If you plan to submit a bid directly to the Department of Transportation

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 that 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 letting.

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 124INT) 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.

WHO CAN BID?

Bids will be accepted from only those companies that request and receive written **Authorization to Bid** from IDOT's Central Bureau of Construction.

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?: When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status" (BDE 124INT) 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 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 form within a reasonable time of complete and correct original document submittal should contact the department as to status. This is critical in the week before the letting. These documents must be received three days before the letting date. 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.

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

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

The Internet is the Department's primary way of doing business. The subscription server e-mails are an added courtesy the Department provides. It is suggested that 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 (217)524-1642 or Timothy.Garman@illinois.gov.

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

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

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

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

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

Questions Regarding	Call
Prequalification and/or Authorization to Bid	217/782-3413
Preparation and submittal of bids	217/782-7806
Mailing of plans and proposals	217/782-7806

ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

Planholders should verify that they have received and incorporated any addendum and/or revision prior to submitting their bid. Failure by the bidder to include and addendum or revision could result in a bid being rejected as irregular.

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Proposal Submitted By
Name
Address
City

Letting September 17, 2010

NOTICE TO PROSPECTIVE BIDDERS

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

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



Springfield, Illinois 62764

Contract No. 66408 GRUNDY County Section (32,47-4)HBK-4 & (G)N Route FAI 80 Project ACIM-HPP-080-4(189)115 District 3 Construction Funds

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

Prepared by

F

Checked by

(Printed by authority of the State of Illinois

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

INSTRUCTIONS

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

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

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

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

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

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

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

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

Questions Regarding Call

Prequalification and/or Authorization to Bid 217/782-3413 Preparation and submittal of bids 217/782-7806



PROPOSAL

Section (32,47-4)HBK-4 & (G)N Project ACIM-HPP-080-4(189)115

District 3 Construction Funds

Route FAI 80

This project consists of construction of all four ramps of the I-80/Brisbin Road interchange, reconstruction and adding lanes to Brisbin Road, replacement of the existing Brisbin Road Bridge over I-80, reconstruction, resurfacing and widening of 2,245 feet of US 6, reconstruction and realignment of 1,044 feet of North Road, reconstruction and realignment of 1,652 feet of Service Drive and reconstruction and realignment of driveways. This project is located near Morris.

2. The undersigned bidder will furnish all labor, material and equipment to complete the above described project in a good and 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. ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER. The undersigned further declares that he/she has carefully examined the proposal, plans, specifications, 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.
- 4. **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.
- 5. **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> </u>	Amount o	of Bid	Proposal <u>Guaranty</u>	<u>Am</u>	nount c	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.

Attach Cashier's Check or Certi	fied Check Here
In the event that one proposal guaranty check is intended to cover two or more proposof the proposal guaranties which would be required for each individual proposal. If the state below where it may be found.	
The proposal guaranty check will be found in the proposal for:	
Section No.	
County	

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

		KETUKN WITH BID				
6.	combination, he/sl combination bid s proportion to the b	IDS. The undersigned further agrees that if awarded the contract ne will perform the work in accordance with the requirements of pecified in the schedule below, and that the combination bid sid submitted for the same. If an error is found to exist in the gross in a combination, the combination bid shall be corrected as providing	f each individual proposa hall be prorated against s sum bid for one or more	al comprising the each section is		
		combination bid is submitted, the schedule below must be coing the combination.	ompleted in each propo	sal		
		ate bids are submitted for one or more of the sections compr ation bid must be submitted for each alternate.	ising the combination, a	1		
		Schedule of Combination Bids				
Со	mbination		Combination	n Bid		
	No.	Sections Included in Combination	Dollars	Cents		
7.	schedule of prices all extensions and schedule are appri is an error in the contract will be ma contract. The sch	RICES. The undersigned bidder submits herewith, in accordar for the items of work for which bids are sought. The unit prices I summations have been made. The bidder understands that eximate and are provided for the purpose of obtaining a gross surextension of the unit prices, the unit prices shall govern. Payade only for actual quantities of work performed and accepted or eduled quantities of work to be done and materials to be furnish delsewhere in the contract.	bid are in U.S. dollars an the quantities appearin m for the comparison of b ment to the contractor at materials furnished according	d cents, and g in the bid bids. If there awarded the brding to the		
8.	provides that a pe	DO BUSINESS IN ILLINOIS. Section 20-43 of the Illinois Progreson (other than an individual acting as a sole proprietor) must be of Illinois prior to submitting the bid.	curement Code (30 ILCS st be a legal entity auth	\$ 500/20-43) orized to do		
9.	The services of a	subcontractor will or may be used.				
		Yes □ No □				
		ocontractors with subcontracts with an annual value of more than lidress, and the dollar allocation for each subcontractor.	\$25,000, the contract sha	ıll include		

State Job # - C-93-006-04
PPS NBR - 3-40970-0000
County Name - GRUNDY- -

Project Number
ACIM-HPP-0804/189/115

Route FAI 80

Code - 63 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
XX003140	SHORT-TERM PVT MK REM	FOOT	384.000				
XX005968	TURBIDITY CURTAIN	SQ YD	271.000				
XX006520	AGGREGATE DRIVEWAY 6"	SQ YD	529.000				
X0321156	HIGH VIS TEMP FENCE	FOOT	1,209.000				
X0322936	REMOV EX FLAR END SEC	EACH	9.000				
X0325887	POROUS GRAN CAP MAT	TON	7,364.000				
X0326867	RADAR SPEED TRAILER	CAL MO	42.000				
X0326880	MESSAGE BOARD VEH DRV	HOUR	100.000				
X0326907	PORT VHMNT CH MSS SGN	CAL MO	20.000				
X2020502	BRACED EXCAVATION	CU YD	395.000				
X2090210	POROUS GRAN BACK SPEC	CU YD	619.000				
X4400110	TEMP PAVT REMOVAL	SQ YD	10,789.000				
X4401980	CONC BARRIER REMOV	FOOT	430.000				
X4402805	ISLAND REMOVAL	SQ FT	248.000				
X6013600	PIPE UNDERDRAIN 4 MOD	FOOT	32,386.000				

State Job # - C-93-006-04
PPS NBR - 3-40970-0000
County Name - GRUNDY- -

Project Number
ACIM-HPP-0804/189/115

Route FAI 80

Code - 63 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
X6020088	MAN TA 8 DIA T1F CL	EACH	1.000				
X6063600	COMB CC&G TM4.24	FOOT	203.000				
X6660410	REMOVE ROW MARKERS	EACH	3.000				
X7010805	TR C-PROT 701401 SPL	L SUM	1.000				
X7011008	TC-PROT ALT ROUTE SN	CAL MO	21.000				
X7030140	PAVT MK TAPE T3 6 SP	FOOT	11,700.000				
X7830070	GRV RCSD PVT MRKG 5	FOOT	35,365.000				
X7830074	GRV RCSD PVT MRKG 7	FOOT	22,411.000				
X7830076	GRV RCSD PVT MRKG 9	FOOT	4,052.000				
X8730027	ELCBL C GROUND 6 1C	FOOT	860.000				
Z0001050	AGG SUBGRADE 12	SQ YD	80,402.000				
Z0001058	AGG SUBGRADE 18	SQ YD	4,774.000				
Z0001060	AGG SUBGRADE 24	SQ YD	4,914.000				
Z0004530	HMA DRIVEWAY PAVT 8	SQ YD	189.000				
Z0013797	STAB CONSTR ENTRANCE	SQ YD	730.000				

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County Name - GRUNDY- -

Project Number
ACIM-HPP-0804/189/115

Route FAI 80

Code - 63 - - District - 3 - -

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				
Z0018002	DRAINAGE SCUPPR DS-11	EACH	4.000				
Z0018905	DRILL-GROUT BARS	EACH	85.000				
Z0026407	TEMP SHT PILING	SQ FT	1,850.000				
Z0030070	IMP ATTEN SU NAR TL3	EACH	1.000				
Z0030250	IMP ATTN TEMP NRD TL3	EACH	6.000				
Z0030350	IMP ATTN REL NRD TL3	EACH	10.000				
Z0065740	SLOT DR 12" W/VAR SL	FOOT	280.000				
Z0065752	SLOT DR 12" W/6" SLOT	FOOT	420.000				
Z0076600	TRAINEES	HOUR	3,000.000		0.800		2,400.000
20100110	TREE REMOV 6-15	UNIT	3,818.000				
20100210	TREE REMOV OVER 15	UNIT	3,063.000				
20101000	TEMPORARY FENCE	FOOT	7,883.000				
20200100	EARTH EXCAVATION	CU YD	71,188.000				
20201200		CU YD	8,457.000				

State Job # - C-93-006-04
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County Name - GRUNDY- -

Project Number
ACIM-HPP-0804/189/115

Route FAI 80

Code - 63 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
20400800	FURNISHED EXCAVATION	CU YD	284,197.000				
20600110	GRAN EMBANK SPEC	TON	82,847.000				
20800150	TRENCH BACKFILL	CU YD	1,318.000				
21001000	GEOTECH FAB F/GR STAB	SQ YD	9,688.000				
21101505	TOPSOIL EXC & PLAC	CU YD	19,237.000				
25000210	SEEDING CL 2A	ACRE	23.500				
25000300	SEEDING CL 3	ACRE	9.400				
25000400	NITROGEN FERT NUTR	POUND	2,963.000				
25000500	PHOSPHORUS FERT NUTR	POUND	2,963.000				
25000600	POTASSIUM FERT NUTR	POUND	2,963.000				
25100630	EROSION CONTR BLANKET	SQ YD	43,325.000				
28000250	TEMP EROS CONTR SEED	POUND	6,585.000				
28000305	TEMP DITCH CHECKS	FOOT	163.000		-		
28000400	PERIMETER EROS BAR	FOOT	7,703.000				
28000500	INLET & PIPE PROTECT	EACH	13.000				

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Project Number
ACIM-HPP-0804/189/115

Route FAI 80

Code - 63 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
28000720	MULCH METHOD 2	ACRE	56.500				
28100105	STONE RIPRAP CL A3	SQ YD	114.000				
28100107	STONE RIPRAP CL A4	SQ YD	1,819.000				
28200200	FILTER FABRIC	SQ YD	2,233.000				
31100200	SUB GRAN MAT A	CU YD	1,899.000				
31102000	SUB GRAN MAT C	CU YD	2,747.000				
31200500	STAB SUBBASE HMA 4	SQ YD	56,554.000				
35101600	AGG BASE CSE B 4	SQ YD	198.000				
35501311	HMA BASE CSE 6 3/4	SQ YD	3,016.000				
40200100	AGG SURF CSE A	TON	2,010.000				
40201000	AGGREGATE-TEMP ACCESS	TON	91.000				
40600100	BIT MATLS PR CT	GALLON	24,018.000				
40600115	P BIT MATLS PR CT	GALLON	1,773.000				
40600300	AGG PR CT	TON	144.000				
40600400	MIX CR JTS FLANGEWYS	TON	1.500				

State Job # - C-93-006-04
PPS NBR - 3-40970-0000
County Name - GRUNDY- -

Project Number
ACIM-HPP-0804/189/115

Route FAI 80

Code - 63 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
40600845	P LEV BIND MM N90	TON	214.000				
40600895	CONSTRUC TEST STRIP	EACH	7.000				
40603085	HMA BC IL-19.0 N70	TON	5,555.000				
40603090	HMA BC IL-19.0 N90	TON	459.000				
40603310	HMA SC "C" N50	TON	330.000				
40603545	PHMA SC "D" N90	TON	428.000				
40702011	HMA PAVT FD 16 1/2	SQ YD	6,921.000				
42000506	PCC PVT 10 1/4 JOINTD	SQ YD	47,574.000				
42001300	PROTECTIVE COAT	SQ YD	68,484.000				
44000100	PAVEMENT REM	SQ YD	5,011.000				
44000198	HMA SURF REM VAR DP	SQ YD	5,089.000				
44000200	DRIVE PAVEMENT REM	SQ YD	351.000				
44004000	PAVED DITCH REMOVAL	FOOT	67.000				
44004250	PAVED SHLD REMOVAL	SQ YD	2,045.000				
44005000	STAB SHOULDER REMOV	SQ YD	5,570.000				

State Job # - C-93-006-04
PPS NBR - 3-40970-0000
County Name - GRUNDY- -

Project Number
ACIM-HPP-0804/189/115

Route FAI 80

Code - 63 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
44213200	SAW CUTS	FOOT	1,941.000				
48101500	AGGREGATE SHLDS B 6	SQ YD	5,396.000				
48203029	HMA SHOULDERS 8	SQ YD	3,810.000				
48300505	PCC SHOULDERS 10 1/4	SQ YD	14,793.000				
48300820	PCC SHOULDERS 14	SQ YD	2,212.000				
50100100	REM EXIST STRUCT	EACH	1.000				
50102400	CONC REM	CU YD	8.800				
50104400	CONC HDWL REM	EACH	9.000				
50105220	PIPE CULVERT REMOV	FOOT	573.000				
50157300	PROTECTIVE SHIELD	SQ YD	900.000				
50200100	STRUCTURE EXCAVATION	CU YD	373.000				
50200400	ROCK EXC STRUCT	CU YD	2.000				
50300225	CONC STRUCT	CU YD	679.300				
50300255	CONC SUP-STR	CU YD	1,355.400				
50300260	BR DECK GROOVING	SQ YD	3,228.000		-		-

State Job # - C-93-006-04 PPS NBR - 3-40970-0000

GRUNDY- -

Code - 63 - - District - 3 - -

County Name -

Section Number - (32,47-4)HBK-4 & (G)N

 Project Number
 Route

 ACIM-HPP-0804/189/115
 FAI 80

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
50300280	CONCRETE ENCASEMENT	CU YD	38.200				
50300300	PROTECTIVE COAT	SQ YD	4,197.000				
50400735	F&E PPC BULB T-BM 63	FOOT	611.000				
50400745	F&E PPC BULB T-BM 72	FOOT	661.000				
50500105	F & E STRUCT STEEL	L SUM	1.000				
50500505	STUD SHEAR CONNECTORS	EACH	7,740.000				
50800205	REINF BARS, EPOXY CTD	POUND	397,320.000				
50800515	BAR SPLICERS	EACH	314.000				
51100100	SLOPE WALL 4	SQ YD	800.000				
51201600	FUR STL PILE HP12X53	FOOT	220.000				
51201610	FUR STL PILE HP12X63	FOOT	246.000				
51201900	FUR STL PILE HP14X89	FOOT	1,612.000				
51202305	DRIVING PILES	FOOT	2,078.000				
51203600	TEST PILE ST HP12X53	EACH	1.000				
51203610	TEST PILE ST HP12X63	EACH	2.000				

State Job # - C-93-006-04 PPS NBR - 3-40970-0000

GRUNDY- -

Code - 63 - - District - 3 - -

County Name -

Project Number	Route	
ACIM-HPP-0804/189/115	FAI 80	

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
51203900	TEST PILE ST HP14X89	EACH	2.000				
51204650	PILE SHOES	EACH	82.000				
51500100	NAME PLATES	EACH	3.000				
52000110	PREF JT STRIP SEAL	FOOT	201.000				
52100010	ELAST BEARING ASSY T1	EACH	20.000				
52100520	ANCHOR BOLTS 1	EACH	40.000				
52100530	ANCHOR BOLTS 1 1/4	EACH	20.000				
542A0220	P CUL CL A 1 15	FOOT	131.000				
542A0223	P CUL CL A 1 18	FOOT	54.000				
542A0235	P CUL CL A 1 30	FOOT	72.000				
542A1909	P CUL CL A 3 24	FOOT	120.000				
542A1921	P CUL CL A 3 36	FOOT	117.000				
542A2743	P CUL CL A 4 18	FOOT	20.000				
542A2749	P CUL CL A 4 24	FOOT	248.000				
542A2755	P CUL CL A 4 30	FOOT	426.000				

State Job # - C-93-006-04
PPS NBR - 3-40970-0000
County Name - GRUNDY- -

 Route FAI 80

Code - 63 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
542A2761	P CUL CL A 4 36	FOOT	238.000				
542A2773	P CUL CL A 4 48	FOOT	523.000				
542A5491	P CUL CL A 1 EQRS 36	FOOT	190.000				
542D0220	P CUL CL D 1 15	FOOT	192.000				
54213447	END SECTIONS 12	EACH	7.000				
54213450	END SECTIONS 15	EACH	10.000				
54213657	PRC FLAR END SEC 12	EACH	12.000				
54213660	PRC FLAR END SEC 15	EACH	12.000				
54213663	PRC FLAR END SEC 18	EACH	4.000				
54213669	PRC FLAR END SEC 24	EACH	3.000				
54213672	PRC FLAR END SEC 27	EACH	2.000				
54213675	PRC FLAR END SEC 30	EACH	6.000				
54213681	PRC FLAR END SEC 36	EACH	4.000				
54213693	PRC FLAR END SEC 48	EACH	2.000				
54214731	PRCF END S EL EQRS 36	EACH	8.000				

State Job # - C-93-006-04
PPS NBR - 3-40970-0000
County Name - GRUNDY- -

Project Number
ACIM-HPP-0804/189/115

Route FAI 80

Code - 63 - - District - 3 - -

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
54244405	FL INLT BX MED 542546	EACH	1.000				, ,
54248510	CONCRETE COLLAR	CU YD	3.300				
550A0050	STORM SEW CL A 1 12	FOOT	251.000				
550A0070	STORM SEW CL A 1 15	FOOT	262.000				
550A0090	STORM SEW CL A 1 18	FOOT	31.000				
550A0340	STORM SEW CL A 2 12	FOOT	1,908.000				
550A0360	STORM SEW CL A 2 15	FOOT	216.000				
550A0420	STORM SEW CL A 2 27	FOOT	124.000				
550A0430	STORM SEW CL A 2 30	FOOT	143.000				
55100700	STORM SEWER REM 15	FOOT	481.000				
552A0400	SS JKD CL A 15	FOOT	67.000				
58700300	CONCRETE SEALER	SQ FT	4,241.000				
59100100	GEOCOMPOSITE WALL DR	SQ YD	423.000				
60100060	CONC HDWL FOR P DRAIN	EACH	60.000				
60100915	PIPE DRAINS 6	FOOT	20.000				

State Job # - C-93-006-04 PPS NBR - 3-40970-0000

GRUNDY- -

Code - 63 - - District - 3 - -

County Name -

Project Number	Route
ACIM-HPP-0804/189/115	FAI 80

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
60100925	PIPE DRAINS 8	FOOT	20.000				
60100935	PIPE DRAINS 10	FOOT	20.000				
60100945	PIPE DRAINS 12	FOOT	544.000				
60100965	PIPE DRAINS 18	FOOT	20.000				
60108100	PIPE UNDERDRAIN 4 SP	FOOT	1,136.000				
60109580	P UNDR FOR STRUCT 4	FOOT	436.000				
60218300	MAN TA 4 DIA T1F OL	EACH	1.000				
60221100	MAN TA 5 DIA T1F CL	EACH	1.000				
60222240	MAN TA 5 DIA T24F&G	EACH	4.000				
60237470	INLETS TA T24F&G	EACH	16.000				
60240210	INLETS TB T1F OL	EACH	2.000				
60240328	INLETS TB T24F&G	EACH	17.000				
60270050	DR STR T4 W/2 T20F&G	EACH	4.000				
	REMOV INLETS	EACH	5.000				
60605000	COMB CC&G TB6.24	FOOT	5,650.000				

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PPS NBR - 3-40970-0000
County Name - GRUNDY- -

 Project Number

 ACIM-HPP-0804/189/115

Route FAI 80

Code - 63 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
60616110	PAVED DITCH TA-30	FOOT	536.000				
60616130	PAVED DITCH TA-45	FOOT	3,293.000				
60620000	CONC MED TSB6.24	SQ FT	25,969.000				
60624600	CORRUGATED MED	SQ FT	842.000				
60625800	ISLAND PAVEMENT SPL	SQ YD	143.000				
60900515	CONC THRUST BLOCKS	EACH	7.000				
61100500	EXPLOR TRENCH 52	FOOT	15,000.000				
61100605	MISC CONCRETE	CU YD	2.000				
61101005	STORM SEW PROT A 4	FOOT	50.000				
61101007	STORM SEW PROT A 6	FOOT	50.000				
61101009	STORM SEW PROT A 8	FOOT	50.000				
61101011	STORM SEW PROT A 10	FOOT	50.000				
61101013	STORM SEW PROT A 12	FOOT	50.000				
61101020	STORM SEW PROT A 18	FOOT	50.000				
61139800	STORM SEWER SPEC 4	FOOT	100.000				

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Project Number
ACIM-HPP-0804/189/115

Route FAI 80

Code - 63 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
61139900	STORM SEWER SPEC 6	FOOT	100.000				
61140000	STORM SEWER SPEC 8	FOOT	100.000				
61140100	STORM SEWER SPEC 10	FOOT	100.000				
61140200	STORM SEWER SPEC 12	FOOT	100.000				
61140600	STORM SEWER SPEC 18	FOOT	100.000				
63000001	SPBGR TY A 6FT POSTS	FOOT	1,337.500				
63100045	TRAF BAR TERM T2	EACH	6.000				
63100070	TRAF BAR TERM T5	EACH	6.000				
63100085	TRAF BAR TERM T6	EACH	6.000				
63100169	TR BAR TRM T1 SPL FLR	EACH	6.000				
63200310	GUARDRAIL REMOV	FOOT	3,094.000				
63500105	DELINEATORS	EACH	326.000				
63700155	CONC BAR 1F 32HT	FOOT	114.000				
63700275	CONC BAR 2F 42HT	FOOT	318.000				
63700805	CONC BAR TRANS	FOOT	34.000				

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Project Number
ACIM-HPP-0804/189/115

Route FAI 80

Code - 63 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
64200105	SHOULDER RUMBLE STRIP	FOOT	860.000				
66500105	WOV W FENCE 4	FOOT	10,590.000				
66502300	WOV W FENCE REMOV	FOOT	9,402.000				
66600105	FUR ERECT ROW MARKERS	EACH	59.000				
67000400	ENGR FIELD OFFICE A	CAL MO	27.000				
67100100	MOBILIZATION	L SUM	1.000				
70101800	TRAF CONT & PROT SPL	L SUM	1.000				
70103816	TR CONT SURVEILLANCE	CAL MO	21.000				
70106800	CHANGEABLE MESSAGE SN	CAL MO	61.000				
70300100	SHORT-TERM PAVT MKING	FOOT	384.000				
70300220	TEMP PVT MK LINE 4	FOOT	49,474.000				
70300280	TEMP PVT MK LINE 24	FOOT	83.000				
70301000	WORK ZONE PAVT MK REM	SQ FT	18,230.000				
70400100	TEMP CONC BARRIER	FOOT	19,466.000				
70400200	REL TEMP CONC BARRIER	FOOT	5,926.000				

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ACIM-HPP-0804/189/115

Route FAI 80

Code - 63 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
72000100	SIGN PANEL T1	SQ FT	626.000				
72000200	SIGN PANEL T2	SQ FT	310.000				
72000300	SIGN PANEL T3	SQ FT	1,604.000				
72400100	REMOV SIN PAN ASSY TA	EACH	18.000				
72400330	REMOV SIGN PANEL T3	SQ FT	60.000				
72700100	STR STL SIN SUP BA	POUND	8,737.000				
72700200	TUB STL SN SUPPORT BA	POUND	400.000				
73000100	WOOD SIN SUPPORT	FOOT	1,561.000				
73400100	CONC FOUNDATION	CU YD	21.000				
73700100	REM GR-MT SIN SUPPORT	EACH	2.000				
73700200	REM CONC FDN-GR MT	EACH	2.000				
78008300	POLYUREA PM T2 LTR-SY	SQ FT	780.000				
78008310	POLYUREA PM T2 LN 4	FOOT	72,228.000				
78008330	POLYUREA PM T2 LN 6	FOOT	5,903.000				
78008340	POLYUREA PM T2 LN 8	FOOT	16,714.000				

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ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
78008350	POLYUREA PM T2 LN 12	FOOT	6,577.000				
78008370	POLYUREA PM T2 LN 24	FOOT	350.000				
78100100	RAISED REFL PAVT MKR	EACH	1,294.000				
78100105	RAISED REF PVT MKR BR	EACH	20.000				
78200300	PRISMATIC CURB REFL	EACH	205.000				
78200410	GUARDRAIL MKR TYPE A	EACH	34.000				
78201000	TERMINAL MARKER - DA	EACH	7.000				
78300100	PAVT MARKING REMOVAL	SQ FT	4,539.000				
80400100	ELECT SERV INSTALL	EACH	2.000				
80500200	SERV INSTALL TY B	EACH	1.000				
81012600	CON T 2 PVC	FOOT	2,395.000				
81012700	CON T 2 1/2 PVC	FOOT	30.000				
81012800	CON T 3 PVC	FOOT	154.000				
81013000	CON T 4 PVC	FOOT	52.000				
81018500	CON P 2 GALVS	FOOT	55.000				

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3-40970-0000 <u>Project Number</u>
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Route FAI 80

Code - 63 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
81020500	CON P 2 IM	FOOT	840.000				
81020700	CON P 3 IM	FOOT	145.000				
81020900	CON P 4 IM	FOOT	85.000				
81021330	CON P 2 PVC	FOOT	45.000				
81021370	CON P 4 PVC	FOOT	437.000				
81100500	CON AT ST 1 1/2 GALVS	FOOT	28.000				
81100600	CON AT ST 2 GALVS	FOOT	20.000				
81200120	CON EMB STR 2 GALVS	FOOT	15.000				
81200230	CON EMB STR 2 PVC	FOOT	1,340.000				
81300530	JUN BX SS AS 12X10X6	EACH	1.000				
81300550	JUN BX SS AS 12X12X6	EACH	8.000				
81400700	HANDHOLE PCC	EACH	7.000				
81400720	DBL HANDHOLE PCC	EACH	1.000				
81603000	UD 2#8 #8G XLPUSE 3/4	FOOT	1,040.000				
81603010	UD 2#10#10GXLPUSE 3/4	FOOT	5,865.000				

C-93-006-04 State Job # -PPS NBR -3-40970-0000 County Name -

GRUNDY--

Code -63 - -District -3 - -

Project Number	Ro	ute
ACIM-HPP-0804/189/115	FA	I 80

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
81603025	UD 2#4 #4G XLPUSE 1	FOOT	8,350.000				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
81603035	UD 2#6 #6G XLPUSE 1	FOOT	2,160.000				
81603065	UD 2#2#2GXLPUSE 1 1/4	FOOT	3,820.000				
81702140	EC C XLP USE 1C 4	FOOT	470.000				
81702150	EC C XLP USE 1C 2	FOOT	455.000				
81900200	TR & BKFIL F ELECT WK	FOOT	18,591.000				
82102400	LUM SV HOR MT 400W	EACH	26.000				
82105600	LUM SV HM HOR MT 400W	EACH	110.000				
82107300	UNDERPAS LUM 150W HPS	EACH	4.000				
82500340	LT CONT PEDM 480V 60	EACH	1.000				
82500380	LT CONT BASEM 480V200	EACH	1.000				
83004600	LT P A 50MH 15DA	EACH	22.000				
83057170	LT P WD 35 CL 3	EACH	1.000				
83502300	LT TOWER 100MH LM 4	EACH	2.000				
83502400		EACH	17.000				

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Project Number
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Route FAI 80

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Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
83600300	LIGHT POLE FDN 30D	FOOT	154.000				
83700300	LT TOWER FDN 48D	FOOT	261.000				
83800205	BKWY DEV TR B 15BC	EACH	22.000				
84400115	RELOC EX LIGHT UNIT	L SUM	1.000				
85700205	FAC T4 CAB SPL	EACH	1.000				
86200300	UNINTER POWER SUP EXT	EACH	1.000				
87301225	ELCBL C SIGNAL 14 3C	FOOT	1,308.000				
87301245	ELCBL C SIGNAL 14 5C	FOOT	1,322.000				
87301255	ELCBL C SIGNAL 14 7C	FOOT	4,402.000				
87301305	ELCBL C LEAD 14 1PR	FOOT	5,150.000				
87301805	ELCBL C SERV 6 2C	FOOT	59.000				
87501200	TS POST 16	EACH	2.000				
87703090	STL COMB MAA&P 70	EACH	3.000				
87703120	STL COMB MAA&P 75	EACH	1.000				
87800100	CONC FDN TY A	FOOT	8.000				

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Project Number	Route
ACIM-HPP-0804/189/115	FAI 80

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
87800150	CONC FDN TY C	FOOT	4.000				
87800500	CONC FDN SPL	FOOT	60.000				
88040030	SH P LED 1F 1S PM	EACH	2.000				
88040090	SH P LED 1F 3S MAM	EACH	4.000				
88040150	SH P LED 1F 5S BM	EACH	8.000				
88040160	SH P LED 1F 5S MAM	EACH	8.000				
88200410	TS BACKPLATE L F PLAS	EACH	22.000				
88500100	INDUCTIVE LOOP DETECT	EACH	16.000				
88600100	DET LOOP T1	FOOT	2,639.000				

CONTRACT NUMBER	66408	
THIS IS THE TOTAL BID		\$

NOTES:

- 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 Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.
- **B.** In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. Except as otherwise required in subsection III, paragraphs J-M, by execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances have been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.
- **C.** In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for the chief procurement officer to void the contract, or subcontract, and may result in the suspension or debarment of the bidder or subcontractor.

II. ASSURANCES

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

A. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

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

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

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

B. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

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

C. Inducements

1. The Illinois Procurement Code provides:

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

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

D. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

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

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

E. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

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

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

F. Confidentiality

1. The Illinois Procurement Code provides:

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

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

G. Insider Information

1. The Illinois Procurement Act provides:

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

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

III. CERTIFICATIONS

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

A. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
 - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
 - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government, 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 Procurement Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.
- 2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

B. Felons

1. The Illinois Procurement Code provides:

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

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

C. Debt Delinquency

1. The Illinois Procurement Code provides:

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

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

D. Prohibited Bidders, Contractors and Subcontractors

1. The Illinois Procurement Code provides:

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

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

E. Section 42 of the Environmental Protection Act

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

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 Illinois Procurement 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, or companies involved in consortiums or projects commissioned by the Government of Iran and either of the following conditions apply:

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

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

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

Check the appropriate statement:	
// Company has no business operations in Iran to disclose.	
/ / Company has business operations in Iran as disclosed the attached document.	

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

In accordance with the provisions of Section 30-22 (6) of the Illinois Procurement Code, the bidder certifies that it is a participant, either as an individual or as part of a group program, in the approved apprenticeship and training programs applicable to each type of work or craft that the bidder will perform with its own forces. The bidder further certifies for work that will be performed by subcontract that each of its subcontractors submitted for approval either (a) is, at the time of such bid, participating in an approved. applicable apprenticeship and training program; or (b) will, prior to commencement of performance of work pursuant to this contract, begin participation in an approved apprenticeship and training program applicable to the work of the subcontract. The Department, at any time before or after award, may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. Applicable apprenticeship and training programs are those that have been approved and registered with the United States Department of Labor. The bidder shall list in the space below, the official name of the program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's forces. Types of work or craft work that will be subcontracted shall be included and listed as subcontract 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	 	

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

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

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

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

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

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

M. Lobbyist Disclosure

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

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

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

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

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

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

IV. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Illinois Procurement Code provides that all bids of more than \$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 Procurement Code or the existence of a conflict of interest as provided in subsections (b) and (d) of Section 50-35.

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

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. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies. **The forms must be included with each bid.**

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

- 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 ___
 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
 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? YES ____ NO __
 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 per person per bid even if a specific individual would require a yes answer to more
- than one question.)

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

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.

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.

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		
Oity, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
		(1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Code (30 ILCS 500). Vendors desiring to enter into a contract with the State of Illinois must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for bids in excess of \$25,000, and for all open-ended contracts. A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.

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

DISCLOSURE OF FINANCIAL INFORMATION

1. Disclosure of Financial Information. The individual named below has an interest in the BIDDER (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than 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)

NAME:			
ADDRESS			
Type of own	ership/distributable income share	:	
Type of Own	•		
stock	sole proprietorship	Partnership	other: (explain on separate sheet)

- **2. Disclosure of Potential Conflicts of Interest.** Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.
 - (a) State employment, currently or in the previous 3 years, including contractual employment of services.

 Yes ____No ___

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

- Are you currently an officer or employee of either the Capitol Development Board or the Illinois State
 Toll Highway Authority?
 Yes No ___
- Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor provide the name the State agency for which you are employed and your annual salary.

3.	If you are currently appointed to or employed by any agency of the St salary exceeds 60% of the annual salary of the Governor, are you en (i) more than 7 1/2% of the total distributable income of your firm corporation, or (ii) an amount in excess of 100% of the annual salary	titled to receive , partnership, association or
4.	If you are currently appointed to or employed by any agency of the St salary exceeds 60% of the annual salary of the Governor, are you an or minor children entitled to receive (i) more than 15% in aggregate of your firm, partnership, association or corporation, or (ii) an amount salary of the Governor?	d your spouse If the total distributable income
	employment of spouse, father, mother, son, or daughter, including cont previous 2 years.	
If your	answer is yes, please answer each of the following questions.	YesNo
1.	Is your spouse or any minor children currently an officer or employee of Board or the Illinois State Toll Highway Authority?	of the Capitol Development YesNo
	Is your spouse or any minor children currently appointed to or employed of Illinois? If your spouse or minor children is/are currently appointed agency of the State of Illinois, and his/her annual salary exceeds 60° annual salary of the Governor, provide the name of the spouse and/or of the State agency for which he/she is employed and his/her annual salary.	to or employed by any % of the minor children, the name
	If your spouse or any minor children is/are currently appointed to or er State of Illinois, and his/her annual salary exceeds 60% of the annual are you entitled to receive (i) more than 71/2% of the total distributable firm, partnership, association or corporation, or (ii) an amount in exceannual salary of the Governor?	salary of the Governor, income of your
	If your spouse or any minor children are currently appointed to or em State of Illinois, and his/her annual salary exceeds 60% of the annual sand your spouse or any minor children entitled to receive (i) more than aggregate of the total distributable income from your firm, partnership, (ii) an amount in excess of two times the salary of the Governor?	salary of the Governor, are you a 15% in the
unit of I	e status; the holding of elective office of the State of Illinois, the government authorized by the Constitution of the State of Illinois currently or in the previous 3 years.	
	nship to anyone holding elective office currently or in the previous 2 year daughter.	ars; spouse, father, mother, YesNo
America of the S	tive office; the holding of any appointive government office of the State a, or any unit of local government authorized by the Constitution of the State of Illinois, which office entitles the holder to compensation in exceedange of that office currently or in the previous 3 years.	State of Illinois or the statues
	nship to anyone holding appointive office currently or in the previous 2 y	rears; spouse, father, mother, YesNo
(g) Employ	ment, currently or in the previous 3 years, as or by any registered lobb	yist of the State government. YesNo

son, or daughter.	YesNo
(i) Compensated employment, currently or in the previous 3 year committee registered with the Secretary of State or any county action committee registered with either the Secretary of State or	clerk of the State of Illinois, or any political
(j) Relationship to anyone; spouse, father, mother, son, or daught last 2 years by any registered election or re-election committee county clerk of the State of Illinois, or any political action commistate or the Federal Board of Elections.	registered with the Secretary of State or any nittee registered with either the Secretary of
	Yes No
3. Communication Disclosure.	
Disclose the name and address of each lobbyist and other agent 2 of this form, who is has communicated, is communicating, or m concerning the bid or offer. This disclosure is a continuing obliga accuracy throughout the process and throughout the term of the othe line below:	ay communicate with any State officer or employee tion and must be promptly supplemented for
Name and address of person(s):	

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Procurement Related Information Disclosure

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
Disclosure of the information contained in this Act (30 ILCS 500). This information shall be completed for bids in excess of \$25,000, a	come part of the publicly available c	
DISCLOSURE OF OTHER	CONTRACTS AND PROCUREMEN	IT RELATED INFORMATION
1. Identifying Other Contracts & Procure has any pending contracts (including leases any other State of Illinois agency: Yes_If "No" is checked, the bidder only needs to	s), bids, proposals, or other ongoing No	procurement relationship with
2. If "Yes" is checked. Identify each such information such as bid or project number (INSTRUCTIONS:		
THE FOL	LOWING STATEMENT MUST BE	CHECKED
	Signature of Authorized Representative	Date

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.



PART I. IDENTIFICATION

Contract No. 66408 GRUNDY County Section (32,47-4)HBK-4 & (G)N Project ACIM-HPP-080-4(189)115 Route FAI 80 District 3 Construction Funds

Dept. Human Right							Du	ıration	of Proj	ect: _								
PART II. WORKFO A. The undersigned which this contract wo projection including a	PRCE PR bidder ha	as analyz e perform	ed mir ed, an	d for thi	he locat	ions fro	m whi	ch the b	idder re	ecruits	employ	ees, and h	nere	by subr	nits the fol	lowi cor	ng workf itract:	
		TOTA	AL Wo	rkforce	Projec	tion for	Contra	act						(CURRENT		-	S
MINORITY EMPLOY				VEEQ	YEES TRAINEES						TO BE							
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OFFICIALS (MANAGERS)	M	F	M	F	M	F	M	F	M	F	M	F		M	F		M	F
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
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MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
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Note: See instructions on page 2

Contract No. 66408 GRUNDY County Section (32,47-4)HBK-4 & (G)N Project ACIM-HPP-080-4(189)115 Route FAI 80 District 3 Construction Funds

B. Included in "Total Employees" under Table A is the total number of **new hires** that would be employed in the event

PART II. WORKFORCE PROJECTION - continued

	the un	ndersigned bidder is awarded this contract.		
	The un	ndersigned bidder projects that: (number)ted from the area in which the contract project is loc	ated; and/or (number) be recruited from the area in wh	new hires would be
	office	or base of operation is located.	e recruited from the area in wi	lich the bidder's principal
C.		led in "Total Employees" under Table A is a projection signed bidder as well as a projection of numbers of		
		ndersigned bidder estimates that (number)ectly employed by the prime contractor and that (number) byed by subcontractors.	mber)	persons will persons will be
PART	III. AFF	IRMATIVE ACTION PLAN		
A.	utilizatin any comm (geare utilizat	ndersigned bidder understands and agrees that in the tion projection included under PART II is determined to be category, and in the event that the undersigned nencement of work, develop and submit a written Affect to the completion stages of the contract) whereby tion are corrected. Such Affirmative Action Plan will epartment of Human Rights.	d to be an underutilization of mit bidder is awarded this contractifirmative Action Plan including and/or deficiencies in minority and/or	inority persons or women t, he/she will, prior to a specific timetable female employee
В.	submi	ndersigned bidder understands and agrees that the itted herein, and the goals and timetable included ur rt of the contract specifications.		
Comp	any		Telephone Number	
Addre	 SS			
		NOTICE REGARDING	SIGNATURE	
		signature on the Proposal Signature Sheet will constitute ed only if revisions are required.	the signing of this form. The foll	owing signature block needs
Signa	ture: 🗌		Title:	Date:
Instruct	ions:	All tables must include subcontractor personnel in addition to p	orime contractor personnel.	
Table A		Include both the number of employees that would be hired to (Table B) that will be allocated to contract work, and include a should include all employees including all minorities, apprentic	Ill apprentices and on-the-job trainees	. The "Total Employees" column
Table B	-	Include all employees currently employed that will be allocated currently employed.	I to the contract work including any ap	prentices and on-the-job trainees
Table C	; -	Indicate the racial breakdown of the total apprentices and on-the	he-job trainees shown in Table A.	
				DC 1256 (Day 12/11/00)

ADDITIONAL FEDERAL REQUIREMENTS

In addition to the Required Contract Provisions for Federal-Aid Construction Contracts (FHWA 1273), 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.

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

CERTIFICATION. EQUAL EMPLOYMENT OPPORTUNITY:

B.

Contract No. 66408 GRUNDY County Section (32,47-4)HBK-4 & (G)N Project ACIM-HPP-080-4(189)115 Route FAI 80 District 3 Construction Funds

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 3 of this Proposal, and that the contract will be executed in accordance with the rules of the Department if an award is made on this bid.

	Firm Name	
(IF AN INDIVIDUAL)	Signature of Owner	
	Business Address	
	Firm Name	
	Ву	
(IF A CO-PARTNERSHIP)		
		Name and Address of All Members of the Firm:
	Corporate Name	
	Ву	
(IF A CORPORATION)		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	Signature
(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE	Pusinosa Address	
SECOND PARTY SHOULD SIGN BELOW)	business Address	
	Corporate Name	
(IF A JOINT VENTURE)	•	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
		•
	Attest	Signature
	Rusiness Address	•
	Dusiliess Addless	
If more than two parties are in the joint venture,	please attach an addir	tional signature sheet.



Return with Bid

Division of Highways Proposal Bid Bond

(Effective November 1, 1992)

			item No.
			Letting Date
KNOW ALL MEN BY THESE PRE	SENTS. That We		
PDINCIDAL and			
as PRINCIPAL, and			
			as SURETY, are
specified in Article 102.09 of the "S	Standard Specifications for to be paid unto said STAT	r Road and Bridge Constru	um of 5 percent of the total bid price, or for the amoun action" in effect on the date of invitation for bids, whicheve ayment of which we bind ourselves, our heirs, executors
	ugh the Department of Ti	The state of the s	he PRINCIPAL has submitted a bid proposal to the rovement designated by the Transportation Bulletin Item
and as specified in the bidding and after award by the Department, the including evidence of the required performance of such contract and failure of the PRINCIPAL to make pays to the Department the different	d contract documents, sub e PRINCIPAL shall enter d insurance coverages and for the prompt payment the required DBE submis- nce not to exceed the pena- tract with another party to	omit a DBE Utilization Plan into a contract in accordant of providing such bond as of labor and material furn assion or to enter into such alty hereof between the an	NCIPAL; and if the PRINCIPAL shall, within the time that is accepted and approved by the Department; and if nice with the terms of the bidding and contract documents a specified with good and sufficient surety for the faithful ished in the prosecution thereof; or if, in the event of the contract and to give the specified bond, the PRINCIPAL mount specified in the bid proposal and such larger amount by said bid proposal, then this obligation shall be null and
paragraph, then Surety shall pay the	he penal sum to the Depa time, the Department may	artment within fifteen (15) of bring an action to collect t	with any requirement as set forth in the preceding days of written demand therefor. If Surety does not make the amount owed. Surety is liable to the Department for all or in whole or in part.
In TESTIMONY WHEREOF,	, the said PRINCIPAL and	the said SURETY have ca	aused this instrument to be signed by
their respective officers	day of		A.D.,
PRINCIPAL		SURET	
(Company)	Jama)		(Company Name)
(Company N	iame)	D	(Company Name)
By(Signat	ture & Title)	By:	(Signature of Attorney-in-Fact)
	Notowy Co	rtification for Principal an	J. Cruneter
STATE OF ILLINOIS,	Notary Ce.	runcauon for Frincipal and	a surety
County of			
I,		. a Notarv P	ublic in and for said County, do hereby certify that
			, , , , , , , , , , , , , , , , , , ,
	(Insert names of individu	and lals signing on behalf of PF	RINCIPAL & SURETY)
	me to be the same person te this day in person and	ns whose names are subso acknowledged respectivel	cribed to the foregoing instrument on behalf of PRINCIPAI y, that they signed and delivered said instrument as their
Given under my hand and no	otarial seal this	day of	A.D
My commission expires			
•			Notary Public
marking the check box next to the	Signature and Title line b	pelow, the Principal is ensu	file an Electronic Bid Bond. By signing the proposal and uring the identified electronic bid bond has been executed ons of the bid bond as shown above.
Electronic Bid Bond ID#	Company / Bido	der Name	Signature and Title
	Joinpany / Diac	aca	Signature and Thic



DBE Utilization Plan

(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

Date

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) Pro	ject and Bid Identification			
Comple	te the following information concerning the project and bid	! :		
Route		Total Bid		
Section		Contract DBE Goal		
Project			(Percent)	(Dollar Amount)
County				
Letting I	Date			
Contrac	t No.			
Letting I	Item No.			
(4) Ass	surance			
	in my capacity as an officer of the undersigned bidder (or my company: (check one)	bidders if a joint venture), hereb	by assure the Dep	artment that on this
	Meets or exceeds contract award goals and has provided Disadvantaged Business Participation per Attached are the signed participation statements, forms use of each business participating in this plan and assur work of the contract. Failed to meet contract award goals and has included go provided participation as follows: Disadvantaged Business Participation per The contract goals should be accordingly modified or was support of this request including good faith effort. Also a required by the Special Provision evidencing availability business will perform a commercially useful function in the	SBE 2025, required by the Specing that each business will perform the specing that each business will perform the specing that each business will perform the specing that each business participation and use of each business participation.	cial Provision evic rm a commerciall meet the goals a required by the S	y useful function in the nd that my company has Special Provision in forms SBE 2025,
Dir	Company	The "as read" Low Bidder is re		·
Ву		Submit only one utilization plan submitted in accordance with t		utilization plan shall be
Title		Bureau of Small Business Ent	ernrises I	ocal Let Projects

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.

2300 South Dirksen Parkway

Springfield, Illinois 62764

Submit forms to the

Local Agency

(A)	Illinois Department of Transportation		D	BE Participatio	on Statement		
Subcontract	or Registration	Letting					
Participation	on Statement		Ito	em No			
(1) Instructi	ons		С	ontract			
This form must be completed for each disadvantaged business participating in the Utilization Plan. This form shall be submitted in accordance with the special provision and will be attached to the Utilization Plan form If additional space is needed complete an additional form for the firm. (2) Work							
Pay Item No.	Description	Q	uantity	Unit Price	Total		
		I		Total			
	Payment Items ne above items which are partial pay items, spec	cifically descri	ibe the wo	rk and subcontra	ct dollar		
(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 that complete and accurate information regarding actual work performed on this project and the payment therefore must be provided to the Department.							
	Signature for Prime Contractor		Sigr	nature for DBE Firm			
Title		Title					
ъ .							
Contact		Contact					
Phone		Phone _					
Firm Name			Firm Name				

The Department of Transportation is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under the 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 Management Center.

Address _____

City/State/Zip

E ______ WC _____

Address _____

City/State/Zi

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

lame:	
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. 66408
GRUNDY County
Section (32,47-4)HBK-4 & (G)N
Project ACIM-HPP-080-4(189)115
Route FAI 80
District 3 Construction Funds



SUBCONTRACTOR DOCUMENTATION

Public Acts 96-0795 and 96-0920, enacted substantial changes to the provisions of the Illinois Procurement Code (30 ILCS 500). Among the changes are provisions affecting subcontractors. The Contractor awarded this contract will be required as a material condition of the contract to implement and enforce the contract requirements applicable to subcontractors approved in accordance with article 108.01 of the Standard Specifications for Road and Bridge Construction.

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

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

STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

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

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

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

A. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

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

B. Felons

1. The Illinois Procurement Code provides:

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

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

C. Debt Delinguency

1. The Illinois Procurement Code provides:

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

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

D. Prohibited Bidders, Contractors and Subcontractors

1. The Illinois Procurement Code provides:

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

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

E. Section 42 of the Environmental Protection Act

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

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

Name of Subcontracting Company	
Authorized Officer	Date

SUBCONTRACTOR DISCLOSURES

I. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Illinois Procurement Code provides that all subcontracts with a total value of \$25,000 or more, from subcontractors identified in Section 20-120 of the Illinois Procurement 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. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies.

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

to more than one question.)

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

1.	Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO
2.	Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 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? YES NO
	(Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)
4.	Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES NO
	(Note: Only one set of forms needs to be completed per person per subcontract even if a specific individual would require a yes answer

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</u> <u>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		
g		
City, State, Zip		
,, ₋		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Code (30 ILCS 500). Subcontractors desiring to enter into a subcontract of a State of Illinois contract must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for subcontracts with a total value of \$25,000 or more, from subcontractors identified in Section 20-120 of the Illinois Procurement Code, and for all open-ended contracts. A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.

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

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)

FOR INDIVIDUA	_ (type or print information)
NAME:	
ADDRESS	
Type of own	nership/distributable income share:
stock	sole proprietorship Partnership other: (explain on separate sheet of ownership/distributable income share:
	Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following of interest relationships apply. If the answer to any question is "Yes", please attach additional be.
potential conflict of pages and descri	of interest relationships apply. If the answer to any question is "Yes", please attach additional
potential conflict of pages and descrition (a) State employr	of interest relationships apply. If the answer to any question is "Yes", please attach additional be. nent, currently or in the previous 3 years, including contractual employment of services.
potential conflict of pages and descripages and descripages (a) State employred If your answer 1. Are your	of interest relationships apply. If the answer to any question is "Yes", please attach additional be. nent, currently or in the previous 3 years, including contractual employment of services. YesNo

	 If you are currently appointed to or employed by any agency of the Si salary exceeds 60% of the annual salary of the Governor, are you er (i) more than 7 1/2% of the total distributable income of your firm corporation, or (ii) an amount in excess of 100% of the annual salary 	ntitled to receive , partnership, association or
	4. If you are currently appointed to or employed by any agency of the Si salary exceeds 60% of the annual salary of the Governor, are you are or minor children entitled to receive (i) more than 15 % in the aggrincome of your firm, partnership, association or corporation, or (ii) at the salary of the Governor?	nd your spouse egate of the total distributable
(b)	State employment of spouse, father, mother, son, or daughter, including coin the previous 2 years.	
	If your answer is yes, please answer each of the following questions.	YesNo
	 Is your spouse or any minor children currently an officer or employee Board or the Illinois State Toll Highway Authority? 	of the Capitol Development YesNo
	2. Is your spouse or any minor children currently appointed to or employ of Illinois? If your spouse or minor children is/are currently appagency of the State of Illinois, and his/her annual salary exceed annual salary of the Governor, provide the name of your spouse and/of the State agency for which he/she is employed and his/her annual	pointed to or employed by any ds 60% of the for minor children, the name
	3. If your spouse or any minor children is/are currently appointed to or State of Illinois, and his/her annual salary exceeds 60% of the annual are you entitled to receive (i) more than 71/2% of the total distributab firm, partnership, association or corporation, or (ii) an amount in annual salary of the Governor?	Il salary of the Governor, le income of your
	4. If your spouse or any minor children are currently appointed to or en State of Illinois, and his/her annual salary exceeds 60% of the annual are you and your spouse or minor children entitled to receive (i) mo aggregate of the total distributable income of your firm, partnership, (ii) an amount in excess of two times the salary of the Governor?	salary of the Governor, ore than 15 % in the association or corporation, or
		YesNo
(c)	Elective status; the holding of elective office of the State of Illinois, the gover unit of local government authorized by the Constitution of the State of Illinois Illinois currently or in the previous 3 years.	
(d)	Relationship to anyone holding elective office currently or in the previous 2 y son, or daughter.	rears; spouse, father, mother, YesNo
(e)	Appointive office; the holding of any appointive government office of the Star America, or any unit of local government authorized by the Constitution of the State of Illinois, which office entitles the holder to compensation in extended the compensation of the discharge of that office currently or in the previous 3 years.	ne State of Illinois or the statutes
(f)	Relationship to anyone holding appointive office currently or in the previous 2 son, or daughter.	2 years; spouse, father, mother, YesNo
(g)	Employment, currently or in the previous 3 years, as or by any registered lob	byist of the State government. YesNo

(h) Relationship to anyone who is or was a registered lobbyi son, or daughter.	st in the previous 2 years; spouse, father, mother, YesNo
(i) Compensated employment, currently or in the previous 3 committee registered with the Secretary of State or any action committee registered with either the Secretary of S	county clerk of the State of Illinois, or any political
(j) Relationship to anyone; spouse, father, mother, son, or clast 2 years by any registered election or re-election com county clerk of the State of Illinois, or any political action State or the Federal Board of Elections.	mittee registered with the Secretary of State or any
	Yes No
3. Communication Disclosure.	
Disclose the name and address of each lobbyist and other a Section 2 of this form, who is has communicated, is communicated, employee concerning the bid or offer. This disclosure is a complemented for accuracy throughout the process and throughout identified, enter "None" on the line below:	nicating, or may communicate with any State officer or ontinuing obligation and must be promptly
Name and address of person(s):	

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly

supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below: Name of person(s): Nature of disclosure: APPLICABLE STATEMENT This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge. Completed by: Signature of Individual or Authorized Officer Date **NOT APPLICABLE STATEMENT** Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A. This Disclosure Form A is submitted on behalf of the SUBCONTRACTOR listed on the previous page. 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)
ILCS 500). This information shall become	part of the publicly available contra 00 or more, from subcontractors	on 50-35 of the Illinois Procurement Act (30 oct file. This Form B must be completed for identified in Section 20-120 of the Illinois
DISCLOSURE OF OTHER CONTRA	CTS, SUBCONTRACTS, AND PRO	OCUREMENT RELATED INFORMATION
1. Identifying Other Contracts & Procure any pending contracts, subcontracts, include other State of Illinois agency: Yes No If "No" is checked, the subcontractor only	ng leases, bids, proposals, or other	ongoing procurement relationship with any
2. If "Yes" is checked. Identify each such information such as bid or project number (a INSTRUCTIONS:		
THE FOLLO	WING STATEMENT MUST BE CH	ECKED
	Cignostrus of Authorized Offices	Data
,	Signature of Authorized Officer	Date

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., September 17, 2010. 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. 66408
GRUNDY County
Section (32,47-4)HBK-4 & (G)N
Project ACIM-HPP-080-4(189)115
Route FAI 80
District 3 Construction Funds

This project consists of construction of all four ramps of the I-80/Brisbin Road interchange, reconstruction and adding lanes to Brisbin Road, replacement of the existing Brisbin Road Bridge over I-80, reconstruction, resurfacing and widening of 2,245 feet of US 6, reconstruction and realignment of 1,044 feet of North Road, reconstruction and realignment of 1,652 feet of Service Drive and reconstruction and realignment of driveways. This project is located near Morris.

- 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 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.
 - (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS. This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the Illinois Department of Transportation

Gary Hannig, Secretary

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2010

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS and frequently used RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-07) (Revised 1-1-10)

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RECURRING SPECIAL PROVISIONS

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FAI 80 (I-80) Project ACIM-HPP-080-4 (189) 115 Section (32,47-4)HBK-4 & (G)N Grundy County Contract 66408

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction, Adopted January 1, 2007", the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein, which apply to and govern the construction of FAI 80 (I-80), Project ACIM-HPP-080-4 (189) 115, Section (32,47-4)HBK-4 & (G)N, in Grundy County, Contract 66408 and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

Contract #66408

LOCATION OF PROJECT

This improvement begins on Brisbin Road approximately 2,750 feet south of the centerline of Interstate 80 (I-80) and extends to the north to approximately 1,550 feet north of the centerline of Interstate 80 (I-80) and also extends down all 4 (four) interchange ramps to the ramp terminals as they connect to eastbound and westbound I-80. The project includes US 6 improvements as well, which starts approximately 1,400 feet west of the centerline of Brisbin Road and extends to the east to approximately 1,100 feet east of the centerline of Brisbin Road. The project is located in Grundy County.

DESCRIPTION OF PROJECT

- Construction of all four ramps of the I-80/Brisbin Road interchange, a total length of 8,895 feet.
- Construction of Ramp B Bridge, Structure #032-0117.
- Construction of Ramp C Bridge, Structure #032-0118.
- Reconstruction and adding lanes to 4,277 feet of Brisbin Road, an existing two-lane road.
- Replacement of the existing Brisbin Road Bridge over I-80 (Structure # 032-0058) with a new Brisbin Road Bridge (Structure #032-0115).
- Reconstruction, resurfacing and widening of 2,245 feet of US 6, a two-lane road.
- Reconstruction and realignment of 1,044 feet of North Road, a two-lane road.
- Reconstruction and realignment of 1,652 feet of Service Drive, a one-lane road.
- Reconstruction and realignment of the driveways at Brisbin Road Station 102+06, North Road Station 108+49, in addition to other driveway improvements.

The work shall include all labor, materials, tools, and equipment necessary for the proper execution of the work as shown in the plans and as specified. It shall also include all work not specifically mentioned but which is reasonably and properly inferable and necessary for the completion of the work.

CONSTRUCTION REQUIREMENTS

The Contractor shall incorporate the following requirements into his Sequence of Operations.

- The Contractor is allowed 200 working days to complete this project.
- The Contractor may close Brisbin Road from March 14, 2011 to June 16, 2012.
- US Route 6 shall be open to two way traffic at all times except for temporary lane closures as approved by the Engineer.
- The Contractor must maintain two open lanes of traffic on I-80 in each direction except during bridge removal and beam setting operations.
- During the removal or setting of bridge beams, eastbound and westbound traffic shall be maintained by allowing I-80 thru traffic to utilize the exit and entrance ramps as runaround detours. Traffic shall be detoured during off peak hours.
- The permanent interchange lighting must be operational when traffic is detoured on the ramps during darkness.
- Off peak hours are 12 noon to 5 a.m. eastbound and 8 p.m. to 12 noon westbound.
- Any traffic control devices placed on I-80 pavement or shoulders shall be placed and removed during off peak hours.
- The Contractor may request approval from the Engineer to temporarily reduce the TCB shoulder offset shown in the plans for an off peak period to facilitate construction operations on I-80. The TCB must maintain a minimum 2' of clearance from the edge of pavement of any open lane of traffic. The original offset shown in plans (8') must be restored prior to the next peak period. The cost of temporarily relocating TCB as specified here, will not be paid for separately but shall be considered included in the contract unit price for TEMPORARY CONCRETE BARRIER.
- No temporary traffic control devices shall be allowed to remain on I-80 pavement or shoulders from December 15 to March 15 of any year without the written approval from the Engineer.
- No traffic control devices shall be allowed to remain on US 6 pavement or shoulders from December 15 to March 15 of any year.
- The Brisbin Road interchange ramps shall remain closed to all traffic until intersection of US 6/Brisbin Road is complete and the traffic signal operational.
- Any temporary ramps between exposed surfaces at the US 6/Brisbin intersection shall not remain in place longer than two weeks unless constructed at a 40 feet per inch vertical transition.

STATUS OF UTILITIES TO BE ADJUSTED

(Revised January 1, 2007)

	_		Estimated Date
Name & Address of Utility	Type	Location	Relocation Complete
ComEd, An Exelon Company Two Lincoln Centre Oakbrook Terrace, IL 60181	Aerial Electric	Poles on east and west side Brisbin Rd, and south side US 6	Permit pending to relocate 41 poles in conflict. Work to start once ROW is clear.
AT&T 1000 Commerce Drive Oak Brook, IL 60523	Buried Telephone	Various locations throughout	Permit required.

Comcast Cable	Aerial and	Aerial on ComEd	Permit required.
688 Industrial Drive	Buried	poles throughout.	-
Elmhurst, IL 60126	CATV	Buried along US 6	
		Sta. 211+50 to	
		215+25 RT.	

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Section 102 and Articles 105.07, 107.20, 107.31 and 108.02 of the Standard Specifications for Road and Bridge Construction shall apply.

The estimated utility relocation dates should be part of the progress schedule submitted by the Contractor.

** Above utility relocation information reflected as of July 9, 2010, relocation complete dates are unknown at this time due to right of way acquisitions. Per SB 699 (90 day utility relocation law), once the proposed right of way is clear to award the project, a notice will be sent to the utility companies instructing them to have their facilities relocated within 90 days.

DUST CONTROL-HAULING EARTH, GRANULAR MATERIALS OR WASTE MATERIAL Effective November 16, 1993

In addition to the general requirements of Section 107 of the Standard Specifications, the Contractor shall be required to prepare a plan for pavement cleaning and dust control for this project. A detailed plan outlining specific wetting, tarping, and/or cleaning procedures, or similar dust control methods is to be submitted for approval at the preconstruction meeting.

As required by Chapter 95 1/2, paragraphs 15-109 and 15-109.1 of the Illinois Vehicle Code, no blowing or spillage of material will be allowed during the hauling operations. The specific preventative measures proposed by the Contractor are to be included in the dust control plan.

If, in the opinion of the Engineer, excessive dust is produced during the hauling operations, the hauling shall stop until corrective action is taken.

Approval of the dust control and pavement cleaning procedures will not relieve the Contractor of his responsibility to provide a safe work zone for the traveling public.

No additional compensation will be allowed for dust alleviation.

WETLAND AREAS

Effective April 3, 1997;

Revised January 1, 2007

<u>Description</u>: According to Federal Executive Order 11990, dated May 24, 1977, and Articles 107.01 and 107.23 of the Standard Specifications, the Contractor shall protect the wetland areas on or adjacent to this project.

<u>Materials</u>: Materials shall be according to the following Articles/Sections of the Standard Specifications:

Fence 1081.15(b), 1081.15(d)

Sign 720.02 Sign Support 1093

<u>Construction Requirements</u>: The Contractor shall install fence at all wetland areas as shown on the plans. The Contractor shall also install a minimum of two signs at each wetland location. Signs shall not be spaced greater than 300' (100 m). The signs shall be 9" x 12" (225mm x 300mm) and shall read "Federally Protected Wetlands: KEEP OUT." The fence shall be High Visibility Orange.

The Contractor shall remove the fence at the completion of the project.

<u>Method of Measurement</u>: The fence will be measured for payment in feet along the top of the fence. The signs and removal of the fence will not be measured for payment.

<u>Basis of Payment</u>: The fence will be paid for at the contract unit price per foot for HIGH VISIBILITY TEMPORARY FENCING, pay item # X0321156.

TEMPORARY CONSTRUCTION/WATERWAY PERMITS (CORPS OF ENGINEERS)

Effective January 1, 2001;

Revised January 1, 2007

Temporary in-stream work for proposed construction activities has been authorized from the Army Corps of Engineers using the following guidelines:

All requests made by the Contractor shall refer to Permit No. CEMVR-OD-P-2010-507 for Structure Numbers 032-0117 and 032-0118.

Temporary causeway/workpad:

- Area: <u>+</u> 460 sq. yd.
- Location: Actual location to be determined in the field to suit actual construction needs.
- Material Type: Clean coarse aggregates.
- Additional Restrictions: Dewatering methods will be at the option of the Contractor. The stream channel within the right-of-way limits must be cleaned and all temporary in-stream works shall be removed from the stream channel and taken to an upland site upon completion of the project.

Should the Contractor desire to deviate from the guidelines currently imposed under the permit as listed above, then full design details including location, material specifications, and hydraulic analysis should be included in a request to the Army Corps of Engineers. Requests shall be made to United States Army Corps of Engineers, Rock Island District, Clock Tower Building, Rock Island, IL 61204.

Any additional request is at the discretion of the Contractor, therefore, any delays in receiving approval for various methods outside of the given parameters will **not** be cause for additional compensation.

TEMPORARY CONSTRUCTION/WATERWAY PERMITS (IDNR)

Effective January 1, 2001; Revised January 1, 2002

The temporary construction activities required for completion of the permanent structure are authorized by statewide Permit #13 from the Illinois Department of Natural Resources (IDNR), provided the following conditions are met:

- The term "temporary" shall mean not more than one construction season; all temporary construction materials must be removed from the stream and floodway within one year of their placement and the area returned to the conditions existing prior to the beginning of construction. Any desired subsequent or repetitive material placement shall not occur without the review and approval of the Office of Water Resources.
- 2. The temporary project shall be constructed such that it will not cause erosion or damage due to increases in water surface profiles to adjacent properties. For locations where there are structures in the upstream floodplain, the temporary project shall be constructed such that all water surface profile increases due to the temporary project are contained within the channel banks.
 - This permit does not authorize the placement or construction of any solid embankment or wall such as a dam, roadway, levee, or dike across any channel or floodway.
- 3. No temporary structure shall be placed within any river or stream channel until a registered professional engineer determines and documents that the temporary structure will meet the requirements of Special Condition 3 of this permit (Item #2 listed above.) Such documentation shall include, at a minimum, confirmation that no buildings or structures will be impacted by the backwater induced by the temporary structure.
- 4. Disturbance of vegetation shall be kept to a minimum during construction to prevent erosion and sedimentation. All disturbed areas shall be seeded or otherwise stabilized upon completion of the removal of the temporary structure.
- 5. Materials used shall not cause water pollution as defined by the Environmental Protection Act (415 ILCS 5).

Should the Contractor desire to deviate from the conditions of the statewide Permit #13, a formal permit application shall be submitted by the Contractor to the Illinois Department of Natural Resources, Office of Water Resources, 524 South Second Street, Springfield, IL 62704. Any permit application by the Contractor shall refer to IDNR/OWR Permit No. HYS12-03-2010 for S.N. 032-0117 and 032-0118 (P) which was issued for the permanent construction.

EMBANKMENT

Effective July 1, 1990;

Revised January 1, 2007

This work shall be performed in accordance with Section 205 of the Standard Specifications except that the embankment material shall not be placed and compacted at moisture contents in excess of 110 percent of optimum moisture unless authorized, in writing, by the Engineer.

Topsoil material shall not be placed in the embankment within 12 in. (300 mm) of high type base and surface courses.

MULCH METHOD 2

Effective August 1, 1994;

Revised January 1, 2007

Article 251.03 Method 2 Procedure 1 of the Standard Specifications shall be required for this improvement.

AGGREGATE, SUBGRADE 12"

Effective March 10, 1997;

Revised September 1, 2007

This work shall consist of furnishing, transporting, placing, and compacting granular material to the lines and grades shown on the plans or as directed by the Engineer. This work shall be done according to the applicable portions of Section 207 of the Standard Specifications. Any aggregate (recycled and virgin) containing contaminants deemed unacceptable by the Department will not be approved. The material shall conform to Article 1004.05 of the Standard Specification except the gradations and materials shall be as follows:

Gradation #1:

Material: Crushed Stone, Crushed Slag, Crushed Gravel, and Crushed Concrete

	Option 1	Option 2
Sieve Size	Percent Passing*	Percent Passing*
5 inches (125 mm)	100	100
4 inches (100 mm)	85±15	85±15
2 inches (50 mm)	60±20	45±25
1 inch (25 mm)	45±20	10±10
#4 (4.75 mm)	20±10	
#200 (75 µm)	5±5	2±2
	Note 1	Note 2
* A dry gradation will be sufficient to fulfill the -#200 (75 μm) specification.		

Note 1: Geotextile fabric having a minimum weight of 6 ounces and meeting the requirements of Article 1080.02 of the Standard Specification may be necessary dependent upon subgrade soil conditions. The Engineer shall make the determination if Geotextile utilization is necessary.

Note 2: Geotextile fabric having a minimum weight of 6 ounces and meeting the requirements of Article 1080.02 of the Standard Specification shall be used as a separation layer.

Gradation #2:

Material: Subbase Granular Material, Type C, or RAP

The Subbase Granular Material, Type C shall meet a gradation of CA 6 or CA 10 and a minimum 'D' quality as specified in Section 1004 of the Standard Specifications. RAP shall contain a minimum of Class D quality coarse aggregates and shall meet the gradation limits as specified in Section 1031 of the Standard Specifications.

Gradation #1 shall be used in the lower 9 inches (230 mm). Gradation #2 shall be used in the upper 3 inches (70 mm) as a capping material.

The material shall be placed in two or more lifts or as directed by the Engineer. Each lift shall be rolled with a vibratory roller meeting the requirements of Article 1101.01 of the Standard Specifications to obtain the desired compaction. Construction equipment not necessary for the completion of the work shall not be allowed on the subgrade until completion of the recommended thickness of the Aggregate Subgrade. Any damage to the compacted Aggregate Subgrade due to the Contractor's activities or operations shall be corrected.

Method of Measurement: Aggregate Subgrade 12" (300 mm) will be measured in place and the area computed in square yards. The width shall be as shown on the plans.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per square yard for AGGREGATE SUBGRADE 12". This price shall include the cost of the geotextile fabric.

AGGREGATE, SUBGRADE 18" AND 24"

This work shall be in accordance with the special provision for AGGREGATE, SUBGRADE 12" except that the additional thickness shall consist of Gradation #1. This work will be paid for at the contract unit price per square yard for AGGREGATE, SUBGRADE 18" or AGGREGATE, SUBGRADE 24".

HOT-MIX ASPHALT SURFACE COURSE, CUT OFF DATE

Effective January 1, 2007

Placement of Hot-Mix Asphalt Surface Course will not be permitted after October 15 unless approved, in writing, by the Engineer.

PRIMING

Effective July 1, 1990;

Revised September 3, 2009

Bituminous Materials (Prime Coat) used on brick, concrete, or HMA bases shall be RC-70. Polymerized Bituminous Materials (Prime Coat) used on brick, concrete, or HMA bases shall be SS-1hP.

When more than one HMA lift is proposed, additional prime shall be applied for the subsequent lifts at the lesser rate (fog coat) shown on the plans.

PORTLAND CEMENT CONCRETE SHOULDERS

Effective August 1, 1990;

Revised February 1, 1990

Add the following general note to Standard 483001, PCC Shoulder:

The contraction joints shall be sawed or grooved and sealed with hot-poured joint sealer meeting the requirements of Article 1050.02 of the Standard Specifications.

AGGREGATE SHOULDERS, TYPE B 6"

Effective July 1, 1990;

Revised January 1, 2007

The aggregate shoulder shall be constructed according to Section 481 of the Standard Specifications. The shoulder shall be constructed in two lifts. The first lift shall be placed and compacted flush with the top of the adjacent HMA shoulder or leveling binder. Placement of the HMA surface course will not be allowed until the first lift of aggregate shoulder is constructed.

This work will be paid for at the contract unit price per SQ YD for AGGREGATE SHOULDERS, TYPE B 6".

AGGREGATE SHOULDERS, TYPE B – RAP

Effective February 23, 1998;

Revised March 1, 2007

The use of reclaimed asphalt pavement (RAP) as Aggregate Shoulders, Type B or Aggregate Wedge Shoulder, Type B is not allowed on this project.

Remove Note 1 from Article 481.02(b) RAP Material.

HOT-MIX ASPHALT – START-UP PROCEDURES

Effective January 12, 2010

This special provision modifies the start-up procedures for hot-mix asphalt placement. In addition, the Hot-Mix Asphalt QC/QA Start-Up Procedures Appendix B4 D. Start-Up Methods and G. Nuclear/Core Correlation of the Manual of Test Procedures for Materials shall be revised accordingly.

Replace Article 1030.06 (a) High ESAL Mixture and Low ESAL Mixture of the Standard Specifications with the following:

(a) High ESAL Mixture and Low ESAL Mixture. During the mixture start-up, the Contractor shall follow the QC/QA document "Hot-Mix Asphalt QC/QA Start-Up Procedures" with the following modifications.

At the start of HMA production, QC/QA mixture start-up will be required for all situations specified by the Engineer.

The final determination for test strip procedures shall be discussed at the Resident Engineer's pre-laydown meeting.

Before start-up, target values shall be determined by applying gradation correction factors to the JMF when applicable. These correction factors shall be determined from previous experience. The target values, when approved by the Engineer, shall be used to control HMA production. Plant settings and control charts shall be set according to target values.

In the field, slight adjustments to the JMF or minor changes in cold-feed/hot-bin blends may be necessary to obtain the desired air voids, density, uniformity, and constructability. After any JMF adjustment, the JMF shall become the Adjusted Job Mix Formula (AJMF). Upon completion of the first acceptable test strip, the JMF shall become the AJMF regardless of whether or not the JMF has been adjusted. If an adjustment/plant change is made, the Engineer may require a new test strip to be constructed. If the HMA placed during the initial test strip is determined to be unacceptable to remain in place by the Engineer, it shall be removed and replaced.

The limitations between the JMF and AJMF are as follows:

Parameter	Adjustment
½ in. (12.5 mm)	± 5.0%
No. 4 (4.75 mm)	± 4.0%
No. 8 (2.36 mm)	±3.0%
No. 30 (600 μm)	*
No. 200 (75 μm)	*
Asphalt Binder Content	± 0.3%

^{*} In no case shall the target for the amount passing be greater than the JMF.

Any adjustments outside the above limitations will require a new mix design.

A test strip consisting of 350 tons shall be constructed in one continuous lift during the first day of production. The test strip area shall be located on a relatively flat portion of the roadway. Descending/ascending grades, ramps, super elevations, etc. shall be avoided. After 350 tons has been produced for the purpose of constructing a test strip, plant production shall cease until the following has been completed.

A test strip shall consist of two growth curve areas, a normal rolling pattern location, and one set of plant samples. After the Contractor has produced and placed approximately 150 tons of mix, paving shall cease and the first growth curve shall be constructed. After completion of the first growth curve, paving shall resume until the Contractor has produced and placed an additional 100 tons of mix. At this time, paving shall cease and the second growth curve shall be constructed. The Contractor shall use normal rolling procedures for all portions of the test strip except for the growth curve areas which shall be compacted solely with a vibratory roller as directed by the QC Manager. After completion of the second growth curve, paving shall resume until the Contractor has produced and placed an additional 100 tons of mix.

At this time, paving shall cease and the normal rolling pattern location shall be constructed.

One set of plant samples, as specified in Article 1030.05(d)(2)f. HMA Sampling of the Standard Specifications, shall be taken between the two growth curve areas.

Upon completion of the growth curves, normal rolling pattern location, and plant tests, the Engineer will determine if the test strip is acceptable. If the Contractor or Engineer deems the test strip unacceptable, corrective action shall be taken and a new test strip shall be constructed.

If the test strip is deemed acceptable by the Engineer, production and paving can resume for the remainder of the first production day on the condition cores will be used for density acceptance. All core holes shall be filled with non-shrink grout.

A nuclear/core correlation, if required by the Engineer, shall follow the QC/QA document "Standard Test Method for Correlating Nuclear Gauge Densities with Core Densities" and shall be performed by the Contractor during the first production day. Three locations shall be selected from the first acceptable test strip. Two sites shall be located on the two growth curve locations and one site on the normal rolling pattern location. All core holes shall be filled with non-shrink grout.

The next day's production shall not resume until all test results, including an acceptable nuclear/core correlation (if required), are available and an AJMF is agreed upon by the Contractor and Engineer.

PREPARATION OF BASE

Effective February 8, 2010

Add the following to Article 406.05(a) of the Standard Specifications:

Fine particulate shall be removed from all milled pavement by sweeping, vacuuming, or another method approved by the Engineer and then by air blasting prior to the placement of prime coat.

UNPUBLISHED TELEPHONE NUMBERS FOR ENGINEER'S FIELD OFFICE

Effective March 21, 2002;

Revised January 1, 2007

Add the following sentence to the end of Paragraphs 670.02(i) and 670.04(e): All of the telephone lines provided shall have unpublished numbers.

ISLAND PAVEMENT (SPECIAL)

Effective March 1, 1996;

Revised January 1, 2007

This work shall consist of constructing full depth concrete islands as shown on the plans.

<u>Method of Measurement</u>. This work will be measured for payment in place and the area computed in square yards.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per square yard for ISLAND PAVEMENT (SPECIAL).

PIPE UNDERDRAINS 4" (MODIFIED)

Effective January 1, 2010

<u>Description:</u> This work consists of constructing pipe underdrains according to the applicable portions of Section 601 of the Standard Specifications and Highway Standard 601001.

<u>Materials</u>: The pipe underdrain material used shall meet the requirements of AASHTO M 252-96 except the pipe shall have a slot width of 0.07 in. \pm 0.01 in. (1.75 mm \pm 0.25 mm). The number of slots and the slot length may be modified to maintain the inlet flow specified in AASHTO M 252-96. Fabric around the pipe is not allowed.

The backfill material shall meet the requirements of Section 1003 of the Standard Specifications for a FA-4 Natural Sand or Gravel and meet the following gradation requirements:

Sieve Size	Percent Passing
3/8" (9.5 mm)	100
No. 10 (2 mm)	10±10
No. 16 (1.18 mm)	5±5
No. 200 (75 um)	1±1

<u>Method of Measurement</u>: Backfill material will not be paid for separately, but shall be included in the unit cost of the underdrain.

<u>Basis of Payment</u>: This work will be paid at the contract unit price per foot for PIPE UNDERDRAINS 4" (MODIFIED) (PIPE UNDERDRAINS 100MM, MODIFIED).

TRAFFIC CONTROL PLAN

Revised August 15, 2005;

Revised January 1, 2010

Traffic control shall be in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, these special provisions, and any special details and Highway Standards herein and in the plans.

Special attention is called to the following sections of the Standard Specifications, the Highway Standards, and the special provisions relating to traffic control:

Standard Specifications:

Section 701 - Work Zone Traffic Control and Protection

Section 703 - Work Zone Pavement Marking

Section 704 - Temporary Concrete Barrier

Section 781 - Raised Reflective Pavement Markers

Section 783 - Pavement Marking and Marker Removal

Supplemental Specifications:

Section 701 - Work Zone Traffic Control and Protection

Section 783 - Pavement Marking and Marker Removal

Section 862 - Uninterruptable Power Supply

Section 1106 - Work Zone Traffic Control Devices

Highway Standards:

701001 701006 701011 701101 701301 701311 701326 701400(SP) 701401 701426 701451 701901 704001

In addition, the following also relate to traffic control for this project:

RECURRING SPECIAL PROVISIONS

Night Time Inspection of Roadway Lighting

Work Zone Public Information Signs

SPECIAL PROVISIONS

TRAFFIC CONTROL & PROTECTION, STANDARDS 701401 (SPECIAL) AND 701401 (SPECIAL)

Traffic Control and Protection (Special)

Changeable Message Sign

Contractor Access

Equipment Illumination

Impact Attenuators (BDE)

Impact Attenuators, Temporary (BDE)

Pavement Marking Removal/Work Zone Pavement Marking Removal

Personal Protective Equipment (BDE)

Plastic Drums

Reflective Sheeting on Channelizing Devices (BDE)

Traffic Control and Protection for Alternate Route Signing

Vehicle Parking

Radar Speed Trailer

Nighttime Work Zone Lighting (BDE)

Notification of Reduced Width (BDE)

Ramp Closure for Freeway/Expressway (BDE)

TRAFFIC CONTROL SURVEILLANCE: In addition to the Standard Specifications for Article 701.10 Surveillance, this item will be required when Traffic Standard 701326 is in place.

TRAFFIC CONTROL AND PROTECTION, STANDARDS 701400 (SPECIAL) AND 701401 (SPECIAL)

Effective August 7, 2008:

Revised April 22, 2010

<u>Description.</u> Replace any reference to Standard 701400 in Standard 701401 with the detail, Standard 701400 (Special), shown on the plans.

<u>Construction Requirements.</u> This work shall be done according to the applicable portions of Section 701 and 780 of the Standard Specifications, the details on the plans, and Standards 701401 and 701901.

Temporary thermoplastic rumble strips, when shown on the detail, shall be constructed of thermoplastic pavement markings placed to a thickness of one-half inch.

<u>Method of Measurement</u>. Traffic control and protection required under the detail, Standard 701400 (Special), will not be measured for payment.

Temporary thermoplastic rumble strips and lane drop arrows, when shown on the detail, will not be measured for payment.

In Article 701.19(c) Measured As Lump Sum of the Standard Specifications, replace Standard 701401 with Standard 701401 (Special).

<u>Basis of Payment</u>. This work will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, STANDARD 701401 (SPECIAL).

TRAFFIC CONTROL AND PROTECTION (SPECIAL)

<u>Description:</u> Specific traffic control plan details and Special Provisions have been prepared for this contract. This work shall include all labor, materials, transportation, handling and incidental work necessary to furnish, install, maintain, replace, relocate, and remove all traffic control devices for the purpose of regulating, warning, or redirecting traffic required to construct this improvement through all the required stages as shown in the plans for I-80, Brisbin Road, and US 6. Traffic control and protection shall be provided as called for in the plans, applicable Highway Standards, Standard Specifications, these Special Provisions, or as directed by the Engineer.

<u>General</u>: The governing factor in the execution and staging of work for this project is to provide the motoring public with the safest possible travel conditions thru the construction zone. The Contractor shall be responsible for the proper locations, installation, and arrangement of all traffic control devices. The Contractor shall immediately remove, completely cover, or turn away from the motorist's view all signs which are inconsistent with lane assignment patterns.

When directed by the Engineer, the Contractor shall remove all traffic control devices that were furnished, installed, or maintained by him under this contract, and such devices shall remain the property of the Contractor. All traffic control devices shall remain in place until specific authorization for relocation or removal is received from the Engineer.

Additional requirements for traffic control devices shall be as follows.

(a) Traffic Control Setup and Removal. The setting and removal of barricades for the taper portion of a lane closure shall be done under the protection of a vehicle with a crash attenuator and arrow board. The attenuator vehicle shall be positioned in the live lane that is being closed or opened in advance of the workers and shall have the arrow panel directing traffic to the adjacent open lane. Failure to meet this requirement will subject to a Traffic Control Deficiency charge. The deficiency will be calculated as outlined in Article 105.03 of the Standard Specifications. Truck/trailer mounted attenuator shall comply with Article 1106.02(g) or shall meet the requirements of NCHRP 350 Test Level 3 with vehicles used in accordance with manufacturer's recommendations and requirements.

(b) Sign Requirements

- (1) Sign Maintenance. The Contractor shall maintain, furnish, and replace at his own expense, any traffic sign or post which has been damaged or lost by the Contractor or third party.
- (2) Work Zone Speed Limit Signs. Work zone speed limit signs shall be installed as required in Article 701.14(b) and as shown in the plans and Highway Standards. Based upon the existing posted speed limit, work zone speed limits shall be established and signed as follows.
 - a. Existing Speed Limit of 55mph or higher. The initial work zone speed limit assembly, located approximately 4,200' before the work zone, shall be 55mph as shown in 701400 (SPECIAL). Additional work zone 45 mph assemblies shall be used as required according to Article 701.14(b) and as shown in the Highway Standards and plans.
- (c) Drums/Barricades. All barricades and drums shall be equipped with flashing or steady burning lights to provide sufficient lane widths for traffic and also working room.
- (d) Vertical Barricades. Vertical barricades shall not be used in lane closure tapers, lane shifts, and exit ramp gores. Also, vertical barricades shall not be used as patch barricades or check barricades. Special attention shall be given, and ballast provided per manufacturer's specifications, to maintain the vertical barricades in an upright position and in proper alignment.
- (e) Vertical panels. All vertical panels shall be equipped with steady burning lights. Vertical panels shall only be used along the outside edge of pavement of the temporary widening for US 6.
- (f) Temporary Concrete Barrier. Prismatic barrier wall reflectors shall be installed on both the face of the wall next to traffic, and the top of sections of the temporary concrete barrier wall as shown in Standard 704001. The color of these reflectors shall match the color of the edgelines (yellow on the left and crystal or white on the right). If the base of the temporary concrete barrier wall is 12 inches or less from the travel lane, then the lower slope of the wall shall also have a 6 inch wide temporary pavement marking edge line (yellow on the left and white on the right).

Method of Measurement: All traffic control (except changeable message sign; temporary concrete barrier; relocate temporary concrete barrier; pavement marking tape, type III 6", special; impact attenuators ,temporary; traffic control pavement marking; radar speed trailer) indicated on the traffic control details and specified in the Special Provisions will be measured for payment on lump sum basis. Changeable message sign will be measured per calendar month. Temporary concrete barrier will be measured per foot. Pavement Marking Tape, Type III 6", special will be measured per foot. Impact attenuators, temporary will be measured per each. Traffic control pavement marking will be measured per foot. Radar speed trailer will be measured per calendar month.

<u>Basis of Payment</u>: All traffic control and protection will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL).

This price shall be payment in full for all labor, materials, transportation, handling and incidental work necessary to furnish, install, maintain and remove all traffic control devices required as indicated in the plans and as approved by the Engineer. The standards required to control traffic during the construction of this project are not paid for separately, but included in the lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL).

CHANGEABLE MESSAGE SIGN; TEMPORARY CONCRETE BARRIER; PAVEMENT MARKING TAPE, TYPE III 6", SPECIAL; IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3; TEMPORARY PAVEMENT MARKING and RADAR SPEED TRAILER, TRAFFIC CONTROL SURVEILLANCE will be paid for separately.

TRAFFIC CONTROL AND PROTECTION FOR ALTERNATE ROUTE SIGNING

Effective August 1, 2008

<u>Description:</u> This work shall consist of the furnishing, installation, maintenance, and removal of signing for an alternate route for Interstate Route I-80 as shown on the plans.

<u>Materials</u>: Materials shall be according to the applicable portions of Section 701 of the Standard Specifications and as shown on the plans.

<u>Construction Requirements</u>: The alternate route signing shall be in place prior to beginning construction on Interstate Route I-80 and shall remain in place until the completion of the project. If all lanes of the interstate are to remain open for an extended period of time during the project, such as a winter shutdown, the Contractor shall cover the signs until lane closures resume.

<u>Method of Measurement</u>: Traffic control and protection for alternate route signing will be measured on a calendar month basis.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per calendar month for TRAFFIC CONTROL AND PROTECTION FOR ALTERNATE ROUTE SIGNING.

CONTRACTOR ACCESS

Revised August 15, 2005;

Revised January 1, 2008

At road closure locations where Type III barricades are installed in a manner that will not allow Contractor access to the project without relocation of one or more of the barricades, the arrangement of the barricades at the beginning of each work day may be altered, when approved by the Engineer, in the manner shown on Highway Standard 701901 for Road Closed to Through Traffic. "Road Closed" signs (R11-2), supplemented by "Except Authorized Vehicles" signs (R3-I101), shall be mounted on both the near right and the far left barricade(s). At the end of each work day, the barricades shall be returned to their in-line positions. This work will not be paid for separately, but shall be include in the associated traffic control pay items.

Additional barricades, drums or cones, required by the Engineer to control traffic when relocation for contractor access is used, will not be paid for separately, but shall be include in the associated traffic control pay items.

VEHICLE PARKING

Revised January 1, 2007

Parking of personal vehicles within the interstate right of way will be strictly prohibited. Parking of construction equipment within the right of way will be permitted only at locations approved by the Engineer and never within median area or overnight on any roadway area.

EQUIPMENT ILLUMINATION

Revised January 26, 1998;

Revised January 1, 2007

The Contractor shall equip all machinery and vehicles with a flashing amber dome light, installed so the illumination is visible from all directions.

CHANGEABLE MESSAGE SIGN

Effective December 1, 1999;

Revised August 7, 2008

In addition to any changeable message signs shown in the traffic control standards, the Contractor shall furnish two Changeable Message Signs for this project. The signs shall be operational two weeks prior to any lane closure and shall be located as directed by the Engineer. Any relocation of the signs directed by the Engineer during construction will not be paid for separately, but shall be included in the cost of the Changeable Message Sign.

RADAR SPEED TRAILER

Effective January 1, 2010

<u>Description:</u> This work shall consist of the furnishing, installation, maintenance, relocation, and removal of radar speed trailers.

<u>Construction Requirements</u>: Radar speed trailers shall be installed in addition to the standard construction speed limit signs. These units will be deployed as directed by the Engineer. Construction speed limit signs will still be required, at the locations shown on the plans.

Whenever the trailers are in use, they shall be considered traffic control devices and when they are not required for this use, they shall be considered non-operating equipment and shall be stored according to Article 701.11 of the Standard Specifications. The trailers shall meet the applicable requirements of Section 701 of the Standard Specifications.

<u>Equipment</u>: The radar speed trailer shall consist of a LED speed indicator display with self-contained, one-direction radar mounted on an orange see-through trailer. It shall also include an attached speed limit sign, with changeable digits, above the speed indicator display. The height of the display and radar shall be such that it will function and be visible when located behind concrete barrier.

The speed measurement shall be by radar and provide a minimum detection distance of one thousand (1,000) feet. The radar shall have an accuracy of ± 1 mile per hour.

The speed indicator display shall face approaching traffic and shall have a sign legend of "YOUR SPEED" immediately above or below the speed display. The digital speed display shall show two digits (00 to 99) in m.p.h. The color of the changeable message legend shall be a yellow legend on a black background. The minimum height of the numerals shall be eighteen (18) inches, and the nominal legibility distance shall be at least 750 feet.

The attached speed limit sign shall be a R2-1 meeting minimum size requirements of 36x48. The sign shall be according to the applicable portions of Sections 1090 and 1091 of the Standard Specifications and shall have Type A Sheeting or better.

The speed indicator display shall be equipped with a violation alert that flashes the displayed detected speed when the posted limit is exceeded. The speed indicator shall have a maximum speed cutoff. The display shall include automatic dimming for nighttime operation.

The speed indicator measurement and display functions shall be equipped with the power supply capable of providing 24 hours of uninterrupted service.

The Contractor shall provide all preventive maintenance efforts deemed necessary to achieve uninterrupted service. If service is interrupted for any cause and not restored within 24 hours, the Engineer will cause such work to be performed as may be necessary to provide this service and the cost of such work will be deducted from compensation due or which may become due the Contractor under the contract.

Method of Measurement: This work will be measured on a calendar month basis.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per calendar month for each trailer as RADAR SPEED TRAILER.

PAVEMENT MARKING TAPE, TYPE III SPECIAL

Effective December 14, 2009

<u>Description:</u> This work shall consist of furnishing, installing, and maintaining temporary pavement marking tape for wet conditions according to Section 703 of the Standard Specifications and as shown in the plans.

<u>Materials</u>: In addition to the requirements of Article 1095.06 of the Standard Specifications, the marking tape shall maintain its reflective properties when submerged in water. The wet reflective properties shall be verified by a visual inspection method performed by the Department. The surface of the material shall provide an average skid resistance of 50 BPN when tested according to ASTM E 303.

<u>General</u>: Prior to application, a surface preparation adhesive shall be applied to the clean, dry road surface.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per foot for PAVEMENT MARKING TAPE, TYPE III SPECIAL of the line width specified.

PAVEMENT MARKING REMOVAL/WORK ZONE PAVEMENT MARKING REMOVAL

Effective August 15, 2005;

Revised January 1, 2009

All permanent and work zone pavement markings shall be removed according to Article 1101.12 Water Blaster with Vacuum Recovery and the applicable portions of Sections 703 and 783 of the Standard Specifications and as described herein. Pavement marking tape type III may be peeled or burned off; however, all remnants or burn marks shall be hydro-blasted.

Add the following paragraph to Article 1101.12 of the Standard Specifications:

For the high pressure water spray, the pressure at the nozzle shall be approximately 25,000 psi (172,000 kPa) with maximum flow rate of 15 gal/min (56 L/min). The nozzle shall be in close proximity to the pavement surface.

PLASTIC DRUMS

Effective August 15, 2005;

Revised March 26, 2007

Plastic drums according to Standard 701901 with steady burning lights shall be used in lieu of cones, Type I and Type II barricades, and vertical barricades throughout lane closures.

HOT MIX ASPHALT – DENSITY TESTING OF LONGITUDINAL JOINTS

Effective: January 1, 2007; Revised: October 1, 2009

<u>Description</u>: This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). This work shall be according to Section 1030 of the Standard Specifications except as follows.

Quality Control/Quality Assurance (QC/QA):

1030.05(d)(3) Add the following paragraphs:

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing along edges of pavement which are unconfined and adjacent to the shoulder shall be located at a distance of 4 inches away from the edge of mat. One value shall be obtained at three locations spaced approximately 10 feet apart with the center location at the specified random station. These values are to be averaged. Longitudinal joint testing along a confined edge or unconfined and not along the shoulder (i.e. the centerline of the roadway) shall be located at a distance equal to the lift thickness, or a minimum of 2 inches away from the edge of the mat. One value shall be obtained at three locations spaced approximately 10 feet apart with the center location at the specified random station. These values are to be averaged.

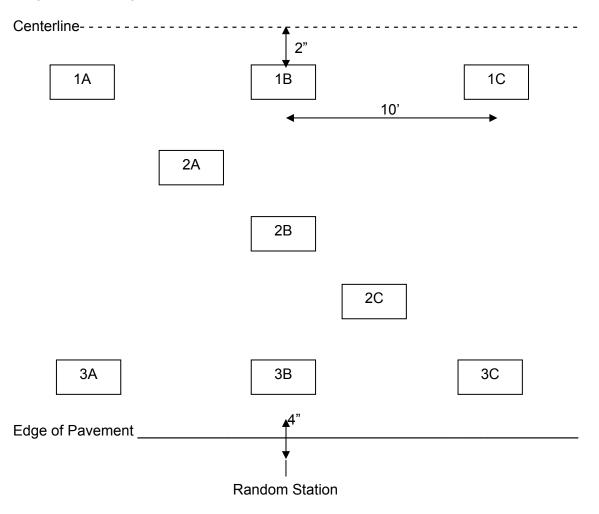
The joint density value shall be determined using either a correlated nuclear gauge or cores. When using a correlated nuclear gauge, one one-minute density readings shall be taken at the given density test site.

In performing the longitudinal joint density testing, the outside two testing locations of the five total testing locations spread across the entire mat specified in the QC/QA document, "Illinois-Modified ASTM D 2950, Standard Test Method for Determination of Density of Bituminous Concrete In-Place by Nuclear Method" shall be omitted, leaving three testing locations that are to be averaged and meet the requirements located in the table in Article 1030.05(d)(4)."

1030.05(d)(4) Replace the density control limits table with the following:

DENSITY CONTROL LIMITS				
Mixture Composition	Parameter	Individual Test	Confined Edge	Unconfined Edge
IL-9.5, IL-12.5	Ndesign ≥ 90	92.0 - 96.0%	92.0 - 96.0%	90.0%
IL-9.5,IL-9.5L, IL-12.5	Ndesign < 90	92.5 – 97.4%	92.5 – 97.4%	90.0%
IL-19.0, IL-25.0	Ndesign ≥ 90	93.0 – 96.0%	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L, IL-25.0	Ndesign < 90	93.0 – 97.4%	93.0 – 97.4%	90.0%
SMA	Ndesign = 50 & 80	93.5 – 97.4%	93.5 – 97.4%	91.0%
All Other	Ndesign = 30	93.0 - 97.4%	93.0 - 97.4%	90.0%

Diagram of Testing Locations



TEMPORARY PAINT PAVEMENT MARKING

Effective August 15, 2005

In addition to the requirements of Section 703, Work Zone Pavement Marking, the Contractor shall replace the Short Term Pavement Marking with Temporary Paint Pavement Marking within 24 hours on all surfaces except the final wearing surface.

GROOVING FOR RECESSED PAVEMENT MARKING

Effective February 8, 2010

<u>Description</u>: This work shall consist of the grooving of an existing pavement surface in preparation for the application recessed pavement marking lines.

<u>Equipment:</u> The grooving equipment shall be equipped with a free-floating cutting or grinding head. The grinding or cutting head shall be equipped with diamond saw blades, steel star cutters and/or carbide tipped star cutters. A grinder head configuration may be used on hot-mix asphalt (HMA) surfaces to achieve a rough surface texture in the bottom of the groove. Diamond saw blades shall be used on the cutting head when a smooth surface in the bottom of the groove is required by the Engineer, or contract specifications, or pavement marking material manufacturer's recommendations.

Construction Requirements

<u>Pavement Grooving Methods</u>: The grooves for recessed pavement markings shall be constructed using the following methods.

- a) Wet Saw Blade Operation. When water is required or used to cool the saw blades, such as during a continuous edge line grooving operation, the groove shall be flushed with high pressure water immediately following the cut to avoid build up and hardening of slurry in the groove. The pavement surface shall be allowed to dry for 24 hours prior to the application of the pavement markings following a wet saw blade operation.
- b) Dry Saw Blade Operation. If the grooving is done with dry saw blades, the groove shall be flushed with high-pressure air to remove debris and dust generated during the cutting operation.

<u>Pavement Grooving</u>: Grooves shall be cut into the pavement prior to the application of the pavement marking. The grooves shall be cut such that the width is 1 inch (25 mm) wider than that of the line to be placed. Grooves for letters and symbols shall be cut in a shape so that the entire marking will fit. The position of the edge of the grooves shall be a minimum of 2 inches (50 mm) from the edge of concrete joints or HMA paving seams along edge or centerlines. The depth of the groove shall not be less than the manufacturer's recommendations for the marking material specified, but shall be installed to a minimum depth of 100 mils (2.54 mm) +/- 10 mils for pavement marking tapes and 40 mils (1.02 mm) +/- 10 mils for liquid markings.

On new HMA surfaces: The Engineer shall determine if the new HMA has achieved the necessary strength and hardness to support grooving prior to the start of a grooving operation. Some HMA mixes may require 14 or more days to achieve adequate hardness to support a grooving operation.

On existing HMA surfaces some existing HMA pavements may not be strong enough to support a grooving operation. For existing HMA pavements, the Engineer shall determine if the existing HMA has the necessary strength and hardness to support grooving prior to the start of a grooving operation.

<u>Cleaning:</u> Immediately prior to the application of the pavement markings, the groove shall be cleaned with high-pressure air blast.

<u>Method of Measurement</u>: This work will be measured for payment in place, in feet of the pavement marking lines applied and accepted, for the groove width specified.

Grooving for letters, numbers and symbols will be measured in square feet as specified in the plans.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per foot for GROOVING FOR RECESSED PAVEMENT MARKING of the groove width specified and per square foot for GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS, NUMBERS AND SYMBOLS.

FURNISH AND ERECT SIGN PANEL

This work shall consist of furnishing and erecting an extruded sign panel, or a portion thereof, complete with reflectorized sign face, legend, and supplemental panels or plates, on existing sign support(s) at the locations(s) specified in the work order. The type, size, and content of legend requirements will be as specified below or in the work order.

The aluminum extrusions and the installation shall be according to the requirements of Section 1090 of the Standard Specification, as shown on the plans and/or as directed by the Engineer.

All Type III reflectorized guide signs, supplemental signs, including route shields and supplemental panels shall be fabricated using faces and legend of Type ZZ retroreflective sheeting. This shall include mainline, ramp, crossroad interchange approach directional signing, and route markers. All remaining signing shall be fabricated using a background material of Type AP retroreflective sheeting. All signs shall be fabricated such that the copy or text and background material is applied in the preferred orientation for the maximum retroreflectivity per the manufacturer's recommendation. Background sheeting and legend shall be provided by the same manufacturer.

This specification shall apply to all colors of sheeting used in this contract except for blue and brown. Signs fabricated with blue and brown sheeting shall use Type AP for the background reflective sheeting with the legend of Type ZZ reflective sheeting.

For existing signs that require the replacement of some of the existing extrusions due to damage, the replacement extrusion sheeting shall be of the same type of sheeting as the existing sign. This information shall be included on the work order.

This work will be measured for payment in square feet from edge-to-edge (horizontally and vertically).

The Contractor shall package all signs so as to prevent damage during shipment.

This work will be paid for at the contract unit price per square foot, for FURNISH AND ERECT SIGN PANEL. This price shall include furnishing all materials, fabricating the sign panel (including sign face and sign legend), furnishing all mounting hardware (including any 4WF1.79 sign brackets required for overhead sign structure mounting) and installing the sign panel on previously erected sign supports or sign structure and removing any existing sign panel(s) as required for the proper installation of the new panel(s). Removal of any existing sign panel(s) will be paid for in accordance with REMOVE EXISTING SIGN PANEL.

CONCRETE FOUNDATIONS FOR SIGN SUPPORTS

This work shall consist of constructing Class SI concrete foundations for the installation of structural steel sign supports.

The concrete shall be obtained from a predetermined approved source. A list of approved suppliers may be obtained from each District.

Concrete foundations of the type and size as specified in the work order shall be constructed in accordance with the applicable requirements of Section 734. The top segment of the foundations shall be formed down to a depth of at least one (1) foot below the ground line. The top of the foundation shall be finished level, and all exposed surfaces shall be rubbed in accordance with Article 503.15(a).

The excavated material removed for installation of the foundations shall be disposed of outside the right-of-way at the Contractor's expense.

Concrete foundations will be measured for payment in accordance with the requirements of Article 503.21.

This work will be paid for at the contract unit price per cubic yard of CONCRETE FOUNDATIONS. This price shall be payment in full for all necessary excavating, back-filling, form-work, and furnishing and placing all materials, including the Class SI Concrete, reinforcing steel, anchor bolts, nuts and washers complete in place.

REMOVE CONCRETE FOUNDATIONS

This work shall consist of removing a concrete foundation for a ground-mounted sign support. All components of the concrete foundation, including the concrete, reinforcing, and stub post, shall be removed to at least one foot below the grade line.

The use of explosives of any kind will not be permitted in removing concrete foundations. The hole shall be back-filled with suitable material approved by the Engineer. The surface of the filled hole shall be treated to match the surrounding area.

All debris resulting from this operation shall be removed from the right-of-way at the Contractor's expense.

This work will be paid for at the contract unit price each for REMOVE CONCRETE FOUNDATION-GROUND MOUNT, which price shall be payment in full for all equipment and labor necessary to complete the work and backfill the hole as herein described.

SERVICE INSTALLATION (OF THE TYPE SPECIFIED)

Effective July 1, 1990;

Revised January 1, 2007

In addition to the requirements of Section 805 of the Standard Specifications, this item shall require the Contractor to contact the utility company, prior to beginning work, to determine the utility company regulations relating to electrical service. The Contractor shall provide the utility company an estimated date that the service connection will be required, the agency which will be responsible for monthly service changes, and the connected load for flat rate billing if required. The responsible agency and connected load information is included in the plans. The customer service agreement with the utility company shall be executed by the agency responsible for monthly service charges.

All information furnished to the utility company shall be in writing with a copy provided to the Engineer.

During the interim between the service activation date and signal turn on day, all energy charges for the intersection shall be paid by the Contractor according to Article 109.05 of the Standard Specifications. Beginning the day of the traffic signal turn on, all energy charges for the intersection will be paid by the responsible agency listed in the plans. The Contractor is responsible for making arrangements with the responsible agency to transfer billing to the responsible agency.

This work shall be included in the cost of the SERVICE INSTALLATION, of the type specified.

CONDUIT PUSHED

Effective April 1, 2003;

Revised January 1, 2007

<u>Description</u>: This work shall consist of furnishing and installing pushed conduit according to Section 810 of the Standard Specifications except as modified below.

<u>Materials</u>: The conduit shall be according to Article 810.02(a) or 810.02(b) of the Standard Specifications except that the rigid nonmetallic conduit shall be Schedule 80.

<u>Construction Requirements</u>: The tunnel created for the pushed conduit shall not be significantly larger than the conduit being pushed to prevent undue settling. No tunnel shall be left for more than two hours without conduit filling it.

INDUCTIVE LOOP DETECTOR

Effective January 1, 2002;

Revised January 1, 2007

Inductive loop detectors shall meet the requirements of Sections 885 and 1079 of the Standard Specifications with the following modifications:

Each inductive loop detector amplifier shall be rack mounted. Each inductive loop detector amplifier channel shall have a minimum of:

- 8 sensitivity settings
- LCD program menu
- Detector logs and displays number of loop failure incidents since last reset
- Internal function to determine the ideal sensitivity setting for every loop system
- 8 frequency settings
- 32 second call extend timer
- 32 second delay timer
- Call extend and delay timers able to operate cooperatively
- LED indication for detection

The detector supplied shall be the Reno Model C1200R Revision 34 or greater single channel detector. An upgraded model of Reno detector may be substituted if the C1200R is not the current model.

The Contractor shall label each amplifier for the loop and movement where they provide input according to the chart in the plans.

Basis of Payment. This item will be paid for according to Article 885.04 of the Standard Specifications.

FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL

Effective January 1, 2002;

Revised January 1, 2007

Full Actuated Controller and Type IV Cabinet shall meet the requirements of Sections 857, 1073 and 1074 of the Standard Specifications with the following modifications.

This item requires that a factory representative capable of ensuring that the controller and cabinet are operating to the satisfaction of the Engineer shall be present at the turn on of the controller and shall remain until the intersection is operating to the satisfaction of the Engineer. Should a defect appear in the controller or cabinet operation, the representative shall return as often as necessary until all defects are repaired.

At the preconstruction meeting, the Contractor shall provide the names and phone numbers of two technicians who would be able to respond to controller malfunctions that occur within the 30 day acceptance period after the controller is turned on. If neither person can be reached at the time of the malfunction nor be at the location within two hours of receiving the call, any available electrician capable of evaluating and correcting the malfunction may be called at the State's discretion. Any and all bills resulting from defective operation of the controller or cabinet shall be the responsibility of the Contractor.

CONTROLLER:

The Controller shall include two copies of the latest version of Marc or Aries software and shall be capable of uploading and downloading it database to a laptop computer. All necessary software, cables and training shall be provided by the Contractor.

The controller shall be capable of uploading and downloading its database to a laptop computer that has been installed with the proper software. All uploaded data shall be able to be changed within the laptop and then downloaded to the controller.

The necessary cables for upload/download shall be provided and upload/download software shall be provided and installed onto the District Three laptop computer if the software and cables have not already been supplied to District Three or the software presently being used by District Three requires updating.

The controller data entry fields shall have a clear distinction between data fields and information. Data fields shall be in matrix format with a minimum of eight phases wide and four data lines deep.

The active status screen shall display the following information for all operating phases in an alpha-numeric display.

A clear distinction between the following detection's for each phase: vehicle recall, vehicle detection, pedestrian recall, and pedestrian detection.

A clear distinction among the phases receiving detection.

Status displayed simultaneously whenever one or more of the following is operating: vehicle passage timer, maximum phase timer, added initial timer, time before reduction timer, time to reduce timer, existing gap timer, walk timer, don't walk timer.

When a phase ends, the controller shall report whether the exit was a max out, gap out or force out condition. The controller shall show the yellow and red timers timing and any trailing overlap timers timing.

The color of all operating overlaps.

The phase of the controller shall be as shown in the plans.

CONTROLLER CABINET

The police door compartment shall contain a manual control cord from which the signals may be operated manually. The inside door toggle switches shall be protected from accidental contact by vertical metal slats. The slats shall extend beyond the switches, in a manner similar to the terminals on the back panel. A plastic plans holder shall be installed on the cabinet door. The holder shall be at least 11 inches high and 17 inches wide, shall open from the side, and shall not interfere with the filter. The holder shall have a means of closing the side opening to prevent water from entering.

A Plexiglas cover, or other high strength nonconductive cover, shall be installed over, and completely cover, the power panel. The cover shall completely shield the service wires, and circuit breaker wires from accidental contact.

A Plexiglas cover, or other high strength nonconductive cover, shall be installed over, and completely cover, the power terminals for the thermostatically controlled exhaust fan. The thermostat shall be of the knob type capable of adjustment by hand and without tools. The thermostat and terminals shall be mounted on the left or right side of the controller cabinet.

All harness wiring of connectors A, B, C and D shall be factory installed so that an additional phase may be added to the existing phasing by the addition of a load switch and the proper conflict monitor card pinning.

A self adhering phasing diagram shall be placed on the inside of the cabinet door.

Three 15 inch Velcro straps shall be fastened to the front of each cabinet shelf to secure the detector amplifier cables.

Traffic signal controller and the cabinet assembly shall be fully tested by the equipment supplier. Five (5) copies of the complete cabinet wiring showing all connections shall be furnished to the Engineer.

Basis of Payment: This work will be paid for at the contract unit price per each for FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL.

LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP

This work shall consist of furnishing and installing a lighting controller according to Section 825 of the Standard Specifications except the controller enclosure shall be 50" in height by 36" in width by 17" in depth, sized larger as needed.

This work will be paid for at the contract unit price each for LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP.

FURNISH AND INSTALL HIGH MAST LIGHT TOWER

This work shall be performed according to the Standard Specifications and as stated herein:

Light towers shall be weathering steel. The assembly & installation of all light towers shall be completed under the supervision of a representative of the Manufacturer. At the time of the final inspection, the Contractor shall provide to the Engineer the Manufacturer's written certification, signed by their supervising representative that all towers have been properly installed.

The base section of the pole shall have a minimum 3 gage wall thickness. All crevices and gaps at the backer ring at the tower base shall be sealed completely to preclude the collection of water and to prevent corrosion.

The tower base shall be of sufficient size as to allow all power cords, control cords and devices to be neatly coiled and stored in the base without inhibiting accessibility of any component. The tower's reinforced handhole frame shall extend a minimum of 12" out from the face of the pole (unless the tower has a flair base) to allow room for electrical equipment. The rain shield shall be welded to the handhole frame.

The access door shall be a pocket door adequately sized to house the main breaker panel. The door shall have a full-height stainless steel piano hinge, shall be held closed with 12 gauge, captive, adjustable, spring loaded, stainless steel clamp assemblies, and shall be equipped with a linkage arm assembly designed to hold the door in the open position.

The multi-point safety chain and hook assembly consisting of two chains shall be stainless steel. Each chain shall be of sufficient strength as to independently withstand the weight of the entire luminaire ring assembly and seating force.

The winch drum shall have a cable guide to keep the winch cable paying on and off the winch drum in smooth, continuous layers with no gaps or bunching. The cable guide will be designed to protect the winch cable and prevent abrasion to it.

The luminaire ring shall be fully enclosed and continuously welded. The luminaire ring shall be equipped with a shock-absorbing system to guide the ring during raising/lowering operations. This system shall maintain positive contact with the tower shaft during the full length of travel of the ring unless written approval is obtained from the Engineer for an alternate system.

The terminal box on the luminaire ring shall be a stainless steel, NEMA 4X box. In addition to the required components in the Standard Specifications, the box shall be equipped with fuse blocks and fuses, a hinged door and latch, and it shall be completely sealed to preclude the entry of moisture. A breather shall be mounted on top and a ½" to 1" diameter drain hole shall be installed in the bottom of the box to eliminate condensation. Permanently seal the hole with stainless steel wire cloth to prevent entry of insects. Holes drilled in the box for conduit fittings shall not be oversized or the box shall be replaced at no cost to the Department. LFNC shall be resistant to oil, water,

Chemicals, and UV and shall be suitable for outdoor, direct bury, and extreme cold use according to NEC Article 356.

The weight of the luminaire ring and all attachments shall be balanced so that the ring remains level when raised and lowered. The weight shall be evenly distributed among the lift cables.

Luminaires shall be mounted in such a way that allows unrestrained rotation of the fixture for aiming.

All high mast luminaires shall be vibration tested at resonant frequency and shall pass ANSI C136.31 and be rated for "3G" peak acceleration. Vibration testing of the luminaire shall replicate the means of attachment to the luminaire ring. Written results of the test shall be sent to the Engineer along with the Manufacturer's certification.

The power cord running from the transition plate to the luminaire ring shall have a three conductor, extra flexible, jacketed construction with reinforced fillers to maintain a smooth, round surface. Each conductor shall be No. 8 AWG stranded annealed copper.

The hood shall be secured in place with a primary and secondary latching system and, in addition, shall be attached with a stainless steel tether of the same strength as that used in the handhole for the safety chain. The hood shall be easily removed for maintenance and remain connected to the head frame by the tether.

All cable connectors for the lightning protection system shall be of the compression type. Bolted connections will only be accepted at attachment points to the tower shaft & head frame. Threads in all grounding lugs shall be protected with plastic inserts during shipment.

Grounding electrodes for light towers shall be installed in accordance with Section 806 of the Standard Specifications at no additional cost.

A concrete work pad shall be installed adjacent to each tower handhole in accordance with Article 1068.01(b)(1)f of the Standard Specifications.

This work to FURNISH AND INSTALL HIGH MAST LIGHT TOWER of the mounting height, luminaire count and finish specified shall be included in cost of the high mast tower pay item. No additional payment shall be made for this work.

LUMINAIRE TESTING

<u>Description</u>: This work shall consist of independent laboratory testing to verify Roadway Luminaires are manufactured and furnished to IDOT according to Section 821 of the Standard Specifications and as modified herein.

<u>Testing:</u> Luminaires shall be tested at a properly accredited and fully certified laboratory approved for each of the required tests. All costs associated with luminaire testing shall be included in the bid price of the luminaire.

Each luminaire type used on the project shall be tested, unless noted otherwise. In addition, each luminaire wattage and distribution within a given luminaire type shall be tested. Only one luminaire for each type, wattage, and distribution shall be tested except, one additional luminaire shall be tested for each quantity of 50 luminaires supplied to the project.

The Contractor shall propose, for approval by the Engineer, testing at either the luminaire manufacturer's test laboratory or an independent test laboratory. The qualifications of the laboratory to perform each of the required tests must be furnished to the Engineer at the time the request is made to select a lab.

In addition, the Contractor shall propose a qualified independent witness, for approval by the Engineer, familiar with the luminaire requirements and test procedures, to witness the required tests. The Contractor shall provide all travel costs for the independent witness to and from the test location for all required testing. The Contractor shall supply documentation to the Engineer of the independent witness' qualifications at the time of request for selection approval.

No luminaires shall be shipped for testing until the Engineer's written approval is received for the approved lab and witness. The Contractor is responsible to find a suitable independent witness and provide advanced notice for travel and testing. No extension of time will be allowed for delays incurred as a result of luminaire testing.

The independent witness shall select from the project luminaires at the manufacturer's facility or at the Contractor's storage facility, the luminaires for testing. In all cases, the selection of luminaires shall be a random selection from the entire completed lot of luminaires required for the contract. Selections from partial lots will not be allowed.

The testing performed shall include photometric and electrical testing. Photometric testing shall be according to IES recommendations and as a minimum, shall yield an isofootcandle chart, with max candela point and half candela trace indicated, an isocandela diagram, maximum plane and maximum cone plots of candela, a candlepower table (house and street side), a coefficient of utilization chart, a luminous flux distribution table, and complete calculations based on specified requirements and test results.

Electrical testing shall conform to NEMA and ANSI standards and as a minimum, shall yield a complete check of wiring connections, a ballast dielectric test, total ballast losses in watts and percent of input, a lamp volt-watt trace, regulation data, a starter test, lamp current crest factor, power factor (minimum over the design range of input voltage at nominal lamp voltage) and, a table of ballast characteristics showing input amperes, watts and power factor, output volts, amperes, watts and lamp crest factor as well as ballast losses over the range of values required to produce the lamp volt-watt trace.

The summary report and the test results shall be certified by the independent test laboratory or the independent witness, as applicable, and shall be sent by certified mail directly to the Engineer. A copy of this material shall be sent to the Contractor at the same time. Electrical and photometric test reports shall be sent to the Engineer as part of the shop drawing approval process.

Should any of the tested luminaires of a given type, distribution, and wattage fail to satisfy the specifications and perform according to approved submittal information, the luminaire of that type, distribution, and wattage shall be unacceptable and shall be replaced. Replacement luminaires must meet the specifications and therefore, the submittal and testing process shall be repeated in its entirety.

Upon approval by the Engineer, luminaires which fail, may have corrections made instead of being replaced. In the case of corrections, the Contractor shall advise the Engineer of the corrections to be made and shall request a repeat of the specified testing and, if the corrections are deemed reasonable by the Engineer, the testing process shall be repeated. The number of luminaires to be tested shall be the same quantity as originally tested. Luminaires which are not modified or corrected shall not be retested without prior approval from the Engineer.

The process of retesting (testing modified or replacement luminaires) shall be repeated until luminaires are approved for the project. Retesting, should it become necessary, shall not be grounds for additional compensation or extension of time.

<u>Basis of Payment</u>: This work will be paid for as part of the contract unit price each for the specific luminaire pay item to which it is associated. No separate payment will be made for luminaire testing.

IDOT DISTRICT 3 LUMINAIRE PERFORMANCE TABLES

Add the following table(s) to Article 1067 of the Standard Specifications:

IDOT DISTRICT 3 LUMINAIRE PERFORMANCE TABLE

GIVEN CONDITIONS			
ROADWAY DATA	Pavement Width Number of Lanes I.E.S. Surface Classification Q-Zero Value	36(ft) 3 R3 .07	
TOWER DATA	Mounting Height Wall (W) or Overhead (o) Mount Luminaire Set Back From Edge of Pavement	15.5 (ft) W 13 (ft)	
LUMINAIRE DATA	Lamp Type Lamp Lumens I.E.S. Vertical Distribution I.E.S. Control Of Distribution I.E.S. Lateral Distribution Total Light Loss Factor	HPS 16000 Short N Type IV 0.7	
LAYOUT DATA	Spacing Configuration	43 ft 1 Side Only	

NOTE: Variations from the above specified I.E.S. distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION	Ave. Horizontal Illumination, E _{AVE}	Between 9 Lux to 18 Lux
	Uniformity Ratio, E _{AVE} /E _{MIN}	3.0
LUMINANCE	Average Luminance, L _{AVE}	Between 0.6 Cd/m ² to 1.2 Cd/m ²
	Uniformity Ratio, L _{AVE} /L _{MIN}	3.5 (Max)
	Uniformity Ratio, L _{MAX} /L _{MIN}	6.0 (Max)
	Veiling Luminance Ratio, L _V /L _{AVE}	0.3 (Max)

LUMINAIRE HORIZONTAL MOUNT 400W

Add the following table(s) to Article 1067 of the Standard Specifications:

IDOT DISTRICT 3 LUMINAIRE PERFORMANCE TABLE

GIVEN CONDITIONS			
ROADWAY DATA	Pavement Width	36 (ft)	
	Number of Lanes	3	
	Median Width	6 (ft)	
	I.E.S. Surface Classification	R3	
	Q-Zero Value	.07	
TOWER DATA	Mounting Height	50 (ft)	
	Mast Arm Length	15	
	Pole Set Back From Edge of Pavement	7 (ft)	
	_		
LUMINAIRE DATA	Lamp Type	HPS	
	Lamp Lumens	50000	
	I.E.S. Vertical Distribution	Medium	
	I.E.S. Control Of Distribution	Full Cutoff	
	I.E.S. Lateral Distribution	Type III	
	Total Light Loss Factor	0.7	
LAYOUT DATA	Spacing	360ft	
	Configuration	Staggered	
	Luminaire Overhang Over Edge of Pavement Lane	8 ft	

NOTE: Variations from the above specified I.E.S. distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION	Ave. Horizontal Illumination, E _{AVE}	9.0 Lux
	Uniformity Ratio, E _{AVE} /E _{MIN}	3.0
LUMINANCE	Average Luminance, L _{AVE}	0.6 Cd/m ² (Min)
	Uniformity Ratio, L _{AVE} /L _{MIN}	3.5 (Max)
	Uniformity Ratio, L _{MAX} /L _{MIN}	6.0 (Max)
	Veiling Luminance Ratio, L _V /L _{AVE}	0.3 (Max)

LUMINAIRE HIGH MAST, HORIZONTAL MOUNT 400W

Add the following table(s) to Article 1067 of the Standard Specifications:

IDOT DISTRICT 3 LUMINAIRE PERFORMANCE TABLE

IDOT DISTRICT 3 LUMINAIRE PERFORMANCE TABLE				
	GIVEN CONDITIONS			
ROADWAY DATA	Pavement Width	36 (ft)		
	Number of Lanes	3		
	Median Width	26 (ft)		
	I.E.S. Surface Classification	R3		
	Q-Zero Value	.07		
TOWER DATA	Mounting Height	100 (ft)		
	Luminaire Count on Ring	6		
	Tower Set Back From Edge of Pavement	40 (ft)		
LUMINAIRE DATA	Lamp Type	HPS		
	Lamp Lumens	50,000		
	I.E.S. Vertical Distribution	Medium		
	I.E.S. Control Of Distribution	Cutoff		
	I.E.S. Lateral Distribution	Type III		
	Total Light Loss Factor	0.7		
LAYOUT DATA	Spacing	900 ft		
	Configuration	staggered		
	Luminaire Aiming Pattern	All 1 direction		

NOTE: Variations from the above specified I.E.S. distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION	Ave. Horizontal Illumination, E _{AVE}	9.0 Lux
	Uniformity Ratio, E _{AVE} /E _{MIN}	3.0
LUMINANCE	Average Luminance, L _{AVE}	0.6 Cd/m ² (Min)
	Uniformity Ratio, L _{AVE} /L _{MIN}	3.5 (Max)
	Uniformity Ratio, L _{MAX} /L _{MIN}	6.0 (Max)
	Veiling Luminance Ratio, L _V /L _{AVE}	0.3 (Max)

RELOCATION OF EXISTING LIGHT UNIT

This work shall consist of maintaining, removing, relocating as needed and reinstalling existing lighting unit to accommodate staged construction of US Rte. 6 at Brisbin Road, as shown on the plans, according to "Standard Specifications for Road and Bridge Construction" and as modified herein.

The following items shall be included as parts of this work:

- Existing lighting unit must remain operational during all stages of construction or until proposed lighting is made operational.
- Included aerial cable needed for any relocation.
- Contractor to repair or replace existing facilities due to any damage.
- Salvage or discard pole/ luminaries

The Contractor shall be responsible for maintaining, removing and relocating the existing lighting unit at the intersection of US Route 6 and Brisbin Road during the various stages of construction according to Section 801 of the "Standard Specifications for Road and Bridge Construction". No additional compensation will be allowed for this work; no matter how many times the existing lighting facilities are relocated. The pole and all attached facilities shall be kept clear of construction operations during all stages of construction to the satisfaction of the Engineer. This light pole shall be removed after the proposed lighting is made operational at US Route 6 and Brisbin Road.

BASIS OF PAYMENT: This work will be paid for at the contract unit price LUMP SUM for RELOCATION OF EXISTING LIGHT UNIT which shall be payment in full for performing the work as described herein.

CONCRETE HANDHOLE OR CONCRETE DOUBLE HANDHOLE

Effective December 1, 1999;

Revised January 1, 2007

Concrete Handhole and Concrete Double Handhole shall meet the requirements of Sections 814 and 1088 of the Standard Specifications with the following modifications:

The lift ring for the cover shall consist of a solid closed ring of stainless steel at least 0.375 inch (10 mm) in diameter. The lift ring shall be attached to the cover by a loop of stainless steel at least 0.375 inch (10 mm) in diameter. The lift ring and loop shall be recessed in the cover.

DRILLED SHAFT FOUNDATIONS

Effective April 1, 2008

For light pole (Section 836) and traffic signal (Section 878) drilled shaft foundations, Class SI concrete may be used in lieu of the Class DS concrete specified in Article 1020.04 of the Standard Specifications. If Class SI concrete is used, the entire length of the drilled shaft shall be vibrated.

CONCRETE FOUNDATION, SPECIAL

<u>Description</u>: This work shall consist of installing a concrete foundation for a combination mast arm assembly and pole.

<u>Materials</u>: The foundation shall meet the requirements of Section 878 of the Standard Specifications.

<u>Installation</u>: The foundation shall be installed according to Section 878 of the Standard Specifications. The dimensions of the foundation are shown Highway Standard 878001-08. In addition to the conduit shown on the Highway Standard, an additional 3 ½" conduit shall be installed in the foundation and shall be oriented as directed by the Engineer.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot for CONCRETE FOUNDATION, SPECIAL.

REMOVE AND RELOCATE EXISTING LIGHT STANDARD

This work shall consist of removing, relocating and reinstalling existing lighting to accommodate staged construction of US Rte. 6 at Brisbin Road according to Section 840 of the "Standard Specifications for Road and Bridge Construction" and as modified herein.

The Contractor shall be responsible for maintaining the existing wooden light pole at the intersection of US Route 6 and Brisbin Road during the various stages of construction according to Section 801 of the "Standard Specifications for Road and Bridge Construction". The pole and all attached facilities shall be kept clear of construction operations during all stages of construction to the satisfaction of the Engineer. This light pole shall be removed after the proposed lighting is installed at US Route 6 and Brisbin Road.

<u>Basis of Payment:</u> Relocation of existing lighting will be paid for at the contract unit price each for REMOVE AND RELOCATE EXISTING LIGHT STANDARD which shall be payment in full for performing the work as described herein. Work includes providing new light pole foundations as shown in these plans.

STABILIZED CONSTRUCTION ENTRANCE

<u>Description</u>: This work shall consist of constructing stabilized construction entrances in accordance with Sections 282 and 351 of the Standard Specifications and Code 930 of the Illinois Urban Manual, Practice and as shown on the plans.

<u>General:</u> The stabilized construction entrance shall be constructed according to the Illinois Urban Manual, Standard Drawing L-630 (ftp://ftp-fc.sc.egov.usda.gov/IL/urbanmnl/sections/standards/urbst930.pdf) as shown on the plans. The Contractor has the option to install a wash rack. It is the Contractor's responsibility to maintain the roadway in a clean condition.

The locations of the stabilized construction entrances must be approved by the Engineer.

<u>Method of Measurement:</u> This work will be measured for payment in place and the area computed in square yards.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per square yard for STABILIZED CONSTRUCTION ENTRANCE. This price shall include excavation, aggregate, filter fabric, wash rack (If needed), and all material, equipment, and labor necessary for complete installation and removal when the entrance is not needed.

TURBIDITY CURTAIN

<u>Description:</u> This work shall consist of furnishing the materials, equipment, and labor, to install the Turbidity Curtain and all appurtenances that are specified in the plans and provisions.

<u>General:</u> The Turbidity Curtain shall be installed in such a manner as to prevent drift shoreward or downstream. The floatation log shall be securely attached to the fabric in both horizontal and vertical direction. A 5/16-inch cable shall be attached above the floatation members and extend the entire length of each section of silt screen. The 5/16-inch chain shall be sealed on the lower hem for ballast. Connectors shall join the main load line and ballast chain to carry all tensile pressure. The fabric shall be joined for its entire height.

Anchorages shall be installed on the construction side and the pond, swamp, or creek side to maximum stability. Shore anchors shall consist of a post with dead man or approved equal. Stream anchors shall be of sufficient size, type and strength to stabilize the barrier beyond the construction area.

Anchors shall be buoyed to prevent the boom from being pulled under water. Danforth-type anchors shall be used in sandy bottom and heavy kedge type or mushroom anchors on mud bottoms.

The Contractor shall be responsible for maintenance of the curtain throughout construction operations.

<u>Submittals:</u> The materials, fabrication, and construction of these components are subject to approval by the Engineer. The Engineer reserves the right to obtain random samples for material testing.

Operation: Removal of entrapped sediment and cleaning of any silt curtain will be paid for according to Article 109.04. The sediment shall be removed as directed by the Engineer during the contract period and disposed of according to Article 202.03.

Installation/Workmanship: Workmanship shall be performed in a skillful and workmanlike manner by qualified personnel under competent supervision and direction and in accordance with the best modern methods for the various trades involved. All material and parts shall be free of all defects in either workmanship or materials that will impair their service.

The fabric shall comply with the following physical properties:

Grab Tensile Strength
 300 pounds min.

Equivalent Opening Size (U.S. Std. Sieve)
Weight/oz./sq. yd.
60-170
18 or 22

• Seams (All to be heat sealed or sewn)

 Floatation 8-inch diameter solid expanded polystyrene log type or approved equal with approximately 20 lbs./ft. buoyancy. Polystyrene beads or chips shall not be used for floatation.

Main Load Line.
Ballast
5/16 inch Cable
5/16 inch Chain

<u>Method of Measurement</u>: Turbidity Curtain will be measured for payment in place and the area computed in square yards.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per square yard for TURBIDITY CURTAIN.

REMOVE EXISTING FLARED END SECTION

<u>Description:</u> This work shall consist of all labor and materials required to remove a precast reinforced concrete flared end section from the existing culvert or storm sewer as shown on the plans and as specified herein.

<u>Construction Requirements:</u> The existing pipe will be inspected by the Engineer to determine if the pipe needs to be cleaned prior to extending the existing pipe. The precast reinforced concrete flared end section shall be removed just prior to extending the existing pipe and in such a manner that there is no damage to the existing pipe. If there is any damage to the existing pipe, the Contractor shall repair the pipe to the Engineers satisfaction at no additional expense to the contract. A concrete collar shall be constructed to connect the existing pipe to the new pipe unless otherwise directed by the Engineer. The collar shall be constructed in accordance with Article 542.08 of the Standard Specifications. The removed end section will become the property of the Contractor.

<u>Basis of Payment:</u> End section removal will be paid for at the contract unit price each for REMOVE EXISTING FLARED END SECTION

Sewer cleaning shall be included in the contract unit price for REMOVE EXISTING FLARED END SECTION.

Concrete Collars shall be paid for at the contract unit price per cubic yard for CONCRETE COLLARS in accordance with Article 542.11 of the Standard Specifications.

GRANULAR EMBANKMENT, SPECIAL

<u>Description:</u> This item of work shall consist of furnishing, transporting and placing granular material as roadway embankment within the pond that is located in the vicinity of the proposed interchange of Ramp A and reconstructed Brisbin Road, just southwest of I-80, in accordance with the applicable portions of Section 206 of the Standard Specifications, or as amended herein. This material will be placed from the pond bottom to elevation 541.0, as shown in the plan details, or as directed by the Engineer.

This item of work shall also include the removal and satisfactory disposal of the islands and associated trees and vegetation located within the pond in accordance with the applicable portions of Sections 201 and 202 of the Standard Specifications.

<u>Materials:</u> The stone will be quarried from an approved source of undisturbed consolidated deposits of rock and shall conform to the following requirements.

- A. Quality. Use Class B or better quality stone as defined in Section 1005 of the Standard Specifications.
- B. <u>Gradation.</u> There are no gradation requirements for this material except that no rock may exceed 12" as measured in its largest dimension. It is the intention of this special provision to permit the use of ungraded quarry run angular stone as produced in normal blasting procedures for a crusher or mill.

<u>Construction Method:</u> The Contractor may construct the granular embankment in lifts of any vertical dimensions.

The islands located in the existing pond shall be removed to the pond bottom elevation prior to placement of the granular embankment.

Material for the granular embankment shall be end dumped and care shall be used in placing the material to secure the maximum filling of voids.

The quarry run material shall be "worked into" the pond bed and existing embankment slopes by mechanical means meeting the satisfaction of the Engineer.

The Contractor is advised he may encounter a "mud wave" when filling the pond. This would be weak material lining the pond that is displaced or pushed up by our fill material. The "mud wave" shall be set aside and dried. Work shall proceed so any resulting mud wave will be not be used in roadway embankments.

The Contractor must submit a dewatering plan to the Engineer for review and approval prior to any dewatering operations. The Contractor will be allowed to pump the water into the nearest I-80 ditch for natural drainage into Collins Run provided that sediment from the pond bottom is not deposited into Collins Run. The maximum allowable pumping rate into the existing I-80 ditch shall be 4,500 gallons/minute unless otherwise directed by the Engineer.

If the water encroaches on an adjacent shoulder or creates any condition the Engineer considers unsafe, the Contractor shall immediately cease and correct the condition.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per ton for GRANULAR EMBANKMENT, SPECIAL which price shall include all labor, equipment and material necessary to complete the work as specified herein. Any additional Quarry Run Granular Embankment required due to settlement during construction will be paid for at the contract unit price per ton for GRANULAR EMBANKMENT, SPECIAL, and no other compensation will be allowed.

The cost of removal and disposal of the islands and associated trees and vegetation shall be included in the cost of this item.

The cost of any de-watering operations that may be necessary shall be included in the cost of this item.

SETTLEMENT OF FILL MATERIAL CONSTRUCTED IN AND ADJACENT TO THE POND ALONG RAMP "A"

Fill material placed in, and adjacent to, the pond along Ramp "A" may experience significant settlement.

Any additional Quarry Run Granular Embankment required, due to settlement during construction, to construct this item to the lines and grades indicated on the plans will be paid for at the contract unit price per ton for QUARRY RUN GRANULAR EMBANKMENT.

POROUS GRANULAR CAPPING MATERIAL

<u>Description:</u> This work shall be performed in accordance with the applicable portions of Section 207 of the Standard Specifications except as modified herein. The work consists of filling voids in the top of, and constructing a cap of CA-6 material immediately above, Quarry Run Granular Embankment.

<u>Construction Method:</u> The Contractor shall provide, place and compact CA-6 granular material to fill in voids in the top surface of the quarry run granular material and shall consist of a three inch finished layer of granular material at the locations indicated in the plans or as directed by the Engineer. Projections of quarry run granular embankment above the CA-6 will be acceptable if approved by the Engineer.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per ton for POROUS GRANULAR CAPPING MATERIAL as specified herein. Should additional quantities of CA-6 be required for this item of work, adjustments to the quantity will be made at the contract unit price per ton for POROUS GRANULAR CAPPING MATERIAL, and no other compensation will be allowed.

Fill material placed in and adjacent to the pond along Ramp A and Brisbin Road may experience significant settlement. Any additional Quarry Run Granular Embankment and/or required, due to settlement during construction, to construct this item to the lines and grades indicated on the plans will be paid for at the contract unit price per ton for QUARRY RUN GRANULAR EMBANKMENT.

BRACED EXCAVATION

<u>Description</u>: This work shall consist of furnishing, installing and removing all necessary sheeting and bracing members required to support the excavation according to the applicable requirements of Section 502 of the Standard Specifications. This item shall also include all excavation of earth necessary to obtain the bottom of footing elevations shown on the plans where braced excavation is indicated. The bracing shall properly support excavations by the use of sheeting, timber or plates etc., to prevent movement of soil, structures, pavements or utilities outside of the excavated area.

<u>Construction Requirements:</u> The Contractor shall submit design calculations and shop drawings prepared and sealed by an Illinois Licensed Structural Engineer for the temporary earth retention system. Shop drawings shall show the design and all necessary details for the construction of the bracing system. The design calculations and shop drawings shall be submitted to the Engineer for approval.

Approval of the Engineer shall be received before the Contractor proceeds with his construction operations.

However, in any event, the Contractor shall be fully responsible for the safety, stability and adequacy of the bracing system and shall be solely responsible and liable for all damages resulting from his construction operations or from failure or inadequacy of the bracing system.

In the event the bracing system protecting the existing embankment fails or is otherwise inadequate, in the judgment of the Engineer, the Contractor shall, at his own expense, take all necessary steps to restore the embankments to a safe operating condition to the satisfaction of the Engineer.

Bracing members shall be installed as soon as an excavation level is reached to permit their installation.

<u>Method of Measurement</u>: This work shall be measured in cubic yards according to the requirements for structure excavation as specified in Section 502.12 of the Standard Specifications.

<u>Basis of Payment:</u> This work, as herein specified and shown on the plans, will be paid for at the contract unit price per cubic yard for BRACED EXCAVATION. Payment for

BRACED EXCAVATION will be limited to those locations shown on the plans. All sheeting and bracing members associated with braced excavation will not be measured for payment but shall be included in the cost for BRACED EXCAVATION. No separate payment will be made for structure excavation where BRACED EXCAVATION is shown.

SLOTTED DRAIN 12" WITH 6" SLOT SLOTTED DRAIN 12" WITH VARIABLE SLOT

<u>Description:</u> This work shall consist of furnishing and installing slotted drain pipe assemblies complete with all necessary fittings in the roadway pavement at locations shown on the plans and directed by the Engineer.

Materials: Materials shall be according to the following.

Corrugated Steel Pips	1006.01
Concrete	.1020

Slotted drain pipe assemblies shall be fabricated from 12 inch diameter coated corrugated steel pipe meeting the requirements of AASHTO M 36 (Type I). The CMP shall be Aluminized Steel Type 2.

The grates shall be manufactured from ASTM A1011, Grade 36 steel. The spacers and bearing bars (sides) shall be 3/16" material ± 0.008".

The spacers shall be on 6" centers and welded on both sides to each bearing bar (sides) with four (4) 1-1/4" long 3/16" fillet welds on each side of the bearing bar.

The grates shall be vertical (straight sides) or trapezoidal with a 1-3/4" opening in the top and 30° slanted spacers unless shown otherwise on the plans. The grate shall be 6" or a variable depth between 6" and 12" high as shown on the plans.

The grate shall be galvanized in accordance with ASTM A 123 except with a 2 oz. galvanized coating, total both sides.

<u>General Requirements:</u> Slotted Pavement Drains shall be constructed in accordance with the applicable provisions of Section 550, and as herein required.

The Engineer may call for tensile strength tests on the grate if the grate is not in compliance with the above spacer specifications. If tensile strength tests are called for, minimum results for an in-place spacer pulled perpendicular to the bearing bar shall be:

T = 16,000 pounds for 6" grate

Slotted drain pipe assemblies shall be installed in accordance with the manufacturer's specifications in a suitable trench and encased in Class SI concrete in accordance with the Plan details. When installed, the slotted drain shall conform to the alignment and gradient shown in the Plans.

The grate shall be fillet welded with a minimum weld 1" long to the CSP on each side of the grate at every other corrugation.

Each slotted drain shall be connected to a proposed drainage inlet with suitable fitting(s) and coupling band(s) as shown in the plans.

Tolerances - Finished Slotted Drain -20' Lengths:

Vertical Bow - ± 3/8" 6.2 Horizontal Bow Twist - ± 1/2"

<u>Construction Requirements:</u> Each slotted drain pipe assembly of either description shall be installed in a properly excavated trench, all connections assembled and tightened, the assembly rigidly blocked and supported in place to maintain alignment and gradient and the trench backfilled with Class SI Concrete.

The Corrugated Steel Pipe shall have a minimum of two rerolled annular ends. The Slotted Drain bands shall be a modified HUGGER Bands to secure the pipe and prevent infiltration of the backfill. When the Slotted Drain is banded together, the adjacent grates shall have a maximum 3" gap.

Prior to backfilling, the slotted opening shall be covered to prevent the intrusion of foreign material during backfilling and paving operations.

Connections of outlet pipes into drainage structures as detailed shall be sealed with Class SI concrete collars to the satisfaction of the Engineer. The cost of connecting the slotted drain into existing or proposed inlets, including fittings and miscellaneous hardware, shall be included in the Contract unit price per foot of Slotted Drains with no additional compensation.

Any bituminous coating damaged in shipment, during installation, or prior to final acceptance shall be repaired by the Contractor to the satisfaction of the Engineer.

<u>Shop Drawings.</u> The Contractor shall submit complete shop drawings detailing the type of slotted drain to be used and the construction techniques to be utilized in its installation. This submittal shall conform to the requirements of Article 105.04. In addition, the Contractor shall submit (10) copies of design calculations which substantiate structural properties of the proposed installation.

No work on this item shall be allowed until the required submittals have been made and approved by the Engineer.

<u>Method of Measurement:</u> SLOTTED DRAIN of either description will be measured for payment in feet complete, in place and accepted.

Basis of Payment: Payment for SLOTTED DRAIN 12" WITH 6" SLOT and SLOTTED DRAIN 12" WITH VARIABLE SLOT will be made at the contract unit price per foot, which payment shall constitute full compensation for all work as specified including but not limited to pipe, plates, Class SI Concrete, grating, saw cuts for removal of existing pavement, trench excavation and disposal, fittings, connections, shop drawings and all other labor, equipment, tools and incidentals necessary to complete the work as specified.

SETTLEMENT PLATFORMS

Settlement of the embankments constructed for Ramp A will be monitored by the Engineer utilizing settlement platforms constructed at the two locations shown on the plans or as directed by the Engineer. As directed by the Engineer, two additional settlement platforms may be constructed at other locations. The settlement platforms shall be constructed in accordance with Article 204.06 of the Standard Specifications. The cost of the settlement platforms will be considered as included in the cost of FURNISHED EXCAVATION.

PORTABLE, VEHICLE MOUNTED, CHANGEABLE MESSAGE SIGN

Effective August 7, 2008;

Revised March 16, 2010

<u>Description.</u> This item shall consist of one heavy duty vehicle fitted with a truck mounted attenuator and with a permanently mounted changeable message sign. The vehicle mounted message sign shall be required when Traffic Control and Protection, Standard 701401 (Special) is in place and the Contractor is working. The vehicle mounted message sign shall also be required when high volumes of traffic occur such as on weekends and holidays. Specific times will be determined by the Engineer.

The vehicle location shall be in advance of the lane closure taper and in advance of any stopped traffic on the interstate.

<u>Construction Requirements.</u> The Contractor shall provide a person who shall remain with the vehicle at all times it is use. The person shall have in his/her possession a current driver's license. The person shall be capable of operating the vehicle and capable of promptly programming and/or reprogramming the message sign to provide the messages as directed by the Engineer.

When the vehicle is not in use, it shall be stored at a location approved by the Engineer. The stored vehicle shall be capable of being on the jobsite within 5 minutes.

The sign shall meet the applicable requirements of Article 701.15 of the Standard Specifications.

<u>Equipment.</u> The vehicle shall be fitted with a truck mounted attenuator and should have an actual weight of no less than 11,000 pounds and no greater than 26,000 pounds. Higher weights may be used when approved by the Engineer and the attenuator manufacturer.

The message sign shall meet the applicable requirements of Article 1106.02(i) of the Standard Specifications. Character height shall be 10 in. (250 mm) minimum.

<u>Method of Measurement</u>. The vehicle with the mounted changeable message sign will be measured on a calendar month basis.

The person provided by the Contractor to operate the truck and message sign will be paid for separately on a per hour basis.

<u>Basis of Payment</u>. The vehicle and portable changeable message sign will be paid for at the contract unit price per calendar month for PORTABLE VEHICLE MOUNTED CHANGEABLE MESSAGE SIGN. The person provided by the Contractor to operate the truck and message sign will be paid for at the contract unit price per hour for MESSAGE BOARD VEHICLE DRIVER.

CLEANING AND PAINTING NEW METAL STRUCTURES

Effective Date: September 13, 1994 Revised Date: April 30, 2010

<u>Description.</u> The material and construction requirements that apply to cleaning and painting new structural steel shall be according to the applicable portion of Sections 506 of the Standard Specifications except as modified herein. The three coat paint system shall be the system as specified on the plans and as defined herein. Unless stated otherwise, requirements imposed on the "Contactor" in this specification apply to both the shop painting contractor and the field painting contractor.

<u>Materials.</u> All materials to be used on an individual structure shall be produced by the same manufacturer. The Bureau of Materials and Physical Research has established a list of all products that have met preliminary requirements. Each batch of material must be tested and approved by that bureau before use.

The paint materials shall meet the requirements of the following articles of the Standard Specification:

<u>Item</u>	<u>Article</u>
(a) Inorganic Zinc-Rich Primer	1008.02
(b) Waterborne Acrylic	1008.04
(c) Aluminum Epoxy Mastic	1008.03

- (d) Organic Zinc-Rich Primer (Note 1)
- (e) Epoxy Intermediate (Note 1)
- (f) Aliphatic Urethane (Note 1)

Note 1: These material requirements shall be according to the Special Provision for the Organic Zinc-Rich Paint System.

<u>Submittals.</u> At least 30 days prior to beginning shop or field painting respectively, the Contractor shall submit for the Engineer's review and acceptance, the following applicable plans, certifications and information for completing the field work. Painting work shall not proceed until the submittals are accepted by the Engineer. Qualifications, certifications and QC plans for shop and field cleaning and painting shall be available for review by the QA Inspector.

- a) Contractor Shop Qualifications. Except for miscellaneous steel items such as bearings, side retainers, expansion joint devices, and other items allowed by the Engineer, or unless stated otherwise in the contract, the shop painting Contractors—shall be certified to perform the work as follows: the shop painting Contractor shall possess AISC Sophisticated Paint Endorsement or SSPC-QP3 certification. Evidence of current qualifications shall be provided.
- b) Contractor Field Qualifications. Unless indicated otherwise on the contract plans, the field painting contractor shall possess current SSPC QP1 certification. Evidence of current qualifications shall be provided. The Contractor shall maintain certified status throughout the duration of the painting work under the contract. The Department reserves the right to accept Contractors documented to be currently enrolled in the SSPC-QP7, Painting Contractor Introductory Program, in lieu of the QP certifications noted above.
- c) QC Personnel Qualifications. Personnel managing the shop and field Quality Control program(s) for this work shall possess a minimum classification of Society of Protective Coatings (SSPC) BCI certified, National Association of Corrosion Engineers (NACE) Coating Inspector Level 2-Certified, or shall provide evidence of successful inspection of 3 projects of similar or greater complexity and scope that have been completed in the last 2 years. Copies of the certification and/or experience shall be provided, including names, addresses and telephone numbers of contact persons employed by the bridge owner.

The personnel performing the QC tests for this work shall be trained in coatings inspection and the use of the testing instruments. Documentation of training shall be provided. The QC personnel shall not perform hands on surface preparation or paint activities unless otherwise approved by the Engineer. Painters shall perform wet film thickness measurements, with QC personnel conducting random spot checks of the wet film. The Contractor shall not replace the QC personnel assigned to the project without advance notice to the Engineer, and acceptance of the replacement(s), by the Engineer.

- d) Quality Control (QC) Program. The shop and field QC Programs shall identify the following; the instrumentation that will be used, a schedule of required measurements and observations, procedures for correcting unacceptable work, and procedures for improving surface preparation and painting quality as a result of quality control findings. The shop program shall include a copy of the quality control form(s) that will be completed daily. The field program shall incorporate the IDOT Quality Control Daily Report form, as supplied by the Engineer.
- e) Field Cleaning and Painting Inspection Access Plan. The inspection access plan for use by Contractor QC personnel for ongoing inspections and by the Engineer during Quality Assurance (QA) observations.

f) Surface Preparation/Painting Plan. The surface preparation/painting plan shall include the methods of surface preparation and type of equipment to be utilized for solvent cleaning, abrasive blast cleaning, washing, and power tool cleaning. The plan shall include the manufacturer's names of the materials that will be used, including Product Data Sheets and Material Safety Data Sheets (MSDS).

A letter or written instructions from the coating manufacturer shall be included, indicating the required drying time for each coat at the minimum, normal, and maximum application temperatures before the coating can be exposed to temperatures or moisture conditions that are outside of the published application parameters. Application shall be performed in accordance with the coating manufacturer's instructions.

Quality Control (QC) Inspections. The Contractor shall perform first line, in process QC inspections of each phase of the work. The submitted and accepted QC Program(s) shall be used to insure that the work accomplished complies with these specifications. The shop painting Contractor shall use their forms as supplied in their submittal. These shop reports shall be made available for review when requested by the Engineer. The field painting Contractor shall use the IDOT Quality Control Daily Report form supplied by the Engineer to record the results of quality control tests. These field reports shall be turned into the Engineer before work resumes the following day. The Engineer or designated representative will sign the report. The signature is an acknowledgment that the report has been received, but should not be construed as an agreement that any of the information documented therein is accurate.

The Contractor shall supply all necessary equipment to perform the QC inspections. Equipment shall include the following at a minimum:

- Psychrometer or comparable equipment for the measurement of dew point and relative humidity, together with all necessary weather bureau tables or psychrometric charts.
- Surface temperature thermometer.
- Bresle Cell Kits or CHLOR*TEST kits for chloride determinations, or equivalent.(only required when erected steel is exposed through the winter prior to field painting.)
- Wet Film Thickness Gage.
- Blotter paper for compressed air cleanliness checks.
- Type 2 Magnetic Dry Film Thickness Gage per SSPC PA2.
- Calibration standards for dry film thickness gage.
- Light meter for measuring light intensity during cleaning, painting, and inspection activities.
- All applicable ASTM and SSPC Standards used for the work.
- Commercially available putty knife of a minimum thickness of 40 mils (1 mm) and a width between 1 and 3 in. (25 and 75 mm). Note that the putty knife is only required in touch-up areas where the coating is being feathered and must be tested with a dull putty knife.

The instruments shall be calibrated by the Contractor's personnel according to the equipment manufacturer's recommendations and the Contractor's QC Program. All inspection equipment shall be made available to the Engineer for QA observations on an as needed basis.

<u>Quality Assurance (QA) Observations</u>. The Engineer may conduct QA observations of any or all phases of the shop or field work. The Engineer's observations in no way relieve the Contractor of the responsibility to provide all necessary daily QC inspections of his/her own and to comply with all requirements of this Specification.

<u>Inspection Access and Lighting.</u> The Contractor shall facilitate the Engineer's observations as required, including allowing ample time to view the work. The field Contractor shall furnish, erect and move scaffolding or other mechanical equipment to permit close observation of all surfaces to be cleaned and painted. This equipment shall be provided during all phases of the work. Examples of acceptable access structures include:

- Mechanical lifting equipment, such as, scissor trucks, hydraulic booms, etc.
- Platforms suspended from the structure comprised of trusses or other stiff supporting members and including rails and kick boards.
- Simple catenary supports are permitted only if independent life lines for attaching a fall arrest system according to Occupational Safety and Health Administration (OSHA) regulations are provided.

When the surface to be inspected is more than 6 ft. (1.8 m) above the ground or water surface, and fall prevention is not provided (e.g. guardrails) the Contractor shall provide the Engineer with a safety harness and a lifeline according to OSHA regulations. The lifeline and attachment shall not direct the fall into oncoming traffic. The Contractor shall provide a method of attaching the lifeline to the structure independent of the inspection facility or any support of the platform. When the inspection facility is more than 2 1/2 ft. (800 mm) above the ground, the Contractor shall provide an approved means of access onto the platform.

The Contractor shall provide artificial lighting both inside and outside containment where natural light is inadequate, as determined by the Engineer, to allow proper cleaning, inspection, and painting. Illumination for inspection shall be at least 30 foot candles (325 LUX). Illumination for cleaning and painting, including the working platforms, access, and entryways shall be at least 20 foot candles (215 LUX). General work area illumination outside the containment shall be employed at the discretion of the Engineer and shall be at least 5 foot candles. The exterior lighting system shall be designed and operated so as to avoid glare that interferes with traffic, workers, and inspection personnel.

Construction Requirements for Field Painting. The Contractor shall be responsible for any damage caused to persons, vehicles, or property, except as indemnified by the Response Action Contractor Indemnification Act. Whenever the intended purposes of the protective devices are not being accomplished, as determined by the Engineer, work shall be immediately suspended until corrections are made. Painted surfaces damaged by any Contractor's operation shall be removed and repainted, as directed by the Engineer, at the Contractor's expense.

The Contractor shall comply with the provisions of the Illinois Environmental Protection Act. Paint drips, spills, and overspray are not permitted to escape into the air or onto any other surfaces or surrounding property not intended to be painted. Containment shall be used to control paint drips, spills, and overspray, and shall be dropped and all equipment secured when sustained wind speeds of 40 mph (64 kph) or greater occur, unless the containment design necessitates action at lower wind speeds. When the containment needs to be attached to the structure, it shall be attached by clamping or similar means. Welding or drilling into the structure shall be prohibited unless otherwise approved by the Engineer in writing. The Contractor shall evaluate project-specific conditions to determine the specific type and extent of containment needed to control the paint emissions and shall submit a plan for containing or controlling paint debris (droplets, spills, overspray, etc.) to the Engineer for acceptance prior to starting the work. Acceptance by the Engineer shall not relieve the Contractor of their ultimate responsibility for controlling paint debris from escaping the work zone.

Hold Point Notification for Field Painting. Specific inspection items throughout this specification are designated as Hold Points. Unless other arrangements are made at the project site, the Contractor shall provide the Engineer with a minimum 4-hour notification before a Hold Point inspection will be reached. If the 4-hour notification is provided and the Work is ready for inspection at that time, the Engineer will conduct the necessary observations. If the Work is not ready at the appointed time, unless other arrangements are made, an additional 4-hour notification is required. Permission to proceed beyond a Hold Point without a QA inspection will be granted solely at the discretion of the Engineer, and only on a case by case basis. The Engineer has the right to reject any work that was performed without adequate provision for QA observations

<u>Field Surface Preparation (HOLD POINT).</u> The following processes shall be used to prepare the shop-coated steel surfaces for field painting.

1. <u>Low Pressure Water Cleaning and Solvent Cleaning.</u> The Contractor shall notify the Engineer 24 hours in advance of beginning surface preparation operations.

Washing shall involve the use of potable water at a minimum of 1000 psi (7 MPa) and less than 5000 psi (34 MPa) according to "Low Pressure Water Cleaning" of SSPCSP12. Paint spray equipment shall not be used to perform the water cleaning. The cleaning shall be performed in such a manner as to remove dust, dirt, chalk, insect and animal nests, bird droppings, and other foreign matter prior to solvent cleaning.

If detergents or other additives are added to the water, the detergents/additives shall be included in the submittals and not used until accepted by the Engineer. When detergents or additives are used, the surface shall be rinsed with potable water before the detergent water dries.

After washing has been accepted by the Engineer, all traces of asphaltic cement, oil, grease, diesel fuel deposits, and other soluble contaminants which remain on the steel surfaces to be painted shall be removed according to SSPC – SP1 Solvent Cleaning, supplemented with scraping (e.g., to remove large deposits of asphaltic cement) as required. The solvent(s) used for cleaning shall be compatible with the primer. The Contractor shall identify the proposed solvent(s) in the submittals. If the primer is softened, wrinkled, or shows other signs of attack from the solvents, the Contractor shall immediately discontinue their use. The name and composition of replacement solvents, together with MSDS, shall be submitted for Engineer acceptance prior to use. If solvent cleaning/scraping is not successful in removing the foreign matter, the Contractor shall use other methods identified in SP1, such as steam cleaning as necessary.

- 2. <u>Water Cleaning Between Coats.</u> When foreign matter has accumulated on a newly applied coat, washing shall be performed prior to the application of subsequent coats.
- 3. Power Tool Cleaning SSPC-SP3 (Modified). The edges of the coating surrounding the spot repairs shall be feathered. A power tool cleaned surface shall be free of all loose rust, loose and peeling paint, and loose rust that is bleeding through and/or penetrating the coating. All locations of visible corrosion and rust bleed, and lifting or loose paint shall be prepared using the power tools.

Upon completion of the cleaning, rust, rust bleed, and surrounding paint are permitted to remain if they cannot be lifted using a dull putty knife.

<u>Field Soluble Salt Remediation (HOLD POINT)</u>. If the erected steel is exposed to winter weather prior to field painting, the Contractor shall implement surface preparation procedures and processes that will remove chloride from the surfaces prior to field painting. Surfaces that may be contaminated with chloride include, but are not limited to, expansion joints and all areas that are subject to roadway splash or run-off such as fascia beams and stringers.

Methods of chloride removal may include, but are not limited to, steam cleaning or pressure washing with or without the addition of a chemical soluble salt remover as approved by the coating manufacturer, and scrubbing before or after initial paint removal. The water does not need to be collected. The Contractor shall provide the proposed procedures for chloride remediation in the Surface Preparation/Painting Plan.

Upon completion of the chloride remediation steps, the Contractor shall use cell methods of field chloride extraction and test procedures (e.g., silver dichromate) accepted by the Engineer, to test representative surfaces for the presence of remaining chlorides. Remaining chloride levels shall be no greater than $7\mu g/sq$ cm as read directly from the surface without any multiplier applied to the results. The testing must be performed, and the results must be acceptable.

<u>Surface and Weather Conditions (HOLD POINT)</u>. Surfaces to be painted after cleaning shall remain free of moisture and other contaminants. The Contractor shall control his/her operations to insure that dust, dirt, or moisture does not come in contact with surfaces cleaned or painted that day.

Prepared surfaces, shall meet the requirements of the respective degrees of cleaning immediately prior to painting, and shall be painted before rusting appears on the surface. If rust appears or bare steel remains unpainted for more than 12 hours, the affected area shall be prepared again at the expense of the Contractor.

The surface temperature shall be at least 5°F (3°C) above the dew point during final surface preparation operations. The paint manufacturers' published literature shall be followed for specific temperature, dew point, and humidity restrictions during the application of each coat, and for the minimum and maximum time between coats.

The Contractor shall monitor temperature, dew point, and humidity every 4 hours during surface preparation and coating application in the specific areas where the work is being performed. The frequency of monitoring shall increase if weather conditions are changing. The Engineer has the right to reject any work that was performed under unfavorable weather conditions. Rejected work shall be removed, and repainted at the Contractor's expense.

<u>Seasonal Restrictions on Field Cleaning and Painting.</u> Field cleaning and painting work shall be accomplished between April 15 and October 31 unless authorized otherwise by the Engineer in writing.

Inorganic Zinc-rich/ Waterborne Acrylic Paint system. This system shall be for shop and field application of the coating system. Shop application of the intermediate and top coats will not be allowed.

In the shop, all structural steel designated to be painted shall be given one coat of inorganic zinc rich primer. In the field, before the application of the intermediate coat, the prime coat and any newly installed fasteners shall be spot solvent cleaned per SSPC-SP 1 and all surfaces pressure washed as specified above. All damaged shop primed areas shall be spot cleaned per SSPC-SP3 Modified, All damaged areas and all installed fasteners shall be fully primed with aluminum epoxy mastic. The structural steel shall then receive one full intermediate coat and one full topcoat of waterborne acrylic paint.

a) Coating Dry Film Thickness (dft), measured according to SSPC-PA2:

Zinc Primer: 3 mils (75 microns) min., 6 mils (150 microns) max.

Epoxy Mastic(spot coat): 5 mils (125 microns) min., 7 mils (180 microns) max.

Intermediate Coat: 2 mils (50 microns) min., 4 mils (100 microns) max.

Topcoat: 2 mils (50 microns) min., 4 mils (100 microns) max.

The total dry film thickness, excluding the spot areas touched up with epoxy mastic, shall be between 7 and 14 mils (180 and 355 microns).

- b) The pressure washing requirement above may be waived if the QC and QA Inspectors verify the primed surfaces have not been contaminated.
- d) Damage to the completed paint system shall be spot cleaned using SSPC-SP3 (Modified). The cleaned areas shall be spot painted with a penetrating sealer as recommended by the manufacturer, which shall overlap onto the existing topcoat. Then the aluminum epoxy mastic shall be spot applied not to go beyond the area painted with the sealer. The acrylic intermediate and topcoat shall be spot applied to the mastic with at least a 6 inch (150 mm) overlap onto the existing topcoat.

Organic Zinc-Rich/ Epoxy/ Urethane Paint System. This system shall be for full shop application of the coating system, or when specified on the plans, for the application of two coats in the shop with the finish coat applied in the field. All contact surfaces shall be masked off prior to shop-application of the intermediate and top coats.

In addition to the requirements of Section 3.2.9 of the AASHTO/AWS D1.5/D1.5:2002 Bridge Welding Code (breaking thermal cut corners of stress carrying members), rolled and thermal cut corners to be painted with organic zinc primer shall be broken if they are sharper than a 1/16 in. (1.5 mm) radius. Corners shall be broken by a single pass of a grinder or other suitable device at a 45 degree angle to each adjoining surface prior to final blast cleaning, so the resulting corner approximates a 1/16 in. (1.5 mm) or larger radius after blasting. Surface anomalies (burrs, fins, deformations) shall also be treated to meet this criteria before priming.

In the shop, all structural steel designated to be painted shall be given one coat of organic zinc rich primer, one coat of epoxy intermediate, and unless stated otherwise in the plans, one coat of urethane finish. Before the application of the field coats, the shop coats and any newly installed fasteners shall be spot solvent cleaned per SSPC-SP 1 and all surfaces pressure washed as specified above to remove dirt, oil, lubricants, oxidation products, and foreign substances. All damaged shop coated areas shall then be spot cleaned per SSPC-SP3 (Modified). The surrounding coating at each repair location shall be feathered for a minimum distance of 1 1/2 in. (40 mm) to achieve a smooth transition between the prepared areas and the existing coating. The existing coating in the feathered area shall be roughened to insure proper adhesion of the repair coats.

All damaged areas and all newly installed fasteners shall be fully primed with epoxy mastic. One intermediate coat of epoxy shall be applied over the epoxy mastic and on exposed shop primer. One topcoat of aliphatic urethane shall be applied to all areas where the intermediate coat is visible, whether the intermediate coat was applied in the shop or in the field. The field applied coats shall only overlap onto the existing finish coat where sanding has been performed.

When the plans require the urethane coat to be applied in the field, the maximum recoat time for the intermediate coat shall be observed. If the recoat time for the intermediate coat is exceeded, the Contractor shall remove the shop-applied system, or submit for approval by the Engineer, written recommendations from the coating manufacturer for the procedures necessary to extend that recoat window or otherwise prepare the intermediate coat to receive the finish.

- (a) Coating Dry Film Thickness (dft), measured according to SSPC-PA2:
 - Organic Zinc-Rich Primer: 3 mils (75 microns) min., 5 mils (125 microns) max.

 Aluminum Epoxy Mastic (spot coat): 5 mils (125 microns) min., 7 mils (180 microns) max.
 - Epoxy Intermediate Coat: 3 mils (75 microns) min., 6 mils (150 microns) max. Aliphatic Urethane Top Coat: 2.5 mils (65 microns) min., 4 mils (100 microns) max.
- (b) The total dry film thickness, excluding the spot areas touched up with epoxy mastic, shall be between 8.5 and 15 mils (215 and 375 microns).
- (c) All faying surfaces of field connections shall be masked off after priming and shall not receive the intermediate or top coats in the shop. The intermediate and top coats for field connections shall be applied, in the field, after erection of the structural steel is completed.

Special Instructions.

Painting Date/System Code. At the completion of the work, the Contractor shall stencil in contrasting color paint the date of painting the bridge, the painting Contractors name, and the paint type code from the Structure Information and Procedure Manual for the system used. The letters shall be capitals, not less than 2 in. (50 mm) and not more than 3 in. (75 mm) in height. When all coats are applied in the shop the shop Contractor shall do the stenciling. When 1 or more coats are applied in the field, the field contractor shall do the stenciling.

The stencil shall contain the following wording "PAINTED BY (insert the name of the painting Contractor)" and shall show the month and year in which the painting was completed, followed by "CODE S" for the Inorganic Zinc/ Acrylic System, "CODE X" for the Organic Zinc/ Epoxy/ Urethane System (field applied finish coats), "CODE AB" for the Organic Zinc/ Epoxy/ Urethane System (shop applied), all stenciled on successive lines. This information shall be stenciled on the cover plate of a truss end post near the top of the railing, or on the outside face of an outside stringer near both ends of the bridge facing traffic, or at some equally visible surface designated by the Engineer.

<u>Method of Measurement.</u> Shop cleaning and painting new structures will not be measured for payment. Field cleaning and painting will not be measured for payment except when performed under a contract that contains a separate pay item for this work.

Basis of Payment. This work will be paid for according to Article 506.07.

TEMPORARY SHEET PILING

Effective: September 2, 1994 Revised: January 1, 2007

<u>Description.</u> This work shall consist of furnishing, driving, adjusting for stage construction when required and subsequent removal of the sheet piling according to the dimensions and details shown on the plans and according to the applicable portions of Section 512 of the Standard Specifications.

This work shall also include furnishing, installing and subsequent removal of all miscellaneous steel shapes, plates and connecting hardware when required to attach the sheeting to an existing substructure unit and/or to facilitate stage construction.

<u>General.</u> The Contractor may propose other means of supporting the sides of the excavation provided they are done so at no extra cost to the department. If the Contractor elects to vary from the design requirements shown on the plans, the revised design calculations and details shall be submitted to the Engineer for approval. The calculations shall be prepared and sealed by an Illinois Licensed Structural Engineer. This approval will not relieve the Contractor of responsibility for the safety of the excavation. Approval shall be contingent upon acceptance by all involved utilities and/or railroads.

<u>Material.</u> The sheet piling shall be made of steel and may be new or used material, at the option of the Contractor. The sheet piling shall have a minimum section modulus as shown on the plans or in the approved Contractor's alternate design. The sheeting shall have a minimum yield strength of 38.5 ksi (265 MPa) unless otherwise specified. The sheeting, used by the Contractor, shall be identifiable and in good condition free of bends and other structural defects. The Contractor shall furnish a copy of the published sheet pile section properties to the Engineer for verification purposes. The Engineer's approval will be required prior to driving any sheeting. All driven sheeting not approved by the Engineer shall be removed at the Contractor's expense.

Construction. The Contractor shall verify locations of all underground utilities before driving any sheet piling. Any disturbance or damage to existing structures, utilities or other property, caused by the Contractor's operation, shall be repaired by the Contractor in a manner satisfactory to the Engineer at no additional cost to the Department. The Contractor shall be responsible for determining the appropriate equipment necessary to drive the sheeting to the tip elevation(s) specified on the plans or according to the Contractor's approved design. The sheet piling shall be driven, as a minimum, to the tip elevation(s) specified, prior to commencing any related excavation. If unable to reach the minimum tip elevation, the adequacy of the sheet piling design will require re-evaluation by the Department prior to allowing excavation adjacent to the sheet piling in question. The Contractor shall not excavate below the maximum excavation line shown on the plans without the prior permission of the Engineer. The sheet piling shall remain in place until the Engineer determines it is no longer required.

The sheet piling shall be removed and disposed of by the Contractor when directed by the Engineer. When allowed, the Contractor may elect to cut off a portion of the sheet piling leaving the remainder in place. The remaining sheet piling shall be a minimum of 12 in. (300 mm) below the finished grade or as directed by the Engineer. Removed sheet piling shall become the property of the Contractor.

When an obstruction is encountered, the Contractor shall notify the Engineer and upon concurrence of the Engineer, the Contractor shall begin working to break up, push aside, or remove the obstruction. An obstruction shall be defined as any object (such as but not limited to, boulders, logs, old foundations etc.) where it's presence was not obvious or specifically noted on the plans prior to bidding, that cannot be driven through or around with normal driving procedures, but requires additional excavation or other procedures to remove or miss the obstruction.

<u>Method of Measurement</u>. The temporary sheet piling will be measured for payment in place in square feet (square meter). Any temporary sheet piling cut off, left in place, or driven to dimensions other than those shown on the contract plans without the written permission of the Engineer, shall not be measured for payment but shall be done at the contractor's expense.

If the Contractor is unable to drive the sheeting to the specified tip elevation(s) and can demonstrate that any further effort to drive it would only result in damaging the sheeting, then the Contractor shall be paid based on the plan quantity of temporary sheeting involved. However, no additional payment will be made for any walers, bracing, or other supplement to the temporary sheet piling, which may be required as a result of the re-evaluation in order to insure the original design intent was met.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per square foot (square meter) for TEMPORARY SHEET PILING.

Payment for any excavation performed in conjunction with this work will not be included in this item but shall be paid for as specified elsewhere in this contract.

Obstruction mitigation shall be paid for according to Article 109.04 of the Standard Specifications.

PIPE UNDERDRAINS FOR STRUCTURES

Effective: May 17, 2000 Revised: January 22, 2010

<u>Description</u>. This work shall consist of furnishing and installing a pipe underdrain system as shown on the plans, as specified herein, and as directed by the Engineer.

Materials. Materials shall meet the requirements as set forth below:

The perforated pipe underdrain shall be according to Article 601.02 of the Standard Specifications. Outlet pipes or pipes connecting to a separate storm sewer system shall not be perforated.

The drainage aggregate shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 16, according to Sections 1003 and 1004 of the Standard Specifications.

The fabric surrounding the drainage aggregate shall be Geotechnical Fabric for French Drains according to Article 1080.05 of the Standard Specifications.

<u>Construction Requirements.</u> All work shall be according to the applicable requirements of Section 601 of the Standard Specifications except as modified below.

The pipe underdrains shall consist of a perforated pipe drain situated at the bottom of an area of drainage aggregate wrapped completely in geotechnical fabric and shall be installed to the lines and gradients as shown on the plans.

<u>Method of Measurement.</u> Pipe Underdrains for Structures shall be measured for payment in feet (meters), in place. Measurement shall be along the centerline of the pipe underdrains. All connectors, outlet pipes, elbows, and all other miscellaneous items shall be included in the measurement. Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures, but shall not be included in the measurement for payment.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per foot (meter) for PIPE UNDERDRAINS FOR STRUCTURES of the diameter specified. Furnishing and installation of the drainage aggregate, geotechnical fabric, forming holes in structural elements and any excavation required, will not be paid for separately, but shall be included in the cost of the pipe underdrains for structures.

POROUS GRANULAR EMBANKMENT, SPECIAL

Effective: September 28, 2005 Revised: November 14, 2008

<u>Description.</u> This work shall consist of furnishing and placing porous granular embankment special material as detailed on the plans, according to Section 207 except as modified herein.

<u>Materials.</u> The gradation of the porous granular material may be any of the following CA 8 thru CA 18, FA 1 thru FA 4, FA 7 thru FA 9, and FA 20 according to Articles 1003 and 1004.

<u>Construction.</u> The porous granular embankment special shall be installed according to Section 207, except that it shall be uncompacted.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per Cubic Yard (Cubic Meter) for POROUS GRANULAR EMBANKMENT, SPECIAL.

DEMOLITION PLANS FOR REMOVAL OF EXISTING STRUCTURES

Effective: September 5, 2007

Add to the beginning of Article 501.02 of the Standard Specifications.

"The Contractor shall submit a demolition plan to the Engineer for approval, detailing the proposed methods of demolition and the amount, location(s) and type(s) of equipment to be used. With the exception of removal of single box culverts, for work adjacent to or over an active roadway, railroad or navigable waterway, the demolition plan shall include an assessment of the structure's condition and an evaluation of the structure's strength and stability during demolition and shall be sealed by an Illinois Licensed Structural Engineer."

PILING

Effective: May 11, 2009 Revised: January 22, 2010

Revise Article 512.04(a) of the Standard Specifications to read:

- "(a) Splicing. Splicing of metal shell piles shall be as follows.
 - (1) Planned Splices. Planned field or shop splices may be used when allowed per Article 512.10 or when the lengths specified in Article 512.16 exceed the estimated lengths specified in the contract plans by at least 10 ft (3 m). The location of planned splices shall be approved by the Engineer and located to minimize the chance they will occur within the 10 ft (3 m) below the base of the footing, abutment, or pier.
 - (2) Unplanned Splices. Unplanned field splices shall be used as required to furnish lengths beyond those specified in Article 512.16. The length of additional segments shall be specified by the Engineer."

Revise Article 512.05(a) of the Standard Specifications to read:

- "(a) Splicing. Splicing of steel piles shall be as follows.
 - (1) Planned Splices. Planned field or shop splices may be used when allowed per Article 512.10 or when the lengths specified in Article 512.16 exceed the estimated lengths specified in the contract plans by at least 10 ft (3 m). The location of planned splices shall be approved by the Engineer and located to minimize the chance they will occur within the 10 ft (3 m) below the base of the footing, abutment, or pier.
 - (2) Unplanned Splices. Unplanned field splices shall be used as required to furnish lengths beyond those specified in Article 512.16. The length of additional segments shall be specified by the Engineer."

Revise the first three paragraphs of Article 512.10 of the Standard Specifications to read:

- "512.10 Driving Equipment. The equipment for driving piles shall be adequate for driving piles at least 10 ft (3 m) longer than the longest estimated pile length specified in the contract plans without splicing, unless the estimated pile length exceeds 55 ft (17 m) or prevented by vertical clearance restrictions. The use of shorter length equipment or the use of preplanned splices (necessitated by estimated pile lengths exceeding 55 ft (17 m) or vertical clearance restrictions) shall meet the approval of the Engineer. The equipment for driving piles shall be according to the following.
 - (a) Hammers. Piles shall be driven with an impact hammer such as a drop, steam/air, hydraulic, or diesel. The driving system selected by the Contractor shall not result in damage to the pile. The impact hammer shall be capable of being operated at an energy which will maintain a pile penetration rate between 1 and 10 blows per 1 in. (25 mm) when the nominal driven bearing of the pile approaches the nominal required bearing.

For hammer selection purposes, the minimum and maximum hammer energy necessary to achieve these penetrations may be estimated as follows.

$$E \ge \frac{32.90 \, R_N}{F_{\text{eff}}}$$
 (English)

$$E \leq \frac{65.80 \, \text{R}_{\text{N}}}{\text{F}_{\text{eff}}} \ \ \text{(English)}$$

$$E \ge \frac{10.00 \, R_N}{F_{\text{eff}}}$$
 (metric)

$$E \leq \frac{20.00 \, R_N}{F_{eff}}$$
 (metric)

Where:

 R_N = Nominal required bearing in kips (kN)

E = Energy developed by the hammer per blow in ft lb (J) F_{eff} = Hammer efficiency factor according to Article 512.14."

Add the following sentence to the beginning of the fourth paragraph of Article 512.11 of the Standard Specifications:

"Except as required to satisfy the minimum tip elevations required in 512.11(b) above, piles are not required to be driven more than one additional foot (300 mm) after the nominal driven bearing equals or exceeds the nominal required bearing; more than three additional inches (75 mm) after the nominal driven bearing exceeds 110 percent of the nominal required bearing; or more than one additional inch (25 mm) after the nominal driven bearing exceeds 150 percent of the nominal required bearing."

Revise the first paragraph of Article 512.14 of the Standard Specifications to read:

"512.14 Determination of Nominal Driven Bearing. The nominal driven bearing of each pile shall be determined by the WSDOT formula as follows.

$$R_{NDB} = \frac{6.6 F_{eff} E Ln (10 N_b)}{1000} \text{ (English)}$$

$$R_{NDB} = \frac{21.7 \ F_{\text{eff}} \ E \ Ln \left(10 \ N_b\right)}{1000} \ \ \text{(metric)}$$

Where:

 R_{NDB} = Nominal driven bearing of the pile in kips (kN)

 N_b = Number of hammer blows per inch (25 mm) of pile penetration

E = Energy developed by the hammer per blow in ft lb (J)

 F_{eff} = Hammer efficiency factor taken as:

0.55 for air/steam hammers

0.47 for open-ended diesel hammers and steel piles or metal shell piles

0.37 for open-ended diesel hammers and concrete or timber piles

0.35 for closed-ended diesel hammers

0.28 for drop hammers"

Add the following to Article 512.18 of the Standard Specifications.

"(h) When the lengths specified in Article 512.16 exceed the estimated lengths specified in the contract plans by at least 10 ft (3m), additional field splices (for metal shell and steel piles) required to provide the lengths specified in Article 512.16 will be paid for according to Article 109.04."

FREEZE-THAW AGGREGATES FOR CONCRETE SUPERSTRUCTURES POURED ON GRADE

Effective: April 30, 2010

Revise the first sentence of Article 1004.029(f) to read as follows.

"When coarse aggregate is used to produce portland cement concrete for base course, base course widening, pavement, driveway pavement, sidewalk, shoulders, curb, gutter, combination curb and gutter, median, paved ditch, concrete superstructures on grade such as bridge approach slabs, or their repair using concrete, the gradation permitted will be determined from the results of the Department's Freeze-Thaw Test (Illinois Modified AASHTO T161)."

ALKALI-SILICA REACTION FOR CAST-IN-PLACE CONCRETE (BDE)

Effective: August 1, 2007 Revised: January 1, 2009

<u>Description</u>. This special provision is intended to reduce the risk of a deleterious alkali-silica reaction in concrete exposed to humid or wet conditions. The special provision is not intended or adequate for concrete exposed to potassium acetate, potassium formate, sodium acetate or sodium formate. The special provision shall not apply to the dry environment (humidity less than 60 percent) found inside buildings for residential or commercial occupancy. The special provision shall also not apply to precast products or precast prestressed products.

Aggregate Expansion Values. Each coarse and fine aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List. The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.05 percent will be assigned to limestone or dolomite coarse aggregates and 0.03 percent to limestone or dolomite fine aggregates (manufactured stone sand); however the Department reserves the right to perform the ASTM C 1260 test.

<u>Aggregate Groups</u>. Each combination of aggregates used in a mixture will be assigned to an aggregate group. The point at which the coarse aggregate and fine aggregate expansion values intersect in the following table will determine the group.

AGGREGATE GROUPS			
Coarse Aggregate or Coarse Aggregate Blend ASTM C 1260 Expansion	Fine Aggregate or Fine Aggregate Blend ASTM C 1260 Expansion		
	≤ 0.16%	> 0.16% - 0.27%	> 0.27%
≤ 0.16%	Group I	Group II	Group III
> 0.16% - 0.27%	Group II	Group II	Group III
> 0.27%	Group III	Group III	Group IV

<u>Mixture Options</u>. Based upon the aggregate group, the following mixture options shall be used; however, the Department may prohibit a mixture option if field performance shows a deleterious alkali-silica reaction or Department testing indicates the mixture may experience a deleterious alkali-silica reaction.

Group I - Mixture options are not applicable. Use any cement or finely divided mineral.

Group II - Mixture options 1, 2, 3, 4, or 5 shall be used.

Group III - Mixture options 1, 2 and 3 combined, 4, or 5 shall be used.

Group IV - Mixture options 1, 2 and 4 combined, or 5 shall be used.

For Class PP-3 concrete the mixture options are not applicable, and any cement may be used with the specified finely divided minerals.

a) Mixture Option 1. The coarse or fine aggregates shall be blended to place the material in a group that will allow the selected cement or finely divided mineral to be used.

When a coarse or fine aggregate is blended, the weighted expansion value shall be calculated separately for the coarse and fine aggregate as follows:

Weighted Expansion Value = $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + ...$

Where: a, b, c... = percentage of aggregate in the blend; A, B, C... = expansion value for that aggregate.

- b) Mixture Option 2. A finely divided mineral shall be used as described in 1), 2), 3), or 4) that follow. The replacement ratio is defined as "finely divided mineral:portland cement".
 - 1) Class F Fly Ash. For Class PV, BS, MS, DS, SC, and SI concrete and cement aggregate mixture II (CAM II), Class F fly ash shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.
 - 2) Class C Fly Ash. For Class PV, MS, SC, and SI Concrete, Class C fly ash with 18 percent to less than 26.5 percent calcium oxide content, and less than 2.0 percent loss on ignition, shall replace 20 percent of the portland cement at a minimum replacement ratio of 1:1; or at a minimum replacement ratio of 1.25:1 if the loss on ignition is 2.0 percent or greater. Class C fly ash with less than 18 percent calcium oxide content shall replace 20 percent of the portland cement at a minimum replacement ratio of 1.25:1.

For Class PP-1, RR, BS, and DS concrete and CAM II, Class C fly ash with less than 26.5 percent calcium oxide content shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.

 Ground Granulated Blast-Furnace Slag. For Class PV, BS, MS, SI, DS, and SC concrete, ground granulated blast-furnace slag shall replace 25 percent of the portland cement at a minimum replacement ratio of 1:1.

For Class PP-1 and RR concrete, ground granulated blast-furnace slag shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.

For Class PP-2, ground granulated blast-furnace slag shall replace 25 to 30 percent of the portland cement at a minimum replacement ratio of 1:1.

- 4) Microsilica or High Reactivity Metakaolin. Microsilica solids or high reactivity metakaolin shall be added to the mixture at a minimum 25 lb/cu yd (15 kg/cu m) or 27 lb/cu yd (16 kg/cu m) respectively.
- c) Mixture Option 3. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.60 percent. When aggregate in Group II is involved, any finely divided mineral may be used with a portland cement.
- d) Mixture Option 4. The cement used shall have a maximum total equivalent alkali content $(Na_2O + 0.658K_2O)$ of 0.45 percent. When aggregate in Group II or III is involved, any finely divided mineral may be used with a portland cement.
- e) Mixture Option 5. The proposed cement or finely divided mineral may be used if the ASTM C 1567 expansion value is ≤ 0.16 percent when performed on the aggregate in the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly. For latex concrete, the ASTM C 1567 test shall be performed without the latex. The 0.20 percent autoclave expansion limit in ASTM C 1567 shall not apply.

If during the two year time period the Contractor needs to replace the cement, and the replacement cement has an equal or lower total equivalent alkali content $(Na_2O + 0.658K_2O)$, a new ASTM C 1567 test will not be required.

<u>Testing.</u> If an individual aggregate has an ASTM C 1260 expansion value > 0.16 percent, an ASTM C 1293 test may be performed by the Contractor to evaluate the Department's ASTM C 1260 test result. The ASTM C 1293 test shall be performed with Type I or II cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.80 percent or greater. The interior vertical wall of the ASTM C 1293 recommended container (pail) shall be half covered with a wick of absorbent material consisting of blotting paper. If the testing laboratory desires to use an alternate container or wick of absorbent material, ASTM C 1293 test results with an alkali-reactive aggregate of known expansion characteristics shall be provided to the Engineer for review and approval. If the expansion is less than 0.040 percent after one year, the aggregate will be assigned an ASTM C 1260 expansion value of 0.08 percent that will be valid for two years, unless the Engineer determines the aggregate has changed significantly.

The Engineer reserves the right to verify a Contractor's ASTM C 1293 or 1567 test result. The Engineer will not accept the result if the precision and bias for the test methods are not met.

The laboratory performing the ASTM C 1567 test shall either be accredited by the AASHTO Materials Reference Laboratory (AMRL) for ASTM C 227 under Portland Cement Concrete or Aggregate; or shall be inspected for Hydraulic Cement - Physical Tests by the Cement and Concrete Reference Laboratory (CCRL) and shall be approved by the Department. The laboratory performing the ASTM C 1293 test shall be inspected for Portland Cement Concrete by CCRL and shall be approved by the Department.

ALKALI-SILICA REACTION FOR PRECAST AND PRECAST PRESTRESSED CONCRETE (BDE)

Effective: January 1, 2009

<u>Description</u>. This special provision is intended to reduce the risk of a deleterious alkali-silica reaction in precast and precast prestressed concrete exposed to humid or wet conditions. The special provision is not intended or adequate for concrete exposed to potassium acetate, potassium formate, sodium acetate or sodium formate. The special provision shall not apply to the dry environment (humidity less than 60 percent) found inside buildings for residential or commercial occupancy. The special provision shall also not apply to cast-in-place concrete.

Aggregate Expansion Values. Each coarse and fine aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List. The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.05 percent will be assigned to limestone or dolomite coarse aggregates and 0.03 percent to limestone or dolomite fine aggregates (manufactured stone sand); however the Department reserves the right to perform the ASTM C 1260 test.

<u>Aggregate Groups</u>. Each combination of aggregates used in a mixture will be assigned to an aggregate group. The point at which the coarse aggregate and fine aggregate expansion values intersect in the following table will determine the group.

AGGREGATE GROUPS			
Coarse Aggregate or Coarse Aggregate Blend ASTM C 1260 Expansion	Fine Aggregate or Fine Aggregate Blend ASTM C 1260 Expansion		
	≤ 0.16%	> 0.16% - 0.27%	> 0.27%
≤ 0.16%	Group I	Group II	Group III
> 0.16% - 0.27%	Group II	Group II	Group III
> 0.27%	Group III	Group III	Group IV

<u>Mixture Options</u>. Based upon the aggregate group, the following mixture options shall be used; however, the Department may prohibit a mixture option if field performance shows a deleterious alkali-silica reaction or Department testing indicates the mixture may experience a deleterious alkali-silica reaction.

Group I - Mixture options are not applicable. Use any cement or finely divided mineral.

Group II - Mixture options 1, 2, 3, 4, or 5 shall be used.

Group III - Mixture options 1, 2 and 3 combined, 4, or 5 shall be used.

Group IV - Mixture options 1, 2 and 4 combined, or 5 shall be used.

a) Mixture Option 1. The coarse or fine aggregates shall be blended to place the material in a group that will allow the selected cement or finely divided mineral to be used.

When a coarse or fine aggregate is blended, the weighted expansion value shall be calculated separately for the coarse and fine aggregate as follows:

Weighted Expansion Value = $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + ...$

Where: a, b, c... = percentage of aggregate in the blend; A, B, C...= expansion value for that aggregate.

- b) Mixture Option 2. A finely divided mineral shall be used as described in 1), 2), 3), or 4) that follow. The replacement ratio is defined as "finely divided mineral:portland cement".
 - 1) Class F Fly Ash. For Class PC concrete, precast products, and PS concrete, Class F fly ash shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.
 - 2) Class C Fly Ash. For Class PC Concrete, precast products, and Class PS concrete, Class C fly ash with 18 percent to less than 26.5 percent calcium oxide content, and less than 2.0 percent loss on ignition, shall replace 20 percent of the portland cement at a minimum replacement ratio of 1:1; or at a minimum replacement ratio of 1.25:1 if the loss on ignition is 2.0 percent or greater. Class C fly ash with less than 18 percent calcium oxide content shall replace 20 percent of the portland cement at a minimum replacement ratio of 1.25:1.
 - 3) Ground Granulated Blast-Furnace Slag. For Class PC concrete, precast products, and Class PS concrete, ground granulated blast-furnace slag shall replace 25 percent of the portland cement at a minimum replacement ratio of 1:1.
 - 4) Microsilica or High Reactivity Metakaolin. Microsilica solids or high reactivity metakaolin shall be added to the mixture at a minimum 25 lb/cu yd (15 kg/cu m) or 27 lb/cu yd (16 kg/cu m) respectively.
- c) Mixture Option 3. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.60 percent. When aggregate in Group II is involved, any finely divided mineral may be used with a portland cement.
- d) Mixture Option 4. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.45 percent. When aggregate in Group II or III is involved, any finely divided mineral may be used with a portland cement.
- e) Mixture Option 5. The proposed cement or finely divided mineral may be used if the ASTM C 1567 expansion value is ≤ 0.16 percent when performed on the aggregate in the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly. The 0.20 percent autoclave expansion limit in ASTM C 1567 shall not apply.

If during the two year time period the Contractor needs to replace the cement, and the replacement cement has an equal or lower total equivalent alkali content $(Na_2O + 0.658K_2O)$, a new ASTM C 1567 test will not be required.

<u>Testing</u>. If an individual aggregate has an ASTM C 1260 expansion value > 0.16 percent, an ASTM C 1293 test may be performed by the Contractor to evaluate the Department's ASTM C 1260 test result. The ASTM C 1293 test shall be performed with Type I or II cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.80 percent or greater. The interior vertical wall of the ASTM C 1293 recommended container (pail) shall be half covered with a wick of absorbent material consisting of blotting paper. If the testing laboratory desires to use an alternate container or wick of absorbent material, ASTM C 1293 test results with an alkali-reactive aggregate of known expansion characteristics shall be provided to the Engineer for review and approval. If the expansion is less than 0.040 percent after one year, the aggregate will be assigned an ASTM C 1260 expansion value of 0.08 percent that will be valid for two years, unless the Engineer determines the aggregate has changed significantly.

The Engineer reserves the right to verify a Contractor's ASTM C 1293 or 1567 test result. The Engineer will not accept the result if the precision and bias for the test methods are not met.

The laboratory performing the ASTM C 1567 test shall either be accredited by the AASHTO Materials Reference Laboratory (AMRL) for ASTM C 227 under Portland Cement or Aggregate; or shall be inspected for Hydraulic Cement - Physical Tests by the Cement and Concrete Reference Laboratory (CCRL) and shall be approved by the Department. The laboratory performing the ASTM C 1293 test shall be inspected for Portland Cement Concrete by CCRL and shall be approved by the Department.

APPROVAL OF PROPOSED BORROW AREAS, USE AREAS, AND/OR WASTE AREAS INSIDE ILLINOIS STATE BORDERS (BDE)

Effective: November 1, 2008

Revise the title of Article 107.22 of the Standard Specifications to read:

"107.22 Approval of Proposed Borrow Areas, Use Areas, and/or Waste Areas Inside Illinois State Borders."

Add the following sentence to the end of the first paragraph of Article 107.22 of the Standard Specifications:

"Proposed borrow areas, use areas, and/or waste areas outside of Illinois shall comply with Article 107.01."

CEMENT (BDE)

Effective: January 1, 2007 Revised: April 1, 2009

Revise Section 1001 of the Standard Specifications to read:

"SECTION 1001. CEMENT

1001.01 Cement Types. Cement shall be according to the following.

(a) Portland Cement. Acceptance of portland cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland cement shall be according to ASTM C 150, and shall meet the standard physical and chemical requirements. Type I or Type II may be used for cast-in-place, precast, and precast prestressed concrete. Type III may be used according to Article 1020.04, or when approved by the Engineer. All other cements referenced in ASTM C 150 may be used when approved by the Engineer.

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. The total of all inorganic processing additions shall be a maximum of 4.0 percent by weight (mass) of the cement. However, a cement kiln dust inorganic processing addition shall be limited to a maximum of 1.0 percent. Organic processing additions shall be limited to grinding aids that improve the flowability of cement, reduce pack set, and improve grinding efficiency. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302, Class C fly ash according to the chemical requirements of AASHTO M 295, and cement kiln dust.

(b) Portland-Pozzolan Cement. Acceptance of portland-pozzolan cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland-pozzolan cement shall be according to ASTM C 595 and shall meet the standard physical and chemical requirements. Type IP may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. The pozzolan constituent for Type IP shall be a maximum of 21 percent of the weight (mass) of the portland-pozzolan cement.

For cast-in-place construction, portland-pozzolan cement shall not be used in concrete mixtures when the air temperature is below 40 °F (4 °C) without permission of the Engineer. If permission is given, the mix design strength requirement may require the Contractor to increase the cement or eliminate the cement factor reduction for a water-reducing or high range water-reducing admixture which is permitted according to Article 1020.05(b).

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall be limited to cement kiln dust at a maximum of 1.0 percent.

(c) Portland Blast-Furnace Slag Cement. Acceptance of portland blast-furnace slag cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland blast-furnace slag cement shall be according to ASTM C 595 and shall meet the standard physical and chemical requirements. Type IS portland blast-furnace slag cement may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. The blast-furnace slag constituent for Type IS shall be a maximum of 25 percent of the weight (mass) of the portland blast-furnace slag cement.

For cast-in-place construction, portland blast-furnace slag cement shall not be used in concrete mixtures when the air temperature is below 40 °F (4 °C) without permission of the Engineer. If permission is given, the mix design strength requirement may require the Contractor to increase the cement or eliminate the cement factor reduction for a water-reducing or high range water-reducing admixture which is permitted according to Article 1020.05(b).

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall be limited to cement kiln dust at a maximum of 1.0 percent.

- (d) Rapid Hardening Cement. Rapid hardening cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall be on the Department's current "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs", and shall be according to the following.
 - (1) The cement shall have a maximum final set of 25 minutes, according to Illinois Modified ASTM C 191.
 - (2) The cement shall have a minimum compressive strength of 2000 psi (13,800 kPa) at 3.0 hours, 3200 psi (22,100 kPa) at 6.0 hours, and 4000 psi (27,600 kPa) at 24.0 hours, according to Illinois Modified ASTM C 109.
 - (3) The cement shall have a maximum drying shrinkage of 0.050 percent at seven days, according to Illinois Modified ASTM C 596.
 - (4) The cement shall have a maximum expansion of 0.020 percent at 14 days, according to Illinois Modified ASTM C 1038.
 - (5) The cement shall have a minimum 80 percent relative dynamic modulus of elasticity; and shall not have a weight (mass) gain in excess of 0.15 percent or a weight (mass) loss in excess of 1.0 percent, after 100 cycles, according to AASHTO T 161, Procedure B.
- (e) Calcium Aluminate Cement. Calcium aluminate cement shall be used only where specified by the Engineer. The cement shall meet the standard physical requirements for Type I cement according to ASTM C 150, except the time of setting shall not apply. The chemical requirements shall be determined according to ASTM C 114 and shall be as follows: minimum 38 percent aluminum oxide (Al₂O₃), maximum 42 percent calcium oxide (CaO), maximum 1 percent magnesium oxide (MgO), maximum 0.4 percent sulfur trioxide (SO₃), maximum 1 percent loss on ignition, and maximum 3.5 percent insoluble residue.
- **1001.02 Uniformity of Color.** Cement contained in single loads or in shipments of several loads to the same project shall not have visible differences in color.
- **1001.03 Mixing Brands and Types.** Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall not be mixed or used alternately in the same item of construction unless approved by the Engineer.

1001.04 Storage. Cement shall be stored and protected against damage, such as dampness which may cause partial set or hardened lumps. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall be kept separate."

CERTIFICATION OF METAL FABRICATOR (BDE)

Effective: July 1, 2010

Revise Article 106.08 of the Standard Specifications to read:

"106.08 Certification of Metal Fabricator. All fabricators performing work on metal components of structures shall be certified under the appropriate category of the AISC Quality Certification Program as follows.

- (a) Fabricators of the main load carrying steel components of welded plate girder, box girder, truss, and arch structures shall be certified under Category MBr (Major Steel Bridges).
- (b) Fabricators of the main load carrying steel components of rolled beam structures, either simple span or continuous, and overhead sign structures shall be certified under Category SBr (Simple Steel Bridges).

Fabricators of steel or other non-ferrous metal components of structures not certified under (a) or (b) above shall be certified under the program for Bridge and Highway Metal Component Manufacturers."

CONCRETE ADMIXTURES (BDE)

Effective: January 1, 2003 Revised: April 1, 2009

Replace the first paragraph of Article 1020.05(b) of the Standard Specifications to read:

"(b) Admixtures. The use of admixtures to increase the workability or to accelerate the hardening of the concrete will be permitted when approved by the Engineer. Admixture dosages shall result in the mixture meeting the specified plastic and hardened properties. The Department will maintain an Approved List of Corrosion Inhibitors. Corrosion inhibitor dosage rates shall be according to Article 1020.05(b)(12). Department will also maintain an Approved List of Concrete Admixtures, and an admixture technical representative shall be consulted when determining an admixture dosage from this list. The dosage shall be within the range indicated on the approved list unless the influence by other admixtures, jobsite conditions (such as a very short haul time), or other circumstances warrant a dosage outside the range. The Engineer shall be notified when a dosage is proposed outside the range. To determine an admixture dosage, air temperature, concrete temperature, cement source and quantity, finely divided mineral sources(s) and quantity, influence of other admixtures, haul time, placement conditions, and other factors as appropriate shall be considered. Engineer may request the Contractor to have a batch of concrete mixed in the lab or field to verify the admixture dosage is correct. An admixture dosage or combination of admixture dosages shall not delay the initial set of concrete by more than one hour.

When a retarding admixture is required or appropriate for a bridge deck or bridge deck overlay pour, the initial set time shall be delayed until the deflections due to the concrete dead load are no longer a concern for inducing cracks in the completed work. However, a retarding admixture shall not be used to further extend the pour time and justify the alteration of a bridge deck pour sequence.

When determining water in admixtures for water/cement ratio, the Contractor shall calculate 70 percent of the admixture dosage as water, except a value of 50 percent shall be used for a latex admixture used in bridge deck latex concrete overlays."

Revise Section 1021 of the Standard Specifications to read:

"SECTION 1021. CONCRETE ADMIXTURES

1021.01 **General.** Admixtures shall be furnished in liquid form ready for use. The admixtures shall be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer. Delivery shall be accompanied by a ticket which clearly identifies the manufacturer and trade name of the material. Containers shall be readily identifiable as to manufacturer and trade name of the material they contain.

Corrosion inhibitors will be maintained on the Department's Approved List of Corrosion Inhibitors. All other concrete admixture products will be maintained on the Department's Approved List of Concrete Admixtures. For the admixture submittal, a report prepared by an independent laboratory accredited by the AASHTO Materials Reference Laboratory (AMRL) for Portland Cement Concrete shall be provided. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications. However, for corrosion inhibitors the ASTM G 109 test information specified in ASTM C 1582 is not required to be from and independent lab. All other information in ASTM C 1582 shall be from and independent lab.

Tests shall be conducted using materials and methods specified on a "test" concrete and a "reference" concrete, together with a certification that no changes have been made in the formulation of the material since the performance of the tests. Per the manufacturer's option, the cement content for all required tests shall either be according to applicable specifications or 5.65 cwt/cu yd (335 kg/cu m). Compressive strength test results for six months and one year will not be required.

Prior to the approval of an admixture, the Engineer reserves the right to request a sample for testing. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). For freeze-thaw testing, the Department will perform the test according to AASHTO T 161, Procedure B. The flexural strength test will be performed according to AASHTO T 177. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The test and reference concrete mixture shall contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO.

The manufacturer shall include in the submittal the following admixture information: the manufacturing range for specific gravity, the midpoint and manufacturing range for residue by oven drying, and the manufacturing range for pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

For air-entraining admixtures according to Article 1021.02, the specific gravity allowable manufacturing range shall be established by the manufacturer and the test method shall be according to ASTM C 494. For residue by oven drying and pH, the allowable manufacturing range and test methods shall be according to ASTM C 260.

For admixtures according to Articles 1021.03, 1021.04, 1021.05, 1021.06, and 1021.07, the pH allowable manufacturing range shall be established by the manufacturer and the test method shall be according to ASTM E 70. For specific gravity and residue by oven drying, the allowable manufacturing range and test methods shall be according to ASTM C 494.

When test results are more than seven years old, the manufacturer shall re-submit the infrared spectrophotometer trace and the report prepared by an independent laboratory accredited by AASHTO.

All admixtures, except chloride-based accelerators, shall contain a maximum of 0.3 percent chloride by weight (mass).

Random field samples may be taken by the Department to verify an admixture meets specification. A split sample will be provided to the manufacturer if requested. Admixtures that do not meet specification requirements or an allowable manufacturing range established by the manufacturer shall be replaced with new material.

1021.02Air-Entraining Admixtures. Air-entraining admixtures shall be according to AASHTO M 154.

1021.03 Retarding and Water-Reducing Admixtures. The admixture shall be according to the following.

- (a) The retarding admixture shall be according to AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) The water-reducing admixture shall be according to AASHTO M 194, Type A.
- (c) The high range water-reducing admixture shall be according to AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding).

1021.04Accelerating Admixtures. The admixture shall be according to AASHTO M 194, Type C (accelerating) or Type E (water reducing and accelerating).

1021.05Self-Consolidating Admixtures. The self-consolidating admixture system shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete mixture that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

The high range water-reducing admixture shall be according to AASHTO M 194, Type F.

The viscosity modifying admixture shall be according to ASTM C 494, Type S (specific performance).

1021.06Rheology-Controlling Admixture. The rheology-controlling admixture shall be capable of producing a concrete mixture with a lower yield stress that will consolidate easier for slipform applications used by the Contractor. The rheology-controlling admixture shall be according to ASTM C 494, Type S (specific performance).

1021.07Corrosion Inhibitor. The corrosion inhibitor shall be according to one of the following.

- (a) Calcium Nitrite. The corrosion inhibitor shall contain a minimum 30 percent calcium nitrite by weight (mass) of solution, and shall comply with the requirements of AASHTO M 194, Type C (accelerating).
- (b) Other Materials. The corrosion inhibitor shall be according to ASTM C 1582."

CONCRETE JOINT SEALER (BDE)

Effective: January 1, 2009

Add the following to the end of the second paragraph of Article 503.19 of the Standard Specifications:

"After the surface is clean and before applying protective coat, joints being sealed according to Section 588 shall be covered with a masking tape."

Revise Section 588 of the Standard Specifications to read:

"SECTION 588. CONCRETE JOINT SEALER

588.01 Description. This work shall consist of sealing the transverse joint in the bridge roadway slab.

588.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Hot-Poured Joint Sealer	1050.02
(b) Preformed Flexible Foam Expansion Joint Filler	1051.09

CONSTRUCTION REQUIREMENTS

588.03 General. The faces of all joints to be sealed shall be free of foreign matter, curing compound, oils, grease, dirt, free water, and laitance. Concrete joints to be sealed shall be free of cracked or spalled areas. Any cracked areas shall be chipped back to sound concrete before placing joint sealer.

The hot-poured joint sealer shall be placed when the air temperature in the shade is 40 $^{\circ}$ F (5 $^{\circ}$ C) or higher, unless approved by the Engineer.

A continuous length of expansion joint filler of the size designated on the plans, shall be placed in the joint opening at the depth below the finished surface of the joint shown on the plans. Hot-poured joint sealer shall be stirred during heating to prevent localized overheating. The sealing material shall be applied to each joint opening according to the details shown on the plans or as directed by the Engineer, without spilling on the exposed concrete surfaces.

All bridge joints shall be filled to 1/4 in. (6 mm) below the finished surface of the joint. This is to be interpreted to mean that the surface of the sealant shall be level and the point of its contact with the sidewalls of the joint shall be 1/4 in. (6 mm) below the finished surface of the joint.

Any sealing compound that is not bonded to the joint wall or face 24 hours after placing shall be removed and the joint shall be cleaned and resealed.

588.04 Basis of Payment. This work will not be paid for as a separate item, but shall be considered as included in the unit price bid for the major item of construction involved."

CONCRETE MIX DESIGNS (BDE)

Effective: April 1, 2009

Add the following to Article 1020.05(c) of the Standard Specifications:

- "(5) Performance Based Finely Divided Mineral Combination. For Class PV and SI concrete a performance based finely divided mineral combination may be used. The minimum cement factor, maximum cement factor, and water cement ratio of Article 1020.04 shall be replaced with the values below, and the performance based finely divided mineral combination herein is an alternative to Articles 1020.05(c)(1), (c)(2), (c)(3), and (c)(4). The mix design shall meet the following requirements and the Engineer may request a trial batch.
 - a. The mixture shall contain a minimum of 375 lbs/cu yd (222 kg/cu m) of portland cement. For a blended cement, a sufficient amount shall be used to obtain the required 375 lbs/cu yd (222 kg/cu m) of portland cement in the mixture. For example, a blended cement stated to have 20 percent finely divided mineral, ignoring any ASTM C 595 tolerance on the 20 percent, would require a minimum of 469 lbs/cu yd (278 kg/cu m) of material in the mixture. When the mixture is designed for cement content from 375 lbs/cu yd (222 kg/cu m) to 400 lbs/cu yd (237 kg/cu m), the total of organic processing additions, inorganic processing additions, and limestone addition in the cement shall not exceed 5.0 percent.
 - b. The mixture shall contain a maximum of two finely divided minerals. The finely divided mineral in a blended cement shall count toward the total number of finely divided minerals allowed. The finely divided mineral(s) shall constitute a maximum of 35.0 percent of the total cement plus finely divided mineral(s). The fly ash portion shall not exceed 30.0 percent for Class C fly ash or 25.0 percent for Class F fly ash. The Class C and F fly ash combination shall not exceed 30.0 percent. The ground granulated blast-furnace slag portion shall not exceed 35.0 percent.

The microsilica or high-reactivity metakaolin portion used together or separately shall not exceed 5.0 percent. The finely divided mineral in the blended cement shall apply to the maximum 35.0 percent, and shall be determined as discussed in a. above for determining portland cement in blended cement.

c. For central mixed Class PV and SI concrete, the mixture shall contain a minimum of 535 lbs/cu yd (320 kg/cu m) of cement and finely divided mineral(s) summed together, and a water-reducing admixture shall be used. The value shall be 565 lbs/cu yd (335 kg/cu m) without a water-reducing admixture.

For truck mixed or shrink mixed Class PV and SI concrete, the mixture shall contain a minimum of 575 lbs/cu yd (345 kg/cu m) of cement and finely divided mineral(s) summed together, and a water-reducing admixture shall be used. The value shall be 605 lbs/cu yd (360 kg/cu m) without a water-reducing admixture.

- d. The mixture shall contain a maximum of 705 lbs/cu yd (418 kg/cu m) of cement and finely divided mineral(s) summed together.
- e. The mixture shall have a water/cement ratio of 0.32 0.44.
- f. The mixture shall not be used for placement underwater.
- g. The combination of cement and finely divided mineral(s) shall have an ASTM C 1567 expansion value ≤ 0.16 percent, and shall be performed on the aggregate in the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly.

If during the two year time period the Contractor needs to replace the portland cement, and the replacement portland cement has an equal or lower total equivalent alkali content ($Na_2O + 0.658K_2O$), a new ASTM C 1567 test will not be required. However, replacement of a blended cement with another cement will require a new ASTM C 1567 test."

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term "equipment" refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment's respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 1/	600-749	2002
	750 and up	2006
June 1, 2011 ^{2/}	100-299	2003
,	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 ^{2/}	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

- 1/ Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.
- 2/ Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) Verified Retrofit
 Technology List (http://www.epa.gov/otag/retrofit/verif-list.htm), or verified by the
 California Air Resources Board (CARB) (http://www.arb.ca.gov/diesel/verde/verdev.htm);
 or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer.

Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

Diesel Retrofit Deficiency Deduction

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected. Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

CONSTRUCTION AIR QUALITY - DIESEL VEHICLE EMISSIONS CONTROL (BDE)

Effective: April 1, 2009 Revised: July 1, 2009

<u>Diesel Vehicle Emissions Control</u>. The reduction of construction air emissions shall be accomplished by using cleaner burning diesel fuel. The term "equipment" refers to any and all diesel fuel powered devices rated at 50 hp and above, to be used on the project site in excess of seven calendar days over the course of the construction period on the project site (including any "rental" equipment).

All equipment on the jobsite, with engine ratings of 50 hp and above, shall be required to: use Ultra Low Sulfur Diesel fuel (ULSD) exclusively (15 ppm sulfur content or less).

Diesel powered equipment in non-compliance will not be allowed to be used on the project site, and is also subject to a notice of non-compliance as outlined below.

The Contractor shall submit copies of monthly summary reports and include certified copies of the ULSD diesel fuel delivery slips for diesel fuel delivered to the jobsite for the reporting time period, noting the quantity of diesel fuel used.

If any diesel powered equipment is found to be in non-compliance with any portion of this specification, the Engineer will issue the Contractor a notice of non-compliance and identify an appropriate period of time, as outlined below under environmental deficiency deduction, in which to bring the equipment into compliance or remove it from the project site.

Any costs associated with bringing any diesel powered equipment into compliance with these diesel vehicle emissions controls shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall also not be grounds for a claim.

<u>Environmental Deficiency Deduction</u>. When the Engineer is notified, or determines that an environmental control deficiency exists, he/she will notify the Contractor in writing, and direct the Contractor to correct the deficiency within a specified time period. The specified time-period, which begins upon Contractor notification, will be from 1/2 hour to 24 hours long, based on the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge regarding the time period.

The deficiency will be based on lack of repair, maintenance and diesel vehicle emissions control.

If the Contractor fails to correct the deficiency within the specified time frame, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

If a Contractor or subcontractor accumulates three environmental deficiency deductions in a contract period, the Contractor will be shutdown until the deficiency is corrected. Such a shutdown will not be grounds for any extension of contract time, waiver of penalties, or be grounds for any claim.

CONSTRUCTION AIR QUALITY - IDLING RESTRICTIONS (BDE)

Effective: April 1, 2009

Idling Restrictions. The Contractor shall establish truck-staging areas for all diesel powered vehicles that are waiting to load or unload material at the jobsite. Staging areas shall be located where the diesel emissions from the equipment will have a minimum impact on adjacent sensitive receptors. The Department will review the selection of staging areas, whether within or outside the existing highway right-of-way, to avoid locations near sensitive areas or populations to the extent possible. Sensitive receptors include, but are not limited to, hospitals, schools, residences, motels, hotels, daycare facilities, elderly housing and convalescent facilities. Diesel powered engines shall also be located as far away as possible from fresh air intakes, air conditioners, and windows. The Engineer will approve staging areas before implementation.

Diesel powered vehicle operators may not cause or allow the motor vehicle, when it is not in motion, to idle for more than a total of 10 minutes within any 60 minute period, except under any of the following circumstances:

- 1) The motor vehicle has a gross vehicle weight rating of less than 8000 lb (3630 kg).
- 2) The motor vehicle idles while forced to remain motionless because of on-highway traffic, an official traffic control device or signal, or at the direction of a law enforcement official.
- 3) The motor vehicle idles when operating defrosters, heaters, air conditioners, or other equipment solely to prevent a safety or health emergency.
- 4) A police, fire, ambulance, public safety, other emergency or law enforcement motor vehicle, or any motor vehicle used in an emergency capacity, idles while in an emergency or training mode and not for the convenience of the vehicle operator.
- 5) The primary propulsion engine idles for maintenance, servicing, repairing, or diagnostic purposes if idling is necessary for such activity.
- 6) A motor vehicle idles as part of a government inspection to verify that all equipment is in good working order, provided idling is required as part of the inspection.
- 7) When idling of the motor vehicle is required to operate auxiliary equipment to accomplish the intended use of the vehicle (such as loading, unloading, mixing, or processing cargo; controlling cargo temperature; construction operations, lumbering operations; oil or gas well servicing; or farming operations), provided that this exemption does not apply when the vehicle is idling solely for cabin comfort or to operate non-essential equipment such as air conditioning, heating, microwave ovens, or televisions.
- 8) When the motor vehicle idles due to mechanical difficulties over which the operator has no control.
- 9) The outdoor temperature is less than 32 °F (0 °C) or greater than 80 °F (26 °C).

When the outdoor temperature is greater than or equal to 32 °F (0 °C) or less than or equal to 80 °F (26 °C), a person who operates a motor vehicle operating on diesel fuel shall not cause or allow the motor vehicle to idle for a period greater than 30 minutes in any 60 minute period while waiting to weigh, load, or unload cargo or freight, unless the vehicle is in a line of vehicles that regularly and periodically moves forward.

The above requirements do not prohibit the operation of an auxiliary power unit or generator set as an alternative to idling the main engine of a motor vehicle operating on diesel fuel.

<u>Environmental Deficiency Deduction</u>. When the Engineer is notified, or determines that an environmental control deficiency exists based on non-compliance with the idling restrictions, he/she will notify the Contractor, and direct the Contractor to correct the deficiency.

If the Contractor fails to correct the deficiency a monetary deduction will be imposed. The monetary deduction will be \$1,000.00 for each deficiency identified.

DETERMINATION OF THICKNESS (BDE)

Effective: April 1, 2009

Revise Articles 353.12 and 353.13 of the Standard Specifications to Articles 353.13 and 353.14 respectively.

Add the following Article to the Standard Specifications:

"353.12 Tolerance in Thickness. The thickness of base course pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction, bike paths, and individual locations less than 500 ft (150 m) long, will be evaluated.

Temporary construction is defined as those areas constructed and removed under the same contract. If the base course cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course thickness.

The procedure described in Article 407.10(b) will be followed, except the option of correcting deficient pavement with additional lift(s) shall not apply."

Revise Article 354.09 of the Standard Specifications to read:

"354.09 Tolerance in Thickness. The thickness of base course widening pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 3 ft (1 m) wide or 1000 ft (300 m) long, will be evaluated. Temporary construction is defined as those areas constructed and removed under the same contract. If the base course widening cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course widening thickness.

The procedure described in Article 407.10(b) will be followed, except:

- (a) The width of a unit shall be the width of the widening along one edge of the pavement.
- (b) The length of the unit shall be 1000 ft (300 m).
- (c) The option of correcting deficient pavement with additional lift(s) shall not apply."

Revise Article 355.09 of the Standard Specifications to read:

"355.09 Tolerance in Thickness. The thickness of HMA base course pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 500 ft (150 m) long, will be evaluated according to Article 407.10(b). Temporary construction is defined as those areas constructed and removed under the same contract. If the base course cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course thickness."

Revise Article 356.07 of the Standard Specifications to read:

"356.07 Tolerance in Thickness. The thickness of HMA base course widening pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 3 ft (1 m) wide or 1000 ft (300 m) long, will be evaluated according to Article 407.10(b) except, the width of a unit shall be the width of the widening along one edge of the pavement and the length of a unit shall be 1000 ft (300 m). Temporary locations are defined as those constructed and removed under the same contract. If the base course widening cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s)and subtract them from the measured core thickness to determine the base course widening thickness."

Revise Article 407.10 of the Standard Specifications to read:

"407.10 Tolerance in Thickness. Determination of pavement thickness shall be performed after the pavement surface tests and corrective action have been completed according to Article 407.09. Pay adjustments made for pavement thickness will be in addition to and independent of those made for pavement smoothness. Pavement pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous pavement shall be evaluated with the following exclusions: temporary pavements; variable width pavements; radius returns; short lengths of contiguous pavements less than 500 ft (125 m) in length; and constant width portions of turn lanes less than 500 ft (125 m) in length. Temporary pavements are defined as pavements constructed and removed under the same contract.

The method described in Article 407.10(a), shall be used except for those pavements constructed in areas where access to side streets and entrances necessitates construction in segments less than 1000 ft (300 m). The method described in Article 407.10(b) shall be used in areas where access to side streets and entrances necessitates construction in segments less than 1000 ft (300 m).

- (a) Percent Within Limits. The percent within limits (PWL) method shall be as follows.
 - (1) Lots and Sublots. The pavement will be divided into approximately equal lots of not more than 5000 ft (1500 m) in length. When the length of a continuous strip of pavement is 500 ft (1500 m) or greater but less than 5000 ft (1500 m), these short lengths of pavement, ramps, turn lanes, and other short sections of continuous pavement will be grouped together to form lots approximately 5000 ft (1500 m) in length. Short segments between structures will be measured continuously with the structure segments omitted. Each lot will be subdivided into ten equal sublots. The width of a sublot and lot will be the width from the pavement edge to the adjacent lane line, from one lane line to the next, or between pavement edges for single-lane pavements.
 - (2) Cores. Cores 2 in. (50 mm) in diameter shall be taken from the pavement by the Contractor, at locations selected by the Engineer. The exact location for each core will be selected at random, but will result in one core per sublot. Core locations will be specified prior to beginning the coring operations.

The Contractor and the Engineer shall witness the coring operations, as well as the measuring and recording of the core lengths. The cores will be measured with a device supplied by the Department immediately upon removal from the core bit and prior to moving to the next core location. Upon concurrence of the length, the core samples shall be disposed of according to Article 202.03.

Upon completion of each core, all water shall be removed from the hole and the hole then filled with a rapid hardening mortar or concrete. The material shall be mixed in a separate container, placed in the hole, consolidated by rodding, and struck-off flush with the adjacent pavement.

(3) Deficient Sublot. When the length of the core in a sublot is deficient by more than ten percent of plan thickness, the Contractor may take three additional cores within that sublot at locations selected at random by the Engineer. If the Contractor chooses not to take additional cores, the pavement in that sublot shall be removed and replaced.

When the three additional cores are taken, the length of those cores will be averaged with the original core length. If the average shows the sublot to be deficient by ten percent or less, no additional action is necessary. If the average shows the sublot to be deficient by more than ten percent, the pavement in that sublot shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such deficient sublots to remain in place. For deficient sublots allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When a deficient sublot is removed and replaced, or additional lifts are placed, the corrected sublot shall be retested for thickness. The length of the new core taken in the sublot will be used in determining the PWL for the lot.

When a deficient sublot is left in place, and no additional lift(s) are placed, no payment will be made for the deficient sublot. The length of the original core taken in the sublot will be used in determining the PWL for the lot.

(4) Deficient Lot. After addressing deficient sublots, the PWL for each lot will be determined. When the PWL of a lot is 60 percent or less, the pavement in that lot shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such deficient lots to remain in place. For deficient lots allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When a deficient lot is removed and replaced, or additional lifts are placed, the corrected lot shall be retested for thickness. The PWL for the lot will then be recalculated based upon the new cores; however, the pay factor for the lot shall be a maximum of 100 percent.

When a deficient lot is left in place, and no additional lift(s) are placed, the PWL for the lot will not be recalculated.

(5) Right of Discovery. When the Engineer has reason to believe the random core selection process will not accurately represent the true conditions of the work, he/she may order additional cores. The additional cores shall be taken at specific locations determined by the Engineer. The Engineer will provide notice to the Contractor containing an explanation of the reasons for his/her action. The need for, and location of, additional cores will be determined prior to commencement of coring operations.

When the additional cores show the pavement to be deficient by more than ten percent of plan thickness, more additional cores shall be taken to determine the limits of the deficient pavement and that area shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such areas of deficient pavement to remain in place.

The area of deficient pavement will be defined using the length between two acceptable cores and the full width of the sublot. An acceptable core is a core with a length of at least 90 percent of plan thickness.

For deficient areas allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When an area of deficient pavement is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness.

When an area of deficient pavement is left in place, and no additional lift(s) are placed, no payment will be made for the deficient pavement.

When the additional cores show the pavement to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04.

- (6) Profile Index Adjustment. After any area of pavement is removed and replaced or any additional lifts are placed, the corrected areas shall be retested for pavement smoothness and any necessary profile index adjustments and/or corrections will be made based on these final profile readings prior to retesting for thickness.
- (7) Determination of PWL. The PWL for each lot will be determined as follows.

Definitions:

xi = Individual values (core lengths) under consideration

n = Number of individual values under consideration (10 per lot)

 \bar{x} = Average of the values under consideration

LSL = Lower Specification Limit (98% of plan thickness)

 Q_1 = Lower Quality Index

s = Sample Standard Deviation

PWL = Percent Within Limits

Determine \bar{x} for the lot to the nearest two decimal places.

Determine *s* for the lot to the nearest three decimal places using:

$$S = \sqrt{\frac{\sum (x_i - \overline{x})^2}{n - 1}} \quad \text{where} \qquad \sum (x_i - \overline{x})^2 = (x_1 - \overline{x})^2 + (x_2 - \overline{x})^2 + \dots + (x_{10} - \overline{x})^2$$

Determine Q₁ for the lot to the nearest two decimal places using:

$$Q_{L} = \frac{\left(\overline{x} - LSL\right)}{S}$$

Determine PWL for the lot using the Q_L and the following table. For Q_L values less than zero the value shown in the table must be subtracted from 100 to obtain PWL.

(8) Pay Factors. The pay factor (PF) for each lot will be determined, to the nearest two decimal places, using:

PF (in percent) = 55 + 0.5 (PWL)

If \bar{x} for a lot is less than the plan thickness, the maximum PF for that lot shall be 100 percent.

(9) Payment. Payment of incentive or disincentive for pay items subject to the PWL method will be calculated using:

Payment = (((TPF/100)-1) x CUP) x (TOTPAVT - DEFPAVT)

TPF = Total Pay Factor CUP = Contract Unit Price

TOTPAVT = Area of Pavement Subject to Coring

DEFPAVT = Area of Deficient Pavement

The TPF for the pavement shall be the average of the PF for all the lots; however, the TPF shall not exceed 102 percent.

Area of Deficient pavement (DEFPAVT) is defined as an area of pavement represented by a sublot deficient by more than ten percent which is left in place with no additional thickness added.

Area of Pavement Subject to Coring (TOTPAVT) is defined as those pavement areas included in lots for pavement thickness determination.

	PERCENT WITHIN LIMITS						
	Percent		Percent		Percent		Percent
Quality	Within	Quality	Within	Quality	Within	Quality	Within
Index	Limits	Index	Limits	Index	Limits	Index	Limits
(Q _L)*	(PWL)	(Q _L)*	(PWL)	(Q _L)*	(PWL)	(Q _L)*	(PWL)
0.00	50.00	0.40	65.07	0.80	78.43	1.20	88.76
0.01	50.38	0.41	65.43	0.81	78.72	1.21	88.97
0.02	50.77	0.42	65.79	0.82	79.02	1.22	89.17
0.03	51.15	0.43	66.15	0.83	79.31	1.23	89.38
0.04	51.54	0.44	66.51	0.84	79.61	1.24	89.58
0.05	51.92	0.45	66.87	0.85	79.90	1.25	89.79
0.06	52.30	0.46	67.22	0.86	80.19	1.26	89.99
0.07	52.69	0.47	67.57	0.87	80.47	1.27	90.19
0.08	53.07	0.48	67.93	0.88	80.76	1.28	90.38
0.09	53.46	0.49	68.28	0.89	81.04	1.29	90.58
0.10	53.84	0.50	68.63	0.90	81.33	1.30	90.78
0.11	54.22	0.51	68.98	0.91	81.61	1.31	90.96
0.12	54.60	0.52	69.32	0.92	81.88	1.32	91.15
0.13	54.99	0.53	69.67	0.93	82.16	1.33	91.33
0.14	55.37	0.54	70.01	0.94	82.43	1.34	91.52
0.15	55.75	0.55	70.36	0.95	82.71	1.35	91.70
0.16	56.13	0.56	70.70	0.96	82.97	1.36	91.87
0.17	56.51	0.57	71.04	0.97	83.24	1.37	92.04
0.18	56.89	0.58	71.38	0.98	83.50	1.38	92.22
0.19	57.27	0.59	71.72	0.99	83.77	1.39	92.39
0.20	57.65	0.60	72.06	1.00	84.03	1.40	92.56
0.21	58.03	0.61	72.39	1.01	84.28	1.41	92.72
0.22	58.40	0.62	72.72	1.02	84.53	1.42	92.88
0.23	58.78	0.63	73.06	1.03	84.79	1.43	93.05
0.24	59.15	0.64	73.39	1.04	85.04	1.44	93.21
0.25	59.53	0.65	73.72	1.05	85.29	1.45	93.37
0.26	59.90	0.66	74.04	1.06	85.53	1.46	93.52
0.27	60.28	0.67	74.36	1.07	85.77	1.47	93.67
0.28	60.65	0.68	74.69	1.08	86.02	1.48	93.83
0.29	61.03	0.69	75.01	1.09	86.26	1.49	93.98
0.30	61.40	0.70	75.33	1.10	86.50	1.50	94.13
0.31	61.77	0.71	75.64	1.11	86.73	1.51	94.27
0.32	62.14	0.72	75.96	1.12	86.96	1.52	94.41
0.33	62.51	0.73	76.27	1.13	87.20	1.53	94.54
0.34	62.88	0.74	76.59	1.14	87.43	1.54	94.68
0.35	63.25	0.75	76.90	1.15	87.66	1.55	94.82
0.36	63.61	0.76	77.21	1.16	87.88	1.56	94.95
0.37	63.98	0.77	77.51	1.17	88.10	1.57	95.08
0.38	64.34	0.78	77.82	1.18	88.32	1.58	95.20
0.39	64.71	0.79	78.12	1.19	88.54	1.59	95.33

^{*}For Q_L values less than zero, subtract the table value from 100 to obtain PWL

	PERCEN	T WITHIN	LIMITS (c	ontinued)	
Quality Index (Q _L)*	Percent Within Limits (PWL)	Quality Index (Q _L)*	Percent Within Limits (PWL)	Quality Index (Q _L)*	Percent Within Limits (PWL)
1.60 1.61 1.62 1.63 1.64	95.46 95.58 95.70 95.81 95.93	2.00 2.01 2.02 2.03 2.04	98.83 98.88 98.92 98.97 99.01	2.40 2.41 2.42 2.43 2.44	99.89 99.90 99.91 99.91 99.92
1.65 1.66 1.67 1.68 1.69	96.05 96.16 96.27 96.37 96.48	2.05 2.06 2.07 2.08 2.09	99.06 99.10 99.14 99.18 99.22	2.45 2.46 2.47 2.48 2.49	99.93 99.94 99.94 99.95 99.95
1.70 1.71 1.72 1.73 1.74	96.59 96.69 96.78 96.88 96.97	2.10 2.11 2.12 2.13 2.14	99.26 99.29 99.32 99.36 99.39	2.50 2.51 2.52 2.53 2.54	99.96 99.96 99.97 99.97
1.75 1.76 1.77 1.78 1.79	97.07 97.16 97.25 97.33 97.42	2.15 2.16 2.17 2.18 2.19	99.42 99.45 99.48 99.50 99.53	2.55 2.56 2.57 2.58 2.59	99.98 99.98 99.98 99.99
1.80 1.81 1.82 1.83 1.84	97.51 97.59 97.67 97.75 97.83	2.20 2.21 2.22 2.23 2.22	99.56 99.58 99.61 99.63 99.66	2.60 2.61 2.62 2.63 2.64	99.99 99.99 99.99 100.00 100.00
1.85 1.86 1.87 1.88 1.89	97.91 97.98 98.05 98.11 98.18	2.25 2.26 2.27 2.28 2.29	99.68 99.70 99.72 99.73 99.75	≥ 2.65	100.00
1.90 1.91 1.92 1.93 1.94	98.25 98.31 98.37 98.44 98.50	2.30 2.31 2.32 2.33 2.34	99.77 99.78 99.80 99.81 99.83		
1.95 1.96 1.97 1.98 1.99	98.56 98.61 98.67 98.72 98.78	2.35 2.36 2.37 2.38 2.39	99.84 99.85 99.86 99.87 99.88		

^{*}For Q_L values less than zero, subtract the table value from 100 to obtain PWL

- (b) Minimum Thickness. The minimum thickness method shall be as follows.
 - (1) Length of Units. The length of a unit will be a continuous strip of pavement 500 ft (150 m) in length.
 - (2) Width of Units. The width of a unit will be the width from the pavement edge to the adjacent lane line, from one lane line to the next, or between pavement edges for single-lane pavements.
 - (3) Thickness Measurements. Pavement thickness will be based on 2 in. (50 mm) diameter cores.

Cores shall be taken from the pavement by the Contractor at locations selected by the Engineer. When determining the thickness of a unit, one core shall be taken in each unit.

The Contractor and the Engineer shall witness the coring operations, as well as the measuring and recording of the cores. Core measurements will be determined immediately upon removal from the core bit and prior to moving to the next core location. Upon concurrence of the length, the core samples may be disposed of according to Article 202.03.

Upon completion of each core, all water shall be removed from the hole and the hole then filled with a rapid hardening mortar or concrete. The material shall be mixed in a separate container, placed in the hole, consolidated by rodding, and struck-off flush with the adjacent pavement.

- (4) Unit Deficient in Thickness. In considering any portion of the pavement that is deficient, the entire limits of the unit will be used in computing the deficiency or determining the remedial action required.
- (5) Thickness Equals or Exceeds Specified Thickness. When the thickness of a unit equals or exceeds the specified plan thickness, payment will be made at the contract unit price per square yard (square meter) for the specified thickness.
- (6) Thickness Deficient by Ten Percent or Less. When the thickness of a unit is less than the specified plan thickness by ten percent or less, a deficiency deduction will be assessed against payment for the item involved. The deficiency will be a percentage of the contract unit price as given in the following table.

Percent Deficiency (of Plan Thickness)	Percent Deduction (of Contract Unit Price)
0.0 to 2.0 2.1 to 3.0	0 20
3.1 to 4.0	28
4.1 to 5.0 5.1 to 7.5	32 43
7.6 to 10.0	50

(7) Thickness Deficient by More than Ten Percent. When a core shows the pavement to be deficient by more than ten percent of plan thickness, additional cores shall be taken on each side of the deficient core, at stations selected by the Contractor and offsets selected by the Engineer, to determine the limits of the deficient pavement. No core shall be located within 5 ft (1.5 m) of a previous core obtained for thickness determination. The first acceptable core obtained on each side of a deficient core will be used to determine the length of the deficient pavement. An acceptable core is a core with a thickness of at least 90 percent of plan thickness. The area of deficient pavement will be defined using the length between two acceptable cores and the full width of the unit. The area of deficient pavement shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such areas of deficient payement to remain in place. For deficient areas allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When an area of deficient pavement is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness. The thickness of the new core will be used to determine the pay factor for the corrected area.

When an area of deficient pavement is left in place, and no additional lift(s) are placed, no payment will be made for the deficient pavement. In addition, an amount equal to two times the contract cost of the deficient pavement will be deducted from the compensation due the Contractor.

The thickness of the first acceptable core on each side of the core more than ten percent deficient will be used to determine any needed pay adjustments for the remaining areas on each side of the area deficient by more than ten percent. The pay adjustment will be determined according to Article 407.10(b)(6).

(8) Right of Discovery. When the Engineer has reason to believe any core location does not accurately represent the true conditions of the work, he/she may order additional cores. These additional cores shall be taken at specific locations determined by the Engineer. The Engineer will provide notice to the Contractor containing an explanation of the reasons for his/her action.

When the additional cores show the pavement to be deficient by more than ten percent of plan thickness, the procedures outlined in Article 407.10(b)(7) shall be followed, except the Engineer will determine the additional core locations.

When the additional cores, ordered by the Engineer, show the pavement to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04.

(9) Profile Index Adjustment. After any area of pavement is removed and replaced or any additional lifts are added, the corrected areas shall be retested for pavement smoothness and any necessary profile index adjustments and/or corrections will be made based on these final profile readings prior to retesting for thickness."

Revise Article 482.06 of the Standard Specifications to read:

"482.06 Tolerance in Thickness. The shoulder shall be constructed to the thickness shown on the plans. When the contract includes square yards (square meters) as the unit of measurement for HMA shoulder, thickness determinations shall be made according to Article 407.10(b)(3) and the following.

- (a) Length of the Units. The length of a unit shall be a continuous strip of shoulder 2500 ft (750 m) long.
- (b) Width of the Units. The width of the unit shall be the full width of the shoulder.
- (c) Thickness Deficient by More than Ten Percent. When a core shows the shoulder to be deficient by more than ten percent of plan thickness, additional cores shall be taken on each side of the deficient core, at stations selected by the Contractor and offsets selected by the Engineer, to determine the limits of the deficient shoulder. No core shall be located within 5 ft (1.5 m) of a previous core obtained for thickness determination. The first acceptable core obtained on each side of a deficient core will be used to determine the length of the deficient shoulder. An acceptable core is a core with a thickness of at least 90 percent of plan thickness. The area of deficient shoulder will be defined using the length between two acceptable cores and the full width of the unit. The area of deficient shoulder shall be brought to specified thickness by the addition of the applicable mixture, at no additional cost to the Department and subject to the lift thickness requirements of Article 312.05, or by removal and replacement with a new mixture. However, the surface elevation of the completed shoulder shall not exceed by more than 1/8 in. (3 mm) the surface elevation of the adjacent payement. When requested in writing by the Contractor, the Engineer may permit in writing such thin shoulder to remain in place. When an area of thin shoulder is left in place, and no additional lift(s) are placed, no payment will be made for the thin shoulder. In addition, an amount equal to two times the contract unit price of the shoulder will be deducted from the compensation due the Contractor.

When an area of deficient shoulder is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness.

(d) Right of Discovery. When the Engineer has reason to believe any core location does not accurately represent the true conditions of the work, he/she may order additional cores. When the additional cores, ordered by the Engineer, show the shoulder to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04. When the additional core shows the shoulder to be less than 90 percent of plan thickness, the procedure in (c), above shall be followed."

Revise Article 483.07 of the Standard Specifications to read:

"483.07 Tolerance in Thickness. The shoulder shall be constructed to the thickness shown on the plans. Thickness determinations shall be made according to Article 482.06 except the option of correcting deficient pavement with additional lift(s) shall not apply."

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000 Revised: January 1, 2010

<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 7.00% 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 may consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217)785-4611, or by visiting the Department's web site at www.dot.il.gov.

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

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

- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
- b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision and that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons why good faith efforts have not been found.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery.

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

<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.

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

Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:

- (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
- That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
- (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonably competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted.
- (f) If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (g) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau of Small Business Enterprises and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau of Small Business Enterprises will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.
- (h) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed.

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

- (i) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (j) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

DOWEL BARS (BDE)

Effective: April 1, 2007 Revised: January 1, 2008

Revise the fifth and sixth sentences of Article 1006.11(b) of the Standard Specifications to read:

"The bars shall be epoxy coated according to AASHTO M 284, except the thickness of the epoxy shall be 7 to 12 mils (0.18 to 0.30 mm) and patching of the ends will not be required. The epoxy coating applicator shall be certified according to the current Bureau of Materials and Physical Research Policy Memorandum, "Epoxy Coating Plant Certification Procedure". The Department will maintain an approved list."

ENGINEER'S FIELD OFFICE TYPE A (BDE)

Effective: April 1, 2007 Revised: August 1, 2008

Revise Article 670.02 of the Standard Specifications to read:

"670.02 Engineer's Field Office Type A. Type A field offices shall have a minimum ceiling height of 7 ft (2 m) and a minimum floor space 450 sq ft (42 sq m). The office shall be provided with sufficient heat, natural and artificial light, and air conditioning.

The office shall have an electronic security system that will respond to any breach of exterior doors and windows. Doors and windows shall be equipped with locks. Doors shall also be equipped with dead bolt locks or other secondary locking device.

Windows shall be equipped with exterior screens to allow adequate ventilation. All windows shall be equipped with interior shades, curtains, or blinds. Adequate all-weather parking space shall be available to accommodate a minimum of ten vehicles.

Suitable on-site sanitary facilities meeting Federal, State, and local health department requirements shall be provided, maintained clean and in good working condition, and shall be stocked with lavatory and sanitary supplies at all times.

Sanitary facilities shall include hot and cold potable running water, lavatory and toilet as an integral part of the office where available. Solid waste disposal consisting of two waste baskets and an outside trash container of sufficient size to accommodate a weekly provided pick-up service.

In addition, the following furniture and equipment shall be furnished.

- (a) Four desks with minimum working surface 42 x 30 in. (1.1 m x 750 mm) each and five non-folding chairs with upholstered seats and backs.
- (b) One desk with minimum working surface 48 x 72 in. (1.2 x 1.8 m) with height adjustment of 23 to 30 in. (585 to 750 mm).
- (c) One four-post drafting table with minimum top size of 37 1/2 x 48 in. (950 mm x 1.2 m). The top shall be basswood or equivalent and capable of being tilted through an angle of 50 degrees. An adjustable height drafting stool with upholstered seat and back shall also be provided.
- (d) Two free standing four drawer legal size file cabinet with lock and an underwriters' laboratories insulated file device 350 degrees one hour rating.
- (e) One 6 ft (1.8 m) folding table with six folding chairs.
- (f) One equipment cabinet of minimum inside dimension of 44 in. (1100 mm) high x 24 in. (600 mm) wide x 30 in. (750 mm) deep with lock. The walls shall be of steel with a 3/32 in. (2 mm) minimum thickness with concealed hinges and enclosed lock constructed in such a manner as to prevent entry by force. The cabinet assembly shall be permanently attached to a structural element of the field office in a manner to prevent theft of the entire cabinet.
- (g) One refrigerator with a minimum size of 16 cu ft (0.45 cu m) with a freezer unit.
- (h) One electric desk type tape printing calculator.
- (i) A minimum of two communication paths. The configuration shall include:
 - (1) Internet Connection. An internet service connection using telephone DSL, cable broadband, or CDMA wireless technology. Additionally, an 802.11g/N wireless router shall be provided, which will allow connection by the Engineer and up to four Department staff.
 - (2) Telephone Lines. Three separate telephone lines.

- (j) One plain paper copy machine capable of reproducing prints up to 11 x 17 in. (280 x 432 mm) with an automatic feed tray capable of storing 30 sheets of paper. Letter size and 11 x 17 in. (280 x 432 mm) paper shall be provided.
- (k) One plain paper fax machine with paper.
- (I) Two telephones, with touch tone, where available, and a digital telephone answering machine, for exclusive use by the Engineer.
- (m) One electric water cooler dispenser.
- (n) One first-aid cabinet fully equipped.
- (o) One microwave oven, 1 cu ft (0.03 cu m) minimum capacity.
- (p) One fire-proof safe, 0.5 cu ft (0.01 cu m) minimum capacity.
- (q) One electric paper shredder.
- (r) One post mounted rain gauge, located on the project site for each 5 miles (8 km) of project length."

Revise the first sentence of the first paragraph of Article 670.07 of the Standard Specifications to read:

"The building or buildings fully equipped as specified will be paid for on a monthly basis until the building or buildings are released by the Engineer."

Revise the last sentence of the first paragraph of Article 670.07 of the Standard Specifications to read:

"This price shall include all utility costs and shall reflect the salvage value of the building or buildings, equipment, and furniture which become the property of the Contractor after release by the Engineer, except that the Department will pay that portion of the monthly long distance telephone bills that, when combined, exceed \$150."

EQUIPMENT RENTAL RATES (BDE)

Effective: August 2, 2007 Revised: January 2, 2008

Replace the second and third paragraphs of Article 105.07(b)(4)a. of the Standard Specifications with the following:

"Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4)."

Replace Article 109.04(b)(4) of the Standard Specifications with the following:

- "(4) Equipment. Equipment used for extra work shall be authorized by the Engineer. The equipment shall be specifically described, be of suitable size and capacity for the work to be performed, and be in good operating condition. For such equipment, the Contractor will be paid as follows.
 - a. Contractor Owned Equipment. Contractor owned equipment will be paid for by the hour using the applicable FHWA hourly rate from the "Equipment Watch Rental Rate Blue Book" (Blue Book) in effect when the force account work begins. The FHWA hourly rate is calculated as follows.

FHWA hourly rate = (monthly rate/176) x (model year adj.) x (Illinois adj.) + EOC

Where: EOC = Estimated Operating Costs per hour (from the Blue Book)

The time allowed will be the actual time the equipment is operating on the extra work. For the time required to move the equipment to and from the site of the extra work and any authorized idle (standby) time, payment will be made at the following hourly rate: 0.5 x (FHWA hourly rate - EOC).

All time allowed shall fall within the working hours authorized for the extra work.

The rates above include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance, and all incidentals. The rates do not include labor.

The Contractor shall submit to the Engineer sufficient information for each piece of equipment and its attachments to enable the Engineer to determine the proper equipment category. If a rate is not established in the Blue Book for a particular piece of equipment, the Engineer will establish a rate for that piece of equipment that is consistent with its cost and use in the industry.

b. Rented Equipment. Whenever it is necessary for the Contractor to rent equipment to perform extra work, the rental and transportation costs of the equipment plus five percent for overhead will be paid. In no case shall the rental rates exceed those of established distributors or equipment rental agencies.

All prices shall be agreed to in writing before the equipment is used."

HMA - HAULING ON PARTIALLY COMPLETED FULL-DEPTH PAVEMENT (BDE)

Effective: January 1, 2008

Revise Article 407.08 of the Standard Specifications to read:

"407.08 Hauling on the Partially Completed Full-Depth Pavement. Legally loaded trucks will be permitted on the partially completed full-depth HMA pavement only to deliver HMA mixture to the paver, provided the last lift has cooled a minimum of 12 hours. Hauling shall be limited to the distances shown in the following tables. The pavement surface temperature shall be measured using an infrared gun.

The use of water to cool the pavement to permit hauling will not be allowed. The Contractor's traffic pattern shall minimize hauling on the partially completed pavement and shall vary across the width of the pavement such that "tracking" of vehicles, one directly behind the other, does not occur.

MAXIMUM HAULING DISTANCE FOR				
PAVEME	NT SURFACE TE	MPERATURE E	BELOW 105 °F (4)	0 °C)
Total In-Place		Thickness of Li	ift Being Placed	
Thickness Being	3 in. (75 m	m) or less	More than 3	in. (75 mm)
Hauled On,	Modified Soil	Granular	Modified Soil	Granular
in. (mm)	Subgrade	Subbase	Subgrade	Subbase
3.0 to 4.0	0.75 miles	1.0 mile	0.50 miles	0.75 miles
(75 to 100)	(1200 m)	(1600 m)	(800 m)	(1200 m)
4.1 to 5.0	1.0 mile	1.5 miles	0.75 miles	1.0 mile
(101 to 125)	(1600 m)	(2400 m)	(1200 m)	(1600 m)
5.1 to 6.0	2.0 miles	2.5 miles	1.5 miles	2.0 miles
(126 to 150)	(3200 m)	(4000 m)	(2400 m)	(3200 m)
6.1 to 8.0	2.5 miles	3.0 miles	2.0 miles	2.5 miles
(151 to 200)	(4000 m)	(4800 m)	(3200 m)	(4000 m)
Over 8.0 (200)	No Restrictions			

	MAXIMUM HAULING DISTANCE FOR					
PAVEMENT S	SURFACE TEMPE	ERATURE OF 10	05 °F (40 °C) AND	O ABOVE		
Total In-Place		Thickness of Li	ft Being Placed			
Thickness Being	3 in. (75 m	m) or less	More than 3	in. (75 mm)		
Hauled On,	Modified Soil	Granular	Modified Soil	Granular		
in. (mm)	Subgrade	Subbase	Subgrade	Subbase		
3.0 to 4.0	0.50 miles	0.75 miles	0.25 miles	0.50 miles		
(75 to 100)	(800 m)	(1200 m)	(400 m)	(800 m)		
4.1 to 5.0	0.75 miles	1.0 mile	0.50 miles	0.75 miles		
(101 to 125)	(1200 m)	(1600 m)	(800 m)	(1200 m)		
5.1 to 6.0	1.0 mile	1.5 miles	0.75 miles	1.0 mile		
(126 to 150)	(1600 m)	(2400 m)	(1200 m)	(1600 m)		
6.1 to 8.0	2.0 miles	2.5 miles	1.5 miles	2.0 miles		
(151 to 200)	(3200 m)	(4000 m)	(2400 m)	(3200 m)		
Over 8.0 (200)		No Res	trictions	_		

Permissive hauling on the partially completed pavement shall not relieve the Contractor of his/her responsibility for damage to the pavement. Any portion of the full-depth HMA pavement that is damaged by hauling shall be removed and replaced, or otherwise repaired to the satisfaction of the Engineer.

Crossovers used to transfer haul trucks from one roadway to the other shall be at least 1000 ft (300 m) apart and shall be constructed of material that will prevent tracking of dust or mud on the completed HMA lifts. The Contractor shall construct, maintain, and remove all crossovers."

HOT-MIX ASPHALT – ANTI-STRIPPING ADDITIVE (BDE)

Effective: November 1, 2009

Revise the first and second paragraphs of Article 1030.04(c) of the Standard Specifications to read:

"(c) Determination of Need for Anti-Stripping Additive. The mixture designer shall determine if an additive is needed in the mix to prevent stripping. The determination will be made on the basis of tests performed according to Illinois Modified AASHTO T 283. To be considered acceptable by the Department as a mixture not susceptible to stripping, the conditioned to unconditioned split tensile strength ratio (TSR) shall be equal to or greater than 0.85 for 6 in. (150 mm) specimens. Mixtures, either with or without an additive, with TSRs less than 0.85 for 6 in. (150 mm) specimens will be considered unacceptable. Also, the conditioned tensile strength for mixtures containing an anti-strip additive shall not be lower than the original conditioned tensile strength determined for the same mixture without the anti-strip additive.

If it is determined that an additive is required, the additive may be hydrated lime, slaked quicklime, or a liquid additive, at the Contractor's option."

HOT-MIX ASPHALT – DROP-OFFS (BDE)

Effective: January 1, 2010

Revise the third paragraph of Article 701.07 of the Standard Specifications to read:

"At locations where construction operations result in a differential in elevation exceeding 3 in. (75 mm) between the edge of pavement or edge of shoulder within 3 ft (900 mm) of the edge of the pavement and the earth or aggregate shoulders, Type I or II barricades or vertical panels shall be placed at 100 ft (30 m) centers on roadways where the posted speed limit is 45 mph or greater and at 50 ft (15 m) centers on roadways where the posted speed limit is less than 45 mph."

HOT-MIX ASPHALT - FINE AGGREGATE (BDE)

Effective: April 1, 2010

Add the following to the gradation tables of Article 1003.01(c) of the Standard Specifications:

"FINE AGGREGATE GRADATIONS					
Sieve Size and Percent Passing					
Grad No. 3/8 No. 4 No. 8 No. 16 No. 200					No. 200
FA 22	100	6/	6/	8±8	2±2

FINE AGGREGATE GRADATIONS (Metric)						
Grad No.	Sieve Size and Percent Passing					
Grad No.	9.5 mm 4.75 mm 2.36 mm 1.18 mm 75 μm					
FA 22 100 6/ 6/ 8±8 2±2						

6/ For the fine aggregate gradation FA 22, the aggregate producer shall set the midpoint percent passing, and the Department will apply a range of ± ten percent. The midpoint shall not be changed without Department approval."

Revise Article 1003.03(a) of the Standard Specifications to read:

"(a) Description. Fine aggregate for HMA shall consist of sand, stone sand, chats, slag sand, or steel slag sand. For gradation FA 22, uncrushed material will not be permitted."

Revise Article 1003.03(c) of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradation for all HMA shall be FA 1, FA 2, FA 20, FA 21, or FA 22.

Gradation FA 1, FA 2, or FA 3 shall be used when required for prime coat aggregate application for HMA."

HOT-MIX ASPHALT – PLANT TEST FREQUENCY (BDE)

Effective: April 1, 2008 Revised: January 1, 2010

Revise the table in Article 1030.05(d)(2)a. of the Standard Specifications to read:

"Parameter	Frequency of Tests High ESAL Mixture Low ESAL Mixture	Frequency of Tests All Other Mixtures	Test Method See Manual of Test Procedures for Materials
Aggregate Gradation % passing sieves: 1/2 in. (12.5 mm), No. 4 (4.75 mm), No. 8 (2.36 mm), No. 30 (600 μm) No. 200 (75 μm)	washed ignition oven test on the mix per half day of production Note 4.	1 washed ignition oven test on the mix per day of production Note 4.	Illinois Procedure
Note 1.			
Asphalt Binder Content by Ignition Oven	1 per half day of production	1 per day	Illinois-Modified AASHTO T 308
Note 2.			
VMA Note 3.	Day's production ≥ 1200 tons: 1 per half day of production	N/A	Illinois Modified AASHTO R 35
	Day's production < 1200 tons:		
	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)		

Air Voids	Day's production ≥ 1200 tons:		
Bulk Specific Gravity	1 per half day of production	1 per day	Illinois-Modified AASHTO T 312
of Gyratory Sample	Day's production < 1200 tons:		
	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)		
Maximum Specific Gravity of Mixture	Day's production ≥ 1200 tons: 1 per half day of production	1 per day	Illinois-Modified AASHTO T 209
	Day's production < 1200 tons:		
	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)		

- Note 1. The No. 8 (2.36 mm) and No. 30 (600 μ m) sieves are not required for All Other Mixtures.
- Note 2. The Engineer may waive the ignition oven requirement for asphalt binder content if the aggregates to be used are known to have ignition asphalt binder content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the asphalt binder content.
- Note 3. The G_{sb} used in the voids in the mineral aggregate (VMA) calculation shall be the same average G_{sb} value listed in the mix design.
- Note 4. The Engineer reserves the right to require additional hot bin gradations for batch plants if control problems are evident."

HOT-MIX ASPHALT – QC/QA ACCEPTANCE CRITERIA (BDE)

Effective: January 1, 2010

Revise Article 1030.05(f)(3) of the Standard Specifications to read:

"(3) Department assurance tests for voids, field VMA, and density."

HOT-MIX ASPHALT – TRANSPORTATION (BDE)

Effective: April 1, 2008

Revise Article 1030.08 of the Standard Specifications to read:

"1030.08 Transportation. Vehicles used in transporting HMA shall have clean and tight beds. The beds shall be sprayed with asphalt release agents from the Department's approved list. In lieu of a release agent, the Contractor may use a light spray of water with a light scatter of manufactured sand (FA 20 or FA 21) evenly distributed over the bed of the vehicle. After spraying, the bed of the vehicle shall be in a completely raised position and it shall remain in this position until all excess asphalt release agent or water has been drained.

When the air temperature is below 60 °F (15 °C), the bed, including the end, endgate, sides and bottom shall be insulated with fiberboard, plywood or other approved insulating material and shall have a thickness of not less than 3/4 in (20 mm). When the insulation is placed inside the bed, the insulation shall be covered with sheet steel approved by the Engineer. Each vehicle shall be equipped with a cover of canvas or other suitable material meeting the approval of the Engineer which shall be used if any one of the following conditions is present.

- (a) Ambient air temperature is below 60 °F (15 °C).
- (b) The weather is inclement.
- (c) The temperature of the HMA immediately behind the paver screed is below 250 °F (120 °C).

The cover shall extend down over the sides and ends of the bed for a distance of approximately 12 in. (300 mm) and shall be fastened securely. The covering shall be rolled back before the load is dumped into the finishing machine."

IMPACT ATTENUATORS (BDE)

Effective: November 1, 2003 Revised: November 1, 2008

<u>Description</u>. This work shall consist of furnishing and installing impact attenuators of the category and test level specified.

<u>Materials</u>. Materials shall meet the requirements of the impact attenuator manufacturer and the following:

Item	Article/Section
(a) Fine Aggregate (Note 1)	1003.01
(b) Steel Posts, Structural Shapes, and Plates	
(c) Rail Elements, End Section Plates, and Splice Plates	1006.25
(d) Bolts, Nuts, Washers and Hardware	1006.25
(e) Hollow Structural Tubing	1006.27(b)
(f) Wood Posts and Wood Blockouts	
(g) Preservative Treatment	1007.12

Note 1. Fine aggregate shall be FA 1 or FA 2, Class A quality. The sand shall be unbagged and shall have a maximum moisture content of five percent.

CONSTRUCTION REQUIREMENTS

<u>General</u>. Impact attenuators shall meet the testing criteria contained in National Cooperative Highway Research Program (NCHRP) Report 350 for the test level specified and shall be on the Department's approved list. Fully redirective and partially redirective attenuators shall also be designed for bi-directional impacts.

<u>Installation</u>. Regrading of slopes or approaches for the installation shall be as shown on the plans.

Bases for impact attenuators, other than sand modules, shall be installed when required by the manufacturer. The bases shall be constructed on a prepared subgrade according to the manufacturer's specifications. The surface of the base shall be slightly sloped or crowned to facilitate drainage.

Bases for sand module impact attenuators will be required. The bases shall be constructed of either portland cement concrete or hot-mix asphalt (HMA). Portland cement concrete bases shall be 6 in. (150 mm) thick and be according to the applicable requirements of Section 424 of the Standard Specifications. HMA bases shall be 8 in. (200 mm) thick and be according to the applicable requirements of Section 408 of the Standard Specifications. The surface of the base shall be slightly sloped or crowned to facilitate drainage. The perimeter of each module and the specified weight (mass) of sand in each module shall be painted on the surface of the base.

Impact attenuators shall be installed according to the manufacturer's specifications and include all necessary transitions between the impact attenuator and the item to which it is attached.

<u>Method of Measurement</u>. This work will be measured for payment as each, where each is defined as one complete installation.

Contract quantities for sand module attenuator bases may be accepted according to Article 202.07(a) of the Standard Specifications. When measured, sand module attenuator bases will be measured in place and the dimensions used to calculate square yards (square meters) will not exceed those as shown on the plans.

Basis of Payment. This work, will be paid for at the contract unit price per each for IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW); IMPACT ATTENUATORS (FULLY REDIRECTIVE, WIDE); IMPACT ATTENUATORS (FULLY REDIRECTIVE, RESETTABLE); IMPACT ATTENUATORS (SEVERE USE, NARROW); IMPACT ATTENUATORS (SEVERE USE, WIDE); IMPACT ATTENUATORS (PARTIALLY REDIRECTIVE); or IMPACT ATTENUATORS (NON-REDIRECTIVE), of the test level specified.

Sand module attenuator bases will be paid for at the contract unit price per square yard (square meter) for ATTENUATOR BASE.

Regrading of slopes or approaches will be paid for according to Section 202 and/or Section 204 of the Standard Specifications.

IMPACT ATTENUATORS, TEMPORARY (BDE)

Effective: November 1, 2003 Revised: January 1, 2007

<u>Description</u>. This work shall consist of furnishing, installing, maintaining, and removing temporary impact attenuators of the category and test level specified.

<u>Materials</u>. Materials shall meet the requirements of the impact attenuator manufacturer and the following:

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Item	Article/Section
(a) Fine Aggregate (Note 1)	003.01
(b) Steel Posts, Structural Shapes, and Plates	1006.04
(c) Rail Elements, End Section Plates, and Splice Plates	1006.25
(d) Bolts, Nuts, Washers and Hardware	1006.25
(e) Hollow Structural Tubing	1006.27(b)
(f) Wood Posts and Wood Blockouts	1007.01, 1007.02, 1007.06
(g) Preservative Treatment	1007.12
(h) Packaged Rapid Hardening Mortar	1018.01

Note 1. Fine aggregate shall be FA 1 or FA 2, Class A quality. The sand shall be unbagged and shall have a maximum moisture content of five percent.

CONSTRUCTION REQUIREMENTS

<u>General</u>. Impact Attenuators shall meet the testing criteria contained in National Cooperative Highway Research Program (NCHRP) Report 350 for the test level specified and shall be on the Department's approved list.

<u>Installation</u>. Regrading of slopes or approaches for the installation shall be as shown on the plans.

Attenuator bases, when required by the manufacturer, shall be constructed on a prepared subgrade according to the manufacturer's specifications. The surface of the base shall be slightly sloped or crowned to facilitate drainage.

Impact attenuators shall be installed according to the manufacturer's specifications and include all necessary transitions between the impact attenuator and the item to which it is attached.

When water filled attenuators are used between November 1 and April 15, they shall contain anti-freeze according to the manufacturer's recommendations.

<u>Markings</u>. Sand module impact attenuators shall be striped with alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes. There shall be at least two of each stripe on each module.

Other types of impact attenuators shall have a terminal marker applied to their nose and reflectors along their sides.

<u>Maintenance</u>. All maintenance of the impact attenuators shall be the responsibility of the Contractor until removal is directed by the Engineer.

<u>Relocate</u>. When relocation of temporary impact attenuators is specified, they shall be removed, relocated and reinstalled at the new location. The reinstallation requirements shall be the same as those for a new installation.

<u>Removal</u>. When the Engineer determines the temporary impact attenuators are no longer required, the installation shall be dismantled with all hardware becoming the property of the Contractor.

Surplus material shall be disposed of according to Article 202.03. Anti-freeze, when present, shall be disposed of/recycled according to local ordinances.

When impact attenuators have been anchored to the pavement, the anchor holes shall be repaired with rapid set mortar. Only enough water to permit placement and consolidation by rodding shall be used and the material shall be struck-off flush.

<u>Method of Measurement</u>. This work will be measured for payment as each, where each is defined as one complete installation.

Basis of Payment. This work will be paid for at the contract unit price per each for IMPACT ATTENUATORS, **TEMPORARY** (FULLY REDIRECTIVE, NARROW); ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, WIDE); IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, RESETTABLE); IMPACT ATTENUATORS. TEMPORARY (SEVERE USE, NARROW); IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, WIDE); or IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) of the test level specified.

Relocation of the devices will be paid for at the contract unit price per each for IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE); IMPACT ATTENUATORS, RELOCATE (SEVERE USE); or IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE); of the test level specified.

Regrading of slopes or approaches will be paid for according to Section 202 and/or Section 204 of the Standard Specifications.

IMPROVED SUBGRADE (BDE)

Effective: January 1, 2010

Revise the second paragraph of Article 302.04 of the Standard Specifications to read:

"The quantity of modified soil constructed shall be limited to that which can be covered by the full thickness of portland cement concrete pavement or HMA binder during the same construction season."

Revise the first paragraph of Article 302.07 of the Standard Specifications to read:

"302.07 Application of Modifier. The modifier shall be applied uniformly on the soil. The application of modifier shall be limited to that amount which can be mixed with the soil within the same working day."

Revise the first paragraph of Article 302.08 of the Standard Specifications to read:

"302.08 Mixing. The modifier, soil, and water shall be thoroughly mixed. Mixing shall continue until a homogenous layer of the required thickness has been obtained and a minimum of 75 percent of the mixture is smaller than 1 in. (25 mm). The moisture content of the modified soil shall be above optimum moisture content with a maximum of three percent above optimum."

Revise Article 302.10 of the Standard Specifications to read:

" 302.10 Finishing and Curing. When multiple lifts are used to construct the modified soil layer, the top lift shall be a minimum of 6 in. (150 mm) thick when compacted.

Construction of pipe underdrains shall follow the requirements of Article 407.07. The surface of the modified soil shall be kept drained according to Article 301.09 and shall maintain moisture content not exceeding three percent above optimum prior to pavement construction.

When compaction of the modified soil is nearing completion, the surface shall be shaped to the required lines, grades, and cross section shown on the plans.

For HMA base course and pavement (full-depth) and portland cement concrete base course and pavement, the surface of the modified soil shall be brought to true shape and correct elevation according to Article 301.07, except well compacted earth shall not be used to fill low areas.

The modified soil shall be cured for a minimum of 24 hours. The ambient air temperature shall be above 45 °F (7 °C) during curing.

During the curing period, the moisture content of the modified soil shall be maintained at optimum by sprinkling with water, use of plastic sheeting, or applying bituminous materials according to Article 312.14. During this period, no equipment or traffic will be permitted on the completed work beyond that required for maintenance of curing.

Equipment of such weight, or used in such a way as to cause a rut depth of 1/2 in. (13 mm) or more in the finished modified soil, shall be removed, or the rutting otherwise prevented, as directed by the Engineer."

Revise the first paragraph of Article 302.11 of the Standard Specifications to read:

"302.11 Subgrade Stability. Following curing, the Engineer will determine the stability of the modified soil in terms of the immediate bearing value (IBV), according to Illinois Test Procedure 501. The IBV shall be a minimum of 10.0 measured within 10 calendar days prior to pavement construction."

Revise the second paragraph of Article 310.04 of the Standard Specifications to read:

"The quantity of lime stabilized soil mixture constructed shall be limited to that which can be covered by the full thickness of portland cement concrete pavement or HMA binder during the same construction season."

Revise the first paragraph of Article 310.08(a) of the Standard Specifications to read:

"(a) Initial Mixing. The lime, soil, and water shall be thoroughly mixed until a uniform mixture throughout the required depth and width is obtained. All clods and lumps shall be reduced to a maximum size of 2 in. (50 mm). The moisture content of the stabilized soil shall be above optimum moisture content with a maximum of three percent above optimum."

Insert the following paragraph after the first paragraph of Article 310.10 of the Standard Specifications:

"Construction of pipe underdrains shall follow the requirements of Article 407.07. The surface of the lime stabilized soil shall be kept drained according to Article 301.09 and shall maintain a maximum moisture content of three percent above optimum prior to pavement construction."

Revise the first paragraph of Article 310.11 of the Standard Specifications to read:

"310.11 Subgrade Stability. Following curing, the Engineer will determine the stability of the lime stabilized soil mixture in terms of the immediate bearing value (IBV) according to Illinois Test Procedure 501. The IBV shall be a minimum of 23.0 measured within 10 calendar days prior to pavement construction."

Revise the second paragraph of Article 311.05 of the Standard Specifications to read:

"The granular material shall be placed and compacted at least three days prior to the placement of pavement or base course. Except where required for temporary access, the quantity of subbase granular material Types A or B to be placed shall be limited to that which can be covered by the full thickness of PCC pavement or HMA binder during the same construction season."

LIQUIDATED DAMAGES (BDE)

Effective: April 1, 2009

Revise the table in Article 108.09 of the Standard Specifications to read:

"Schedule of Deductions for Each Day of Overrun in Contract Time					
Original Con	Original Contract Amount Daily Charges				
From More Than	To and Including	Calendar Day	Work Day		
\$ 0	\$ 100,000	\$ 375	\$ 500		
100,000	500,000	625	875		
500,000	1,000,000	1,025	1,425		
1,000,000	3,000,000	1,125	1,550		
3,000,000	5,000,000	1,425	1,950		
5,000,000	10,000,000	1,700	2,350		
10,000,000	And over	3,325	4,650"		

MAST ARM ASSEMBLY AND POLE (BDE)

Effective: January 1, 2008 Revised: January 1, 2009

Revise Article 1077.03 of the Standard Specifications to read:

"1077.03 Mast Arm Assembly and Pole. Mast arm assembly and pole shall be as follows.

(a) Steel Mast Arm Assembly and Pole and Steel Combination Mast Arm Assembly and Pole. The steel mast arm assembly and pole and steel combination mast arm assembly and pole shall consist of a traffic signal mast arm, a luminaire mast arm or davit (for combination pole only), a pole, and a base, together with anchor rods and other appurtenances. The configuration of the mast arm assembly, pole, and base shall be according to the details shown on the plans.

- (1) Loading. The mast arm assembly and pole, and combination mast arm assembly and pole shall be designed for the loading shown on the Highway Standards or elsewhere on the plans, whichever is greater. The design shall be according to AASHTO "Standard Specification for Structural Supports for Highway Signs, Luminaries and Traffic Signals" 1994 Edition for 80 mph (130 km/hr) wind velocity. However, the arm-to-pole connection for tapered signal and luminaire arms shall be according to the "ring plate" detail as shown in Figure 11-1(f) of the 2002 Interim, to the AASHTO "Standard Specification for Structural Supports for Highway Signs, Luminaries and Traffic Signals" 2001 4th Edition.
- (2) Structural Steel Grade. The mast arm and pole shall be fabricated according to ASTM A 595, Grade A or B, ASTM A 572 Grade 55, or ASTM A 1011 Grade 55 HSLAS Class 2. The base and flange plates shall be of structural steel according to AASHTO M 270 Grade 50 (M 270M Grade 345). Luminaire arms and trussed arms 15 ft (4.5 m) or less shall be fabricated from one steel pipe or tube size according to ASTM A 53 Grade B or ASTM A 500 Grade B or C. All mast arm assemblies, poles, and bases shall be galvanized according to AASHTO M 111.
- (3) Fabrication. The design and fabrication of the mast arm assembly, pole, and base shall be according to the requirements of the Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals published by AASHTO. The mast arm and pole may be of single length or sectional design. If section design is used, the overlap shall be at least 150 percent of the maximum diameter of the overlapping section and shall be assembled in the factory.

The manufacturer will be allowed to slot the base plate in which other bolt circles may fit, providing that these slots do not offset the integrity of the pole. Circumferential welds of tapered arms and poles to base plates shall be full penetration welds.

- (4) Shop Drawing Approval. The Contractor shall submit detailed drawings showing design materials, thickness of sections, weld sizes, and anchor rods to the Engineer for approval prior to fabrication. These drawings shall be at least 11 x 17 in. (275 x 425 mm) in size and of adequate quality for microfilming.
- (b) Anchor Rods. The anchor rods shall be ASTM F 1554 Grade 105, coated by the hot-dip galvanizing process according to AASHTO M 232, and shall be threaded a minimum of 7 1/2 in. (185 mm) at one end and have a bend at the other end. The first 10 in. (250 mm) at the threaded end shall be galvanized. Two nuts, one lock washer, and one flat washer shall be furnished with each anchor rod. All nuts and washers shall be galvanized."

METAL HARDWARE CAST INTO CONCRETE (BDE)

Effective: April 1, 2008 Revised: April 1, 2009

Add the following to Article 503.02 of the Standard Specifications:

Add the following to Article 504.02 of the Standard Specifications:

Revise Article 1006.13 of the Standard Specifications to read:

"1006.13 Metal Hardware Cast into Concrete. Unless otherwise noted, all steel hardware cast into concrete, such as inserts, brackets, cable clamps, metal casings for formed holes, and other miscellaneous items, shall be galvanized according to AASHTO M 232 or AASHTO M 111. Aluminum inserts will not be allowed. Zinc alloy inserts shall be according to ASTM B 86, Alloys 3, 5, or 7.

The inserts shall be UNC threaded type anchorages having the following minimum certified proof load.

Insert Diameter	Proof Load		
5/8 in. (16 mm)	6600 lb (29.4 kN)		
3/4 in. (19 mm)	6600 lb (29.4 kN)		
1 in. (25 mm)	9240 lb (41.1 kN)"		

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM / EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 2007 Revised: November 1, 2009

Revise Article 105.03(a) of the Standard Specifications to read:

"(a) National Pollutant Discharge Elimination System (NPDES) / Erosion and Sediment Control Deficiency Deduction When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, or the Contractor's activities represents a violation of the Department's NPDES permits, the Engineer will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 1 week based on the urgency of the situation and the nature of the work effort required. The Engineer will be the sole judge.

A deficiency may be any lack of repair, maintenance, or implementation of erosion and/or sediment control devices included in the contract, or any failure to comply with the conditions of the Department's NPDES permits. A deficiency may also be applied to situations where corrective action is not an option such as the failure to participate in a jobsite inspection of the project, failure to install required measures prior to initiating earth moving operations, disregard of concrete washout requirements, or other disregard of the NPDES permit.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or portion of a calendar day until the deficiency is corrected to the satisfaction of the Engineer. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The base value of the daily monetary deduction is \$1000.00 and will be applied to each location for which a deficiency exists.

The value of the deficiency deduction assessed for each infraction will be determined by multiplying the base value by a Gravity Adjustment Factor provided in Table A. Except for failure to participate in a required jobsite inspection of the project prior to initiating earthmoving operations which will be based on the total acreage of planned disturbance at the following multipliers: <5 Acres: 1; 5-10 Acres: 2; >10-25 Acres: 3; >25 Acres: 5. For those deficiencies where corrective action was not an option, the monetary deduction will be immediate and will be valued at one calendar day multiplied by a Gravity Adjustment Factor.

Table A					
Deficiency Deduction Gravity Adjustment Factors					
Types of Violations	Soil Disturbed and Not Permanently				
	Stabilized At Time of Violation				
	< 5	5 - 10	>10 - 25	> 25	
	Acres	Acres	Acres	Acres	
Failure to Install or Properly	0.1 - 0.5	0.2 - 1.0	0.5 - 2.5	1.0 - 5	
Maintain BMP					
Careless Destruction of BMP	0.2 - 1	0.5 - 2.5	1.0 - 5.	1.0 - 5	
Intrusion into Protected Resource	1.0 - 5	1.0 - 5	2.0 - 10	2.0 - 10	
Failure to properly manage	0.2 - 1	0.2 - 1	0.5 - 2.5	1.0 - 5	
Chemicals, Concrete Washouts or					
Residuals, Litter or other Wastes					
Improper Vehicle and Equipment	0.1 - 0.5	0.2 - 1	0.2 - 1	0.5 - 2.5	
Maintenance, Fueling or Cleaning					
Failure to Provide or Update	0.2 - 1	0.5 - 2.5	1.0 - 5	1.0 - 5	
Written or Graphic Plans Required					
by SWPPP					
Failure to comply with Other	0.1 - 0.5	0.2 - 1	0.2 - 1	0.5 - 2.5"	
Provisions of the NPDES Permit					

NIGHTTIME WORK ZONE LIGHTING (BDE)

Effective: November 1, 2008

<u>Description</u>. This work shall consist of furnishing, installing, maintaining, moving, and removing lighting for nighttime work zones. Nighttime shall be defined as occurring shortly before sunset until after sunrise.

<u>Materials</u>. The lighting shall consist of mobile and/or stationary lighting systems as required herein for the specific type of construction. Mobile lighting systems shall consist of luminaires attached to construction equipment or moveable carts. Stationary lighting systems shall consist of roadway luminaires mounted on temporary poles or trailer mounted light towers at fixed locations. Some lighting systems, such as balloon lights, may be adapted to both mobile and stationary applications.

Equipment. The Contractor shall furnish an illuminance meter for use by the Engineer. The meter shall have a digital display calibrated to NIST standards, shall be cosine and color corrected, and shall have an accuracy of \pm five percent. The sensor shall have a level indicator to ensure measurements are taken in a horizontal plane.

CONSTRUCTION REQUIREMENTS

<u>General</u>. At the preconstruction conference, the Contractor shall submit the type(s) of lighting system to be used and the locations of all devices.

Before nighttime construction may begin, the lighting system shall be demonstrated as being operational.

<u>Nighttime Flagging</u>. The requirements for nighttime flagging shall be according to Article 701.13 of the Standard Specifications and the glare control requirements contained herein.

<u>Lighting System Design</u>. The lighting system shall be designed to meet the following.

- (a) Lighting Levels. The lighting system shall provide a minimum of 5 foot candles (54 lux) throughout the work area. For mobile operations, the work area shall be defined as 25 ft (9 m) in front of and behind moving equipment. For stationary operations, the work area shall be defined as the entire area where work is being performed.
 - Lighting levels will be measured with an illuminance meter. Readings will be taken in a horizontal plane 3 ft (1 m) above the pavement or ground surface.
- (b) Glare Control. The lighting system shall be designed and operated so as to avoid glare that interferes with traffic, workers, or inspection personnel. Lighting systems with flood, spot, or stadium type luminaires shall be aimed downward at the work and rotated outward no greater than 30 degrees from nadir (straight down). Balloon lights shall be positioned at least 12 ft (3.6 m) above the roadway.
 - As a large component of glare, the headlights of construction vehicles and equipment shall not be operated within the work zone except as allowed for specific construction operations. Headlights shall never be used when facing oncoming traffic.
- (c) Light Trespass. The lighting system shall be designed to effectively light the work area without spilling over to adjoining property. When, in the opinion of the Engineer, the lighting is disturbing adjoining property, the Contractor shall modify the lighting arrangement or add hardware to shield the light trespass.

<u>Construction Operations</u>. The lighting design required above shall be provided at any location where construction equipment is operating or workers are present on foot. When multiple operations are being carried on simultaneously, lighting shall be provided at each separate work area.

The lighting requirements for specific construction operations shall be as follows.

- (a) Installation or Removal of Work Zone Traffic Control. The required lighting level shall be provided at each truck and piece of equipment used during the installation or removal of work zone traffic control. Headlights may be operated in the work zone.
- (b) Milling and Paving. The required lighting level shall be provided by mounting a minimum of one balloon light to each piece of mobile construction equipment used in the work zone.

This would include milling machines, mechanical sweepers, material transfer devices, spreading and finishing machines, and rollers; but not include trucks used to transport materials and personnel or other vehicles that are continuously moving in and out of the work zone. The headlights of construction equipment shall not be operated within the work zone.

- (c) Patching. The required lighting level shall be provided at each patching location where work is being performed.
- (d) Pavement Marking and Raised Reflective Pavement Marker Removal/Installation. The striping truck and the attenuator/arrow board trucks may by operated by headlights alone; however, additional lighting may be necessary for the operator of the striping truck to perform the work.
 - For raised reflective pavement marker removal and installation and other pavement marking operations where workers are on foot, the required lighting level shall be provided at each truck and piece of equipment.
- (e) Layout, Testing, and Inspection. The required lighting level shall be provided for each active area of construction layout, material testing, and inspection. The work area shall be defined as 15 ft (7.6 m) in front and back of the individual(s) performing the tasks.

<u>Basis of Payment</u>. This work will be paid for at the contract lump sum price for NIGHTTIME WORK ZONE LIGHTING.

NOTIFICATION OF REDUCED WIDTH (BDE)

Effective: April 1, 2007

Add the following after the first paragraph of Article 701.06 of the Standard Specifications:

"Where the clear width through a work zone with temporary concrete barrier will be 16.0 ft (4.88 m) or less, the Contractor shall notify the Engineer at least 21 days in advance of implementing the traffic control for that restriction."

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000 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 109.07 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.

PERSONAL PROTECTIVE EQUIPMENT (BDE)

Effective: November 1, 2008

Revise the first sentence of Article 701.12 of the Standard Specifications to read:

"All personnel on foot, excluding flaggers, within the highway right-of-way shall wear a fluorescent orange, fluorescent yellow/green, or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of ANSI/ISEA 107-2004 for Conspicuity Class 2 garments."

PIPE CULVERTS (BDE)

Effective: April 1, 2009 Revised: April 1, 2010

Revise Tables IIIA, IIIB, and IIIC of Article 542.03 of the Standard Specifications to read:

					"PIF	E CU	LVERT 1	TABLE	IIIA					
			PLA	STIC PIPE	PER	MITTE	D FOR	A GIVE	N PIPE	DIAMETER	₹			
	AND FILL HEIGHT OVER THE TOP OF THE PIPE													
			Т	ype 1						Т	ype 2			
Nom.		Fill Height: 3' and less Fill Height: Greater than 3',												
Dia.				inimum co			-		ceeding 10					
	PVC													
in.		-794 -304 -304 -794 -304												
10	Х	X NA NA NA X NA NA X * NA NA X NA							NA	NA				
12	Х	Χ	Χ	Χ	Χ	Χ	NA	Х	Х	Χ	Χ	Χ	Χ	NA
15	Х	Х	Χ	Χ	Χ	Χ	NA	Х	Х	Χ	Χ	Х	Χ	NA
18	Х	Х	X	Χ	Χ	X	Х	Х	Х	X	Χ	Χ	Х	Х
21	Χ	X	X	Χ	NA	NA	Χ	Χ	X	X	Χ	NA	NA	Х
24	Х	Х	Х	Χ	Χ	Χ	Χ	Х	X	Х	Χ	Χ	Χ	Х
30	X							Х	Х	Χ	Χ	Χ	Χ	Х
36	Х	X							X	Х	Х	Χ	Χ	Х
42	NA	NA X X X X X NA NA X X X X X												
48	NA	NA	X	X	Х	X	Χ	NA	NA	X	X	Х	Х	X

	PIPE CULVERT TABLE IIIA (metric)													
	PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER													
	AND FILL HEIGHT OVER THE TOP OF THE PIPE													
			Т	ype 1						Т	ype 2			
Nom.		Fill Height: 1 m and less Fill Height: Greater than 1 m,												
Dia.	with 0.3 m minimum cover									not exc	ceeding 3 n	n		
	PVC	VC CPVC PVCPW PVCPW PE CPE PEPW PVC CPVC PVCPW PVCPW PE CPE PEPW												
mm	-794 -304									-794	-304			
250) X NA NA NA X NA NA X * NA NA							NA	Х	NA	NA			
300	Х	Х	X	X	Χ	Х	NA	Х	Х	X	X	Χ	Х	NA
375	X	Х	Х	Х	Х	X	NA	Х	Х	Х	Х	Х	Χ	NA
450	X	Х	X	X	Х	X	Х	Х	Х	X	X	Х	X	Х
525	Х	Х	Х	Х	NA	NA	Х	Х	Х	X	Х	NA	NA	Х
600	, , ,	x x x x x x x x x x												
750	X X X X X X X							X	X	X	X	Х	X	X
900	X X X X X X X X								X	X	X	Х	X	X
1000	NA													
1200	NA	NA	X	X	Х	X	Х	NA	NA	X	X	Х	X	Χ

PVC Polyvinyl Chloride (PVC) Pipe

Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior CPVC

Polyvinyl Chloride (PVC) Profile Wall Pipe-794 PVCPW-794 PVCPW-304 Polyvinyl Chloride (PVC) Profile Wall Pipe-304 Polyethylene (PE) Pipe with a Smooth Interior Corrugated Polyethylene (PE) Pipe with a Smooth Interior PΕ

CPE

PEPW Polyethylene (PE) Profile Wall Pipe

This material may be used for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. NA

May be used if Bureau of Materials and Physical Research approves and with manufacturer's certification.

	PIPE CULVERT TABLE IIIB											
	PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE											
		Type 3 Type 4										
Nom. Dia.			eight: Grea		O',		Fill Height: Greater than 15', not exceeding 20'					
	PVC	CPVC PVCPW PVCPW PE PEPW PVC CPVC PVCPW PVCPW										
in.	-794 -304								-794	-304		
10	Χ	*	NA	NA	Χ	NA	Χ	*	NA	NA		
12	Χ	Χ	X	X	Х	NA	Χ	Χ	X	X		
15	Χ	Χ	X	X	Х	NA	Χ	Χ	X	Х		
18	Х	Χ	Χ	X	Χ	Χ	Χ	Χ	X	X		
21	Χ	Χ	X	X	NA	Χ	Χ	Χ	X	X		
24	Χ	Χ	Χ	Х	Χ	Х	Χ	Χ	X	Х		
30	Х	Χ	Χ	X	Χ	Х	Χ	Х	X	X		
36	Χ	Χ	Χ	X	Χ	Χ	Χ	Χ	X	X		
42	NA	NA	Χ	Χ	Χ	Х	NA	NA	Х	Х		
48	NA	NA	Χ	Χ	Χ	Χ	NA	NA	X	X		

	PIPE CULVERT TABLE IIIB (metric)											
	PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE											
		Type 3 Type 4										
Nom.				ter than 3	m,			Fill Hei	ght: Greate	r than 4.5 m	١,	
Dia.		n	ot exceedi	ng 4.5 m				1	not exceedir	ng 6 m		
	PVC	PVC CPVC PVCPW PVCPW PE PEPW PVC CPVC PVCPW PV										
mm			-794	-304					-794	-304		
250	Х	X * NA NA X NA						*	NA	NA		
300	Χ	Χ	X	X	Χ	NA	Χ	Χ	X	X		
375	Х	Х	X	X	Χ	NA	Χ	Х	X	X		
450	Х	Х	X	X	Х	Х	Χ	X	X	X		
525	X	X	X	X	NA	X	Χ	Χ	X	X		
600	Х	Х	X	X	Χ	Х	Χ	Х	X	X		
750	Х	Х	X	X	Χ	Х	Χ	Х	X	X		
900	X	X	Х	Х	Χ	Х	Χ	X	X	X		
1000	NA	NA	Χ	Χ	Х	Х	NA	NA	X	X		
1200	NA	NA	X	X	Х	Х	NA	NA	X	X		

PVC Polyvinyl Chloride (PVC) Pipe

CPVC Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior PVCPW-794 Polyvinyl Chloride (PVC) Profile Wall Pipe-794

PVCPW-794 Polyvinyl Chloride (PVC) Profile Wall Pipe-794
PVCPW-304 Pelyvinyl Chloride (PVC) Profile Wall Pipe-304
Polyvinyl Chloride (PVC) Profile Wall Pipe-304
Polyvinyl Chloride (PVC) Profile Wall Pipe-304
Polyvinyl Chloride (PVC) Profile Wall Pipe-794
Polyvinyl Chloride (PVC) Profile Wall Pipe-304
Polyv

PEPW Polyethylene (PE) Profile Wall Pipe

X This material may be used for the given pipe diameter and fill height.
NA This material is Not Acceptable for the given pipe diameter and fill height.

* May be used if Bureau of Materials and Physical Research approves and with manufacturer's certification.

	PIPE CULVERT TABLE IIIC										
	PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE										
			Type 5				Type 6			Type 7	
Nom. Dia.	om. Fill Height: Greater Than 20',				Fill Height: Greater than 25', not exceeding 30'				Fill Height: Greater than 30', not exceeding 35'		
	PVC	CPVC	PVCPW	PVCPW	PVC	CPVC	PVCPW	PVCPW	PVC		
in.			-794	-304			-794	-304			
10	Х	*	NA	NA	Х	*	NA	NA	X		
12	Х	Х	X	X	Х	Х	X	X	X		
15	Х	Х	Х	X	Х	NA	NA	NA	Х		
18	Х	Х	X	X	Х	NA	NA	NA	Х		
21	Х	Х	X	X	Х	NA	NA	NA	Х		
24	Х	Х	Х	Х	Х	NA	NA	NA	Х		
30	X	NA	NA	NA	Х	NA	NA	NA	Х		
36	Х	NA	NA	NA	Х	NA	NA	NA	X		
42	NA	NA	NA	NA	NA	NA	NA	NA	NA		
48	NA	NA	NA	NA	NA	NA	NA	NA	NA		

	PIPE CULVERT TABLE IIIC (metric)											
	PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER											
	AND FILL HEIGHT OVER THE TOP OF THE PIPE											
	Type 5 Type 6 Type 7											
Nom.										eight: Greater Than 9 m,		
Dia.			ceeding 7.5			_	xceeding 9 ı			not exceeding 10.5 m		
	PVC	CPVC	PVCPW	PVCPW	PVC	CPVC	PVCPW	PVCPW	PVC			
mm			-794	-304			-794	-304				
250	Х	*	NA	NA	Х	*	NA	NA	Х			
300	Χ	Χ	X	X	Χ	Χ	X	X	X			
375	Х	Х	X	X	Х	NA	NA	NA	Х			
450	Х	X	X	X	Х	NA	NA	NA	X			
525	Х	X	X	X	Χ	NA	NA	NA	Χ			
600	Х	Χ	X	Х	Х	NA	NA	NA	Х			
750	Х	NA	NA	NA	Х	NA	NA	NA	Х			
900	Χ	NA	NA	NA	Χ	NA	NA	NA	X			
1000	NA	NA	NA	NA	NA	NA	NA	NA	NA			
1200	NA	NA	NA	NA	NA	NA	NA	NA	NA			

PVC Polyvinyl Chloride (PVC) Pipe

Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior Polyvinyl Chloride (PVC) Profile Wall Pipe-794 CPVC

PVCPW-794 PVCPW-304 Polyvinyl Chloride (PVC) Profile Wall Pipe-304

This material may be used for the given pipe diameter and fill height.

This material is Not Acceptable for the given pipe diameter and fill height.

May be used if Bureau of Materials and Physical Research approves and with manufacturer's certification." Χ NA

Add the following paragraph to the end of Article 542.04(d) of the Standard Specifications:

"PVC and PE pipes shall be joined according to the manufacturer's specifications."

Revise the second paragraph of Article 542.04(f) of the Standard Specifications to read:

"When using flexible pipe, as listed in the first table of Article 542.03, the aggregate shall be continued to a height of at least 1 ft (300 mm) above the top of the pipe and compacted to a minimum of 95 percent of standard lab density by mechanical means."

Revise the first paragraph of Article 542.04(i) of the Standard Specifications to read:

"(i) Deflection Testing for Pipe Culverts. All PE and PVC pipe culverts shall be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted. The testing shall be performed in the presence of the Engineer."

Revise the ninth paragraph of Article 542.11 of the Standard Specifications to read:

"End sections for polyvinylchloride (PVC) and polyethylene (PE) culvert pipes will be paid for at the contract unit price per each for METAL END SECTIONS, of the diameter specified."

Revise Article 1040.04(b) of the Standard Specifications to read:

"(b) Corrugated PE Pipe with a Smooth Interior. The pipe shall be according to AASHTO M 294 (nominal size – 12 to 48 in. (300 to 1200 mm)). The pipe shall be Type S or D."

Revise the first paragraph of Article 1040.04(c) of the Standard Specifications to read:

"(c) PE Profile Wall Pipe. The pipe shall be according to ASTM F 894 and shall have a minimum ring stiffness constant of 160. The pipe shall also have a minimum cell classification of PE 334433C as defined in ASTM D 3350."

POLYUREA PAVEMENT MARKING (BDE)

Effective: April 1, 2004 Revised: January 1, 2009

<u>Description</u>. This work shall consist of furnishing and applying pavement marking lines.

The type of polyurea pavement marking applied will be determined by the type of reflective media used. Polyurea Pavement Marking Type I shall use glass beads as a reflective media. Polyurea Pavement Marking Type II shall use a combination of composite reflective elements and glass beads as a reflective media.

Polyurea-based liquid pavement markings shall only be applied by Contractors on the list of Approved Polyurea Contractors maintained by the Engineer of Operations and in effect on the date of advertisement for bids.

Materials. Materials shall meet the following requirements:

- (a) Polyurea Pavement Marking. The polyurea pavement marking material shall consist of 100 percent solid two part system formulated and designed to provide a simple volumetric mixing ratio of two components (must be two or three volumes of Part A to one volume of Part B). No volatile or polluting solvents or fillers will be allowed.
- (b) Pigmentation. The pigment content by weight (mass) of component A shall be determined by low temperature ashing according to ASTM D 3723. The pigment content shall not vary more than ± two percent from the pigment content of the original qualified paint.

White Pigment shall be Titanium Dioxide meeting ASTM D 476 Type II, Rutile.

Yellow Pigment shall be an Organic Yellow and contain no heavy metals.

- (c) Environmental. Upon heating to application temperature, the material shall not exude fumes which are toxic or injurious to persons or property.
- (d) Daylight Reflectance. The daylight directional reflectance of the cured polyurea material (without reflective media) shall be a minimum of 80 percent (white) and 50 percent (yellow) relative to magnesium oxide when tested using a color spectrophotometer with a 45 degrees circumferential /zero degrees geometry, illuminant C, and two degrees observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm. In addition, the color of the yellow polyurea shall visually match Color Number 33538 of Federal Standard 595a with chromaticity limits as follows:

X	0.490	0.475	0.485	0.539
Υ	0.470	0.438	0.425	0.456

(e) Weathering Resistance. The polyurea marking material, when mixed in the proper ratio and applied at 14 to 16 mils (0.35 to 0.41 mm) wet film thickness to an aluminum alloy panel (Federal Test Std. No. 141, Method 2013) and allowed to cure for 72 hours at room temperature, shall be subjected to accelerated weathering for 75 hours. The accelerated weathering shall be completed by using the light and water exposure apparatus (fluorescent UV - condensation type) and tested according to ASTM G 53.

The cycle shall consist of four hours UV exposure at 122 °F (50 °C) and four hours of condensation at 104 °F (40 °C). UVB 313 bulbs shall be used. At the end of the exposure period, the material shall show no substantial change in color or gloss.

- (f) Dry Time. The polyurea pavement marking material, when mixed in the proper ratio and applied at 14 to 16 mils (0.35 to 0.41 mm) wet film thickness and with the proper saturation of reflective media, shall exhibit a no-tracking time of ten minutes or less when tested according to ASTM D 711.
- (g) Adhesion. The catalyzed polyurea pavement marking materials when applied to a 4 x 4 x 2 in. (100 x 100 x 50 mm) concrete block, shall have a degree of adhesion which results in a 100 percent concrete failure in the performance of this test.

The concrete block shall be brushed on one side and have a minimum strength of 3500 psi (24,100 kPa). A 2 in. (50 mm) square film of the mixed polyurea shall be applied to the brushed surface and allowed to cure for 72 hours at room temperature. A 2 in. (50 mm) square cube shall be affixed to the surface of the polyurea by means of an epoxy glue. After the glue has cured for 24 hours, the polyurea specimen shall be placed on a dynamic testing machine in such a fashion so that the specimen block is in a fixed position and the 2 in. (50 mm) cube (glued to the polyurea surface) is attached to the dynamometer head. Direct upward pressure shall be slowly applied until the polyurea system fails. The location of the break and the amount of concrete failure shall be recorded.

- (h) Hardness. The polyurea pavement marking materials when tested according to ASTM D 2240, shall have a shore D hardness of between 70 and 100. Films shall be cast on a rigid substrate at 14 to 16 mils (0.35 to 0.41 mm) in thickness and allowed to cure at room temperature for 72 hours before testing.
- (i) Abrasion. The abrasion resistance shall be evaluated according to ASTM D 4060 using a Taber Abrader with a 1,000 gram load and CS 17 wheels. The duration of the test shall be 1,000 cycles. The loss shall be calculated by difference and be less than 120 mgs. The tests shall be run on cured samples of polyurea material which have been applied at a film thickness of 14 to 16 mils (0.35 to 0.41 mm) to code S-16 stainless steel plates. The films shall be allowed to cure at room temperature for at least 72 hours and not more than 96 hours before testing.
- (j) Reflective Media. The reflective media shall meet the following requirements:
 - (1) Type I The glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications and the following requirements:
 - a. First Drop Glass Beads. The first drop glass beads shall be tested by the standard visual method of large glass spheres adopted by the Department. The beads shall have a silane coating and meet the following sieve requirements:

U.S. Standard	Sieve	% Passing
Sieve Number	Size	By Weight (mass)
12	1.70 mm	95-100
14	1.40 mm	75-95
16	1.18 mm	10-47
18	1.00 mm	0-7
20	850 µm	0-5

- b. Second Drop Glass Beads. The second drop glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications for Type B.
- (2) Type II The combination of microcrystalline ceramic elements and glass beads shall meet the following requirements:
- a. First Drop Glass Beads. The first drop glass beads shall meet the following requirements:
 - 1. Composition. The elements shall be composed of a titania opacified ceramic core having clear and or yellow tinted microcrystalline ceramic beads embedded to the outer surface.

- 2. Index of Refraction. All microcrystalline reflective elements embedded to the outer surface shall have an index of refraction of 1.8 when tested by the immersion method.
- 3. Acid Resistance. A sample of microcrystalline ceramic beads supplied by the manufacturer, shall show resistance to corrosion of their surface after exposure to a one percent solution (by weight (mass)) of sulfuric acid. Adding 0.2 oz (5.7 ml) of concentrated acid into the water shall make the one percent acid solution. This test shall be performed by taking a 1 x 2 in. (25 x 50 mm) sample and adhering it to the bottom of a glass tray and placing just enough acid solution to completely immerse the sample. The tray shall be covered with a piece of glass to prevent evaporation and allow the sample to be exposed for 24 hours under these conditions. The acid solution shall be decanted (do not rinse, touch, or otherwise disturb the bead surfaces) and the sample dried while adhered to the glass tray in a 150 °F (66 °C) oven for approximately 15 minutes. Microscope examination (20X) shall show no white (corroded) layer on the entire surface.
- b. Second Drop Glass Beads. The second drop glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications for Type B or the following manufacturer's specification:

1.	Sieve Analysis.	The glass beads	shall meet the	following sieve	e requirements:

U.S. Standard	Sieve	% Passing
Sieve Number	Size	By Weight (mass)
20	850 μm	100
30	600 μm	75-95
50	300 μm	15-35
100	150 μm	0-5

The manufacturer of the glass beads shall certify that the treatment of the glass beads meets the requirements of the polyurea manufacturer.

- Imperfections. The surface of the glass beads shall be free of pits and scratches. The glass beads shall be spherical in shape and shall contain a maximum of 20 percent by weight (mass) of irregular shapes when tested by the standard method using a vibratile inclined glass plate as adopted by the Department.
- 3. Index of Refraction. The index of refraction of the glass beads shall be a minimum of 1.50 when tested by the immersion method at 77 °F (25 °C).
- (k) Packaging. Microcrystalline ceramic reflective elements and glass beads shall be delivered in approved moisture proof bags or weather resistant bulk boxes. Each carton shall be legibly marked with the manufacturer, specifications and type, lot number, and the month and year the microcrystalline ceramic reflective elements and/or glass beads were packaged. The letters and numbers used in the stencils shall be a minimum of 1/2 in. (12.7 mm) in height.

- (1) Moisture Proof Bags. Moisture proof bags shall consist of at least five ply paper construction unless otherwise specified. Each bag shall contain 50 lb (22.7 kg) net.
- (2) Bulk Weather Resistance Boxes. Bulk weather resistance boxes shall conform to Federal Specification PPP-8-640D Class II or latest revision. Boxes are to be weather resistant, triple wall, fluted, corrugated-fiber board. Cartons shall be strapped with two metal straps. Straps shall surround the outside perimeter of the carton. The first strap shall be located approximately 2 in. (50 mm) from the bottom of the carton and the second strap shall be placed approximately in the middle of the carton. All cartons shall be shrink wrapped for protection from moisture. Cartons shall be lined with a minimum 4 mil polyester bag and meet Interstate Commerce Commission requirements. Cartons shall be approximately 38 x 38 in. (1 x 1 m), contain 2000 lb (910 kg) of microcrystalline ceramic reflective elements and/or glass beads and be supported on a wooden pallet with fiber straps.
- (I) Packaging. The material shall be shipped to the job site in substantial containers and shall be plainly marked with the manufacturer's name and address, the name and color of the material, date of manufacture, and batch number.
- (m) Verification. Prior to approval and use of the polyurea pavement marking materials, the manufacturer shall submit a notarized certification of an independent laboratory, together with the results of all tests, stating these materials meet the requirements as set forth herein. The certification test report shall state the lot tested, manufacturer's name, brand name of polyurea and date of manufacture. The certification shall be accompanied by one 1 pt (1/2 L) samples each of Part A and Part B. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B.

After approval by the Department, certification by the polyurea manufacturer shall be submitted for each batch used. New independent laboratory certified test results and samples for testing by the Department shall be submitted any time the manufacturing process or paint formulation is changed. All costs of testing (other than tests conducted by the Department) shall be borne by the manufacturer.

- (n) Acceptance samples. Acceptance samples shall consist of one 1 pt (1/2 L) samples of Part A and Part B, of each lot of paint. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B. The samples shall be submitted to the Department for testing, together with a manufacturer's certification. The certification shall state the formulation for the lot represented is essentially identical to that used for qualification testing. All, acceptance samples will be taken by a representative of the Department. The polyurea pavement marking materials shall not be used until tests are completed and they have met the requirements as set forth herein.
- (o) Material Retainage. The manufacturer shall retain the test sample for a minimum of 18 months.

<u>Equipment</u>. The polyurea pavement marking compounds shall be applied through equipment specifically designed to apply two component liquid materials, glass beads and/or reflective elements in a continuous and skip-line pattern. The two-component liquid materials shall be applied after being accurately metered and then mixed with a static mix tube or airless impingement mixing guns. The static mixing tube or impingement mixing guns shall accommodate plural component material systems that have a volumetric ratio of 2 to 1 or 3 to 1.

This equipment shall produce the required amount of heat at the mixing head and gun tip and maintain those temperatures within the tolerances specified. The guns shall have the capacity to deliver materials from approximately 1.5 to 3 gal/min (5.7 to 11.4 L/min) to compensate for a typical range of application speeds of 6 to 8 mph (10 to 13 km/h). The accessories such as spray tip, mix chamber, and rod diameter shall be selected according to the manufacturer's specifications to achieve proper mixing and an acceptable spray pattern. The application equipment shall be maneuverable to the extent that straight lines can be followed and normal curves can be made in a true arc. This equipment shall also have as an integral part of the gun carriage, a high pressure air spray capable of cleaning the pavement immediately prior to making application.

The equipment shall be capable of spraying both yellow and white polyurea, according to the manufacturer's recommended proportions and be mounted on a truck of sufficient size and stability with an adequate power source to produce lines of uniform dimensions and prevent application failure. The truck shall have at least two polyurea tanks each of 110 gal (415 L) minimum capacity and be equipped with hydraulic systems and agitators. It shall be capable of placing stripes on the left and right sides and placing two lines on a three-line system simultaneously with either line in a solid or intermittent pattern, in yellow or white, and applying the appropriate reflective media according to manufacturer's recommendations. All guns shall be in full view of operations at all times. The equipment shall have a metering device to register the accumulated installed quantities for each gun, each day. Each vehicle shall include at least one operator who shall be a technical expert in equipment operations and polyurea application techniques. Certification of equipment shall be provided at the pre-construction conference.

The mobile applicator shall include the following features:

- (a) Material Reservoirs. The applicator shall provide individual material reservoirs, or space for the storage of Part A and Part B of the resin composition.
- (b) Heating Equipment. The applicator shall be equipped with heating equipment of sufficient capacity to maintain the individual resin components at the manufacturer's recommended temperature of ±5 °F (±2.8 °C) for spray application.
- (c) Dispensing Equipment. The applicator shall be equipped with glass bead and/or reflective element dispensing equipment. The applicator shall be capable of applying the glass beads and/or reflective elements at a rate and combination indicated by the manufacturer.
- (d) Volumetric Usage. The applicator shall be equipped with metering devices or pressure gauges on the proportioning pumps as well as stroke counters to monitor volumetric usage. Metering devices or pressure gauges and stroke counters shall be visible to the Engineer.
- (e) Pavement Marking Placement. The applicator shall be equipped with all the necessary spray equipment, mixers, compressors and other appurtenances to allow for the placement of reflectorized pavement markings in a simultaneous sequence of operations.

The Contractor shall provide an accurate temperature-measuring device(s) that shall be capable of measuring the pavement temperature prior to application of the material, the material temperature at the gun tip and the material temperature prior to mixing.

CONSTRUCTION REQUIREMENTS

<u>General</u>. The pavement shall be cleaned by a method approved by the Engineer to remove all dirt, grease, glaze, or any other material that would reduce the adhesion of the markings with minimum or no damage to the pavement surface. New portland cement concrete pavements shall be air-blast-cleaned to remove all latents.

Widths, lengths, and shapes of the cleaned surface shall be of sufficient size to include the full area of the specified pavement marking to be placed.

The cleaning operation shall be a continuous moving operation process with minimum interruption to traffic.

Markings shall be applied to the cleaned surfaces on the same calendar day. If this cannot be accomplished, the surface shall be re-cleaned prior to applying the markings. No markings shall be applied until the Engineer approves the cleaning.

The pavement markings shall be applied to the cleaned road surface, during conditions of dry weather and subsequently dry pavement surfaces at a minimum uniform wet thickness of 15 mils (0.4 mm) according to the manufacturer's installation instructions. On new hot-mix asphalt (HMA) surfaces the pavement markings shall be applied at a minimum uniform wet thickness of 20 mils (0.5 mm). The application of and combination of reflective media (glass beads and/or reflective elements) shall be applied at a rate specified by the manufacturer. At the time of installation the pavement surface temperature and the ambient temperature shall be above 40 °F (4 °C) and rising. The pavement markings shall not be applied if the pavement shows any visible signs of moisture or it is anticipated that damage causing moisture, such as rain showers, may occur during the installation and set periods. The Engineer will determine the atmospheric conditions and pavement surface conditions that produce satisfactory results.

Using the application equipment, the pavement markings shall be applied in the following manner, as a simultaneous operation:

- (a) The surface shall be air-blasted to remove any dirt and residue.
- (b) The resin shall be mixed and heated according to manufacturer's recommendations and sprayed onto the pavement surface.

The edge of the center line or lane line shall be offset a minimum distance of 2 in. (50 mm) from a longitudinal crack or joint. Edge lines shall be approximately 2 in. (50 mm) from the edge of pavement. The finished center and lane lines shall be straight, with the lateral deviation of any 10 ft (3 m) line not to exceed 1 in. (25 mm).

<u>Notification</u>. The Contractor shall notify the Engineer 72 hours prior to the placement of the markings in order that he/she can be present during the operation. At the time of notification, the Contractor shall provide the Engineer the manufacturer and lot numbers of polyurea and reflective media that will be used.

<u>Inspection</u>. The polyurea pavement markings will be inspected following installation according to Article 780.10 of the Standard Specifications, except, no later than December 15, and inspected following a winter performance period that extends 180 days from December 15.

Method of Measurement. This work will be measured for payment as follows:

- (a) Contract Quantities. The requirements for the use of contract quantities shall be according to Article 202.07(a).
- (b) Measured Quantities. Lines will be measured for payment in place in feet (meters). Double yellow lines will be measured as two separate lines.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot (meter) for POLYUREA PAVEMENT MARKING TYPE I – LINE of the line width specified or for POLYUREA PAVEMENT MARKING TYPE II – LINE of the line width specified.

PORTLAND CEMENT CONCRETE PLANTS (BDE)

Effective: January 1, 2007

Add the following to Article 1020.11(a) of the Standard Specifications.

- "(9) Use of Multiple Plants in the Same Construction Item. The Contractor may simultaneously use central-mixed, truck-mixed, and shrink-mixed concrete from more than one plant, for the same construction item, on the same day, and in the same pour. However, the following criteria shall be met.
 - a. Each plant shall use the same cement, finely divided minerals, aggregates, admixtures, and fibers.
 - b. Each plant shall use the same mix design. However, material proportions may be altered slightly in the field to meet slump and air content criteria. Field water adjustments shall not result in a difference that exceeds 0.02 between plants for water/cement ratio. The required cement factor for central-mixed concrete shall be increased to match truck-mixed or shrink-mixed concrete, if the latter two types of mixed concrete are used in the same pour.
 - c. The maximum slump difference between deliveries of concrete shall be 3/4 in. (19 mm) when tested at the jobsite. If the difference is exceeded, but test results are within specification limits, the concrete may be used. The Contractor shall take immediate corrective action and shall test subsequent deliveries of concrete until the slump difference is corrected. For each day, the first three truck loads of delivered concrete from each plant shall be tested for slump by the Contractor. Thereafter, when a specified test frequency for slump is to be performed, it shall be conducted for each plant at the same time.
 - d. The maximum air content difference between deliveries of concrete shall be 1.5 percent when tested at the jobsite. If the difference is exceeded, but test results are within specification limits, the concrete may be used. The Contractor shall take immediate corrective action and shall test subsequent deliveries of concrete until the air content difference is corrected. For each day, the first three truck loads of delivered concrete from each plant shall be tested for air content by the Contractor. Thereafter, when a specified test frequency for air content is to be performed, it shall be conducted for each plant at the same time.
 - e. Strength tests shall be performed and taken at the jobsite for each plant. When a specified strength test is to be performed, it shall be conducted for each plant at the same time.

The difference between plants for their mean strength shall not exceed 450 psi (3100 kPa) compressive and 80 psi (550 kPa) flexural. The strength standard deviation for each plant shall not exceed 650 psi (4480 kPa) compressive and 110 psi (760 kPa) flexural. The mean and standard deviation requirements shall apply to the test of record. If the strength difference requirements are exceeded, the Contractor shall take corrective action.

f. The maximum haul time difference between deliveries of concrete shall be 15 minutes. If the difference is exceeded, but haul time is within specification limits, the concrete may be used. The Contractor shall take immediate corrective action and check subsequent deliveries of concrete until the haul time difference is corrected."

POST CLIPS FOR EXTRUDED ALUMINUM SIGNS (BDE)

Effective: January 1, 2009

Revise the sixth paragraph of Article 1090.03 of the Standard Specifications to read:

"Stainless steel post clips shall be according to ASTM A 276, Type 304. In place of stainless steel post clips the manufacturer may substitute aluminum post clips according to ASTM B 108, 356-T6. A flat washer shall be used under each nut to prevent gouging of the clip."

PRECAST CONCRETE HANDLING HOLES (BDE)

Effective: January 1, 2007

Add the following to Article 540.02 of the Standard Specifications:

"(g) Handling Hole Plugs

1042.16"

Add the following paragraph after the sixth paragraph of Article 540.06 of the Standard Specifications:

"Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar, or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar."

Add the following to Article 542.02 of the Standard Specifications:

"(ee) Handling Hole Plugs

1042.16"

Revise the fifth paragraph of Article 542.04(d) of the Standard Specifications to read:

"Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation."

Add the following to Article 550.02 of the Standard Specifications:

"(o) Handling Hole Plugs

1042.16"

Replace the fourth sentence of the fifth paragraph of Article 550.06 of the Standard Specifications with the following:

"Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation."

Add the following to Article 602.02 of the Standard Specifications:

"(p) Handling Hole Plugs

1042.16(a)"

Replace the fifth sentence of the first paragraph of Article 602.07 of the Standard Specifications with the following:

"Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar."

Add the following to Section 1042 of the Standard Specifications:

- "1042.16 Handling Hole Plugs. Plugs for handling holes in precast concrete products shall be as follows.
 - (a) Precast Concrete Plug. The precast concrete plug shall have a tapered shape and shall have a minimum compressive strength of 3000 psi (20,700 kPa) at 28 days.
 - (b) Polyethylene Plug. The polyethylene plug shall have a "mushroom" shape with a flat round top and a stem with three different size ribs. The plug shall fit snuggly and cover the handling hole.

The plug shall be according to the following.

Mechanical Properties	Test Method	Value (min.)
Flexural Modulus	ASTM D 790	3300 psi (22,750 kPa)
Tensile Strength (Break)	ASTM D 638	1600 psi (11,030 kPa)
Tensile Strength (Yield)	ASTM D 638	1200 psi (8270 kPa)

Thermal Properties	Test Method	Value (min.)
Brittle Temperature	ASTM D 746	-49 °F (-45 °C)
Vicat Softening Point	ASTM D 1525	194 °F (90 °C)"

PRISMATIC CURB REFLECTORS (BDE)

Effective: November 1, 2008

Add the following paragraph to the end of Article 782.03 of the Standard Specifications:

"The installed height of the prismatic curb reflectors shall be a maximum of 3/4 in. (19 mm) above the mounting surface. The unit shall have one reflective surface that is placed approximately perpendicular to the mounting surface."

Add the following Article to Section 1097 of the Standard Specifications:

"1097.04 Prismatic Curb Reflectors. The unit shall provide a reflective area between 1 1/2 sq in. (960 sq mm) and 2 sq in. (1290 sq mm). The base of the marker shall be designed for adhesive mounting.

The unit shall support an 800 lb (360 kg) load. This shall be determined by placing the unit on a flat plate and slowly applying the load by means of another plate evenly to the entire top flat surface of the unit. Breakage or significant deformation of the unit shall constitute failure.

The coefficient of luminous intensity of each reflector shall be equal to or exceed the following minimum values regardless of reflector orientation.

Divergence	Entrance	Inter	nsity
Angle	Angle	Candle Power p	er Foot Candle
Degrees	Degrees	(cande	las/lux)
		Crystal	Amber
0.2°	0°	14 (1.3)	11 (1.0)
0.2°	+5° *	14 (1.3)	11 (1.0)
0.2°	+10° *	9 (0.8)	7 (0.7)
0.2°	+20° *	5 (0.5)	7 (0.4)

^{*} Traffic side"

RAISED REFLECTIVE PAVEMENT MARKERS (BDE)

Effective: November 1, 2009 Revised: April 1, 2010

Revise the first sentence of the second paragraph of Article 781.03(a) of the Standard Specifications to read:

RAMP CLOSURE FOR FREEWAY/EXPRESSWAY (BDE)

Effective: January 1, 2009

Description. This work shall consist of furnishing and installing traffic control for the closure of ramps on a freeway/expressway. Work shall be according to Section 701 except as modified herein.

[&]quot;The pavement shall be cut to match the bottom contour of the marker using a concrete saw fitted with 18 and 20 in. (450 and 500 mm) diameter blades."

Delete the third paragraph of Article 701.17(e)(1) of the Standard Specifications.

Add the following to Article 701.18 of the Standard Specifications:

"(k) Standard 701451. Only one interchange at a time may have ramps closed and only one exit ramp and one entrance ramp may be closed at a time.

The Contractor shall furnish a portable changeable message sign to be placed on the mainline in advance of the ramp closure. The exact placement and display shall be as shown in the plans or as directed by the Engineer."

Revise the first sentence of Article 701.19(c) of the Standard Specifications to read:

"Traffic control and protection required under Standards 701201, 701206, 701306, 701326, 701336, 701406, 701421, 701451, 701501, 701502, 701601, 701602, 701606, 701701 and 701801 will be measured for payment on a lump sum basis."

Add the following to the first paragraph of Article 701.20(b) of the Standard Specifications:

"TRAFFIC CONTROL AND PROTECTION STANDARD 701451;"

RECLAIMED ASPHALT PAVEMENT (RAP) (BDE)

Effective: January 1, 2007 Revised: January 1, 2010

In Article 1030.02(g), delete the last sentence of the first paragraph in (Note 2).

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT

- **1031.01 Description.** Reclaimed asphalt pavement (RAP) is reclaimed asphalt pavement resulting from cold milling or crushing of an existing dense graded hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- **1031.02 Stockpiles.** The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

Prior to milling, the Contractor shall request the District to provide verification of the quality of the RAP to clarify appropriate stockpile.

(a) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality.

All FRAP shall be fractionated prior to testing by screening into a minimum of two size fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass one sieve size larger than the maximum sieve size specified for the mix the RAP will be used in.

- (b) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (c) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (d) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, Superpave (High or Low ESAL), HMA (High or Low ESAL), or equivalent mixtures. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (e) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP/FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

1031.03 Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.

For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Before extraction, each field sample shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

Evaluation of Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable G_{mm} . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	FRAP/Homogeneous /Conglomerate	Conglomerate "D" Quality
1 in. (25 mm)		± 5 %
1/2 in. (12.5 mm)	± 8 %	± 15 %
No. 4 (4.75 mm)	± 6 %	± 13 %
No. 8 (2.36 mm)	± 5 %	
No. 16 (1.18 mm)		± 15 %
No. 30 (600 μm)	± 5 %	
No. 200 (75 μm)	± 2.0 %	± 4.0 %
Asphalt Binder	\pm 0.4 % ^{1/}	± 0.5 %
G _{mm}	± 0.03	

1/ The tolerance for FRAP shall be \pm 0.3 %.

If more than 20 percent of the individual sieves are out of the gradation tolerances, or if more than 20 percent of the asphalt binder content test results fall outside the appropriate tolerances, the RAP/FRAP shall not be used in HMA unless the RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

1031.04 Quality Designation of Aggregate in RAP/FRAP.

- (a) The aggregate quality of the RAP for homogenous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.
 - (1) RAP from Class I, Superpave (High ESAL)/HMA (High ESAL), or HMA (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
 - (2) RAP from Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.

- (3) RAP from Class I, Superpave (High ESAL), or HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
- (4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.
- (b) The aggregate quality of FRAP shall be determined as follows.

Fractionated stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5000 tons (4500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant prequalified by the Department for the specified testing. The consultant shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications."

1031.05 Use of RAP/FRAP in HMA. The use of RAP/FRAP shall be a Contractor's option when constructing HMA in all contracts. The use of RAP/FRAP in HMA shall be as follows.

- (a) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
- (b) Steel Slag Stockpiles. RAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) surface mixtures only.
- (c) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better.
- (d) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
- (e) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, conglomerate, or conglomerate DQ.
- (f) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in the table below for a given N Design.

Max RAP Percentage

HMA Mixtures 1/, 3/	Maximum % RAP		
Ndesign	Binder/Leveling Binder Surface		Polymer Modified
30	30	30	10
50	25	15	10
70	15 / 25 ^{2/}	10 / 15 ^{2/}	10
90	10	10	10
105	10	10	10

- 1/ For HMA shoulder and stabilized subbase (HMA) N-30, the amount of RAP shall not exceed 50% of the mixture.
- 2/ Value of Max % RAP if homogeneous RAP stockpile of IL-9.5 RAP is utilized.
- 3/ When RAP exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275°°F (135 °C) the grades shall be reduced as follows:

Overlays:

When WMA contains between 20 and 30 percent RAP the high temperature shall be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-22). When WMA contains 30 percent or more RAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

Full Depth:

When WMA contains between 20 and 30 percent RAP, the low temperature shall be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG64-28). When the WMA contains 30 percent or more RAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

(g) When the Contractor chooses the FRAP option, the percentage of FRAP shall not exceed the amounts indicated in the table below for a given N Design.

Max FRAP Percentage

	1 11 11 0				
HMA Mixtures 1/, 2/	Maximum % FRAP				
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified		
30	35	35	10		
50	30	25	10		
70	25	20	10		
90	20	15	10		
105	10	10	10		

- 1/ For HMA shoulder and stabilized subbase (HMA) N30, the amount of FRAP shall not exceed 50 percent of the mixture.
- 2/ When FRAP exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275°°F (135°C) the grades shall be reduced as follows:

Overlays:

When WMA contains between 20 and 30 percent FRAP the high temperature shall be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-22). When WMA contains 30 percent or more FRAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

Full Depth:

When WMA contains between 20 and 30 percent FRAP, the low temperature shall be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG64-28). When the WMA contains 30 percent or more FRAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

1031.06 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP material meeting the above detailed requirements.

RAP/FRAP designs shall be submitted for volumetric verification. If additional RAP/FRAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP stockpiles may be used in the original mix design at the percent previously verified.

1031.07 HMA Production. The coarse aggregate in all RAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

HMA plants utilizing RAP/FRAP shall be capable of automatically recording and printing the following information.

- (a) Dryer Drum Plants.
 - (1) Date, month, year, and time to the nearest minute for each print.
 - (2) HMA mix number assigned by the Department.
 - (3) Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - (4) Accumulated dry weight of RAP/FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - (5) Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
 - (6) Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
 - (7) Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
 - (8) Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)
- (b) Batch Plants.
 - (1) Date, month, year, and time to the nearest minute for each print.
 - (2) HMA mix number assigned by the Department.
 - (3) Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - (4) Mineral filler weight to the nearest pound (kilogram).
 - (5) RAP/FRAP weight to the nearest pound (kilogram).
 - (6) Virgin asphalt binder weight to the nearest pound (kilogram).
 - (7) Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

1031.08 RAP in Aggregate Surface Course and Aggregate Shoulders. The use of RAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply.
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

REFLECTIVE SHEETING ON CHANNELIZING DEVICES (BDE)

Effective: April 1, 2007 Revised: November 1, 2008

Revise the seventh paragraph of Article 1106.02 of the Standard Specifications to read:

"At the time of manufacturing, the retroreflective prismatic sheeting used on channelizing devices shall meet or exceed the initial minimum coefficient of retroreflection as specified in the following table. Measurements shall be conducted according to ASTM E 810, without averaging. Sheeting used on cones, drums and flexible delineators shall be reboundable as tested according to ASTM D 4956. Prestriped sheeting for rigid substrates on barricades shall be white and orange. The sheeting shall be uniform in color and devoid of streaks throughout the length of each roll. The color shall conform to the latest appropriate standard color tolerance chart issued by the U.S. Department of Transportation, Federal Highway Administration, and to the daytime and nighttime color requirements of ASTM D 4956.

Initial Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material					
Observation Entrance Angle Fluorescent Angle (deg.) White Orange Orange					
0.2	-4	365	160	150	
0.2	+30	175	80	70	
0.5	-4	245	100	95	
0.5	+30	100	50	40"	

Revise the first sentence of the first paragraph of Article 1106.02(c) of the Standard Specifications to read:

Revise the third sentence of the first paragraph of Article 1106.02(d) of the Standard Specifications to read:

REINFORCEMENT BARS - STORAGE AND PROTECTION (BDE)

Effective: August 1, 2008 Revised: April 1, 2009

Revise Article 508.03 of the Standard Specifications to read:

[&]quot;Barricades and vertical panels shall have alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

[&]quot;The bottom panels shall be 8 x 24 in. (200 x 600 mm) with alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

"508.03 Storage and Protection. Reinforcement bars shall be stored off the ground using platforms, skids, or other supports; and shall be protected from mechanical injury and from deterioration by exposure. Epoxy coated bars shall be stored on wooden or padded steel cribbing and all systems for handling shall have padded contact areas. The bars or bundles shall not be dragged or dropped.

When epoxy coated bars are stored in a manner where they will be exposed to the weather more than 60 days prior to use, they shall be protected from deterioration such as that caused by sunlight, salt spray, and weather exposure. The protection shall consist of covering with opaque polyethylene sheeting or other suitable opaque material. The covering shall be secured and allow for air circulation around the bars to minimize condensation under the cover.

Covering of the epoxy coated bars will not be required when the bars are installed and tied, or when they are partially incorporated into the concrete."

SEEDING (BDE)

Effective: July 1, 2004 Revised: July 1, 2010

Revise the following seeding mixtures shown in Table 1 of Article 250.07 of the Standard Specifications to read:

	"Table 1 - SEEDING MIXTURES				
	Class – Type Seeds		lb/acre		
			(kg/hectare)		
1A	Salt Tolerant	Bluegrass	60 (70)		
	Lawn Mixture 7/	Perennial Ryegrass	20 (20)		
		Red Fescue	20 (20)		
		(Audubon, Sea Link, or Epic)			
		Hard Fescue	20 (20)		
		(Rescue 911, Spartan II, or Reliant IV)	, ,		
		Fults Salt Grass 1/ or Salty Alkaligrass	60 (70)		
2	Roadside Mixture 7/	Tall Fescue	100 (110)		
		(Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	` ′		
		Perennial Ryegrass	50 (55)		
		Creeping Red Fescue	40 (50)		
		Red Top	10 (10)		
2A	Salt Tolerant	Tall Fescue	60 (70)		
	Roadside Mixture 7/	(Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)			
		Perennial Ryegrass	20 (20)		
		Red Fescue	30 (20)		
		(Audubon, Sea Link, or Epic)	, ,		
		Hard Fescue	30 (20)		
		(Rescue 911, Spartan II, or Reliant IV)	, ,		
		Fults Salt Grass 1/ or Salty Alkaligrass	60 (70)		

	"Table 1 - SEEDING MIXTURES				
3			5 (5)		
	Slope Mixture 7/	(Canada Wild Rye)			
		Perennial Ryegrass	20 (20)		
		Alsike Cover 2/	5 (5)		
		Desmanthus Illinoensis	2 (2)		
		(Illinois Bundleflower) 2/, 5/			
		Andropogon Scoparius	12 (12)		
		(Little Bluestem) 5/			
		Bouteloua Curtipendula	10 (10)		
		(Side-Oats Grama)			
		Fults Salt Grass 1/ or Salty Alkaligrass	30 (35)		
		Oats, Spring	50 (55)		
		Slender Wheat Grass 5/	15 (15)		
		Buffalo Grass (Cody or Bowie) 4/, 5/, 9/	5 (5)		
6A	Salt Tolerant	Andropogon Scoparius	5 (5)		
	Conservation	(Little Bluestem) 5/			
	Mixture	Elymus Canadensis	2 (2)		
		(Canada Wild Rye) 5/			
		Buffalo Grass (Cody or Bowie) 4/, 5/, 9/	5 (5)		
		Vernal Alfalfa 2/	15 (15)		
		Oats, Spring	48 (55)		
		Fults Salt Grass 1/ or Salty Alkaligrass	20 (20)"		

Revise Note 7 of Table 1 – Seeding Mixtures of Article 250.07 of the Standard Specifications to read:

"7/ In Districts 1 through 6, the planting times shall be April 1 to June 15 and August 1 to November 1. In Districts 7 through 9, the planting times shall be March 1 to June 1 and August 1 to November 15. Seeding may be performed outside these dates provided the Contractor guarantees a minimum of 75 percent uniform growth over the entire seeded area(s) after a period of establishment. Inspection dates for the period of establishment will be as follows: Seeding conducted in Districts 1 through 6 between June 16 and July 31 will be inspected after April 15 and seeding conducted between November 2 and March 31 will be inspected after September 15. Seeding conducted in Districts 7 through 9 between June 2 and July 31 will be inspected after April 15 and seeding conducted between November 16 and February 28 will be inspected after September 15. The guarantee shall be submitted to the Engineer in writing prior to performing the work. After the period of establishment, areas not exhibiting 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at no additional cost to the Department."

Revise the first paragraph of Article 1081.04(a) of the Standard Specifications to read:

"(a) Sampling and Testing. Each lot of seed furnished shall be tested by a State Agriculture Department (including other States) or by land grant college or university agricultural sections or by a Registered Seed Technologist. Germination testing of seed shall be accomplished within the 12 months prior to the seed being installed on the project."

Delete the last sentence of the first paragraph of Article 1081.04(c)(2) of the Standard Specifications.

Revise Table II of Article 1081.04(c)(6) of the Standard Specifications to read:

TABLE II						
	Hard		Pure		Secondary *	
	Seed	Purity	Live	Weed	Noxious Weeds	
	%	%	Seed %	%	No. per oz (kg)	
Variety of Seeds	Max.	Min.	Min.	Max.	Max. Permitted	Notes
Alfalfa	20	92	89	0.50	6 (211)	1/
Clover, Alsike	15	92	87	0.30	6 (211)	2/
Red Fescue, Audubon	0	97	82	0.10	3 (105)	-
Red Fescue, Creeping	-	97	82	1.00	6 (211)	-
Red Fescue, Epic	-	98	83	0.05	1 (35)	-
Red Fescue, Sea Link	-	98	83	0.10	3 (105)	-
Tall Fescue, Blade Runner	-	98	83	0.10	2 (70)	-
Tall Fescue, Falcon IV	-	98	83	0.05	1 (35)	-
Tall Fescue, Inferno	0	98	83	0.10	2 (70)	-
Tall Fescue, Tarheel II	-	97	82	1.00	6 (211)	-
Tall Fescue, Quest	0	98	83	0.10	2 (70)	
Fults Salt Grass	0	98	85	0.10	2 (70)	-
Salty Alkaligrass	0	98	85	0.10	2 (70)	-
Kentucky Bluegrass	-	97	80	0.30	7 (247)	4/
Oats	-	92	88	0.50	2 (70)	3/
Redtop	-	90	78	1.80	5 (175)	3/
Ryegrass, Perennial, Annual	-	97	85	0.30	5 (175)	3/
Rye, Grain, Winter	-	92	83	0.50	2 (70)	3/
Hard Fescue, Reliant IV	-	98	83	0.05	1 (35)	-
Hard Fescue, Rescue 911	0	97	82	0.10	3 (105)	-
Hard Fescue, Spartan II	-	98	83	0.10	3 (105)	-
Timothy	-	92	84	0.50	5 (175)	3/
Wheat, hard Red Winter	-	92	89	0.50	2 (70)	3/"

Revise the first sentence of the first paragraph of Article 1081.04(c)(7) of the Standard Specifications to read:

"The seed quantities indicated per acre (hectare) for Prairie Grass Seed in Classes 3, 3A, 4, 4A, 6, and 6A in Article 250.07 shall be the amounts of pure, live seed per acre (hectare) for each species listed."

SELF-CONSOLIDATING CONCRETE FOR CAST-IN-PLACE CONSTRUCTION (BDE)

Effective: November 1, 2005 Revised: July 1, 2010

<u>Definition</u>. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.

<u>Usage</u>. Self-consolidating concrete may be used for cast-in-place concrete construction items involving Class MS, DS, and SI concrete.

Materials. Materials shall be according to Section 1021 of the Standard Specifications.

Mix Design Criteria. Article 1020.04 of the Standard Specifications shall apply, except as follows:

- (a) The cement factor shall be according to Article 1020.04 of the Standard Specifications. If the maximum cement factor is not specified, it shall not exceed 7.05 cwt/cu yd (418 kg/cu m). The cement factor shall not be reduced if a water-reducing, retarding, or high range water-reducing admixture is used.
- (b) The maximum allowable water/cement ratio shall be according to Article 1020.04 of the Standard Specifications or 0.44, whichever is lower.
- (c) The slump requirements shall not apply.
- (d) The coarse aggregate gradations shall be CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 may be used when the Contractor provides satisfactory evidence to the Engineer that the mix will not segregate. The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used.
- (e) The slump flow range shall be ± 2 in. (± 50 mm) of the Contractor target value, and within the overall Department range of 20 in. (510 mm) minimum to 28 in. (710 mm) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 4 in. (100 mm). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The hardened visual stability index shall be a maximum of 1.

<u>Test Methods</u>. Illinois Test Procedures SCC-1, SCC-2, SCC-3, SCC-4, SCC-6, and Illinois Modified AASHTO T 22, 23, 121, 126, 141, 152, 177, 196, and 309 shall be used for testing of self-consolidating concrete mixtures.

<u>Mix Design Submittal</u>. The Contractor's Level III PCC Technician shall submit a mix design according to the "Portland Cement Concrete Level III Technician" course manual, except target slump information is not applicable and will not be required. However, a target slump flow shall be submitted.

A J-ring value shall be submitted if a lower mix design maximum will apply. An L-box blocking ratio shall be submitted if a higher mix design minimum will apply. The Contractor shall also indicate applicable construction items for the mix design.

Trial mixture information will be required by the Engineer. A trial mixture is a batch of concrete tested by the Contractor to verify the Contractor's mix design will meet specification requirements. Trial mixture information shall include test results as specified in the "Portland Cement Concrete Level III Technician" course manual.

Test results shall also include slump flow, visual stability index, J-ring value or L-box blocking ratio, and hardened visual stability index. For the trial mixture, the slump flow shall be near the proposed target slump flow.

<u>Trial Batch</u>. A minimum 2 cu yd (1.5 cu m) trial batch shall be produced, and the self-consolidating concrete admixture dosage proposed by the Contractor shall be used. The slump flow shall be within 1.0 in. (25 mm) of the maximum slump flow range specified by the Contractor, and the air content shall be within the top half of the allowable specification range.

The trial batch shall be scheduled a minimum of 21 calendar days prior to anticipated use and shall be performed in the presence of the Engineer.

The Contractor shall provide the labor, equipment, and materials to test the concrete. The mixture will be evaluated by the Engineer for strength, air content, slump flow, visual stability index, J-ring value or L-box blocking ratio, and hardened visual stability index.

Upon review of the test data from the trial batch, the Engineer will verify or deny the use of the mix design and notify the Contractor.

A new trial batch will be required whenever there is a change in the source of any component material, proportions beyond normal field adjustments, dosage of the self-consolidating concrete admixture, batch sequence, mixing speed, mixing time, or as determined by the Engineer. The testing criteria for the new trial batch will be determined by the Engineer.

When necessary, the trial batches shall be disposed of according to Article 202.03 of the Standard Specifications.

<u>Mixing Portland Cement Concrete</u>. In addition to Article 1020.11 of the Standard Specifications, the mixing time for central-mixed concrete shall not be reduced as a result of a mixer performance test. Truck-mixed or shrink-mixed concrete shall be mixed in a truck mixer for a minimum of 100 revolutions.

Wash water, if used, shall be completely discharged from the drum or container before the succeeding batch is introduced.

The batch sequence, mixing speed, and mixing time shall be appropriate to prevent cement balls and mix foaming for central-mixed, truck-mixed, and shrink-mixed concrete.

<u>Falsework and Forms</u>. In addition to Articles 503.05 and 503.06 of the Standard Specifications, the Contractor shall ensure the design of the falsework and forms is adequate for the additional form pressure caused by the fluid concrete. Forms shall be tight to prevent leakage of fluid concrete.

When the form height for placing the self-consolidating concrete is greater than 10.0 ft (3.0 m), direct monitoring of form pressure shall be performed according to Illinois Test Procedure SCC-10. The monitoring requirement is a minimum, and the Contractor shall remain responsible for adequate design of the falsework and forms. The Contractor shall record the formwork pressure during concrete placement. This information shall be used by the Contractor to prevent the placement rate from exceeding the maximum formwork pressure allowed, to monitor the thixotropic change in the concrete during the pour, and to make appropriate adjustments to the mix design. This information shall be provided to the Engineer during the pour.

<u>Placing and Consolidating</u>. Concrete placement and consolidation shall be according to Article 503.07 of the Standard Specifications, except as follows:

Revise the third paragraph of Article 503.07 of the Standard Specifications to read:

"Open troughs and chutes shall extend as nearly as practicable to the point of deposit. The drop distance of concrete shall not exceed 5 ft (1.5 m). If necessary, a tremie shall be used to meet this requirement. The maximum distance of horizontal flow from the point of deposit shall be 25 ft (7.6 m), unless approved otherwise by the Engineer. For drilled shafts, free fall placement will not be permitted."

Delete the seventh, eighth, ninth, and tenth paragraphs of Article 503.07 of the Standard Specifications.

Add to the end of the eleventh paragraph of Article 503.07 of the Standard Specifications the following:

"Concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator shall be the pencil head type with a maximum diameter or width of 1 in. (25 mm). Any other method for restoring the fluidity of the concrete shall be approved by the Engineer."

<u>Quality Control by Contractor at Plant</u>. The specified test frequencies for aggregate gradation, aggregate moisture, air content, unit weight/yield, and temperature shall be performed as indicated in the contract.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed as needed to control production. The hardened visual stability index test will not be required to be performed at the plant.

<u>Quality Control by Contractor at Jobsite</u>. The specified test frequencies for air content, strength, and temperature shall be performed as indicated in the contract.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed on the first two truck deliveries of the day, and every 50 cu yd (40 cu m) thereafter. The Contractor shall select either the J-ring or L-box test for jobsite testing.

The hardened visual stability index test shall be performed on the first truck delivery of the day, and every 300 cu yd (230 cu m) thereafter. Slump flow, visual stability index, J-ring value or L-box blocking ratio, air content, and concrete temperature shall be recorded for each hardened visual stability index test.

The Contractor shall retain all hardened visual stability index cut cylinder specimens until the Engineer notifies the Contractor that the specimens may be discarded.

If mix foaming or other potential detrimental material is observed during placement or at the completion of the pour, the material shall be removed while the concrete is still plastic.

<u>Quality Assurance by Engineer at Plant</u>. For air content and aggregate gradation, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract.

For slump flow, visual stability index, and J-ring or L-box tests, quality assurance independent sample testing and split sample testing will be performed as determined by the Engineer.

<u>Quality Assurance by Engineer at Jobsite</u>. For air content and strength, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract.

For slump flow, visual stability index, J-ring or L-box, and hardened visual stability index tests, quality assurance independent sample testing will be performed as determined by the Engineer.

For slump flow and visual stability index quality assurance split sample testing, the Engineer will perform tests at the beginning of the project on the first three tests performed by the Contractor. Thereafter, a minimum of ten percent of total tests required of the Contractor will be performed per plant, which will include a minimum of one test per mix design. The acceptable limit of precision will be 1.5 in. (40 mm) for slump flow and a limit of precision will not apply to the visual stability index.

For the J-ring or the L-box quality assurance split sample testing, a minimum of 80 percent of the total tests required of the Contractor will be witnessed by the Engineer per plant, which will include a minimum of one witnessed test per mix design. The Engineer reserves the right to conduct quality assurance split sample testing. The acceptable limit of precision will be 1.5 in. (40 mm) for the J-ring value and ten percent for the L-box blocking ratio.

For each hardened visual stability index test performed by the Contractor, the cut cylinders shall be presented to the Engineer for determination of the rating. The Engineer reserves the right to conduct quality assurance split sample testing. A limit of precision will not apply to the hardened visual stability index.

SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)

Effective: July 1, 2004 Revised: July 1, 2010

<u>Definition</u>. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.

Usage. Self-consolidating concrete may be used for precast concrete products.

Materials. Materials shall be according to Section 1021 of the Standard Specifications.

Mix Design Criteria. The mix design criteria shall be as follows:

(a) The minimum cement factor shall be according to Article 1020.04 of the Standard Specifications. If the maximum cement factor is not specified, it shall not exceed 7.05 cwt/cu yd (418 kg/cu m).

- (b) The maximum allowable water/cement ratio shall be according to Article 1020.04 of the Standard Specifications or 0.44, whichever is lower.
- (c) The slump requirements of Article 1020.04 of the Standard Specifications shall not apply.
- (d) The coarse aggregate gradations shall be CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 may be used when the Contractor provides satisfactory evidence to the Engineer that the mix will not segregate. The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used.
- (e) The slump flow range shall be ± 2 in. (± 50 mm) of the Contractor target value, and within the overall Department range of 20 in. (510 mm) minimum to 28 in. (710 mm) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 4 in. (100 mm). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The hardened visual stability index shall be a maximum of 1.

<u>Mixing Portland Cement Concrete</u>. In addition to Article 1020.11 of the Standard Specifications, the mixing time for central-mixed concrete shall not be reduced as a result of a mixer performance test. Truck-mixed or shrink-mixed concrete shall be mixed in a truck mixer for a minimum of 100 revolutions.

Wash water, if used, shall be completely discharged from the drum or container before the succeeding batch is introduced.

The batch sequence, mixing speed, and mixing time shall be appropriate to prevent cement balls and mix foaming for central-mixed, truck-mixed, and shrink-mixed concrete.

<u>Placing and Consolidating</u>. The maximum distance of horizontal flow from the point of deposit shall be 25 ft (7.6 m), unless approved otherwise by the Engineer.

Concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator shall be the pencil head type with a maximum diameter or width of 1 in. (25 mm). Any other method for restoring the fluidity of the concrete shall be approved by the Engineer.

Mix Design Approval. The Contractor shall obtain mix design approval according to the Department's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products".

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

To account for the preparatory work and 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 in accordance with Article 108.01 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 BC 260A submitted for the approval of the subcontractor's work.

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

SURFACE TESTING OF PAVEMENTS (BDE)

Effective: April 1, 2002 Revised: January 1, 2007

Hot-Mix Asphalt (HMA) Overlays

Revise Article 406.03(h) of the Standard Specifications to read:

"(h) Pavement Surface Test Equipment1101.10"

Revise Article 406.11 of the Standard Specifications to read:

"406.11 Surface Tests. The finished surface of the pavement shall be tested for smoothness within three days of paving. Testing shall be performed in the presence of the Engineer.

Prior to testing, a copy of the approval letter and recorded settings from the Profile Equipment Verification (PEV) Program shall be submitted to the Engineer; and all objects and debris shall be removed from the pavement.

- (a) Test Sections/Equipment.
 - (1) High-Speed Mainline Pavement. High-speed mainline pavement shall consist of pavements, ramps, and loops with a posted speed greater than 45 mph. These sections shall be tested using a profile testing device.
 - (2) Low-Speed Mainline Pavement. Low-speed mainline pavement shall consist of pavements, ramps, and loops with a posted speed of 45 mph or less. These sections shall be tested using a profile testing device.
 - (3) Miscellaneous Pavement. Miscellaneous pavement shall consist of:

- a. pavement on horizontal curves with a centerline radius of curvature of less than or equal to 1000 ft (300 m) and pavement within the superelevation transition of such curves:
- b. pavement on vertical curves having a length of less than or equal to 200 ft (60 m) in combination with an algebraic change in tangent grades greater than or equal to three percent, as may occur on urban ramps or other constricted-space facilities:
- c. the first or last 15 ft (4.5 m) of a pavement section where the Contractor is not responsible for the adjoining surface;
- d. intersections;
- e. variable width pavements;
- f. side street returns;
- g. crossovers;
- h. connector pavement from mainline pavement expansion joint to the bridge approach pavement;
- i. bridge approach pavement; and
- j. other miscellaneous pavement surfaces (i.e. a turn lane) as determined by the Engineer.

Miscellaneous pavement shall be tested using a 16 ft (5 m) straightedge set to a 3/8 in. (10 mm) tolerance.

- (b) Lots/Sublots. Mainline pavement test sections will be divided into lots and sublots.
 - (1) Lots. A lot will be defined as a continuous strip of pavement 1 mile (1600 m) long and one lane wide. When the length of a continuous strip of pavement is less than 1 mile (1600 m), that pavement will be included in an adjacent lot. Structures will be omitted when measuring pavement length.
 - (2) Sublots. Lots will be divided into 0.1 mile (160 m) sublots. A partial sublot greater than or equal to 250 ft (76 m) resulting from an interruption in the pavement will be subject to the same evaluation as a whole sublot. Partial sublots less than 250 ft (76 m) shall be included with the previous sublot for evaluation purposes.
- (c) Testing Procedure. One wheel track shall be tested per lane. Testing shall be performed 3 ft (1 m) from and parallel to the edge of the lane away from traffic. A guide shall be used to maintain the proper distance.

The profile trace generated shall have stationing indicated every 500 ft (150 m) at a minimum.

Both ends of the profile trace shall be labeled with the following information: contract number, beginning and ending stationing, which direction is up on the trace, which direction the data was collected, and the device operator name(s). The top portion of the Department supplied form, "Profile Report of Pavement Smoothness" shall be completed and secured around the trace roll.

Although surface testing of intermediate lifts will not be required, they may be performed at the Contractor's option. When this option is chosen, the testing shall be performed and the profile traces shall be generated as described above.

The Engineer may perform his/her own testing at any time for monitoring and comparison purposes.

(d) Trace Reduction and Bump Locating Procedure. All traces shall be reduced. Traces produced by a mechanical recorder shall be reduced using an electronic scanner and computer software. This software shall calculate the profile index of each sublot in in./mile (mm/km) and indicate any high points (bumps) in excess of 0.30 in. (8 mm) with a line intersecting the profile on the printout. Computerized recorders shall provide the same information.

The profile index of each track, average profile index of each sublot, average profile index of the lot and locations of bumps shall be recorded on the form.

All traces and reports shall be provided within two working days of completing the testing to the Engineer for the project file. Traces from either a computerized profile testing device or analysis software used with a manual profile testing device shall display the settings used for the data reduction. The Engineer will compare these settings with the approved settings from the PEV Program. If the settings do not match, the results will be rejected and the section shall be retested/reanalyzed with the appropriate settings.

The Engineer will use the results of the testing to evaluate paving methods and equipment. If the average profile index of a lot exceeds 40.0 in./mile (635 mm/km) for high-speed mainline pavement or 65.0 in./mile (1025 mm/km) for low-speed mainline pavement, the paving operation will be suspended until corrective action is taken by the Contractor.

- (e) Corrective Work. All bumps in excess of 0.30 in. (8 mm) in a length of 25 ft (8 m) or less shall be corrected. If the bump is greater than 0.50 in. (13 mm), the pavement shall be removed and replaced. The minimum length of pavement to be removed shall be 3 ft (900 mm).
 - (1) High-Speed Mainline Pavement. Any sublot having a profile index within the range of, greater than 30.0 to 40.0 in./mile (475 to 635 mm/km) including bumps, shall be corrected to reduce the profile index to 30.0 in./mile (475 mm/km) or less on each trace. Any sublot having a profile index greater than 40.0 in./mile (635 mm/km) including bumps, shall be corrected to reduce the profile index to 30.0 in./mile (475 mm/km) or less on each trace, or replaced at the Contractor's option.

- (2) Low-Speed Mainline Pavement. Any sublot having a profile index within the range of, greater than 45.0 to 65.0 in./mile (710 to 1025 mm/km) including bumps, shall be corrected to reduce the profile index to 45.0 in./mile (710 mm/km) or less on each trace. Any sublot having a profile index greater than 65.0 in./mile (1025 mm/km) including bumps, shall be corrected to reduce the profile index to 45.0 in./mile (710 mm/km) or less on each trace, or replaced at the Contractor's option.
- (3) Miscellaneous Pavement. Surface variations which exceed the 3/8 in. (10 mm) tolerance will be marked by the Engineer and shall be corrected by the Contractor.

Corrective work shall be completed using either an approved grinding device consisting of multiple saws or by removing and replacing the pavement. Corrective work shall be applied to the full lane width. When completed, the corrected area shall have uniform texture and appearance, with the beginning and ending of the corrected area squared normal to the centerline of the paved surface.

Upon completion of the corrective work, the surface of the sublot(s) shall be retested. The Contractor shall furnish the profile tracing(s) and the completed form(s) to the Engineer within two working days after corrections are made. If the profile index and/or bumps still do not meet the requirements, additional corrective work shall be performed.

Corrective work shall be at no additional cost to the Department.

(f) Smoothness Assessments. Assessments will be paid to or deducted from the Contractor for each sublot of mainline pavement, per the Smoothness Assessment Schedule. Assessments will be based on the average profile index of each sublot prior to performing any corrective work unless the Contractor has chosen to remove and replace the sublot. For sublots that are replaced, assessments will be based on the profile index determined after replacement.

Assessments will not be paid or deducted until all other contract requirements for the pavement are satisfied. Pavement that is corrected or replaced for reasons other than smoothness, shall be retested as stated herein.

SMOOTHNESS ASSESSMENT SCHEDULE (HMA Overlays)				
High-Speed Mainline Pavement Average Profile Index in./mile (mm/km) Low-Speed Mainline Pavement Average Profile Index in./mile (mm/km) Assessment per sublot				
6.0 (95) or less	15.0 (240) or less	+\$150.00		
>6.0 (95) to 10.0 (160)	>15.0 (240) to 25.0 (400)	+\$80.00		
>10.0 (160) to 30.0 (475)	>25.0 (400) to 45.0 (710)	+\$0.00		
>30.0 (475) to 40.0 (635)	>45.0 (710) to 65.0 (1025)	+\$0.00		
Greater than 40.0 (635)	Greater than 65.0 (1025)	-\$300.00		

Smoothness assessments will not be applied to miscellaneous pavement sections."

Hot-Mix Asphalt (HMA) Pavement (Full-Depth)

Revise Article 407.09 of the Standard Specifications to read:

"407.09 Surface Tests. The finished surface of the pavement shall be tested for smoothness according to Article 406.11, except as follows:

Two wheel tracks shall be tested per lane. Testing shall be performed 3 ft (1 m) from and parallel to each lane edge.

SMOOTHNESS ASSESSMENT SCHEDULE (Full-Depth HMA)				
High-Speed Mainline Pavement Average Profile Index in./mile (mm/km)	Assessment per sublot			
6.0 (95) or less		+\$800.00		
>6.0 (95) to 11.0 (175)	15.0 (240) or less	+\$550.00		
>11.0 (175) to 17.0 (270)	>15.0 (240) to 25.0 (400)	+\$350.00		
>17.0 (270) to 30.0 (475)	>25.0 (400) to 45.0 (710)	+\$0.00		
>30.0 (475) to 40.0 (635)	>45.0 (710) to 65.0 (1025)	+\$0.00		
Greater than 40.0 (635)	Greater than 65.0 (1025)	-\$500.00"		

Delete the third paragraph of Article 407.12 of the Standard Specifications.

Portland Cement Concrete Pavement

Revise Article 420.10 of the Standard Specifications to read:

"420.10 Surface Tests. The finished surface of the pavement shall be tested for smoothness according to Article 406.11, except as follows:

The finished surface of the pavement shall be tested for smoothness once the pavement has attained a flexural strength of 550 psi (3800 kPa) or a compressive strength of 3000 psi (20,700 kPa).

Two wheel tracks shall be tested per lane. Testing shall be performed 3 ft (1 m) from and parallel to each lane edge.

Membrane curing damaged during testing shall be repaired as directed by the Engineer at no additional cost to the Department.

No further texturing for skid resistance will be required for areas corrected by grinding. Protective coat shall be reapplied to ground areas according to Article 420.18 at no additional cost to the Department.

For pavement that is corrected by removal and replacement, the minimum length to be removed shall meet the requirements of either Class A or Class B patching.

SMOOTHNESS ASSESSMENT SCHEDULE (PCC)				
High-Speed Mainline Pavement Average Profile Index in./mile (mm/km)	Low-Speed Mainline Pavement Average Profile Index in./mile (mm/km)	Assessment per sublot		
6.0 (95) or less		+\$1200.00		
>6.0 (95) to 11.0 (175)	15.0 (240) or less	+\$950.00		
>11.0 (175) to 17.0 (270)	>15.0 (240) to 25.0 (400)	+\$600.00		
>17.0 (270) to 30.0 (475)	>25.0 (400) to 45.0 (710)	+\$0.00		
>30.0 (475) to 40.0 (635)	>45.0 (710) to 65.0 (1025)	+\$0.00		
Greater than 40.0 (635)	Greater than 65.0 (1025)	-\$750.00"		

Delete the fourth paragraph of Article 420.20 of the Standard Specifications.

Testing Equipment

Revise Article 1101.10 of the Standard Specifications to read:

"1101.10 Pavement Surface Test Equipment. Required surface testing and analysis equipment and their jobsite transportation shall be provided by the Contractor.

- (a) 16 ft (5 m) Straightedge. The 16 ft (5 m) straightedge shall consist of a metal I-beam mounted between two wheels spaced 16 ft (5 m) between the axles. Scratcher bolts which can be easily and accurately adjusted, shall be set at the 1/4, 1/2, and 3/4 points between the axles. A handle suitable for pushing and guiding shall be attached to the straightedge.
- (b) Profile Testing Device. The profile testing device shall have a decal displayed to indicate it has been tested through the Profile Equipment Verification (PEV) Program administered by the Department.
 - (1) California Profilograph. The California Profilograph shall be either computerized or manual and have a frame 25 ft (8 m) in length supported upon multiple wheels at either end. The profile shall be recorded from the vertical movement of a wheel attached to the frame at mid point.
 - The California Profilograph shall be calibrated according to the manufacturer's recommendations and California Test 526. All calibration traces and calculations shall be submitted to the Engineer for the project file.
 - (2) Inertial Profiler. The inertial profiler shall be either an independent device or a system that can be attached to another vehicle using one or two non-contact sensors to measure the pavement profile. The inertial profiler shall be capable of performing a simulation of the California Profilograph to provide results in the Profile Index format.

The inertial profiler shall be calibrated according to the manufacturer's recommendations. All calibration traces and calculations shall be submitted to the Engineer for the project file.

(3) Trace Analysis. The Contractor shall reduce/evaluate these traces using a 0.00 in. (0.0 mm) blanking band and determine a Profile Index in in./mile (mm/km) for each section of finished pavement surface. Traces produced using a computerized profile testing device will be evaluated without further reduction. When using a manual profile testing device, the Contractor shall provide an electronic scanner, a computer, and software to reduce the trace. All analysis equipment (electronic scanner, computerized recorder, etc.) shall be able to accept 0.00 in. (0.0 mm) for the blanking band.

All traces from pavement sections tested with the profile testing device shall be recorded on paper with scales of 300:1 longitudinally and 1:1 vertically. Equipment and software settings of the profile testing device and analysis equipment shall be set to those values approved through the PEV Program.

The Engineer may retest the pavement at any time to verify the accuracy of the equipment."

TEMPORARY EROSION CONTROL (BDE)

Effective: November 1, 2002 Revised: July 1, 2010

Add the following to Article 280.02 of the Standard Specifications to read:

"(k) Filter Fabric 1080.03"

Revise the third paragraph of Article 280.03 of the Standard Specifications to read:

"Erosion control systems shall be installed prior to beginning any activities which will potentially create erodible conditions. Erosion control systems for areas outside the limits of construction such as storage sites, plant sites, waste sites, haul roads, and Contractor furnished borrow sites shall be installed prior to beginning soil disturbing activities at each area. These offsite systems shall be designed by the Contractor and be subject to the approval of the Engineer."

Add the following paragraph after the third paragraph of Article 280.03 of the Standard Specifications:

"The temporary erosion and sediment control systems shown on the plans represent the minimum systems anticipated for the project. Conditions created by the Contractor's operations, or for the Contractor's convenience, which are not covered by the plans, shall be protected as directed by the Engineer at no additional cost to the Department. Revisions or modifications of the erosion and sediment control systems shall have the Engineer's written approval."

Revise Article 280.04(a) of the Standard Specifications to read:

"(a) Temporary Ditch Checks. This system consists of the construction of temporary ditch checks to prevent siltation, erosion, or scour of ditches and drainage ways. Temporary ditch checks shall be constructed with rolled excelsior, products from the Department's approved list, or with aggregate placed on filter fabric when specified. Filter fabric shall be installed according to the requirements of Section 282. Riprap shall be placed according to Article 281.04. Manufactured ditch checks shall be installed according to the manufacturer's specifications. Spacing of ditch checks shall be such that the low point in the center of one ditch check is at the same elevation as the base of the ditch check immediately upstream. Temporary ditch checks shall be sufficiently long enough that the top of the device in the middle of the ditch is lower than the bottom of the terminating ends of the ditch side slopes."

Revise the last sentence of the first paragraph of Article 280.04(g) of the Standard Specifications to read:

"The temporary mulch cover shall be according to either Article 251.03 or 251.04 except for any reference to seeding."

Revise Article 280.07(b) of the Standard Specifications to read:

"(b) Temporary Ditch Checks. This work will be measured for payment along the long axis of the device in place in feet (meters) except for aggregate ditch checks which will be measured for payment in tons (metric tons). Payment will not be made for aggregate in excess of 108 percent of the amount specified by the Engineer."

Revise Article 280.07(f) of the Standard Specifications to read:

"(f) Temporary Mulch. This work will be measured for payment according to Article 251.05(b)."

Add the following paragraph after the ninth paragraph of Article 280.07 of the Standard Specifications:

"Temporary or permanent erosion control systems required for areas outside the limits of construction will not be measured for payment."

Revise Article 280.08(b) of the Standard Specifications to read:

"(b) Temporary Ditch Checks. This work will be paid for at the contract unit price per foot (meter) for TEMPORARY DITCH CHECKS except for aggregate ditch checks which will be paid for at the contract unit price per ton (metric ton) for AGGREGATE DITCH CHECKS."

Revise Article 280.08(f) of the Standard Specifications to read:

"(f) Temporary Mulch. Temporary Mulch will be paid for according to Article 251.06."

Delete the tenth (last) paragraph of Article 280.08 of the Standard Specifications.

Revise the second sentence of the first paragraph of Article 1081.15(e) of the Standard Specifications to read:

"The upstream facing of the aggregate ditch check shall be constructed of gradation CA 3. The remainder of the ditch check shall be constructed of gradation RR 3."

TRAFFIC BARRIER TERMINAL, TYPE 6 (BDE)

Effective: January 1, 2010

Delete the fourth paragraph of Article 631.07 of the Standard Specifications.

TRAINING SPECIAL PROVISIONS

This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be $\underline{\mathbf{6}}$. In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather then clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract.

A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

METHOD OF MEASUREMENT The unit of measurement is in hours.

<u>BASIS OF PAYMENT</u> This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

TRUCK MOUNTED/TRAILER MOUNTED ATTENUATORS (BDE)

Effective: January 1, 2010

Revise Article 701.03(k) of the Standard Specifications to read:

"(k) Truck Mounted/Trailer Mounted Attenuators1106.02"

Revise Article 701.15(h) of the Standard Specifications to read:

"(h) Truck Mounted/Trailer Mounted Attenuators (TMA). TMA units shall have a roll ahead distance in the event of an impact. The TMA shall be between 100 and 200 ft (30 and 60 m) behind the vehicle ahead or the workers. This distance may be extended by the Engineer.

TMA host vehicles shall have the parking brake engaged when stationary.

The driver and passengers of the TMA host vehicle should exit the vehicle if the TMA is to remain stationary for 15 minutes or more in duration."

Revise Article 1106.02(g) of the Standard Specifications to read:

"(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be a NCHRP 350 approved unit for Test Level 3. Test Level 2 may be used as directed by the Engineer for normal posted speeds less than or equal to 45 mph."

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within **200** working days.

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE) (RETURN FORM WITH BID)

Effective: November 2, 2006 Revised: April 1, 2009

<u>Description</u>. Bituminous material cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and pavement preservation type surface treatments. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, or joint filling/sealing.

The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments.

Method of Adjustment. Bituminous materials cost adjustments will be computed as follows.

 $CA = (BPI_P - BPI_L) \times (\%AC_V / 100) \times Q$

Where: CA = Cost Adjustment, \$.

BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

BPI_L = Bituminous Price Index, as published by the Department for the month prior to the letting, \$/ton (\$/metric ton).

 $^{\circ}$ AC $_{\vee}$ = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the $^{\circ}$ AC $_{\vee}$ will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC $_{\vee}$ and undiluted emulsified asphalt will be considered to be 65% AC $_{\vee}$.

Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: Q, tons = A x D x (G_{mb} x 46.8) / 2000. For HMA mixtures measured in square meters: Q, metric tons = A x D x (G_{mb} x 24.99) / 1000. When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different G_{mb} and % AC_{V} .

For bituminous materials measured in gallons: Q, tons = $V \times 8.33$ lb/gal x SG / 2000 For bituminous materials measured in liters: Q, metric tons = $V \times 1.0$ kg/L x SG / 1000

Where: A = Area of the HMA mixture, sq yd (sq m).

D = Depth of the HMA mixture, in. (mm).

 G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).

SG = Specific Gravity of bituminous material as shown on the bill of lading.

<u>Basis of Payment</u>. Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the BPI_L and BPI_P in excess of five percent, as calculated by:

Percent Difference = $\{(BPI_L - BPI_P) \div BPI_L\} \times 100$

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the work placed during the month are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

RETURN WITH BID

ILLINOIS DEPARTMENT OF TRANSPORTATION

OPTION FOR BITUMINOUS MATERIALS COST ADJUSTMENTS

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments. After award, this form, when submitted, shall become part of the contract.

Contract No.:			_	
Company Name:_				
Contractor's Opti	on:			
Is your company of	pting to includ	le this spe	cial provisi	on as part of the contract?
Yes		No		
Signature:				Date:

FUEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)

Effective: April 1, 2009 Revised: July 1, 2009

<u>Description</u>. Fuel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in fuel prices when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form or failure to indicate contract number, company name and sign and date the form shall make this contract exempt of fuel cost adjustments for all categories of work. Failure to indicate "Yes" for any category of work will make that category of work exempt from fuel cost adjustment.

<u>General</u>. The fuel cost adjustment shall apply to contract pay items as grouped by category. The adjustment shall only apply to those categories of work checked "Yes", and only when the cumulative plan quantities for a category exceed the required threshold. Adjustments to work items in a category, either up or down, and work added by adjusted unit price will be subject to fuel cost adjustment only when the category representing the added work was subject to the fuel cost adjustment. Added work paid for by time and materials will not be subject to fuel cost adjustment. Category descriptions and thresholds for application and the fuel usage factors which are applicable to each are as follows:

(a) Categories of Work.

- (1) Category A: Earthwork. Contract pay items performed under Sections 202, 204, and 206 including any modified standard or nonstandard items where the character of the work to be performed is considered earthwork. The cumulative total of all applicable item plan quantities shall exceed 25,000 cu yd (20,000 cu m). Included in the fuel usage factor is a weighted average 0.10 gal/cu yd (0.50 liters/cu m) factor for trucking.
- (2) Category B: Subbases and Aggregate Base Courses. Contract pay items constructed under Sections 311, 312 and 351 including any modified standard or nonstandard items where the character of the work to be performed is considered construction of a subbase or aggregate, stabilized or modified base course. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is a 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
- (3) Category C: Hot-Mix Asphalt (HMA) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 355, 406, 407 and 482 including any modified standard or nonstandard items where the character of the work to be performed is considered HMA bases, pavements and shoulders. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.

- (4) Category D: Portland Cement Concrete (PCC) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 353, 420, 421 and 483 including any modified standard or nonstandard items where the character of the work to be performed is considered PCC base, pavement or shoulder. The cumulative total of all applicable item plan quantities shall exceed 7500 sq yd (6000 sq m). Included in the fuel usage factor is 1.20 gal/cu yd (5.94 liters/cu m) factor for trucking.
- (5) Category E: Structures. Structure items having a cumulative bid price that exceeds \$250,000 for pay items constructed under Sections 502, 503, 504, 505, 512, 516 and 540 including any modified standard or nonstandard items where the character of the work to be performed is considered structure work when similar to that performed under these sections and not included in categories A through D.

(b) Fuel Usage Factors.

English Units		
Category	Factor	Units
A - Earthwork	0.34	gal / cu yd
B – Subbase and Aggregate Base courses	0.62	gal / ton
C – HMA Bases, Pavements and Shoulders	1.05	gal / ton
D – PCC Bases, Pavements and Shoulders	2.53	gal / cu yd
E – Structures	8.00	gal / \$1000
Metric Units		
Category	Factor	Units
A - Earthwork	1.68	liters / cu m
B – Subbase and Aggregate Base courses	2.58	liters / metric ton
C – HMA Bases, Pavements and Shoulders	4.37	liters / metric ton
D – PCC Bases, Pavements and Shoulders	12.52	liters / cu m
E – Structures	30.28	liters / \$1000

(c) Quantity Conversion Factors.

Category	Conversion	Factor
В	sq yd to ton sq m to metric ton	0.057 ton / sq yd / in depth 0.00243 metric ton / sq m / mm depth
С	sq yd to ton sq m to metric ton	0.056 ton / sq yd / in depth 0.00239 m ton / sq m / mm depth
D	sq yd to cu yd sq m to cu m	0.028 cu yd / sq yd / in depth 0.001 cu m / sq m / mm depth

Method of Adjustment. Fuel cost adjustments will be computed as follows.

 $CA = (FPI_P - FPI_L) \times FUF \times Q$

Where: CA = Cost Adjustment, \$

FPI_P = Fuel Price Index, as published by the Department for the month the work is

performed, \$/gal (\$/liter)

FPI_L = Fuel Price Index, as published by the Department for the month prior to the letting, \$/gal (\$/liter)

FUF = Fuel Usage Factor in the pay item(s) being adjusted

Q = Authorized construction Quantity, tons (metric tons) or cu yd (cu m)

The entire FUF indicated in paragraph (b) will be used regardless of use of trucking to perform the work.

Progress Payments. Fuel cost adjustments will be calculated for each calendar month in which applicable work is performed; and will be paid or deducted when all other contract requirements for the items of work are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Final Quantities. Upon completion of the work and determination of final pay quantities, an adjustment will be prepared to reconcile any differences between estimated quantities previously paid and the final quantities. The value for the balancing adjustment will be based on a weighted average of FPI_P and Q only for those months requiring the cost adjustment. The cost adjustment will be applicable to the final measured quantities of all applicable pay items.

Basis of Payment. Fuel cost adjustments may be positive or negative but will only be made when there is a difference between the FPI_L and FPI_P in excess of five percent, as calculated by:

Percent Difference = $\{(FPI_L - FPI_P) \div FPI_L\} \times 100$

Return With Bid

ILLINOIS DEPARTMENT OF TRANSPORTATION

OPTION FOR FUEL COST ADJUSTMENT

The bidder shall submit this completed form with his/her bid. Failure to submit the form or properly complete contract number, company name, and sign and date the form shall make this contract exempt of fuel cost adjustments in all categories. Failure to indicate "Yes" for any category of work at the time of bid will make that category of work exempt from fuel cost adjustment. After award, this form, when submitted shall become part of the contract.

Contract No.:			
Company Name:			
Contractor's Option:			
Is your company opting to include this special provision following categories of work?	on as pa	rt of the contract plans	for the
Category A Earthwork.	Yes		
Category B Subbases and Aggregate Base Courses	Yes		
Category C HMA Bases, Pavements and Shoulders	Yes		
Category D PCC Bases, Pavements and Shoulders	Yes		
Category E Structures	Yes		
Signature:		Date:	

STEEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)

Effective: April 2, 2004 Revised: April 1, 2009

<u>Description</u>. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form or failure to indicate contract number, company name, and sign and date the form shall make this contract exempt of steel cost adjustments for all items of steel. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment.

<u>Types of Steel Products</u>. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

Metal Piling (excluding temporary sheet piling) Structural Steel Reinforcing Steel

Other steel materials such as dowel bars, tie bars, mesh reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), and frames and grates will be subject to a steel cost adjustment when the pay items they are used in has a contract value of \$10,000 or greater.

<u>Documentation</u>. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

Q = quantity of steel incorporated into the work, in lb (kg)

D = price factor, in dollars per lb (kg)

 $D = MPI_M - MPI_I$

Where: MPI_M = The Materials Cost Index for steel as published by the Engineering News-

Record for the month the steel is shipped from the mill. The indices will be

converted from dollars per 100 lb to dollars per lb (kg).

MPI_L = The Materials Cost Index for steel as published by the Engineering News-

Record for the month prior to the letting. The indices will be converted from

dollars per 100 lb to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the MPI_M will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

<u>Basis of Payment</u>. Steel cost adjustments may be positive or negative but will only be made when there is a difference between the MPI_L and MPI_M in excess of five percent, as calculated by:

Percent Difference = $\{(MPI_L - MPI_M) \div MPI_L\} \times 100$

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the items of work are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Attachment

Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	3 7
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights
	(masses)
Reinforcing Steel	See plans for weights
	(masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Mesh Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail	
Steel Plate Beam Guardrail, Type A w/steel posts	20 lb/ft (30 kg/m)
Steel Plate Beam Guardrail, Type B w/steel posts	30 lb/ft (45 kg/m)
Steel Plate Beam Guardrail, Types A and B w/wood posts	8 lb/ft (12 kg/m)
Steel Plate Beam Guardrail, Type 2	305 lb (140 kg) each
Steel Plate Beam Guardrail, Type 6	1260 lb (570 kg) each
Traffic Barrier Terminal, Type 1 Special (Tangent)	730 lb (330 kg) each
Traffic Barrier Terminal, Type 1 Special (Flared)	410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms	
Traffic Signal Post	11 lb/ft (16 kg/m)
Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 – 12 m)	14 lb/ft (21 kg/m)
Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 – 16.5 m)	21 lb/ft (31 kg/m)
Light Pole w/Mast Arm, 30 - 50 ft (9 – 15.2 m)	13 lb/ft (19 kg/m)
Light Pole w/Mast Arm, 55 - 60 ft (16.5 – 18 m)	19 lb/ft (28 kg/m)
Light Tower w/Luminaire Mount, 80 - 110 ft (24 – 33.5 m)	31 lb/ft (46 kg/m)
Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 – 42.5 m)	65 lb/ft (97 kg/m)
Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 – 48.5 m)	80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence)	
Steel Railing, Type SM	64 lb/ft (95 kg/m)
Steel Railing, Type S-1	39 lb/ft (58 kg/m)
Steel Railing, Type T-1	53 lb/ft (79 kg/m)
Steel Bridge Rail	52 lb/ft (77 kg/m)
Frames and Grates	
Frame	250 lb (115 kg)
Lids and Grates	150 lb (70 kg)

RETURN WITH BID

ILLINOIS DEPARTMENT OF TRANSPORTATION

OPTION FOR STEEL COST ADJUSTMENT

The bidder shall submit this completed form with his/her bid. Failure to submit the form or properly complete contract number, company name, and sign and date the form shall make this contract exempt of steel cost adjustments for all items of steel. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment. After award, this form, when submitted shall become part of the contract.

Contract No.:		
Company Name:		
Contractor's Option:		
Is your company opting to include this special provision a following items of work?	s part of the	contract plans for the
Metal Piling	Yes	
Structural Steel	Yes	
Reinforcing Steel	Yes	
Dowel Bars, Tie Bars and Mesh Reinforcement	Yes	
Guardrail	Yes	
Steel Traffic Signal and Light Poles, Towers and Mast Arms	Yes	
Metal Railings (excluding wire fence)	Yes	
Frames and Grates	Yes	
Signature:	Date:	

Illinois Department of Transportation PROJECT LABOR AGREEMENT

This Project Labor Agreement ("PLA") is entered into this _____ day of ______, by and between the Illinois Department of Transportation ("IDOT" or "Department") in its proprietary capacity, and each relevant Illinois AFL-CIO Building Trades Council made signatory hereto by the Illinois AFL-CIO Statewide Project Labor Agreement Committee on behalf of itself and each of its affiliated members (individually and collectively, the "Union"). This PLA shall apply to Construction Work (as defined herein) to be performed by IDOT's Prime Contractor and each of its relevant subcontractors of whatever tier ("Subcontractor" or "Subcontractors") on Contract 66408 (hereinafter, the "Project").

ARTICLE 1 - INTENT AND PURPOSES

- 1.1. This PLA is entered into in furtherance of Illinois Executive Order No. 2003-13. It is mutually understood and agreed that the terms and conditions of this PLA are intended to promote the public interest in obtaining timely and economical completion of the Project by encouraging productive and efficient construction operations; by establishing a spirit of harmony and cooperation among the parties; and by providing for peaceful and prompt settlement of any and all labor grievances or jurisdictional disputes of any kind without strikes, lockouts, slowdowns, delays or other disruptions to the prosecution of the work.
- 1.2. As a condition of the award of the contract for performance of work on the Project, IDOT's Prime Contractor and each of its Subcontractors shall be required to sign a "Contractor Letter of Assent", in the form attached hereto as Exhibit A, prior to commencing Construction Work on the Project. Each Union affiliate and separate local representing workers engaged in Construction Work on the Project in accordance with this PLA are bound to this agreement by the Illinois AFL-CIO Statewide Project Labor Agreement Committee which is the central committee established with full authority to negotiate and sign PLAs with the State on behalf of all respective crafts. Upon their signing the Letter of Assent, the Prime Contractor, each Subcontractor, and the individual Unions shall thereafter be deemed a party to this PLA. No party signatory to this PLA shall, contract or subcontract, nor permit any other person, firm, company or entity to contract or subcontract for the performance of Construction Work for the Project to any person, firm, company or entity that does not agree in writing to become bound by the terms of this PLA prior to commencing such work.
- 1.3. It is understood that the Prime Contractor(s) and each Subcontractor will be considered and accepted by the Unions as separate employers for the purposes of collective bargaining, and it is further agreed that the employees working under this PLA shall constitute a bargaining unit separate and distinct from all others. The Parties hereto also agree that this PLA shall be applicable solely with respect to this Project, and shall have no bearing on the interpretation of any other collective bargaining agreement or as to the recognition of any bargaining unit other than for the specific purposes of this Project.

- 1.4. In the event of a variance or conflict, whether explicit or implicit, between the terms and conditions of this PLA and the provisions of any other applicable national, area, or local collective bargaining agreement, the terms and conditions of this PLA shall supersede and control. For any work performed under the NTL Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, the National Agreement of the International Union of Elevator Constructors, and for any instrument calibration work and loop checking performed under the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, the preceding sentence shall apply only with respect to Articles I, II, V, VI, and VII.
- 1.5. Subject to the provisions of paragraph 1.4 of this Article, it is the parties' intent to respect the provisions of any other collective bargaining agreements that may now or hereafter pertain, whether between the Prime Contractor and one or more of the Unions or between a Subcontractor and one or more of the Unions. Accordingly, except and to the extent of any contrary provision set forth in this PLA, the Prime Contractor and each of its Subcontractors agrees to be bound and abide by the terms of the following in order of precedence: (a) the applicable collective bargaining agreement between the Prime Contractor and one or more of the Unions made signatory hereto; (b) the applicable collective bargaining agreement between a Subcontractor and one or more of the Unions made signatory hereto; or (c) the current applicable area collective bargaining agreement for the relevant Union that is the agreement certified by the Illinois Department of Labor for purposes of establishing the Prevailing Wage applicable to the Project. The Union will provide copies of the applicable collective bargaining agreements pursuant to part (c) of the preceding sentence to the Prime Contractor. Assignments by the Contractors amongst the trades shall be consistent with area practices; in the event of unresolved disagreements as to the propriety of such assignments, the provisions of Article VI shall apply.
- 1.6. Subject to the limitations of paragraphs 1.4 and 1.5 of this Article, the terms of each applicable collective bargaining agreement as determined in accordance with paragraph 1.5 are incorporated herein by reference, and the terms of this PLA shall be deemed incorporated into such other applicable collective bargaining agreements only for purposes of their application to the Project.
- 1.7. To the extent necessary to comply with the requirements of any fringe benefit fund to which the Prime Contractor or Subcontractor is required to contribute under the terms of an applicable collective bargaining agreement pursuant to the preceding paragraph, the Prime Contractor or Subcontractor shall execute all "Participation Agreements" as may be reasonably required by the Union to accomplish such purpose; provided, however, that such Participation Agreements shall, when applicable to the Prime Contractor or Subcontractor solely as a result of this PLA, be amended as reasonably necessary to reflect such fact. Upon written notice from any applicable fringe benefit fund, IDOT will withhold from the Prime Contractor payment of any delinquencies arising from this Project.

1.8. In the event that the applicable collective bargaining agreement between a Prime Contractor and the Union or between the Subcontractor and the Union expires prior to the completion of this Project, the expired applicable contract's terms will be maintained until a new applicable collective bargaining agreement is ratified. The wages and fringe benefits included in any new applicable collective bargaining agreement will apply on and after the effective date of the newly negotiated collective bargaining agreement, except to the extent wage and fringe benefit retroactivity is specifically agreed upon by the relevant bargaining parties.

ARTICLE II - APPLICABILITY, RECOGNITION, AND COMMITMENTS

- 2.1 The term Construction Work as used herein shall include all "construction, prosecution, completion, or repair" work performed by a "laborer or mechanic" at the "site of the work" for the purpose of "building" the specific structures and improvements that constitute the Project. Terms appearing within quotation marks in the preceding sentence shall have the meaning ascribed to them pursuant to 29 CFR Part 5.
- 2.2 By executing the Letters of Assent, Prime Contractor and each of its Subcontractors recognizes the Unions signatory to this PLA as the sole and exclusive bargaining representatives for their craft employees employed on the jobsite for this Project. Unions who are signatory to this PLA will have recognition on the Project for their craft.
- 2.3 The Prime Contractor and each of its Subcontractors retains and shall be permitted to exercise full and exclusive authority and responsibility for the management of its operations, except as expressly limited by the terms of this PLA or by the terms and conditions of the applicable collective bargaining agreement.
- 2.4 Except to the extent contrary to an express provision of the relevant collective bargaining agreement, equipment or materials used in the Project may be pre-assembled or prefabricated, and there shall be no refusal by the Union to handle, transport, install, or connect such equipment or materials. Equipment or materials delivered to the job-site will be unloaded and handled promptly without regard to potential jurisdictional disputes; any such disputes shall be handled in accordance with the provisions of this PLA.
- 2.5 Unions commit to furnishing qualified and skilled craft persons as required by the Prime Contractor and its Subcontractors in fulfillment of their obligations to complete the Project. In order to promote the long-term development of a skilled and knowledgeable work force, the parties are encouraged to utilize apprentices to the maximum extent permitted by the applicable collective bargaining agreement.
- 2.6 The parties are mutually committed to promoting a safe working environment for all personnel at the job site. It shall be the responsibility of each employer to which this PLA applies to provide and maintain safe working conditions for its employees, and to comply with all applicable federal, state, and local health and safety laws and regulations.

- 2.7 The use or furnishing of alcohol or drugs and the conduct of any other illegal activity at the job-site is strictly prohibited. The parties shall take every practical measure consistent with the terms of applicable collective bargaining agreements to ensure that the job-site is free of alcohol and drugs.
- 2.8 All parties to this PLA agree that they shall not discriminate against any employee based on race, creed, color, national origin, union activity, age, or gender as required by all applicable federal, state, and local laws.
- 2.9 The Parties hereto agree that engineering consultants and materials testing employees, to the extent subject to the terms of this PLA, shall be fully expected to objectively and responsibly perform their duties and obligations owed to the Department without regard to the potential union affiliation of such employees or of other employees on the Project.

ARTICLE III - ADMINISTRATION OF AGREEMENT

- 3.1 In order to assure that all parties have a clear understanding of the PLA and to promote harmony, a post-award pre-job conference will be held among the Prime Contractor, all Subcontractors and Union representatives prior to the start of any Construction Work on the Project. No later than the conclusion of such pre-job conference, the parties shall, among other matters, provide to one another contact information for their respective representatives (including name, address, phone number, facsimile number, e-mail). Nothing herein shall be construed to limit the right of the Department to discuss or explain the purpose and intent of this PLA with prospective bidders or other interested parties prior to or following its award of the job.
- 3.2 Representatives of the Prime Contractor and the Unions shall meet as often as reasonably necessary following award until completion of the Project to assure the effective implementation of this PLA.
- 3.3 Not less than once per month, Prime Contractor and all Subcontractors shall make available in writing to the Unions a Project status report that shall include, though not necessarily be limited to, planned activities for the next 30 day period and estimated numbers of employees by craft required for the next 30 day period. The purpose of this Project status report is to promote effective workforce planning and to facilitate resolution of any potential jurisdictional or other problems.
- 3.4 Not later than the earlier of (a) five business days following the pre-job conference, or (b) commencement of Construction Work, the Unions and Prime Contractor (on behalf of itself and all its subcontractors of whatever tier) shall confer and jointly designate a slate of three (3) permanent arbitrators (each a "Permanent Arbitrator") for the purpose of hearing disputes pursuant to Articles V and VII of this PLA. The slate of Permanent Arbitrators shall be selected from among the following individuals: Thomas F. Gibbons, Robert Perkovich, Byron Yaffee, and Glenn A. Zipp. In the event that the Unions and Prime Contractor are not able to agree on a full slate of three Permanent Arbitrators, the Department, after consultation with the Unions and Prime Contractor, shall designate such additional Permanent Arbitrators as may be necessary to establish the full slate.

A single Permanent Arbitrator shall be selected from the slate of three on a rotating basis to adjudicate each arbitrable matter as it arises. In the event a Permanent Arbitrator is not available to adjudicate a particular matter in the order of rotation, the arbitration assignment shall pass to the next available Permanent Arbitrator.

ARTICLE IV - HOURS OF WORK AND GENERAL CONDITIONS

- 4.1 The standard work day for Construction Work on the Project shall be an established consecutive eight (8) hour period between the hours of 7:00 a.m. and 5:00 p.m. with one-half hour designated as unpaid period for lunch. The standard work week shall be five (5) consecutive days of work commencing on Monday. Starting time shall be established at the pre-job conference, and shall be applicable to all craft employees on the Project unless otherwise expressly agreed in writing. In the event Project site or other job conditions dictate a change in the established starting time and/or a staggered lunch period for portions of the Project or for specific crafts, the Prime Contractor, relevant Subcontractors and business managers of the specific crafts involved shall confer and mutually agree to such changes as appropriate. If proposed work schedule changes cannot be mutually agreed upon between the parties, the hours fixed at the time of the pre-job meeting shall prevail.
- 4.2 Shift work may be established and directed by the Prime Contractor or relevant Subcontractor as reasonably necessary or appropriate to fulfill the terms of its contract with the Department. If used, shift hours, rates and conditions shall be as provided in the applicable collective bargaining agreement.
- 4.3 The parties agree that chronic and/or unexcused absenteeism is undesirable and must be controlled in accordance with procedures established by the applicable collective bargaining agreement. Any employee disciplined for absenteeism in accordance with such procedures shall be suspended from all work on the Project for not less than the maximum period permitted under the applicable collective bargaining agreement.
- 4.4 Except as may be otherwise expressly provided by the applicable collective bargaining agreement, employment begins and ends at the Project site; employees shall be at their place of work at the starting time; and employees shall remain at their place of work until quitting time.
- 4.5 Except as may be otherwise expressly provided by the applicable collective bargaining agreement, there shall be no limit on production by workmen, no restrictions on the full use of tools or equipment, and no restrictions on efficient use of manpower or techniques of construction other than as may be required by safety regulations.

- 4.6 The parties recognize that specialized or unusual equipment may be installed on the Project. In such cases, the Union recognizes the right of the Prime Contractor or Subcontractor to involve the equipment supplier or vendor's personnel in supervising the setting up of the equipment, making modifications and final alignment, and performing similar activities that may be reasonably necessary prior to and during the start-up procedure in order to protect factory warranties. The Prime Contractor or Subcontractor shall notify the Union representatives in advance of any work at the job-site by such vendor personnel in order to promote a harmonious relationship between the equipment vendor's personnel and other Project employees.
- 4.7 For the purpose of promoting full and effective implementation of this PLA, authorized Union representatives shall have access to the Project job-site during scheduled work hours. Such access shall be conditioned upon adherence to all reasonable visitor and security rules of general applicability that may be established for the Project site at the pre-job conference or from time to time thereafter.

<u>ARTICLE V - GRIEVANCE AND ARBITRATION PROCEDURES</u>

- 5.1 Except as provided in Articles VI or VII, it is specifically agreed among the parties that any grievance or dispute arising out of the interpretation or application of this PLA shall be settled by means of the expedited arbitration process set forth in Paragraph 5.2 below. No such grievance or dispute shall be recognized unless called to the attention of the Prime Contractor and relevant Subcontractor by the Union or to the Union by the Prime Contractor or relevant Subcontractor within five (5) working days after the alleged violation was committed or discovered by the grieving party.
- 5.2 Grievances shall be settled according to the following procedure:
 - 5.2.A. Step 1. The dispute shall be referred to the Steward of the craft union involved and a representative of the Prime Contractor and relevant Subcontractor at the job-site.
 - 5.2.B. Step 2. In the event that the Steward and the contractors' representatives at the job-site cannot reach agreement within two (2) working days after a meeting is arranged and held, the matter shall be referred to the Union Business Manager and to executive representatives of the Prime Contractor and relevant Subcontractor.
 - 5.2.C. Step 3. In the event the dispute is not resolved within five (5) working days after completion of Step 2, the relevant parties shall request a Permanent Arbitrator as determined in accordance with paragraph 3.4 of this PLA, who shall, within ten (10) working days, hear the grievance and make a written decision. Such decisions shall be final and binding on all parties. The parties shall each pay the expense of their own representative. The expense of the Permanent Arbitrator shall be divided equally between (1) the Prime Contractor and/or relevant Subcontractor, and (2) the involved Union.

- 5.3 Any failure of a party to comply fully with such final and binding decision of the Permanent Arbitrator may result in removal of the non-complying party from the site, in a holdback from the Prime Contractor or Subcontractor of any amounts awarded, or in such other relief as the Department may reasonably determine is necessary to promote final resolution of the dispute.
- 5.4 In the event any dispute or grievance should arise, the parties expressly agree that it shall be resolved without occurrence of any strike, work stoppage, slow-down or other prohibited activities as provided in Article VII of this PLA. Individuals or parties violating this section shall be subject to immediate discharge or other discipline.

ARTICLE VI - JURISDICTIONAL DISPUTES

- 6.1 As used in this Agreement, the term "jurisdictional dispute" shall be defined as any dispute, difference or disagreement involving the assignment of particular work to one class or craft of employees rather than to a different class or craft of employees, regardless of that Contractor's contractual relationship to any other employer, contractor, or organization on the site.
- 6.2 It is agreed by and between the parties to this Agreement that any and all jurisdictional disputes shall be resolved in the following manner; each of the steps hereinafter listed shall be initiated by the parties in sequence as set forth:
 - (a) Negotiation by and between the Local Business Representative of the disputing Union and Employer shall take place within two (2) business days. Business days are defined as Monday through Friday excluding contract holidays. Such negotiations shall be pursued until it is apparent that the dispute cannot be resolved at the local level.
 - (b) The International Representatives of the disputing Union shall meet or confer and attempt to resolve said dispute. This meeting shall take place within two (2) business days. Business days are defined as Monday through Friday excluding contract holidays.
 - (c) The parties to the Jurisdictional Dispute shall submit the dispute directly to an Arbitrator after complying with paragraph (2b) above. The parties shall meet with the Arbitrator within three (3) business days. Business days are defined as Monday through Friday excluding contract holidays. An Arbitrator will be selected based on availability from the slate of permanent Arbitrators. The Arbitrator's bench decision will be given the day of the hearing and will be final and legally binding on this project only. The Arbitrator's bench decision will be implemented without delay. The cost of Arbitration will be shared equally by the disputing parties. Any party to the dispute can require that a "long form" written decision be provided from the Arbitrator, however the cost of the "long form" written decision will be the responsibility of the party making the request.

Notes:

- A jurisdictional dispute may be submitted based upon a pre-job assignment.
- If any party to the jurisdictional disputes does not fully comply with the steps and time limits with each step, then the party in non-compliance will lose by "automatic default".
- Time limits at any step can be extended if all parties to the jurisdictional dispute mutually agree in writing.
- All parties to a jurisdictional dispute can mutually agree to waive the time limits in steps (a) and (b) and proceed directly to an expedited arbitration hearing.
- (d) In rendering his decision, the Arbitrator shall determine:
 - (1) First whether a previous agreement of record or applicable agreement, including a disclaimer agreement, between the National or International Unions to the dispute governs:
 - (2) Only if the Arbitrator finds that the dispute is not covered by an appropriate or applicable agreement of record or agreement between the crafts to the dispute, he shall then consider whether there is a previous decision of record governing the case;
 - (3) If the Arbitrator finds that a previous decision of record governs the case, the Arbitrator shall apply the decision of record in rendering his decision except under the following circumstances. After notice to the other parties to the dispute prior to the hearing that it intends to challenge the decision of record, if a trade challenging the decision of record is able to demonstrate that the recognized and established prevailing practice in the locality of the work has been contrary to the applicable decision of record, and that historically in that locality the work in dispute has not been performed by the other craft or crafts, the Arbitrator may rely on such prevailing practice rather than the decision of record. If the craft relying on the decision of record demonstrates that it has performed the work in dispute in the locality of the job, then the Arbitrator shall apply the decision of record in rendering his decision. If the Arbitrator finds that a craft has improperly obtained the prevailing practice in the locality through raiding, the undercutting of wagers or by the use of vertical agreements, the Arbitrator shall rely on the decision of record rather than the prevailing practice in the locality.
 - (4) If no decision of record is applicable, the Arbitrator shall then consider the established trade practice in the industry and prevailing practice in the locality; and

(5) Only if none of the above criteria is found to exist, the Arbitrator shall then consider that because efficiency, cost or continuity and good management are essential to the well being of the industry, the interest of the consumer or the past practice of the employer shall not be ignored.

The Arbitrator shall set forth the basis for his decision and shall explain his findings regarding the applicability of the above criteria. If lower-ranked criteria are relied upon, the Arbitrator shall explain why the higher-ranked criteria were not deemed applicable. The Arbitrator's decision shall only apply to the job in dispute.

- (6) Agreements of record are applicable only to the party's signatory to such agreements. Decisions of record are applicable to all trades.
- (7) The Arbitrator is not authorized to award back pay or any other damages for a mis-assignment of work. Nor may any party bring an independent action for back pay or any other damages, based upon a decision of an Arbitrator.
- 6.3 The signatory parties to this Agreement agree that jurisdictional disputes cannot and shall not interfere with the efficient and continuous operations required for the successful application of this Agreement. In the event a dispute arises, the Contractor's assignment shall be followed until the dispute is resolved.
- 6.4 Equipment or material delivered to the job site will be unloaded promptly without regard to jurisdictional disputes which will be handled as per the provisions of this Agreement. The Contractor will supply the Union with delivery schedules, allowing as much time as possible to insure the appropriate crafts will be available to unload the materials or equipment.
- 6.5 All signatory affiliates agree that upon request, a representative shall be assigned without delay to attempt a settlement in the event of a question on assignments.

ARTICLE VII - WORK STOPPAGES AND LOCKOUTS

7.1 During the term of this PLA, no Union or any of its members, officers, stewards, employees, agents or representatives shall instigate, support, sanction, maintain, or participate in any strike, picketing, walkout, work stoppage, slow down or other activity that interferes with the routine and timely prosecution of work at the Project site or at any other contractor's or supplier's facility that is necessary to performance of work at the Project site. Hand billing at the Project site during the designated lunch period and before commencement or following conclusion of the established standard workday shall not, in itself, be deemed an activity that interferes with the routine and timely prosecution of work on the Project.

- 7.2 Should any activity prohibited by paragraph 7.1 of this Article occur, the Union shall undertake all steps reasonably necessary to promptly end such prohibited activities. No Union complying with its obligations under this Article shall be liable for acts of employees for which it has no responsibility or for the unauthorized acts of employees it represents. Any employee who participates in or encourages any activity prohibited by paragraph 7.1 shall be immediately suspended from all work on the Project for a period equal to the greater of (a) 60 days; or (b) the maximum disciplinary period allowed under the applicable collective bargaining agreement for engaging in comparable unauthorized or prohibited activity.
- 7.3 During the term of this PLA, the Prime Contractor and its Subcontractors shall not engage in any lockout at the Project site of employees covered by this Agreement.
- 7.4 Upon notification of violations of this Article, the principal officer or officers of the local area Building and Construction Trades Council, and the Illinois AFL-CIO Statewide Project Labor Agreement Committee as appropriate, will immediately instruct, order and use their best efforts to cause the affiliated union or unions to cease any violations of this Article. A Trades Council and the Committee otherwise in compliance with the obligations under this paragraph shall not be liable for unauthorized acts of its affiliates.
- 7.5 In the event that activities in violation of this Article are not immediately halted through the efforts of the parties, any aggrieved party may invoke the special arbitration provisions set forth in paragraph 7.6 of this Article.
- 7.6 Upon written notice to the other involved parties by the most expeditious means available, any aggrieved party may institute the following special arbitration procedure when a breach of this Article is alleged:
 - 7.6.A The party invoking this procedure shall notify the individual designated as the Permanent Arbitrator pursuant to Article III of the nature of the alleged violation; such notice shall be by the most expeditious means possible. The initiating party may also furnish such additional factual information as may be reasonably necessary for the Permanent Arbitrator to understand the relevant circumstances. Copies of any written materials provided to the arbitrator shall also be contemporaneously provided by the most expeditious means possible to the party alleged to be in violation and to all other involved parties.
 - 7.6.B Upon receipt of said notice the Permanent Arbitrator shall set and hold a hearing within twenty-four (24) hours if it is contended the violation is ongoing, but not before twenty-four (24) hours after the written notice to all parties involved as required above.
 - 7.6.C The Permanent Arbitrator shall notify the parties by facsimile or any other effective written means, of the place and time chosen by the Permanent Arbitrator for this hearing. Said hearing shall be completed in one session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an Award by the Permanent Arbitrator.

- 7.6.D The sole issue at the hearing shall be whether a violation of this Article has, in fact, occurred. An Award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the Award. The Permanent Arbitrator may order cessation of the violation of this Article, and such Award shall be served on all parties by hand or registered mail upon issuance.
- 7.6.E Such Award may be enforced by any court of competent jurisdiction upon the filing of the Award and such other relevant documents as may be required. Facsimile or other hardcopy written notice of the filing of such enforcement proceedings shall be given to the other relevant parties. In a proceeding to obtain a temporary order enforcing the Permanent Arbitrator's Award as issued under this Article, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Permanent Arbitrator's Award shall be served on all parties by hand or by delivery to their last known address or by registered mail.
- 7.7 Individuals found to have violated the provisions of this Article are subject to immediate termination. In addition, IDOT reserves the right to terminate this PLA as to any party found to have violated the provisions of this Article.
- 7.8 Any rights created by statue or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance therewith are hereby waived by parties to whom they accrue.
- 7.9 The fees and expenses of the Permanent Arbitrator shall be borne by the party or parties found in violation, or in the event no violation is found, such fees and expenses shall be borne by the moving party.

<u>ARTICLE VIII – MISCELLANEOUS</u>

- 8.1 If any Article or provision of this PLA shall be declared invalid, inoperative or unenforceable by operation of law or by final non-appealable order of any tribunal of competent jurisdiction, such provision shall be deemed severed or limited, but only to the extent required to render the remaining provisions of this PLA enforceable consistent with the intent of the parties. The remainder of this PLA or the application of such Article or provision to persons or circumstances other than those as to which it has been held invalid, inoperative or unenforceable shall not be affected thereby.
- 8.2 The term of this PLA shall commence as of and from the date of the notice of award to the Prime Contractor and shall end upon final acceptance by IDOT of all work on the Project by the parties hereto.

- 8.3 This PLA may not be changed or modified except by the subsequent written agreement of the parties. All parties represent that they have the full legal authority to enter into this PLA. This PLA may be executed by the parties in one or more counterparts.
- 8.4 Any liability arising out of this PLA shall be several and not joint. IDOT shall not be liable to any person or other party for any violation of this PLA by any other party, and no Contractor or Union shall be liable for any violation of this PLA by any other Contractor or Union.
- 8.5 The failure or refusal of a party to exercise its rights hereunder in one or more instances shall not be deemed a waiver of any such rights in respect of a separate instance of the same or similar nature.

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Execution Page

Illinois Department of Transportation	
Christine M. Reed, P.E., Director of Highways	
Matthew R. Hughes, Acting Director - Finance	& Administration
Ellen Schanzle-Haskins, Chief Counsel	_
Gary Hannig, Secretary	(Date)
Illinois AFL-CIO Statewide Project Labor Agreement Con	nmittee, representing the local unions listed below:
	(Date)
List Union Locals:	

** RETURN WITH BID **

Exhibit A – Contractor Letter of Assent	
(Date)	
To All Parties:	
In accordance with the terms and condition [Contract 66408], this Letter of Assent hereby coor Subcontractor agrees to be bound by the Agreement established and entered into by the connection with said Project.	terms and conditions of the Project Labor
It is the understanding and intent of the Agreement shall pertain only to the identified P undersigned party to become signatory to a colle otherwise a party in order that it may lawfully ma fringe benefit funds, the undersigned party hereb limits its participation in such collective bargaining	ective bargaining agreement to which it is not ke certain required contributions to applicable by expressly conditions its acceptance of and
	(Authorized Company Officer)
	(Company)

** RETURN WITH BID **

OUTFALL STRUCTURES AND ASSOCIATED INTAKE STRUCTURES (CORPS OF ENGINEERS NWP # 7)

Effective March 19, 2007

Activities related to construction or modification of outfall structures and associated intake structures has been authorized from the Army Corps of Engineers using the following guidelines:

All requests made by the Contractor shall refer to Permit No. <u>CEMVR-OD-P-2010-835</u> for the project with Contract No. 66408

- Where the effluent from the outfall is authorized, conditionally authorized, or specifically exempt by, or that are otherwise in compliance with regulations issued under the National Pollutant Discharge Elimination System Program (Section 402 of the Clean Water Act).
- The construction of intake structures are not authorized by this NWP, unless they are directly associated with an authorized outfall structure.
- The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity.
- No activity may occur in the proximity of a public water supply intake, except where the
 activity is for the repair or improvement of public water supply structures or adjacent bank
 stabilization.

Should the Contractor desire to deviate from the guidelines currently imposed under the permit as listed above, then full design details including location, material specifications, and hydraulic analysis should be included in a request to the Army Corps of Engineers. Requests shall be made to United States Army Corps of Engineers, Rock Island District, Clock Tower Building, Rock Island, IL 61204.

Any additional request is at the discretion of the Contractor; therefore, any delays in receiving approval for various methods outside of the given parameters will **not** be cause for additional compensation.

STORM WATER POLLUTION PREVENTION PLAN



Storm Water Pollution Prevention Plan

Route FAI 80 (I-80),FAS 297 / FAU 392 (US 6)	Marked Rte.	I-80, Brisbin Road, US 6
Section _(32, 47-4) HBK-4 & (G)N	Project No.	
County Grundy	Contract No.	66408
This plan has been prepared to comply with the provision Environmental Protection Agency for storm water discharges	from Construction	Site Activities.
I certify under penalty of law that this document and all attach accordance with a system designed to assure that qualified p submitted. Based on my inquiry of the person or persons who gathering the information, the information submitted is, to the am aware that there are significant penalties for submitting fa for knowing violations.	ersonnel properly on manage the system best of my knowle	gathered and evaluated the information em, or those persons directly responsible for dge and belief, true, accurate and complete. I
George F. Ryan, P.E.)	Leony Rym pB
Region 2 Engineer Title		6- 28-10 Date
Illinois Department of Transportation Agency		

1. Site Description:

A. The following is a description of the project location:

This improvement begins on Brisbin Road approximately 2,750' south of the centerline of Interstate 80 (I-80) and extends to the north to approximately 1,550' north of the centerline of Interstate 80 (I-80) and also extends down all four (4) interchange ramps to the ramp terminals as they connect to eastbound and westbound I-80. The project includes US 6 improvements as well, which starts approximately 1,400' west of the centerline of Brisbin Road and extends to the east to approximately 1,100' east of the centerline of Brisbin Road.

B. The following is a description of the construction activity which is the subject of this plan:

Construction of all four ramps of the I-80 / Brisbin Road interchange, a total length of 8,895 feet.

- Construction of Ramp B Bridge, Structure #032-0117.
- Construction of Ramp C Bridge, Structure #032-0118.
- Reconstruction and adding lanes to 4,277 feet of Brisbin Road, an existing two-lane road.
- Replacement of the Brisbin Road Bridge (Ex Structure #032-0058) over Interstate 80 (I-80), Proposed Structure #032-0058.
- Reconstruction, resurfacing and widening of 2,245 feet of US6, a two-lane road.
- Reconstruction and realignment of 1,044 feet of North Road, a two-lane road.
- Reconstruction and realignment of 1,652 feet of Service Drive, a one-lane road.
- Reconstruction and realignment of the driveways at Brisbin Road Station 102+06, North Road Station 108+49, in addition to other driveway improvements.

The work shall include all labor, materials, tools, and equipment necessary for the proper execution of the work as shown in the plans and as specified. It shall also include all work not specifically mentioned but which is reasonably and properly inferable and necessary for the completion of the work.

The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as grubbing, excavation and grading:

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- 1. Excavation and grading for new ramps, reconstruction and widening of Brisbin Road and US 6 and the construction of the North Road and Service Drive
- 2. Bridge replacement for Brisbin Road structure over I-80 and bridge replacement for Ramp B and Ramp C over Collins Run.
- 3. Construction of storm sewers and utility relocations.
- D. The total area of the construction site is estimated to be 130 acres.

The total area of the site that is estimated will be disturbed by excavation, grading or other activities is <a href="https://example.com/

E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

Reference the Drainage Study

F. The following is a description of the soil types found at the project site followed by information regarding their erosivity:

According to the 1980 Soil Conservation Service Soil Survey of Grundy County, the soils in the area tend to be poorly drained silty clay loams or silt loams, which are subject to intermittent flooding in the spring. The specific soil types found in the vicinity of the interchange include the following:

- Drummer silty clay loam
- Darroch silt loam
- Lawson silt loam
- Martinsville loam

These soils have moderate to high erosivity.

Access ramps will be located on Drummer silty clay loam, which is the dominant soil type in all four quadrants of the proposed interchange. The typical characteristics for these soils include high organic-matter content and slow runoff.

G. The following is a description of potentially erosive areas associated with this project:

There are potentially erosive areas along the banks of Collins Run.

H. The following is a description of soil disturbing activities, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):

Excavation will be required for the construction of the proposed ditches for Brisbin Road, North Road and Service Drive and the proposed ramps. Embankment construction will be required for the above mentioned locations with fill heights in excess of 15 feet for the new ramps at their intersections with Brisbin Road. The typical side slopes consist of 4:1 to 3:1 (H:V) foreslopes, a 2 to 4 foot wide ditch and 3:1 (H:V) backslopes. The slope lengths vary with location with high fill areas with slope length up to 60 feet at the ramp intersections with moderate to high erosion potential.

- I. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.
- J. The following is a list of receiving water(s) and the ultimate receiving water(s), and areal extent of wetland acreage at the site. The location of the receiving waters can be found on the erosion and sediment control plans:

Collins Run and Aux Sable Creek. Extent of wetland acreage is approximately 3.4 acres.

K. The following pollutants of concern will be associated with this construction project: nted 6/24/2010 Page 2 of 8 BDE 2342 (Rev. 07/23/09)

ı.			oncrete olid Was aints olvents	nent Truck Waste Curing Compounds ste Debris / Pesticides		Antifreeze	Cooler from cify) cify) cify) cify)	diesel, oil, kerosene, hydraulic oil / fluids) lants n cleaning construction equipment	
,2 :	This so descril contra engine reside with th part of	ection ctor ver a nt en e pe , this	n I.C. ab will be re plan for gineer o rmit. Ea plan:	ove and for all use area esponsible for its implem the implementation of the fany proposed changes	as, borro nentation he meas s, maint	ow sites, and n as indicate sures indicate enance, or m	wasted. The ed. The nodification	ted for each of the major construction active sites. For each measure discussed, the e contractor shall provide to the resident he contractor, and subcontractors, will notications to keep construction activities composition on forms which are attached to, and	fy the
	1.	pra soc app init per has	luding si getation actices m dding, ve propriate iated as manentl s tempor a period Where permar	te specific scheduling of is preserved where atta any include but are not lie getative buffer strips, per measures. Except as soon as practicable in ply ceased, but in no castarily or permanently ceal of 14 or more calendar the initiation of stabilization of stabilization.	f the implication of the implication of the improvided coortions are more tracks.	plementation and disturbed b: temporary n of trees, pr d below in II(of the site w than 7 days all disturbed asures by the	of the portion seeding	erim and permanent stabilization practices, e practices. Site plans will ensure that existence on the site will be stabilized. Stabilizations of the site will be stabilized. Stabilizations, permanent seeding, mulching, geotextation of mature vegetation, and other (a) and II(A)(3), stabilization measures shall construction activities have temporarily or the construction activity in that portion of the construction activity in that portion of the construction activity in the portion of the construction activity temporarily or the site where construction will not construct on activity temporarily or ation measures shall be initiated as soon as	sting on tiles, II be e site occur
			The foli	serving and shall be pro tion within the site shall	e Vegetas ontrol Se ing, Cla Practice atside the tected fi	eeding ss 7) es listed abore proposed or constructioned as directions	we will	Erosion Control Blanket / Mulching Sodding Geotextiles Other (specify) Other (specify) Other (specify) Other (specify) Other (specify) I be utilized: uction limits shall be indentified by the Englictivities. Dead, diseased or unsuitable y the Engineer along with the required tree	
								erodable areas as determined by the Engir	neer

temporary seed will not germinate and provide erosion protection until the following Spring. Mulch, rinted 6/24/2010

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expected within 7 days. Immediately after tree removal is completed, areas which are highly erodable as determined by the Engineer shall be temporarily seeded when no construction activities are expected within 7 days. Permanent landscaping (seeding with erosion blanket on all slope 3:1 or steeper or mulch for flatter slopes) will be installed as soon as final grading is completed. Temporary seeding will be used to stabilize bare earth areas every seven days. Temporary mulch cover will be used on sensitive areas that have been temporarily seeded and as a temporary cover when grading will occur late in the construction season when permanent seeding cannot be installed or in the winter when

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Method 2 (with temporary seeding if practicle) will be used if needed for areas that need protection during a winter shutdown.

2. Structural Practices: Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

paragan i mangan ing ing	The following	ng Structural Practices will be use	ed for this project:		
		Perimeter Erosion Barrier Temporary Ditch Check		Rock Outlet Protection	
		Storm Drain Inlet Protection		Riprap Gabions	
		Sediment Trap		Slope Mattress	
		Temporary Pipe Slope Drain		Retaining Walls	
		Temporary Sediment Basin	\boxtimes	Slope Walls	
	\boxtimes	Temporary Stream Crossing		Concrete Revetment Mats	
	\boxtimes	Stabilized Construction Exits		Level Spreaders	
		Turf Reinforcement Mats	\boxtimes	Other (specify) Turbidity Curtain	
		Permanent Check Dams		Other (specify)	
		Permanent Sediment Basin		Other (specify)	
		Aggregate Ditch		Other (specify)	
	\boxtimes	Paved Ditch		Other (specify)	

Describe how the Structural Practices listed above will be utilized:

Perimeter erosion barrier will be placed prior to any earth disturbing and grading activities. Turbidity Curtain will be placed in Collins Run prior to earth disturbing and grading activities. Pipe protection will be installed at the upstream ends of the pipe culverts. Riprap will be used to protect the creek banks and outfall of culverts and storm sewers. Paved ditches will be constructed as soon as practical in the ditches at the locations shown on the plans. Temporary ditch checks will be installed as soon as practical in the ditches at the locations shown on the plans.

- 3. Storm Water Management: Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.
 - a. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Section 59-8 (Erosion and Sediment Control) in Chapter 59 (Landscape Design and Erosion Control) of the Illinois Department of Transportation Bureau of Design and Environment Manual. If practices other than those discussed in Section 59-8 are selected for implementation or if practices are applied to situations different from those covered in Section 59-8, the technical basis for such decisions will be explained below.

b. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of Storm Water Management Controls.

Vegetative ditches will be constructed to convey stormwater and riprap outlets will be constructed to dissipate energy and to protect against erosion.

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4. Other Controls:

 a. Vehicle Entrances and Exits – Stabilized construction entrances and exits must be constructed to prevent tracking of sediments onto roadways.

The contractor will provide the resident engineer with a written plan identifying the location of stabilized entrances and exits and the procedures (s)he will use to construct and maintain them.

- b. Material Delivery, Storage, and Use The following BMPs shall be implemented to help prevent discharges of construction materials during delivery, storage, and use:
 - All products delivered to the project site must be properly labeled.
 - Water tight shipping containers and/or semi trailers shall be used to store hand tools, small parts, and most construction materials that can be carried by hand, such as paint cans, solvents, and grease.
 - A storage/containment facility should be chosen for larger items such as drums and items shipped or stored on pallets. Such material is to be covered by a tin roof or large sheets of plastic to prevent precipitation from coming in contact with the products being stored.
 - Large items such as light stands, framing materials and lumber shall be stored in the open in a
 general storage area. Such material shall be elevated with wood blocks to minimize contact with
 storm water runoff.
 - Spill clean-up materials, material safety data sheets, an inventory of materials, and emergency
 contact numbers shall be maintained and stored in one designated area and each Contractor is
 to inform his/her employees and the resident engineer of this location.
- c. Stockpile Management BMPs shall be implemented to reduce or eliminate pollution of storm water from stockpiles of soil and paving materials such as but not limited to portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, aggregate sub base, and pre-mixed aggregate. The following BMPs may be considered:
 - Perimeter Erosion Barrier
 - Temporary Seeding
 - Temporary Mulch
 - Plastic Covers
 - Soil Binders
 - Storm Drain Inlet Protection

The contractor will provide the resident engineer with a written plan of the procedures (s)he will use on the project and how they will be maintained.

- Waste Disposal. No materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.
- e. The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.
- f. The contractor shall provide a written and graphic plan to the resident engineer identifying where each of the above areas will be located and how they are to be managed.

5. Approved State or Local Laws

The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual, 1995. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

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Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

The Contractor must follow the requirements as shown on the soil erosion and sediment control plans and details and this SWPP and as directed by the Engineer.

III. Maintenance:

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. The resident engineer will provide maintenance guides to the contractor for the practices associated with this project.

During construction, the Contractor shall:

- 1) Clean up and grade the work area to eliminate concentration of runoff.
- 2) Cover the open ends of pipes in trenches at the close of each work day.
- 3) Maintain or replace (if specified by the Engineer) erosion and sediment control items.
- 4) Remove entrapped sediment from filters as directed by the Engineer.

All maintenance of erosion control systems will be the responsibility of the Contractor.

IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site. Such inspections shall be conducted at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater or equivalent snowfall.

- A. Disturbed areas, use areas (storage of materials, stockpiles, machine maintenance, fueling, etc.), borrow sites, and waste sites shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Discharge locations or points that are accessible, shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off site sediment tracking.
- B. Based on the results of the inspection, the description of potential pollutant sources identified in section I above and pollution prevention measures identified in section II above shall be revised as appropriate as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within ½ hour to 1 week based on the urgency of the situation. The resident engineer will notify the contractor of the time required to implement such actions through the weekly inspection report.
- C. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with section IV(B) shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed in accordance with Part VI. G of the general permit.
- D. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the resident engineer shall notify the appropriate IEPA Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within 24 hours of the incident. The resident Engineer shall then complete and submit an "Incidence of Noncompliance" (ION) report for the identified violation within 5 days of the incident. The resident engineer shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI. G of the general permit.

The Incidence of Non-Compliance shall be mailed to the following address:

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Attn: Compliance Assurance Section 1021 North Grand East Post Office Box 19276 Springfield, Illinois 62794-9276

V. Non-Storm Water Discharges:

Except for flows from fire fighting activities, sources of non-storm water that is combined with storm water discharges associated with the industrial activity addressed in this plan must be described below. Appropriate pollution prevention measures, as described below, will be implemented for the non-storm water component(s) of the discharge.

- A. Spill Prevention and Control BMPs shall be implemented to contain and clean-up spills and prevent material discharges to the storm drain system. The contractor shall produce a written plan stating how his/her company will prevent, report, and clean up spills and provide a copy to all of his/her employees and the resident engineer. The contractor shall notify all of his/her employees on the proper protocol for reporting spills. The contractor shall notify the resident engineer of any spills immediately.
- B. Concrete Residuals and Washout Wastes The following BMPs shall be implemented to control residual concrete, concrete sediments, and rinse water:
 - Temporary Concrete Washout Facilities shall be constructed for rinsing out concrete trucks. Signs shall be installed directing concrete truck drivers where designated washout facilities are located.
 - The contractor shall have the location of temporary concrete washout facilities approved by the resident engineer.
 - All temporary concrete washout facilities are to be inspected by the contractor after each use and all spills must be reported to the resident engineer and cleaned up immediately.
 - Concrete waste solids/liquids shall be disposed of properly.
- C. Litter Management A proper number of dumpsters shall be provided on site to handle debris and litter associated with the project. The Contractor is responsible for ensuring his/her employees place all litter including marking paint cans, soda cans, food wrappers, wood lathe, marking ribbon, construction string, and all other construction related litter in the proper dumpsters.
- Vehicle and Equipment Cleaning Vehicles and equipment are to be cleaned in designated areas only, preferably off site.
- E. Vehicle and Equipment Fueling A variety of BMPs can be implemented during fueling of vehicles and equipment to prevent pollution. The contractor shall inform the resident engineer as to which BMPs will be used on the project. The contractor shall inform the resident engineer how (s)he will be informing his/her employees of these BMPs (i.e. signs, training, etc.). Below are a few examples of these BMPs:
 - Containment
 - Spill Prevention and Control
 - Use of Drip Pans and Absorbents
 - Automatic Shut-Off Nozzles
 - Topping Off Restrictions
 - Leak Inspection and Repair
- F. Vehicle and Equipment Maintenance On site maintenance must be performed in accordance with all environmental laws such as proper storage and no dumping of old engine oil or other fluids on site.

VI. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the contractor and/or penalties under the NPDES permit which could be passed onto the contractor.

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Contractor Certification Statement

The Resident Engineer is to make copies of this form and every contractor and sub-contractor will be required to complete their own separate form.				
Route FAI 80 (I-80),FAS 297 / FAU 392 (US 6) Section (32, 47-4) HBK-4 & (G)N	Marked Rt. Project No.	I-80, Brisbin Road, US 6		
County Grundy Contract No. 66408 This certification statement is part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency. I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR 10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.				
In addition, I have read and understand all of the information and requirements stated in the Storm Water Pollution Prevention Plan for the above mentioned project; I have provided all documentation required to be in compliance with the ILR10 and Storm Water Pollution Prevention Plan and will provide timely updates to these documents as necessary.				
☐ Contractor				
☐ Sub-Contractor				
Print Name		Signature		
Title		Date		
Name of Firm	Mark the second	Telephone		
Street Address		City/State/ZIP		

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ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

I. GENERAL

- 1. These contract provisions shall apply to all word performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.
- **3.** A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.
- **4.** A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2; Section IV, paragraphs 1, 2, 3, 4 and 7; Section V, paragraphs 1 and 2a through 2g.

- **5.** Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 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 DOL, or the contractor's employees or their representatives.
- **6.** Selection of Labor: During the performance of this contract, the contractor shall not:
- $\mbox{\bf a.}\;\;\mbox{Discriminate}$ against labor from any other State, possession, or

territory of the United States (except for employment preference for

Appalachian contracts, when applicable, as specified in Attachment

A), or

b. Employ convict labor for any purpose within the limits of the

project unless it is labor performed by convicts who are on parole.

supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60 (and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- The contractor will work with the State highway agency (SHA) and
- the Federal Government in carrying out EEO obligations and in their

review of his/her activities under the contract.

b. The contractor will accept as his operating policy the ollowing

statement: "It is the policy of this Company to assure that applicants $\ensuremath{\mathsf{I}}$

are employed, and that employees are treated during employment,

without regard to their race, religion, sex, color, national origin, age or

disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; roff or

termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship,

and/or on-the-job-training."

- **2. EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.
- **3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
 - **a.** Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
 - **b.** All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
 - **c.** All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
 - **d.** Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
 - e. The contractor's EEO policy and the procedures to

implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

- 4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
 - a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.
 - b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
 - c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.
- 5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
 - a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
 - **b.** The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
 - c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
 - d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special

provision.

- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth
 - a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
 - b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
 - c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.
 - d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.
- 8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.
 - a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
 - b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids

from

- and to utilize DBE subcontractors or subcontractors with meaningful
- minority group and female representation among employees.
 - Contractors shall obtain lists of DBE construction firms from SHA personnel.
 - c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

- **9. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.
- **a.** The records kept by the contractor shall document the following:
- (1) The number of minority and non-minority group members and women employed in each work classification on the project;
 - **(2)** The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;
- $\mbox{(3)}$ The progress and efforts being made in locating, hiring, training.

qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of

DBE subcontractors or subcontractors with meaningful minority and

female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.
- **b.** 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 directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).
- **c.** The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

- a. All mechanics and laborers 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 (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) 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. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, 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 paragraphs 4 and 5 of this Section IV.
- **b.** 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.
- **c.** All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

- **a.** The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
- **b.** The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
- (1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination:
- (2) the additional classification is utilized in the area by the construction industry;
- (3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
- (4) with respect to helpers, when such a classification prevails in the area in which the work is performed.
- **c.** If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification 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 DOL, Administrator of the Wage and

Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour 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.

- d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional 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 question, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advised the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. 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 or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.
- b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any cost 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.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

- (1) 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 DOL, 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/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
- (2) The allowable ratio of apprentices to journeyman-level employees 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 employee 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 listed in 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 or subcontractor 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-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) 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 journeyman-level 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

the full amount of fringe benefits listed on the wage determination

for the applicable classification. If the Administrator for the Wage $\,$

and Hour Division determines that a different practice prevails for

the applicable apprentice classification, fringes shall be paid in accordance with that determination.

- (4) 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 or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.
- b. Trainees:

paid

- (1) 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 DOL, Employment and Training Administration.
- (2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. 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 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.
- (3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level 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-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.
- (4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor 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.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV. 2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor 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, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainee's 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 SHA contracting officer may, after written notice to the contractor, 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.

7. 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, trainees, and helpers described in paragraphs 4 and 5 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.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall; upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies 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 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

- **a.** Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
- b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof 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. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found 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 and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs. c. Each contractor and subcontractor shall furnish, each week
- in which any contractor and subcontractor shall runnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. 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 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for submitting payroll copies of all subcontractors.

- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/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 2b of this Section V and that such information is correct and complete:
- (2) that such 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 the Regulations, 29 CFR 3;
- (3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for
- the classification of worked performed, as specified in the applicable
- wage determination incorporated into the contract.
- **e**. 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 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U/S. C. 1001 and 31 U.S.C. 231.
- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, 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 SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions 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.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

- 1. On all federal-aid contracts on the national highway system, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:
 - a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
 - b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
 - **c.** Furnish, upon the completion of the contract, to the SHA resident engineer on /Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
- 2. At the prime contractor's option, either a single report

covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractors' own organization (23 CFR 635).
 - a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
 - b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- **3.** The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with

Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S. C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented:

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more).

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
- 2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
- **3.** That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
- **4.** That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
 b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an 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 a person from participation in this transaction.
- **c.** 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
- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is

submitted if any time the prospective primary participant learns that

its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

- e. 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 meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.
 - f. 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.

g. 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 Covered Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions

and in all solicitations for lower tier covered transactions.

- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that 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 portion of the "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.
- i. 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 participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph f 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 any Federal department or agency;
 - b. Have not within a 3-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 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 1b of this certification; and
 - d. Have not within a 3-year 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.

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- **a.** By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- **b.** 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.
- **c.** 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 by reason of changed circumstances.
- **d.** The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage 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.
- **e.** The prospective lower tie 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.
- f. 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.
- **g.** A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that 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.
- **h.** 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 participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealing.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

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

1. The prospective lower tier participant certifies, by submission

of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal 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.
 - b. 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 Federal 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.
- 2. 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 31 U.S.C. 1352. 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.
- **3.** The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

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.