#### 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 downloading and/or ordering CD-ROM's and are 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, signed and notarized, "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 a Proposal Denial and/or Authorization Form, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Proposal Denial and/or Authorization Form will indicate the reason for denial.

**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 bidder check IDOT's website <a href="http://www.dot.il.gov/desenv/delett.html">http://www.dot.il.gov/desenv/delett.html</a> before submitting final bid information.

#### IDOT is not responsible for any e-mail related 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 garmantr@dot.il.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
Electronic plans and proposals	(217)524-1642

#### ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

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

# 58

Proposal Submitted By		
Name		
Address		
City		

### Letting November 18, 2005

### **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. 90632
VERMILION County
Section 34Z-4
Route FAP 729
Project ACF-729(13)
District 5 Construction Funds

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

Prepared by

F

Checked by

Printed by authority of the State of Illin

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.

**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 Availability (BC 57).</u>

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

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

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

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

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

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

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



**PROPOSAL** 

#### TO THE DEPARTMENT OF TRANSPORTATION

1.	Proposal of	 	 	

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

Contract No. 90632
VERMILION County
Section 34Z-4
Project ACF-729(13)
Route FAP 729
District 5 Construction Funds

- 1.4 kilometers of 17.66 meters and variable width widening and resurfacing reconstruction of U.S. Route 136 to a four lane roadway with a bi-directional turn lane from east of Pine Street to the west side of the Stoney Creek bridge in Danville.
- 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, 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>A</u>	mount o	of Bid	Proposal <u>Guaranty</u>	<u>An</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.

The amount of the proposal guaranty check is	\$(	). If this proposal is accepted
and the undersigned shall fail to execute a contract bond as required herein, it	is hereby agreed that the amount	of the proposal guaranty shall become
the property of the State of Illinois, and shall be considered as payment of dama	ages due to delay and other cause	s suffered by the State because of the
failure to execute said contract and contract bond; otherwise, the bid bond sha	all become void or the proposal g	uaranty check shall be returned to the
undersigned		•

ified Check Here
sals, the amount must be equal to the sum e guaranty check is placed in another proposal,
·

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

BD 354 (Rev. 11/2001)

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

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

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

#### **Schedule of Combination Bids**

Combination		Combination Bid			
No.	Sections Included in Combination	Dollars	Cents		

- 7. SCHEDULE OF PRICES. The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices shall govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
- 8. **CERTIFICATE OF AUTHORITY.** The undersigned bidder, if a business organized under the laws of another State, assures the Department that it will furnish a copy of its certificate of authority to do business in the State of Illinois with the return of the executed contract and bond. Failure to furnish the certificate within the time provided for execution of an awarded contract may be cause for cancellation of the award and forfeiture of the proposal guaranty to the State.

State Job # - C-95-034-98
PPS NBR - 5-99670-0100
County Name - VERMILION - -

ame - VERMILION- -183 - -

Code - 183 - District - 5 - - Section Number - 34Z-4

 Project Number
 Route

 ACF-0729/013/000
 FAP 729

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
A2001016	T-ACER RUBRM 2	EACH	1.000				
A2001116	T-ACER RUB OG 2	EACH	1.000				
B0237351	T-PYRUS C CLE TF 6'	EACH	4.000				
MX030399	CONC STEP REMOV	SQ M	8.000				
MX032094	COAXIAL CABLE IN CON	METER	1,337.000				
MX032529	SEGMENT CONC BLK WALL	SQ M	107.200				
MX032540	VANE DRAINS	METER	178.000				
MX032783	RETAINING WALL REMOV	SQ M	18.000				
MX032867	REM & RESET ORN FENCE	METER	29.600				
MX033549	SS WM DIP CL 50 300	METER	10.500				
MX033550	SS WM DIP CL 50 375	METER	14.000				
MX033551	R&R MH S A 1.8D T1FCL	EACH	1.000				
MX033552	R&R MH A 1.2D T1F CL	EACH	1.000				
MX033553		METER	23.000				
MX033554		EACH	14.000				

State Job # - C-95-034-98
PPS NBR - 5-99670-0100
County Name - VERMILION - -

Project Number	Route
ACF-0729/013/000	FAP 729

ltem Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
MX873027	ELCBL C GROUND 6 1C	METER	819.000				
MX878030	CONC FDN TY E 900D	METER	58.000				
MZ000990	AGG FOR TEMP ACCESS	M TON	127.000				
MZ068200	STEEL CASINGS 750	METER	33.000				
M2020010	EARTH EXCAVATION	CU M	2,662.000				
M2080150	TRENCH BACKFILL	CU M	5,054.000				
M2130010	EXPLOR TRENCH SPL	METER	229.000				
M2500350	SEEDING CL 7	НА	0.200				
M2500400	NITROGEN FERT NUTR	KG	16.000				
M2500500	PHOSPHORUS FERT NUTR	KG	16.000				
M2500600	POTASSIUM FERT NUTR	KG	16.000				
M2510115	MULCH METHOD 2	НА	0.200				
M2520100	SODDING	SQ M	2,249.000				
M2800250	TEMP EROS CONTR SEED	KG	172.000				
M2810107	STONE RIPRAP CL A4	SQ M	57.000				

State Job # - C-95-034-98
PPS NBR - 5-99670-0100
County Name - VERMILION - -

5-99670-0100 VERMILION- -183 - -

Project Number	Route		
ACF-0729/013/000	FAP 729		

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
M2820200	FILTER FABRIC	SQ M	57.000				
M3110300	SUB GRAN MAT A 300	SQ M	26,287.000				
M3111100	SUB GRAN MAT B 100	SQ M	7,611.000				
M3510150	AGG BASE CSE A 150	SQ M	561.000				
M4020200	AGG SURF CSE A 200	SQ M	36.000				
M4060995	TEMPORARY RAMP SPL	SQ M	304.000				
M4080100	BIT MATLS PR CT	LITER	694.000				
M4080300	AGG PR CT	M TON	2.000				
M4080400	INCIDENTAL BIT SURF	M TON	144.000				
M4202205	PCC PVT 200 JOINTED	SQ M	5,818.000				
M4202235	PCC PVT 230 JOINTED	SQ M	25,585.000				
M4205100	PAVEMENT FABRIC	SQ M	263.500				
M4205200	PROTECTIVE COAT	SQ M	45,713.000				
M4230200	PCC DRIVEWAY PAVT 200	SQ M	353.000				
M4240125	PC CONC SIDEWALK 125	SQ M	7,685.000				

State Job # - C-95-034-98
PPS NBR - 5-99670-0100
County Name - VERMILION - -

Project Number	Route
ACF-0729/013/000	FAP 729

ltem Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
M4248000	DETECTABLE WARNINGS	SQ M	46.600				
M4402000	PAVEMENT REM	SQ M	29,268.000				
M4402010	DRIVE PAVEMENT REM	SQ M	2,101.000				
M4402040	COMB CURB GUTTER REM	METER	3,954.000				
M4402050	SIDEWALK REM	SQ M	9,513.000				
M4402310	CONC MEDIAN SURF REM	SQ M	26.000				
M4402800	SIDEWLK REM & REPL SP	SQ M	168.000				
M4427235	CL C PATCH T2 300	SQ M	15.000				
M4427435	CL C PATCH T4 300	SQ M	3,341.000				
M5080105	REINFORCEMENT BARS	KG	350.000				
M5100105	PIPE HANDRAIL	METER	4.200				
M542F252	CIP RC END SEC 1200	EACH	1.000				
M5500230	STORM SEW CL B 1 300	METER	31.000				
M5500240	STORM SEW CL B 1 375	METER	397.000				
M5500440	STORM SEW CL A 2 375	METER	3.000				

State Job # - C-95-034-98
PPS NBR - 5-99670-0100
County Name - VERMILION - -

Project Number	Route
ACF-0729/013/000	FAP 729

ltem Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
M5500450	STORM SEW CL A 2 450	METER	8.000				
M5500610	STORM SEW CL B 2 100	METER	26.500				
M5500615	STORM SEW CL B 2 150	METER	28.500				
M5500620	STORM SEW CL B 2 200	METER	7.500				
M5505530	SS RG CL A 1 300	METER	636.500				
M5505540	SS RG CL A 1 375	METER	209.500				
M5505570	SS RG CL A 1 600	METER	5.500				
M5505620	SS RG CL A 1 1050	METER	34.500				
M5505930	SS RG CL A 2 300	METER	166.500				
M5505940	SS RG CL A 2 375	METER	116.500				
M5505950	SS RG CL A 2 450	METER	108.500				
M5505970	SS RG CL A 2 600	METER	165.000				
M5505990	SS RG CL A 2 750	METER	415.500				
M5506010		METER	198.500				
M5506020	SS RG CL A 2 1050	METER	368.500				

State Job # - C-95-034-98
PPS NBR - 5-99670-0100
County Name - VERMILION - -

Project Number	Route
ACF-0729/013/000	FAP 729

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
M5506430	SS RG CL A 3 1200	METER	13.000				
M5510015	STORM SEWER REM 200	METER	7.000				
M5510020	STORM SEWER REM 250	METER	29.000				
M5510025	STORM SEWER REM 300	METER	15.000				
M5510045	STORM SEWER REM 450	METER	37.000				
M5510060	STORM SEWER REM 600	METER	310.000				
M5630400	ADJ SAN SEW 200 LESS	METER	103.000				
M5630600	ADJ WATER SERV LINES	METER	103.000				
M6010610	PIPE UNDERDRAINS 150	METER	111.500				
M6010710	PIPE UNDERDRN 150 SP	METER	11.700				
M6021405	MAN A 1.2D T1F OL	EACH	1.000				
M6021410	MAN A 1.2D T1F CL	EACH	14.000				
M6021415	MAN A 1.2D T3F&G	EACH	9.000				
M6021455	MAN A 1.2D T11F&G	EACH	1.000				
M6021610	MAN A 1.5D T1F CL	EACH	36.000				

State Job # - C-95-034-98
PPS NBR - 5-99670-0100
County Name - VERMILION - -

Project Number	Route
ACF-0729/013/000	FAP 729

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
M6021810	MAN A 1.8D T1F CL	EACH	5.000				
M6021815	MAN A 1.8D T3F&G	EACH	1.000				
M6060060	CONC CURB SPL	METER	89.200				
M6060070	CONC CURB TB	METER	36.300				
M6060110	CONC CURB TB SPL	METER	1,008.300				
M6060500	COMB CC&G TB15.30	METER	578.000				
M6060600	COMB CC&G TB15.45	METER	43.900				
M6060700	COMB CC&G TB15.60	METER	2,707.700				
M6061400	COMB CC&G TB22.30	METER	15.400				
M6061600	COMB CC&G TB22.60	METER	84.800				
M6063060	COMB CC&G TB SPL	METER	59.200				
M6063600	CONC MEDIAN SURF 100	SQ M	69.000				
M6641930	CH LK FENCE REM & RE	METER	18.000				
M7030100	SHORT-TERM PAVT MKING	METER	3,137.000				
M7030210	TEMP PVT MK LTR & SYM	SQ M	100.000				

State Job # - C-95-034-98
PPS NBR - 5-99670-0100
County Name - VERMILION - -

Project Number	Route
ACF-0729/013/000	FAP 729

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
M7030220	TEMP PVT MK LINE 100	METER	15,836.000				
M7030240	TEMP PVT MK LINE 150	METER	1,092.000				
M7030260	TEMP PVT MK LINE 300	METER	57.000				
M7030280	TEMP PVT MK LINE 600	METER	347.000				
M7031000	WORK ZONE PAVT MK REM	SQ M	1,040.000				
M7800600	EPOXY PVT MK LTR-SYM	SQ M	70.000				
M7800605	EPOXY PVT MK LN 100	METER	5,471.000				
M7800615	EPOXY PVT MK LN 150	METER	1,092.000				
M7800625	EPOXY PVT MK LN 300	METER	57.000				
M7800640	EPOXY PVT MK LN 600	METER	292.000				
M7830100	PAVT MARKING REMOVAL	SQ M	994.000				
M8100250	CON T 40 PVC	METER	945.000				
M8100260	CON T 50 PVC	METER	136.000				
M8100270	CON T 65 PVC	METER	24.000				
M8100280	CON T 75 PVC	METER	66.000				

State Job # - C-95-034-98
PPS NBR - 5-99670-0100
County Name - VERMILION - -

Project Number	Route
ACF-0729/013/000	FAP 729

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
M8100300	CON T 100 PVC	METER	42.000				
M8100310	CON T 125 PVC	METER	8.000				
M8100320	CON T 150 PVC	METER	6.000				
M8100850	CON AUGERED 40 PVC	METER	81.000				
M8100880	CON AUGERED 75 PVC	METER	231.000				
M8100900	CON AUGERED 100 PVC	METER	93.000				
M8150200	TR & BKFIL F ELECT WK	METER	1,218.000				
M8731210	ELCBL C SIGNAL 14 2C	METER	98.000				
M8731220	ELCBL C SIGNAL 14 3C	METER	2,237.000				
M8731230	ELCBL C SIGNAL 14 4C	METER	1,265.000				
M8731240	ELCBL C SIGNAL 14 5C	METER	1,525.000				
M8731250	ELCBL C SIGNAL 14 7C	METER	2,356.000				
M8731700	ELCBL C COMM 18 3PR	METER	1,266.000				
M8731800	ELCBL C SERV 6 2C	METER	52.000				
M8750670	TS POST A 3.65	EACH	5.000				

State Job # - C-95-034-98
PPS NBR - 5-99670-0100
County Name - VERMILION - -

County Name - VERMILIONCode - 183 - District - 5 - -

34Z-4

Section Number -

Project Number	Route
ACF-0729/013/000	FAP 729

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
M8750690	TS POST A 4.25	EACH	6.000				
M8750710	TS POST A 4.85	EACH	14.000				
M8770710	STL COMB MAA&P 5.48	EACH	1.000				
M8770730	STL COMB MAA&P 7.92	EACH	1.000				
M8770735	STL COMB MAA&P 8.53	EACH	1.000				
M8770740	STL COMB MAA&P 9.14	EACH	1.000				
M8770745	STL COMB MAA&P 9.75	EACH	3.000				
M8770750	STL COMB MAA&P 10.36	EACH	8.000				
M8770755	STL COMB MAA&P 10.97	EACH	2.000				
M8770760	STL COMB MAA&P 11.58	EACH	3.000				
M8780100	CONC FDN TY A	METER	22.900				
M8780200	CONC FDN TY D	METER	6.600				
M8780400	CONC FDN TY E 750D	METER	9.000				
XX005710	PAINT N TRAF SIG POST	EACH	16.000				
X0320872	VIDEO VEH DET SYS	EACH	6.000				

State Job # - C-95-034-98
PPS NBR - 5-99670-0100
County Name - VERMILION - -

Project Number	Route
ACF-0729/013/000	FAP 729

ltem Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
X0322178	REM EX LIGHT POLE FDN	EACH	52.000				
X0323405	METAL SECURITY GATE	EACH	1.000				
X0325143	FILL EXIST VAULT	EACH	1.000				
X0325144	FILL EX WINDOW WELL	EACH	2.000				
X0325151	REMOVE EX LIGHT POLE	EACH	67.000				
X7015005	CHANGEABLE MESSAGE SN	CAL DA	112.000				
X8801300	SH P LED 1F 3S BM	EACH	8.000				
X8801310	SH P LED 1F 3S MAM	EACH	26.000				
X8801350	SH P LED 1F 4S MAM	EACH	3.000				
X8801400	SH P LED 1F 5S MAM	EACH	11.000				
X8801415	SH P LED 2F 3S BM	EACH	3.000				
X8801435	SH P L 2F 1-3,1-4 BM	EACH	3.000				
X8801437	SH P LED 2F 1-3,1-5BM	EACH	11.000				
X8810395	PED SH P LED 1F BM	EACH	24.000				
X8810495	PED SH P LED 2F BM	EACH	10.000				

State Job # - C-95-034-98
PPS NBR - 5-99670-0100
County Name - VERMILION - -

Project Number	Route		
ACF-0729/013/000	FAP 729		

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
Z0048665	RR PROT LIABILITY INS	L SUM	1.000				
Z0076600	TRAINEES	HOUR	1,500.000		0.800		1,200.000
28000500	INLET & PIPE PROTECT	EACH	122.000				
50104400	CONC HDWL REM	EACH	1.000				
60234200	INLETS TA T1F OL	EACH	2.000				
60235700	INLETS TA T3F&G	EACH	44.000				
60236200	INLETS TA T8G	EACH	2.000				
60236600	INLETS TA T9F&G	EACH	2.000				
60236700	INLETS TA T10F&G	EACH	4.000				
60236800	INLETS TA T11F&G	EACH	11.000				
60236825	INLETS TA T11V F&G	EACH	2.000				
60240220	INLETS TB T3F&G	EACH	35.000				
60240305	INLETS TB T10F&G	EACH	2.000				
60240310	INLETS TB T11F&G	EACH	6.000				
60255500	MAN ADJUST	EACH	53.000				

State Job # - C-95-034-98
PPS NBR - 5-99670-0100
County Name - VERMILION - -

Project Number	Route
ACF-0729/013/000	FAP 729

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
60265700	VV ADJUST	EACH	174.000				
60300305	FR & LIDS ADJUST	EACH	26.000				
60500040	REMOV MANHOLES	EACH	8.000				
60500060	REMOV INLETS	EACH	9.000				
60500105	FILL MANHOLES	EACH	12.000				
60500305	FILL INLETS	EACH	41.000				
66700105	PERM SURV MKRS SPL	EACH	5.000				
67000400	ENGR FIELD OFFICE A	CAL MO	17.000				
67100100	MOBILIZATION	L SUM	1.000				
70101700	TRAF CONT & PROT	L SUM	1.000				
70103815	TR CONT SURVEILLANCE	CAL DA	324.000				
78100100	RAISED REFL PAVT MKR	EACH	396.000				
80500205	SERV INSTALL TY B MOD	EACH	6.000				
81400100	HANDHOLE	EACH	34.000				
81400300	DBL HANDHOLE	EACH	6.000				

**Project Number** 

State Job # - C-95-034-98 PPS NBR - 5-99670-0100

VERMILION- - ACF-0729/013/000

Route FAP 729

 Code 183 - 

 District 5 - 

 Section Number 34Z-4

County Name -

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
84200805		EACH	36.000	***************************************			
85700200	FAC T4 CAB	EACH	6.000				
86000100	MASTER CONTROLLER	EACH	1.000				
86600020	GULFBOX JUNCTION REM	EACH	1.000				
87601100	PED P-B POST GALVS T1	EACH	11.000				
88200100	TS BACKPLATE	EACH	40.000				
88800100	PED PUSH-BUTTON	EACH	45.000				
89000100	TEMP TR SIG INSTALL	EACH	5.000				
89502375	REMOV EX TS EQUIP	EACH	6.000				
89502380	REMOV EX HANDHOLE	EACH	105.000				
89502385	REMOV EX CONC FDN	EACH	50.000				

CON	TDA	$\sim$ T	NII	IRA	DED
CON	IIKA	L O	Nυ	ועו ע	IBER

90632

THIS IS THE TOTAL BID	<u>\$</u>	

#### 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. By execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances has been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.
- **C.** In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for termination of the contract and the suspension or debarment of the bidder.

#### **II. ASSURANCES**

**A.** The assurances hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous assurance, and the surety providing the performance bond shall be responsible for the completion of the contract.

#### B. Felons

1. The Illinois Procurement Code provides:

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

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

#### C. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

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

The current salary of the Governor is \$150,700.00. Sixty percent of the salary is \$90,420.00.

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

#### D. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

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

#### E. Inducements

1. The Illinois Procurement Code provides:

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

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

#### F. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

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

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

#### G. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

Section 50-40. Reporting anticompetitive practices. When, for any reason, any vendor, bidder, contractor, chief procurement officer, State purchasing officer, designee, elected official, or State employee suspects collusion or other anticompetitive practice among any bidders, 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.

#### H. Confidentiality

1. The Illinois Procurement Code provides:

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

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

#### I. Insider Information

1. The Illinois Procurement Act provides:

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

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

#### **III. CERTIFICATIONS**

**A.** The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous certification, and the surety providing the performance bond shall be responsible for completion of the contract.

#### B. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

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

#### C. Educational Loan

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

#### D. Bid-Rigging/Bid Rotating

- 1. Section 33E-11 of the Criminal Code of 1961 provides:
- § 33E-11. (a) Every bid submitted to and public contract executed pursuant to such bid by the State or a unit of local government shall contain a certification by the prime contractor that the prime contractor is not barred from contracting with any unit of State or local government as a result of a violation of either Section 33E-3 or 33E-4 of this Article. The State and units of local government shall provide the appropriate forms for such certification.

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

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

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

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

#### E. International Anti-Boycott

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

#### F. Drug Free Workplace

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

#### G. Debt Delinquency

1. The Illinois Procurement Code provides:

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

The contractor or bidder certifies that it, or any affiliate, is not barred from being awarded a contract under 30 ILCS 500. Section 50-11 prohibits a person from entering into a contract with a State agency if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The contractor further acknowledges that the contracting State agency may declare the contract void if this certification is false or if the contractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

#### H. Sarbanes-Oxley Act of 2002

1. The Illinois Procurement Code provides:

Section 50-60(c).

The contractor certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 for a period of five years prior to the date of the bid or contract. The contractor acknowledges that the contracting agency shall declare the contract void if this certification is false.

#### I. ADDENDA

The contractor or bidder certifies that all relevant addenda have been incorporated in to this contract. Failure to do so may cause the bid to be declared unacceptable.

#### J. Section 42 of the Environmental Protection Act

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

#### 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.

#### TO BE RETURNED WITH BID

#### **IV. DISCLOSURES**

**A.** The disclosures hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous disclosure, and the surety providing the performance bond shall be responsible for completion of the contract.

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

1. Section 50-35 of the Illinois Procurement Code provides that all bids of more than \$10,000 shall be accompanied by disclosure of the financial interests of the bidder. This disclosed information for the successful bidder, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act.

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

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

2. <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 or incorporated by reference.** 

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

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

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

#### **CERTIFICATION STATEMENT**

I have determined that the Form A disclosure inform accurate, and all forms are hereby incorporated by forms or amendments to previously submitted form	reference in this bid. Any necessary additional	al
(Bidding Co	ompany)	
Name of Authorized Representative (type or print)	Title of Authorized Representative (type or print)	_
Signature of Authoriz	zed Representative Date	_

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

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is 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 the second page of Form A must be signed and dated by a person that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

1.	Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO
2.	Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$90,420.00? YES NO
3.	Does anyone in your organization receive more than \$90,420.00 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES NO
4.	Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than \$90,420.00? YES NO
	(Note: Only one set of forms needs to be completed <u>per person per bid</u> even if a specific individual would require a yes answer to more than one question.)
bidding en authorize	answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or the ntity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is d to execute contracts for your organization. <b>Photocopied or stamped signatures are not acceptable</b> . The person signing can be, but have to be, the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.
	wer 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 that is authorized to execute contracts for your company.
bidding er	dentifying Other Contracts & Procurement Related Information Disclosure Form B must be completed for each bid submitted by the natity. It must be signed by an individual who is authorized to execute contracts for the bidding entity. Note: Signing the NOT BLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be completed, signed and dated or the bidder considered nonresponsive and the bid will not be accepted.
ongoing p	er shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:
agency po attached and are n	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 ending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts of to be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development is to be included. Bidders who submit Affidavits of Availability are suggested to use Option II.
"See Affic agency po	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 lavit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois ending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the f Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.
Bidders 5	Submitting More Than One Bid
	ubmitting multiple bids may submit one set of forms consisting of all required Form A disclosures and one Form B for use with all bids. dicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms noe.
	e bid submitted for letting item contains the Form A disclosures or Certification Statement and the Form B closures. The following letting items incorporate the said forms by reference:

### **ILLINOIS DEPARTMENT OF TRANSPORTATION**

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

Contractor Name		
egal Address		
ity, State, Zip		
elephone Number	Email Address	Fax Number (if available)
CS 500). Vendors desiring to enter intential conflict of interest information blicly available contract file. This Fontracts. A publicly traded company requirements set forth in Form A.	nto a contract with the State as specified in this Disclos orm A must be completed f or may submit a 10K disclo See Disclosure Form Inst	
DIS	CLOSURE OF FINANCIA	AL INFORMATION
60% of the Governor's salary as of 7/1 orm A for each individual meeting t FOR INDIVIDUAL (type or print info	/01). (Make copies of this these requirements)	r an interest which has a value of more than \$90,4 form as necessary and attach a separate Discl
NAME:		
ADDRESS		
Type of ownership/distributable i	ncome share:	
stock sole proprietor % or \$ value of ownership/distributa		hip other: (explain on separate sheet):
		or "No" to indicate which, if any, of the following y question is "Yes", please attach additional pages
(a) State employment, currently o	r in the previous 3 years, inc	cluding contractual employment of services.  YesNo
If your answer is yes, please a	nswer each of the following	
Are you currently an o Highway Authority?	officer or employee of either	the Capitol Development Board or the Illinois Toll YesNo
currently appointed to exceeds \$90,420.00,	or employed by any agency	any agency of the State of Illinois? If you are of the State of Illinois, and your annual salary ary as of 7/1/01) provide the name the State

3.	If you are currently appointed to or employed by any agency salary exceeds \$90,420.00, (60% of the Governor's salary as (i) more than 7 1/2% of the total distributable income of y corporation, or (ii) an amount in excess of the salary of the Governor's salary of the Governor to the salary of the salary of the Governor to the salary of the salary of the Governor to the salary of the sal	s of 7/1/01) are you entitled to receive our firm, partnership, association or
4.	If you are currently appointed to or employed by any agency salary exceeds \$90,420.00, (60% of the Governor's salary as or minor children entitled to receive (i) more than 15% in aggin of your firm, partnership, association or corporation, or (ii) as salary of the Governor?	s of 7/1/01) are you and your spouse regate of the total distributable income
` '	employment of spouse, father, mother, son, or daughter, including previous 2 years.	ng contractual employment for services
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 em Board or the Illinois Toll Highway Authority?	ployee of the Capitol Development YesNo
2.	Is your spouse or any minor children currently appointed to or of Illinois? If your spouse or minor children is/are currently apagency of the State of Illinois, and his/her annual salary exce Governor's salary as of 7/1/01) provide the name of the spous of the State agency for which he/she is employed and his/her a	pointed to or employed by any eeds \$90,420.00, (60% of the se and/or minor children, the name
3.	If your spouse or any minor children is/are currently appointed State of Illinois, and his/her annual salary exceeds \$90,420.00 as of 7/1/01) are you entitled to receive (i) more than 71/2% of firm, partnership, association or corporation, or (ii) an amound Governor?	O, (60% of the salary of the Governor the total distributable income of your
4.	If your spouse or any minor children are currently appointed to State of Illinois, and his/her annual salary exceeds \$90,420.00,7/1/01) are you and your spouse or any minor children entitled aggregate of the total distributable income from your firm, partr (ii) an amount in excess of 2 times the salary of the Governor?	(60% of the Governor's salary as of to receive (i) more than 15% in the nership, association or corporation, or
		Yes No
unit of	e status; the holding of elective office of the State of Illinois, the local government authorized by the Constitution of the State of currently or in the previous 3 years.	
• ,	onship to anyone holding elective office currently or in the previo	ous 2 years; spouse, father, mother, YesNo
Americ of the S	ntive office; the holding of any appointive government office of the ca, or any unit of local government authorized by the Constitution State of Illinois, which office entitles the holder to compensation charge of that office currently or in the previous 3 years.	n of the State of Illinois or the statues
. ,	nship to anyone holding appointive office currently or in the previously.	vious 2 years; spouse, father, mother, YesNo
(g) Employ	yment, currently or in the previous 3 years, as or by any register	red lobbyist of the State government.  Yes No

(h) Relationship to a son, or daughter.	nyone who is or was a registered lobbyist in the previous 2 years; s Yes _	pouse, father, mother, No
committee registe	nployment, currently or in the previous 3 years, by any registered or red with the Secretary of State or any county clerk of the State of Il registered with either the Secretary of State or the Federal Board of Yes _	linois, or any political
last 2 years by any county clerk of the	nyone; spouse, father, mother, son, or daughter; who was a comper y registered election or re-election committee registered with the Se e State of Illinois, or any political action committee registered with e ral Board of Elections.  Yes _	ecretary of State or any
	APPLICABLE STATEMENT	
This Disclosure Fo	rm A is submitted on behalf of the INDIVIDUAL named on previ	ious page.
Completed by:		
•	Name of Authorized Representative (type or print)	
Completed by:		
•	Title of Authorized Representative (type or print)	
Completed by:		
•	Signature of Individual or Authorized Representative	Date
	NOT APPLICABLE STATEMENT	_
	that no individuals associated with this organization meet the cition of this Form A.	criteria that would
This Disclosure Fo	rm A is submitted on behalf of the CONTRACTOR listed on the	previous page.
	Name of Authorized Representative (type or print)	
	Title of Authorized Representative (type or print)	
	Signature of Authorized Representative	Date

### ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form B Other Contracts & Procurement Related Information Disclosure

			Disclosure	,
Contractor Name				
Legal Address				
City, State, Zip				
Telephone Number		Email Address	Fax Number (if	available)
L	tion contained in th	is Form is required by	the Section 50-35 of the III	inois Procurement
		•	cly available contract file. Th	
be completed for bids in e			•	
DISCLOS	SURE OF OTHER	CONTRACTS AND PI	ROCUREMENT RELATED	INFORMATION
has any pending contra any other State of Illinoi	cts (including lease s agency: Yes	es), bids, proposals, or No	nation. The BIDDER shall id other ongoing procurement ture box on the bottom of thi	relationship with
			ng State of Illinois agency nes as necessary). SEE DISC	
	THE FC	DLLOWING STATEME	NT MUST BE SIGNED	
	Na	ame of Authorized Represen	tative (type or print)	
	Т	itle of Authorized Represent	ative (type or print)	_
		Signature of Authorized F	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.



Contract No. 90632
VERMILION County
Section 34Z-4
Project ACF-729(13)
Route FAP 729
District 5 Construction Funds

	District 3 Construction i unus
PART I. IDENTIFICATION	
Dept. Human Rights #	Duration of Project:
Name of Bidder:	
PART II. WORKFORCE PROJECTION	

A. The undersigned bidder has analyzed minority group and female populations, unemployment rates and availability of workers for the location in which this contract work is to be performed, and for the locations from which the bidder recruits employees, and hereby submits the following workforce projection including a projection for minority and formula employees utilization in all ich extensives in the workforce to be allocated to this contract:

which this contract work is to be performed, and for the locations from which the bidder recruits employees, and hereby submits the following workforce projection including a projection for minority and female employee utilization in all job categories in the workforce to be allocated to this contract:

TABLE A

TABLE B

TOTAL Workforce Projection for Contract

CURRENT EMPLOYEES

TO BE ASSIGNED

TO CONTRACT

TO CONTRACT

		101/	AL Wo	rktorce	Projec	tion for	Contr	act						(	CURRENT			<u>:</u> S	
				MIN	ORITY	EMPI (	YFFS	3		TRA	AINEES			TO BE ASSIGNED TO CONTRACT					
JOB CATEGORIES		TAL OYEES	BL	ACK	HISP		*01	THER NOR.		APPREN- ON THE JOB TICES TRAINEES			TOTAL EMPLOYEES				MINORITY EMPLOYEES		
	М	F	М	F	M	F	М	F	М	F	М	F		М	F	1	М	F	
OFFICIALS (MANAGERS)																			
SUPERVISORS																			
FOREMEN																			
CLERICAL																			
EQUIPMENT OPERATORS																			
MECHANICS																			
TRUCK DRIVERS																			
IRONWORKERS																			
CARPENTERS																			
CEMENT MASONS																			
ELECTRICIANS																			
PIPEFITTERS, PLUMBERS																			
PAINTERS																			
LABORERS, SEMI-SKILLED																			
LABORERS, UNSKILLED																			
TOTAL																			

TABLE C									
T	OTAL Tra	aining Pro	jection	າ for C	ontract				
EMPLOYEES IN	-	TAL DYEES	BLACK HISPANIC			ANIC	*OTHER MINOR.		
TRAINING	М	F	М	F	М	F	M	F	
APPRENTICES									
ON THE JOB TRAINEES									

<sup>\*</sup>Other minorities are defined as Asians (A) or Native Americans (N).

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

Note: See instructions on the next page

FOR DEPARTMENT USE ONLY

Contract No. 90632 VERMILION County Section 34Z-4 Project ACF-729(13) Route FAP 729 District 5 Construction Funds

#### PART II. WORKFORCE PROJECTION - continued

B.	Included in "Total Employees" under Table A is the total number of <b>new hires</b> that would be employed in the event the undersigned bidder is awarded this contract.												ed in the				
		indersigne recruited or base of											located	d; a	and/or	es would (number) principal	
0	office or base of operation is located.										د د دا دا د د						
C.	Included in "Total Employees" under Table A is a projection of numbers of persons to be employed directly undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors.												lly by the				
	The u be dir emplo	ndersigne ectly emp yed by su	d bidder loyed by bcontrac	estimathe postors.	ates tha rime cor	it (num ntracto	nber) <sub>_</sub> or and	that (r	umber)						per persor	sons will as will be	
PART I	II. AFF	IRMATIV	E ACTIO	N PL	AN												
A.	The undersigned bidder understands and agrees that in the event the foregoing minority and female employ utilization projection included under <b>PART II</b> is determined to be an underutilization of minority persons or women any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior commencement of work, develop and submit a written Affirmative Action Plan including a specific timetal (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employ utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency at the <b>Department of Human Rights</b> .												r women , prior to timetable employee				
B.	submi	indersigne itted herei part of the	n, and th	ne goa	ls and t	imetal											
Company									Telephone Number								
Address																	
						NO	TICE R	EGARI	DING SIG	NAT	TURE						
	The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature I needs to be completed only if revisions are required.													ture block			
	Signa	ture:							Title:				[	Date:			
Instructi	ons:	All tables n	nust include	e subco	ntractor p	ersonne	el in add	lition to p	orime conti	ractor	r personne	el.					
Table A	-		hat will be	allocate	ed to cont	ract wor	rk, and	include a	all apprent	ices a	and on-the	-job trai	nees. Th	ne "Tot	al Employé	employed es" column ork.	
Table B	-	Include all currently en		current	tly employ	ed that	will be	allocated	I to the co	ntract	t work incl	uding ar	ny appren	tices a	ınd on-the-j	ob trainees	
Table C	-	Indicate the	e racial bre	akdown	of the tot	al appre	entices	and on-t	ne-job trair	nees	shown in <sup>-</sup>	Γable A.		BC-	1256-Pg. 2	(Rev. 3/98)	

#### **RETURN WITH BID**

#### **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.
- B. <u>CERTIFICATION</u>, <u>EQUAL EMPLOYMENT OPPORTUNITY</u>:

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

#### **RETURN WITH BID**

Contract No. 90632
VERMILION County
Section 34Z-4
Project ACF-729(13)
Route FAP 729
District 5 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	
	Firm Name	
	Ву	
(IF A CO-PARTNERSHIP)	Business Address	
		Name and Address of All Members of the Firm:
_		
	Corporate Name	
	Ву	Signature of Authorized Representative
(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	Rusinoss Addross	·
SECOND PARTY SHOULD SIGN BELOW)	Dusilless Address	
	Corporate Name	
(IF A JOINT VENTURE)	2,	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	
		Signature
	Business Address	
If more than two parties are in the joint venture, p	olease attach an addit	ional signature sheet.

#### **RETURN WITH BID**



#### Division of Highways Proposal Bid Bond

(Effective November 1, 1992)

	Item No.
	Letting Date
KNOW ALL MEN BY THESE PRESENTS, That We	
as PRINCIPAL, and	
	as SURETY, are
Article 102.09 of the "Standard Specifications for Road and Bri	LINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in idge Construction" in effect on the date of invitation for bids, whichever is the lesser sum, well syment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.
	N IS SUCH, That Whereas, the PRINCIPAL has submitted a bid proposal to the STATE OF or the improvement designated by the Transportation Bulletin Item Number and Letting Date
the bidding and contract documents, submit a DBE Utilization In PRINCIPAL shall enter into a contract in accordance with the to coverages and providing such bond as specified with good and alabor and material furnished in the prosecution thereof; or if, in into such contract and to give the specified bond, the PRINCIPA	old proposal of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in Plan that is accepted and approved by the Department; and if, after award by the Department, the terms of the bidding and contract documents including evidence of the required insurance sufficient surety for the faithful performance of such contract and for the prompt payment of the event of the failure of the PRINCIPAL to make the required DBE submission or to enter AL pays to the Department the difference not to exceed the penalty hereof between the amount the Department may contract with another party to perform the work covered by said bid it shall remain in full force and effect.
Surety shall pay the penal sum to the Department within fifteen	PAL has failed to comply with any requirement as set forth in the preceding paragraph, then (15) days of written demand therefor. If Surety does not make full payment within such the amount owed. Surety is liable to the Department for all its expenses, including attorney's alle or in part.
In TESTIMONY WHEREOF, the said PRINCIPAL and the day of	he said SURETY have caused this instrument to be signed by their respective officers this A.D.,
PRINCIPAL	SURETY
(Company Name)	(Company Name)
By:	By:
(Signature & Title)	(Signature of Attorney-in-Fact)
Not	tary Certification for Principal and Surety
STATE OF ILLINOIS, COUNTY OF	
I,	, a Notary Public in and for said County, do hereby certify that
and	
(Insert names of individual)	duals signing on behalf of PRINCIPAL & SURETY)
	whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and dged respectively, that they signed and delivered said instrument as their free and voluntary
Given under my hand and notarial seal this	day of, A.D
My commission expires	
	Notary Public
	m, the Principal may file an Electronic Bid Bond. By signing below the Principal is ensuring neipal and Surety are firmly bound unto the State of Illinois under the conditions of the bid
Electronic Bid Bond ID# Company/Bidder Name	Signature and Title

#### PROPOSAL ENVELOPE



### **PROPOSALS**

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

Item No.	Item No.	Item No.

#### Submitted By:

Name:	
Address:	
Phone No.	

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

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

#### **NOTICE**

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

# CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

#### **NOTICE**

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

Contract No. 90632
VERMILION County
Section 34Z-4
Project ACF-729(13)
Route FAP 729
District 5 Construction Funds



## 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., November 18, 2005. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after the 10:00 a.m. cut off time.
- **2. DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 90632
VERMILION County
Section 34Z-4
Project ACF-729(13)
Route FAP 729
District 5 Construction Funds

1.4 kilometers of 17.66 meters and variable width widening and resurfacing reconstruction of U.S. Route 136 to a four lane roadway with a bi-directional turn lane from east of Pine Street to the west side of the Stoney Creek bridge in Danville.

- 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

Timothy W. Martin, Secretary

BD 351 (Rev. 01/2003)

### INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

#### Adopted March 1, 2005

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

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-02) (Revised 3-1-05)

#### SUPPLEMENTAL SPECIFICATIONS

Std. Sp	ec. Sec.	Page No.
101	Definition of Terms	
105	Control of Work	
205	Embankment	. 3
251	Mulch	
281	Riprap	
282	Filter Fabric for Use With Riprap	. 8
285	Concrete Revetment Mats.	. 10
311	Granular Subbase	. 14
351	Aggregate Base Course	. 15
440	Removal of Existing Pavement and Appurtenances	
442	Pavement Patching	
449	Removal and Replacement of Preformed Elastomeric Compression Joint Seal	. 18
481	Aggregate Shoulders	
501	Removal of Existing Structures	
503	Concrete Structures	
505	Steel Structures	
506	Cleaning and Painting Metal Structures	
508	Reinforcement Bars	
512	Piling	
540	Box Culverts	
589	Elastic Joint Sealer	
602	Catch Basin, Manhole, Inlet, Drainage Structures and Valve Vault	
	Construction, Adjustment and Reconstruction	. 31
603	Adjusting Frames and Grates of Drainage and Utility Structures	
610	Shoulder Inlets with Curb	
665	Woven Wire Fence	
669	Removal and Disposal of Regulated Substances	
671	Mobilization	
702	Work Zone Traffic Control Devices	
1003	Fine Aggregates	
1004	Coarse Aggregate	
1005	Stone, Concrete Blocks and Broken Concrete for Erosion Protection,	. 00
1000	Sediment Control and Rockfill	. 42
1006	Metals	
1007	Timber and Preservative Treatment	
1012	Hydrated Lime	
1020	Portland Cement Concrete	
1021	Concrete Admixtures	
1022	Concrete Curing Materials	
1024	Nonshrink Grout	
1041	Brick	
1043	Precast Reinforced Concrete Manhole Sections and Adjusting Rings	
1056	Preformed Flexible Gaskets and Mastic Joint Sealer for Sewer and Culvert Pipe	
1059	Elastic Joint Sealers	
1060	Waterproofing Materials	
1069	Pole and Tower	
1070	Foundation and Breakaway Devices	
1077	Post and Foundation	
1080	Fabric Materials	
1080	Materials For Planting	
1083	Elastomeric Bearings	
1083	Overhead Sign Structures	
11034	Portland Cement Concrete Equipment	
1100	- I ordana demont denote Equipment	. 19

#### RECURRING SPECIAL PROVISIONS

The following RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

CHE	:Cł	<u>K SHEET #</u> PAGE	<u>NO.</u>
		State Required Contract Provisions All Federal-aid Construction Contracts (Eff. 2-1-69) (Rev. 10-1-83)	
2	Χ	Subletting of Contracts (Federal-aid Contracts) (Eff. 1-1-88) (Rev. 5-1-93)	. 82
3	Х	EEO (Eff. 7-21-78) (Rev. 11-18-80)	. 83
4		Specific Equal Employment Opportunity Responsibilities NonFederal-aid Contracts (Eff. 3-20-69) (Rev. 1-1-94)	94
5		Required Provisions - State Contracts (Eff. 4-1-65) (Rev. 4-1-93)	100
6		Reserved	
7	Χ	Asphalt Quantities and Cost Reviews (Eff. 7-1-88)	
		National Pollutant Discharge Elimination System Permit (Eff. 7-1-94) (Rev. 1-1-03)	
9		Haul Road Stream Crossings, Other Temporary Stream Crossings and In-Stream Work Pads (Eff. 1-2-92) (Rev. 1-1-98)	
10		Construction Layout Stakes Except for Bridges (Eff. 1-1-99) (Rev. 1-1-02)	109
11		Construction Layout Stakes (Eff. 5-1-93) (Rev. 1-1-02)	
12		Use of Geotextile Fabric for Railroad Crossing (Eff. 1-1-95) (Rev. 1-1-97)	
13		Asphaltic Emulsion Slurry Seal and Fibrated Asphaltic Emulsion Slurry Seal (Eff. 8-1-89) (Rev. 2-1-97)	
14		Bituminous Surface Treatments Half-Smart (Eff. 7-1-93) (Rev. 1-1-97)	. 123
15	Х		129
16		Subsealing of Concrete Pavements (Eff. 11-1-84) (Rev. 2-1-95)	
17		Bituminous Surface Removal (Cold Milling) (Eff. 11-1-87) (Rev. 10-15-97)	
18		Resurfacing of Milled Surfaces (Eff. 10-1-95)	
19		PCC Partial Depth Bituminous Patching (Eff. 1-1-98)	. 155
20		Patching with Bituminous Overlay Removal (Eff. 10-1-95) (Rev. 7-1-99)	. 157
21		Reserved	
22		Protective Shield System (Eff. 4-1-95) (Rev. 1-1-03)	
23		Polymer Concrete (Eff. 8-1-95) (Rev. 3-1-05)	
24	Χ		
25		Pipe Underdrains (Eff. 9-9-87) (Rev. 1-1-98)	
26		Guardrail and Barrier Wall Delineation (Eff. 12-15-93) (Rev. 1-1-97)	
27		Bicycle Racks (Eff. 4-1-94) (Rev. 1-1-97)	
28		Reserved	
29		Reserved	
30	.,	Reserved	. 179
	Χ		
32		Reserved	
33	v	English Substitution of Metric Bolts (Eff. 7-1-96)	
34	Λ	J	183
35		Polymer Modified Emulsified Asphalt (Eff. 5-15-89) (Rev. 1-1-04)	100
36 37		Quality Control of Concrete Mixtures at the Plant-Single A (Eff. 8-1-00) (Rev. 1-1-04)	
38		Quality Control of Concrete Mixtures at the Plant-Double A (Eff. 8-1-00) (Rev. 1-1-04)	
39	v		
40	^	Traffic Barrier Terminal Type 1, Special (Eff. 8-1-94) (Rev. 1-1-03)	
41		Reserved	
	X	Segregation Control of Bituminous Concrete (Eff. 7-15-97)	
43	^	Reserved	

#### **TABLE OF CONTENTS**

INTENT OF PROJECT	1
DESCRIPTION OF PROJECT	1
TRAFFIC CONTROL PLAN	1
TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR SIDESTREET CLOSURE	2
CHANGEABLE MESSAGE SIGN:	4
PUBLIC MEETING	5
RAILROAD COORDINATION	5
CONTRACTOR ACCESS	6
COOPERATION BETWEEN CONTRACTORS:	6
TEMPORARY EASEMENT	6
PRESERVING PROPERTY CORNERS	7
AGGREGATE FOR TEMPORARY ACCESS	7
REMOVAL OF UNCLASSIFIED MATERIAL	7
BITUMINOUS REMOVAL	7
EARTH EXCAVATION	8
PERMANENT SURVEY MARKERS (SPECIAL)	8
EXPLORATION TRENCH, SPECIAL	8
TEMPORARY RAMP (SPECIAL)	
PAVEMENT REMOVAL	
COMBINATION CURB AND GUTTER REMOVAL	9
CONCRETE MEDIAN SURFACE REMOVAL	
SIDEWALK REMOVAL AND REPLACEMENT (SPECIAL)	
CONCRETE HEADWALL REMOVAL	
CONCRETE CURB, TYPE B (SPECIAL)	
CONCRETE CURB (SPECIAL)	
COMBINATION CONCRETE CURB AND GUTTER, TYPE B (SPECIAL)	
PORTLAND CEMENT CONCRETE SPECIMENS	
CONNECTING EXISTING STORM SEWERS TO PROPOSED STORM SEWERS	
PIPE UNDERDRAINS (SPECIAL) 150 MM	
CHAIN LINK FENCE TO BE REMOVED AND RE-ERECTED	
CONCRETE STEP REMOVAL	
VANE DRAINS	
REMOVE AND REPLACE MANHOLES	
SEGMENTAL CONCRETE BLOCK WALL	
TRAFFIC SIGNAL SPECIAL PROVISIONS	
STORM SEWER WATER MAIN AND STORM SEWER, RUBBER GASKET, CLASS A	27

STORM SEWER REMOVAL	28
REMOVE AND RESET ORNAMENTAL FENCE	29
METAL SECURITY GATE	29
REMOVE EXISTING LIGHT POLE FOUNDATION	30
POLE FOUNDATION REMOVAL, METAL	30
REMOVING EXISTING LIGHT POLE	30
LIGHTING CONDUIT AND WIRING REMOVAL	30
STEEL CASINGS	30
RAILROAD PROTECTIVE LIABILITY INSURANCE	31
FILLING EXISTING VAULTS:	32
FILLING EXISTING WINDOW WELLS	33
RETAINING WALL REMOVAL	33
REPAIRING DAMAGED STORM SEWER	33
REPAIRING UTILITY BORES	34
STATUS OF UTILITIES TO BE ADJUSTED	34
AUTHORITY OF RAILROAD ENGINEER (BDE)	36
COARSE AGGREGATE FOR TRENCH BACKFILL, BACKFILL AND BEDDING (BDE)	
CONCRETE ADMIXTURES (BDE)	43
CURING AND PROTECTION OF CONCRETE CONSTRUCTION (BDE)	47
DETECTABLE WARNINGS (BDE)	55
DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION	56
EPOXY COATING ON REINFORCEMENT (BDE)	64
EPOXY PAVEMENT MARKING (BDE)	64
EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)	65
EXPANSION JOINTS (BDE)	66
FLAGGER VESTS (BDE)	66
FREEZE-THAW RATING (BDE)	67
HAND VIBRATOR (BDE)	67
LIGHT EMITTING DIODE (LED) PEDESTRIAN SIGNAL HEAD (BDE)	67
LIGHT EMITTING DIODE (LED) SIGNAL HEAD (BDE)	68
MULCHING SEEDED AREAS (BDE)	71
PARTIAL PAYMENTS (BDE)	72
PAVEMENT THICKNESS DETERMINATION FOR PAYMENT (BDE)	73
PAYMENTS TO SUBCONTRACTORS (BDE)	80
PERSONAL PROTECTIVE EQUIPMENT (BDE)	81
PORTLAND CEMENT (BDE)	81
PORTLAND CEMENT CONCRETE (BDE)	81
PORTLAND CEMENT CONCRETE PATCHING (BDE)	82
PRECAST CONCRETE PRODUCTS (BDE)	85

PREFORMED RECYCLED RUBBER JOINT FILLER (BDE)	86
RAP FOR USE IN BITUMINOUS CONCRETE MIXTURES (BDE)	87
REINFORCEMENT BARS (BDE)	91
SEEDING AND SODDING (BDE)	92
SELF-CONSOLIDATING CONCRETE FOR CAST-IN-PLACE CONSTRUCTION (BDE)	95
SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)	101
SURFACE TESTING OF PAVEMENTS (BDE)	102
SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)	109
SUBGRADE PREPARATION (BDE)	109
SUPERPAVE BITUMINOUS CONCRETE MIXTURES (BDE)	110
TEMPORARY EROSION CONTROL (BDE)	116
TRAFFIC CONTROL DEFICIENCY DEDUCTION (BDE)	118
TRAINING SPECIAL PROVISIONS	119
TRANSIENT VOLTAGE SURGE SUPPRESSION (BDE)	122
TRUCK BED RELEASE AGENT (BDE)	123
VARIABLY SPACED TINING (BDE)	123
WEIGHT CONTROL DEFICIENCY DEDUCTION	124
WORK ZONE TRAFFIC CONTROL DEVICES (BDE)	125
WORKING DAYS (BDE)	127
PAYROLLS AND PAYROLL RECORDS (BDE)	127
STEEL COST ADJUSTMENT (BDE)	128
STORM WATER ROLL LITION PREVENTION DLAN	133

#### STATE OF ILLINOIS

#### SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2002, 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 FAP Route 729, (US 136), Project ACF- 0729(013), Section 34Z-4 in Vermilion County and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

#### INTENT OF PROJECT

The intent of this section is to widen by reconstructing FAP 729 (US Route 136) to a four-lane roadway with a bi-directional turn lane from east of Pine Street to the west side of the Stoney Creek bridge. The proposed roadway will be reconstructed with P.C. pavement. The contractor shall take appropriate precautions to protect and preserve the surrounding environment.

This work must be accomplished in a manner causing the least amount of damage possible to the environment and giving the maximum possible protection to the public, while minimizing disruption and inconvenience.

To that end the Contractor will be required to comply with the TRAFFIC CONTROL PLAN and with various provisions for protection of the environment contained elsewhere herein and in the plans.

#### **DESCRIPTION OF PROJECT**

The work in this section consists of reconstructing FAP 729 (US Route 136) with Portland Cement Concrete Pavement from east of Pine Street to the west side of the Stoney Creek bridge. Work items include: pavement removal, curb and gutter removal, Portland Cement Concrete pavement, storm sewer, sidestreet intersection reconstruction, entrances, sidewalks, curb and gutter, sodding, pavement marking, traffic signals, and other related work items.

#### TRAFFIC CONTROL PLAN

Eff. 09-11-90 Rev.: 01-06-99

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 contained herein and in the plans.

Special attention is called to Articles 107.09 and 107.14 of the Standard Specifications, the following Highway Standards relating to Traffic Control, and the listed Supplemental Specifications and Recurring Special Provisions.

Highway Standards: 701426 701602 701606 701701 701501

> 701801 702001

Special Details: Special Detail for Traffic Control

Traffic Control for Temporary Striping

Typical Application of Traffic Control Devices

For Sidestreet Closures Maintenance of Traffic Plans

Traffic: It is the intention of the Department that U.S. Route 136 and all sidestreets, except those noted in the Special Provisions entitled "Typical Application of Traffic Control Devices for Sidestreets Closures", be kept open to traffic at all times during the construction of this section. One-lane traffic will be permitted in the immediate work areas during construction. At all other times, all lanes of traffic shall be maintained throughout the project. The Contractor shall schedule his operations to assure that the time of lane and sidestreet closures are kept to a minimum. The entire mainline shall be open to emergency vehicles at all times.

Notice is to be given to the following public services 2 weeks before start of construction:

Vermilion County Sheriff Department	442-4080
Danville Police Department	431-2250
Danville Fire Department	431-2350
Danville Mass Transit	431-0653

Completion of construction requires the same public services contact.

#### TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR SIDESTREET CLOSURE

It is the intent of the Department that the south approach of Clark, College, Quincy, Park, Elizabeth, and Corrine Streets, and the north approach of Franklin, Washington, McDonald, Lauhoff Streets, and the north and south approaches of Walnut, Vermilion, Hazel, Jackson and Buchanan Streets to U.S. Route 136 be closed to traffic during the construction operations which impair traffic movement from these approaches onto or across U.S. Route 136. Sideroads shall be closed in alternating fashion in accordance with the sideroad closure patterns in the maintenance of traffic plans. During the period of road closure, the Contractor shall provide traffic devices in accordance with the detail for Typical Application of Traffic Control Devices for Sidestreet Closures. This item shall be considered included in the cost of Traffic Control and Protection and no additional compensation will be allowed.

Keeping Entrances Open:

At least one entrance shall be kept open at all times for properties which have more than one existing entrance. Any other entrances that are 6 meters wide or wider shall be constructed in half widths so that traffic will be allowed to use the portion of the entrance that is not under construction.

#### Pedestrian Safety Through Construction Areas:

Pedestrians shall have access to all properties abutting the work zone at all times except in the immediate work areas while construction is actually taking place. Pedestrian traffic shall be routed away from the construction area where possible.

Any excavation for storm sewer, inlets, or manholes left unattended by the Contractor shall require protection for pedestrians, such as temporary fence around the excavated area. The type and location of this protection shall be as directed by the Engineer.

Traffic Control and Protection Standard 701801 shall be utilized for pedestrian safety through construction areas. Traffic Control and Protection Standard 701801 will not be paid for separately, but shall be included in the cost of Traffic Control and Protection.

#### Traffic Control and Protection

This work shall include all of the traffic control and protection as detailed in the plans for the staged construction of FAP Route 729. The application of traffic control shall be as detailed in the plans.

Vertical barricades or orange cones shall be used instead of barricades or non-lighted drums in some areas as specified in the plans.

Vertical barricades shall be in accordance with Standard 702001.

Orange cones shall be equipped with two fluorescent 100-150 mm white and two fluorescent 100-150 mm orange hi-intensity reflective strips. The strips shall be placed as shown for drums on Highway Standard 702001. Each of these devices shall be equipped with a rubber ballast weighing no less than 13.6 kg. Spacing for the 1.07m tall cones shall be at 8m centers.

Cones or vertical barricades will be placed outside the work area, but will not encroach more than 450mm into the open lane. Such payment shall be considered included in the cost of Traffic Control and Protection.

Traffic Control and Protection, Standard 701426 shall be utilized for pavement striping. A back truck shall not be required as shown in Detail C. A flagger shall not be required if traffic speeds are less than 45 m.p.h. Spacing between the work area and the truck mounted attenuator may be adjusted to fit field conditions to the satisfaction of the Engineer.

Traffic Control and Protection, Standard 701501, 701602, 701606 and 701701 shall be utilized for, but not limited to storm sewer construction and patching, curb and gutter placement, pavement removal, pavement construction, pavement marking, and other work items near the back of curb.

Traffic Control and Protection, Standard 701801 shall be utilized for crosswalk and sidewalk closure at the locations noted in the plans.

This work will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, which price will include the cost of furnishing, erecting, maintaining, and removing the specified traffic control devices. Traffic Control and Protection Standards 701426, 701501, 701602, 701606, 701701, and 701801 will not be paid for separately, but shall be included in the cost of Traffic Control and Protection.

#### CHANGEABLE MESSAGE SIGN:

Eff. 03-23-2004

<u>Description</u>. This work shall consist of furnishing, placing, and maintaining changeable message sign(s) at the location(s) shown on the plans or as directed by the Engineer.

A portable changeable message sign shall be erected at the following locations for a period of two weeks prior to start of construction activities:

- Item 1. Place one on the north, south, and west approaches in the Gilbert Street and East Main Street intersection.
- Item 2. Place one east of the project limits on East Main Street.
- Item 3 As required by the resident engineer at any time unusual or unexpected conditions may occur or when especially heavy traffic is expected (such as travel days preceding, through and following holiday periods.)

The District 5 Traffic Operations Engineer shall provide the appropriate message for each location.

The Contractor shall furnish the portable changeable message signs for Item 3 within 24 hours of notice from the Engineer that they will be required.

The portable changeable message signs referenced in Item 3 above will be paid for in accordance with Article 109.04 of the Standard Specifications.

The sign(s) shall be trailer mounted. The message panel shall be at least 2.1 m (7 ft) above the pavement, present a level appearance, and be capable of displaying up to eight characters in each of three lines at a time. Character height shall be 450 mm (18 in.).

The message panel shall be of either a bulb matrix or disc matrix design controlled by an on-board computer capable of storing a minimum of 99 programmed messages for instant recall. The computer shall be capable of being programmed to accept message created by the operator via an alpha-numeric keyboard and able to flash any six messages in sequence. The message panel shall also be capable of being controlled by a computer from a remote location via a cellular linkage. The Contractor shall supply the modem, the cellular phone, and the necessary software to run the sign from a remote computer at a location designated by the Engineer. The Contractor shall promptly program and/or reprogram the computer to provide the messages as directed by the Engineer.

The message panel shall be visible from 400 m (1/4 mile) under both day and night conditions. The letters shall be legible from 250 m (750 ft).

The sign shall include automatic dimming for nighttime operation and a power supply capable of providing 24 hours of uninterrupted service.

The Contractor shall provide all preventive maintenance efforts s(he) deems 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. The cost of such work shall be borne by the Contractor or deducted from current or future compensation due the Contractor.

When the sign(s) are displaying messages, they shall be considered a traffic control device. At all times when no message is displayed, they shall be considered equipment.

<u>Basis of Payment.</u> The furnishing, placing, and maintaining of each portable message sign in Item1 and Item 2 above shall be paid for at the contract unit price per Calendar Day for Changeable Message Sign.

#### START OF WORK

The Contractor will not be allowed to proceed with any operations requiring lane restrictions on FAP 729 (U.S 136) prior to March 15, 2006.

#### SEQUENCE OF OPERATIONS

The Contractor shall complete all work as outlined in the plans for Season 1, Area 1, prior to proceeding with Season 2, Area 2 construction, unless written permission is received from the Engineer. No open holes or pavement will be allowed over the winter shut-down period. This restriction shall be considered to be included in the Contractor's bid, and no additional compensation will be allowed.

#### **PUBLIC MEETING**

The Contractor shall schedule and conduct a Public Information Meeting for this project before the start of construction. The Contractor shall secure a suitable facility for the meeting subject to the approval of the Department. The Contractor shall pay for all required insurance and fees associated with the meeting. The Contractor shall have representatives at the meeting to answer questions concerning scheduling, the nature of the work performed, and any other issues that may arise.

This work will not be paid for separately but considered included in the cost of the various traffic control items included herein.

#### RAILROAD COORDINATION

Norfolk Southern Railroad will be responsible for installing new traffic signal gates and/or signals

at the locations shown in the plans. Subsequent to the award of the contract, and before any work is started on the project, a mandatory meeting shall be held between the State's representatives, Norfolk Southern Railroad, and the Contractor(s) to coordinate the work to be performed by the various entities, including but not limited to construction operations requiring the use of a railroad flagger, traffic control staging changes affecting railroad signals, boring of Steel Casings 750 mm, boring of PVC conduit for traffic signal interconnect, installation of concrete medians, and any other work abutting railroad right of way. A preliminary schedule of operations shall be agreed to at that meeting. The Contractor shall notify the railroad of all schedule updates. A list of required contacts for the coordination meeting shall be furnished by the District's Railroad Coordinator, Bart Sherer (217-466-7225).

#### **CONTRACTOR ACCESS**

5-701PD4-94

Eff. 09-11-90 Rev.: 01-01-97

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 relocated, when approved by the Engineer, in the manner shown on Highway Standard 702001 for Road Closed to Through Traffic. 'Road Closed 'signs (Rll-2), supplemented by 'Except Authorized Vehicles 'signs (R3-II0I), 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 be considered incidental to the contract and no extra compensation will be allowed.

#### **COOPERATION BETWEEN CONTRACTORS:**

The City of Danville is planning proposed lighting improvements along E. Main Street which are to be constructed throughout the area of this contract's proposed improvements. It is anticipated that those improvements will be constructed concurrently with this contract. It is therefore essential that the selected contractors for each contract cooperate and communicate effectively.

There is a possibility that additional contractor operations may also be ongoing within the proposed project limits at the same time that the work included in this contract is being performed.

The contractor for this section shall cooperate with any other contractors performing work adjacent to this project in accordance with Article 105.08 of Standard Specifications. Any inconveniences or delays caused the contractor in complying with this requirement shall be considered included in the cost of the contract and no additional compensation will be allowed.

#### **TEMPORARY EASEMENT**

It is the intention of the Department that any temporary easement area be used only for the purpose of highway construction for which it was obtained. If the Contractor wishes to use a

temporary easement area for such things as equipment and material storage, he shall obtain written approval from the property owner involved and present the written approval to the Engineer before using.

#### PRESERVING PROPERTY CORNERS

The existing property corner markers located along this section in areas without additional right-of-way acquisition and any existing iron pins set at the proposed right-of-way shall be protected by the contractor. Any such markers destroyed by the Contractor's operations shall be replaced by a Registered Land Surveyor at the Contractor's expense.

Any expense, inconvenience or delays caused the Contractor in complying with this Special Provision will be considered included in the cost of the contract and no additional compensation will be allowed.

#### AGGREGATE FOR TEMPORARY ACCESS

Temporary Aggregate shall be used to provide temporary access at private entrances, commercial entrances, and alleys during construction of the storm sewer and the widening. The aggregate shall be weighed as it is initially placed or stockpiled for later use. The aggregate shall be re-used one time at other entrances or alleys on the project as needed or stockpiled until needed elsewhere on the project. The Contractor shall reclaim as much of the temporary aggregate as possible when coring out for the entrance pavement.

This work shall be paid for at the contract price per metric ton for AGGREGATE FOR TEMPORARY ACCESS. The price shall include all equipment, material, and labor for the transportation, excavation, placement, stockpiling, and removal and no additional compensation will be allowed.

#### **REMOVAL OF UNCLASSIFIED MATERIAL**

The existing pipe culverts, masonry block walls, wood retaining planks, sign bases, and other unclassified materials not called out in the Summary of Quantities shall be removed as designated by the Engineer. The material removed as required in this Special Provision shall be disposed of outside the limits of the right of way in accordance with Article 202.03 of the Standard Specifications and as directed by the Engineer.

This work will not be paid for separately but shall be considered included in the cost per cubic meter for EARTH EXCAVATION and no additional compensation will be allowed.

#### **BITUMINOUS REMOVAL**

The existing bituminous drives and parking lots within the limits of construction as shown on the plans shall be removed and the materials removed and disposed of in accordance with Section 202.03 of the Standard Specifications.

This work will not be paid for separately but shall be considered included in the cost per cubic meter for EARTH EXCAVATION and no additional compensation will be allowed.

#### **EARTH EXCAVATION**

This work shall consist of all earth excavation including the necessary excavation for the wider reconstructed pavement and adjacent curb and gutter in accordance with the applicable portions of Section 202 of the Standard Specifications. Any surplus excavation not used for embankment on the project or any unsuitable material shall be disposed of by the Contractor according to Article 202.03.

This work will be paid for at the contract unit price per cubic meter, for EARTH EXCAVATION.

#### PERMANENT SURVEY MARKERS (SPECIAL)

This work shall consist of providing and installing PERMANENT SURVEY MARKERS (SPECIAL), in accordance with the applicable portion of Section 667 of the Standard Specifications and the special detail in the plans.

This work will be paid for at the contract unit price per each for PERMANENT SURVEY MARKERS (SPECIAL) which price shall include all labor and equipment necessary to complete the work specified herein.

#### **EXPLORATION TRENCH, SPECIAL**

This work shall consist of excavating an exploration trench adjacent to existing storm sewer systems for the purpose of locating existing storm drains connected to the storm sewer system.

Upon completion of the pavement and curb and gutter removal at the designated locations, the exploration trench shall be excavated to a depth lower than the invert of the existing storm sewer to assure all storm drains have been located. Depths range from 1.0 to 3.0 meters.

All storm drains shall be connected to the proposed storm sewer in accordance with the detail in the plans unless the Engineer determines the storm drain has been abandoned.

Exploration Trench, Special shall be utilized at the following locations and as directed by the Engineer:

- 1) Left Sta. 91+540 to the outfall into Stoney Creek.
- 2) Right Sta. 91+542 to Sta. 91+633.
- 3) Right Sta. 91+633 to Left Sta. 91+631.

After the trench has been inspected for storm drains and the storm drains connected to the proposed storm sewer, the trench shall be backfilled with Trench Backfill to the original grade in accordance with Article 550.07 of the Standard Specifications.

This work will be paid for at the contract unit price per meter for EXPLORATION TRENCH, SPECIAL, which price shall include all labor, materials, including trench backfill, excavation, and equipment necessary to complete this item as specified and to the satisfaction of the Engineer.

All items required for connecting existing storm drains to the proposed storm sewer shall be considered included in the cost of constructing the storm sewer.

#### TEMPORARY RAMP (SPECIAL)

This work shall consist of constructing an adequate driving surface across the gap between the existing and the proposed pavement to provide a temporary ramp for intersection traffic to traverse from one pavement to the other. This work shall be completed in accordance with the detail in the plans at the locations shown in the plans and as directed by the Engineer.

The gap between the two pavements shall be filled with a minimum of 200mm of CA-6 compacted to the satisfaction of the Engineer and graded to the limits as specified in the detail.

In areas where the proposed pavement is higher than the existing pavement, the temporary ramp shall be constructed with incidental bituminous surface at a maximum slope of 1:10 (V:H).

In areas where the proposed pavement is lower than the existing pavement, the temporary ramp shall be constructed by milling the existing bituminous surface at a maximum slope of 1:10 (V:H) in accordance with the detail.

A minimum of 50mm incidental bituminous surfacing shall be placed over the CA-6 at all locations.

Incidental Bituminous Surfacing shall be placed in accordance with the applicable portion of Section 408 of the Standard Specifications.

The work described herein shall not be paid for separately, but shall be included in the contract unit price per square meter for TEMPORARY RAMP (SPECIAL) which price shall include all labor and equipment necessary to complete the work specified herein.

#### **PAVEMENT REMOVAL**

This work shall consist of the removal and disposal of the existing pavement at the locations shown on the plans in accordance with Section 440 of the Standard Specifications.

Pavement removal shall include any earth excavation and/or embankment necessary to prepare the subgrade for the proposed paving. Subgrade preparation shall be in accordance with the applicable portions of Section 301 of the Standard Specifications.

This work will be paid for at the contract unit price per square meter for PAVEMENT REMOVAL which price shall include all labor and equipment necessary to complete the work as specified herein.

#### **COMBINATION CURB AND GUTTER REMOVAL**

This work shall consist of the removal and disposal of existing concrete curb and gutter, gutter outlets, curb, bituminous curb or stone curb, at the locations shown on the plans and in accordance with Section 440 of the Standard Specifications.

Curb and gutter removal shall include the removal of the widened depressed curb at entrances and the removal of the widened depressed curb and header curb at side streets.

This work also will include the removal of any existing bituminous concrete which extends beyond the existing edge of pavement into the gutter flag. The material shall be disposed of outside of the limits of right-of-way.

This work will be included in the contract unit price per meter for COMBINATION CURB AND GUTTER REMOVAL.

#### CONCRETE MEDIAN SURFACE REMOVAL

This work shall consist of the removal and satisfactory disposal of the existing concrete median at the location shown on the plans or determined by the Engineer. The work shall include the removal of the median surface and the curb and gutter in accordance with Section 440 of the Standard Specifications.

This work will be paid for at the contract unit price per square meter for CONCRETE MEDIAN SURFACE REMOVAL and no additional compensation will be allowed.

#### SIDEWALK REMOVAL AND REPLACEMENT (SPECIAL)

This work shall consist of the removal and replacement of the existing brick sidewalk at the locations shown in the plans. The existing brick will be salvaged and replaced in the same type of bedding layer that it was originally constructed in. The brick walk at Rt. 91 + 334.9 to Rt. 91 + 391.6 shall be placed in a herringbone pattern. The brick walks at N. Vermilion St. shall be placed in a pattern as directed by the Engineer. The Contractor shall complete this work in accordance with all applicable portions of Section 424 of the Standard Specifications and as directed by the Engineer.

This work will be paid for at the contract unit price per square meter of SIDEWALK REMOVAL AND REPLACEMENT (SPECIAL), which price will be payment in full for all labor and materials necessary to complete the work.

#### **CONCRETE HEADWALL REMOVAL**

This work shall consist of the removal and satisfactory disposal of the existing concrete headwalls at the locations shown on the plans. This work shall be performed in accordance with Section 501 of the Standard Specifications.

This work will be paid for at the contract unit price per each for CONCRETE HEADWALL REMOVAL which price shall include all equipment and labor to complete this item to the satisfaction of the Engineer.

#### **CONCRETE CURB, TYPE B (SPECIAL)**

This work shall consist of the construction of Concrete Curb, Type B (Special) as detailed in the plans at locations shown in the plans.

This work will be paid for at the contract unit price per meter for CONCRETE CURB, TYPE B (SPECIAL) which price shall include all labor and equipment necessary to complete the work specified herein.

#### **CONCRETE CURB (SPECIAL)**

This work shall consist of the construction of Concrete Curb (Special) as detailed in the plans at locations shown in the plans.

This work will be paid for at the contract unit price per meter for CONCRETE CURB (SPECIAL) which price shall include all labor and equipment necessary to complete the work specified herein.

#### COMBINATION CONCRETE CURB AND GUTTER, TYPE B (SPECIAL)

This work shall consist of the construction of Combination Concrete Curb and Gutter, Type B (Special) as detailed in the plans at locations shown in the plans.

#### PORTLAND CEMENT CONCRETE SPECIMENS

Effective Date: 08/02/2004

All Portland Cement Concrete (PCC) shall be tested for flexural strength. No compression testing of any PCC will be allowed on this project. Any inconveniences to the Contractor shall be considered included in the cost of the various PCC pay items and no additional compensation will be allowed.

This work will be paid for at the contract unit price per meter for COMBINATION CONCRETE CURB AND GUTTER, TYPE B (SPECIAL), which price shall include all labor and equipment necessary to complete the work specified herein.

#### CONNECTING EXISTING STORM SEWERS TO PROPOSED STORM SEWERS

The existing storm sewers shall be connected to the proposed storm sewers or manholes at the locations shown on the plans. A portion of the existing pipe shall be removed for the construction of the manhole or placement of the proposed storm sewers.

This work will not be paid for separately, but will be included in the unit cost for each of the manholes of the type and size specified, or the unit cost per meter of storm sewer of the size and type specified.

#### **PIPE UNDERDRAINS (SPECIAL) 150 MM**

This work shall consist of construction of Pipe Underdrains (Special) 150 mm and connecting to inlets, manholes or storm sewer at the locations shown in the Block Retaining Wall Details in the plans. This work shall be completed in accordance with the applicable portions of Section 601 of the Standard Specifications.

This work will be paid for at the contract unit price per meter for PIPE UNDERDRAINS (SPECIAL) 150 mm which price shall include all labor, materials, equipment, excavation, backfilling, and connections necessary to complete this item as specified and to the satisfaction of the Engineer.

#### CHAIN LINK FENCE TO BE REMOVED AND RE-ERECTED

This work shall consist of removing and re-erecting the existing chain link fence at the locations shown on the plans and as designated by the Engineer. All elements of the fence shall be removed and re-erected as required for the construction of the proposed improvement.

Any fence elements damaged during the removal and re-erecting will be replaced by the Contractor at his own expense.

This work will be paid for at the contract unit price per meter for CHAIN LINK FENCE TO BE REMOVED AND RE-ERECTED, which price will include all labor, materials, and equipment required to complete the work to the satisfaction of the Engineer.

#### **CONCRETE STEP REMOVAL**

This work shall consist of the removal and disposal of the concrete steps and landings at the locations shown on the plans. The work shall be performed in accordance with the applicable portions of Section 440 of the Standard Specifications.

The removal of the steps and landings will be measured for payment per square meter of tread and landing area.

This work will be paid for at the contract unit price per square meter for CONCRETE STEPS REMOVAL.

#### **VANE DRAINS**

This work shall consist of constructing vane drains on a proposed storm sewer at the locations shown in the plans and in accordance with the details in the plans.

This work will be paid for at the contract unit price per meter for VANE DRAIN, which price shall include all labor, equipment, and materials, including the concrete encasement. The storm sewer shall be paid for at the contract unit price per meter for STORM SEWERS, CLASS B, TYPE 1 375 MM.

#### **REMOVE AND REPLACE MANHOLES**

This work shall consist of the removal of existing storm sewer manholes and the construction of a new concrete manhole, complete in place, in accordance with the applicable portions of Sections 504, 602, and 605 of the Standard Specifications.

The existing storm sewers shall be connected to the proposed manholes to maintain flow. If

additional pipe is required to make the connections, the same size pipe as the existing pipe shall be used. If a dissimilar type of pipe is used for the connection, a concrete collar shall be provided to join the pipes.

This work will be paid for at the contract unit price each for REMOVE AND REPLACE MANHOLES, of the type and diameter specified, with the types of frame and lid and/or frame and grate specified, which price shall include all labor, materials, equipment, excavation, and backfilling required to complete this item to the satisfaction of the Engineer. Storm sewer pipe and concrete collars shall not be paid for separately, but considered included in the cost of Remove and Replace Manholes.

#### SEGMENTAL CONCRETE BLOCK WALL

Description: This work shall consist of furnishing the design computations, shop plans, materials, equipment and labor to construct a Segmental Concrete Block Retainage Wall with a maximum height of  $\pm 1.5$  m (5 ft) as measured from the top of block elevation to the finished grade line at the wall face.

General: The wall shall consist of a leveling pad, pre-cast concrete blocks, select granular backfill and, if required by the design, soil reinforcement. The materials, fabrication, and construction of the wall components are subject to approval by the Engineer. The Engineer reserves the right to obtain random samples for material testing. The wall shall be designed and constructed according to the lines, grades, and dimensions shown on the contract plans and approved shop plans.

Submittals: The wall supplier shall submit design computations and shop plans to the Engineer. The shop plans shall be sealed by an Illinois Licensed Professional Engineer and shall include all details, dimensions, quantities, and cross sections necessary to construct the wall and shall include, but not be limited to, the following items:

- (a) Plan, elevation, and cross section sheet(s) for each wall showing the following:
  - (1) A plan view of the wall indicating the offsets from the construction centerline to the first coarse of blocks at all changes in horizontal alignment. These shall be calculated using the offsets to the front face of the block shown on the contract plans and the suppliers proposed wall batter. The plan view shall indicate bottom (and top coarse of block when battered), the excavation and select granular backfill limits as well as any soil reinforcing required by the design. The centerline of any drainage structure or pipe behind or passing through/under the wall shall also be shown.
  - (2) An elevation view of the wall, indicating the elevation and all steps in the top coarse of blocks along the length of the wall. The top of these blocks shall be at or above the theoretical top of block line shown on the contract plans. This view shall also show the steps and proposed top of leveling pad elevations as well as the finished grade line at the wall face specified

on the contract plan. These leveling pad elevations shall be located at or below the theoretical top of leveling line shown on the contract plans. The location, size, and length of any soil reinforcing connected to the blocks shall be indicated.

- (3) Typical cross section(s) showing the limits of the select granular backfill, soil reinforcement if used in the design. The right-of-way limits shall be indicated as well as the proposed excavation, cut slopes, and the elevation relationship between existing ground conditions and proposed grades.
- (4) All general notes required for constructing the wall.
- (b) All details for the leveling pads, including the steps, shall be shown. The theoretical top of the leveling pad shall either be below the anticipated frost depth or 450 mm (1.5 ft.) below the finished grade line at the wall face whichever is greater; unless otherwise shown on the plans. The minimum thickness shall be 152 mm (6 in.).
- (c) Cap blocks shall be used to cover the top of the standard block units. The top coarse of blocks and cap blocks shall be stepped to satisfy the top of block line shown on the contract plans.
- (d) All details of the block and/or soil reinforcement placement around all appurtenances located behind, on top of, or passing through the wall shall be clearly indicated. Any modifications to the design of these appurtenances to accommodate a particular design arrangement shall also be submitted.
- (e) All details of the blocks, including color and texture shall be shown. The exterior face shall preferably be straight, textured with a "split rock face" pattern, and dark grey in color unless otherwise stated on the plans.
- (f) All block types (standard, cap, corner, and radius turning blocks) shall be detailed showing all dimensions.
- (g) All blocks shall have alignment/connection devices such as shear keys, leading/trailing lips, or pins. The details for the connection devices between adjacent blocks and the block to soil reinforcement shall be shown. The block set back or face batter shall be limited to 20 degrees from vertical, unless otherwise shown by the plans.

The initial submittal shall include 3 sets of prints of the detail shop plans and 1 set of calculations. One set of plans will be returned to the Contractor with any corrections indicated. After approval, the Contractor shall furnish the Engineer with 8 sets of corrected plan prints for distribution. The Contractor shall not order materials for the structure until the submittal has been approved in writing by the Engineer.

Materials: The materials shall meet the following requirements:

(a) Pre-cast Concrete Block: The block proposed for use shall be produced according to the Department's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products", and shall satisfy the following:

Conform to the requirements of ASTM C 1372 except as follows:

- 1. Fly ash shall be according to Article 1010.03.
- 2. Ground granulated blast-furnace slag shall be according to AASHTO M302.
- 3. Aggregate shall be according to Articles 1003.02 and 1004.02, with the exception of gradation. Chert gravel may be used based on past inservice satisfactory performance, in the environment in which the product was used.
- 4. Water shall be according to Section 1002.
- 5. Testing for freeze-thaw durability will not be required. However, unsatisfactory field performance as determined by the Department will be cause to prohibit the use of the block on Department projects.
- (b) Select Granular Backfill: The material behind the blocks and above a 1:1 slope extending upward from either the back of the bottom block or soil reinforcement (whichever is greater) shall consist of either a coarse aggregate according to Article 1004.06(a), or a fine aggregate according to the first sentence of Article 1003.04(a). The aggregate used shall also meet the following:

Coarse Aggregate Gradation Fine Aggregate Gradation Coarse Aggregate Quality Fine Aggregate Quality Internal Friction Angle pH CA6 thru CA16(Article 004.01(c))
FA1, FA2, or FA20 (Article 1003.01(c))
Minimum Class C (Article 1004.01 (b))
Minimum Class C (Article 1003.01 (b))
34° minimum (AASHTO T 236)
4.5 to 9 (AASHTO T 289)

When a fine aggregate is selected, the rear of all block joints shall be covered by a non-woven needle punch geotextile filter material according to Article 1080.05 of the Standard Specifications and shall have a minimum permeability according to ASTM D 4491 and 0.008 cm/sec. All fabric overlaps shall be 150 mm (6 inches) and non-sewn. As an alternative to the geotextile, a coarse aggregate shall be placed against the back face of the blocks to create a minimum 300 mm (12 inches) wide continuous gradation filter to prevent the select fill material from passing through the block joints.

- (c) Leveling pad: The material shall be either Class SI concrete according to Article 1020.04 or compacted coarse aggregate according to Articles 1004.04, (a) and (b). The compacted coarse aggregate gradation shall be CA6 or CA10.
- (d) Soil Reinforcement: If soil reinforcement is required by the approved design, the Contractor shall submit a manufacturer's certification for the soil reinforcement properties which equals or exceeds those required in the design computations. The soil reinforcement shall be manufactured from high density polyethylene (HDPE) uniaxial or polypropylene biaxial resins or high tenacity polyester fibers with a PVC coating, stored between –29 and 60°C (-20 and 140°F). The following standards shall be used in determining the soil reinforcement capacities:

ASTM D-638	Test Method for Tensile Properties of Plastic
ASTM D-1248	Specification for Polyethylene Plastics Molding and
	Extrusion Materials
ASTM D-4218	Test Method for Carbon Black Content in Polyethylene
	Compounds
ASTM D-5262	Test Methods for Evaluating the Unconfined Tension
	Creep Behavior of Geosynthetics
GG1	Standard Test Method for Geogrid Rib Tensile Strength
GG2	Standard Test Method for Geogrid Junction Strength
GG4	Standard Practice for Determination of the Long Term
	Design Strength of Geogrid
GG5	Standard Practice for Evaluating Geogrid Pullout Behavior

Design Criteria: The design shall be according to AASHTO Specifications and commentaries for Earth Retaining Walls or FHWA Publication No. HI-95-038, SA-96-071 and SA-96-072. The wall supplier shall be responsible for all internal stability aspects of the wall design.

Internal stability design shall insure that adequate factors of safety against overturning and sliding are present at each level of block. If required by design, soil reinforcement shall be utilized and loading at the block/soil reinforcement connection as well as the failure surface must be indicated. The calculations to determine the allowable load of the soil reinforcement and the factor of safety against pullout shall also be included. The analysis of settlement, bearing capacity, and overall slope stability are the responsibility of the Department.

External loads such as those applied through structure foundations, from traffic or railroads, slope surcharge etc., shall be accounted for in the internal stability design. The presence of all appurtenances behind, in front of, mounted upon, or passing through the wall volume such as drainage structures, utilities, structure foundation elements, or other items shall be accounted for in the internal stability design of the wall.

Construction Requirements: The Contractor shall obtain technical assistance from the supplier during wall erection to demonstrate proper construction procedures and shall include all costs related to this technical assistance in the unit price bid for this item.

The foundation material for the leveling pad and select granular backfill volume shall be graded to the design elevation and compacted according to Article 205.05, except the minimum required compaction shall be 95% of the standard laboratory density. Any foundation soils found to be unsuitable shall be removed and replaced as directed by the Engineer and shall be paid for according to Article 109.04.

The select granular backfill lift placement shall closely follow the erection of each coarse of blocks. All aggregate shall be swept from the top of the block prior to placing the next block lift. If soil reinforcement is used, the select granular backfill material shall be leveled and compacted before placing and attaching the soil reinforcement to the blocks. The soil reinforcement shall be pulled taut, staked in place, and select fill placed from the rear face of the blocks outward. The lift thickness shall be the lesser of 255 mm (10 inches) loose measurement or the proposed block height.

The select granular backfill shall be compacted according to Article 205.05, except the minimum required compaction shall be 95% of the standard laboratory density. Compaction shall be achieved using a minimum of 3 passes of a lightweight mechanical tamper, roller, or vibratory system. The top 300 mm (12 inches) of backfill shall be a cohesive, impervious material capable of supporting vegetation, unless pavement or other details are specified on the plans.

The blocks shall be maintained in position as successive lifts are compacted along the rear face of the block. Vertical, horizontal, and rotational alignment tolerances shall not exceed 12 mm (1/2 inch) when measured along a 3 m (10 ft.) straight edge.

Method of Measurement: Segmental Concrete Block Wall will be measured by the square meter (square foot) of wall face from the top of block line to the theoretical top of the leveling pad for the length of the wall in a vertical plane, as shown on the contract plans.

Basis of Payment: This work will be paid for at the contract unit price per square meter (square foot) for SEGMENTAL CONCRETE BLOCK WALL.

#### TRAFFIC SIGNAL SPECIAL PROVISIONS

TRAFFIC SIGNAL EQUIPMENT: The traffic signal equipment furnished for this contract shall be Eagle Brand in accordance with the proprietary letter between the State of Illinois and the City of Danville dated October 26, 1992.

<u>DAMAGE TO EQUIPMENT:</u> Any equipment damaged by the Contractor in his operations shall be replaced by him at his own expense, and no additional compensations will be allowed.

<u>REMOVE EXISTING CONCRETE FOUNDATION:</u> This work shall be completed in accordance with Article 895.05(c) of the Standard Specifications.

Removal of an existing concrete foundation will be paid for at the contract unit price EACH for REMOVE EXISTING CONCRETE FOUNDATION and no additional compensation will be allowed.

<u>REMOVE EXISTING HANDHOLE:</u> This work shall consist of the removal of handholes in accordance with Article 895.05(b) of the Standard Specifications.

The handhole shall be removed in its entirety and disposed of in accordance with Article 202.03 of the Standard Specifications as directed by the Engineer. All excavation resulting from concrete foundations removal that falls within 2 feet of pavement shall be backfilled with trench backfill in accordance with Section 208 of the Standard Specifications. Existing conduit to be used shall be protected from damage during removal.

This work will be paid for at the contract unit price EACH for REMOVE EXISTING HANDHOLE and no additional compensation will be allowed.

<u>REMOVE EXISTING GULFBOX JUNCTION:</u> This work shall consist of the removal of gulfbox junctions. It shall be in accordance with Article 895.05(b) of the Standard Specifications, except that the gulfbox junction shall be removed complete.

This work will be paid for per the contract unit price EACH for GULFBOX JUNCTION REMOVAL and no additional compensation will be allowed.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT: This work shall consist of the removal of the existing traffic signal systems complete at each intersection in accordance with Article 895.05(a) of the Standard Specifications. The existing systems shall include but not be limited to the following items:

Signal heads, pedestrian heads, mast arm assemblies and poles, traffic signal posts, pedestrian push buttons, pedestrian push button posts, controller and cabinet, service installation, all electric cable, all foundations, handholes and gulfbox junctions. Existing conduit shall be abandoned in place.

Any additional miscellaneous existing equipment which the Engineer requires to be removed will also be included in this pay item.

All items except for foundations, handholes and gulfbox junctions shall be returned to the City of Danville unless otherwise noted in the plans. The City Engineer should be contacted when items to be returned to the City of Danville are removed.

The removal of existing foundations, handholes and gulfbox junctions will be paid for under their respective pay items. Payment for complying with this Special Provision will be at the contract unit price EACH for REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT, and no additional compensation will be allowed.

<u>ELECTRIC CABLE:</u> All signal, lead-in, communication, service cable, and lighting cable shall be tagged with wiring identification markers at each point of access. All handholes, gulfbox junctions, mast arm pole handholes, and controller cabinet shall be considered as points of access.

Wiring identification markers shall be in accordance with Article 1066.07 of the Standard Specifications. The cost associated with this compliance shall be considered as included in the contract unit price per METER for ELECTRIC CABLE of the size and type specified.

<u>ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1/C</u>: This work shall be in accordance with the applicable Articles of Sections 807, 817, 873 and 1066 of the Standard Specifications with the following modifications.

This work shall consist of furnishing and installing a grounding wire to connect all traffic signal posts, poles, handholes, cabinets and exposed metallic conduits. The proposed ground wire shall be an insulated 6 XLP green copper conductor. This wire shall be bonded to all items and their associated ground rods utilizing mechanical lugs and bolts. This wire may be made continuous by splicing in the adjacent handholes with compression lugs. Split bolts shall not be allowed.

The controller foundation ground rod shall be located in the double handhole rather than in the foundation. All other foundations shall retain their ground rods as shown on the foundation detail sheet.

The grounding wire shall be bonded to the grounded conductor at the service disconnect per the NEC.

When the lighting system is supplied by the same source as the signals, the bonded ground system for the luminaries may utilize the bonded ground system for the traffic signals. All luminaries that are a part of the traffic signal system shall be considered as grounded as required by the Department.

This work shall be paid for at the contract unit price per METER for ELECTRIC CABLE IN CONDUIT, GROUNDING NO 6 1/C which price shall be payment in full for all labor, materials, including clamps, hardware and all equipment required to provide the grounding system described above.

<u>PVC CONDUIT:</u> This work shall consist of furnishing and installing a conduit of the type and size specified, in accordance with Section 810 of the Standard Specifications except as described herein.

The substitution of Polyethylene duct conduit in place of PVC conduit, augered or in trench, of the size specified in the plans is permitted with no change in compensation of this item.

The term augered shall cover both the pushed and bored method of installing the conduit. Because of differences in the equipment and techniques, the contractor may use either method to install the conduit for the item AUGERED.

If the contractor chooses to install conduit runs designated as trenched in the plans by augering, payment shall be at the contract unit price per METER for CONDUIT IN TRENCH of the size specified along with trench and backfill for this work.

When PVC Conduit is required to be spliced to steel conduit sections, a heavy wall set screw connector with a PVC female adapter shall be installed and sealed by duct seal and plastic tape.

A 6 mm polypropylene pull rope shall be installed in all conduit runs exceeding 6 meters. A minimum of 0.6 meter of rope shall be provided at each end of a conduit run.

This work will be paid for at the contract unit price per METER for PVC CONDUIT, of the size and type specified. Trench and backfill when required will be paid for separately.

<u>HANDHOLE</u>: This work shall be in accordance with Section 814 of the Standard Specifications with the exception of article 1088.10 which shall read as follows:

#### 1088.10 Handhole

- (a) Concrete. The concrete shall be Class SI according to Section 1020.
  - (1) Frame and Cover. The handhole frame and cover shall be fabricated from steel according to Section 505, or cast iron according to AASHTO M 105, Class 30 or better. The dimensions of the frame and cover shall be according to Standards 814001 and 814006, and the frame and the outer rims of the cover shall be a minimum of 19 mm (3/4 in.) thick. The thickness of the cover, at the center, shall be a minimum of 25mm (1 in.) at the reinforcing ribs. The frame and cover shall have beveled edges to assist in centering the cover. Each cover of a double handhole shall be connected to the frame by a flush hinge.

The frame and cover shall be designed to withstand AASHTO H 15 loading for a regular handhole and a double handhole, and to withstand AASHTO H 20 for a heavy-duty handhole. The frame and cover shall have the minimum mass (weight) as follows:

Frame and Cover	Minimum
	Mass (Weight)
Handhole	64 kg (140 lb)
Heavy-duty handhole	118 kg (260 lb)
Double Handhole	150 kg (330 lb)

(b) Composite Concrete. The composite concrete handhole shall be according to Article 1088.05 except that the bolts to attach the cover shall be omitted.

All hardware used for assembling the composite concrete double handhole shall be galvanized or stainless steel.

(c) Cover. All covers shall contain a recessed ring or handle for lifting and a cast in place legend "TRAFFIC SIGNALS" or "IDOT LIGHTING" when used for traffic signals or highway lighting respectively.

- (1) Lift Ring. The handhole lift ring shall have the same or better design life than the handhole cover and frame. The attachment of the lift ring to the lid by a loaded spring mechanism will not be acceptable.
- (d) French Drain. The French drain shall be constructed of crushed stone or gravel, Gradation CA 5 or CA 7, and according to Section 601.

<u>CONCRETE FOUNDATION TYPE E</u>: This work shall be in accordance with Section 878 of the Standard Specifications and Standard 878001-02 with the addition of separate lighting conduit for future use by the City of Danville.

It is the intent of the department that 50mm (2") PVC conduit (2 each) be installed at each location where a combination mast arm assembly is to be installed. This conduit is in addition to the 2  $\frac{1}{2}$ " conduit required in the standard. This conduit shall function as lighting cable conduit and provide access to connect the combination mast arm lighting and the Main St. corridor lighting. The contractor shall arrange the signal cable conduit and the ground rod along with the added lighting cable conduit within the specified bolt circle pattern for each foundation.

The lighting cable conduit shall extend1m (3 ft.) beyond the foundation and shall have a depth of 600 mm (2 ft) below finished grade. The conduit shall be capped using a 2" PVC cap. The end of the conduit stub shall be marked with labeled lathe and ribbon.

The positioning of the lighting cable conduits for entrance and exit of the foundation shall be per the approval of the engineer.

This work shall be considered as included in the contract unit price per METER for CONCRETE FOUNDATION TYPE E of the size specified and no additional compensation will be allowed.

TRAFFIC SIGNAL PAINTING: This work shall include surface preparation, powder type painted finish application and packaging of new galvanized steel traffic signal mast arm poles and posts assemblies. Traffic signal mast arm shrouds and post bases shall also be painted.

Surface Preparation: All weld flux and other contaminates shall be mechanically removed. The traffic mast arms and post assemblies shall be degreased, cleaned, and air dried to assure all moisture is removed.

Painted Finish: All galvanized exterior surfaces shall be coated with a urethane or triglycidyl isocyanurate (TGIC) polyester powder to a dry film thickness of 2.0 mils. Prior to application, the surface shall be mechanically etched by brush blasting (Ref. SSPC-SP7) and the zinc coated substrate preheated to 450 degrees F for a minimum one (1) hour. The coating shall be electrostatically applied and cured by elevating the zinc-coated substrate temperature to a minimum of 400 degrees F.

The City of Danville has requested that the finish for the proposed signal equipment be standard smooth powder coat black.

Traffic signal heads, pedestrian signal heads and controller cabinets are not included in this pay item.

Any damage to the finish after leaving the manufacturer's facility shall be repaired to the satisfaction of the Engineer using a method approvable by the Engineer and manufacturer. If while at the manufacturer's facility the finish is damaged, the finish shall be re-applied.

Packaging: Prior to shipping, the poles and posts shall be wrapped in ultraviolet-inhibiting plastic foam or rubberized foam.

Basis of Payment: This work shall be paid for at the contract unit price EACH for PAINT NEW COMBINATION MAST ARM POLE, UNDER 12.19 METER (40 FEET) or PAINT NEW TRAFFIC SIGNAL POST of any height, which shall be payment in full for painting and packaging the traffic signal mast arm poles and posts described above including all shrouds, bases and appurtenances.

TRAFFIC SIGNAL POST: This work shall be in accordance with Section 875 of the Standard Specifications except that in addition to a fabric post tightener, a pipe wrench shall also be an acceptable method of screwing the post to the base.

The Contractor shall protect the finish of the post by placing wood blocks in the jaws of the pipe wrench or by other means acceptable to the Engineer.

Post shall be field tightened to the base.

<u>POLYCARBONATE SIGNAL HEADS:</u> The POLYCARBONATE heads provided for this project shall have the terminal compartment for two-way, post mounted signal heads on top of the post in accordance with Standard 880006.

The polycarbonate signal head housing shall be black in color.

Compliance with this special provision will be considered as included in the contract unit price, EACH, for POLYCARBONATE SIGNAL HEADS of the type specified and no additional compensation will be allowed.

<u>PEDESTRIAN PUSH-BUTTON</u>: This work shall consist of furnishing and installing pedestrian push-buttons of the type specified in accordance with Section 888 of the Standard Specifications.

Push buttons shall meet ADA requirements.

This work shall be paid for at the contract unit price EACH for PEDESTRIAN PUSH-BUTTON and no additional compensation shall be allowed.

<u>CONTROLLER CABINET:</u> The cabinet furnished under this contract shall have a detector test panel installed properly wired to the back-panel and located on the interior of the service door.

It shall be possible to register an input call by means of momentary action switches, or comparable means, for any available phase. The call will be serviced as an actual call from a field detector. Each switch shall be properly identified per phase.

The proposed controller cabinet at the intersection of U.S. 136 (Main St.) and Walnut Street shall be in accordance with all applicable portions of Article 1073.04(b) of the Standard Specifications in order to function as the location for a master controller.

<u>ANTI-BACKUP FEATURE:</u> The anti-backup feature for controller programming required in Article 1073.01(c) of the Standard Specifications for Traffic Control Items shall have the following added to the definition shown in Article 1073.01(a):

The components used to accomplish this feature shall be located outside the controller and labeled for identification.

Any costs incurred by compliance with this special provision shall be considered as included in the applicable pay items.

<u>SERVICE INSTALLATION</u>: This work shall be in accordance with Section 805 of the Standard Specifications except that in addition to the stainless steel enclosure required in Article 1086.02, a weatherproof painted steel enclosure will also be allowed.

MAST ARM MOUNTED STREET NAME SIGNS: The Contractor shall erect new mast arm mounted street name signs and mounting hardware on the mast arm assemblies per Standard 720016. This work shall be in accordance with Section 720 of the Standard Specifications.

The Contractor shall notify the District 5 Bureau of Operations Traffic Engineer a minimum of 2 weeks in advance of installation to obtain the signs for the State route prior to installation.

The contractor shall notify the municipality of the impending mast arm assembly and pole installation in adequate time to obtain signs to be erected over the municipalities route, if the municipality is so desirous

This work shall be considered as included in the various pay items of the project and no additional compensation will be allowed.

MASTER CONTROLLER: This work shall be in accordance with Section 860 of the Standard Specifications except that the telephone service shall be established by others.

<u>VIDEO VEHICLE DETECTION SYSTEM:</u> This work shall consist of furnishing, installing and placing into operation a vehicle detection system which detects vehicles by processing video images and providing detection outputs to a traffic signal controller. This equipment shall meet the NEMA Environmental, power and surge ratings as set forth in NEMA TS1 and TS Specifications. The video detection system shall consist of four video cameras, a video detection processor (VDP) capable of processing up to six video sources, and a pointing device.

The system shall include software that detects vehicles in multiple lanes using only the video image. Detection zones shall be defined using only a video menu and a pointing device to place the zones on a video image. Up to 144 detection zones shall be available. A separate computer shall not be required for programming detection zones.

The VDP shall process video from up to 6 video sources simultaneously. The sources can be a video cameras or S-VHS video tape players. The video shall be input to the VDP in RS 170 format and shall be digitized and analyzed in real time. A separate microprocessor for each video input shall be used.

Detection zones shall be programmed via a menu displayed on a video monitor and a pointing device connected to the VDP. The menu shall facilitate placement of the detection zones.

The VDP shall detect vehicles in real time as they travel across each detector zone.

The VDP shall have an RS-232 port for communications with an external computer. The VDP shall accept new detector patterns from an external computer through the RS-232 port. The VDP shall send its detector patterns to an external computer through the RS-232 port.

A minimum of 24 detection zones shall be supported and each detection zone can be sized to suit the site and the desired vehicle detection region.

Placement of detection zones shall be done by using only a pointing device and a graphical interface built into the VDP to draw the detection zones on the video image from each video camera.

The contractor shall supply to the Illinois Department of Transportation District 5 Bureau of Operations and to the City of Danville one (1) copy each of the latest version of pc software for uploading and downloading the detector patterns to and from the external computer through the RS-232 port.

Up to 3 detection zone patterns shall be saved within the VDP memory and this memory shall prevent loss during power outages.

Detector zone placement shall not be more distant from the camera than a distance of ten times the mounting height of the camera.

The VDP shall provide up to 32 channels of vehicle presence detection through a NEMA TS1 or TS2 port.

The VDP shall provide normal detector operation of existing zones except the one being added or modified during the setup process. The VDP shall output a constant call on any detection channel corresponding to a zone being modified.

The VDP shall be housed in a durable metal enclosure suitable for shelf mounting or 19" rack mounting in a NEMA type traffic equipment cabinet. The VDP shall be modular in construction with plug in field replaceable units.

The VDP shall be equipped with internal surge suppression. Surge ratings shall be as set forth in NEMA specifications.

The VDP shall include an RS-232 port for serial communications with a remote computer. This port shall be a "D" subminiature connector on the front of the VDP.

The front of the VDP shall include a BNC video input connection suitable for RS-170 video inputs. The video input shall include a switch selectable 75 ohm or high impedance termination to allow camera video to be routed to other devices, as well as input to the VDP for vehicle detection.

The front face of VDP shall contain indication, such as LED displays, to enable the user to view real time detections for up to 8 detector output channels at a time.

<u>CAMERA</u>: The video cameras used for traffic detection shall be furnished by the VDP supplier and shall be qualified by the supplier to ensure proper system operation.

The cameras shall produce a useable video image of the bodies of vehicles under all roadway lighting conditions, regardless of time of day.

The camera shall use a CCD sensing element and shall output monochrome video with resolution of not less than 380 lines vertical and 380 lines horizontal.

The camera shall include an electronic control lens.

The camera shall be housed in an environmentally sealed enclosure. The enclosure shall be equipped with a sun shield that prevents sunlight from directly entering the lens. The sunshield shall include a provision for water diversion to prevent water from flowing in the cameras field of view.

The camera enclosure shall include a thermostatically controlled heater to assure proper operation of the lens iris at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure.

The camera enclosure shall be equipped with separate, water-tight connections for power and video cables at the rear of the enclosure to allow diagnostic testing and viewing of video at the camera while the camera is installed on a mast arm or pole. Video and power shall not be connected within the same connector.

The video signal output by the camera shall be black and white in RS-170 format.

The video signal shall be fully isolated from the camera enclosure and power cabling.

Installation and Training: The supplier of the video detector unit shall supervise the installation and testing of the video equipment. A factory certified representative from the supplier shall be on-site for a minimum of one day.

Training shall be provided to maintenance and engineering personnel in the operation, setup, and maintenance of the video detection system.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price LUMP SUM for VIDEO DETECTION SYSTEM which price shall be payment in full for furnishing, installing, and placing into operation the equipment specified to the satisfaction of the Engineer.

<u>VIDEO MONITOR AND SOFTWARE:</u> The contractor shall supply to the Illinois Department of Transportation District 5 Bureau of Operations and to the City of Danville a video monitor, 1 each, to interface with the ACU for drawing the detection zones and also one (1) copy each of the latest version of pc software for uploading and downloading the detector patterns to and from the external computer through the RS-232 port.

This compliance shall be considered as included in the contract unit cost EACH for VIDEO DETECTION SYSTEM and no additional compensation will be allowed.

<u>COAXIAL CABLE</u>: This work shall consist of furnishing and installing coaxial cable in accordance with the applicable portions of Section 824 of the Standard Specifications for the Road and Bridge Construction and as specified herein.

The coaxial cable to use between the camera and the cabinet shall be a 75 ohm, precision video cable with 20 gauge solid bare copper conductor (9.9 ohms/M), solid polyethylene insulating dielectric, 98% (min) tinned copper double-braided shield and black polyethylene outer covering. The signal attenuation shall not exceed 0.78 dB per 100 feet at 10 MHZ. This cable shall be suitable for installation in conduit or overhead with appropriate span wire. BNC plug connectors should be used at both the Camera and Cabinet ends. The coaxial cable, BNC connector and crimping tool shall be approved by the supplier of the video detection system and the manufacturer's instructions must be followed to ensure proper connection.

The power cabling shall be No. 14 AWG three conductor cable.

The video detection system shall be installed as recommended by the supplier and as documented in installation materials provided by the supplier.

This work will be paid for at the contract unit price per METER for COAXIAL CABLE IN CONDUIT and ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3/C which price shall be payment in full for furnishing the material, installing connectors, making connections and installing the cable complete.

<u>TEMPORARY TRAFFIC SIGNAL INSTALLATION</u>: This work shall consist of the installation of temporary traffic signals at the locations shown in the plans.

The temporary signals shall be fully installed and operational prior to the existing signals being disconnected. The proposed signal installation shall be installed and operational before the temporary installation is disconnected.

The proposed temporary traffic signals shall be installed in accordance with Standard 880001 and Section 890 of the Standard Specifications.

The wood poles furnished for the temporary traffic signal installation shall be Class III or better. It shall be the Contractors responsibility to provide wood poles of sufficient length to maintain the clearance requirements in Standard 880001.

There shall be at least two (2) signal indications operational at all times for the through movements on each approach to the intersection. There shall be at least one (1) indication operational at all times for any turning movement on each approach. Generally, signal heads for any traffic movement shall be placed on the adjacent right lane line of that movement. Adjustments will be allowed to place signal heads within the width limits of a lane when necessary. The final location of all traffic control items shall be verified by the engineer in the field.

The contractor shall furnish sufficient cable slack to allow relocation of signal heads to any position on the span wire as well as locations for construction staging. Each temporary traffic signal head shall have its own individual cable from the controller cabinet to the signal head. The temporary traffic signals shall remain in operation during all signal head relocations.

All signal heads shall have 300 mm (12") indications.

Sidewalk guys will be required at all locations.

The controller furnished shall be configured to control the intersection as a minimum 4 phase operation. Signal timings shall be provided by the District 5 Bureau of Operations.

All hardware necessary to install the span wire, signal heads, wood poles, guy wires and any other item necessary for the complete installation of the temporary traffic signals shall be provided.

Compliance with this special provision shall be considered as included in the contract unit price EACH for TEMPORARY TRAFFIC SIGNAL INSTALLATION and shall include adjustments at all stages for each intersection. No additional compensation will be allowed.

## STORM SEWER WATER MAIN AND STORM SEWER, RUBBER GASKET, CLASS A

STORM SEWER WATER MAIN, and STORM SEWER, RUBBER GASKET, CLASS A are being used to satisfy the EPA requirements for vertical and horizontal separation of water mains from sewers as outlined in Section 41-2.01B and 41-2.01C, respectively, of the Standard Specifications for Water and Sewer Main Construction in Illinois.

STORM SEWER, RUBBER GASKET, CLASS A shall be installed at locations shown in the plans and shall be used to satisfy the requirements of Section 41-2.01B of the Standard Specifications for Water and Sewer Main Construction in Illinois. The work shall consist of construction of storm sewers with the necessary fittings according to Section 550 of the Standard Specifications for Road and Bridge Construction, with the following exception:

• The Contractor shall furnish and install a reinforced concrete pipe of the size, class, and type indicated with O-ring rubber gasket joints consisting of a compressive type ring in accordance with ASTM Specification C-361. Pressure testing shall not be required as part of this construction. The length of STORM SEWER, RUBBER GASKET, CLASS A shall extend a minimum of three meters (3m)(ten (10) feet) perpendicular each side of the water main that the storm sewer crosses. This item may only be used for crossings of a storm sewer and waterline. It may not be substituted for STORM SEWER, WATER MAIN.

STORM SEWER, WATER MAIN shall be used to satisfy the requirements of Section 41-2.01B of the Standard Specifications for Water and Sewer Main Construction in Illinois. Materials permitted and methods of construction are given below:

• Ductile Iron Pipe may be used for water main quality storm sewer, and shall be according to Sections 40-2.02, 40-2.04, and 40-2.05A of the Standard Specifications for Water & Sewer Main Construction in Illinois, dated May 1996. The Contractor shall install the pipe size specified or the next larger pipe size available, and methods of construction shall be according to Section 550 of the Standard Specifications for Road and Bridge Construction. The pressure testing required by Section 41-2.01B of the Standard Specifications for Water and Sewer Main Construction in Illinois, May 1996 shall include a hydrostatic head to the top of lid elevation of the lower manhole on the run, or as otherwise shown in the plans.

This work will be measured according to Article 550.04 of the Standard Specifications for Road and Bridge Construction and shall be paid for at the contract unit price per linear meter (foot) for STORM SEWER, RUBBER GASKET, CLASS A of the type and size specified, and STORM SEWER WATER MAIN, DUCTILE IRON PIPE, CLASS 50, of the size specified in the plans. This payment shall include the excavation, placement, and backfilling and shall be according to the applicable portions of Section 550 of the Standard Specifications except as otherwise described and no additional compensation will be allowed.

### STORM SEWER REMOVAL

This work shall consist of removing existing storm sewers at the locations designated in the plans in accordance with the applicable portions of Section 551 of the Standard Specifications. During storm sewer removal operations, the contractor shall inspect the trench for existing laterals which have been connected to the storm sewer. All storm drains shall be connected to the proposed storm sewer in accordance with the detail in the plans, unless the Engineer determines the lateral has been abandoned.

Storm sewer removal will be paid for at the contract unit price per meter for STORM SEWER REMOVAL, of the diameter specified, which price shall include all excavation and backfilling, and removing and disposal of the pipe. All items required for connecting existing storm drains to the proposed storm sewer shall be considered included in the cost of constructing the storm sewer.

# **REMOVE AND RESET ORNAMENTAL FENCE**

This work shall consist of removing and resetting the wrought iron fence at the location shown on the plans and as designated by the Engineer. All elements of the fence shall be removed and reset in the original location and as directed by the Engineer.

Prior to removing the fence, the post locations shall be referenced and documented so that the fence can be reset in its original location.

Any fence elements damaged during the resetting will be replaced by the Contractor at his own expense.

Upon completion of the resetting of the fence, the Contractor shall paint the weld areas and any other areas of the fence where the paint surface was damaged during the resetting operations. The paint used shall match the existing paint color of the fence.

Removal of the existing ornamental fence as well as the adjacent metal security gate from Lt. Station 90+662 to Lt. Station 90+681 shall be permitted for a maximum of 14 calendar days. Care shall be taken to complete all work necessary to reset the gate and fence and to restore operation of the gate within 14 calendar days to enable secure transportation of prisoners to and from the adjacent county facilities.

This work will be paid for at the contract unit price per meter for REMOVE AND RESET ORNAMENTAL FENCE, which price will include all labor, materials including Miscellaneous SI Concrete necessary for setting the posts, and equipment required to complete the work to the satisfaction of the Engineer.

### **METAL SECURITY GATE**

This work shall consist of removing and resetting the electric wrought iron gate at Lt. Station 650+667 as designated by the Engineer. All elements of the gate shall be removed and reset in the original location and as directed by the Engineer.

Prior to removing the gate, the post locations shall be referenced and documented so that the gate can be reset in its original location. Any gate elements damaged during the resetting will be replaced by the Contractor at his own expense. The Contractor shall perform all necessary electrical work to restore power to and operation of the security gate.

Upon completion of the resetting of the gate, the Contractor shall paint the weld areas and any other areas of the gate where the paint surface was damaged during the resetting operations. The paint used shall match the existing paint color of the fence.

Removal of the existing gate as well as the adjacent ornamental fence from Lt. Station 90+662 to Lt. Station 90+681 shall be permitted for a maximum of 14 calendar days. Care shall be taken to complete all work necessary to reset the gate and fence and to restore operation of the gate within 14 calendar days to enable secure transportation of prisoners to and from the adjacent county facilities.

This work will be paid for at the contract unit price each for METAL SECURITY GATE, which price will include all labor, materials including Miscellaneous SI Concrete necessary for setting the posts, electrical work necessary to repair and restore the gate to operating condition, and any other equipment necessary to complete the work to the satisfaction of the Engineer.

## REMOVE EXISTING LIGHT POLE FOUNDATION

Concrete light pole foundations shall be removed, per Section 842 of the Standard Specifications, at the locations shown in the plans or as directed by the Engineer. This work will be paid for at the contract unit price EACH for REMOVE EXISTING LIGHT POLE FOUNDATION, and no other compensation will be allowed.

### POLE FOUNDATION REMOVAL, METAL

Metal light pole foundations shall be removed, per Section 842 of the Standard Specifications, at the locations shown in the plans or as directed by the Engineer. This work will be paid for at the contract unit price EACH for POLE FOUNDATION REMOVAL, METAL, and no other compensation will be allowed.

#### REMOVING EXISTING LIGHT POLE

Existing light poles including luminaires and any other associated hardware and appurtenances shall be removed, per Section 842 of the Standard Specifications with No Salvage, at the locations shown in the plans or as directed by the Engineer. This work will be paid for at the contract unit price EACH for REMOVING EXISTING LIGHT POLE, regardless of the light pole material, and no other compensation will be allowed.

#### LIGHTING CONDUIT AND WIRING REMOVAL

Existing underground electric cables for lighting shall be removed with conduit and duct to a depth of 300 mm (1ft) below ground level and the hole backfilled, as directed by the Engineer. Cables in unit duct may be removed from the duct and become the property of the Contractor. The empty duct shall be removed to 300 mm (1ft) below ground level and the hole backfilled. This work shall be considered to be included in the various associated removal pay items and no additional compensation will be allowed.

### **STEEL CASINGS**

This work shall consist of constructing storm sewers of the required inside diameter with the necessary method of joining the pipe.

The material shall be smooth steel pipe (uncoated) which shall conform to ASTM Specifications A139 Grade B (No Hydro). The minimum yield strength of this pipe shall be 35,000 psi. The minimum wall thickness is as follows:

Nominal Size	Recommended Wall Thickness (Inches)
30	0.500

Sections of pipe shall be field welded with a full-depth, single "v" groove (butt joint) weld.

This work will also consist of jacking the pipe beneath the railroad tracks at the location shown on the plans in accordance with Section 552 of the Standard Specifications and as specified herein.

The Contractor shall inspect the site where the storm sewer is to be installed and familiarize himself with the conditions under which the work will be performed and with all necessary details as to the orderly prosecution of the work. The omission of any details for the satisfactory installation of the work in its entirety, which may not appear herein shall not relieve the Contractor of full responsibility.

Construction shall be carried on in such a manner that settlement of the ground surface above the pipe line shall be held to an absolute minimum. The installation of the pipe line shall follow the heading or boring excavation. Excavation shall be carried on in such a manner that voids behind the pipe will be held to a minimum. The Contractor shall pressure grout voids using an approved hydraulic pumping device, with grout mix in the proportions of one part Type I cement to three parts sand and sufficient water to produce a free flowing grout.

If, in the opinion of the Engineer, the installation of the pipe is being conducted in an unsafe manner, the Contractor will be required to stop work and bulkhead the heading until suitable agreements are reached between the Contractor and the Railroad Company. The Railroad Company will not be responsible and shall be saved harmless in the event of delays to the Contractor's work resulting from any cause whatsoever.

That length of pipe that is not jacked shall be constructed in accordance with Section 550 of the Standard Specifications except as specified herein:

This work will be paid for at the contract unit price per meter for STEEL CASINGS of the diameter and material specified, which price shall include all pipe fittings necessary, all other materials and equipment necessary including jacking the pipe and all excavation except excavation in rock.

FAP 729 (US route 136) Section 34Z Main Street CONTRACT 90632 Job No. C95-035-98 Norfolk Southern Corporation DOT/AAR 479 862 K RR Mile Post 301.73 Vermilion County

## RAILROAD PROTECTIVE LIABILITY INSURANCE

The contractor will be required to carry Railroad Protective Liability and Property Damage Liability Insurance in accordance with Article 107.11 of the Standard Specifications. The limits of liability shall be in accordance with Article 107.11 of the Standard Specification unless otherwise noted. A separate policy is required for each railroad indicated below unless otherwise noted.

SPEED OF NAMED INSURED & ADDRESS TRAINS	NUMBER AND SPEED OF	FREIGHT
Norfolk Southern Railroad Company 30 mph Attn: David W. Fries, Risk Manager Three Commercial Place Norfolk, VA 23510-2191	-0-	46 per day @

### FOR FREIGHT/PASSENGER INFORMATION CONTACT:

Mr. Richard Smoot, Asst. Superintendent Phone: 217-425-2060

#### FOR INSURANCE INFORMATION CONTACT:

Mr. David W. Fries, Risk Manager Phone: 757-629-2701

**BASIS OF PAYMENT:** The costs for providing insurance, as noted above, will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

APPROVAL OF INSURANCE: The ORIGINAL and one CERTIFIED copy of each required policy shall be submitted to the ENGINEER OF DESIGN, ILLINOIS DEPARTMENT OF TRANSPORTATION, 2300 SOUTH DIRKSEN PARKWAY, SPRINGFIELD, ILLINOIS 62764 for approval. The contractor will be advised when the Department has received approval of the insurance from the railroad(s). Before any work begins on railroad right-of-way, the Contractor shall submit to the Resident Engineer evidence that the required railroad protective liability insurance has been approved by the railroad(s). The Contractor shall also provide the Resident Engineer with the expiration date of each required policy.

#### FILLING EXISTING VAULTS:

This work shall consist of the filling and abandonment of existing vaults at the locations shown in the plans. The filling of the vaults and basements shall be done in accordance with the detail in the plans and as directed by the Engineer. The condition of the vault and basement walls shall be video taped prior to being filled.

This work will be paid for at the contract unit price per each for FILLING EXISTING VAULTS which price shall include all labor, equipment, and material including the concrete, reinforcement bars, controlled low strength material, and trench backfill, and video taping necessary for filling existing vaults to the satisfaction of the Engineer.

# FILLING EXISTING WINDOW WELLS

This work shall consist of the filling and abandonment of existing window wells at the locations shown in the plans. The Contractor shall field verify the size and depth of the window well to be filled prior to construction. The filling of the window wells shall be done in accordance with the detail in the plans and as directed by the Engineer. The condition of the basement walls shall be video taped prior to the window wells being filled.

This work will be paid for at the contract unit price per each for FILLING EXISTING WINDOW WELLS which price shall include all labor, equipment, and material necessary for filling existing window wells to the satisfaction of the Engineer.

The existing window well at Lt. Station 90+796 is to remain in place. The Contractor shall take care to maintain the existing window well during sidewalk and other nearby construction. Any additional costs incurred by the Contractor to maintain this existing opening shall be considered to be included in the cost of Portland Cement Concrete Sidewalk 125 MM and no additional compensation will be allowed.

### **RETAINING WALL REMOVAL**

This work shall consist of the removal and salvaging of the existing limestone retaining wall at the location specified in the plans.

The work shall be performed in accordance with Section 501 of the Standard Specifications except the salvaged limestone shall be stockpiled on the adjacent property at the location specified by the property owner.

This work will be paid for at the contract unit price per square meter for RETAINING WALL REMOVAL which price shall include all labor and equipment necessary to complete the work as specified herein.

#### REPAIRING DAMAGED STORM SEWER

This work shall consist of repairing existing storm sewer which has collapsed, separated or otherwise become damaged at locations shown in the plans and as directed by the Engineer. This work shall consist of storm sewer removal, storm sewer, and trench backfill.

The trench backfill and proposed storm sewer shall be completed in accordance with the applicable sections of Articles 208 and 550 respectively of the Standard specifications and as directed by the Engineer.

The proposed storm sewer shall be paid for per meter STORM SEWER of the class, type, and size shown in the plans. Trench backfill shall be paid for per cubic meter of TRENCH BACKFILL. The storm sewer removal and any necessary collars will not be paid for separately, but shall be considered as included in the contract unit price for the various pay items involved and no additional compensation will be allowed.

# **REPAIRING UTILITY BORES**

This work shall consist of repairing existing storm sewer damaged by a utility bore through the storm sewer pipe at locations shown in the plans and as directed by the Engineer. This work shall consist of storm sewer removal, utility adjustment, storm sewer and trench backfill.

It shall be the responsibility of the Contractor to identify the exact type, size, location, and owner of the utility at the location of the conflict. If the utility is identified as a water service line or sanitary sewer, the contractor shall adjust the utility in accordance with applicable Section of Article 563.

The trench backfill and proposed storm sewer shall be completed in accordance with the applicable sections of Articles 208 and 550 respectively of the Standard Specifications and as directed by the Engineer.

The proposed storm sewer shall be paid for per meter STORM SEWER of the class, type, and size shown in the plans. Trench backfill shall be paid for per cubic meter of TRENCH BACKFILL. The storm sewer removal and necessary collars and the necessary utility adjustment will not be paid for separately, but shall be considered as included in the contract unit price for the various pay items involved and no additional compensation will be allowed.

90632sp

(217) 431-2382

#### STATUS OF UTILITIES TO BE ADJUSTED

The following utilities are involved in this project. The utility companies have provided the estimated dates. Utility information provided is current as of August 25, 2005

Estimated Date

Name & Address of Utility	Type & Location	Relocation <u>Completed</u>
Mr. Charles Spurgeon * Danville Sanitary District Grape Creek Rd PO Box 724 Danville, IL 61832 (217) 442-3193	Industrial Sanitary-Not with-in jobsite	Not required
Mr. R. David Schnelle,  * City of Danville 17 W Main Danville, IL 61832-5705	Sanitary– throughout jobsite Proposed roadway lighting Plans pending	Not required During Const.

Mr. Wayne Parrish * Insight Communications 806 1/2 East Main St Danville, IL 61832 (217) 443-8178	Aerial along Buchanan Street AR 91+546+/- Relocate 1 pole on Buchanan Street and bury aerial facilities - Permit 5-29617	Required Completed 10/2005
Mr. Dan Coon * Ameren-IP	Gas - throughout jobsite Permit 5-29644 @ AR 90+320	Required
1112 West Anthony Drive P.O. Box 17070 Urbana, IL 61803-7070 (217) 383-7212 Mob: (217) 778-0718	Gas along Walnut Street on City ROW Permit not required 10" gas main at AR 91+205 is 30" deep Below the proposed pavement at 12.7m Lt 2" below proposed subbase. Call AmerenIP for AmerenIP inspector while working in the area.	Required 12/31/2005
	Electric Vault manhole to be adjusted by State contract.	Required
	Underground Electric	Not Required

Toll Free J.U.L.I.E. Telephone Number (800) 892-0123 
\* = Julie Member

# STATUS OF UTILITIES TO BE ADJUSTED

The following utilities are involved in this project. The utility companies have provided the estimated dates. Utility information provided is current as of August 25, 2005

•	official provided to current as of 7 tagget 20, 2000	Estimated
Date Name & Address of Utility	Type & Location	Relocation Completed
Mr. Charles Cushwa * SBC 816 Voorhees St. Danville, IL 61832 (217) 443-7830	Telephone- throughout jobsite Telephone Vaults Bury aerial facilities at Buchanan – Permit 5-29648 @ AR 91+547 Manholes to be adjusted by SBC. Install telephone to new TS control cabinet	Required Not required Required Completed During const.
Mr. Cameren Alden * Aqualllinois 1300 W Fairchild Danville, IL 61832 217/443-8542 Ext 126	at SW quadrant of Walnut and Main  Water Main and services Agreement Number UT 5-05-001 Install new 12" HDPE Water Main and services under north sidewalk. Abandoned 6",8", and 10" water main and services, under pavement, in place	During const.  Required April 15, 2006

Aqualllinois is installing a new 12" HDPE water main with services and laterals under the north sidewalk. Aqualllinois will disconnect the abandoned water mains under the roadway. The to be abandoned water main and laterals are shown on the plans. Proposed water main plans under State permit number 5-29559 are available for review upon request. The new water main locations are not shown in the plans. Portions of the abandoned water system may need to be removed before installing the proposed storm sewers. Call Aqua Illinois before any removal.

Mr. Justin French Fiber optic conduits under north sidewalk Not required

\* LightCore Lt. 90+268 to Lt. 90+480, AR 90+480, AR 91+464 Conduits not locatable. Report any damage to

Suite 500 Lightcore for as-built information and future fiber placement.

(314) 880-1637 Per email dated 9/13/2005, "the Idot contractor would not be liable for any damages to Lightcore facilities at this location.", per Susan Grinnell

## Information provided is the best estimate as of 10/21/2005.

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Sections 102, 103, 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. If any utility adjustments or relocations have not been completed by the above dates specified and when required by the contractor's operations after these dates, the contractor should notify the Engineer in writing. A request for an extension of time will be considered to the extent the Contractor's critical path schedule is affected.

Toll Free J.U.L.I.E. Telephone Number (800) 892-0123

\* = J.U.L.I.E. Member

### **AUTHORITY OF RAILROAD ENGINEER (BDE)**

Effective: July 1, 2004

Revise Article 105.02 of the Standard Specifications to read:

"105.02 Authority of Railroad Engineer. Whenever the safety of railroad traffic is concerned, the Railroad Engineer will have jurisdiction over safety measures to be taken and his/her decision as to the methods, procedures, and measures used shall be final, and any and all Contractors performing work near or about the railroad shall be governed by such decision. Instructions to the Contractor by the Railroad Engineer will be given through the Engineer. Work ordered as specified herein will be classified and paid for according to Article 104.02. Work performed for the Contractor's convenience will not be paid for separately but shall be considered as included in the contract."

80128

### COARSE AGGREGATE FOR TRENCH BACKFILL, BACKFILL AND BEDDING (BDE)

Effective: April 1, 2001 Revised: November 1, 2003

Revise Article 208.02 of the Standard Specifications to read:

"208.02 Materials. Materials shall be according to the following Articles of Section 1000 – Materials:

- - Note 1. The fine aggregate shall be moist to the satisfaction of the Engineer.
  - Note 2. The coarse aggregate shall be wet to the satisfaction of the Engineer."

Revise the first sentence of the second paragraph of subparagraph (b) in Article 208.03 of the Standard Specifications to read:

"Any material meeting the requirements of Articles 1003.04 or 1004.06 which has been excavated from the trenches shall be used for backfilling the trenches."

Add the following to the end of Article 542.02 of the Standard Specifications:

- - Note 1. The fine aggregate shall be moist to the satisfaction of the Engineer.
  - Note 2. The coarse aggregate shall be wet to the satisfaction of the Engineer."

Revise the first and second sentences of the second paragraph of subparagraph (a) of Article 542.04 of the Standard Specifications to read:

"The unstable and unsuitable material shall be removed to a depth determined by the Engineer and for a width of one diameter (or equivalent diameter) of the pipe on each side of the pipe culvert, and replaced with aggregate. Rock shall be removed to an elevation 300 mm (1 ft) lower than the bottom of the pipe or to a depth equal to 40 mm/m (1/2 in./ft) of ultimate fill height over the top of the pipe culvert, whichever is the greater depth, and for a width as specified in (b) below, and replaced with aggregate."

Revise the second paragraph of subparagraph (c) of Article 542.04 of the Standard Specifications to read:

"Well compacted aggregate, at least 100 mm (4 in.) in depth below the pipe culvert, shall be placed the entire width of the trench and for the length of the pipe culvert, except well compacted impervious material shall be used for the outer 1 m (3 ft) at each end of the pipe. When the trench has been widened by the removal and replacement of unstable or unsuitable material, the foundation material shall be placed for a width not less than the above specified widths on each side of the pipe. The aggregate and impervious

material shall be approved by the Engineer and shall be compacted to the Engineer's satisfaction by mechanical means."

Revise subparagraph (e) of Article 542.04 of the Standard Specifications to read:

"(e) Backfilling. As soon as the condition of the pipe culvert will permit, the entire width of the trench shall be backfilled with aggregate to a height of at least the elevation of the center of the pipe. The aggregate shall be placed longitudinally along the pipe culvert, except at the outer 1 m (3 ft) at each end of the culvert which shall be backfilled with impervious material. The elevation of the backfill material on each side of the pipe shall be the same. The space under the pipe shall be completely filled. The aggregate and impervious material shall be placed in 200 mm (8 in.) layers, loose measurement. When using PVC, PE, or corrugated metal pipe, the aggregate shall be continued to a height of at least 300 mm (1 ft) above the top of the pipe and compacted to a minimum of 85 percent of standard lab density by mechanical means. When reinforced concrete pipes are used and the trench is within 600 mm (2 ft) of the pavement structure, the backfill shall be compacted to a minimum of 85 percent of standard lab density by mechanical means.

When using PVC, PE, or corrugated metal pipe a minimum of 300 mm (1 ft) of cover from the top of the pipe to the top of the subgrade will be required.

The installed pipe and its embedment shall not be disturbed when using movable trench boxes and shields, sheet pile, or other trench protection.

The remainder of the trench shall be backfilled with select material, from excavation or borrow, free from large or frozen lumps, clods or rock, meeting the approval of the Engineer. The material shall be placed in layers not exceeding 200 mm (8 in.) in depth, loose measurement and compacted to 95 percent of the standard laboratory density. Compaction shall be obtained by use of mechanical tampers or with approved vibratory compactors. Before compacting, each layer shall be wetted or dried to bring the moisture content within the limits of 80 to 110 percent of optimum moisture content determined according to AASHTO T 99 (Method C). All backfill material shall be deposited in the trench or excavation in such a manner as not to damage the culvert. The filling of the trench shall be carried on simultaneously on both sides of the pipe. The Contractor may, at his/her expense, backfill the entire trench with aggregate in lieu of select material. The aggregate shall be compacted to the satisfaction of the Engineer by mechanical means.

The backfill material for all trenches and excavations made in the subgrade of the proposed improvement, and for all trenches outside of the subgrade where the inner edge of the trench is within 600 mm (2 ft) of the edge of the proposed pavement, curb, gutter, curb and gutter, stabilized shoulder, or sidewalk shall be according to Section 208. The trench backfill material shall be compacted to a minimum of 85 percent of standard lab density by mechanical means.

The Contractor may, at his/her expense, backfill the entire trench with controlled low strength material meeting the approval of the Engineer.

When the trench has been widened for the removal and replacement of unstable or unsuitable material, the backfilling with aggregate and impervious material, will be required for a width of at least the specified widths on each side of the pipe. The remaining width of each layer may be backfilled with select material. Each 200 mm (8 in.) layer for the entire trench width shall be completed before beginning the placement of the next layer."

Revise subparagraph (b) of Article 542.05 of the Standard Specifications to read:

"(b) Embankment. Embankment extending to an elevation of 300 mm (1 ft) over the top of the pipe shall be constructed according to Article 542.04(f), except the material up to the elevation of the center of the pipe and extending to a width of at least 450 mm (18 in.) on each side of the pipe, exclusive of the outer 1 m (3 ft) at each end of the pipe, shall consist of aggregate. At the outer 1 m (3 ft) at each end of the culvert, impervious material shall be used."

Add the following paragraph after the first paragraph of Article 542.10 of the Standard Specifications:

"Trench backfill will be measured for payment according to Article 208.03."

Add the following paragraph after the third paragraph of Article 542.11 of the Standard Specifications:

"Trench backfill will be paid for according to Article 208.04."

Add the following to of Article 550.02 of the Standard Specifications:

- - Note 2. The fine aggregate shall be moist to the satisfaction of the Engineer.
  - Note 3. The coarse aggregate shall be wet to the satisfaction of the Engineer."

Revise the first two sentences of the third paragraph of Article 550.04 of the Standard Specifications to read:

"Well compacted, aggregate bedding material at least 100 mm (4 in.) in depth below the pipe, shall be placed for the entire width of the trench and length of the pipe. The aggregate shall be compacted to the satisfaction of the Engineer by mechanical means."

Revise Article 550.07 of the Standard Specifications to read:

"550.07 Backfilling. As soon as the condition of the pipe will permit, the entire width of the trench shall be backfilled with aggregate to a height of at least the elevation of the center of the

pipe. The aggregate shall be placed longitudinally along the pipe. The elevation of the backfill material on each side of the pipe shall be the same. The space under the pipe shall be completely filled. The aggregate backfill material shall be placed in 200 mm (8 in.) layers, loose measurement and compacted to the satisfaction of the Engineer by mechanical means. When using PVC pipe, the aggregate shall be continued to a height of at least 300 mm (12 in.) above the top of the pipe.

The installed pipe and its embedment shall not be disturbed when using movable trench boxes and shields, sheet pile, or other trench protection.

The remainder of the trench and excavation shall be backfilled to the natural line or finished surface as rapidly as the condition of the sewer will permit. The backfill material shall consist of suitable excavated material from the trench or of trench backfill as herein specified. All backfill material shall be deposited in the trench or excavation in such a manner as not to damage the sewer and shall be compacted to the satisfaction of the Engineer by mechanical means. The filling of the trench shall be carried on simultaneously on both sides of the pipe.

The backfill material for trenches and excavation made in the subgrade of the proposed improvement, and for all trenches outside of the subgrade where the inner edge of the trench is within 600 mm (2 ft) of the edge of the proposed pavement, curb, gutter, curb and gutter, stabilized shoulder or sidewalk shall be according to Section 208. The backfill material shall be compacted to 85 percent of standard lab density by mechanical means.

All backfill material up to a height of 300 mm (1 ft) above the pipe shall be deposited in uniform layers not exceeding 200 mm (8 in.) thick, loose measurement. The material in each layer shall be compacted to the satisfaction of the Engineer by mechanical means. The backfilling above this height shall be done according to Method 1, 2 or 3 as described below, with the following exceptions.

When trench backfill or excavated material meeting the requirements of Section 208 is required above the first 300 mm (1 ft) of the pipe, the layers shall not exceed 200 mm (8 in.). Gradations CA6 or CA10 shall not be used with Method 2 or Method 3.

- Method 1. The material shall be deposited in uniform layers not exceeding 300 mm (1 ft) thick, loose measurement, and each layer shall be compacted to the satisfaction of the Engineer by mechanical means.
- Method 2. The material shall be deposited in uniform layers not exceeding 300 mm (1 ft) thick, loose measurement, and each layer shall be either inundated or deposited in water.
- Method 3. The trench shall be backfilled with loose material, and settlement secured by introducing water through holes jetted into the backfill to a point approximately 600 mm (2 ft) above the top of the pipe. The holes shall be spaced as directed by the Engineer but shall be no farther than 2 m (6 ft) apart.

The water shall be injected at a pressure just sufficient to sink the holes at a moderate rate of speed. The pressure shall be such that the water will not cut cavities in the backfill material

nor overflow the surface. If water does overflow the surface, it shall be drained into the jetted holes by means of shallow trenches.

Water shall be injected as long as it will be absorbed by the backfill material and until samples taken from test holes in the trench show a satisfactory moisture content. The Contractor shall bore the test holes not more than 15 m (50 ft) apart and at such other locations in the trench designated by the Engineer. As soon as the watersoaking has been completed, all holes shall be filled with soil and compacted by ramming with a tool approved by the Engineer.

Backfill material which has been watersoaked shall be allowed to settle and dry for at least 10 days before any surface course or pavement is constructed on it. The length of time may be altered, if deemed desirable, by the Engineer. Where the inner edge of the trench is within 600 mm (2 ft) of the edge of the proposed pavement, curb, gutter, curb and gutter, stabilized shoulder or sidewalk, the provisions of this paragraph shall also apply.

At the end of the settling and drying period, the crusted top of the backfill material shall be scarified and, if necessary, sufficient backfill material added, as specified in Method 1, to complete the backfilling operations.

The method used for backfilling and compacting the backfill material shall be the choice of the Contractor. If the method used does not produce results satisfactory to the Engineer, the Contractor will be required to alter or change the method being used so the resultant backfill will be satisfactory to the Engineer. Should the Contractor be required to alter or change the method being used, no additional compensation will be allowed for altering or changing the method.

The Contractor may, at his/her expense, backfill the entire trench with controlled low strength material meeting the approval of the Engineer.

When sheeting and bracing have been used, sufficient bracing shall be left across the trench as the backfilling progresses to hold the sides firmly in place without caving or settlement. This bracing shall be removed as soon as practicable. Any depressions which may develop within the area involved in the construction operation due to settlement of the backfilling material shall be filled in a manner approved by the Engineer.

When the Contractor constructs the trench with sloped or benched sides according to Article 550.04, backfilling for the full width of the excavation shall be as specified, except no additional compensation will be allowed for trench backfill material required outside the vertical limits of the specified trench width.

Whenever excavation is made for installing sewer pipe across earth shoulders or private property, the topsoil disturbed by excavation operations shall be replaced as nearly as possible in its original position, and the whole area involved in the construction operations shall be left in a neat and presentable condition.

When using any PVC pipe, the pipe shall be backfilled with aggregate to 300 mm (1 ft) over the top of the pipe and compacted to a minimum of 85 percent of standard lab density by mechanical means.

When reinforced concrete pipes are used and the trench is within 600 mm (2 ft) of the pavement structure, the backfill shall be compacted to a minimum of 85 percent of standard lab density by mechanical means.

Deflection Testing for Storm Sewers. All PVC storm sewers will be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted.

For PVC storm sewers with diameters 600 mm (24 in.) or smaller, a mandrel drag shall be used for deflection testing. For PVC storm sewers with diameters over 600 mm (24 in.), deflection measurements other than by a mandrel drag shall be used.

Where the mandrel is used, the mandrel shall be furnished by the Contractor and pulled by hand through the pipeline with a suitable rope or cable connected to each end. Winching or other means of forcing the deflection gauge through the pipeline will not be allowed.

The mandrel shall be of a shape similar to that of a true circle enabling the gauge to pass through a satisfactory pipeline with little or no resistance. The mandrel shall be of a design to prevent it from tipping from side to side and to prevent debris build-up from occurring between the channels of the adjacent fins or legs during operation. Each end of the core of the mandrel shall have fasteners to which the pulling cables can be attached. The mandrel shall have 9, various sized fins or legs of appropriate dimension for various diameter pipes. Each fin or leg shall have a permanent marking that states its designated pipe size and percent of deflection allowable.

The outside diameter of the mandrel shall be 95 percent of the base inside diameter, where the base inside diameter is:

For all PVC pipe (as defined using ASTM D 3034 methodology):

If the pipe is found to have a deflection greater than specified, that pipe section shall be removed, replaced, and retested."

Revise subparagraph (c) of Article 1003.04 of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradation shall be as follows:

Backfill, bedding and trench backfill for pipe culverts and storm sewers FA 1, FA 2, FA 6, or FA 21 Porous granular embankment and backfill, french drains, and sand backfill for underdrains FA 1, FA 2, or FA20 (Note 1)

Note 1: For FA 1, FA 2, and FA 20 the percent passing the 75  $\,$  m (No. 200) sieve shall be 2  $\pm$  2."

Revise the title of Article 1004.06 of the Standard Specifications to read:

"Coarse Aggregate for Blotter, Embankment, Backfill, Trench Backfill, French Drains, and Bedding."

Add the following to the end of subparagraph (c) of Article 1004.06 of the Standard Specifications:

"Backfill, bedding, and trench backfill for pipe culverts and storm sewers CA 6, CA 10, and CA 18"

80051

## **CONCRETE ADMIXTURES (BDE)**

Effective: January 1, 2003 Revised: July 1, 2004

Revise Article 1020.05(b) of the Standard Specifications to read:

"(b) Admixtures. Except as specified, the use of admixtures to increase the workability or to accelerate the hardening of the concrete will be permitted only when approved in writing by the Engineer. The Department will maintain an Approved List of Concrete Admixtures. When the Department permits the use of a calcium chloride accelerator, it shall be according to Article 442.02, Note 5.

When the atmosphere or concrete temperature is 18 °C (65 °F) or higher, a retarding admixture meeting the requirements of Article 1021.03 shall be used in the Class BD Concrete and portland cement concrete bridge deck overlays. The amount of retarding admixture to be used will be determined by the Engineer. The proportions of the ingredients of the concrete shall be the same as without the retarding admixture except that the amount of mixing water shall be reduced, as may be necessary, in order to maintain the consistency of the concrete as required. In addition, a high range water-reducing admixture shall be used in Class BD Concrete. The amount of high range water-reducing admixture will be determined by the Engineer. At the option of the Contractor, a water-reducing admixture may be used. Type I cement shall be used.

For Class PC and PS Concrete, a retarding admixture may be added to the concrete mixture when the concrete temperature is 18 °C (65 °F) or higher. Other admixtures may be used when approved by the Engineer, or if specified by the contract. If an accelerating admixture is permitted by the Engineer, it shall be the non-chloride type.

At the Contractor's option, admixtures in addition to an air-entraining admixture may be used for Class PP-1 concrete. The accelerator shall be the non-chloride type. If a water-reducing or retarding admixture is used, the cement factor may be reduced a maximum 18 kg/cu m (0.30 hundredweight/cu yd). If a high range water-reducing admixture is used, the cement factor may be reduced a maximum 36 kg/cu m (0.60 hundredweight/cu yd). Cement factor reductions shall not be cumulative when using multiple admixtures. An accelerator shall always be added prior to a high range water-reducing admixture, if both are used.

If Class C fly ash or ground granulated blast-furnace slag is used in Class PP-1

concrete, a water-reducing or high range water-reducing admixture shall be used. However, the cement factor shall not be reduced if a water-reducing, retarding, or high range water-reducing admixture is used. In addition, an accelerator shall not be used.

For Class PP-2 or PP-3 concrete, a non-chloride accelerator followed by a high range water-reducing admixture shall be used, in addition to the air-entraining admixture. For Class PP-3 concrete, the non-chloride accelerator shall be calcium nitrite.

For Class PP-2 or PP-3 concrete, the Contractor has the option to use a water-reducing admixture. A retarding admixture shall not be used unless approved by the Engineer. A water-reducing, retarding, or high range water-reducing admixture shall not be used to reduce the cement factor.

When the air temperature is less than 13 °C (55 °F) for Class PP-1 or PP-2 concrete, the non-chloride accelerator shall be calcium nitrite.

For Class PP-4 concrete, a high range water-reducing admixture shall be used in addition to the air-entraining admixture. The Contractor has the option to use a water-reducing admixture. An accelerator shall not be used. For stationary or truck mixed concrete, a retarding admixture shall be used to allow for haul time. The Contractor has the option to use a mobile portland cement concrete plant according to Article 1103.04, but a retarding admixture shall not be used unless approved by the Engineer. A water-reducing, retarding, or high range water-reducing admixture shall not be used to reduce the cement factor.

If the Department specifies a calcium chloride accelerator for Class PP-1 concrete, the maximum chloride dosage shall be 1.0 L (1.0 quart) of solution per 45 kg (100 lb) of cement. The dosage may be increased to a maximum 2.0 L (2.0 quarts) per 45 kg (100 lb) of cement if approved by the Engineer. If the Department specifies a calcium chloride accelerator for Class PP-2 concrete, the maximum chloride dosage shall be 1.3 L (1.3 quarts) of solution per 45 kg (100 lb) of cement. The dosage may be increased to a maximum 2.6 L (2.6 quarts) per 45 kg (100 lb) of cement if approved by the Engineer.

For Class PV, MS, SI, RR, SC and SH concrete, at the option of the Contractor, or when specified by the Engineer, a water-reducing admixture or a retarding admixture may be used. The amount of water-reducing admixture or retarding admixture permitted will be determined by the Engineer. The air-entraining admixture and other admixtures shall be added to the concrete separately, and shall be permitted to intermingle only after they have separately entered the concrete batch. The sequence, method and equipment for adding the admixtures shall be approved by the Engineer. The water-reducing admixture shall not delay the initial set of the concrete by more than one hour. Type I cement shall be used.

When a water-reducing admixture is added, a cement factor reduction of up to 18 kg/cu m (0.30 hundredweight/cu yd), from the concrete designed for a specific slump without the admixture, will be permitted for Class PV, MS, SI, RR, SC and SH concrete.

When an approved high range water-reducing admixture is used, a cement factor reduction of up to 36 kg/cu m (0.60 hundredweight/cu yd), from a specific water cement/ratio without the admixture, will be permitted based on a 14 percent minimum water reduction. This is applicable to Class PV, MS, SI, RR, SC and SH concrete. A cement factor below 320 kg/cu m (5.35 hundredweight/cu yd) will not be permitted for Class PV, MS, SI, RR, SC and SH concrete. A cement factor reduction will not be allowed for concrete placed underwater. Cement factor reductions shall not be cumulative when using multiple admixtures.

For use of admixtures to control concrete temperature, refer to Articles 1020.14(a) and 1020.14(b).

The maximum slumps given in Table 1 may be increased to 175 mm (7 in.) when a high range water-reducing admixture is used for all classes of concrete except Class PV and PP."

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 may 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 to the satisfaction of the Engineer as to manufacturer and trade name of the material they contain.

Prior to inclusion of a product on the Department's Approved List of Concrete Admixtures, the manufacturer shall submit a report prepared by an independent laboratory accredited by the AASHTO Accreditation Program. 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.

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 335 kg/cu m (5.65 cwt/cu yd). Compressive strength test results for six months and one year will not be required.

In addition to the report, 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 335 kg/cu m (5.65 cwt/cu yd). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by the AASHTO Accreditation Program.

Prior to the approval of an admixture, the Engineer may conduct all or part of the applicable tests on a sample that is representative of the material to be furnished. The test and reference

concrete mixtures tested by the Engineer will contain a cement content of 335 kg/cu m (5.65 cwt/cu yd). For freeze-thaw testing, the Department will perform the test according to Illinois Modified AASHTO T 161, Procedure B.

The manufacturer shall include in the submittal the following information according to ASTM C 494; the average and manufacturing range of specific gravity, the average and manufacturing range of solids in the solution, and the average and manufacturing range of pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

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 the AASHTO Accreditation Program.

All admixtures, except chloride-based accelerators, shall contain no more than 0.3 percent chloride by mass (weight).

**1021.02 Air-Entraining Admixtures.** Air-entraining admixtures shall conform to the requirements of AASHTO M 154.

If the manufacturer certifies that the air-entraining admixture is an aqueous solution of Vinsol resin that has been neutralized with sodium hydroxide (caustic soda), testing for compliance with the requirements may be waived by the Engineer. In the certification, the manufacturer shall show complete information with respect to the formulation of the solution, including the number of parts of Vinsol resin to each part of sodium hydroxide. Before the approval of its use is granted, the Engineer will test the solution for its air-entraining quality in comparison with a solution prepared and kept for that purpose.

**1021.03 Retarding and Water-Reducing Admixtures.** The admixture shall comply with the following requirements:

- (a) The retarding admixture shall comply with the requirements of AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) The water-reducing admixture shall comply with the requirements of AASHTO M 194, Type A.
- (c) The high range water-reducing admixture shall comply with the requirements of AASHTO M 194, Type F (high range water-reducing) or Type G (high range waterreducing and retarding).

When a Type F or Type G high range water-reducing admixture is used, water-cement ratios shall be a minimum of 0.32.

Type F or Type G admixtures may be used, subject to the following restrictions:

For Class MS, SI, RR, SC and SH concrete, the water-cement ratio shall be a maximum of 0.44.

The Type F or Type G admixture shall be added at the jobsite unless otherwise directed by the Engineer. The initial slump shall be a minimum of 40 mm (1 1/2 in.) prior to addition of the Type F or Type G admixture, except as approved by the Engineer.

When a Type F or Type G admixture is used, retempering with water or with a Type G admixture will not be allowed. An additional dosage of a Type F admixture, not to exceed 40 percent of the original dosage, may be used to retemper concrete once, provided set time is not unduly affected. A second retempering with a Type F admixture may be used for all classes of concrete except Class PP and SC, provided that the dosage does not exceed the dosage used for the first retempering, and provided that the set time is not unduly affected. No further retempering will be allowed.

Air tests shall be performed after the addition of the Type F or Type G admixture.

**1021.04 Set Accelerating Admixtures.** The admixture shall comply with the requirements of AASHTO M 194, Type C (accelerating) or Type E (water reducing and accelerating)"

80094

## **CURING AND PROTECTION OF CONCRETE CONSTRUCTION (BDE)**

Effective: January 1, 2004 Revised: November 1, 2005

Revise the second and third sentences of the eleventh paragraph of Article 503.06 of the Standard Specifications to read:

"Forms on substructure units shall remain in place at least 24 hours. The method of form removal shall not result in damage to the concrete."

Delete the twentieth paragraph of Article 503.22 of the Standard Specifications.

Revise the "Unit Price Adjustments" table of Article 503.22 of the Standard Specifications to read:

"UNIT PRICE ADJUSTMENTS		
	Percent	
Type of Construction	Adjustment	
·	in Unit Price	
For concrete in substructures, culverts (having a waterway		
opening of more than 1 sq m (10 sq ft)), pump houses, and		
retaining walls (except concrete pilings, footings and		
foundation seals):		
When protected by:		
Protection Method II	115%	
Protection Method I	110%	
For concrete in superstructures:		
When protected by:		
Protection Method II	123%	
Protection Method I	115%	
For concrete in footings:		
When protected by:		
Protection Method I, II or III	107%	
For concrete in slope walls:		
When protected by:		
Protection Method I	107%"	

Delete the fourth paragraph of Article 504.05(a) of the Standard Specifications.

Revise the second and third sentences of the fifth paragraph of Article 504.05(a) of the Standard Specifications to read:

"All test specimens shall be cured with the units according to Article 1020.13."

Revise the first paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"Curing and Low Air Temperature Protection. The curing and protection for precast, prestressed concrete members shall be according to Article 1020.13 and this Article."

Revise the first sentence of the second paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"For curing, air vents shall be in place and shall be so arranged that no water can enter the void tubes during the curing of the members."

Revise the first sentence of the third paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"As soon as each member is finished, the concrete shall be covered with curing material according to Article 1020.13."

Revise the eighth paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"The prestressing force shall not be transferred to any member before the concrete

has attained the compressive strength of 28,000 kPa (4000 psi) or other higher compressive release strength specified on the plans, as determined from tests of 150 mm (6 in.) by 300 mm (12 in.) cylinders cured with the member according to Article 1020.13. Members shall not be shipped until 28-day strengths have been attained and members have a yard age of at least 4 days."

Delete the third paragraph of Article 512.03(a) of the Standard Specifications.

Delete the last sentence of the second paragraph of Article 512.04(d) of the Standard Specifications.

Revise the "Index Table of Curing and Protection of Concrete Construction" table of Article 1020.13 of the Standard Specifications to read:

"INDEX TABLE OF C	CURING AND PROTECTION O	F CONCRETE O	CONSTRUCTION
TYPE OF CONSTRUCTION	CURING METHODS	CURING PERIOD DAYS	LOW AIR TEMPERATURE PROTECTION METHODS
Cast-in-Place Concrete: 11/			
Pavement Shoulder	1020.13(a)(1)(2)(3)(4)(5) 3/5/	3	1020.13(c)
Base Course Base Course Widening	1020.13(a)(1)(2)(3)(4)(5) 1/2/	3	1020.13(c)
Driveway Median Curb Gutter Curb and Gutter Sidewalk Slope Wall	1020.13(a)(1)(2)(3)(4)(5) 4/5/	3	1020.13(c) <sup>16/</sup>
Paved Ditch Catch Basin Manhole Inlet Valve Vault	1020.13(a)(1)(2)(3)(4)(5) 4/	3	1020.13(c)
Pavement Patching	1020.13(a)(1)(2)(3)(4)(5) 2/	3 <sup>12/</sup>	1020.13(c)
Pavement Replacement	1020.13(a)(1)(2)(3)(4)(5) 1/2/	3	442.06(h) and 1020.13(c)
Railroad Crossing	1020.13(a)(3)(5)	1	1020.13(c)
Piles	1020.13(a)(3)(5)	7	1020.13(e)(1)(2)(3)
Footings Foundation Seals	1020.13(a)(1)(2)(3)(4)(5) 4/6/	7	1020.13(e)(1)(2)(3)
Substructure	1020.13(a)(1)(2)(3)(4)(5) 1/7/	7	1020.13(e)(1)(2)(3)
Superstructure (except deck)	1020.13(a)(1)(2)(3)(5) <sup>8/</sup>	7	1020.13(e)(1)(2)
Deck	1020.13(a)(5)	7	1020.13(e)(1)(2) 17/
Retaining Walls	1020.13(a)(1)(2)(3)(4)(5) 1/7/	7	1020.13(e)(1)(2)
Pump Houses	1020.13(a)(1)(2)(3)(4)(5) 1/	7	1020.13(e)(1)(2)
Culverts	1020.13(a)(1)(2)(3)(4)(5) 4/6/	7	1020.13(e)(1)(2) 18/
Other Incidental Concrete	1020.13(a)(1)(2)(3)(5)	3	1020.13(c)
Precast Concrete: 11/			
Bridge Beams Piles Bridge Slabs Nelson Type Structural Member	1020.13(a)(3)(5) 9/ 10/	As required. <sup>13/</sup>	<sup>1</sup> 504.06(c)(6), 1020.13(e)(2) <sup>19/</sup>
All Other Precast Items	1020.13(a)(3)(4)(5) 2/ 9/ 10/	As required. 14/	504.06(c)(6), 1020.13(e)(2) 19/
Precast, Prestressed Concrete: 11/			11.05(5)(5), 1325.15(5)(2)
All Items	1020.13(a)(3)(5) 9/ 10/		d504.06(c)(6), 1020.13(e)(2) <sup>19/</sup> s

# Notes-General:

- 1/ Type I, membrane curing only
- 2/ Type II, membrane curing only
- 3/ Type III, membrane curing only
- 4/ Type I, II and III membrane curing

- 5/ Membrane curing will not be permitted between November 1 and April 15.
- 6/ The use of water to inundate footings, foundation seals or the bottom slab of culverts is permissible when approved by the Engineer, provided the water temperature can be maintained at 7 °C (45 °F) or higher.
- 7/ Asphalt Emulsion for Waterproofing may be used in lieu of other curing methods when specified and permitted according to Article 503.18.
- 8/ On non-traffic surfaces which receive protective coat according to Article 503.19, a linseed oil emulsion curing compound may be used as a substitute for protective coat and other curing methods. The linseed emulsion curing compound will be permitted between April 16 and October 31 of the same year, provided it is applied with a mechanical sprayer according to Article 1101.09 (b), and meets the material requirements of Article 1022.07.
- 9/ Steam curing (heat and moisture) is acceptable and shall be accomplished by the method specified in Article 504.06(c)(6).
- 10/ A moist room according to AASHTO M 201 is acceptable for curing.
- 11/ If curing is required and interrupted because of form removal for cast-in-place concrete items, precast concrete products, or precast prestressed concrete products, the curing shall be resumed within two hours from the start of the form removal.
- 12/ Curing maintained only until opening strength is attained, with a maximum curing period of three days.
- 13/ The curing period shall end when the concrete has attained the mix design strength. The producer has the option to discontinue curing when the concrete has attained 80 percent of the mix design strength or after seven days. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.
- 14/ The producer shall determine the curing period or may elect to not cure the product. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.
- 15/ The producer has the option to continue curing after strand release.
- 16/ When structural steel or structural concrete is in place above slope wall, Article 1020.13(c) shall not apply. The protection method shall be according to Article 1020.13(e)(1).
- 17/ When Article 1020.13(e)(2) is used to protect the deck, the housing may enclose only the bottom and sides. The top surface shall be protected according to Article 1020.13(e)(1).
- 18/ For culverts having a waterway opening of 1 sq m (10 sq ft) or less, the culverts may be protected according to Article 1020.13(e)(3).
- 19/ The seven day protection period in the first paragraph of Article 1020.13(e)(2) shall not apply. The protection period shall end when curing is finished. For the third paragraph of Article 1020.13(e)(2), the decrease in temperature shall be according to Article 504.06(c)(6)."

#### Add the following to Article 1020.13(a) of the Standard Specifications:

"(5) Wetted Cotton Mat Method. After the surface of concrete has been textured or finished, it shall be covered immediately with dry cotton mats. The cotton mats shall be placed in a manner which will not mar the concrete surface. A texture resulting from the cotton mat material is acceptable. The cotton mats shall then be wetted immediately and thoroughly soaked with a gentle spray of water. For bridge decks, a foot bridge shall be used to place and wet the cotton mats.

The cotton mats shall be maintained in a wetted condition until the concrete has hardened sufficiently to place soaker hoses without marring the concrete surface. The soaker hoses shall be placed on top of the cotton mats at a maximum 1.2 m (4 ft) spacing. The cotton mats shall be kept wet with a continuous supply of water for the remainder of the curing period. Other continuous wetting systems may be used if approved by the Engineer.

After placement of the soaker hoses, the cotton mats shall be covered with white polyethylene sheeting or burlap-polyethylene blankets.

For construction items other than bridge decks, soaker hoses or a continuous wetting system will not be required if the alternative method keeps the cotton mats wet. Periodic wetting of the cotton mats is acceptable.

For areas inaccessible to the cotton mats on bridge decks, curing shall be according to Article 1020.13(a)(3)."

Revise the first paragraph of Article 1020.13(c) of the Standard Specifications to read:

"Protection of Portland Cement Concrete, Other Than Structures, From Low Air Temperatures. When the official National Weather Service forecast for the construction area predicts a low of 0 °C (32 °F), or lower, or if the actual temperature drops to 0 °C (32 °F), or lower, concrete less than 72 hours old shall be provided at least the following protection:"

Delete Article 1020.13(d) and Articles 1020.13(d)(1),(2),(3),(4) of the Standard Specifications.

Revise the first five paragraphs of Article 1020.13(e) of the Standard Specifications to read:

"Protection of Portland Cement Concrete Structures From Low Air Temperatures. When the official National Weather Service Forecast for the construction area predicts a low below 7 °C (45 °F), or if the actual temperature drops below 7 °C (45 °F), concrete less than 72 hours old shall be provided protection. Concrete shall also be provided protection when placed during the winter period of December 1 through March 15. Concrete shall not be placed until the materials, facilities, and equipment for protection are approved by the Engineer.

When directed by the Engineer, the Contractor may be required to place concrete during the winter period. If winter construction is specified, the Contractor shall proceed with the construction, including concrete, excavation, pile driving, steel erection, and all appurtenant work required for the complete construction of the item, except at times when weather conditions make such operations impracticable.

Regardless of the precautions taken, the Contractor shall be responsible for protection of the concrete placed and any concrete damaged by cold temperatures shall be removed and replaced at no additional cost to the Department."

Add the following at the end of the third paragraph of Article 1020.13(e)(1) of the Standard Specifications:

"The Contractor shall provide means for checking the temperature of the surface of the concrete during the protection period."

Revise the second sentence of the first paragraph of Article 1020.13(e)(2) of the Standard Specifications to read:

"The Contractor shall provide means for checking the temperature of the surface of the concrete or air temperature within the housing during the protection period."

Delete the last sentence of the first paragraph of Article 1020.13(e)(3) of the Standard Specifications.

Add the following Article to Section 1022 of the Standard Specifications:

"1022.06 Cotton Mats. Cotton mats shall consist of a cotton fill material, minimum 400 g/sq m (11.8 oz/sq yd), covered with unsized cloth or burlap, minimum 200 g/sq m (5.9 oz/sq yd), and be tufted or stitched to maintain stability.

Cotton mats shall be in a condition satisfactory to the Engineer. Any tears or holes in the mats shall be repaired."

Add the following Article to Section 1022 of the Standard Specifications:

"1022.07 Linseed Oil Emulsion Curing Compound. Linseed oil emulsion curing compound shall be composed of a blend of boiled linseed oil and high viscosity, heavy bodied linseed oil emulsified in a water solution. The curing compound shall meet the requirements of a Type I according to Article 1022.01, except the drying time requirement will be waived. The oil phase shall be  $50 \pm 4$  percent by volume. The oil phase shall consist of 80 percent by mass (weight) boiled linseed oil and 20 percent by mass (weight) Z-8 viscosity linseed oil. The water phase shall be  $50 \pm 4$  percent by volume."

Revise Article 1020.14 of the Standard Specifications to read:

- "1020.14 Temperature Control for Placement. Temperature control for concrete placement shall be according to the following.
  - (a) Temperature Control other than Structures. The temperature of the concrete immediately before placement shall be a minimum of 10 °C (50 °F) and a maximum of 32 °C (90 °F). Aggregates and/or water shall be heated or cooled as necessary to produce concrete within these temperature limits.

When the temperature of the plastic concrete reaches 30 °C (85 °F), an approved retarding admixture shall be used or the approved water reducing admixture in use shall

have its dosage increased by 50 percent over the dosage recommended on the Department's Approved List of Concrete Admixtures for the temperature experienced. The amount of retarding admixture to be used will be determined by the Engineer. This requirement may be waived by the Engineer when fly ash compensated mixtures are used.

Plastic concrete temperatures up to 35 °C (96 °F), as placed, may be permitted provided job site conditions permit placement and finishing without excessive use of water on and/or overworking of the surface. The occurrence within 24 hours of unusual surface distress shall be cause to revert to a maximum 32 °C (90 °F) plastic concrete temperature.

Concrete shall not be placed when the air temperature is below 5 °C (40 °F) and falling or below 2 °C (35 °F), without permission of the Engineer. When placing of concrete is authorized during cold weather, the Engineer may require the water and/or the aggregates to be heated to between 20 °C (70 °F) and 65 °C (150 °F). The aggregates may be heated by either steam or dry heat prior to being placed in the mixer. The apparatus used shall heat the mass uniformly and shall be so arranged as to preclude the possible occurrence of overheated areas which might damage the materials. No frozen aggregates shall be used in the concrete.

For pavement patching, refer to Article 442.06(e) for additional information on temperature control for placement.

(b) Temperature Control for Structures. The temperature of the concrete, as placed in the forms, shall be a minimum of 10 °C (50 °F) and a maximum of 32 °C (90 °F). Aggregates and/or water shall be heated or cooled as necessary to produce concrete within these temperature limits. When insulated forms are used, the temperature of the concrete mixture shall not exceed 25 °C (80 °F). If the Engineer determines that heat of hydration might cause excessive temperatures in the concrete, the concrete shall be placed at a temperature between 10 °C (50 °F) and 15 °C (60 °F). When concrete is placed in contact with previously placed concrete, the temperature of the concrete may be increased as required to offset anticipated heat loss.

Concrete shall not be placed when the air temperature is below 7  $^{\circ}$ C (45  $^{\circ}$ F) and falling or below 4  $^{\circ}$ C (40  $^{\circ}$ F), without permission of the Engineer. When placing of concrete is authorized during cold weather, the Engineer may require the water and/or the aggregates to be heated to between 20  $^{\circ}$ C (70  $^{\circ}$ F) and 65  $^{\circ}$ C (150  $^{\circ}$ F). The aggregates may be heated by either steam or dry heat prior to being placed in the mixer. The apparatus used shall heat the mass uniformly and shall be so arranged as to preclude the possible occurrence of overheated areas which might damage the materials. No frozen aggregates shall be used in the concrete.

When the temperature of the plastic concrete reaches 30 °C (85 °F), an approved retarding admixture shall be used or the approved water reducing admixture in use shall have its dosage increased by 50 percent over the dosage recommended on the Department's Approved List of Concrete Admixtures for the temperature experienced.

The amount of retarding admixture to be used will be determined by the Engineer. This requirement may be waived by the Engineer when fly ash compensated mixtures are used.

(c) Temperature. The concrete temperature shall be determined according to ASTM C 1064."

80114

### **DETECTABLE WARNINGS (BDE)**

Effective: August 1, 2005

Replace Articles 424.08 – 424.12 of the Standard Specifications with the following:

"424.08 Curb Ramps. Curb ramps shall be constructed according to the Americans with Disabilities Act Accessibility Guidelines (ADAAG), the Illinois Accessibility Code, and as shown on the plans.

Curb ramps shall be constructed to the same thickness as the adjacent sidewalk with a minimum thickness of 100 mm (4 in.).

**424.09 Detectable Warnings.** Detectable warnings shall consist of a surface of truncated domes meeting the requirements of the ADAAG and the details shown on the plans.

Detectable warnings shall be installed at curb ramps, medians and pedestrian refuge islands, at-grade railroad crossings, transit platform edges, and other locations where pedestrians are required to cross a hazardous vehicular way. Detectable warnings shall also be installed at alleys and commercial entrances when permanent traffic control devices are present. The installation shall be an integral part of the walking surface and only the actual domes shall project above the walking surface.

The product or method used for installing detectable warnings shall come with the following documents which shall be given to the Engineer prior to use.

- (a) Manufacturer's certification stating the product is fully compliant with the ADAAG.
- (b) Manufacturer's five year warranty.
- (c) Manufacturer's specifications stating the required materials, equipment, and installation procedures.

Products that are colored shall be colored their entire thickness.

The materials, equipment, and installation procedures used shall be according to the manufacturer's specifications.

- **424.10 Backfill.** After the concrete has been cured, the spaces along the edges of the sidewalk and ramps shall be backfilled with approved material. The material shall be compacted until firm and the surface neatly graded.
- **424.11 Disposal of Surplus Material.** Surplus or waste material shall be disposed of according to Article 202.03.
- **424.12 Method of Measurement.** This work will be measured for payment in place and the area computed in square meters (square feet). Curb ramps will be measured for payment as sidewalk. No deduction will be made for detectable warnings located within the ramp.

Detectable warnings will be measured for payment in place and the area computed in square meters (square feet).

Earth excavation will be measured for payment according to Article 202.07.

**424.13 Basis of Payment.** This work will be paid for at the contract unit price per square meter (square foot) for PORTLAND CEMENT CONCRETE SIDEWALK, of the thickness specified.

Detectable warnings will be paid for at the contract unit price per square meter (square foot) for DETECTABLE WARNINGS.

Earth excavation will be paid for according to Article 202.08."

80146

## **DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION**

Effective: September 1, 2000 Revised: June 22, 2005

<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 DBE Directory or most recent addendum.

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% 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% 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 firms 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 6.00% 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 award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

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

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

<u>BIDDING PROCEDURES</u>. Compliance with the bidding procedures of this Special Provision is required prior to the award of the contract and the failure of the as-read low bidder to comply will render the bid not responsive.

- (a) In order to assure the timely award of the contract, the as-read low bidder shall submit a Disadvantaged Business Utilization Plan on Department form SBE 2026 within seven (7) working days after the date of letting. To meet the seven (7) day requirement, the bidder may send the Plan by certified mail or delivery service within the seven (7) working day period. If a question arises concerning the mailing date of a Plan, the mailing date will be established by the U.S. Postal Service postmark on the original certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service. It is the responsibility of the bidder to ensure that the postmark or receipt date is affixed within the seven (7) working days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Plan is to be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). It is the responsibility of the bidder to obtain confirmation of telefax delivery. The Department will not accept a Utilization Plan if it does not meet the seven (7) day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration or to extend the time for award.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. The signatures on these forms must be original signatures. All elements of information indicated on the said form shall be provided, including but not limited to the following:
  - (1) The name and address of each DBE to be used;
  - (2) A description, including pay item numbers, of the commercially useful work to be done by each DBE;
  - (3) The price to be paid to each DBE for the identified work specifically stating the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;

- (4) A commitment statement signed by the bidder and each DBE evidencing availability and intent to perform commercially useful work on the project; and
- (5) If the bidder is a joint venture comprised of DBE firms and non-DBE firms, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s).
- (d) The contract will not be awarded until the Utilization Plan submitted by the bidder is approved. The Utilization Plan will be approved by the Department if the Plan commits sufficient commercially useful DBE work performance to meet the contract goal. The Utilization Plan will not be approved by the Department if the Plan does not commit sufficient DBE performance to meet the contract goal unless the bidder documents that it made a good faith effort to meet the goal. The good faith procedures of Section VIII of this special provision apply. If the Utilization Plan is not approved because it is deficient in a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no less than a five (5) working day period in order to cure the deficiency.

<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% goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE firm does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100% goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100% goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, 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 firm does not count toward the DBE goal.
- (d) DBE as a trucker: 100% goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contact. Credit will be given for the full value of all such DBE

trucks operated using DBE employed drivers. Goal credit will be limited to the value of the reasonable fee or commission received by the DBE if trucks are leased from a non-DBE company.

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

GOOD FAITH EFFORT PROCEDURES. If the bidder cannot obtain sufficient DBE commitments to meet the contract goal, the bidder must document in the Utilization Plan the good faith efforts made in the attempt to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which could reasonably be expected to obtain sufficient DBE participation. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts are not good faith efforts; rather, the bidder is expected to have taken those efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

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

- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
  - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a 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 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 a good faith effort has not been made, the Department will notify the bidder of that preliminary determination by contacting the responsible company official designated in the Utilization Plan. The preliminary determination shall include a statement of reasons why good faith efforts have not been found, and may include

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

(c) The bidder may request administrative reconsideration of a pre-final determination adverse to the bidder within the five (5) working days after the notification date of the determination by delivering the request to the Department of Transportation, 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 pre-final determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. In addition, the request shall be considered a consent by the bidder to extend the time for award. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten (10) working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

- (a) No amendment to the Utilization Plan may be made without prior written approval from the 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) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. If a DBE listed in the Utilization Plan is terminated for reasons other than convenience, or fails to complete its work on the contract for any reason, the Contractor shall make good faith efforts to find another DBE to substitute for the terminated DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, but only to the extent needed to meet the contract goal or the amended contract goal. The Contractor shall notify the 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 and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.
- (c) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefor to the DBE by the Contractor, but not later than thirty (30) calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Report on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the Report shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Plan, the Department will deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
- (d) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

(e) 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.

80029

## **EPOXY COATING ON REINFORCEMENT (BDE)**

Effective: April 1, 1997 Revised: January 1, 2003

For work outside the limits of bridge approach pavement, all references to epoxy coating in the Highway Standards and Standard Specifications for reinforcement, tie bars and chair supports will not apply for pavement, shoulders, curb, gutter, combination curb and gutter and median.

31578

#### **EPOXY PAVEMENT MARKING (BDE)**

Effective: January 1, 2001 Revised: August 1, 2003

Revise Article 1095.04(b) of the Standard Specifications to read:

"(b) The Epoxide Value (WPE) of Component A shall be tested according to ASTM D 1652 on a pigment free basis. The WPE shall not vary more than plus or minus 50 units of the qualification samples."

Revise Article 1095.04(c) of the Standard Specifications to read:

"(c) The Total Amine Value of Component B shall be tested according to ASTM D 2074. The Total Amine Value shall not vary more than plus or minus 50 units of the qualification samples."

Revise Article 1095.04(g) of the Standard Specifications to read:

"(g) The epoxy pavement marking material, when mixed in the proper mix ratio and applied at 0.35 mm to 0.41 mm (14 to 16 mils) wet film thickness and with the proper saturation of glass spheres, shall exhibit a dry no pick-up time of twenty minutes or less when tested according to ASTM D 711."

Revise Article 1095.04(m) of the Standard Specifications to read:

- "(m) The glass beads meet the requirements of Article 1095.07 and the following:
  - (1) 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.

Sieve Size	U.S. Standard Sieve Number	% Passing (by weight)
1.70 mm	12	95-100
1.40 mm	14	75-95
1.18 mm	16	10-47
1.00 mm	18	0-7
850 μm	20	0-5

(2) The second drop glass beads shall be Type B."

Revise the second sentence of the first paragraph of Article 1095.04(n) of the Standard Specifications to read:

"Subject the coated panel for 75 hours to accelerated weathering using the light and water exposure apparatus (fluorescent UV – condensation type) as specified in ASTM G 53 (equipped with UVB-313 lamps)."

80041

#### **EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)**

Effective: August 1, 2001 Revised: November 1, 2001

When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, he/she will direct the Contractor in writing to correct the deficiency. The Contractor shall then correct the deficiency within 24 hours. The 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 National Pollutant Discharge Elimination System (NPDES) Storm Water Permit for Construction Site Activities.

If the Contractor fails to correct the deficiency(s) within 24 hours, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The time period will begin with the initial written notification to the Contractor and end with the Engineer's acceptance of the corrected work. The per calendar day deduction will be either \$1000.00 or 0.05 percent of the awarded contract value, whichever is greater.

If the Contractor fails to respond, the Engineer may correct the deficiencies and deduct the cost from monies due or which may become due the Contractor. This corrective action shall in no way relieve the Contractor of his/her contractual requirements or responsibilities.

80055

#### **EXPANSION JOINTS (BDE)**

Effective: August 1, 2003

Add the following paragraph after the second paragraph of Article 420.10(e) of the Standard Specifications:

"After the dowel bars are oiled, plastic expansion caps shall be secured to the bars maintaining a minimum expansion gap of 50 mm (2 in.) between the end of the bar and the end of the cap. The caps shall fit snuggly on the bar and the closed end shall be watertight. For expansion joints formed using dowel bar basket assemblies, the caps shall be installed on the alternating free ends of the bars. For expansion joints formed using a construction header, the caps shall be installed on the exposed end of each bar once the header has been removed and the joint filler material has been installed."

80103

# **FLAGGER VESTS (BDE)**

Effective: April 1, 2003 Revised: August 1, 2005

Revise the first sentence of Article 701.04(c)(1) of the Standard Specifications to read:

"The flagger shall be stationed to the satisfaction of the Engineer and be equipped with a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 2 garments and approved flagger traffic control signs conforming to Standard 702001 and Article 702.05(e)."

Revise Article 701.04(c)(6) of the Standard Specifications to read:

"(6) Nighttime Flagging. Flaggers shall be illuminated by an overhead light source providing a minimum vertical illuminance of 108 lux (10 fc) measured 300 mm (1 ft) out from the flagger's chest. The bottom of any luminaire shall be a minimum of 3 m (10 ft) above the pavement. Luminaire(s) shall be shielded to minimize glare to approaching traffic and trespass light to adjoining properties.

The flagger vest shall be a fluorescent orange or fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 3 garments."

80101

#### FREEZE-THAW RATING (BDE)

Effective: November 1, 2002

Revise the first sentence of Article 1004.02(f) of the Standard Specifications to read:

"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 or their repair using concrete, the gradation permitted will be determined from the results of the Department's Freeze-Thaw Test."

80079

#### HAND VIBRATOR (BDE)

Effective: November 1, 2003

Add the following paragraph to Article 1103.17(a) of the Standard Specifications:

"The vibrator shall have a non-metallic head for areas containing epoxy coated reinforcement. The head shall be coated by the manufacturer. The hardness of the non-metallic head shall be less than the epoxy coated reinforcement, resulting in no damage to the epoxy coating. Slip-on covers will not be allowed."

80054

# LIGHT EMITTING DIODE (LED) PEDESTRIAN SIGNAL HEAD (BDE)

Effective: November 1, 2005

Add the following paragraph to the end of Article 802.03 of the Standard Specifications:

"The warranty for light emitting diode (LED) modules, including the maintained minimum luminous intensities, shall cover a minimum of 60 months from the date of delivery."

Revise Article 881.01 of the Standard Specifications to read:

"881.01 Description. This work shall consist of furnishing and installing a conventional pedestrian signal head or light emitting diode (LED) pedestrian signal head."

Revise Article 881.02(a) of the Standard Specifications to read:

"(a) Signal Heads......1078.01"

Revise the first paragraph of Article 881.04 of the Standard Specifications to read:

"881.04 Basis of Payment. This work will be paid for at the contract unit price each for PEDESTRIAN SIGNAL HEAD or PEDESTRIAN SIGNAL HEAD, LED of the type specified and of the material type when specified."

Revise Article 1078.02(b) of the Standard Specifications to read:

- "(b) Optical Unit. Only symbolic walk (walking person) and don't walk (upraised palm) indications shall be used.
  - (1) Conventional Pedestrian Signal. Each signal section shall have an optical unit according to Article 1078.01(c), except the lamp for a 300 mm (12 in.) section shall be nominal 90 W, 1040 lumens with a minimum average rated life of 8,000 hours (0.91 years) and the lamp for a 225 mm (9 in.) section shall be nominal 54 W, 530 lumens with a minimum average rated life of 8,000 hours (0.91 years).
  - (2) LED Pedestrian Signal. The pedestrian LED signal heads shall meet the requirements of the Institute of Transportation Engineers (ITE) LED purchase specification, "Pedestrian Traffic Control Signal Indications - Part 2: LED Pedestrian Traffic Signal Modules", or applicable successor ITE specifications, except as modified herein. The LEDs utilized in the modules shall not be Aluminum Gallium Arsenide (AIGaAs) material technology. The LED signal heads shall also meet the following requirements:
    - a. Physical and Mechanical Requirements. The power supply for the LED module shall be integrated with the unit.
    - b. Photometric Requirements. The illuminated portion of the module shall be uniformly and completely dispersed with the LEDs.
    - c. Electrical Requirements. The pedestrian LED signal module shall be EPA Energy Star qualified.

The individual LEDs shall be wired such that a catastrophic loss or the failure of one LED will result in the loss of not more than five percent of the signal module light output.

d. Warranty. The LED modules shall be warrantied according to Article 802.03."

80150

# LIGHT EMITTING DIODE (LED) SIGNAL HEAD (BDE)

Effective: April 1, 2002 Revised: November 1, 2005

Add the following paragraph to the end of Article 802.03 of the Standard Specifications:

"The warranty for light emitting diode (LED) modules, including the maintained minimum luminous intensities, shall cover a minimum of 60 months from the date of delivery."

Revise Article 880.01 of the Standard Specifications to read:

"880.01 Description. This work shall consist of furnishing and installing a conventional signal head, optically programmed signal head or light emitting diode (LED) signal head."

Revise Article 880.02(a) of the Standard Specifications to read:

"(a) Signal Heads.......1078.01"

Revise the first sentence of the first paragraph of Article 880.03 of the Standard Specifications to read:

"The signal head shall be installed on a post, bracket, span wire or mast arm as shown on the plans."

Revise the first paragraph of Article 880.04 of the Standard Specifications to read:

"880.04 Basis of Payment. This work will be paid for at the contract unit price each for SIGNAL HEAD, OPTICALLY PROGRAMMED SIGNAL HEAD, or SIGNAL HEAD, LED of the type specified and of the material type when specified."

Revise Article 1078.01 of the Standard Specifications to read:

# "1078.01 Signal Head, Optically Programmed Signal Head and Light Emitting Diode (LED) Signal Head."

Add the following to Article 1078.01(c) of the Standard Specifications:

- "(3) The LED signal section shall be according to the following:
  - a. General Requirements. The LED signal head shall meet the requirements of the Institute of Transportation Engineers (ITE) LED purchase specification, "Vehicle Traffic Control Signal Heads, Part 2: LED Vehicle Traffic Signal Modules", and "Vehicle Traffic Control Signal Heads, Part 3: LED Vehicle Arrow Traffic Signal Modules", or applicable successor ITE specifications, except as modified herein. The LEDs utilized in the modules shall not be Aluminum Gallium Arsenide (AIGaAs) material technology.
  - b. Physical and Mechanical Requirements. The power supply for the LED module shall be integrated with the unit.
  - c. Photometric Requirements. The candlepower values for yellow 300 mm (12 in.) circular modules shall be equal to the corresponding values for green 300 mm (12 in.) circular modules as listed in Table 1 of Section 4 of the aforementioned ITE specification based on normal use in traffic signal operation over the operating temperature range.

The illuminated portion of the arrow module shall be uniformly and completely dispersed with the LEDs.

d. Electrical Requirements. When applicable to the particular module type, the LED signal module shall be EPA Energy Star qualified. For yellow 300 mm (12 in.) circular and arrow modules, the wattage requirements shall be as follows:

Module Type	Maximum Watts (W) at 74 °C (165 °F)	Nominal Watts (W) at 25 °C (77 °F)
300 mm (12 in.) Yellow Circular	25	22
300 mm (12 in.) Yellow Arrow	12	10

The individual LEDs shall be wired such that a catastrophic loss or the failure of one LED will result in the loss of not more than five percent of the signal module light output.

e. Warranty. The LED modules shall be warrantied according to Article 802.03."

80067

# **MULCHING SEEDED AREAS (BDE)**

Effective: January 1, 2005

Delete Article 251.02(a) of the Standard Specifications.

Add the following to Article 251.02 of the Standard Specifications:

Delete Article 251.03(b)(1) of the Standard Specifications.

Add the following to Article 251.03 of the Standard Specifications:

"(d) Method 4. This method shall consist of applying compost combined with a performance additive designed to bind/stabilize the compost. The compost/performance additive mixture shall be applied to the surface of the slope using a pneumatic blower at a depth of 50 mm (2 in.)."

Revise the first sentence of the first paragraph of Article 251.06(b) of the Standard Specifications to read:

"Mulch Methods 1, 2, 3, and 4 will be measured for payment in hectares (acres) of surface area mulched."

Revise Article 251.07 of the Standard Specifications to read:

"251.07 Basis of Payment. This work will be paid for at the contract unit price per hectare (acre) for MULCH, METHOD 1; MULCH, METHOD 2; MULCH, METHOD 3; or MULCH, METHOD 4; and at the contract unit price per square meter (square yard) for EROSION CONTROL BLANKET or HEAVY DUTY EROSION CONTROL BLANKET."

Add the following after the second paragraph of Article 1081.05(b) of the Standard Specifications:

"Chemical Compost Binder. Chemical compost binder shall be a commercially available product specifically recommended by the manufacturer for use as a compost stabilizer.

The compost binder shall be nonstaining and nontoxic to vegetation and the environment. It shall disperse evenly and rapidly and remain in suspension when agitated in water.

Prior to use of the compost binder, the Contractor shall submit a notarized certification by the manufacturer stating that it meets these requirements. Chemical compost binder shall be packaged, stored, and shipped according to the manufacturer's recommendations with the net quantity plainly shown on each package or container."

80138

#### **PARTIAL PAYMENTS (BDE)**

Effective: September 1, 2003

Revise Article 109.07 of the Standard Specifications to read:

"109.07 Partial Payments. Partial payments will be made as follows:

(a) Progress Payments. At least once each month, the Engineer will make a written estimate of the amount of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

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

(b) Material Allowances. At the discretion of the Department, payment may be made for materials, prior to their use in the work, when satisfactory evidence is presented by the Contractor. Satisfactory evidence includes justification for the allowance (to expedite the work, meet project schedules, regional or national material shortages, etc.), documentation of material and transportation costs, and evidence that such material is properly stored on the project or at a secure location acceptable and accessible to the Department.

Material allowances will be considered only for nonperishable materials when the cost, including transportation, exceeds \$10,000 and such materials are not expected to be utilized within 60 days of the request for the allowance. For contracts valued under \$500,000, the minimum \$10,000 requirement may be met by combining the principal (material) product of no more than two contract items. An exception to this two item limitation may be considered for any contract regardless of value for items in which material (products) are similar except for type and/or size.

Material allowances shall not exceed the value of the contract items in which used and shall not include the cost of installation or related markups. Amounts paid by the Department for material allowances will be deducted from estimates due the Contractor as the material is used. Two-sided copies of the Contractor's cancelled checks for materials and transportation must be furnished to the Department within 60 days of payment of the allowances or the amounts will be reclaimed by the Department."

80116

# PAVEMENT THICKNESS DETERMINATION FOR PAYMENT (BDE)

Effective: April 1, 1999 Revised: January 1, 2004

<u>Description</u>. This work shall consist of determining pavement thickness for payment for full depth bituminous concrete and all pcc pavements. Pavement pay items that individually contain at least 840 sq m (1000 sq yd) of contiguous pavement will be subject to this Special Provision with the following exclusions: temporary pavements; variable width pavement; radius returns and side streets less than 125 m (400 ft) in length; and turn lanes of constant width less than 125 m (400 ft) in length. The areas of pavement excluded from the pay adjustment as described in this Special Provision will be cored according to Article 407.10 of the Standard Specifications. Temporary pavements are defined as pavements constructed and removed under this contract.

<u>Materials</u>. Rapid set materials shall be obtained from the Department's approved list of Packaged, Dry, Rapid Hardening Cementitous Materials For Concrete Repairs. Coarse aggregate may be added to the mortar if allowed by the manufacturer's instructions on the package. Mixing shall be according to the manufacture's recommendations.

<u>Equipment</u>. Cores shall be taken utilizing an approved coring machine. The cores shall have a diameter of 50 mm (2 in.). The cores shall be measured utilizing an approved measuring device.

#### **CONSTRUCTION REQUIREMENTS**

<u>Tolerance in Thickness</u>. Determination of the pavement thickness shall be performed after the pavement surface tests and all corrective grinding are complete according to Article 407.09 of the Standard Specifications. Adjustments made in the contract unit price for pavement thickness will be in addition to and independent of those made for the Profile Index.

The pavement will be divided into approximately equal lots of not more than 1500 m (5000 ft) in length. When the length of a continuous strip of pavement is less than 1500 m (5000 ft), these short lengths of pavement, ramps, turn lanes, and other short sections of continuous pavement shall be grouped together to form lots of approximately 1500 m (5000 ft) 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.

Fifty millimeter (Two inch) cores shall be taken from the pavement by the Contractor at random locations selected by the Engineer. When computing the thickness of a lot, one core will be taken per sublot. Core locations will be specified by the Engineer prior to beginning the coring operations.

The Contractor and the Engineer shall witness the coring operations, the measurement, 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 discarded.

<u>Patching Holes.</u> Upon completion of coring, all core holes shall be filled with a rapid set mortar or concrete. Only enough water to permit placement and consolidation by rodding shall be used, and the material shall be struck-off flush with the adjacent pavement.

For a rapid set mortar mixture, one part packaged rapid set cement shall be combined with two parts fine aggregate, by volume; or a packaged rapid set mortar shall be used. For a rapid set concrete mixture, a packaged rapid set mortar shall be combined with coarse aggregate according to the manufacturer's instructions or a packaged rapid set concrete shall be used. Mixing of a rapid set mortar or concrete shall be according to the manufacturer's instructions.

Deficient Sublot. When the thickness of the core in a sublot is deficient by more than ten percent of plan thickness, the Contractor will have the option of taking three additional cores selected at random by the Engineer within the same sublot at the Contractor's expense. The thickness of the additional three cores will be averaged with the original core thickness. When the average thickness shows the sublot to be deficient by ten percent or less, no additional action is necessary. If the Contractor chooses not to take additional cores, the pavement in the sublot shall be removed and replaced at the Contractor's expense. When additional cores are taken and the average thickness of the additional cores show the sublot to be deficient by more than ten percent, the pavement in that sublot shall be removed and replaced at the Contractor's expense. When requested in writing by the Contractor, the Engineer, at his/her option, may permit in writing such thin pavement to remain in place. For Bituminous Concrete Pavement (Full Depth) allowed to remain in place, additional lift(s) may be placed, at the Contractor's expense, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The material thickness(es), areas to be overlaid, and method of placement used for additional lift(s) will be approved by the Engineer. When the thin pavement is removed and replaced or additional lifts are placed, the replacement pavement will be retested for thickness at the Contractor's expense. When the thin pavement is left in place and no additional lift(s) are placed, no payment will be made for the deficient payement sublot. The thickness of the original core taken in the sublot will be used in determining the payment for the entire lot and no adjustment to the pay factor will be made for any corrective action taken.

<u>Deficient Lot</u>. After analyzing the cores, the Percent Within Limits will be calculated. A lot of pavement represented by the Percent Within Limits (PWL) of 60 percent or less, shall be removed and replaced at the Contractor's expense. When requested in writing by the Contractor, the Engineer, at his/her option, may permit in writing such pavement to remain in place. For Bituminous Concrete Pavement (Full Depth), allowed to remain in place, additional

lift(s) may be placed, at the Contractor's expense, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The material, thickness(es), areas to be overlaid and method of placement used for the additional lift(s) will be approved by the Engineer. After either corrective action, the Contractor shall core the lot according to the "Coring Procedures" at no additional cost to the Department. The PWL will then be recalculated for the lot, however, the pay factor for the lot will be a maximum of 100 percent. When requested in writing by the Contractor, the Engineer, at his/her option, may permit in writing, the lot to remain in place. When the lot is left in place and no additional lifts are placed the pay factor for the lot will be based on the calculated PWL.

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 cores in addition to those specified. 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. These additional cores and locations will be determined prior to commencement of coring operations. When the additional cores show the pavement to be deficient by more than ten percent, additional cores shall be taken at locations determined by the Engineer to determine the limits of the deficient pavement area. The deficient pavement area will be defined as the area between two acceptable cores. An acceptable core is a core with a thickness of 90 percent or more of plan thickness. The defined pavement area shall be removed and replaced at the Contractor's expense. When requested by the Contractor, the Engineer, at his/her option, may permit in writing such thin pavement to remain in place. On Bituminous Concrete Pavement (Full Depth) allowed to remain in place, additional lift(s) may be placed to bring the deficient pavement to plan thickness when the Engineer determines that grade control conditions will permit such lift(s). The material, thickness(es), areas to be overlaid and method of placement for the additional lift(s) will be approved by the Engineer. When the thin pavement is removed and replaced or additional lifts are placed, the replacement pavement will be retested for thickness at the Contractor's expense. When the thin pavement is left in place and no additional lift(s) are placed, no payment will be made for the deficient payement. When the additional cores show the pavement to be deficient by ten percent or less the additional cores will be paid for according to Article 109.04. When the additional cores show the pavement to be deficient by more than ten percent the additional cores taken in the deficient area shall be at the Contractor's expense.

<u>Profile Index Adjustment</u>. After any section of pavement is removed and replaced or any additional lifts are added, the corrected areas shall be tested for pavement smoothness and any necessary Profile Index adjustments and/or corrections will be made based on these final profile readings. Such surface testing shall be performed at the Contractor's expense.

Core Analysis. Cores will be analyzed according to the following:

#### (a) Definition:

x<sub>i</sub> = Individual values (core lengths) under consideration
 n = Number of individual values under consideration

(10 per lot)

x = Average of the values under consideration

LSL = Lower Specification Limit (LSL = 0.98 plan thickness for pavement)

 $Q_L$  = Lower Quality Index

S = Sample Standard Deviation

PWL = Percent Within Limits

Determine  $\bar{x}$  for the lot to the nearest two decimal places.

Compute the sample standard deviation to the nearest three decimal places using:

$$S = \sqrt{\frac{\sum (x_i - \overline{x})^2}{n - 1}} \quad \text{where} \quad \Sigma (x_i - \overline{x})^2 = (x_1 - \overline{x})^2 + (x_2 - \overline{x})^2 + \dots + (x_{10} - \overline{x})^2$$

Determine the Lower Quality Index to the nearest two decimal places using:

$$Q_{L} = \frac{\left(\bar{x} - LSL\right)}{S}$$

Determine the percentage that will fall above the Lower Specification Limit (LSL) by going to the attached Table and utilizing calculated  $Q_L$ . Read the appropriate PWL value from the Table. For  $Q_L$  values less than zero the value shown in the table must be subtracted from 100 to obtain PWL.

<u>Pay Adjustment</u>. The following pay adjustment equation will be used to determine (to the nearest two decimal places) the pay factor for each lot.

Pay Factor (PF) in percent = 55 + 0.5 (PWL)

If  $\bar{x}$  for a lot is less than the plan thickness, the maximum pay factor for that lot will be 100 percent.

<u>Total Payment</u>. The payment will be based on the appropriate pay items in Sections 407, 420, and 421. The final payment will be adjusted according to the following equation:

Total Payment = TPF[CUP (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 entire pavement will be the average of the PF for all the lots, however, not more than 102 percent of plan quantity will be paid.

Deficient pavement is defined as an area of pavement represented by a sublot deficient by more than 10 percent which is left in place with no additional thickness added.

All work involved in determining the total payment will be included in the contract unit prices of the pay items involved.

	Percent Within Limits						
Quality Index (Q <sub>L</sub> )*	Percent Within Limits (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

<sup>\*</sup>For Q<sub>L</sub> values less than zero, subtract the table value from 100 to obtain PWL

	Percent Within Limits (continued)					
Quality Index (Q <sub>L</sub> )*	Percent Within Limits (PWL)	Quality Index (Q <sub>L</sub> )*	Percent Within Limits (PWL)	Quality Index (Q <sub>L</sub> )*	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 99.98	
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	<u>≥</u> 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<sub>L</sub> values less than zero, subtract the table value from 100 to obtain PWL

53600

#### PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000 Revised: September 1, 2003

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 no later than 30 days from the receipt of each payment made to the Contractor.

State law addresses the timing of payments to be made to subcontractors. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, generally requires that when a Contractor receives any payment from the Department, the Contractor is required to make corresponding, proportional payments to each subcontractor performing work within 15 calendar days after receipt of the state payment. Section 7 of the State Prompt Payment Act further provides that interest in the amount of 2% per month, in addition to the payment due, shall be paid to any subcontractor 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 throughout the contracting chain.

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

As progress payments are made to the Contractor in accordance with Article 109.07 of the Standard Specifications for Road and Bridge Construction, the Contractor shall make a corresponding partial payment within 15 calendar days to each subcontractor in proportion to the work satisfactorily completed by each subcontractor. The proportionate amount of partial payment due to each subcontractor 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 shall be paid in full within 15 calendar days after the subcontractor's work has been satisfactorily completed. The Contractor shall hold no retainage from the subcontractors.

This Special Provision does not create any rights in favor of any subcontractor against the State of Illinois or authorize any cause of action against the State of Illinois on account of any payment, nonpayment, delayed payment or interest claimed by application of the State Prompt Payment Act. The Department will neither determine the reasonableness of any cause for delay of payment nor enforce any claim to payment, including interest. Moreover, the Department will not approve any delay or postponement of the 15 day requirement. State law creates 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 in accordance with the Public Construction Bond Act, 30 ILCS 550.

80022

#### PERSONAL PROTECTIVE EQUIPMENT (BDE)

Effective: July 1, 2004

All personnel, excluding flaggers, working outside of a vehicle (car or truck) within 7.6 m (25 ft) of pavement open to traffic shall wear a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/.green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 2 garments. Other types of garments may be substituted for the vest as long as the garments have manufacturers tags identifying them as meeting the ANSI Class 2 requirement.

80130

#### PORTLAND CEMENT (BDE)

Effective: January 1, 2005 Revised: November 1, 2005

Add the following paragraph after the last paragraph of Article 1001.01 of the Standard Specifications.

"For portland cement according to ASTM C 150, the bill of lading shall state if limestone has been added. The bill of lading shall also state that the limestone addition is not in excess of five percent by mass (weight) of the cement."

80139

# PORTLAND CEMENT CONCRETE (BDE)

Effective: November 1, 2002

Add the following paragraph after the fourth paragraph of Article 1103.01(b) of the Standard Specifications:

"The truck mixer shall be approved before use according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

Add the following paragraph after the first paragraph of Article 1103.01(c) of the Standard Specifications:

"The truck agitator shall be approved before use according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

Add the following paragraph after the first paragraph of Article 1103.01(d) of the Standard Specifications:

"The nonagitator truck shall be approved before use according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

Revise the first sentence of the first paragraph of Article 1103.02 of the Standard Specifications to read:

"The plant shall be approved before production begins according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

80083

## PORTLAND CEMENT CONCRETE PATCHING (BDE)

Effective: January 1, 2001 Revised: January 1, 2004

Revise Note 1 of Article 442.02 of the Standard Specifications, to read:

"Note 1. When patching ramp pavements and two lane pavements with two way traffic, Class PP-2, PP-3, or PP-4 concrete shall be used for Class A, Class B and Class C patching. For all other pavements, Class PP-1, PP-2, PP-3, or PP-4 concrete shall be used, at the Contractor's option, for Class A, Class B and Class C patching."

Delete Note 2 of Article 442.02 of the Standard Specifications.

Add the following to Article 442.02 of the Standard Specifications:

Note 5. The calcium chloride accelerator, when permitted by the Department, shall be Type L (Liquid) with a minimum of 32.0 percent by mass (weight) of calcium chloride."

Revise the first paragraph of Article 442.06(e) of the Standard Specifications to read:

"(e) Concrete Placement. For Class A, Class B and Class C Patches, concrete shall be placed according to Article 420.07 and governed by the limitations set forth in Article 1020.14, except that the maximum temperature of the mixed concrete immediately before placing shall be 35 °C (96 °F), the required use of an approved retarding admixture when the plastic concrete reaches 30 °C (85 °F) shall not apply."

Revise the first paragraph of Article 442.06(h) of the Standard Specifications to read:

"(h) Curing and Protection. In addition to Article 1020.13, when the air temperature is less than 13 °C (55 °F), the Contractor shall cover the patch with minimum R12 insulation until opening strength is reached. Insulation is optional when the air temperature is

13 °C - 35 °C (55 °F - 96 °F). Insulation shall not be placed when the air temperature is greater than 35 °C (96 °F)."

Revise the second paragraph of Article 701.05(e)(1)d.1. of the Standard Specifications to read:

"No open holes, broken pavement, or partially filled holes shall remain overnight for bituminous patching or when the Department specifies only Class PP-2, PP-3, or PP-4 concrete be used. The only exception is conditions beyond the control of the Contractor."

Revise Article 701.05(e)(2)b. of the Standard Specifications to read:

"b. Strength Tests. For patches constructed with Class PP-1, PP-2, PP-3, or PP-4 concrete, the pavement may be opened to traffic when test specimens cured with the patches have obtained a minimum flexural strength of 4150 kPa (600 psi) or a minimum compressive strength of 22,100 kPa (3200 psi) according to Article 1020.09.

For patches constructed with Class PP-2, PP-3, or PP-4 concrete which can obtain a minimum flexural strength of 4150 kPa (600 psi) or a minimum of compressive strength of 22,100 kPa (3200 psi) in 16 hours, the pavement may be opened to traffic at a lower opening strength. The specimens cured with the patches shall have obtained a minimum flexural strength of 2050 kPa (300 psi) or a minimum compressive strength of 11,000 kPa (1600 psi) according to Article 1020.09, to permit opening pavement to traffic.

With the approval of the Engineer, concrete strength may be determined according to AASHTO T 276. The strength-maturity relationship shall be developed from concrete which has an air content near the upper specification limit. The strength-maturity relationship shall be re-established if the mix design or materials are changed."

Revise Article 701.05(e)(2)c. of the Standard Specifications to read:

"c. Construction Operations. For Class PP-2, PP-3, or PP-4 concrete used on ramp pavements and two lane pavements with two way traffic, or when the Department specifies only Class PP-2, PP-3, or PP-4 concrete be used for other pavements, Contractor construction operations shall be performed in a manner which allows the patches to be opened the same day and before nightfall. If patches are not opened before nightfall, the additional traffic control shall be at the Contractor's expense. Any time patches cannot be opened before nightfall, the Contractor shall change subsequent construction operations or the mix design. The changes shall be at no additional cost to the Department."

Revise Table 1 of Article 1020.04 of the Standard Specifications by replacing Class PP concrete with the following:

"TABLE	"TABLE 1. CLASSES OF PORTLAND CEMENT CONCRETE AND MIX DESIGN CRITERIA				
Class of Concrete	Use	Specification Section Reference	Cement Factor kg/cu m (cwt/cu yd)	Max. Water/Cement Ratio kg/kg (lb/lb)	
PP-1	PCC Pavement Patching Bridge Deck Patching	442	Type I Cement 385 to 445 (6.50 to 7.50) Type III Cement 365 to 425 (6.20 to 7.20)	0.44	
PP-2	PCC Pavement Patching Bridge Deck Patching	442	Type I Cement 435 (7.35)	0.38	
PP-3	PCC Pavement Patching Bridge Deck Patching	442	Type III Cement 435 (7.35)	0.35	
PP-4	PCC Pavement Patching Bridge Deck Patching	442	Rapid Hardening Cement 355 to 370 (6.00 to 6.25)	0.50	

For PP-1, the Contractor has the option to replace the Type I Cement with Class C fly ash or ground granulated blast-furnace slag. The amount of cement replaced shall not exceed 15 percent by mass (weight), at a minimum replacement ratio of 1.5:1.

For PP-2, the Contractor has the option to replace the Type I cement with ground granulated blast-furnace slag. The amount of cement replaced shall not exceed 30 percent by mass (weight), at a minimum replacement ratio of 1:1.

For PP-3, in addition to the cement, 60 kg/cu m (100 lb/cu yd) of ground granulated blast-furnace slag and 30 kg/cu m (50 lb/cu yd) of microsilica are required. For an air temperature greater than 30  $^{\circ}$ C (85  $^{\circ}$ F), the Contractor has the option to replace the Type III cement with Type I cement.

For PP-4, the cement shall be from the Department's "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs".

TABLE 1.	TABLE 1. (CONT'D) CLASSES OF PORTLAND CEMENT CONCRETE AND MIX DESIGN CRITERIA						
Class of Concrete	Slump, mm (in.)	Mix Design Compressive Strength, kPa (psi) Hours 48	Mix Design Flexural Strength, kPa (psi) Hours 48	Air Content, %	Coarse Aggregate Gradations Permitted		
PP – 1	100 (4) Max	22,100 (3200)	4150 (600)	4.0 – 7.0	CA-7, CA-11, CA-13, CA14, or CA-16		
PP – 2	150 (6) Max	22,100 (3200)	4150 (600)	4.0 – 6.0	CA-7, CA-11, CA-13, CA14, or CA-16		
PP – 3	100 (4) Max	22,100 (3200)	4150 (600)	4.0 – 6.0	CA-7, CA-11, CA-13, CA14, or CA-16		
PP – 4	150 (6) Max	22,100 (3200)	4150 (600)	4.0 – 6.0	CA-7, CA-11, CA-13, CA14, or CA-16		

For PP-1, PP-2, PP-3 or PP-4; only CA-13, CA-14, or CA-16 may be used for bridge deck patching. In addition, the mix design strength at 48 hours shall be increased to 27,500 kPa (4,000 psi) compressive or 4,650 kPa (675 psi) flexural for bridge deck patching.

For PP-1, the slump may be increased to 150 mm (6 in.) Max if a high range water-reducing admixture is used."

Delete Article 1020.05(g) of the Standard Specifications.

80036

#### PRECAST CONCRETE PRODUCTS (BDE)

Effective: July 1, 1999 Revised: November 1, 2004

<u>Product Approval</u>. Precast concrete products shall be produced according to the Department's current Policy Memorandum, "Quality Control/Quality Assurance Program for Precast Concrete Products". The Policy Memorandum applies to precast concrete products listed under the Products Key of the "Approved List of Certified Precast Concrete Producers".

<u>Precast Concrete Box Culverts</u>. Add the following sentence to the end of the fourth paragraph of Article 540.06:

"After installation, the interior and exterior joint gap between precast concrete box culvert sections shall not exceed 38 mm (1 1/2 in.)."

<u>Portland Cement Replacement</u>. For precast concrete products using Class PC concrete or other mixtures, portland cement replacement with fly ash or ground granulated blast-furnace (GGBF) slag shall be governed by the AASHTO or ASTM standard specification referenced in the Standard Specifications.

For all other precast concrete products using Class PC concrete or other mixtures, portland cement replacement with fly ash or GGBF slag shall be approved by the Engineer. Class F fly ash shall not exceed 15 percent by mass (weight) of the total portland cement and Class F fly ash. Class C fly ash shall not exceed 20 percent by mass (weight) of the total portland cement and Class C fly ash. GGBF slag shall not exceed 25 percent by mass (weight) of the total portland cement and GGBF slag.

Concrete mix designs, for precast concrete products, shall not consist of portland cement, fly ash and GGBF slag.

Ready-Mixed Concrete. Delete the last paragraph of Article 1020.11(a) of the Standard Specifications.

<u>Shipping</u>. When a precast concrete product has attained the specified strength, the earliest the product may be loaded, shipped, and used is on the fifth calendar day. The first calendar day shall be the date casting was completed.

<u>Acceptance</u>. Products which have been lot or piece inspected and approved by the Department prior to July 1, 1999, will be accepted for use on this contract.

419.doc

#### PREFORMED RECYCLED RUBBER JOINT FILLER (BDE)

Effective: November 1, 2002

Revise Article 503.02(c) of the Standard Specifications to read:

"(c) Preformed Expansion Joint Filler ......1051"

Revise Article 637.02(d) of the Standard Specifications to read:

"(d) Preformed Expansion Joint Filler .......1051"

Add the following Article to Section 1051 of the Standard Specifications:

"1051.10 Preformed Recycled Rubber Joint Filler. Preformed recycled rubber joint filler shall consist of ground tire rubber, free of steel and fabric, combined with ground scrap or waste polyethylene. It shall not have a strong hydrocarbon or rancid odor and shall meet the physical property requirements of ASTM D 1752. Water absorption by volume shall not exceed 5.0 percent."

80084

# RAP FOR USE IN BITUMINOUS CONCRETE MIXTURES (BDE)

Effective: January 1, 2000 Revised: April 1, 2002

#### Revise Article 1004.07 to read:

"1004.07 RAP Materials. RAP is reclaimed asphalt pavement resulting from cold milling or crushing of an existing dense graded hot-mix asphalt pavement. RAP must originate from routes or airfields under federal, state or local agency jurisdiction. The Contractor shall supply documentation that the RAP meets these requirements.

- (a) Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP will be allowed on top of the pile after the pile has been sealed.
  - (1) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I/ Superpave, or equivalent mixtures only and represent the same aggregate quality, but shall be at least C quality or better, the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag), similar gradation and similar AC 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. Homogenous stockpiles shall meet the requirements of Article 1004.07(d). Homogeneous RAP stockpiles not meeting these requirements may be processed (crushing and screening) and retested.
  - (2) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I/ Superpave, or equivalent mixtures only. The coarse aggregate in this RAP shall be crushed aggregate only and may represent more than one aggregate type and/or quality but shall be at least C quality or better. This RAP may have an inconsistent gradation and/or asphalt cement content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 16 mm (5/8 in.) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department. Conglomerate RAP stockpiles shall meet the requirements of Article 1004.07(d).
  - (3) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP containing coarse aggregate (crushed or round) that is at least D quality or better. This RAP may have an inconsistent gradation and/or asphalt content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department. Conglomerate DQ RAP shall meet the requirements of Article 1004.07(d).
    - Reclaimed Superpave Low ESAL IL-9.5L surface mixtures shall only be placed in conglomerate DQ RAP stockpiles due to the potential for rounded aggregate.
  - (4) Other. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Other". "Other" RAP stockpiles shall not be used in any of the Department's bituminous mixtures.

(b) Use. The allowable use of a RAP stockpile shall be set by the lowest quality of coarse aggregate in the RAP stockpile. Class I/Superpave surface mixtures are designated as containing Class B quality coarse aggregate only. Superpave Low ESAL IL-19.0L binder and IL-9.5L surface mixtures are designated as Class C quality coarse aggregate only. Class I/Superpave binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate only. Bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate only. Any mixture not listed above shall have the designated quality determined by the Department.

RAP containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in Class I/Superpave (including Low ESAL) surface mixtures only. RAP stockpiles for use in Class I/Superpave mixtures (including Low ESAL), base course, base course widening and Class B mixtures shall be either homogeneous or conglomerate RAP stockpiles except conglomerate RAP stockpiles shall not be used in Superpave surface mixture Ndesign 50 or greater. RAP for use in bituminous aggregate mixtures (BAM) shoulders and BAM stabilized subbase shall be from homogeneous, conglomerate, or conglomerate DQ stockpiles.

Additionally, RAP used in Class I/Superpave surface mixtures shall originate from milled or crushed mixtures only, in which the coarse aggregate is of Class B quality or better. RAP stockpiles for use in Class I/Superpave (including Low ESAL) binder mixes as well as base course, base course widening and Class B mixtures shall originate from milled or processed surface mixture, binder mixture, or a combination of both mixtures uniformly blended to the satisfaction of the Engineer, in which the coarse aggregate is of Class C quality or better.

- (c) Contaminants. RAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.
- (d) Testing. All RAP 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 450 metric tons (500 tons) for the first 1800 metric tons (2,000 tons) and one sample per 1800 metric tons (2,000 tons) thereafter. A minimum of five tests shall be required for stockpiles less than 3600 metric tons (4,000 tons).

For testing existing stockpiles, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP pile either insitu or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to extract representative samples throughout the pile for testing.

Before extraction, each field sample shall be split to 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.

All of the extraction results shall be compiled and averaged for asphalt content and gradation. Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	Homogeneous / Conglomerate	Conglomerate "D" Quality
25 mm (1 in.)		± 5%
12.5 mm (1/2 in.)	± 8%	± 15%
4.75 mm (No. 4)	± 6%	± 13%
2.36 mm (No. 8)	± 5%	
1.18 mm (No. 16)		± 15%
600 μm (No. 30)	± 5%	
75 μm (No. 200)	± 2.0%	± 4.0%
AC	± 0.4%	± 0.5%

If more than 20 percent of the individual sieves are out of the gradation tolerances, or if more than 20 percent of the asphalt content test results fall outside the appropriate tolerances, the RAP will not be allowed to be used in the Department's bituminous concrete mixtures unless the RAP representing the failing tests is removed from the stockpile to the satisfaction of the Engineer. 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)".

(e) Designs. At the Contractor's option, bituminous concrete mixtures may be constructed utilizing RAP material meeting the above detailed requirements. The amount of RAP included in the mixture shall not exceed the percentages specified in the plans.

RAP designs shall be submitted for volumetric verification. If additional RAP 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 stockpile and design, and meets all of the requirements herein, the additional RAP stockpiles may be used in the original mix design at the percent previously verified.

(f) Production. The coarse aggregate in all RAP used shall be equal to or less than the nominal maximum size requirement for the bituminous mixture being produced.

To remove or reduce agglomerated material, a scalping screen, 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 control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP and either switch to the virgin aggregate design or submit a new RAP design.

80011

## **REINFORCEMENT BARS (BDE)**

Effective: November 1, 2005 Revised: November 2, 2005

Revise Article 1006.10(a) of the Supplemental Specifications to read:

- "(a) Reinforcement Bars. Reinforcement bars will be accepted according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reinforcement Bar and Dowel Bar Plant Certification Procedure". The Department will maintain an approved list of producers.
  - (1) Reinforcement Bars (Non-Coated). Reinforcment bars shall be according to ASTM A 706M (A 706), Grade 420 (60) for deformed bars and the following.
    - a. Chemical Composition. The chemical composition of the bars shall be according to the following table.

	CHEMICAL COMPOSITION					
Element 1/	Heat Analysis (% maximum)	Product Analysis (% maximum)				
Carbon	0.30	0.33				
Manganese	1.50	1.56				
Phosphorus	0.035	0.045				
Sulfur	0.045	0.055				
Silicon	0.50	0.55				
Nickel	2/	2/				
Chromium	2/	2/				
Molybdenum	2/	2/				
Copper	2/	2/				
Titanium	2/	2/				
Vanadium	2/	2/				
Columbium	2/	2/				
Aluminum	2/, 3/	2/, 3/				
Tin <sup>4/</sup>	0.040	0.044				

- Note 1/. The bars shall not contain any traces of radioactive elements.
- Note 2/. There is no composition limit but the element must be reported.
- Note 3/. If aluminum is not an intentional addition to the steel for deoxidation or killing purposes, residual aluminum content need not be reported.
- Note 4/. If producer bar testing indicates an elongation of 15 percent or more and passing of the bend test, the tin composition requirement may be waived.
- b. Heat Numbers. Bundles or bars at the construction site shall be marked or tagged with heat identification numbers of the bar producer.
- c. Guided Bend Test. Bars may be subject to a guided bend test across two pins which are free to rotate, where the bending force shall be centrally applied with a fixed or rotating pin of a certain diameter as specified in Table 3 of ASTM A 706M (A 706). The dimensions and clearances of this guided bend test shall be according to ASTM E 190.
- d. Spiral Reinforcment. Spiral reinforcement shall be deformed or plain bars conforming to the above requirements or cold-drawn steel wire conforming to AASHTO M 32.
- (2) Epoxy Coated Reinforcement Bars. Epoxy coated reinforcement bars shall be according to Article 1006.10(a)(1) and shall be epoxy coated according to AASHTO M 284M (M 284) and the following.
  - a. Certification. The epoxy coating applicator shall be certified under the Concrete Reinforcing Steel Institute's (CRSI) Epoxy Plant Certification Program.
  - b. Coating Thickness. The thickness of the epoxy coating shall be 0.18 to 0.30 mm (7 to 12 mils). When spiral reinforcment is coated after fabrication, the thickness of the epoxy coating shall be 0.18 to 0.50 mm (7 to 20 mils).
  - c. Cutting Reinforcement. Reinforcement bars may be sheared or sawn to length after coating, providing the end damage to the coating does not extend more than 13 mm (0.5 in.) back and the cut is patched before any visible rusting appears. Flame cutting will not be permitted."

80151

#### **SEEDING AND SODDING (BDE)**

Effective: July 1, 2004 Revised: August 1, 2005

Revise Class 1A and 2A seeding mixtures shown in Table 1 of Article 250.07 of the Standard Specifications to read:

	"Table 1 - SEEDING MIXTURES					
Class – Type Seeds kg/hectare (lb/acre)						
1A	Salt Tolerant	Bluegrass	70 (60)			
	Lawn Mixture 7/	Perennial Ryegrass	20 (20)			
		Audubon Red Fescue	20 (20)			
		Rescue 911 Hard Fescue	20 (20)			
		Fults Salt Grass*	70 (60)			
2A	Salt Tolerant	Alta Fescue or Ky 31	70 (60)			
	Roadside Mixture 7/	Perennial Ryegrass	20 (20)			
		Audubon Red Fescue	20 (30)			
		Rescue 911 Hard Fescue	20 (30)			
		Fults Salt Grass 1/	70 (60)"			

Revise Note 7 of Article 250.07 of the Standard Specifications to read:

"Note 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 one growing season. The guarantee shall be submitted to the Engineer in writing prior to performing the work. After one growing season, areas not sustaining 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at the Contractor's expense."

Add the following sentence to Article 252.04 of the Standard Specifications:

"Sod shall not be placed during the months of July and August."

Revise the first paragraph of Article 252.08 of the Standard Specifications to read:

"252.08 Sod Watering. Within two hours after the sod has been placed, water shall be applied at a rate of 25 L/sq m (5 gal/sq yd). Additional water shall be applied every other day at a rate of 15 L/sq m (3 gal/sq yd) for a total of 15 additional waterings. During periods exceeding 26 °C (80 °F) or subnormal rainfall, the schedule of additional waterings may be altered with the approval of the Engineer."

Revise Article 252.09 of the Standard Specifications to read:

"252.09 Supplemental Watering. During periods exceeding 26 °C (80 °F) or subnormal rainfall, supplemental watering may be required after the initial and additional waterings. Supplemental watering shall be performed when directed by the Engineer. Water shall be applied at the rate specified by the Engineer within 24 hours of notice."

Revise the first and third paragraphs of Article 252.12 of the Standard Specifications to read:

"252.12 Method of Measurement. Sodding will be measured for payment in place and the area computed in square meters (square yards). To be acceptable for final payment, the sod shall be growing in place for a minimum of 30 days in a live, healthy condition. When directed by the Engineer, any defective or unacceptable sod shall be removed, replaced and watered by the Contractor at his/her own expense."

"Supplemental watering will be measured for payment in units of 1000 L (1000 gal) of water applied on the sodded areas. Waterings performed in addition to those required by Article 252.08 or after the 30 day establishment period will be considered as supplemental watering."

Replace the first paragraph of Article 252.13 of the Standard Specifications with the following:

- "252.13 Basis of Payment. Sodding will be paid for at the contract unit price per square meter (square yard) for SODDING or SODDING, SALT TOLERANT according to the following schedule.
  - (a) Initial Payment. Upon placement of sod, 25 percent of the pay item will be paid.
  - (b) Final Payment. Upon acceptance of sod, the remaining 75 percent of the pay item will be paid."

Revise Article 1081.03(b) of the Standard Specifications to read:

"(b) Salt Tolerant Sod.

Variety	Percent by Weight
Buffalo Grass	30%
Buchloe Dactyloides	
Amigo Fineleaf Tall Fescue	20%
Audubon Red Fescue	15%
Rescue 911 Hard Fescue	15%
Rugby Kentucky Bluegrass	5%
Fults Pucinnellia Distans	15%"

Revise Table II of Article 1081.04(c)(6) of the Standard Specifications to read:

		TA	BLE II			
					Secondary	
	Hard Seed	Purity	Pure, Live	Weed	Noxious Weeds	
	Percent	Percent	Seed Percent	Percent	No. per kg (oz)	
Variety of Seeds	Maximum	Minimum	Minimum	Maximum	Max. Permitted*	Remarks
Alfalfa	20	92	89	0.50	211 (6)	1/
Brome Grass	-	90	75	0.50	175 (5)	-
Clover, Alsike	15	92	87	0.30	211 (6)	2/
Clover, Crimson	15	92	83	0.50	211 (6)	-
Clover, Ladino	15	92	87	0.30	211 (6)	-
Clover, Red	20	92	87	0.30	211 (6)	-
Clover, White Dutch	30	92	87	0.30	211 (6)	3/
Audubon Red Fescue	0	97	82	0.10	105 (3)	-
Fescue, Alta or Ky. 31	-	97	82	1.00	105 (3)	-
Fescue, Creeping Red	-	97	82	1.00	105 (3)	-
Fults Salt Grass	0	98	85	0.10	70 (2)	-
Kentucky Bluegrass	-	97	80	0.30	247 (7)	5/
Lespedeza, Korean	20	92	84	0.50	211 (6)	3/
Oats	-	92	88	0.50	70 (2)	4/
Orchard Grass	-	90	78	1.50	175 (5)	4/
Redtop	-	90	78	1.80	175 (5)	4/
Ryegrass, Perennial, Annual	-	97	85	0.30	175 (5)	4/
Rye, Grain, Winter	-	92	83	0.50	70 (2)	4/
Rescue 911 Hard Fescue	0	97	82	0.10	105 (3)	-
Timothy	-	92	84	0.50	175 (5)	4/
Vetch, Crown	30	92	67	1.00	211 (6)	3/ & 6/
Vetch, Spring	30	92	88	1.00	70 (2)	4/
Vetch, Winter	15	92	83	1.00	105 (3)	4/
Wheat, hard Red Winter	-	92	89	0.50	70 (2)	4/

80131

# SELF-CONSOLIDATING CONCRETE FOR CAST-IN-PLACE CONSTRUCTION (BDE)

Effective: November 1, 2005

<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 and SI concrete. Self-consolidating concrete may also be used for drilled shafts.

Materials. Materials shall be according to the following.

(a) <u>Self-Consolidating Admixtures</u>. 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 that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation. The high range water-reducing admixture shall comply with the requirements of AASHTO M 194, Type F.

The viscosity modifying admixture will be evaluated according to the test methods and mix design proportions referenced in AASHTO M 194, except the following physical requirements shall be met:

- (1) For initial and final set times, the allowable deviation of the test concrete from the reference concrete shall not be more than 1.0 hour earlier or 1.5 hours later.
- (2) For compressive and flexural strengths, the test concrete shall be a minimum of 90 percent of the reference concrete at 3, 7, and 28 days.
- (3) The length change of the test concrete shall be a maximum 135 percent of the reference concrete. However, if the length change of the reference concrete is less than 0.030 percent, the length change of the test concrete shall be a maximum 0.010 percentage units greater than the reference concrete.
- (4) The relative durability factor of the test concrete shall be a minimum 80 percent.
- (b) <u>Fine Aggregate</u>. A fine aggregate used alone in the mix design shall not have an expansion greater than 0.30 percent per ASTM C 1260. For a blend of two or more fine aggregates, the resulting blend shall not have an expansion greater than 0.30 percent.

The aggregate blend expansion will be calculated as follows:

Aggregate Blend Expansion =  $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + \dots$ etc.

Where: a, b, c, ... = percent of aggregate blend A, B, C, ... = aggregate expansion according to ASTM C 1260

Mix Design Criteria. Article 1020.04 of the Standard Specifications shall apply except as follows:

- (a) The minimum cement factor shall be according to Article 1020.04 of the Standard Specifications or as specified. The maximum cement factor shall be 418 kg/cu m (7.05 cwt/cu yd). 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 11, CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 shall not be used for drilled shafts or when the Engineer

approves a horizontal flow distance greater than 9 m (30 ft). The fine aggregate proportion shall be a maximum 50 percent by mass (weight) of the total aggregate used.

- (e) The slump flow range shall be  $\pm$  50 mm ( $\pm$  2 in.) of the Contractor target value, and within the overall Department range of 510 mm (20 in.) minimum to 710 mm (28 in.) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 100 mm (4 in.). 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 column segregation index shall be a maximum 15 percent.
- (j) 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-5, 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.

Mix Design Submittal. 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 slump flow target range shall be submitted. In addition, the design mortar factor may exceed 1.10 and durability test data will be waived.

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 also 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, L-box blocking ratio, column segregation index, and hardened visual stability index. For the trial mixture, the slump flow shall be near the midpoint of the proposed slump flow target range.

<u>Trial Batch</u>. A minimum 1.5 cu m (2 cu yd) 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 25 mm (1.0 in.) 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, L-box blocking ratio, column segregation index, 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. Verification by the Engineer will include the Contractor's target slump flow range. If applicable, the Engineer will verify the Contractor's maximum J-ring value and minimum L-box blocking ratio.

A new trial batch will be required whenever there is a change in the source of any component material, proportions, 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 design falsework and forms for full hydrostatic head pressure of the concrete. Forms shall be tight to prevent leakage of fluid concrete.

<u>Placing and Consolidating</u>. Concrete placement and consolidations 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 1.5 m (5 ft). If necessary, a tremie shall be used to meet this requirement. The maximum distance of horizontal flow from the point of deposit shall be 9 m (30 ft), unless approved otherwise by the Engineer. For drilled shafts, free fall placement will not be permitted."

Delete the sixth, seventh, eighth and ninth paragraphs of Article 503.07 of the Standard Specifications.

Revise the eleventh paragraph of Article 503.07 of the Standard Specifications to read:

"Concrete shall be placed in continuous layers. When it is necessary by reason of an emergency to place less than a complete horizontal layer in one operation, such layer shall terminate in a vertical bulkhead. In order that the concrete will not be injured and that there shall be no line of separation between the batches, the separate batches shall follow each other closely as recommended by the manufacturer of the self-consolidating concrete admixture(s). In no case shall the interval of time between the placing of successive batches be greater than 20 minutes. Concrete shall be rodded with a piece of lumber or conduit if the material has lost its fluidity prior to placement of additional concrete. Any other method for restoring the fluidity of the concrete shall be approved by the Engineer. If ready-mixed concrete is used, the requirements of Article 1020.11 shall apply. Delivery of mixed concrete shall be regulated so that there will not be an interruption in the placing of concrete in the forms, as recommended by the manufacturer of the self-consolidating concrete admixture(s). In no case shall the interval of time be greater than 20 minutes."

<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 plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed as needed to control production. The column segregation index test and 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 plans.

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 40 cu m (50 cu yd) thereafter. The Contractor shall select either the J-ring or L-box test for jobsite testing.

The column segregation index test will not be required to be performed at the jobsite. The hardened visual stability index test shall be performed on the first truck delivery of the day, and every 230 cu m (300 cu yd) 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 plans.

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 plans.

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 25 mm (1 in.) 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 25 mm (1 in.) 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.

80152

#### SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)

Effective: July 1, 2004 Revised: November 1, 2005

<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 the following.

(a) <u>Self-Consolidating Admixtures</u>. 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 that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

The high range water-reducing admixture shall comply with the requirements of AASHTO M 194, Type F.

The viscosity modifying admixture will be evaluated according to the test methods and mix design proportions referenced in AASHTO M 194, except the following physical requirements shall be met:

- (1) For initial and final set times, the allowable deviation of the test concrete from the reference concrete shall not be more than 1.0 hour earlier or 1.5 hours later.
- (2) For compressive and flexural strengths, the test concrete shall be a minimum of 90 percent of the reference concrete at 3, 7 and 28 days.
- (3) The length change of the test concrete shall be a maximum 135 percent of the reference concrete. However, if the length change of the reference concrete is less than 0.030 percent, the length change of the test concrete shall be a maximum 0.010 percentage units greater than the reference concrete.
- (4) The relative durability factor of the test concrete shall be a minimum 80 percent.
- (b) <u>Fine Aggregate</u>. A fine aggregate used alone in the mix design shall not have an expansion greater than 0.30 percent per ASTM C 1260. For a blend of two or more fine aggregates, the resulting blend shall not have an expansion greater than 0.30 percent.

The aggregate blend expansion will be calculated as follows:

Aggregate Blend Expansion =  $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + \dots$ etc.

Where: a, b, c, ... = percent of aggregate blend A, B, C, ... = aggregate expansion according to ASTM C 1260

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 or as specified. The maximum cement factor shall be 418 kg/cu m (7.05 cwt/cu yd).

- (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 11, CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 shall not be used when the Engineer approves a horizontal flow distance greater than 9 m (30 ft). The fine aggregate proportion shall be a maximum 50 percent by mass (weight) of the total aggregate used.
- (e) The slump flow range shall be ± 50 mm (± 2 in.) of the Contractor target value, and within the overall Department range of 510 mm (20 in.) minimum to 710 mm (28 in.) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 100 mm (4 in.). 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 column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

<u>Mix Design Approval</u>. The Contractor shall obtain mix design approval according to the Department's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products".

80132

#### SURFACE TESTING OF PAVEMENTS (BDE)

Effective: April 1, 2002 Revised: November 1, 2005

#### **Bituminous Concrete Overlays**

Revise Article 406.03(k) of the Standard Specifications to read:

"(k) Pavement Surface Test Equipment ......1101.10"

Revise Article 406.21 of the Standard Specifications to read:

"406.21 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 75 km/hr (45 mph). These sections shall be tested using a California Profilograph or an approved equivalent.
  - (2) Low-Speed Mainline Pavement. Low-speed mainline pavement shall consist of pavements, ramps and loops with a posted speed of 75 km/hr (45 mph) or less. These sections shall be tested using a California Profilograph or an approved equivalent.
  - (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 300 m (1000 ft) and pavement within the superelevation transition of such curves;
    - b. the first or last 4.5 m (15 ft) of a pavement section where the Contractor is not responsible for the adjoining surface;
    - c. intersections;
    - d. variable width pavements;
    - e. side street returns;
    - f. crossovers;

- g. connector pavement from mainline pavement expansion joint to the bridge approach pavement;
- h. bridge approach pavement; and
- i. other miscellaneous pavement surfaces (i.e. a turn lane) as determined by the Engineer.

Miscellaneous pavement shall be tested using a 5 m (16 ft) straightedge set to a 10 mm (3/8 in.) 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 1600 m (1 mile) long and one lane wide. When the length of a continuous strip of pavement is less than 1600 m (1 mile), that pavement will be included in an adjacent lot. Structures will be omitted when measuring pavement length.
  - (2) Sublots. Lots will be divided into 160 m (0.1 mile) sublots. A partial sublot resulting from an interruption in the pavement will be subject to the same evaluation as a whole sublot.
- (c) Testing Procedure. One wheel track shall be tested per lane. Testing shall be performed 1 m (3 ft) 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 150 m (500 ft) 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 mm/km (in./mile) and indicate any high points (bumps) in excess of 8 mm (0.30 in.) 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 635 mm/km (40.0 in./mile) for high-speed mainline pavement or 1025 mm/km (65.0 in./mile) 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 8 mm (0.30 in.) in a length of 8 m (25 ft) or less shall be corrected. If the bump is greater than 13 mm (0.50 in.), the pavement shall be removed and replaced to the satisfaction of the Engineer at the Contractor's expense. The minimum length of pavement to be removed shall be 900 mm (3 ft).
  - (1) High-Speed Mainline Pavement. Any sublot having a profile index within the range of, greater than 475 to 635 mm/km (30.0 to 40.0 in./mile) including bumps, shall be corrected to reduce the profile index to 475 mm/km (30.0 in./mile) or less on each trace. Any sublot having a profile index greater than 635 mm/km (40.0 in./mile) including bumps, shall be corrected to reduce the profile index to 475 mm/km (30.0 in./mile) 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 710 to 1025 mm/km (45.0 to 65.0 in./mile) including bumps, shall be corrected to reduce the profile index to 710 mm/km (45.0 in./mile) or less on each trace. Any sublot having a profile index greater than 1025 mm/km (65.0 in./mile) including bumps, shall be corrected to reduce the profile index to 710 mm/km (45.0 in./mile) or less on each trace, or replaced at the Contractor's option.
  - (3) Miscellaneous Pavement. Surface variations which exceed the 10 mm (3/8 in.) 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 the Contractor's expense.

(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 (Bituminous Concrete Overlays)			
High-Speed Mainline Pavement Average Profile Index mm/km (in./mile)	Low-Speed Mainline Pavement Average Profile Index mm/km (in./mile)	Assessment per sublot	
95 (6.0) or less	240 (15.0) or less	+\$150.00	
>95 (6.0) to 160 (10.0)	>240 (15.0) to 400 (25.0)	+\$80.00	
>160 (10.0) to 475 (30.0)	>400 (25.0) to 710 (45.0)	+\$0.00	
>475 (30.0) to 635 (40.0)	>710 (45.0) to 1025 (65.0)	+\$0.00	
Greater than 635 (40.0)	Greater than 1025 (65.0)	-\$300.00	

Smoothness assessments will not be applied to miscellaneous pavement sections."

#### **Bituminous Concrete 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 406.21 except as follows:

Two wheel tracks shall be tested per lane. Testing shall be performed 1 m (3 ft) from and parallel to each lane edge."

SMOOTHNESS ASSESSMENT SCHEDULE (Full-Depth Bituminous)			
High-Speed Mainline Pavement Average Profile Index mm/km (in./mile)	Low-Speed Mainline Pavement Average Profile Index mm/km (in./mile)	Assessment per sublot	
95 (6.0) or less		+\$800.00	
>95 (6.0) to 175 (11.0)	240 (15.0) or less	+\$550.00	
>175 (11.0) to 270 (17.0)	>240 (15.0) to 400 (25.0)	+\$350.00	
>270 (17.0) to 475 (30.0)	>400 (25.0) to 710 (45.0)	+\$0.00	
>475 (30.0) to 635 (40.0)	>710 (45.0) to 1025 (65.0)	+\$0.00	
Greater than 635 (40.0)	Greater than 1025 (65.0)	-\$500.00	

Delete the fourth paragraph of Article 407.13 of the Standard Specifications.

#### **Portland Cement Concrete Pavement**

Revise Article 420.12 of the Standard Specifications to read:

"420.12 Surface Tests. The finished surface of the pavement shall be tested for smoothness according to Article 406.21 except as follows:

The finished surface of the pavement shall be tested for smoothness once the pavement has attained a flexural strength of 3,800 kPa (550 psi) or a compressive strength of 20,700 kPa (3,000 psi).

Two wheel tracks shall be tested per lane. Testing shall be performed 1 m (3 ft) from and parallel to each lane edge.

Membrane curing damaged during testing shall be repaired as directed by the Engineer at the Contractor's expense.

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 420.21 at the Contractor's expense.

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 mm/km (in./mile)	Low-Speed Mainline Pavement Average Profile Index mm/km (in./mile)	Assessment per sublot	
95 (6.0) or less		+\$1200.00	
>95 (6.0) to 175 (11.0)	240 (15.0) or less	+\$950.00	
>175 (11.0) to 270 (17.0)	>240 (15.0) to 400 (25.0)	+\$600.00	
>270 (17.0) to 475 (30.0)	>400 (25.0) to 710 (45.0)	+\$0.00	
>475 (30.0) to 635 (40.0)	>710 (45.0) to 1025 (65.0)	+\$0.00	
Greater than 635 (40.0)	Greater than 1025 (65.0)	-\$750.00"	

Delete the sixth paragraph of Article 420.23 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) 5 m (16 ft) Straightedge. The 5 m (16 ft) straightedge shall consist of a metal I-beam mounted between two wheels spaced 5 m (16 ft) 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. The straightedge shall meet the approval of the Engineer.
  - (b) Profile Testing Device. The Profile Testing Device shall have a decal displayed to indicate it has been tested through the PEV Program administered by the Department.
    - (1) California Profilograph. The California Profilograph shall be either computerized or manual and have a frame 8 m (25 ft) 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 0.0 mm (0.00 in.) blanking band and determine a Profile Index in mm/km (in./mile) 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 0.0 mm (0.00 in.) 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."

#### 80075

#### 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.

80143

#### **SUBGRADE PREPARATION (BDE)**

Effective: November 1, 2002

Revise the tenth paragraph of Article 301.03 of the Standard Specifications to read:

"Equipment of such weight, or used in such a way as to cause a rut in the finished subgrade of 13 mm (1/2 in.) or more in depth, shall be removed from the work or the rutting otherwise prevented."

80086

#### SUPERPAVE BITUMINOUS CONCRETE MIXTURES (BDE)

Effective: January 1, 2000 Revised: April 1, 2004

<u>Description</u>. This work shall consist of designing, producing and constructing Superpave bituminous concrete mixtures using Illinois Modified Strategic Highway Research Program (SHRP) Superpave criteria. This work shall be according to Sections 406 and 407 of the Standard Specifications and the special provision, "Quality Control/Quality Assurance of Bituminous Concrete Mixtures", except as follows.

#### Materials.

- (a) Fine Aggregate Blend Requirement. The Contractor may be required to provide FA 20 manufactured sand to meet the design requirements. For mixtures with Ndesign ≥ 90, at least 50 percent of the required fine aggregate fraction shall consist of either stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation.
- (b) Reclaimed Asphalt Pavement (RAP). If the Contractor is allowed to use more than 15 percent RAP, as specified in the plans, a softer performance-graded binder may be required as determined by the Engineer.

RAP shall meet the requirements of the special provision, "RAP for Use in Bituminous Concrete Mixtures".

RAP will not be permitted in mixtures containing polymer modifiers.

RAP containing steel slag will be permitted for use in top-lift surface mixtures only.

(c) Bituminous Material. The asphalt cement (AC) shall be performance-graded (PG) or polymer modified performance-graded (SBS-PG or SBR-PG) meeting the requirements of Article 1009.05 of the Standard Specifications for the grade specified on the plans.

The following additional guidelines shall be used if a polymer modified asphalt is specified:

- (1) The polymer modified asphalt cement shall be shipped, maintained, and stored at the mix plant according to the manufacturer's requirements. Polymer modified asphalt cement shall be placed in an empty tank and shall not be blended with other asphalt cements.
- (2) The mixture shall be designed using a mixing temperature of  $163 \pm 3$  °C ( $325 \pm 5$  °F) and a gyratory compaction temperature of  $152 \pm 3$  °C ( $305 \pm 5$  °F).
- (3) Pneumatic-tired rollers will not be allowed unless otherwise specified by the Engineer. A vibratory roller meeting the requirements of Article 406.16 of the Standard Specifications shall be required in the absence of the pneumatic-tired roller.

#### <u>Laboratory Equipment</u>.

- (a) Superpave Gyratory Compactor. The superpave gyratory compactor (SGC) shall be used for all QC/QA testing.
- (b) Ignition Oven. The ignition oven shall be used to determine the AC content. The ignition oven shall also be used to recover aggregates for all required washed gradations.

The Engineer may waive the ignition oven requirement for AC content if the aggregates to be used are known to have ignition AC 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 AC content.

<u>Mixture Design</u>. The Contractor shall submit mix designs, for approval, for each required mixture. Mix designs shall be developed by Level III personnel who have successfully completed the course, "Superpave Mix Design Upgrade". Articles 406.10 and 406.13 of the Standard Specifications shall not apply. The mixtures shall be designed according to the respective Illinois Modified AASHTO references listed below.

AASHTO MP 2	Standard Specification for Superpave Volumetric Mix Design
AASHTO R 30	Standard Practice for Mixture Conditioning of Hot-Mix Asphalt (HMA)
AASHTO PP 28	Standard Practice for Designing Superpave HMA
AASHTO T 209	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
AASHTO T 312	Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
AASHTO T 308	Determining the Asphalt Content of Hot Mix Asphalt (HMA) by the Ignition Method

(a) Mixture Composition. The ingredients of the bituminous mixture shall be combined in such proportions as to produce a mixture conforming to the composition limits by weight. The gradation mixture specified on the plans shall produce a mixture falling within the limits specified in Table 1.

TABLE 1. MIXTURE COMPOSITION (% PASSING) <sup>1/</sup>								
Sieve	IL-25.0 mm		IL-19.0 mm		IL-12.5 mm <sup>4/</sup>		IL-9.5 mm <sup>4/</sup>	
Size	min	max	min	max	Min	max	min	max
37.5 mm (1 1/2 in.)		100						
25 mm (1 in.)	90	100		100				
19 mm (3/4 in.)		90	82	100		100		
12.5 mm (1/2 in.)	45	75	50	85	90	100		100
9.5 mm (3/8 in.)						89	90	100
4.75 mm (#4)	24	42 <sup>2/</sup>	24	50 <sup>2/</sup>	28	65	28	65
2.36 mm (#8)	16	31	20	36	28	48 <sup>3/</sup>	28	48 <sup>3/</sup>
1.18 mm (#16)	10	22	10	25	10	32	10	32
600 μm (#30)								
300 μm (#50)	4	12	4	12	4	15	4	15
150 μm (#100)	3	9	3	9	3	10	3	10
75 μm (#200)	3	6	3	6	4	6	4	6

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 40 percent passing the 4.75 mm (#4) sieve for binder courses with Ndesign ≥ 90.
- 3/ The mixture composition shall not exceed 40 percent passing the 2.36 mm (#8) sieve for surface courses with Ndesign  $\geq$  90.
- 4/ The mixture composition for surface courses shall be according to IL-12.5 mm or IL-9.5 mm, unless otherwise specified by the Engineer.

One of the above gradations shall be used for leveling binder as specified in the plans and according to Article 406.04 of the Standard Specifications.

It is recommended that the selected combined aggregate gradation not pass through the restricted zones specified in Illinois Modified AASHTO MP 2.

(b) Dust/AC Ratio for Superpave. The ratio of material passing the 75  $\mu$ m (#200) sieve to total asphalt cement shall not exceed 1.0 for mixture design (based on total weight of mixture).

(c) Volumetric Requirements. The target value for the air voids of the hot mix asphalt (HMA) shall be 4.0 percent at the design number of gyrations. The VMA and VFA of the HMA design shall be based on the nominal maximum size of the aggregate in the mix and shall conform to the requirements listed in Table 2.

	TABLE 2. VOLUMETRIC REQUIREMENTS					
	Voids in the Mineral Aggregate (VMA), % minimum				Voids Filled with Asphalt (VFA),	
Ndesign	IL-25.0	IL-19.0	IL-12.5	IL-9.5	%	
50					65 - 78	
70	12.0	13.0	14.0	15		
90	12.0	13.0	14.0	15	65 - 75	
105						

(d) 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 T 283 using 4 in. Marshall bricks. To be considered acceptable by the Department as a mixture not susceptible to stripping, the ratio of conditioned to unconditioned split tensile strengths (TSRs) shall be equal to or greater than 0.75. Mixtures, either with or without an additive, with TSRs less than 0.75 will be considered unacceptable.

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. The liquid additive shall be selected from the Department's list of approved additives and may be limited to those which have exhibited satisfactory performance in similar mixes.

Dry hydrated lime shall be added at a rate of 1.0 to 1.5 percent by weight of total dry aggregate. Slurry shall be added in such quantity as to provide the required amount of hydrated lime solids by weight of total dry aggregate. The exact rate of application for all anti-stripping additives will be determined by the Department. The method of application shall be according to Article 406.12 of the Standard Specifications.

<u>Personnel</u>. The QC Manager and Level I Technician shall have successfully completed the Department's "Superpave Field Control Course".

<u>Required Plant Tests</u>. Testing shall be conducted to control the production of the bituminous mixture. The Contractor shall use the test methods identified to perform the following mixture tests at a frequency not less than that indicated in Table 3.

TABLE 3	. REQUIRED PLANT TESTS for SUPERPAVE	
Parameter	Frequency of Tests	Test Method

	TABLE 3. REQUIRED PLANT TESTS for SUPERPAVE				
Pa	arameter	Frequency of Tests	Test Method		
Hot	ate Gradation bins for batch and tinuous plants	dry gradation per day of production (either morning or afternoon sample).  And	Illinois Procedure (See Manual of Test Procedures for Materials).		
com	vidual cold-feeds or abined belt-feed for r drum plants. sing sieves:	1 washed ignition oven test on the mix per day of production (conduct in afternoon if dry gradation is conducted in the morning or vice versa).			
12.5 mm 4.75 mm 2.36 mm 600 µm	n (1/2 in.), n (No. 4), n (No. 8), (No. 30), No. 200))	NOTE. The order in which the above tests are conducted shall alternate from the previous production day (example: a dry gradation conducted in the morning will be conducted in the afternoon on the next production day and so forth).			
		The dry gradation and washed ignition oven test results shall be plotted on the same control chart.			
Asphalt Oven (I	Content by Ignition Note 1.)	1 per half day of production	Illinois Modified AASHTO T 308		
Air Voids	Bulk Specific Gravity of Gyratory Sample	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	Illinois Modified AASHTO T 312		
	Maximum Specific Gravity of Mixture		Illinois Modified AASHTO T 209		

Note 1. The Engineer may waive the ignition oven requirement for AC content if the aggregates to be used are known to have ignition AC 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 AC content.

During production, the ratio of minus 75  $\mu$ m (#200) sieve material to total asphalt cement shall be not less than 0.6 nor more than 1.2 and the moisture content of the mixture at discharge from the mixer shall not exceed 0.5 percent. If at any time the ratio of minus 75  $\mu$ m (#200) material to asphalt or moisture content of the mixture falls outside the stated limits, production of the mix shall cease. The cause shall be determined and corrective action satisfactory to the Engineer shall be initiated prior to resuming production.

During production, mixtures containing an anti-stripping additive will be tested by the Department for stripping according to Illinois Modified T 283. If the mixture fails to meet the TSR criteria for acceptance, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria.

#### **Construction Requirements**

#### Lift Thickness.

(a) Binder and Surface Courses. The minimum compacted lift thickness for constructing bituminous concrete binder and surface courses shall be according to Table 4:

TABLE 4 – MINIMUM COMPACTED LIFT THICKNESS			
Mixture Thickness, mm (in.)			
IL-9.5	32 (1 1/4)		
IL-12.5	38 (1 1/2)		
IL-19.0	57 (2 1/4)		
IL-25.0	76 (3)		

(b) Leveling Binder. Mixtures used for leveling binder shall be as follows:

TABLE 5 – LEVELING BINDER		
Nominal, Compacted, Leveling	Mixture	
Binder Thickness, mm (in.)		
≤ 32 (1 1/4)	IL-9.5	
32 (1 1/4) to 50 (2)	IL 9.5 or IL-12.5	

Density requirements shall apply for leveling binder when the nominal, compacted thickness is 32 mm (1 1/4 in.) or greater for IL-9.5 mixtures and 38 mm (1 1/2 in.) or greater for IL-12.5 mixtures.

(c) Full-Depth Pavement. The compacted thickness of the initial lift of binder course shall be 100 mm (4 in.). The compacted thickness of succeeding lifts shall meet the minimums specified in Table 4 but not exceed 100 mm (4 in.).

If a vibratory roller is used for breakdown, the compacted thickness of the binder lifts, excluding the top lift, may be increased to 150 mm (6 in.) provided the required density is obtained.

(d) Bituminous Patching. The minimum compacted lift thickness for constructing bituminous patches shall be according to Table 4.

<u>Control Charts/Limits</u>. Control charts/limits shall be according to QC/QA Class I requirements, except density shall be plotted on the control charts within the following control limits:

TABLE 6. DENSITY CONTROL LIMITS				
Mixture	Parameter	Individual Test		
12.5 mm / 9.5 mm	Ndesign ≥ 90	92.0 - 96.0%		
12.5 mm / 9.5 mm	Ndesign < 90	92.5 – 97.4%		
19.0 mm / 25.0 mm	Ndesign ≥ 90	93.0 - 96.0%		
19.0 mm / 25.0 mm	Ndesign < 90	93.0 - 97.4%		

<u>Basis of Payment</u>. On resurfacing projects, this work will be paid for at the contract unit price per metric ton (ton) for BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, of the friction aggregate mixture and Ndesign specified, LEVELING BINDER (HAND METHOD), SUPERPAVE, of the Ndesign specified, LEVELING BINDER (MACHINE METHOD), SUPERPAVE, of the Ndesign specified, and BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, of the mixture composition and Ndesign specified.

On resurfacing projects in which polymer modifiers are required, this work will be paid for at the contract unit price per metric ton (ton) for POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, of the friction aggregate mixture and Ndesign specified, POLYMERIZED LEVELING BINDER (HAND METHOD), SUPERPAVE, of the Ndesign specified, POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, of the Ndesign specified, and POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, of the mixture composition and Ndesign specified.

On full-depth pavement projects, this work will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS CONCRETE PAVEMENT, (FULL-DEPTH), SUPERPAVE, of the thickness specified.

On projects where widening is constructed and the entire pavement is then resurfaced, the binder for the widening will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, of the mixture composition, Ndesign, and thickness specified. The surface and binder used to resurface the entire pavement will be paid for according to the paragraphs above for resurfacing projects.

80010

#### **TEMPORARY EROSION CONTROL (BDE)**

Effective: November 1, 2002

Revise the fifth sentence of the third paragraph of Article 280.04(a) of the Standard Specifications to read:

"This work may be constructed of hay or straw bales, extruded UV resistant high density polyethylene panels, erosion control blanket, mulch barrier, aggregate barriers, excavation, seeding, or mulch used separately or in combination, as approved, by the Engineer."

Add the following paragraphs after the fifth paragraph of Article 280.04(a) of the Standard Specifications.

"A ditch check constructed of extruded, UV resistant, high density polyethylene panels, "M" pins and erosion control blanket shall consist of the following materials:

Extruded, UV resistant, high density polyethylene panels shall have a minimum height of 250 mm (10 in.) and minimum length of 1.0 m (39.4 in.). The panels shall have a 51 mm (2 in.) lip along the bottom of the panel. Each panel shall have a single rib thickness of 4 mm (5/32 in.) with a 12 mm (1/2 in.) distance between the ribs. The panels shall have an average apparent opening size equal to 4.75 mm (No. 4) sieve, with an average of 30

percent open area. The tensile strength of each panel shall be 26.27 kN/m (1800 lb/ft) in the machine direction and 7.3 kN/m (500 lb/ft) in the transverse direction when tested according to ASTM D 4595.

"M" pins shall be at least 76 mm (3 in.) by 686 mm (27 in.), constructed out of deformed grade C1008 D3.5 rod (0.211 in. diameter). The rod shall have a minimum tensile strength of 55 MPa (8000 psi).

Erosion control blanket shall conform to Article 251.04.

A section of erosion control blanket shall be placed transverse to the flowline direction of the ditch prior to the construction of the polyethylene ditch check. The length of the section shall extend from the top of one side of the ditch to the top of the opposite side of the ditch, while the width of the section shall be one roll width of the blanket. The upstream edge of the erosion control blanket shall be secured in a 100 mm (4 in.) trench. The blanket shall be secured in the trench with 200 mm (8 in.) staples placed at 300 mm (1 ft) intervals along the edge before the trench is backfilled. Once the upstream edge of the blanket is secured, the downstream edge shall be secured with 200 mm (8 in.) staples placed at 300 mm (1 ft) intervals along the edge. The polyethylene ditch check shall be installed in the middle of the erosion control blanket, with the lip of each panel facing outward.

The ditch check shall consist of two panels placed back to back forming a single row.

Placement of the first two panels shall be at the toe of the backslope or sideslope, with the panels extending across the bottom of the ditch. Subsequent panels shall extend both across the bottom of the ditch and up the opposite sideslope, as well as up the original backslope or sideslope at the distance determined by the Engineer.

The M pins shall be driven through the panel lips to secure the panels to the ground. M pins shall be installed in the center of the panels with adjacent panels overlapping the ends a minimum of 50 mm (2 in.). The pins shall be placed through both sets of panels at each overlap. They shall be installed at an interval of three M pins per one meter (39 in.) length of ditch check. The panels shall be wedged into the M pins at the top to ensure firm contact between the entire bottom of the panels and the soil."

80087

#### TRAFFIC CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 1992 Revised: January 1, 2005

To ensure a prompt response to incidents involving the integrity of work zone traffic control, the Contractor shall provide a telephone number where a responsible individual can be contacted 24 hours-a-day.

When the Engineer is notified, or determines a traffic control deficiency exists, he/she 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 12 hours based upon the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge.

A deficiency may be any lack of repair, maintenance, or non-compliance with the traffic control plan. A deficiency may also be applied to situations where corrective action is not an option such as the use of non-certified flaggers for short term operations; working with lane closures beyond the time allowed in the contract; or failure to perform required contract obligations such as traffic control surveillance.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The daily monetary deduction will be either \$1,000 or 0.05 percent of the awarded contract value, whichever is greater. For those deficiencies where corrective action was not an option this monetary deduction will be immediate.

In addition, if the Contractor fails to respond, the Engineer may correct the deficiency and the cost thereof will be deducted from monies due or which may become due the Contractor. This corrective action will in no way relieve the Contractor of his/her contractual requirements or responsibilities.

57291

#### 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 3. 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.

20338

#### TRANSIENT VOLTAGE SURGE SUPPRESSION (BDE)

Effective: August 1, 2003

Revise the first paragraph of Article 1074.03(a)(4) of the Standard Specifications to read:

"(4) Transient Voltage Surge Suppression. The cabinet shall be provided with transient voltage surge suppression. Transient surge suppression unit leads shall be kept as short as possible and ground shall be made directly to the cabinet wall or ground plate as near as possible to the object being grounded. All transient surge suppression units shall be tested and certified as meeting this specification by an independent testing laboratory. One copy of each of the full testing report shall be submitted to the Engineer."

Revise Article 1074.03(a)(4)a. of the Standard Specifications to read:

"a. Surge Suppressor. The suppressor protecting the solid state controller, conflict monitor, and detection equipment shall consist of two stages: stage one which shall include a controller cabinet AC power protection assembly and stage two which shall include AC circuit protection.

The design of the stage one suppressor shall be modular and it shall be installed in such a way that it may be removed and replaced with the intersection under power and in flashing operation. It shall have a permanently mounted and wired base and a removable circuit package. The stage one suppressor shall have two LED failure indicators for power 'on' and suppression 'failure' and shall meet the following properties:

Stage One Suppressor		
Properties	Criteria	
"Plug-in" suppression module	12 pin connector assembly	
Clamp voltage	250 V at 20,000 A typical	
Response time	Less than 5 nanoseconds	
Maximum continuous service current	15 A at 120 VAC 60 Hz	
High frequency noise attenuation	At least 50 dB at 100,000 Hz	
Operating temperature	-40 °C (-40 °F) to 85 °C (185 °F)	

If the controller assembly includes a system telemetry module or remote intersection monitor, the status of the stage one suppressor shall be continuously and remotely monitored by an appropriate alarm circuit.

The stage two, high speed, solid state, transient suppressor shall protect the system from transient over voltage without affecting power at the load. It shall suppress transients of either polarity and from either direction (source or load). The suppressor shall have a visual "on" indicator lamp when the unit is operating normally. It shall also have a UL plastic enclosure, a four position terminal strip for power connection, and it shall utilize silicon avalanche diode technology. The stage two suppressor shall meet the following properties:

Stage Two Suppressor				
Properties	Criteria			
Nominal service voltage	120 V at 50/60 Hz			
Maximum voltage protection level	±330 V			
Minimum voltage protection level	±220 V ±5%			
Minimum surge current rating	700 A			
Stand by power	Less than 0.5 Watts			
Hot to neutral leakage current at 120 V	Less than 5μA			
RMS				
Maximum response time	5 nanoseconds			
Operating and Storage temperature	-20 °C (-4 °F) to 50 °C (122 °F)"			

80107m

#### TRUCK BED RELEASE AGENT (BDE)

Effective: April 1, 2004

Add the following sentence after the third sentence of the first paragraph of Article 406.14 of the Standard Specifications.

"In addition to the release agent, the Contractor may use a light scatter of manufactured sand (FA 20 or FA 21) evenly distributed over the bed of the vehicle."

80123

#### **VARIABLY SPACED TINING (BDE)**

Effective: August 1, 2005

Revise the first sentence of the third paragraph of Article 420.11(e)(1) of the Standard Specifications to read:

"The metal comb shall consist of a single line of tempered spring steel tines variably spaced as shown in the table below and securely mounted in a suitable head."

Replace the sixth sentence of the third paragraph of Article 420.11(e)(1) of the Standard Specifications to read:

"The tining device shall be operated so as to a produce a pattern of grooves, 3 to 5 mm (1/8 in. to 3/16 in.) deep and 2.5 to 3.2 mm (1/10 in. to 1/8 in.) wide across the pavement. The tining device shall be operated at a 1:6 skew across the pavement for facilities with a posted speed limit of 55 mph or greater. The tining pattern shall not overlap or leave gaps between successive passes."

Add the following table after the third paragraph of Article 420.11(e)(1) of the Standard Specifications:

Center to Center Spacings of Metal Comb Tines					
mm (in.) (read spacings left to right)					
34 (1 5/16)	36 (1 7/16)	47 (1 7/8)	54 (2 1/8)	48 (1 7/8)	
43 (1 11/16)	32 (1 1/4)	31 (1 1/4)	27 (1 1/16)	36 (1 7/16)	
29 (1 1/8)	46 (1 13/16)	21 (13/16)	43 (1 11/16)	23 (7/8)	
42 (1 5/8)	52 (2 1/16)	24 (15/16)	18 (11/16)	28 (1 1/8)	
40 (1 9/16)	34 (1 5/16)	27 (1 1/16)	26 (1)	25 (1)	
27 (1 1/16)	20 (13/16)	37 (1 7/16)	38 (1 1/2)	52 (2 1/16)	
51 (2)	45 (1 3/4)	37 (1 7/16)	43 (1 11/16)	53 (2 1/16)	
27 (1 1/16)	37 (1 7/16)	42 (1 5/8)	41 (1 5/8)	29 (1 1/8)	
43 (1 11/16)	45 (1 3/4)	44 (1 3/4)	30 (1 3/16)	37 (1 7/16)	
33 (1 5/16)	40 (1 9/16)	28 (1 1/8)	31 (1 1/4)	50 (1 15/16)	
34 (1 5/16)	45 (1 3/4)	20 (13/16)	45 (1 3/4)	50 (1 15/16)	
53 (2 1/16)	51 (2)	29 (1 1/8)	25 (1)	18 (11/16)	
53 (2 1/16)	18 (11/16)	38 (1 1/2)	51 (2)	40 (1 9/16)	
17 (11/16)	49 (1 15/16)	50 (1 15/16)	39 (1 9/16)	51 (2)	
36 (1 7/16)	36 (1 7/16)	38 (1 1/2)	46 (1 13/16)	29 (1 1/8)	
38 (1 1/2)	50 (1 15/16)	24 (15/16)	33 (1 5/16)		

## 80149 WEIGHT CONTROL DEFICIENCY DEDUCTION

Effective: April 1, 2001 Revised: August 1, 2002

The Contractor shall provide accurate weights of materials delivered to the contract for incorporation into the work (whether temporary or permanent) and for which the basis of payment is by weight. These weights shall be documented on delivery tickets which shall identify the source of the material, type of material, the date and time the material was loaded, the contract number, the net weight, the tare weight when applicable and the identification of the transporting vehicle. For aggregates, the Contractor shall have the driver of the vehicle furnish or establish an acceptable alternative to provide the contract number and a copy of the material order to the source for each load. The source is defined as that facility that produces the final material product that is to be incorporated into the contract pay items.

The Department will conduct random, independent vehicle weight checks for material sources according to the procedures outlined in the Documentation Section Policy Statement of the Department's Construction Manual and hereby incorporated by reference. The results of the independent weight checks shall be applicable to all contracts containing this Special Provision. Should the vehicle weight check for a source result in the net weight of material on the vehicle exceeding the net weight of material shown on the delivery ticket by 0.50% (0.70% for aggregates) or more, the Engineer will document the independent vehicle weight check and immediately furnish a copy of the results to the Contractor. No adjustment in pay quantity will be made. Should the vehicle weight check for a source result in the net weight of material shown on the delivery ticket exceeding the net weight of material on the vehicle by 0.50%

(0.70% for aggregates) or more, the Engineer will document the independent vehicle weight check and immediately furnish a copy of the results to the Contractor. The Engineer will adjust the net weight shown on the delivery ticket to the checked delivered net weight as determined by the independent vehicle weight check.

The Engineer will also adjust the method of measurement for all contracts for subsequent deliveries of all materials from the source based on the independent weight check. The net weight of all materials delivered to all contracts containing this Special Provision from this source, for which the basis of payment is by weight, will be adjusted by applying a correction factor "A" as determined by the following formula:

$$A=1.0-\left(\frac{B-C}{B}\right); \text{ Where } A\leq 1.0 \; ; \; \left(\frac{B-C}{C}\right)>0.50\% \; \; \text{(0.70\% for aggregates)}$$

Where A = Adjustment factor

B = Net weight shown on delivery ticket

C = Net weight determined from independent weight check

The adjustment factor will be applied as follows:

Adjusted Net Weight =  $A \times Delivery Ticket Net Weight$ 

The adjustment factor will be imposed until the cause of the deficient weight is identified and corrected by the Contractor to the satisfaction of the Engineer. If the cause of the deficient weight is not identified and corrected within seven (7) calendar days, the source shall cease delivery of all materials to all contracts containing this Special Provision for which the basis of payment is by weight.

Should the Contractor elect to challenge the results of the independent weight check, the Engineer will continue to document the weight of material for which the adjustment factor would be applied. However, provided the Contractor furnishes the Engineer with written documentation that the source scale has been calibrated within seven (7) calendar days after the date of the independent weight check, adjustments in the weight of material paid for will not be applied unless the scale calibration demonstrates that the source scale was not within the specified Department of Agriculture tolerance.

At the Contractor's option, the vehicle may be weighed on a second independent Department of Agriculture certified scale to verify the accuracy of the scale used for the independent weight check.

80048

#### **WORK ZONE TRAFFIC CONTROL DEVICES (BDE)**

Effective: January 1, 2003 Revised: November 1, 2004

Add the following to Article 702.01 of the Standard Specifications:

"All devices and combinations of devices shall meet the requirements of the National Cooperative Highway Research Program (NCHRP) Report 350 for their respective categories. The categories are as follows:

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, flexible delineators and plastic drums with no attachments. Category 1 devices shall be crash tested and accepted or may be self-certified by the manufacturer.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include drums and vertical panels with lights, barricades and portable sign supports. Category 2 devices shall be crash tested and accepted for Test Level 3.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions, truck mounted attenuators and other devices not meeting the definitions of Category 1 or 2. Category 3 devices shall be crash tested and accepted for either Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as arrow boards, changeable message signs, temporary traffic signals and area lighting supports. Currently, there is no implementation date set for this category and it is exempt from the NCHRP 350 compliance requirement.

The Contractor shall provide a manufacturer's self-certification letter for each Category 1 device and an FHWA acceptance letter for each Category 2 and Category 3 device used on the contract. The letters shall state the device meets the NCHRP 350 requirements for its respective category and test level, and shall include a detail drawing of the device."

Delete the third, fourth and fifth paragraphs of Article 702.03(b) of the Standard Specifications.

Delete the third sentence of the first paragraph of Article 702.03(c) of the Standard Specifications.

Revise the first sentence of the first paragraph of Article 702.03(e) of the Standard Specifications to read:

"Drums shall be nonmetallic and have alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes."

Add the following to Article 702.03 of the Standard Specifications:

"(h) Vertical Barricades. Vertical barricades may be used in lieu of cones, drums or Type II barricades to channelize traffic."

Delete the fourth paragraph of Article 702.05(a) of the Standard Specifications.

Revise the sixth paragraph of Article 702.05(a) of the Standard Specifications to read:

"When the work operations exceed four days, all signs shall be post mounted unless the signs are located on the pavement or define a moving or intermittent operation. When approved by the Engineer, a temporary sign stand may be used to support a sign at 1.2 m (5 ft) minimum where posts are impractical. Longitudinal dimensions shown on the plans for the placement of signs may be increased up to 30 m (100 ft) to avoid obstacles, hazards or to improve sight distance, when approved by the Engineer. "ROAD CONSTRUCTION AHEAD" signs will also be required on side roads located within the limits of the mainline "ROAD CONSTRUCTION AHEAD" signs."

Delete all references to "Type 1A barricades" and "wing barricades" throughout Section 702 of the Standard Specifications.

80097

#### **WORKING DAYS (BDE)**

Effective: January 1, 2002

The Contractor shall complete the work within 195 working days.

80071

#### PAYROLLS AND PAYROLL RECORDS (BDE)

Effective: August 10, 2005

<u>FEDERAL AID CONTRACTS</u>. Add the following State of Illinois requirements to the Federal requirements contained in Section V of Form FHWA-1273:

"The payroll records shall include each worker's name, address, telephone number, social security number, classification, rate of pay, number of hours worked each day, starting and ending times of work each day, total hours worked each week, itemized deductions made, and actual wages paid.

The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work. The submittals shall be on the Department's form SBE 48, or an approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box ("No Work", "Suspended", or "Complete") checked on the form."

<u>STATE CONTRACTS</u>. Revise Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

#### "IV. COMPLIANCE WITH THE PREVAILING WAGE ACT

- 1. Prevailing Wages. All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto. If the Department of Labor revises the wage rates, the Contractor will not be allowed additional compensation on account of said revisions.
- 2. Payroll Records. The Contractor and each subcontractor shall make and keep, for a period of three years from the date of completion of this contract, records of the wages paid to his/her workers. The payroll records shall include each worker's name, address, telephone number, social security number, classification, rate of pay, number of hours worked each day, starting and ending times of work each day, total hours worked each week, itemized deductions made, and actual wages paid. Upon two business days' notice, these records shall be available, at all reasonable hours at a location within the State, for inspection by the Department or the Department of Labor.
- 3. Submission of Payroll Records. The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work. The submittals shall be on the Department's form SBE 48, or an approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box ("No Work", "Suspended", or "Complete") checked on the form.

Each submittal shall be accompanied by a statement signed by the Contractor or subcontractor which avers that: (i) such records are true and accurate; (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required by the Act; and (iii) the Contractor or subcontractor is aware that filing a payroll record that he/she knows to be false is a Class B misdemeanor.

4. Employee Interviews. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor."

80155

#### STEEL COST ADJUSTMENT (BDE)

Effective: April 2, 2004 Revised: July 1, 2004

<u>Description</u>. At the bidder's option, a steel cost adjustment will be made to provide additional compensation to the Contractor or a credit to the Department for fluctuations in steel prices. The bidder must indicate on the attached form whether or not steel cost adjustments will be part of this contract. This attached form shall be submitted with the bid. Failure to submit the form shall make this contract exempt of steel cost adjustments.

<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), frames and grates, and other miscellaneous items will be subject to a steel cost adjustment when the pay item 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) Evidence that increased or decreased steel costs have been passed on to the Contractor.
- (b) The dates and quantity of steel, in kg (lb), shipped from the mill to the fabricator.
- (c) The quantity of steel, in kg (lb), 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 kg (lb)

D = price factor, in dollars per kg (lb)

 $D = CBP_M - CBP_L$ 

Where: CBP<sub>M</sub> = The average of the Consumer Buying Price indices for Shredded Auto Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the American Metal Market (AMM) for the day the steel is shipped from the mill. The indices will be converted from dollars per ton to dollars per kg (lb).

CBP<sub>L</sub> = The average of the Consumer Buying Price indices for Shredded Auto Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the AMM for the day the contract is let. The indices will be converted from dollars per ton to dollars per kg (lb).

The unit masses (weights) 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  $CBP_M$  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  $CBP_L$  and  $CBP_M$  in excess of five percent, as calculated by:

Percent Difference =  $\{(CBP_L - CBP_M) \div CBP_L\} \times 100$ 

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the steel items 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.

#### **Attachment**

#### **RETURN WITH BID**

# ILLINOIS DEPARTMENT OF TRANSPORTATION

## OPTION FOR STEEL COST ADJUSTMENT

The bidder shall submit this form with his/her bid. Failure to submit the form shall make this contract exempt of steel cost adjustments. 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 as part of the contract plans?							
Υ	'es		No				
Signature:					Date:		
80127							



### **Storm Water Pollution Prevention Plan**

Route	_7:	729 Marked U.S. 136							
Section	n _	34Z-4	Project No.	90632					
County	/ _	VERMILION							
		has been prepared to comply with the provisions ental Protection Agency for storm water discharges fr							
accord submit gatheri am aw	lance ted. ing t are	nder penalty of law that this document and all attale with a system designed to assure that qualified Based on my inquiry of the person or persons who the information, the information submitted is, to the both that there are significant penalties for submitting falsing violations.	d personnel prop o manage the sy pest of my knowle	perly gathered stem, or those edge and belie	and evaluated the information persons directly responsible for f, true, accurate and complete. I				
	\	hallen		041	Uslus				
		Signature		99	Date				
Г	)enu	uty Director of Highways/Region 3 Engineer							
	осра	Title							
1.	Site	Description							
i	a.	The following is a description of the construction a	activity which is t	he subject of t	his plan:				
		The proposed project consists of PCC reconstruction new storm sewer system will also be installed.	tion and widenin	g of 1.39 km o	f East Main Street (U.S. 136). A				
	b.	The following is a description of the intended seq portions of the construction site, such as grubbing			will disturb soils for major				
The construction will be completed in 2 seasons with 4 stages per season. The first season will reconstruction St. east of the railroad and the second season will reconstruct Main St. west of the railroad.									
		The four stages are as follows:							
		1. Installation of storm sewer trunk line and structures,							
		<ol> <li>Installation of storm sewer laterals and pavement reconstruction on north half of Main,</li> <li>Installation of storm sewer laterals and pavement reconstruction on south half of Main,</li> </ol>							
		<ol> <li>Installation of storm sewer laterals and pavern</li> <li>Installation of pavement markings.</li> </ol>	ient reconstructio	n on south hai	ii oi iviain,				
	c.	The total area of the construction site is estimated	d to be4.4		acres.				
		The total area of the site that it is estimated will b	e disturbed by ex	cavation, grac	ling or other activities is4.4				

- d. The estimated runoff coefficients of the various areas of the site after construction activities are completed are contained in the project drainage study which is hereby incorporated by reference in this plan. Information describing the soils at the site is contained either in the Soils Report for the project, which is hereby incorporated by reference, or in an attachment to this plan.
- e. The design/project report, hydraulic report, or plan documents, hereby incorporated by reference, contain site map(s) indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of major soil disturbance, the location of major structural and nonstructural 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 a surface water.
- f. The names of receiving water(s) and area extent of wetland acreage at the site are in the design/project report or plan documents which are incorporated by reference as a part of this plan.

#### 2. Controls

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b. above. For each measure discussed, the contractor that will be responsible for its implementation is indicated. Each such contractor has signed the required certification on forms which are attached to, and a part of, this plan:

#### a. Erosion and Sediment Controls

- (i) <u>Stabilization Practices</u> Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided in 2.a.(i).(A) and 2.b., stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased on all disturbed portions of the site where construction activity will not occur for a period of 21 or more calendar days.
  - (A) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

### Description of Stabilization Practices:

Temporary seeding for erosion control will be placed as soon as possible on disturbed areas, and enhanced with temporary seeding, until permanent controls can be installed. Sod will be the permanent control. The landscaping schedule in the plans provides the sod placement locations.

(ii) <u>Structural Practices</u> 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 silt fences, earth dikes, drainage swales, sediment traps, check dams, 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.

#### Description of Structural Practices:

Pipe and inlet protection will be placed at inlets to protect structures from sedimentation during excavation and embankment operations.

#### b. 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.

- (I) Such practices may include: 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 10-300 (Design Considerations) in Chapter 10 (Erosion and Sedimentation Control) of the Illinois Department of Transportation Drainage Manual. If practices other than those discussed in Section 10-300 are selected for implementation or if practices are applied to situations different from those covered in Section 10-300, the technical basis for such decisions will be explained below.
- (ii) 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).

### c. Other Controls

- (i) Waste Disposal. No solid materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.
- (ii) The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

### d. Approved State or Local Plans

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 or site permits or 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.

#### 3. Maintenance

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, vegetation, erosion and sediment control measures and other protective measures identified in this plan:

Temporary pipe and inlet protection devices shall have the sediment removed and/or be replaced as directed by the Engineer. Temporary erosion control seeding shall be implemented as directed by the Engineer.

### 4. Inspections

Qualified personnel shall inspect disturbed areas of the construction site which have not been finally stabilized, structural control measures, and locations where vehicles enter or 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 and areas used for storage of materials that are exposed to precipitation 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. Where discharge locations or points are accessible, they 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 1 above and pollution prevention measures identified in section 2 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 7 calendar days following the inspection.
- 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 4.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 or Resident Technician shall complete and file an "Incidence of Noncompliance" (ION) report for the identified violation. The Resident Engineer or Resident Technician 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 report of noncompliance shall be mailed to the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Attn: Compliance Assurance Section 1021 North Grand East Post Office Box 19276 Springfield, Illinois 62794-9276



# **Contractor Certification Statement**

This certification statement is a part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with NPDES Permit No. ILR10, issued by the Illinois Environmental Protection Agency on May 14, 1998.

Project Information:		
Route		Marked
- ·		Project No.
County		
(NPDES) permit (ILR 10	) that authorizes the storm water disc	e general National Pollutant Discharge Elimination System charges associated with industrial activity from the construction
site identified as part of	this certification.	
	Signature	 Date
	Title	
	Name of Firm	
	Name of Firm	
	Street Address	
City	State	
Zip Code		
	elephone Number	

# REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

		Page
I.	General	1
II.	Nondiscrimination	1
III.	Nonsegregated Facilities	3
IV.	Payment of Predetermined Minimum Wage	3
V.	Statements and Payrolls	6
VI.	Record of Materials, Supplies, and Labor	7
VIII.	Safety: Accident Prevention	7
IX.	False Statements Concerning Highway Projects	7
Χ.	Implementation of Clean Air Act and Federal	
	Water Pollution Control Act	8
XI.	Certification Regarding Debarment, Suspension,	
	Ineligibility, and Voluntary Exclusion	8
XII.	Certification Regarding Use of Contract Funds for	
	Lobbying	9

#### **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.
- 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:
  - a. 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.

(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 seg.) 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 FFO:
  - a. 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 following statement:
  - "It is the policy of this Company to assure that applicants 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; layoff 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

Page 1

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
- 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 below:
  - 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 their 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;
  - (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 paid 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:

- (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

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 Federallyassisted 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 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 the submission of copies of payrolls by all suncontractors.

- 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 he 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 form the total original contract price before computing the amount of work required to be performed by the contractor's 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.
- 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.

\*\*\*\*

# 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

#### **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 <a href="http://www.dot.il.gov/desenv/delett.html">http://www.dot.il.gov/desenv/delett.html</a>.

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 <a href="http://www.dot.il.gov/desenv/subsc.html">http://www.dot.il.gov/desenv/subsc.html</a>.

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