an Airport Representative.

ADD the following paragraphs to this Section:

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109-3.19 OPERATION AND MAINTENANCE MANUALS

ADD:

The Contractor shall supply four (4) copies of Operational and Maintenance Manuals for the Constant Current Regulator and revised schematics for the controller.

109-3.20 ALCMS INSTALLATION

109-3.20-1 CONTRACTOR INSTALLATION REQUIREMENTS

- A. The Contractor shall be responsible for the physical installation of all associated ALCMS components. As a minimum, this includes the CCRs, computer cabinets, Touchscreen control stations and DCME.
- B. The Contractor shall furnish, install, relocate, connect and test all equipment, equipment accessories, conduit cables, wires, buses, grounds and support necessary to insure a complete and operable electrical distribution facility for the airport lighting system as specified in the submittal package.
- C. The equipment installation and mounting shall comply with the requirements of the National Electrical Code and local code agency having jurisdiction.
- D. The Contractor shall make all necessary electrical connections at each location in accordance with the ALCMS manufacturer's wiring diagrams.
- E. All wires called out in the drawings associated with equipment that is to be controlled or monitored should be pulled, terminated and dressed at the appropriate terminal blocks and at the associated equipment.
- F. The Contractor shall leave sufficient extra wire length on each control/monitoring lead to make future changes in connections at the terminal block.
- G. All equipment, control wires, terminal blocks, etc., shall be tagged, marked or labeled as specified below:
 - 1. Wire Identification: The Contractor shall furnish and install labels or identifying tags on all control wires at the point where they connect to the control equipment or to the terminal blocks.
 - 2. Wire labels, if used, shall be of the self-sticking, pre-printed type and of the manufacturer's recommended size for the wire involved. Identification markings designated in the plans shall be followed.

3. Tags, if used, shall be nonferrous metal or plastic. Each tag shall be securely tied to the proper wire by a nonmetallic cord or plastic wire tie.

109-3.20-2 INSTALLATION OF DATA CABLES

- A. The Contractor shall install, terminate and test all data cables required for the project. This includes all of the following components: Data cables, terminal cabinets and jumper cables.
- B. All associated data cables shall be tested upon completion of the cable installation and termination of connectors.
- C. Tests shall include verification of point-point continuity of each wire.
- D. All test data shall be recorded and included in a test report that shall be submitted to the Airport/Resident Engineer for approval.
- E. Commissioning of the system shall not begin until all test reports are submitted and approved and a copy provided to ALCMS Manufacturer.

109-3.20-3 ALCMS MANUFACTURING COMMISSIONING

- A. The ALCMS Manufacturer shall perform the following installation and commissioning tasks:
 - 1. Verify Contractor connections including power, control and monitoring.
 - 2. Verify proper labeling of equipment.
 - 3. Verify communication connections.
 - 4. Perform system testing including control, monitoring and diagnostics.
 - 5. Training on ALCMS related equipment.
 - 6. Perform System Acceptance Testing (SAT).

109-3.20-4 SYSTEM ACCEPTANCE TEST (SAT)

- A. Following the final installation and commissioning of the system, the ALCMS Manufacturer shall perform a demonstration of the system performance. This demonstration shall include the following:
 - 1. Lighting control functions

- 2. Monitoring functions
- 3. Alarm functions
- 4. Print and Display functions
- B. The ALCMS Manufacturer shall develop a SAT test plan in accordance with the specifications and issue this to the Contractor for approval from the Airport/Resident Engineer.
- C. The SAT shall be witnessed by the Airport, the FAA, the Contractor, and the Resident Engineer.

109-3.20-5 MANUALS

Maintenance Manuals

- A. The ALCMS Manufacturer shall provide six (6) hard copies of the operation and maintenance manuals that are hard-covered and suitable for daily operation and maintenance of the system. The manuals shall include the following information:
 - 1. Operational overview and system description.
 - 2. Graphical User Interface (GUI) Screen operation.
 - 3. System Block Diagram.
 - 4. Detailed external wiring diagrams (Electrical Contractor wiring).
 - 5. Detailed input/output terminal diagrams.
 - 6. Detailed assembly drawings and wiring diagrams.
 - 7. Original Equipment Manufacturer (OEM) Manuals.
- B. The manuals shall be spiral bound or supplied in 3-ring binders. The cover of each binder shall be labeled with all project-related information.

FAA Air Traffic Control Manuals

- A. The ALCMS Manufacturer shall provide six (6) hard copies of the operation manuals for Air Traffic Controller (ATC) use. The manuals shall be hard-covered and suitable for daily operation of the system. At a minimum, the manuals shall include the following information:
 - 1. Touchscreen operation (graphical user interface).
 - 2. Touchscreen maintenance (i.e. calibration).
- B. The manuals shall be spiral bound or supplied in 3-ring binders. The cover of each binder shall be labeled with all project-related information.

109-3.20-6 AS-INSTALLED DRAWINGS

- A. The ALCMS Manufacturer shall provide six (6) hard copies of As-Installed drawings after system acceptance. The As-Installed drawings shall include the following information:
 - 1. System Block Diagram (1-line drawings).
 - 2. System External Wiring Diagrams.
 - 3. Assembly Drawings.
 - 4. Assembly Wiring Diagrams.
- B. The As-Installed drawings shall be 11" X 17" in size and shall be spiral bound or supplied in 3-ring binders. The cover of each binder shall be labeled with all project-related information.

109-3.20-7 ON-SITE TRAINING

- A. The ALCMS Manufacturer shall provide to the Contractor a final training course syllabus and training schedule thirty (30) days before on-site training.
- B. All training sessions shall be held in a facility provided by the airport. This facility should have tables, chairs, projection screen and sufficient space to lay out manuals and drawings. The ALCMS Manufacturer shall provide all required visual aids and projectors.

FAA Training

- A. FAA air Traffic Control should designate a Training Coordinator that shall be responsible for scheduling and organizing on-site training for their personnel. In addition, this coordinator shall be responsible for training other personnel that were absent or unable to attend the training sessions.
- B. The ALCMS Manufacturer shall provide two (2), 1 hour User Training Class for Air Traffic Control (ATC) personnel. ATC Training Coordinator should be present for both classes. This training shall include discussion and review of the following:
 - 1. ALCMS General System Overview
 - 2. Touchscreen Operations
 - 3. Using the Control System (GUI)
 - 4. Command and Control Sequences
 - 5. Alarm and Warning Messages
 - 6. Failsafe Conditions
 - 7. Granting Local Control to the Vault
- C. Training classes for FAA ATC personnel should be limited to a maximum of 4-6 people per class.

Maintenance Training

- A. Maintenance should designate a Training Coordinator that shall be responsible for scheduling and organizing on-site training for their personnel. In addition, this coordinator shall be responsible for training other personnel that were absent or unable to attend the training sessions.
- B. The ALCMS Manufacturer shall provide two (2), 8 hours (one day) training class for maintenance personnel. This training shall include discussion and review of the following:
 - 1. System Block Diagram
 - 2. System Assemblies and Wiring Diagrams
 - 3. Touchscreen Operation

- 4. Graphical User Interface (GUI) Screens
- 5. Maintenance and Troubleshooting
- 6. Granting Local Control to the Vaults
- 7. Power Up and Power Down Sequences
- 8. Failsafe Operations
- 9. Implementing Airfield Lighting Changes
- 10. Maintenance Report Generation
- C. Training classes for maintenance personnel should be limited to a maximum of 4-6 people per class.

109-3.20-8 OWNER ALCMS ACCEPTANCE AND WARRANTY START DATE

- A. Upon successful completion of the SAT and on-site training, the Owner shall issue to the ALCMS Manufacturer a written notice of ALCMS substantial completion.
- B. The ALCMS warranty guarantee period shall not start until IDOT-DOA issues a written notice of the final acceptance of Illinois project MLI-4080. The date of final acceptance of the MLI-4080 project by IDOT-DOA represents the start of the warranty period. Please refer to the Warranty section for more information regarding the ALCMS warranty guarantee.

109-3.20-9 SYSTEM WARRANTY

- A. All equipment shall be warranted against defects in workmanship, hardware and software for a period of one (1) year from the date of IDOT-DOA final acceptance of Illinois project MLI-4080.
- B. During this time period the ALCMS manufacturer shall provide all parts, materials, labor and technical support at no additional costs.

109-3.20-10 SYSTEM SERVICE AND SUPPORT

- A. The ALCMS Manufacturer shall provide technical assistance and support during the warranty period at no additional costs to the owner.
- B. The ALCMS Manufacturer shall provide a 7 day a week / 24 hours a day support phone line.

- C. The ALCMS Manufacturer shall provide technical phone support within four (4) hours of the initial call.
- D. The ALCMS Manufacturer shall provide free phone consultation and technical support as required during the warranty period and if necessary shall be on-site within 24 hours at no additional costs.
- E. At the request of the airport/engineer, the ALCMS Manufacturer shall provide information about preventative maintenance programs and extended warranty packages.

109-3.20-11 SPARE PARTS

- A. A spare parts package shall be included as part of the base bid for this project.
- B. At a minimum, the spare parts package shall include the following components:

Qty.	Part Number	Description		
1		Touchscreen		
1		Computer, Industrial, to match industrial		
		hardware supplied		
2		Distributed Control and Monitoring		
		Equipment (DCME) Assembly		
2		Current / Voltage Module (CVM)		
2		Insulation Resistance Module (IRM)		
2		Ethernet Fiber Optic Transceiver		
2		Network Interface Card (NIC)		

109-3.21 AR109907-REMOVE TRANSFORMER

This item shall include all work necessary to de-energize and remove the existing scan east RPU transformer as detailed in the Construction Plans. The Contractor shall complete all coordination with MidAmerican Energy Company (MEC) to disconnect the power to the transformer. The Contractor shall be responsible for complying with all MEC specifications and requirements. The existing transformer, disconnect switch, meter, support electrical equipment, and foundations are to be removed. The work to be included in this item includes, but is not limited to, disconnecting existing cables and equipment, terminating existing cables, disassembling existing equipment, excavating, removing existing equipment, removing existing foundations, backfilling excavations with compacted sand, seeding, transporting equipment, disposal of waste materials and foundations, and all other incidentals necessary to remove the existing transformer and support electrical equipment, complete to the satisfaction of the Resident Engineer.

109-3.22 AR109962-RELOCATE ELECTRICAL EQUIPMENT (SCAN SYSTEM)

This item shall include all work that is necessary to completely relocate the existing scan system east Remote Processing Unit (RPU) as detailed in the Construction Plans and these special provisions. The work to be included in this lump sum item includes, but is not limited to, one sub-surface temperature probe, excavation, compaction, concrete pad, concrete piers, disconnect switch, transformers, power stations, electrical equipment, PVC conduit, rigid steel conduit, fittings, locating existing cables, rerouting existing cables, splice can, cables, splices, grounding, wiring, cable trenching, rebar, crushed aggregate rock, geotextile fabric, testing, removal and disposal of existing foundations, sand backfilling, ground rods and all other incidentals necessary to relocate the existing RPU, complete and operational to the satisfaction of the MAA and the Resident Engineer. Separate payments for the individual items required to relocate the RPU shall not be made.

Cable Installation

Sensor cable shall be installed in pavement saw cuts in accordance with the typical details shown in the specifications and as recommended by the equipment supplier/manufacturer.

Sensor cables shall be installed through existing underground ducts in accordance with Sections 108-3.2 through 108-3.7 of the Standard Specifications for Construction of Airports.

Temperature Probe Installation

The Contractor shall arrange for a representative of the equipment manufacturer to be present at all critical stages of the project such as sensor installations and cable splicing.

The surface sensors shall be installed in accordance with the typical details shown in the specifications and the recommendations of the sensor manufacturer. The following installation methods shall also be followed:

- 1. The Contractor shall core drill vertical edged holes in which the sensors are to be installed with an approved saw to the depth shown in the plans and clean these holes prior to sensor installation.
- 2. Both the equipment and methods used in core drilling and saw-cutting shall be subject to prior approval by the Resident Engineer. The Contractor shall saw slots in which the cables are to be installed to the depths shown. Prior to core drilling and providing the recessed openings for the sensor, the Contractor shall mark the proposed location. These locations shall be approved by the Resident

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Engineer. The Contractor shall maintain the sensor level during the curing of the sensor epoxy in a manner approved by the Resident Engineer.

- 3. All sawed slots shall have vertical edges, shall be chamfered at intersection and shall be cleaned prior to installation of wires.
- 4. Immediately before installing the sensors and the cables, the Contractor shall remove the dust resulting from the sawing operations or any foreign materials from the holes or slots by the use of a suitable source of compressed air injected into the holes and slots. Should the holes and slots become damp, they shall be thoroughly dried out to the satisfaction of the Resident Engineer prior to installing the sensors or cables.
- 5. The epoxy to be used in installing the sensors shall be applied in accordance with the manufacturer's printed instructions. The cementing compound recommended by the manufacturer shall be used to bond the sensor into the cored hole. The remainder of the space around the fixture shall be filled with epoxy level with the pavement surface.
- 6. After cleaning all dust and foreign material from the slots and drying the pavement in and adjacent thereto, the Contractor shall exercise care in inserting the backer rod and the cable therein so as not to damage the insulation. The Contractor shall subsequently install the upper backer rod and fill the remainder of the slot with sealing compound level with the pavement surface.
- 7. All surface sensors shall be installed flush with the runway surface. Sensors shall be in place with cured epoxy and there shall be no open cored holes by the end of the working period.

Individual surface sensor and temperature probe warranties shall be provide on each item for a warranty period of five (5) years from the date of installation which will replace a defective surface sensor or temperature probe with a new item, excluding installation costs, as specified under terms of the manufacturer's standard warranty

Item AR109962-Relocate Electrical Equipment shall be constructed in accordance with the applicable portions of items 108, 109, 110, 209 and 610 of the "Standard Specifications for Construction of Airports", these special provisions, the details in the plans and the manufacturer's installation instructions. However, these items <u>shall not be measure for payment or paid for separately</u>. The cost of all work items required to relocate and repower the existing RPU shall be included in the contract item AR109962 lump sum unit price.

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The Contractor shall field inspect the existing surface sensor/scan system prior to bidding and/or purchasing any replacement equipment and cables to ensure the replacement equipment and cables are compatible to the existing system. Any noncompatible components furnished by the Contractor shall be replaced by him at no additional costs with a similar unit (approved by the Resident Engineer) that is compatible with the remainder of the system.

METHOD OF MEASUREMENT

DELETE Sections 109-4.1; 109-4.2; and 109-4.3.

ADD the following Sections:

- 109-4.4 The quantity of "Vault Modifications" to be paid for under this item shall be measured per lump sum for furnishing all materials and equipment (excluding regulators) required for this construction, including, but not limited to, digital module, programming, power converters, transformers, switches, patches, terminal blocks, buses, enclosures, unistruts, control system power convertors, cutouts, circuit breakers, circuit blank fillers, wiring, cables, conduits, fittings, grounding, cable spice kits, connections, painting, marking, labeling, tagging, testing, sealants, concrete, reinforcing bars, and all other necessary items installed in place, operational and accepted by the MAA/Resident Engineer as a complete installation. Separate measurements for payments for the individual items required to complete the vault modifications shall not be made.
- 109-4.5 The quantity of the new regulators to be paid for under this item shall be the number, counted in placed, of each type, style, and size installed as completed, tested, operational, and accepted by the Resident Engineer.

The installation of the proposed regulators shall include the connections as specified as incidental in this section, tools and labor required to furnish a complete operational system. The cost for new circuit breakers, stacking kits, and cable/conduit required for each regulator shall also be included in the pay item for each regulator. The cost for removal and disconnection of existing regulators shall also be included in this pay item.

109-4.5 The quantity of "Lighting Control Computer System" to be paid for under this item shall be measured per lump sum for furnishing all materials and equipment (including all fiber optic cables in the vault, ATCT, and between the vault and the terminal building basement) required for this construction, including, but not limited to computer racks, touchscreens, DCME/IRM/CVM units, cable/conduits, testing, training, removal of existing control systems, spare parts, networks, system warranty, and all other necessary items installed in place, operational, and accepted by the FAA / MAA / Resident Engineer as a complete installation. Separate measurements for

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payments for the individual items required to complete the lighting control computer system (L-890-B-B ALCMS) shall not be made.

The 12 strand multimode fiber optic cable in 2" unit duct in common trench between the vault and the ATCT shall be measure for payment and paid for under contract Item AR801603 -- FIBER OPTIC CABLE IN 2" UD.

- 109-4.6 The Quantity of "Remove Transformer" to be paid for under this item shall be the number of transformers, counted in place, removed as complete and accepted by the Resident Engineer. The removal and disposal of support electrical equipment for the existing transformer shall not be measured for payment and/or paid for separately. The cost for removing and disposing of support electrical equipment for this transformer shall be included in the AR109907-Remove Transformer contract unit price.
- 109-4.7 The quantity of "Relocate Electrical Equipment" to be paid for under this item shall be measured per lump sum for a completed, tested, and operational system as accepted by the MAA and the Resident Engineer. Separate measurements for payments for individual items and cables required to complete the relocation and repowering of the existing east RPU and install a new sub-surface temperature probe shall not be made.

BASIS OF PAYMENT

DELETE Section 109.5.1

ADD the following Sections:

- 109-5.2 The quantity of "Vault Modifications" to be paid for under this item shall be measured per lump sum for furnishing all materials and equipment required for this construction including, but not limited to, wiring, cables, conduits, concrete, cutouts, circuit breakers, blank fillers, fittings, grounding, cable splice kits, connections, module, programming, power converters, control system power convertors, painting, marking, labeling, tagging, testing, sealants, and all other necessary items installed in place, operational and accepted as a complete and operating installation.
- 109-5.3 Payment will be made at the contract unit price per each size, type, and style of regulator complete, operational, accepted by the Resident Engineer and installed in place. This price shall be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials, and for all labor, equipment, tools, integration drawings, and incidentals necessary to complete these items.
- 109-5.4 Payment will be made at the contract unit price per lump sum for the complete, put into operation and accepted lighting control computer system. This price shall be full compensation for furnishing all materials and for all preparation, assembly and installation of these materials and for all labor, equipment, tools, testing, training, system warranty, and incidentals necessary including cables, fiber optic cables,

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conduits, wires, equipment, computers, touchscreens, DCME/IRM/CVM units, removal of existing, spare parts, networks and all other necessary items as required to complete this item.

- 109-5.5 Payment will be made at the contract unit price per each for the accepted completed removed transformer (scan system east RPU MidAmerican transformer). This price shall be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials, and for all labor, equipment, tools, training and incidentals necessary to complete this item.
- 109-5.6 Payment will be made at the contract unit price per lump sum for the completed, put into operation, and accepted relocate electrical equipment (scan system east RPU). This price shall be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials, and for all labor, equipment, tools, testing and incidentals necessary including cable, conduits, splice cans, new sub-surface temperature probe, new power equipment, concrete, crushed aggregate, wires, grounding, equipment, and ducts as required to complete this item.

Payments will be made under:

ITEM AR109210 -- VAULT MODIFICATIONS -- per lump sum.

ITEM AR109301 -- 4 KW REGULATOR, STYLE 1 -- per each.

ITEM AR109630 -- LIGHTING CONTROL COMPUTER SYSTEM -- per lump sum.

ITEM AR109907 -- REMOVE TRANSFORMER -- per lump sum.

ITEM AR109962 -- RELOCATE ELECTRICAL EQUIPMENT -- per lump sum.

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ITEM 110 - INSTALLATION OF AIRPORT UNDERGROUND ELECTRICAL DUCT

DESCRIPTION

110-1.1 ADD the following to this Section:

This item of work shall include, but not be limited to, all work necessary to install directional bore conduit, direct bury conduit, concrete encased duct (1-way, 2-way, 4-way, and 6-way) and remove ducts as detailed in the Construction Plans and in accordance with the standard specifications and these Special Provisions. All materials for these items shall be in accordance with FAA Standard Specification Item 110 "EQUIPMENT AND MATERIALS".

In locations where existing active cables are to be encased in duct banks or where existing active cables are present in existing duct banks to be removed and replaced, the contractor shall use split duct in the proposed duct bank. Cost of split duct to be included in the unit price for the Duct Bank.

In locations where existing active cables are too high in elevation and ducts are proposed, the Contractor shall lower the existing active cable as required to install the proposed duct with the proper cover. Contractor shall include the cost to lower the existing cables in the duct contract unit price.

All waste materials resulting from the removal of the existing ducts and duct banks shall be disposed of by the Contractor at an approved location off of Airport property.

Proposed item 110710-ELECTRICAL MANHOLE shall be constructed in accordance to Item 751-Manholes, Catch Basins, Inlets and Inspection Holes as modified by the detail drawing found in the construction plans. The proposed electrical manholes shall be constructed around proposed cables. The Contractor shall protect the proposed cables from damage during construction. If any cables are damaged during construction, all costs for repairing the damaged cables, including cable replacement and cable splices, shall be the responsibility of the Contractor. Replacement cables (if required) shall not be measured for payment and/or paid for. The Contractor shall supply a Neenah R-3493-A or equal frame and lid (with "electrical" marked on the center of the lid) with this item.

Existing in-turf concrete cable markers damaged by the Contractor during construction, shall be replaced by the Contractor at his expense. New in-turf concrete cable markers are not required for this project. New inpavement brass duct markers are required for this project. The costs for the brass duct markers shall be included in the contract unit prices.

EQUIPMENT AND MATERIALS

110-2.3 PLASTIC CONDUIT

ADD to this Section the following:

Conduits for concrete encased ducts shall be 4" inside diameter, PVC, Schedule 40 unless otherwise noted in the plans.

110-2.9 BUY AMERICAN

ADD to this Section the following:

All materials for this item shall meet the requirements of the FAA Buy American Preference as stated in Appendix 2. Contractor shall provide proof of 100% domestic materials prior to delivering materials to the site. Materials that are unable to meet this requirement shall be reported in the bid documents under Certifications Require by State and/or Federal Law, Buy American Certificate.

CONSTRUCTION METHODS

110-3.1 GENERAL

ADD to this Section the following:

All electrical ducts and conduits shall be installed as indicated on the plans. All excavation and bituminous pavement removal required to install new duct and conduit shall be incidental to the cost of the duct. Spacers for separation of individual ducts meeting the approval of the Resident Engineer shall be required and installed in place prior to pouring concrete. The installation of pull cords, plugs, reinforcement bars, duct markers, concrete backfill, and concrete encasement, as shown on the plans, shall be included in the 110 contract unit prices.

110-3.3 DUCT WITHOUT CONCRETE ENCASEMENT

ADD the following to this Item:

All rigid steel duct, jacked under pavement shall be installed to a minimum depth of 36 inches below the proposed finished grade at the locations shown on the Construction Plans.

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110-3.4 DUCT MARKERS

ADD the following to this Section:

All existing ducts within the limits of this project under existing asphalt surfaces shall be marked with a 3" diameter brass marker located 2' in from the edge of pavement, of a type approved by the Resident Engineer. The brass markers shall be pre-stamped or chiseled on the job with the words "Electrical Duct * - way" on the cap. (* = 1, 2, or 4 as appropriate for duct bank). Existing ducts within the limits of this project under existing concrete surfaces shall be marked with a "D" chiseled into the existing concrete two feet in from each edge of pavement directly over the duct. New or existing ducts located under new or existing asphalt or concrete pavements shall be marked with a 3" diameter brass marker located 2' in from the edge of pavement, of a type approved by the Resident Engineer, marked on the cap as indicated above. The costs for duct markers shall be included in the contract unit prices.

ADD the following Sections to this Item:

110-3.8 ITEM 110710 ELECTRICAL MANHOLE

This item shall be constructed in accordance to <u>Item 751-Manholes</u>, <u>Catch Basins</u>, <u>Inlets and Inspection Holes</u> of the Standard Specifications as modified by this special provision and detailed in the Construction Plans.

110-3.9 BORED DUCT (HORIZONTAL DIRECTIONAL DRILLING)

The Contractor shall dewater the entrance and exit pits as necessary and install the underground ducts in a manner that will not damage existing underground utilities or pavement above the duct. The top of the ducts shall be a minimum of 60 inches below the existing surface.

Curvature shall be minimized at the entrance and exit of the pit to keep axial strain within the limits of the conduit, including joints. Minimum bending radii shall be less than 150 times the nominal diameter of the HDPE conduit and 65 feet for Schedule 40 PVC conduit.

A break-away link, rated with the tensile load limit of the conduit shall be installed between the swivel and the conduit when pulling the conduit. Pulling heads shall be designed so that the pullback force is uniformly transmitted to the conduit and surface stress concentrations are minimized. Seal conduit ends before pulling back to prevent slurry from entering the conduit.

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Allow approximately 4 percent extra length to insure the pull-nose remains extended beyond the bore hole exit after axial strain recovery.

For PVC conduit with cemented joints, follow the manufacturer's installation instructions for cure time and temperature for maximum strength. Use of screws, rivets, or other fasteners which destroy the integrity of the conduit wall or protrude into the inside of the conduit will not be allowed. Use of PVC conduit with seals and mechanical locking rings, designed for installation by horizontal directional drilling is allowed if it meets the requirements for short-term tensile loads and long-term ring stress loads.

Inspect the conduit at the bore hole exit for damage, such as roughness, deep scratches or necking. Notify the Resident Engineer when the inspection will be possible so he can observe the condition of the conduit and make a judgment decision as to whether the installation is acceptable.

The Contractor shall prepare, post and be sure his employees are aware of site safety procedures to be followed during the horizontal directional drilling operation. Emergency procedures, to be followed in the event an existing utility is struck, shall be thoroughly understood by employees and implemented if necessary to reduce the likelihood of injury. Emergency procedures for inadvertently boring into existing buried utilities shall comply with applicable regulations.

METHOD OF MEASUREMENT

ADD the following to this Section:

110-4.3 The number of electrical manholes to be paid for shall be the number of each size and type, as classified, counted in place, and accepted by the Resident Engineer.

BASIS FOR PAYMENT

ADD the following to this Section:

110-5.2 The quantity of electrical manholes to be paid for under this item shall be the number of electrical manholes installed as complete, in place, and accepted units. This price shall be full compensation for furnishing all materials and for all preparation, excavating, cable protection, jumper cables, saw cutting, removals, disposal of waste, replacement cables (if required), cable splices (if required), compacted sand backfill, and placing of materials as may be required to complete these items as detailed on the plans, and for all labor, equipment, tools, and incidentals necessary to complete these items.

Cables installed to replace damaged cables <u>shall not</u> be paid for under any contract pay item. The Contractor shall be responsible for all costs associated with repairing and/or replacing existing cables.

Payment will be made under:

ITEM AR110014 -- 4" DIRECTIONAL BORE -- per lineal foot.

ITEM AR110710 -- ELECTRICAL MANHOLE -- per each.

ITEM AT110212 -- 2" STEEL DUCT, DIRECT BURY -- per lineal foot.

ITEM AT110217 -- 1 1/2" STEEL DUCT, DIRECT BURY -- per lineal foot.

ITEM AT110710 -- ELECTRICAL MANHOLE -- per each.

ITEM 119 AIRPORT OBSTRUCTION LIGHTS

DESCRIPTION

119-1.1 ADD the following to this Section:

This item shall include the furnishing and installing of L-810 LED obstruction lights which are to be mounted on the proposed beacon tower as shown on the Plans. The obstruction lights shall conform to the requirements of AC 150/5345, specification for obstruction lighting equipment, latest edition and FAA Engineering Brief No. 67 "Light Sources other than Incandescent and Xenon for Airport Lighting and Obstruction Lighting Fixtures".

EQUIPMENT AND MATERIALS

119-2.1 GENERAL

ADD the following to this Section:

All new equipment supplied by the Contractor shall appear on the latest version of the FAA approved equipment list found in AC 150/5345-53, Airport Lighting Equipment Certification Program, Appendix 3 Addendum.

ADD the following to the end of this Section:

119-2.9 BUY AMERICAN

All materials for this item shall meet the requirements of the FAA Buy American Preference as stated in Appendix 2. Contractor shall provide proof of 100% domestic materials prior to delivering materials to the site. Materials that are unable to meet this requirement shall be reported in the bid documents under Certifications Require by State and/or Federal Law, Buy American Certificate.

BASIS OF PAYMENT

119-5.1 DELETE the entire Section and ADD the following:

No separate measurement for payment and/or payment shall be made for furnishing and installing airport obstruction lights. The cost for furnishing and installing airport obstruction lights shall be included in the contract Item AT101510-Airport Rotating Beacon and/or AT103410-Beacon Tower unit prices.

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<u>ITEM 125 - INSTALLATION OF AIRPORT LIGHTING SYSTEMS</u>

DESCRIPTION

125-1.1 ADD to this Section the following:

This item shall consist of furnishing and installing new, refurbishing existing, and removing and disposal of existing base mounted RGL units, splice cans, and fiber optic junction enclosures (2 each MAA) as indicated on and at the locations shown on the Construction Plans in accordance with these special provision. The testing of the installed, relocated, refurbished items and all other incidentals necessary to place and/or replace the lighting system back into operation, complete to the satisfaction of the Resident Engineer shall also be included in this item. The ALCMS fiber optic junction enclosures shall not be counted for payment and/or paid for under this item.

The existing equipment and materials scheduled to be removed, refurbished, and/or relocated shall be removed by the Contractor with care so that all materials considered suitable for future use by the Resident Engineer may be salvaged. Equipment and materials having salvage value shall be removed without damage and those having no salvage value shall be removed and disposed of by the Contractor in a suitable location off of airport property. The Contractor shall clean the salvageable materials and equipment to the satisfaction of the Resident Engineer. Any components damaged by the Contractor during removal, refurbishing, and/or relocation shall be replaced or repaired by him at no additional cost with a similar unit (approved by the Resident Engineer) that is compatible with the remainder of the system. All salvageable equipment and materials removed and not reused shall remain the property of and be delivered to the Metropolitan Airport Authority. The Contractor shall deliver the salvaged items to a location designated by the Airport Maintenance Manager. All excavating required to remove existing equipment and materials shall be backfilled with compacted sand.

The Contractor shall field inspect the existing RGL/runway/taxiway lighting system and guidance signs, prior to purchasing the proposed equipment and cables, to ensure the new equipment and cables are compatible to the existing system. Any noncompatible components furnished by the Contractor shall be replaced by him at no additional costs with a similar unit (approved by the Resident Engineer) that is compatible with the remainder of the system.

All new equipment supplied by the Contractor shall appear on the latest version of the approved Equipment List found in AC 150/5345-53D (Airport Lighting Equipment Certification Program).

EQUIPMENT AND MATERIALS

125-2.1 GENERAL

REVISE: References of "150/5345-IU" to "150/5345-1 (Latest Edition)".

ADD: Shop drawings and certifications (including all Buy American Certifications) shall be submitted for all components of this section.

The Contractor shall provide a complete itemized listing of equipment and materials proposed for incorporation into the work. Each itemization shall include an item number, the quantity of items proposed, and the name of the manufacturer. Data composed of catalog cuts, brochures, circulars, specifications and product data, and printed information in sufficient detail and scope to verify compliance with requirements of the contract documents shall be provided.

Special tools and test equipment required for maintenance and testing of the products shall be supplied by the Contractor.

Instructions necessary to check out, troubleshoot, repair, and replace components of the systems, including integrated electrical and mechanical schematics and diagrams and diagnostic techniques necessary to enable operation and troubleshooting after acceptance of the system shall be provided.

125-2.7 ISOLATION TRANSFORMERS

New Isolation Transformers shall be Type L-830 conforming to FAA AC 150/5345-47 sized as required for each installation.

125-2.8 LIGHT CANS

DELETE this Section:

ADD: Light bases shall meet the requirements of FAA AC 150/5345-42 (latest edition), Type L-867 and L-868, Class 1A (metal), Size (B) and shall be provided as indicated or as required to accommodate the fixture or device installed thereon if diameter is not shown.

All light bases shall be provided with an internal and external grounding lug.

Light bases shall be pre-cast in concrete where applicable.

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125-2.10 CABLE CONNECTORS AND SPLICES

ADD: Cable connectors in accordance with FAA AC 150/5345-26 (latest edition), Item L-823 shall be used for connections and splices appropriate for the type of cable. For FAA Type L-824 lighting cable, connectors shall be FAA AC 150/5345-26 (latest edition), Type L-823.

125-2.12 SAND

Sand and backfill around lights, transformers, etc. shall be an IDOT FA-1, FA-2 or that approved by the Resident Engineer.

ADD the following paragraphs to this Section:

125-2.14 ANTI-SEIZE COMPOUND

Prior to reinstalling the existing (or installing new) light fixtures, the Contractor will apply an oxide inhibiting, anti-seizing compound to all screws, nuts, breakable coupling and all places where metal comes into contact with metal. The anti-seize compound will be as manufactured by I.T.T. brand "Contax" or an approved equal.

125-2.15 STAINLESS STEEL BOLTS

All base plate and stake mounting bolts shall be stainless steel. The Contractor shall supply and install new stainless steel bolts, washers, and nuts as required.

125-2.16 AR801645 – FO JUNCTION ENCLOSURES

The MAA FO Junction Enclosures shall be NEMA 4 outdoor rated Fiber Distribution Enclosures with the capacity to support a minimum of 24 strands of fiber optic cable using ST connections on a connector panel. Two (2) each MAA FO Junction Enclosures are required (one airfield and one in the vault). The airfield enclosure shall be mounted on unistrut. The vault enclosure shall be wall mounted. The connector panels shall divide the enclosures into a network compartment and a subscriber compartment. Both network and subscriber compartments shall be equipped with splice trays. The connector panel shall include at least 24 adapter panels equipped with ST connections. Enclosures shall have cable strain relief kits. The minimum enclosure dimensions shall be 24"Hx24"Wx8"D.

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125-2.17 BUY AMERICAN

All materials for this item shall meet the requirements of the FAA Buy American Preference as stated in Appendix 2. Contractor shall provide proof of 100% domestic materials prior to delivering materials to the site. Materials that are unable to meet this requirement shall be reported in the bid documents under Certifications Require by State and/or Federal Law, Buy American Certificate.

CONSTRUCTION METHODS

125-3.1 GENERAL

ADD the following to this Section:

Upon completion of the signage work, all frames, legend panels, and associated parts shall be sealed watertight with a durable silicone caulking compound approved by the Resident Engineer.

ADD the following Sections:

125-3.4 IDENTIFICATION NUMBERS

Per instructions from the MAA, identification numbers will not be required on this project.

125-3.5 ITEMS AR125902, REMOVE BASE MOUNTED LIGHT; AR125906, REMOVE SPLICE CAN AND AR125966, RELOCATE SPLICE CAN

These items shall include all work necessary to remove and/or relocate existing RGL base mounted lights and splice cans as detailed in the Construction Plans. The work to be included in these items includes, but is not limited to, disconnecting light fixtures, excavating base can, disconnecting unit duct, removing base can, transporting lighting equipment, relocate base can, backfilling excavation with compacted sand, disposal of waste materials, supplying and replacing damaged equipment, and all other incidentals necessary to remove and/or relocate the existing equipment and return the remaining lighting systems back into operation, completed to the satisfaction of the Resident Engineer. The Contractor shall either reuse the equipment removed at a new location or deliver the salvaged items to a location designated by the airport maintenance manager.

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125-3.6 ITEM AR801634-RUNWAY GUARD LIGHT

This item shall include all work necessary to furnish and install new base mounted L-804 runway guard light units at the proposed locations as indicated on and detailed in the Construction Plans and this special provision. These lights shall be LED technology. The LED fixtures shall operate on any type (including Thyristor base) of constant current regulator. The new LED units shall operator on the same circuit with incandescent and/or Halogen fixtures.

The L-804 LED units shall conform to the requirements of the latest revision of FAA AC 150/5345-46B "Specification for Runway and Taxiway Light Fixtures" and FAA Engineering Brief No. 67 "Light Sources other than Incandescent and Xenon for Airport Lighting and Obstruction Lighting Fixtures". The L-804 LED units shall be ETL certified. Runway guard lights shall include mounting hardware for mounting on a L-867 base can including frangible coupling, base plate, and ground rods as shown on the Construction Plans or as required by the manufacturer. The Contractor shall supply alignment tools and align the RGL units per manufacturer's instructions.

The RGL shall be Type L-804, Yellow, Class 2, 6.6 amperes constant current fixture, with lamp by-pass and L-823 type connectors, and shall be provided with instruction manual. The L-804 units shall be provided with an incoming power on/off switch. These lights shall be provided complete with compatible type transformers meeting the requirements of AC 150/5345-47 Type L-830 with the appropriate wattage consistent with the type of lamps provided.

The LED L-804 units shall have two possible operating modes: Mimic incandescent on/off curve and instant on/off. It shall be possible to field modify the operating mode. The Mimic incandescent on/off curve mode shall mimic the slower rise and fall conventional incandescent or halogen L-804's. The instant on/off mode shall allow the LED's to instantly turn on and off, which provides for increased conspicuity. It shall be possible to program the operational mode in the field. To allow maximum control of perceived light output, an L-804 LED used in the instant on/off mode shall be on a dedicated circuit.

The Contractor shall furnish two (2) spare L-804 RGL light fixture (LED) to the MAA for future use. Include costs for spare L-804 fixtures in Item "AR801634-Runway Guard Light" contract unit price. The spare fixtures shall not be counted for payment or paid for separately.

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125-3.7 ITEM AR801639-REFURBISH RUNWAY GUARD LIGHT

This item shall include all work necessary to refurbish an existing runway guard light at the proposed locations as indicated on and detailed in the Construction Plans and this special provision to the satisfaction of the Resident Engineer. Refurbishing is defined as converting an existing Mode 2 (voltage driven, 240 VAC) LED RGL Unit to a proposed Mode 1 (6.6 AMP Series Circuit, 60 HZ) LED RGL Unit. The proposed RGL unit shall meet the requirements of Item AR801634-Runway Guard Light, but shall not be counted for payment and/or paid for under Item AR801634. Include costs for proposed Mode 1 RGL in this AR801639, Refurbish Runway Guard Light pay item. The refurbishing of existing runway guard lights shall include; but not be limited to; removing the existing Mode 2 RGL fixture, special base plate (if required), on/off switch, power supply assembly, connectors, pigtails, etc. and then furnishing/installing proposed new Mode 1 LED RGL fixture, transformer, special base plate (if required), on/off switch, power supply assembly, connectors, pigtails, etc. Furnish and install new ground rod per RGL installation detail and all other necessary items as required for a complete, operational, and accepted installation. The Contractor may reuse the existing L-867 base can. The Contractor shall remove old wires and seal the unused exit hubs as required. This item shall also include disconnecting and removing the existing T-K RGL cables from the existing Runway 31 VADI/REIL utility transformer per MidAmerican Energy Company's requirements and the airport's requirements. The Contractor shall remove the existing T-K RGL service disconnect switch, meter pedestal and any other miscellaneous items from the transformer site as directed by the Resident Engineer and Airport. The Contractor shall coordinate all work with MEC, the FAA, and the MAA. The contractor shall meet all MEC requirements. The costs for all of the above items shall be included in the AR801639-Refurbish Runway Guard Light contract unit price.

125-3.8 ITEM AR801645-FO JUNCTION ENCLOSURES

This item shall include all work that is necessary to completely furnish and install two (2) each proposed MAA fiber optic cable junction enclosures as detailed in the Construction Plans and these special provisions. The work to be included in this lump sum item includes, but is not limited to, excavation, compaction, geotextile fabric, compacted 6" depth CA-6 crushed rock pad, concrete piers, PVC conduit, rigid steel conduit, fittings, cables, splices, grounding, ground rod, wiring, rebar, unistrut, enclosure, heavy wall pipe, fiber optic patch panels, modules, termination boards, splice trays, connect panels, adapter panels, cable strain relief kits, ST connectors, testing, sand backfilling, removal of waste soils, and all other incidentals necessary for a complete and operational system to the satisfaction of the MAA and the Resident Engineer. Two each FO junction enclosures are required under this pay item (one airfield and one in the vault). Separate payments for the individual items required to install the FO junction enclosure shall not be made.

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Item AR801645-FO Junction Enclosures shall be constructed in accordance with the applicable portions of items 108, 109, 110, 209 and 610 of the "Standard Specifications for Construction of Airports", these special provisions, and the details in the plans. However, these items shall not be measured for payment or paid for separately. The costs of all work items required to install both of the proposed MAA FO junction enclosures shall be included in the contract item AR801645 lump sum unit price. The ALCMS fiber optic junction enclosures shall not be counted for payment and/or paid for under this item.

METHOD OF MEASUREMENT

ADD the following to this Section:

- 125-4.2 The quantity of new light units, existing light units, new splice cans and existing splice cans to be installed, refurbished and/or removed to be paid for under this item shall be the number, counted in place, as indicated in this special provision, of each type and style, installed, refurbished and/or removed as complete and accepted to the satisfaction of the Resident Engineer. Spare light fixtures to be supplied by the Contractor shall not be counted for payment or paid for separately.
- 125-4.3 The quantity of FO Junction Enclosures to be paid for under this item shall be measured per lump sum for a complete (2 each MAA enclosures), tested, and operational system as accepted by the MAA and the Resident Engineer. Separate measurements for payments for the individual items required to complete the fiber optic (FO) junction enclosures shall not be made. The ALCMS fiber optic junction enclosures shall not be counted for payment and/or paid for under this item.

BASIS OF PAYMENT

125-5.1 REVISE the first sentence of this Section to read as follows:

Payment will be made at the contract unit price per each complete light and splice can, of the type and size specified, installed in place, removed and/or refurbished by the Contractor and accepted by the Resident Engineer.

ADD the following to this Section:

125-5.2 Payment will be made at the contract unit price for lump sum for the completed, put into operation and accepted FO junction enclosures (2 each MAA). This price shall be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials, and for all labor, equipment, tools, training, testing, and incidentals necessary including, conduits, concrete, crushed aggregate, wires, grounding, equipment, enclosures, ducts, unistrut, pipe, fiber optic patch panels, modules, and ST connectors as required to complete this item.

Payment will be made under:

ITEM AR125902 -- REMOVE BASE MOUNTED LIGHT -- per each.

ITEM AR125906 -- REMOVE SPLICE CAN -- per each.

ITEM AR125966 -- RELOCATE SPLICE CAN -- per each.

ITEM AR801634 -- RUNWAY GUARD LIGHT -- per each.

ITEM AR801639 -- REFURBISH RUNWAY GUARD LIGHT -- per each.

ITEM AR801645 -- FO JUNCTION ENCLOSURES -- per lump sum.

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ADD the following Division:

DIVISION VIII - MISCELLANEOUS

ITEM AR801640 – PERFORMED THERMOPLASTIC MARKING

DESCRIPTION

801640-1.1 This item shall include, but not be limited to, all work necessary to supply and install a durable, retroreflective preformed thermoplastic pavement marking to new or existing PCC or bituminous pavements by the use of a large radiant heater as detailed in the special provisions to the satisfaction of the Resident Engineer. The marking colors shall match current FAA standards.

The manufacturer of the Preformed Thermoplastic Markings (PTM) shall be ISO 9001:2008 certified for design, development and manufacturing of the product. The manufacturer shall supply to the Resident Engineer proof of his current certification. The scope of the certification shall include PTM materials. The PTM material shall have a uniform distribution of glass beads throughout the entire cross section of the product.

Multicolored markings shall consist of interconnected individual pieces of PTM material. The individual pieces shall be factory assembled with a compatible material and factory interconnected so that it is not necessary to assemble individual pieces in the field. Obtaining multicolored effect by overlaying materials of different colors in the field will not be allowed. The PTM material shall have an integral color throughout the thickness of the product.

Prior to bidding, the PTM subcontractor shall review the Construction Safety and Phasing Plan (CSPP, Sheets 3 thru 19 of the construction plans). Multiple mobilizations/demobilizations will be required to complete the proposed work. Contractors shall not be entitled to any extra compensation beyond the contract unit rates for this condition.

The contractor shall supply to the airport twenty-five (25) square feet of each color (black, white, red, and yellow) of preformed thermoplastic marking material. This material will be used by the airport to repair future damage to the PTM materials being installed under this contact.

MATERIALS

801640-2.1 MATERIAL ACCEPTANCE

Prior to installation of the PTM, the Contractor shall furnish to the Resident Engineer the manufacturer's certified test reports for the PTM materials to be used on this project. The certified test reports shall include a statement that the materials meet the requirements of the specifications. This report may be used for material acceptance by the Resident Engineer.

801640-2.2 PREFORMED THERMOPLASTIC MARKING

The PTM shall be composed of ester modified rosins in conjunction with aggregates, pigments, and binders which have been factory produced as a finished product. The material must be impervious to degradation by aviation fuels, motor fuels, lubricants, antifreeze, and all other petroleum products.

The marking shall be able to be installed in temperatures down to 35°F without any special storage, preheating, or treatment of the PTM material before application.

801640-2.3 GRADED GLASS BEADS

The material must contain a minimum of thirty percent (30%) evenly distributed intermixed graded glass beads by weight. The intermixed beads shall be conforming to Federal Specification TT-B-1325 Type IV, Gradation B.

The material must have factory applied coated surface beads in addition to the intermixed beads at a rate of 1 lb. $(\pm\ 10\%)$ per 10 sq. ft. These evenly distributed factory applied surface beads shall be conforming to Federal Specification TT-B-1324 Type IV Gradation A and Type 1 Gradation A, with the exception that the roundness shall be 90% or better. The mix of the two types shall meet the following gradation:

Size Gradation			
US Mesh	um	Retained, %	Passing, %
12	1700	0 - 2%	98 - 100%
14	1400	0 - 3.5%	96.5 - 100%
16	1180	2 - 25%	75 - 98%
18	1000	28 - 63%	37 - 72%
20	850	63 - 72%	28 - 37%
30	600	67 - 77%	23 - 33%
50	300	89 - 95%	5 - 11%
80	200	97 - 100%	0 - 3%

801640-2.4 HEATING INDICATORS

The top surface of the material (same side as the factory applied surface beads) shall have regularly spaced indents. These indents shall act as a visual cue during application that the material has reached a molten state so satisfactory adhesion and proper bead embedment has been achieved and a post-application visual cue that the installation procedures have been followed.

801640-2.5 PIGMENTS

White: The material shall be manufactured with minimum 10% by weight ASTM D 476 Type II titanium dioxide pigment. The daylight directional reflectance shall not be less than 78% (relative to magnesium oxide) when tested in accordance with Federal Test Method Standard No. 141D/GEN.

<u>Yellow:</u> The material shall be manufactured with minimum 1% by weight ASTM D 476 Type II titanium dioxide pigment and sufficient yellow organic pigment to meet the below limits (CIE 2° Standard Observer; 45/0 (0/45) Geometry; light source C):

1 2		3		4			
X	У	X	y	X	y	X	y
0.462	0.438	0.470	0.455	0.479	0.428	0.501	0.452

The daylight directional reflectance shall not be less than 45% (relative to magnesium oxide) when tested in accordance with Federal Test Method Standard No. 141D/GEN. The pigment system must be heavy-metal free.

Other Colors: The pigment system must be heavy-metal free.

801640-2.6 MISCELLANEOUS PRODUCT REQUIREMENTS

<u>Skid Resistance</u>: The surface, with properly applied and embedded surface beads, must provide a minimum resistance value of 45 BPN when tested according to ASTM E303.

<u>Thickness:</u> The material must be supplied at a nominal thickness of 65 mils (1.7 mm).

<u>Environmental Resistance:</u> The material must be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to aviation fuels, gasoline, and oil.

<u>Retroreflectivity:</u> The material, when applied in accordance with manufacturer's guidelines, must demonstrate a uniform level of sufficient nighttime retroreflection when tested in accordance with ASTM E1710. The applied material must have an

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initial minimum intensity reading of 100 mcd-m⁻²- $1x^{-1}$ for white and 70 mcd-m⁻²- $1x^{-1}$ for yellow as measured with an LTL-X or LTL-2000 Retroreflectometer.

<u>Prohibited Materials:</u> The manufacturer shall certify that the product does not contain mercury, lead, hexavalent chromium, halogenated solvents, nor any carcinogen, as defined in 29 CFR 1910.1200.

<u>Packaging:</u> A protective film around the snipping box shall be applied to protect the PTM material.

801640-2.7 BUY AMERICAN

All materials for this item shall meet the requirements of the FAA Buy American Preference as stated in Appendix 2. Contractor shall provide proof of 100% domestic materials prior to delivering materials to the site. Materials that are unable to meet this requirement shall be reported in the bid documents under Certifications Require by State and/or Federal Law, Buy American Certificate.

CONSTRUCTION METHOD

801640-3.1 The markings must be capable of conforming to pavement contours, breaks and faults through the action of airport traffic at normal pavement temperatures. The markings must be capable of fully conforming to grooved pavements, including pavement grooving per FAA AC 150/5320-12C, latest edition. The markings shall have resealing characteristics, such that it is capable of fusing with itself and previously applied thermoplastic when heated with a heat source per manufacturer's recommendation.

The markings must be capable of being successfully applied to Green Concrete (concrete that has set but not appreciably hardened). The application of the markings shall not require the portland cement concrete application areas to be cured or dried out.

The marking material must set up rapidly, permitting the pavement to be re-opened to traffic 15 minutes (maximum) after the application of the material is complete.

The PTM manufacturer or installer shall provide technical services as required.

ILL. PRJT. No. MLI-4080 A.I.P. PRJT. No. 3-17-0068-XX 25A QU015

801640-3.2 WEATHER LIMITATIONS

The PTM materials shall be installed only when the pavement surface is clean and dry and the surface temperature is above 45°F and rising. The pavement surface temperature shall also be at least 5°F above the dew point. PTM markings shall not be installed when the pavement temperature is above 120°F.

801640-3.3 PREPARATION OF SURFACE

A. Areas without existing painted pavement markings:

Immediately before application of the PTM material, the surface shall be dry and free from dirt, grease, oil, laitance, or other foreign material that would reduce the bond between the PTM material and the pavement. The area to be marked shall be cleaned by sweeping and blowing or by other methods as required to remove all dirt, laitance, and loose materials without damage to the pavement surface. Use of any chemicals or impact abrasives during surface preparation shall be approved by the Resident Engineer. PTM material shall not be applied to Portland cement concrete pavement until the area to be marked are clean of curing material. High-pressure water shall be used to remove curing materials.

B. Areas with existing painted pavement markings:

PTM materials shall not be installed on top of existing painted pavement markings. Prior to installing the PTM materials, the Contractor shall remove the existing painted pavement marking in accordance to item AR620900-Pavement Marking Removal using the water blasting method. In areas where PTM materials are to be installed, 98% of the existing paint marking shall be eradicated. The existing pavement in these areas shall be exposed across the entire PTM application area. Any residual paint in these areas must be properly bonded and not chipping or delaminating off the pavement surface. After the existing paint has been removed, the Contractor shall prepare the surface in accordance to item 801640-3.3.A above. The contractor shall then remove all residual moisture using the large heater (used to apply the PTM material) or a magnum heat torch.

801640-3.4 APPLICATION

To ensure minimum single-pass application time and optimum bond in the marking/substrate interface, the materials shall be applied using a variable speed self-propelled mobile heater with an effective heating width of no less than 16 ft. (4.88 M) and a free span between supporting wheels of no less than 18ft (5.49 m). The heater shall provide a minimum output of 17,500 Btu/sq.ft. and emit the thermal radiation to the marking material in such a manner that the difference in temperature of 2 in. (5.08 cm) wide linear segments in the direction of heater travel shall be within 5% of the overall average temperature of the heated thermoplastic

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material as it exits the heater. The heater shall have an automatic adjustable reciprocating drive function. The operator controls shall be positioned so that the operator does not have to step into the heated area to operate the heater or to make adjustments. The entire heater span shall be illuminated evenly with 6500°K lighting of no less than 10W per linear ft. The operator controls shall incorporate a powered height adjustment system. The material shall be able to be applied at ambient and pavement temperatures down to 35°F without any preheating of the pavement to a specific temperature. The material shall be able to be applied without the use of a thermometer. The pavement shall be clean, dry and free of debris. A non-VOC sealer with a maximum applied viscosity of 250 centi-Poise (ASTM D 2393) shall be applied to the pavement shortly before the markings are applied. The supplier shall enclose application instructions with each box/package.

The PTM materials shall set up rapidly, permitting the pavements to be re-opened to aircraft traffic quickly. The maximum duration of time between the completion of PTM material application and pavement re-opening shall be 15 minutes. The PTM material drying time shall be less than 15 minutes.

801640-3.5 PROTECTION AND CLEAN UP

After the PTM materials have been installed, the contractor shall protect the materials from damage until the materials are completely dry. All PTM surfaces shall be protected from traffic and moisture. The PTM surfaces shall be protected from excess moisture and/or rain and from disfiguration by splatter, splashes, spillage, or dripping. The contractor shall remove from the airfield all debris, FOD, waste, loose or unadhered reflective media, and by-products generated by the surface preparation and application operations to the satisfaction of the Resident Engineer.

The contractor shall dispose of all of the waste materials in strict compliance with all applicable State, Local and Federal environmental statutes and regulations.

METHOD OF MEASUREMENT

801638-4.1 The quantity of preformed thermoplastic marking to be paid for shall be number of square feet of actual surface area marked as specified, in place, completed, and accepted by the Resident Engineer.

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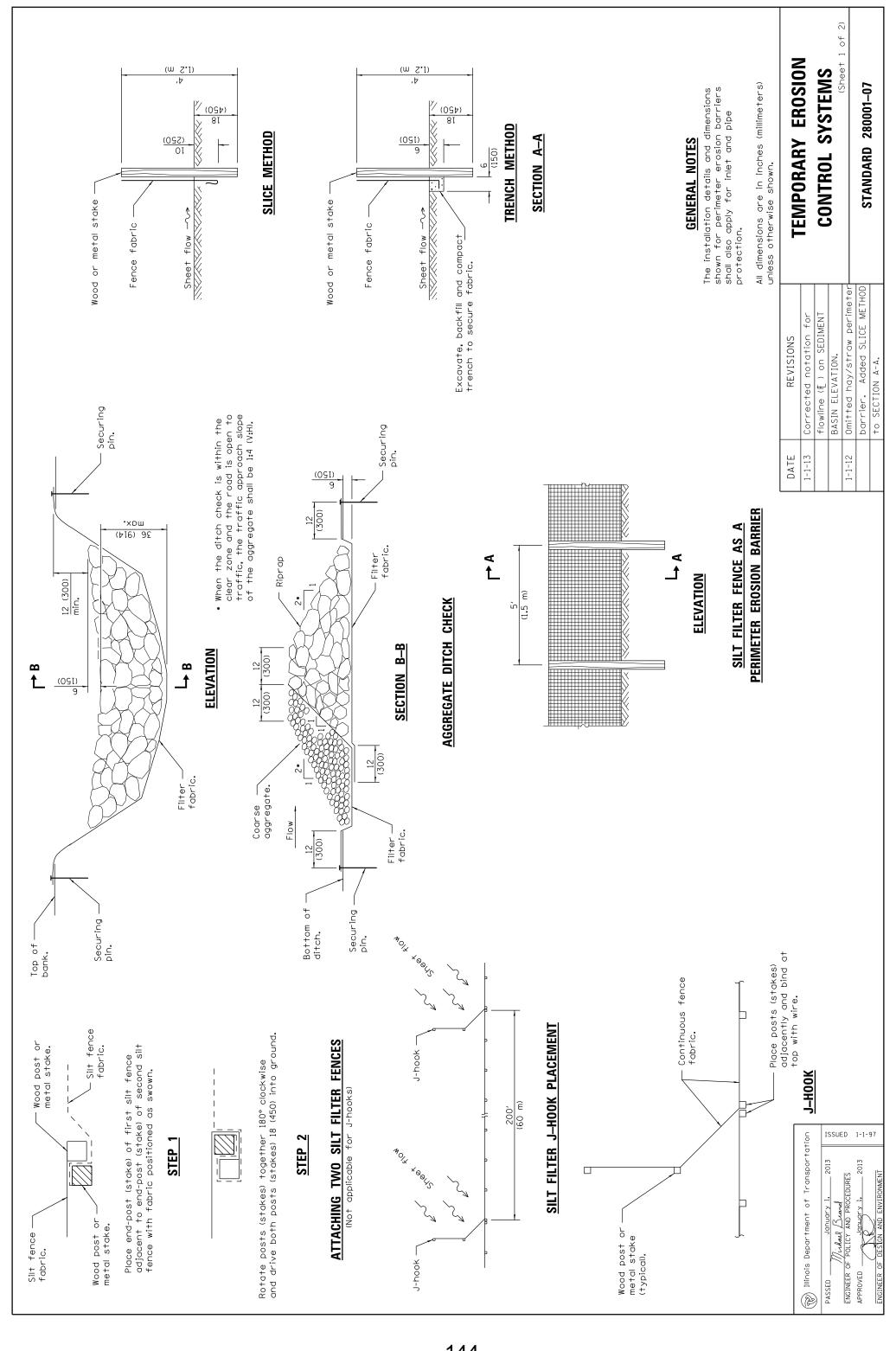
BASIS OF PAYMENT

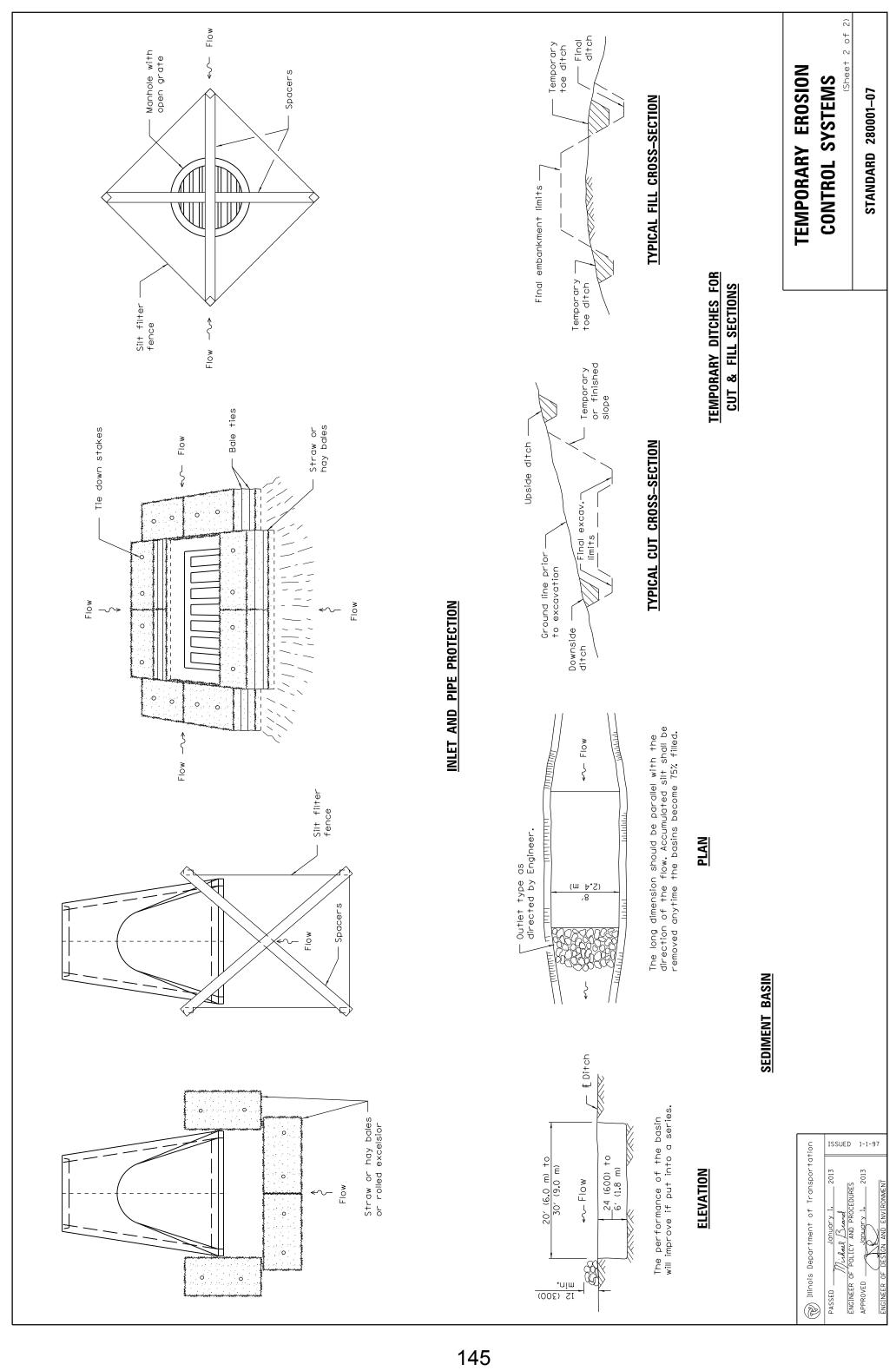
801638-5.1 Payment for the preformed thermoplastic marking shall not be included in the construction progress payment report until the Contractor has met the submittal requirements found in Sections 30-18, 40-01, 40-03, and 40-10 of the standard and special provisions.

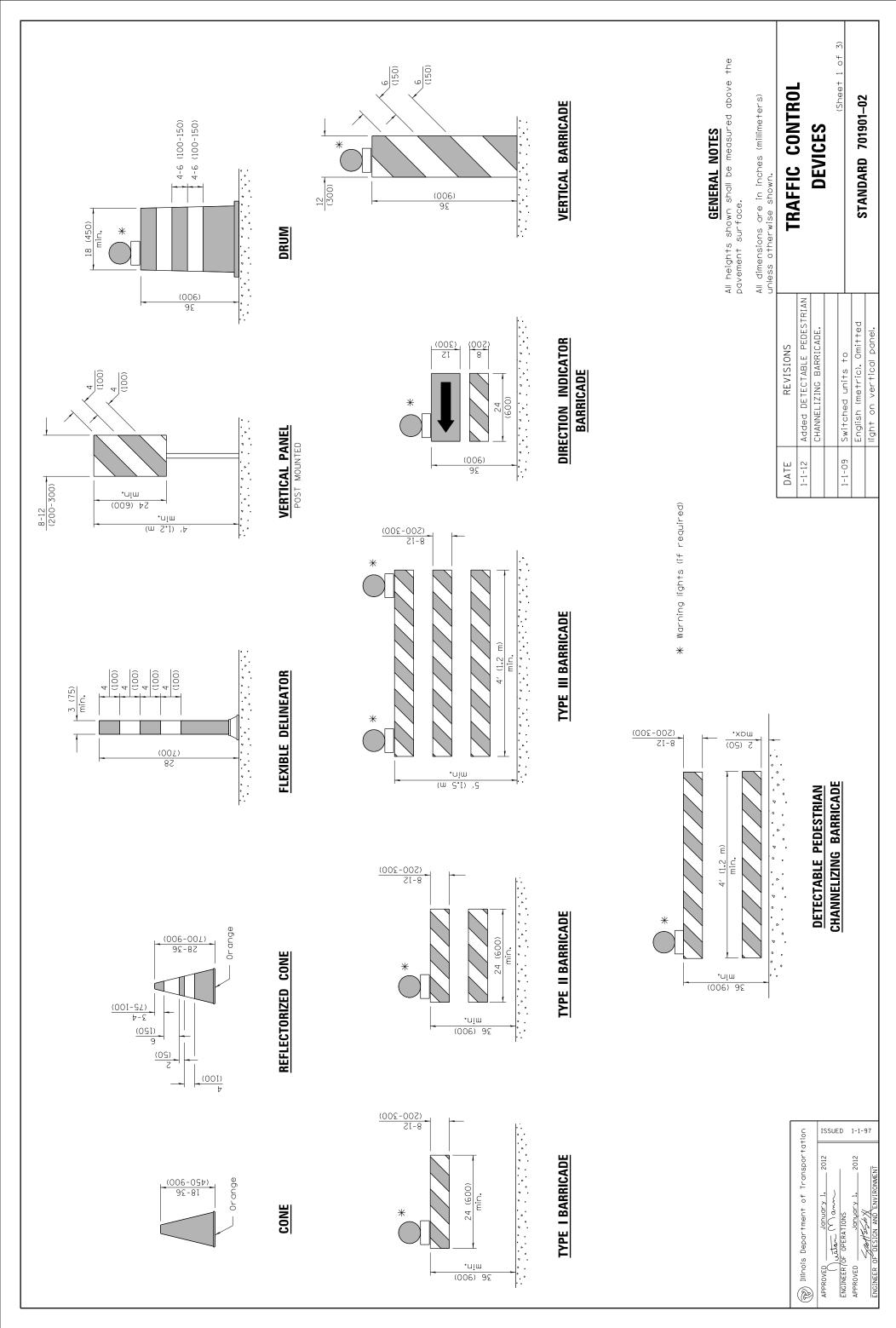
Payment will be made at the contract unit price per square foot for Preformed Thermoplastic Marking. This price shall be full compensation for furnishing all materials and for placing the materials, and for all labor, equipment, tools, and incidentals necessary to complete this item.

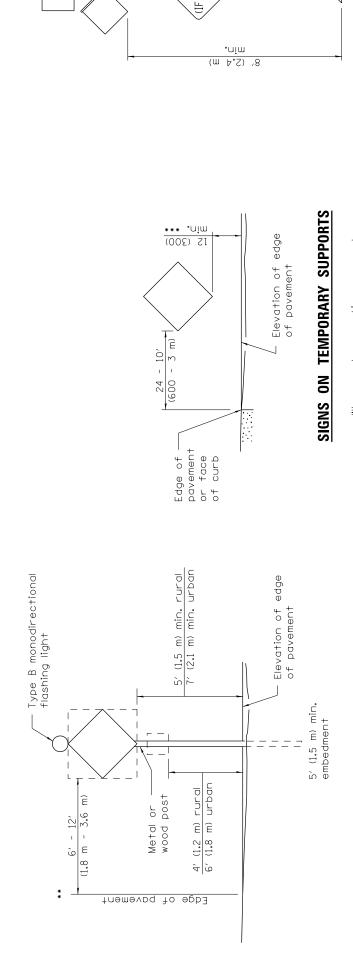
Payment will be made under:

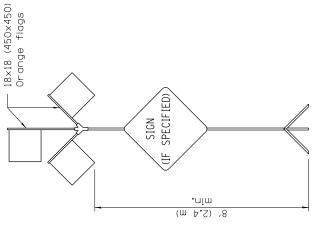
ITEM AR801640 -- PREFORMED THERMOPLASTIC MARKING -- per square foot.











four days, this dimension shall be 5' (1.5 m) min. If located behind other devices, the height shall be sufficient to be seen by motorists.

When curb or paved shoulder are present this dimension shall be 24 (600) to the face of curb or 6′ (1.8 m) to the outside edge of the paved shoulder.

*

POST MOUNTED SIGNS



Dual sign displays shall be utilized on multilane highways.

WORK LIMIT SIGNING

END CONSTRUCTION sign shall be erected at the end of the job unless another job is within 2 miles (3200 m).

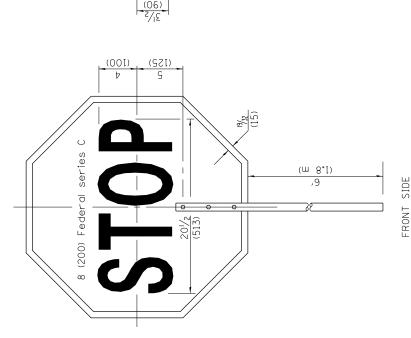
ROAD CONSTRUCTION NEXT X MILES sign shall be placed 500′ (150 m) in advance of project limits.

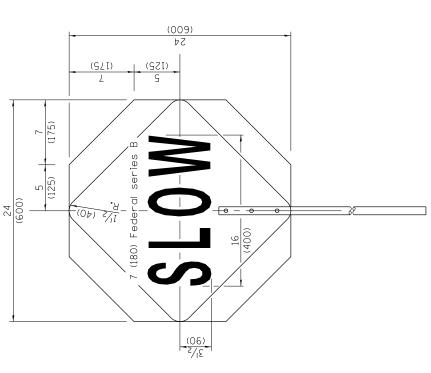
This signing is required for all projects 2 miles (3200 m) or more in length,

CONSTRUCTION

ROAD CONSTRUCTION NEXT X MILES G20-2a(0)-6024

620-1(0)-6036





FLAGGER TRAFFIC CONTROL SIGN

ISSUED 1-1-97

2012

APPROVED

2012

APPROVED January 1.

() Latar () anner ENCINEER/OF OPERATIONS

(R) Illinois Department of Transportation

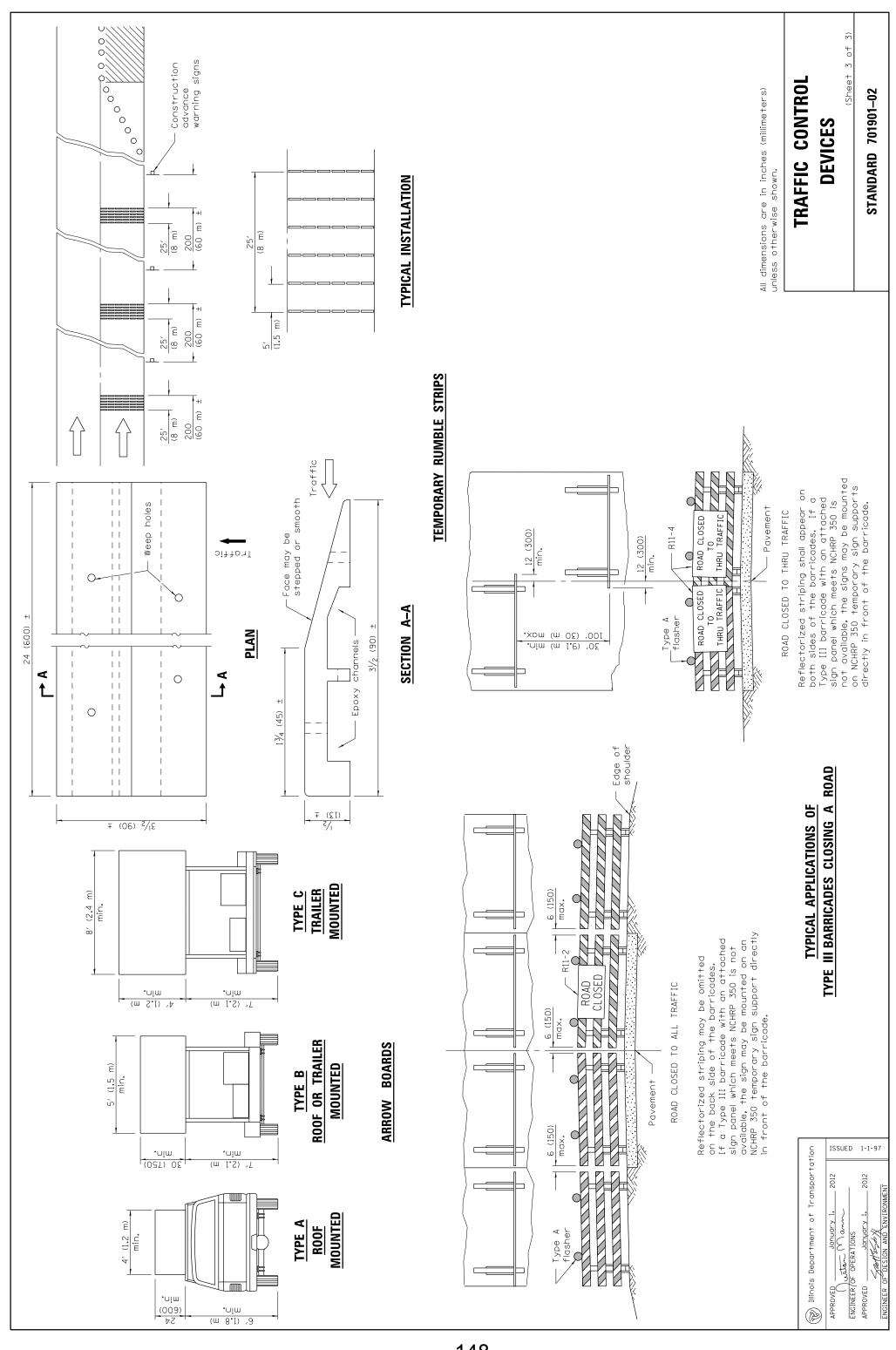
REVERSE SIDE

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

TRAFFIC CONTROL DEVICES

STANDARD 701901-02

(Sheet 2 of 3)



SPECIAL PROVISION FOR PROTECTION OF CABLES, CONTROLS, NAVAIDS AND WEATHER BUREAU FACILITIES

The Contractor is hereby informed that there are installed on the airport FAA NAVAIDS; including, without limitation, ASR, UHF and VHF Receivers and Transmitters; U.S. Weather Bureau facilities; electric cables and control relating to such NAVAIDS and facilities, and other electric power cables serving other facilities. Such NAVAIDS, Weather Bureau and other facilities and electric cables must be fully protected during the entire construction time. Work under this contract can be accomplished in the vicinity of these facilities and cables only at approved periods of time. Approval is subject to withdrawal at any time because of changes in the weather, emergency conditions on the existing airfield areas, anticipation of emergency conditions, and for any other reason determined by the Engineers acting under the orders and instructions of the airport management and/or the designated FAA representative. Any instructions to this Contractor to clear any given area, at any time, by the Engineers, the airport management, or the FAA control tower (by radio or other means) shall be immediately executed. Construction work will be commenced in the cleared area only when additional instructions are issued by the proper authorities.

The Contractor shall be responsible for contacting the appropriate agencies for locations. Power and control cables leading to and from any FAA NAVAIDS, Weather Bureau, and other facilities will then be marked in the field by those agencies for the information of the Contractor, before any work in their general vicinity is started. Thereafter, through the entire time of this construction they shall be protected from any possible damage, including crossing with unauthorized equipment, etc.

These special provisions intend to make perfectly clear the need for protection of FAA NAVAIDS, Weather Bureau, and other facilities and cables by this Contractor at all times.

The Contractor shall immediately repair, with identical material by skilled workmen, any underground cables serving FAA NAVAIDS, Weather Bureau and other airport facilities, which are damaged by his workmen, equipment, or work. Prior approval of the FAA must be obtained for the materials, workmen, time of day or night, method of repairs, and for any temporary or permanent repairs the Contractor proposes to make to any FAA NAVAIDS and facilities damaged by the Contractor. Prior approval of the Engineer or of the representative designated by the airport management must be obtained for the materials, workmen, time of day or night, and for the method of repairs for any temporary or permanent repairs the Contractor proposes to make to any other airport facilities and cables damaged by this Contractor. COSTS INCIDENTAL TO 108. CONTRACT UNIT PRICES.

49 U.S.C.

United States Code, 2009 Edition
Title 49 - TRANSPORTATION
SUBTITLE VII - AVIATION PROGRAMS
PART E - MISCELLANEOUS
CHAPTER 501 - BUY-AMERICAN PREFERENCES
Sec. 50101 - Buying goods produced in the United States
From the U.S. Government Printing Office, http://www.gpo.gov/

§50101. Buying goods produced in the United States

- (a) Preference.—The Secretary of Transportation may obligate an amount that may be appropriated to carry out section 106(k), 44502(a)(2), or 44509, subchapter I of chapter 471 (except section 47127), or chapter 481 (except sections 48102(e), 48106, 48107, and 48110) of this title for a project only if steel and manufactured goods used in the project are produced in the United States.
- (b) Waiver.—The Secretary may waive subsection (a) of this section if the Secretary finds that—
- (1) applying subsection (a) would be inconsistent with the public interest;
- (2) the steel and goods produced in the United States are not produced in a sufficient and reasonably available amount or are not of a satisfactory quality;
- (3) when procuring a facility or equipment under section 44502(a)(2) or 44509, subchapter I of chapter 471 (except section 47127), or chapter 481 (except sections 48102(e), 48106, 48107, and 48110) of this title—
- (A) the cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components of the facility or equipment; and
- (B) final assembly of the facility or equipment has occurred in the United States; or
- (4) including domestic material will increase the cost of the overall project by more than 25 percent.
- (c) Labor Costs.—In this section, labor costs involved in final assembly are not included in calculating the cost of components.

(Pub. L. 103–272, §1(e), July 5, 1994, 108 Stat. 1298, §49101; renumbered §50101 and amended Pub. L. 104–287, §5(88)(D), (89), Oct. 11, 1996, 110 Stat. 3398.)

Historical and Revision Notes Pub. L. 103–272

Revised	Source (U.S. Code)	Source (Statutes at Large)
Section	Source (O.S. Code)	Source (Simules in Large)
49101(a)	49 App.:2226a(a).	Nov. 5, 1990, Pub. L. 101-508, §9129, 104 Stat. 1388-371.
49101(b)	49 App.:2226a(b).	
49101(c)	49 App.:2226a(c).	

In this chapter, the word "goods" is substituted for "product" and "products" for consistency.

In subsection (a), the words "Notwithstanding any other provision of law" are omitted as surplus. The words

APPENDIX 2 PAGE 1 OF 3 "after November 5, 1990" are omitted as obsolete.

In subsection (b), before clause (1), the words "The Secretary may waive" are substituted for "shall not apply" for consistency. In clause (2), the words "steel and goods" are substituted for "materials and products" for consistency. In clause (4), the word "contract" is omitted as surplus.

Pub. L. 104–287, §5(89)

This makes a clarifying amendment to 49:50101(a) and (b)(3), 50102, 50104(b)(1), and 50105, as redesignated by clause (88)(D) of this section, because 49:47106(d) was struck by section 108(1) of the Federal Aviation Administration Authorization Act of 1994 (Public Law 103–305, 108 Stat. 1573).

Amendments

1996—Pub. L. 104–287, §5(88)(D), renumbered section 49101 of this title as this section.

Subsecs. (a), (b)(3). Pub. L. 104–287, §5(89), substituted "section 47127" for "sections 47106(d) and 47127".

Use of Domestic Products

Pub. L. 103–305, title III, §305, Aug. 23, 1994, 108 Stat. 1592, provided that:

- "(a) Prohibition Against Fraudulent Use of 'Made in America' Labels.—(1) A person shall not intentionally affix a label bearing the inscription of 'Made in America', or any inscription with that meaning, to any product sold in or shipped to the United States, if that product is not a domestic product.
- "(2) A person who violates paragraph (1) shall not be eligible for any contract for a procurement carried out with amounts authorized under this title [enacting section 47509 of this title, amending sections 44505 and 48102 of this title, and enacting provisions set out as notes under this section and section 40101 of this title], including any subcontract under such a contract pursuant to the debarment, suspension, and ineligibility procedures in subpart 9.4 of chapter 1 of title 48, Code of Federal Regulations, or any successor procedures thereto
- "(b) Compliance With Buy American Act.—(1) Except as provided in paragraph (2), the head of each office within the Federal Aviation Administration that conducts procurements shall ensure that such procurements are conducted in compliance with sections 2 through 4 of the Act of March 3, 1933 (41 U.S.C. 10a through 10c [41 U.S.C. 10a—10b–1], popularly known as the 'Buy American Act').
- "(2) This subsection shall apply only to procurements made for which—
- "(A) amounts are authorized by this title to be made available; and
- "(B) solicitations for bids are issued after the date of the enactment of this Act [Aug. 23, 1994].
- "(3) The Secretary, before January 1, 1995, shall report to the Congress on procurements covered under this subsection of products that are not domestic products.
- "(c) Definitions.—For the purposes of this section, the term 'domestic product' means a product—
- "(1) that is manufactured or produced in the United States; and

APPENDIX 2 PAGE 2 OF 3 "(2) at least 50 percent of the cost of the articles, materials, or supplies of which are mined, produced, or manufactured in the United States."

Similar provisions were contained in the following prior authorization act: Pub. L. 102–581, title III, §305, Oct. 31, 1992, 106 Stat. 4896.

Purchase of American Made Equipment and Products

Pub. L. 103–305, title III, §306, Aug. 23, 1994, 108 Stat. 1593, provided that:

"(a) Sense of Congress.—It is the sense of Congress that any recipient of a grant under this title [enacting section 47509 of this title, amending sections 44505 and 48102 of this title, and enacting provisions set out as notes under this section and section 40101 of this title], or under any amendment made by this title, should purchase, when available and cost-effective, American made equipment and products when expending grant monies.

"(b) Notice to Recipients of Assistance.—In allocating grants under this title, or under any amendment made by this title, the Secretary shall provide to each recipient a notice describing the statement made in subsection (a) by the Congress."

APPENDIX 2 PAGE 3 OF 3



Memorandum

Federal Aviation Administration

Subject: ACTION: Program Guidance Letter 10-02

Date: February 24, 2010

From: Manager, Airports Financial Assistance Division,

Reply to Attn. of:

Nancy S. Williams 202-267-8822

APP-500

PGL Distribution List

We are issuing this Program Guidance Letter on Buy American requirements.

Frank J. San Martin

Guidance for Buy American on Airport Improvement Program (AIP) or American Recovery and Reinvestment Act (ARRA) projects.

In accepting AIP or ARRA funding, grant recipients are certifying that they will not acquire (or permit any contractor or subcontractor) to use any steel or manufactured products produced outside the United States on any portion of the project for which funds are provided, unless otherwise approved by the FAA. Therefore, for the AIP or ARRA funded portion of a project, grant recipients must either:

- 1. Certify, in writing, all products are wholly produced in the US of US materials, or
- 2. Request a waiver to use non-US produced products, or
- 3. Certify that all equipment that is being used on the project is on the Nationwide Buy American conformance list.

The AIP funded portion of a project includes the grant recipient's local share.

Types of Waivers

There are four types of waivers to Buy American:

- 1. Public interest waiver;
- 2. Insufficient quantity AND quality for ARRA (AIP projects allow waivers for insufficient quantity OR quality);
- 3. 60% or more of the components and subcomponents in the facility or equipment are of US origin and final assembly is in the US; or
- 4. Applying Buy American increases the cost of the overall project by more than 25%.

Many pieces of equipment are constructed with some non-US produced components or subcomponents. Therefore, it is expected that the majority of grants will have waivers issued unless the project is constructed of materials that already have a nationwide waiver.

Nationwide Waiver

Much of the equipment that is frequently used on AIP or ARRA projects has been reviewed by FAA Headquarters and a nationwide waiver has been issued. The Nationwide Buy American conformance list is posted on the www.faa.gov website at the following address:

http://www.faa.gov/airports/aip/procurement/federal_contract_provisions/ by clicking the tab, "Equipment Meeting Buy American Requirements"

If the equipment is on the nationwide waiver list, no additional waiver is required.

Who can Issue Waivers

Only FAA headquarters may issue waivers for reasons 1 and 2. FAA field offices (Regional Offices and/or Airports District Offices) may issue waivers for reasons 3 and 4.

For block grant state projects, the FAA must issue the waivers. Block grant states are not allowed to issue a waiver.

<u>Defining the Project, Facility and Equipment, and Final Assembly Location in the 60%/US</u> final assembly waiver

The waiver can be considered if "at least 60% of the cost of the components and subcomponents in the **facility or equipment** are produced in the United States and the final assembly of the facility or equipment has occurred in the United States." The correct application of the terms is discussed below.

Project

The "**Project**" is generally the project that is being bid. The "Project" does not extend over multiple grants or phases, even though the overall project may be phased or may be built in multiple bid packages.

Facility or Equipment

- For a building, the portion of the building that is being funded under the AIP or ARRA grant is the "**facility**" listed in the waiver.
- For other projects, the bid items as described in the latest edition of FAA Advisory Circular 5370-10 will generally be the "equipment" referred to in the waiver except for airfield electrical equipment.
- For airfield electrical equipment, the "L-" items listed in the Addendum to FAA Advisory Circular 5345-53C, latest edition will generally be the "equipment" referred to in the waiver.
- For a vehicle or single piece of equipment like a snow plow or ARFF vehicle, the single vehicle itself is the "**equipment**."

Final Assembly Location and Labor Exclusion

Final assembly is the substantial transformation of the various components and subcomponents into the equipment. For a building, the final assembly is actual construction of the building.

- For any project other than a building project, the final assembly location is the location where the equipment is assembled, **not the project site itself**.
- For a building, the final assembly location is the airport building site.

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

<u>Common Materials that are waived or excluded from Buy American - Cement, Concrete, Asphalt and Steel</u>

Cement and concrete is excluded from the Buy American preference requirements (although the steel used for reinforcement, ties, stirrups, etc. must meet Buy American.)

Asphalt and other petroleum products are waived as an excepted item under AMS Guidance T3.6.4.1.e: Foreign Acquisition – Definitions identifying Asphalt as a petroleum product.

Steel is specifically identified in the statute. Therefore, all rebar and discrete, identifiable steel components must be manufactured in the United States.

FAA Waiver

After the FAA has determined that the final assembly location is in the US and the percent of US components and subcomponents is above 60%, a waiver may be issued. **The waiver is for the single project – not a nationwide waiver**.

What Information is required to Issue a Waiver (AIP and ARRA) and for the Federal Register Notice (ARRA)

For waiver type 3, a waiver can be considered if "at least 60% of the cost of the components and subcomponents in the **facility or equipment** are produced in the United States and the final assembly of the facility or equipment has occurred in the United States."

Grant recipients must request waivers from FAA in writing, with sufficient supporting information. Grant recipients are responsible for ensuring their waiver request is complete and accurate using project specific information provided directly by the contractor or the contractor's supplier.

The FAA will conduct its review and approval based on the information provided by the grant recipient.

The information that must be provided for either equipment or for a building:

- Project Number
- Project Name
- Airport Name
- Total Project Cost
- Total Equipment or Bid Item Cost for which the waiver is being requested
- Total Equipment or Bid Item Cost excluding labor for final assembly.

For equipment, the following additional information is required:

- The equipment or bid item for which the waiver is being requested
- The manufacturer and country of origin of the equipment or bid item.
- The location of the final assembly of the equipment or bid item (not the airport site)

- The cost of the US components and subcomponents for the equipment or bid item for which the waiver is being requested
- The cost of the non-US components and subcomponents for the equipment or bid item for which the waiver is being requested
- The resulting percent of US and non-US components

For a building, the following additional information is required:

- The building (called the facility in the Buy American statute) for which the waiver is being requested
- The manufacturer and country of origin of the US and non-US materials that will be used in the building,
- For a building, the location of the final assembly is the airport site
- The cost of the US components and subcomponents for the equipment or bid item for which the waiver is being requested
- The cost of the non-US components and subcomponents for the equipment or bid item for which the waiver is being requested
- The resulting percent of US and non-US components

Grant recipients are urged to submit waiver requests as early as possible.

Waivers that are issued on ARRA projects must be included in a Federal Register notice, which will generally be published on a quarterly basis.

Sample Letter of Approval of Waiver:

When FAA is satisfied that a waiver may be issued based on the 60%/US final assembly criteria, a letter must be written to the airport sponsor approving the waiver. The text of the letter follows.

A copy of the letter must be forwarded to APP-500 along with a copy of the supporting documentation that was submitted by the airport for the waiver. The information used in the letter will be the basis of the Federal Register notice. The Federal Register notice may include copies of the waiver letters or will be a tabular listing of the waivers. Therefore, regions must forward both a *.pdf copy of the signed letter and an editable copy of the letter.

XXXX Airport AIP-Project No. X-XX-XXXX-XX Project Name Waiver of Buy American Requirements

I have reviewed the request for Waiver of Buy American Requirement submitted XXX for the use of XXXXX equipment on the subject project. The information submitted by the airport for:

Item for which waiver is being issued: i.e L-831 Transformers Manufacturer: Final Assembly Location:

Percent US Components and Subcomponents:

The information submitted satisfies the requirement for waiver of the requirements of the Buy American per 49 USC Section 50101 based on over 60% of the cost of components and subcomponents to be used in the project being produced in the United States.

The waiver is hereby approved for use on this AIP grant project.

Common Misconceptions

- Belief that if a manufacturer is "FAA-certified" that Buy America has been satisfied. This is not true. The FAA certification certifies that technical standards have been met. However, FAA-certified equipment manufactured outside the U.S. does not meet Buy America provisions of the AIP unless a waiver has been issued.
- Misconception that the North America Free Trade Act (NAFTA) exempts equipment manufactured in Mexico or Canada from "Buy America" requirements. This is <u>not true</u> for AIP or ARRA projects.

Text of Buy American statute from 49 United States Code §50101

- § 50101. Buying goods produced in the United States
- (a) **Preference.** The Secretary of Transportation may obligate an amount that may be appropriated to carry out section 106 (k), 44502 (a)(2), or 44509, subchapter I of chapter 471 (except section 47127), or chapter 481 (except sections 48102 (e), 48106, 48107, and 48110) of this title for a project only if steel and manufactured goods used in the project are produced in the United States.
- **(b) Waiver.** The Secretary may waive subsection (a) of this section if the Secretary finds that—
- (1) applying subsection (a) would be inconsistent with the public interest;
- (2) the steel and goods produced in the United States are not produced in a sufficient and reasonably available amount or are not of a satisfactory quality;
- (3) when procuring a facility or equipment under section 44502 (a)(2) or 44509, subchapter I of chapter 471 (except section 47127), or chapter 481 (except sections 48102 (e), 48106, 48107, and 48110) of this title—
- (A) the cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components of the facility or equipment; and
- (B) final assembly of the facility or equipment has occurred in the United States; or
- (4) including domestic material will increase the cost of the overall project by more than 25 percent.
- (c) Labor Costs.— In this section, labor costs involved in final assembly are not included in calculating the cost of components.



Federal Aviation
Administration

Great Lakes Region Illinois, Indiana, Michigan Minnesota, North Dakota, Ohio, South Dakota, Wisconsin 2300 East Devon Avenue Des Plaines, Illinois 60018

REGIONAL GUIDANCE LETTER—AIRPORTS DIVISION

NUMBER: 5100.30

DATE: May 9, 2008

SUBJECT: Airport Improvement Program (AIP) Buy American Requirement in

Construction and Equipment Grants

REFERENCES: Title 49 United States Code (USC) ("the Act"), Section 50101

FAA Order 5100.38, "Airport Improvement Program Handbook" http://www.faa.gov/airports_airtraffic/airports/aip/aip_handbook/

BACKGROUND:

Section 50101 of the Act prohibits the FAA from obligating funds for a grant under the Airport Improvement Program (AIP) unless steel and manufactured goods used in the project are produced in the United States.

This provision was added to the FAA's authorizing legislation in 1990. The North American Free Trade Agreement (NAFTA) specifically excluded federal grant programs such as AIP. Therefore, NAFTA does not change a Sponsor's requirement to comply with the Buy American requirement in the Act.

The FAA may waive the requirement if a sponsor submits a written request demonstrating that one of the following criteria applies:

- Applying the provision is not in the public interest. This is reserved for significant public interest determinations;
- The steel or manufactured good is not available in sufficient quantity or satisfactory quality in the United States;
- For AIP grant-funded projects other than ground transportation demonstration projects,
 - the cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components of the facility or equipment; and
 - final assembly of the facility or equipment has occurred in the United States; or
- Applying this provision would increase the cost of the overall project by more than 25 percent.

As of the date of this Regional Guidance Letter (RGL), a national Program Guidance Letter (PGL) is under development and pending publication. In order to ensure

compliance for grants issued prior to the PGL's final publication, this RGL is intended to provide interim guidance for all AIP-funded construction and equipment grants.

INTERIM REGIONAL POLICY AND PROCEDURES:

All sponsors are reminded that the "Terms and Conditions of Accepting Airport Improvement Program Grants" (dated June 2005) includes a certification in Section II (General Conditions), Subsection J stating that:

Unless otherwise approved by the FAA, it will not acquire or permit any contractor or subcontractor to acquire any steel or manufactured products produced outside the United States to be used for any project for airport development or noise compatibility for which funds are provided under this grant. The sponsor will include in every contract a provision implementing this condition.

As with all required terms and conditions, sponsors are responsible for ensuring that their certifications are complete and accurate. Sponsors are therefore also responsible for determining if they may require a waiver for a particular project. Until the PGL is finalized and published, it shall be the policy of the Great Lakes Region that any sponsor asking the FAA to waive this requirement must do so in writing (see Exhibit A).

Neither the Region nor ADOs are authorized to approve waivers under the first or second criteria above. If the ADO recommends a waiver pursuant to the first or second criteria, they shall forward the request with their recommendation to AGL-610, who will in turn review and relay such requests to APP-500 for adjudication. Sponsors are urged to submit such requests as early as possible, generally providing at least 30 calendar days prior to anticipated grant award.

ADOs and block-grant states are hereby authorized to approve written waiver requests under the third or fourth criteria above. Consistent with other sponsor certifications, the FAA may base its approval entirely on the information provided by the sponsor, without any obligation to conduct independent review, research or verification of the information presented.

The original written request, all supporting documentation and the final waiver must be retained in the grant documentation file or binder.

FAA CERTIFIED EQUIPMENT:

All ADOs, sponsors, consultants and contractors are advised and reminded that FAA certification of equipment for a particular purpose does not necessarily mean that the equipment satisfies the Buy American requirement. The FAA certifies equipment for technical and functional specifications, without regard to how the equipment is funded. When equipment is funded with AIP grants, a number of additional legal and administrative requirements apply, including the Buy American provision.

Jeri Alles

Airports Division Manager Great Lakes Region

Exhibit A (Request for Waiver of Buy American Requirement)

Airport Sponsor	[insert legal name of	sponsor]	
Official Representative	[insert name]		
Project Name	[insert]		
Indicate reason(s) for waive reason indicated.	er request. Supporting	documentation must be provided for each	
☐ A. Applying the provis public interest dete	on is not in the public interest. This is reserved for significant rminations.		
☐ B. The steel or manufquality in the Unite	ctured good is not available in sufficient quantity or satisfactory States.		
 the cost of com than 60 percen 	of the cost of all components of the facility or equipment; and of the facility or equipment has occurred in the United States.		
☐ D. Applying this provise 25 percent.	ion would increase the cost of the overall project by more than		
Signature			
Date FAA USE ONLY BELOW		true and complete to the best of my knowledge.	
		ve require approval by Headquarters	
ADO Recommendation	Recommended	□ Not recommended	
ADO Manager	[insert name]		
Signature			
Date	[insert]		
RO Recommendation	Recommended	☐ Not recommended	
610 Branch Manager	[insert name]		
Signature			
Date	[insert]		
ADO Manager or block-o	rant state may approv	ve waivers based on Criteria C or D above	
Waiver Determination		enied	
ADO Manager	[insert]	•	
Signature			
Date	[insert]		