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

PREQUALIFICATION

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

REQUESTS FOR AUTHORIZATION TO BID

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

WHO CAN BID?

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

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?: When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status" (BDE 124INT) he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued 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 bidders check IDOT's website at http://www.dot.il.gov/desenv/delett.html before submitting final bid information.

IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL FAILURES.

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

Technical Questions about downloading these files may be directed to Tim Garman (217)524-1642 or Timothy.Garman@illinois.gov.

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

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

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

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

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

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

ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

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

Proposal Submitted By
Name
Address
City

Letting April 24, 2009

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. 97365 MADISON County Section 05-00001-00-PK (Lewis & Clark CC) Route ACCESS ROAD Project ACHPP-HPP-3162(1) **District 8 Construction Funds**

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

Prepared by

Checked by

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

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.

Call

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

Questions Regarding

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

District 8 Construction Funds

1. F	roposal of
Taxp	ayer Identification Number (Mandatory)
fo	or the improvement identified and advertised for bids in the Invitation for Bids as:
	Contract No. 97365 MADISON County Section 05-00001-00-PK (Lewis & Clark CC) Project ACHPP-HPP-3162(1) Route ACCESS ROAD

0.20 mile new road construction including subgrade, base, PCC pavement, sidewalk, curb and gutter and storm sewers to service National Great Rivers Research and Educational Center southeast of Melvin Price Lock & Dam #26 in Alton.

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>Am</u>	ount c	Proposal of Bid Guaranty
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 damages due to delay and other causes suffered by the State because of the failure to execute said contract and contract bond; otherwise, the bid bond shall become void or the proposal guaranty check shall be returned to the undersigned.

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

County

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

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		Combinatio	n 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-98-322-06 PPS NBR - 8-10097-0000

ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 97365 ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 03/03/09 RUN TIME - 183259

COUNTY NAME CODE MADISON 119 D1ST 08 SECTION NUMBER
05-00001-00-PK (LEWIS & CLARK) PROJECT NUMBER ACHPP-HPP-3162/001/000 ROUTE ACCESS ROAD

11 11			FOOT	6" WF CONC BORDER 1	X00
		2,581.000	F00	6" WF CONC BOR 8 3/8	X007841
- 11 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1	52.000	SQ YD	GEOBLOCK 2 POLY PV SY	X007840
1 1 1		1,666.000	SQ YD	GEOBLOCK POLY PAV SYS	X007839
1 11		1,153.000	S	POR GR EMB BED 4 SLAG	007838
	- /	1,153.000	SQ Y	POR GR EM BASE 4 SLAG	X00783
i		1,153.000	SQ YD	POR GR EM SUB 12 SLAG	007836
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2.000	EACH	INLETS TA T3V F&G SPL	X006976
1	1 1 1 1 1 1	3.000	EACH	INLETS TB T3V F&G SPL	X006974
! ! ! !	- >>	1.000	EACH	BICYCLE RACKS	001011
. 1 1 1 1	! ! ! !	875.000	SQ YD	CONC PAVER SIDEWALK	R430050
1 .1 .1 .1 .1	1 1 1 1 1 1 1	2,496.000	SQ YD	CONC PAVER PAVEMENT	R430030
	! ! !	381.000	SQ YD	PCC PVMT 8 SPL	R420029
	-	1,594.000	SQ Y	C PVMT 7 SPL	R42
- 11	->-	0.400	ACR	EEDING SPL	
RICE TOTAL PRICE DOLLARS CTS	UNIT PR	QUANTITY	UNIT OF MEASURE	PAY ITEM DESCRIPTION	I TEM NUMBER

N

ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 97365

ION ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 03/03/09 RUN TIME - 183259

PAY ITEM DESCRIPTION	ASUR	QUANTITY	DOLLARS CENTS DOLLARS CT
NT CURB	F00	151.000 X	11
& RESET ST SIGN	EACH	1.000 X	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CUTTING	F.00		
	EAC	1.000 X	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
E REMOV ACRES	ACR	1.700 X	
TH EXCAVATION	CU YD	7	
& DISP UNS MATL	CU YD	50.00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
GRAN MAT B	TON	95.00	
SHED EXCAV	CU	200.000	
NCH BACKFILL	CU YD	69.000 X	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
OUS GRAN BACKFILL	CU	5.000 X	
ROGEN FERT NUTR	POUN	တ် <u>၊</u>	
SPHORUS FERT NUT	POUN	00	- 11
ASSIUM FERT NUTR	NOO :	36.000 X	- 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
GROUND LIMESTON	TON	.800	
A	PAY ITEM DESCRIPTION INT CURB M & RESET ST SIGNS W CUTTING EPAGE COLLAR EPAGE COLLAR ER REMOV ACRES EE REMOV ACRES RTH EXCAVATION W & DISP UNS MATL RNISHED EXCAV ENCH BACKFILL ROUS GRAN BACKFILL TROGEN FERT NUTR TASSIUM FERT NUTR GROUND LIMESTONE	INT CURB FOOT W & RESET ST SIGNS EACH EACH EACH EACH EPAGE COLLAR EE REMOV ACRES ACRE RTH EXCAVATION W & DISP UNS MATL CU YD RNISHED EXCAV ENCH BACKFILL CU YD ROUS GRAN BACKFILL CU YD ROUS GRAN BACKFILL FOUND TROGEN FERT NUTR POUND DSPHORUS FERT NUTR POUND TASSIUM FERT NUTR POUND TON	INT CURB FOOT

•				1	
I TEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE DOLLARS CENTS	TOTAL PRICE DOLLARS CTS
020100	GGREGATE-TEMP ACCESS	TO	170.000	- 11	
200120	PAVEMENT FABRIC	SQ YD	2,149.000	1 11 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
200130	ROTECTIVE COAT	SQ Y	3,105.000		
2400100	PC CONC SIDEWALK 4	Q FT	3,051.000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
2400200	PC CONC SIDEWALK 5	SQ FT	456.000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2400800	DETECTABLE WARNINGS	SQ FT	342.000	1 1 1 1 1	
4201976	CL D PATCH T2	SQ YD	9.000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
54200427	P CUL 1 RCCP 12	FOOT	24.000		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
4213657	PRC FLAR END SEC 12	EACH	5.000	- II — I	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
4213660	PRC FLAR END SEC 15	EACH	1.000	11 11 1	1 1 1 1 1 1 1 1 1
424440	FL INLT BX MED 542546	EACH	2.000		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
50B0040	STORM SEW CL B 1 10	00T	5.000	11 11 11 11	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
50B0050	STORM: SEW CL B 1 12	FOOT	31.000	11 - 11 - 1	 1 1 1 1 1 1 1
50195	S 1 RCP CL 4 12	FOOT		 - - -	
501960	S 1 RCP CL 4 15	00	67.000	i i i i i i i i i i i i i i i i i i i	 1 1 1 1 1 1

-1)		1	
NUMBER	PAY ITEM DESCRIPTION	MEASURE	QUANTITY	DOLLARS CENTS	DOLLARS C
9300100	CONTR LOW-STRENG MATL	CU YI	2.200	- II —	
010760	IPE UNDERDRAINS 4	F00T	. 000		
0236200	INLETS TA T8G	EACH	2.000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
023870	INLETS TA W/SPL F&G	EACH	1.000		
0240210	NLETS TB T1F OL	EACH	0.0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
24032	INLETS TB T15F&L	EAC	1.000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
0240385	INLETS TB W/SPL F&G	EACH	1.000		1 1 1 1
02465	INLET BOX SPL	EACH	3.000		! !
0603800	COMB CC&G TB6.12	FOOT	303.000		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0604400	COMB CC&G TB6.18	FOOT	1,457.000		
060590	COMB CC&G TB9:12	FOOT	151.000	1	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !
060830	B CC&G TM2.12	FOOT	14.000	 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
640010	CH LK FENCE 4	FOOT	73.000 X	- I	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
640570	CH LK GATES 4X10 DBL	EACH	00 - - X-	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
70004	ENGR FIELD OFFICE A		00	11 11	1 1 1 1 1 1 1 1 1 1

ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 97365

DN ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 03/03/09 RUN TIME - 183259

ITEM	PAY ITEM DESCRIPTION	UNIT OF	QUANTITY	UNIT PRICE TOTAL PRICE DOLLARS CENTS DOLLARS CTS
710010	OBILIZATION	L SU	1.000	
010170	TRAF CONT & PROT	L SU	0	
0103815	TR CONT SURVEILLANCE	CAL DA	3.00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0300220	EMP PVT MK LINE 4	F00	2,037.000	- X - !!
200010	SIGN PANEL T1	SQ FT	87.100	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2000200	IGN PANEL T2	SQ FT	10.000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
00	METAL POST TY A	FOOT	148.500	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2900200	METAL POST TY B	FOOT	181.500	
8008200	POLYUREA PM T1 LTR-SY	SQ FT	21.200	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
8008210	POLYUREA PM T1 LN 4	FOOT	037.000	
800824	POLYUREA PM T1 LN 8	FOOT	40.000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
8008250	POLYUREA PM T1 LN 12	F00T	97.000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
80082	POLYUREA PM T1 LN 24	FOOT	342.000	- 11 11 1 1 1 1 1
820030	PRISMATIC CURB REFL	EAC	26.0	
030010	LOCATE UNDERGR CABLE	00T	2.000	- X - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1

PAGE

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		CONTRACT NUMBER - 9/305	2027	RUN TIME - 183259	18325	œ
I TEM NUMBER	PAY ITEM DESCRIPTION	WEASURE	QUANTITY	UNIT PRICE	RICE	TOTAL PRICE DOLLARS CTS
_	HANDHOLE SPL	EACH	2.000 X	~~~	- 11	
- 1	2#6 #6G	FOOT	96.000 X		1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	3#6 #6G X	FOOT	44.000 X		1 1 1 	
00200	TR & BKFIL F ELECT WK	FOOT	128.000		- H -	
87800100	87800100 CONC FDN TY A	F00T	8.000 X		 - - - - -	1
).T	TOTAL \$	
1						

NOTE:

- EACH PAY ITEM SHOULD HAVE A UNIT PRICE AND A TOTAL PRICE.
- THE UNIT PRICE SHALL GOVERN IF NO TOTAL PRICE IS SHOWN OR IF THERE THE PRODUCT OF THE UNIT PRICE MULTIPLIED BY THE QUANTITY. IS A DISCREPANCY BETWEEN
- ω IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE.
- 4. D 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 \$177,412.00. Sixty percent of the salary is \$106,447.20.

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

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, Section 50-60(c), provides:

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.

L. Executive Order Number 1 (2007) Regarding Lobbying on Government Procurements

The bidder hereby warrants and certifies that they have complied and will comply with the requirements set forth in this Order. The requirements of this warrant and certification are a material part of the contract, and the contractor shall require this warrant and certification provision to be included in all approved subcontracts.

M. Disclosure of Business Operations in Iran

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

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

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

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

	Check the appropriate statement:
	// Company has no business operations in Iran to disclose.
	// Company has business operations in Iran as disclosed the attached document.
N.	Registration with the State Board of Elections.
	Public Act 95-0971, amending the Illinois Procurement Code, 30 ILCS 500, adding new sections 20-160 and 50-37, and Executive Order 3 (2008) establish new requirements affecting contributions that contractors, consultants, vendors and bidders, including affiliated persons and entities, may make to state officeholders, declared candidates for state offices and political organizations established to benefit such officeholders and candidates. These provisions do not apply to federal-aid contracts.
	By submission of a bid, the bidder acknowledges and agrees that it has read and understands the requirements of PA 95-0971 and Executive Order 3 (2008), including but not limited to, all reporting requirements and all restrictions on soliciting and making contributions to state officeholders, declared candidates for state offices and covered political organizations that promote the candidacy of an officeholder or declared candidate for office. In addition, the bidder makes the following certifications:
	(1) As to Executive Order 3 (2008), the bidder certifies that no contribution will be made that would violate the order, and that the bidder will report all contributions as required by the order.
	(2) As to PA 95-0971, the bidder shall check either of the following certifications that apply:
	// The bidder is not required to register as a business entity with the State Board of Elections.
	// The bidder has registered as a business entity with the State Board of Elections, and acknowledges a continuing duty to update the registration as required the Act. A copy of the time-stamped certificate of registration is enclosed with the bid. The Department will

In accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, this certification shall be part of the contract. Compliance with PA 95-0971 and Executive Order 3 (2008) is a material part of the contract and any breach shall be cause to void the contract under Section 50-60 of the Illinois Procurement Code.

not award this contract without the submission of a certificate of registration.

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. Disclosure Form Instructions

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

The Department has retained the Form A disclosures submitted by all bidders responding to these requirements for the April 24, 1998 or any subsequent letting conducted by the Department. The bidder has the option of submitting the information again or the bidder may check the following certification statement indicating that the information previously submitted by the bidder is, as of the date of submission, current and accurate. Before checking this certification, the bidder should carefully review its prior submissions to ensure the Certification is correct. If the Bidder checks the Certification, the Bidder should proceed to Form B instructions.

CERTIFICATION STATEMENT

ac	curate, and all forms a	e Form A disclosure information previously submitted re hereby incorporated by reference in this bid. Any no previously submitted forms are attached to this bid.	
_		(Bidding Company)	
		Signature of Authorized Representative	Date

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

D.

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 \$102,600.00? YES NO
3.	Does anyone in your organization receive more than \$106,447.20 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES NO
4.	Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than \$106,447.20? YES NO
	(Note: Only one set of forms needs to be completed <u>per person per bid</u> even if a specific individual would require a yes answer to more than one question.)
the bidd	" answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or ding entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is seed to execute contracts for your organization. Photocopied or stamped signatures are not acceptable . The person signing can be, but of thave to be, the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.
	nswer 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 n that is authorized to execute contracts for your company.
bidding	E: Identifying Other Contracts & Procurement Related Information Disclosure Form B must be completed for each bid submitted by the entity. Note: Checking the NOT APPLICABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be ted, checked, and dated or the bidder may be considered nonresponsive and the bid will not be accepted.
ongoing	lder shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other grocurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the lox on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:
agency attached and are	I: If the bidder did not submit an Affidavit of Availability to obtain authorization to bid, the bidder must list all non-IDOT State of Illinois pending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an d sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts not to be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital or Bidders who submit Affidavits of Availability are suggested to use Option II.
"See Af agency	II: If the bidder is required and has submitted an Affidavit of Availability in order to obtain authorization to bid, the bidder may write or type fidavit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois pending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the tof Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.
Bidders	s Submitting More Than One Bid
	submitting multiple bids may submit one set of forms consisting of all required Form A disclosures and one Form B for use with all bids. indicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms ence.
	The bid submitted for letting item contains the Form A disclosures or Certification Statement and the Form B lisclosures. The following letting items incorporate the said forms by reference:

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

Contractor Name					
Legal Address					
City, State, Zip					
Telephone Number		Email Address		Fax Number (if available)	
LCS 500). Vendo potential conflict of publicly available contracts. A publi	rs desiring to enter into a interest information as s contract file. This Form A cly traded company may set forth in Form A. See	contract with the State pecified in this Disclos must be completed for submit a 10K disclosure Form Inst	e of Illinois is sure Form. for bids in e osure (or ed ructions.	50-35 of the Illinois Procurement Code must disclose the financial information. This information shall become part of excess of \$10,000, and for all open-equivalent if applicable) in satisfaction.	and f the nded
	DISCLO	SURE OF FINANCIA	AL INFORM	<u>IATION</u>	
of ownership or di of the Governor's A for each indivi	stributive income share in	excess of 5%, or an integration of this form a property (rements)	terest which	interest in the BIDDER (or its parent) in the has a value of more than \$106,447.20 ry and attach a separate Disclosure I	(60%
NAME:					
ADDRESS	3				_
Type of ow	nership/distributable incon	ne share:			1
stock % or \$ value	sole proprietorship e of ownership/distributable ir	Partners ncome share:	hip	other: (explain on separate sheet):	
				ndicate which, if any, of the following s "Yes", please attach additional pages	and
(a) State em	ployment, currently or in the	ne previous 3 years, ind	cluding cont	ractual employment of services. Yes No	
If your an	nswer is yes, please answe	er each of the following	questions.	, 33 <u>—</u> , 13 <u>—</u>	
	Are you currently an office Highway Authority?	or employee of either	the Capitol I	Development Board or the Illinois Toll YesNo	
C G	currently appointed to or er	nployed by any agency % of the Governor's sa	of the State lary as of 3	of the State of Illinois? If you are of Illinois, and your annual salary /1/09) provide the name the State	

3.	If you are currently appointed to or employed by any age salary exceeds \$106,447.20, (60% of the Governor's sa (i) more than 7 1/2% of the total distributable income corporation, or (ii) an amount in excess of the salary of th	alary as of 3/1/09) are you entitled to receive of your firm, partnership, association or
4.	If you are currently appointed to or employed by any age salary exceeds \$106,447.20, (60% of the Governor's sa or minor children entitled to receive (i) more than 15% in of your firm, partnership, association or corporation, or salary of the Governor?	alary as of 3/1/09) are you and your spouse aggregate of the total distributable income
` '	employment of spouse, father, mother, son, or daughter, in previous 2 years.	ncluding contractual employment for services
If your	answer is yes, please answer each of the following questi	YesNo ons.
1.	Is your spouse or any minor children currently an officer of Board or the Illinois Toll Highway Authority?	or employee of the Capitol Development YesNo
	Is your spouse or any minor children currently appointed of Illinois? If your spouse or minor children is/are curren agency of the State of Illinois, and his/her annual salary Governor's salary as of 3/1/09) provide the name of the spot the State agency for which he/she is employed and his.	tly appointed to or employed by any exceeds \$106,447.20, (60% of the pouse and/or minor children, the name
	If your spouse or any minor children is/are currently appostate of Illinois, and his/her annual salary exceeds \$106 as of 3/1/09) are you entitled to receive (i) more than 71/2 firm, partnership, association or corporation, or (ii) an Governor?	,447.20.00, (60% of the salary of the Governor 2% of the total distributable income of your
	If your spouse or any minor children are currently appoir State of Illinois, and his/her annual salary exceeds \$106,43/1/09) are you and your spouse or any minor children er aggregate of the total distributable income from your firm, (ii) an amount in excess of 2 times the salary of the Gove	147.20, (60% of the Governor's salary as of ntitled to receive (i) more than 15% in the partnership, association or corporation, or mor?
		Yes No
unit of I	e status; the holding of elective office of the State of Illinois local government authorized by the Constitution of the St currently or in the previous 3 years.	
	nship to anyone holding elective office currently or in the page daughter.	orevious 2 years; spouse, father, mother, YesNo
America of the S	tive office; the holding of any appointive government office a, or any unit of local government authorized by the Const State of Illinois, which office entitles the holder to compens charge of that office currently or in the previous 3 years.	itution of the State of Illinois or the statues
	nship to anyone holding appointive office currently or in the daughter.	e previous 2 years; spouse, father, mother, YesNo
(g) Employ	yment, currently or in the previous 3 years, as or by any re	gistered lobbyist of the State government. YesNo

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, f son, or daughter. YesNo	
(i) Compensated employment, currently or in the previous 3 years, by any registered election committee registered with the Secretary of State or any county clerk of the State of Illinois, o action committee registered with either the Secretary of State or the Federal Board of Electio YesNo	r any political ns.
(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated e last 2 years by any registered election or re-election committee registered with the Secretary county clerk of the State of Illinois, or any political action committee registered with either the State or the Federal Board of Elections.	of State or any e Secretary of
YesNo	-
APPLICABLE STATEMENT	
This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous pa	ge.
Completed by:	
Signature of Individual or Authorized Representative	Date
NOT APPLICABLE STATEMENT	
I have determined that no individuals associated with this organization meet the criteria trequire the completion of this Form A.	hat would
This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous	us page.
Signature of Authorized Representative	Date

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Procurement Related Information Disclosure

Contractor Name			
Legal Address			
City, State, Zip		_	
Telephone Number	Email Address	Fax Number (if available)	
Disclosure of the information contained	ed in this Form is required by the	Section 50-35 of the Illinois Procure	ement
· ·		available contract file. This Form B m	nust
be completed for bids in excess of \$1	0,000, and for all open-ended co	ontracts.	
DISCLOSURE OF O	THER CONTRACTS AND PRO	CUREMENT RELATED INFORMATI	<u>ION</u>
	g leases), bids, proposals, or oth Yes No	tion. The BIDDER shall identify wheth ner ongoing procurement relationship box on the bottom of this page.	
		State of Illinois agency name and oth as necessary). SEE DISCLOSURE F	
TH	IE FOLLOWING STATEMENT	MUST BE CHECKED	
	Signature of Authorized Repre	esentative Date	e

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. 97365
MADISON County
Section 05-00001-00-PK (Lewis & Clark CC)
Project ACHPP-HPP-3162(1)
Route ACCESS ROAD
District 8 Construction Funds

PART I. IDENTIFIC	ATION																	
Dept. Human Rights # Duration of Project:																		
Name of Bidder:																		
PART II. WORKFO A. The undersigned which this contract wo projection including a	bidder hark is to be	as analyz e perform	ed mir ed, an	d for the	ne locati	ions froi	m whic	h the b	idder re	cruits	employ	ees, and h	ereb	y subm	its the foll	lowir con	ng workfo	
	TOT	AL Wo	rkforce	Projec	tion for	Contra	ıct						C	URRENT		_	S	
		MIN	ORITY I	EMPLO	YEES			TRA	AINEES				TO BE		RACT			
JOB CATEGORIES	EMPL	TAL OYEES		ACK	HISP		MIN		APPI TIC	ES	TRA	HE JOB INEES		EMPL	TAL OYEES			DYEES
OFFICIALS (MANAGERS)	M	F	M	F	M	F	М	F	M	F	M	F	-	M	F	=	M	F
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED LABORERS,																		
UNSKILLED													-					
TOTAL																		
Т		BLE C aining Pro	oiectio	n for C	ontract				1			FOR	DEF	PARTM	IENT USE	ON	ILY	
EMPLOYEES IN	TO	TAL OYEES		ACK		PANIC		THER NOR.										
TRAINING APPRENTICES	M	F	М	F	М	F	М	F	+									
ON THE JOB									1									

*Other minorities are defined as Asians (A) or Native Americans (N).
Please specify race of each employee shown in Other Minorities column.

TRAINEES

BC 1256 (Rev. 12/11/08)

Note: See instructions on page 2

Contract No. 97365
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Project ACHPP-HPP-3162(1)
Route ACCESS ROAD
District 8 Construction Funds

PART II. WORKFORCE PROJECTION - continued

B.		ed in "Total Employees" under Table A is the total in the undersigned bidder is awarded this contract.	number of new hires that	t would be employed in the
	The un	ndersigned bidder projects that: (number)		new hires would be
	recruite	ed from the area in which the contract project is loc	cated; and/or (number)	
	office c	or base of operation is located.		
C.		ed in "Total Employees" under Table A is a projecti signed bidder as well as a projection of numbers of		
	be dire	ndersigned bidder estimates that (number)ectly employed by the prime contractor and that (nuyed by subcontractors.	ımber)	persons will be
PART I	II. AFFI	IRMATIVE ACTION PLAN		
A.	utilizati in any j comme (geared utilizati	ndersigned bidder understands and agrees that in to ion projection included under PART II is determine job category, and in the event that the undersigned encement of work, develop and submit a written Africation to the completion stages of the contract) wherebe ion are corrected. Such Affirmative Action Plan with partment of Human Rights.	d to be an underutilization bidder is awarded this cure firmative Action Plan included the property deficiencies in minority	n of minority persons or women contract, he/she will, prior to uding a specific timetable and/or female employee
B.	submit	ndersigned bidder understands and agrees that the ted herein, and the goals and timetable included upart of the contract specifications.		
Compa	any		Telephone Number	r
Addres	ss			
		NOTICE REGARDING	SIGNATURE	
The Bi	idder's si	signature on the Proposal Signature Sheet will constitute		The following signature block needs
		ed only if revisions are required.	s and digiting of and form.	The following digitatare block floods
Signat	ure: 🔲 _		Title:	Date:
Instructi	ons:	All tables must include subcontractor personnel in addition to p	orime contractor personnel.	
Table A		Include both the number of employees that would be hired to (Table B) that will be allocated to contract work, and include a should include all employees including all minorities, apprentic	all apprentices and on-the-job to	rainees. The "Total Employees" column
Table B		Include all employees currently employed that will be allocated currently employed.	d to the contract work including	any apprentices and on-the-job trainees
Table C	: -	Indicate the racial breakdown of the total apprentices and on-t	he-job trainees shown in Table	Α.
				DO 1050 (D 10(11(00))

ADDITIONAL FEDERAL REQUIREMENTS

In addition to the Required Contract Provisions for Federal-Aid Construction Contracts (FHWA 1273), all bidders make the following certifications.

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

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PROPOSAL SIGNATURE SHEET

The undersigned bidder hereby makes and submits this bid on the subject Proposal, thereby assuring the Department that all requirements of the Invitation for Bids and rules of the Department have been met, that there is no misunderstanding of the requirements of paragraph 3 of this Proposal, and that the contract will be executed in accordance with the rules of the Department if an award is made on this bid.

	Firm Name	
(IF AN INDIVIDUAL)	Signature of Owner	
	Business Address	
	Firm Name	
(IF A CO-PARTNERSHIP)	Business Address	
,		
		Name and Address of All Members of the Firm:
_		
	Corporate Name	
	Ву	
(IF A CORPORATION)		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	Signature
(IF A JOINT VENTURE, USE THIS SECTION	Duningga Address	•
FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)	Business Address	
	Corporate Name	
(IF A JOINT VENTURE)	Бу	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		



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
held jointly, severally and firmly bound unto the STATE OF specified in Article 102.09 of the "Standard Specifications for I is the lesser sum, well and truly to be paid unto said STATE administrators, successors and assigns.	Road and Bridge Construc	tion" in effect on the date of invitation for bids, whichever
THE CONDITION OF THE FOREGOING OBLIGATION I STATE OF ILLINOIS, acting through the Department of Transhumber and Letting Date indicated above.		· ·
NOW, THEREFORE, if the Department shall accept the and as specified in the bidding and contract documents, submafter award by the Department, the PRINCIPAL shall enter in including evidence of the required insurance coverages and performance of such contract and for the prompt payment of failure of the PRINCIPAL to make the required DBE submission to the Department the difference not to exceed the penalty he which the Department may contract with another party to pervoid, otherwise, it shall remain in full force and effect.	nit a DBE Utilization Plan to the a contract in accordance I providing such bond as If labor and material furnis on or to enter into such contereof between the amount	hat is accepted and approved by the Department; and if, be with the terms of the bidding and contract documents specified with good and sufficient surety for the faithful hed in the prosecution thereof; or if, in the event of the tract and to give the specified bond, the PRINCIPAL pays specified in the bid proposal and such larger amount for
IN THE EVENT the Department determines the PRINCI paragraph, then Surety shall pay the penal sum to the Department within such period of time, the Department may bring expenses, including attorney's fees, incurred in any litigation in In TESTIMONY WHEREOF, the said PRINCIPAL and the	nent within fifteen (15) days g an action to collect the ar n which it prevails either in which it SURETY have cau	s of written demand therefor. If Surety does not make full mount owed. Surety is liable to the Department for all its whole or in part. sed this instrument to be signed by
their respective officers this day of		A.D.,
PRINCIPAL		
(Company Name)		(Company Name)
By(Signature & Title)	Ву:	(Signature of Attorney-in-Fact)
(Signature & Title)		(Signature of Attorney-in-Fact)
Notary Certification for Principal and Surety		
STATE OF ILLINOIS, County of		
I,	a Notary Pul	olic in and for said County, do hereby certify that
" -	and	5.5 m and 15. card county, as noticely county and
(Insert names of individua	als signing on behalf of PRI	NCIPAL & SURETY)
who are each personally known to me to be the same persons and SURETY, appeared before me this day in person and ack and voluntary act for the uses and purposes therein set forth.	s whose names are subscr knowledged respectively, th	ibed to the foregoing instrument on behalf of PRINCIPAL tat they signed and delivered said instrument as their free
Given under my hand and notarial seal this	day of	A.D
My commission expires		
In the of appropriate the character of the D	Common also Delevate 1	Notary Public
In lieu of completing the above section of the Proposal Bid F marking the check box next to the Signature and Title line be and the Principal and Surety are firmly bound unto the State of	low, the Principal is ensur	ing the identified electronic bid bond has been executed
Electronic Bid Bond ID# Company / Bidde	er 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.

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Project ACHPP-HPP-3162(1)
Route ACCESS ROAD
District 8 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., April 24, 2009. 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:

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0.20 mile new road construction including subgrade, base, PCC pavement, sidewalk, curb and gutter and storm sewers to service National Great Rivers Research and Educational Center southeast of Melvin Price Lock & Dam #26 in Alton.

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

By Order of the Illinois Department of Transportation

Gary Hannig, Acting Secretary

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2009

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

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-07) (Revised 1-1-09)

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E E	STORM WATER ROLL LITION RREVENTION RLAN

Access Roads National Great Rivers Research and Education Center Section 05-00001-00-PK Contract No. 97365

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LR # LR SD 12	Pg#		Special Provision Title Slab Movement Detection Device	Effective Nov. 11, 1984	Revised Jan. 1, 2007
LR SD 13			Required Cold Milled Surface Texture	Nov. 1, 1987	Jan. 1, 2007
LR 102			Protests on Local Lettings	Jan. 1, 2007	
LR 105			Cooperation with Utilities	Jan. 1, 1999	Jan. 1, 2007
LR 107-2			Railroad Protective Liability Insurance for Local Lettings	Mar. 1, 2005	Jan. 1, 2006
LR 107-3			Disadvantaged Business Enterprise Participation	Jan. 1, 2007	Nov. 1, 2008
LR 107-4	89	\square	<u>Insurance</u>	Feb. 1, 2007	Aug. 1, 2007
LR 107-5			Substance Abuse Prevention Program	Jan. 1, 2008	Jan. 8, 2008
LR 108			Combination Bids	Jan. 1, 1994	Mar. 1, 2005
LR 212		Ш	Shaping Roadway	Aug. 1, 1969	Jan. 1, 2002
LR 355-1		Ц	Asphalt Stabilized Base Course, Road Mix or Traveling Plant Mix	Oct. 1, 1973	Jan. 1, 2007
LR 355-2		\sqcup	Asphalt Stabilized Base Course, Plant Mix	Feb. 2, 1963	Jan. 1, 2007
LR 400-1		Ц	Bituminous Treated Earth Surface	Jan. 1, 2008	
LR 400-2		님	Bituminous Surface Mixture (Class B)	Jan. 1, 2008	
LR 400-3		出	Pavement Rehabilitation by the Heat-Scarify-Overlay Method	Jan. 1, 2008	1 4 0007
LR 402		님	Salt Stabilized Surface Course	Feb. 20, 1963	Jan. 1, 2007
LR 403-2		\vdash	Bituminous Hot Mix Sand Seal Coat	Aug. 1, 1969	Jan. 1, 2007
LR 406		片	Filling HMA Core Holes with Non-shrink Grout	Jan. 1, 2008	I 0 0007
LR 420		H	PCC Pavement (Special)	May 12, 1964	Jan. 2, 2007
LR 442		님	Bituminous Patching Mixtures for Maintenance Use	Jan. 1, 2004	Jun. 1, 2007
LR 451		片	Crack Filling Bituminous Pavement with Fiber-Asphalt	Oct. 1, 1991	Jan. 1, 2007
LR 503-1		님	Furnishing Class SI Concrete	Oct. 1, 1973	Jan. 1, 2002
LR 503-2		H	Furnishing Class SI Concrete (Short Load)	Jan. 1, 1989	Jan. 1, 2002
LR 542		\forall	Pipe Culverts, Type (Furnished)	Sep. 1, 1964	Jan. 1, 2007
LR 663		H	Calcium Chloride Applied	Jun. 1, 1958	Jan. 1, 2007
LR 702		H	Construction and Maintenance Signs	Jan. 1, 2004	Jun. 1, 2007
LR 1004		-H	Coarse Aggregate for Bituminous Surface Treatment	Jan. 1, 2002	Jan. 1, 2007
LR 1013			Rock Salt (Sodium Chloride) Growth Curve	Aug. 1, 1969	Jan. 1, 2002
LR 1030 LR 1032-1		H		Mar. 1, 2008 Jan. 1, 2007	Feb. 1, 2007
		H	Penetrating Emulsions Multigrade Cold Mix Asphalt	•	Feb. 1, 2007 Feb. 1, 2007
LR 1032-2 LR 1102		H	Road Mix or Traveling Plan Mix Equipment	Jan. 1, 2007 Jan. 1, 2007	1 60. 1, 2007
LATIVE		ш	noad Mix of Travelling Flath Mix Equipment	Jan. 1, 2007	

BDE SPECIAL PROVISIONS For the April 24 and June 12, 2009 Lettings

The following special provisions indicated by an "X" are applicable to this contract. An * indicates a new or revised special provision for the letting.

File Name	Pg#		Special Provision Title	<u>Effective</u>	Revised
80099	-9		Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2007
80186			Alkali-Silica Reaction for Cast-in-Place Concrete	Aug. 1, 2007	Jan. 1, 2009
80213			Alkali-Silica Reaction for Precast and Precast Prestressed Concrete	Jan. 1, 2009	, , , , , , , , , , , , , , , , , , , ,
80207	90	X	Approval of Proposed Borrow Areas, Use Areas, and/or Waste Areas Inside	Nov. 1, 2008	
00207	50	^	Illinois State Borders	11011 1, 2000	
80192			Automated Flagger Assistance Device	Jan. 1, 2008	
* 80173			Bituminous Materials Cost Adjustments	Nov. 2, 2006	April 1, 2009
50261	-		Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
5048I			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
50491			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
50531			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	Jan. 1, 2007
* 80166	91	Х	Cement	Jan. 1, 2007	April 1, 2009
80198			Completion Date (via calendar days)	April 1, 2008	
80199		-	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
* 80094	94	Х	Concrete Admixtures	Jan. 1, 2003	April 1, 2009
80193			Concrete Barrier	Jan. 1, 2008	F-11-11-11-11-11-11-11-11-11-11-11-11-11
80214			Concrete Gutter, Type A	Jan. 1, 2009	
80215			Concrete Joint Sealer	Jan. 1, 2009	
* 80226			Concrete Mix Designs	April 1, 2009	
* 80227			Determination of Thickness	April 1, 2009	
80177			Digital Terrain Modeling for Earthwork Calculations	April 1, 2007	
80029	98	X	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Nov. 1, 2008
80178	00	-^-	Dowel Bars	April 1, 2007	Jan. 1, 2008
80179	106	X	Engineer's Field Office Type A	April 1, 2007	Aug. 1, 2008
80205	100	 ^-	Engineer's Field Office Type B	Aug. 1, 2008	7 lug. 1, 2000
80175			Epoxy Pavement Markings	Jan. 1, 2007	
80173	109	X	Equipment Rental Rates	Aug. 2, 2007	Jan. 2, 2008
* 80228	103		Flagger at Side Roads and Entrances	April 1, 2009	0411. 2, 2000
* 80229			Fuel Cost Adjustment	April 1, 2009	
80169			High Tension Cable Median Barrier	Jan. 1, 2007	
80194			HMA – Hauling on Partially Completed Full-Depth Pavement	Jan. 1, 2008	
80181			Hot-Mix Asphalt – Field Voids in the Mineral Aggregate	April 1, 2007	April 1, 2008
80201			Hot-Mix Asphalt - Plant Test Frequency	April 1, 2007	April 1, 2000
80201			Hot-Mix Asphalt – Frant Test Trequency	April 1, 2008	
80136			Hot-Mix Asphalt — Transportation Hot-Mix Asphalt Mixture IL-4.75	Nov. 1, 2004	Jan. 1, 2008
80195			Hot-Mix Asphalt Mixture IL-9.5L	Jan. 1, 2008	oan. 1, 2000
80109			Impact Attenuators	Nov. 1, 2003	Nov. 1, 2008
80110			Impact Attenuators, Temporary	Nov. 1, 2003	Jan. 1, 2007
* 80230	111	Х	Liquidated Damages	April 1, 2009	0an. 1, 2007
80196	111	^	Mast Arm Assembly and Pole	Jan. 1, 2008	Jan. 1, 2009
			Material Transfer Device	June 15, 1999	Jan. 1, 2009
80045 * 80203	112	Х	Metal Hardware Cast into Concrete	April 1, 2008	April 1, 2009
200000000000000000000000000000000000000	1114		Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2007
80165 80082			Multilane Pavement Patching	Nov. 1, 2002	0an. 1, 2007
	110	X	National Pollutant Discharge Elimination System / Erosion and Sediment	April 1, 2007	Nov. 1, 2008
80180	113	^	Control Deficiency Deduction	April 1, 2007	1407. 1, 2000
			(NOTE: This special provision was previously named "Erosion and Sediment		
			Control Deficiency Deduction".)		
80208			Nighttime Work Zone Lighting	Nov. 1, 2008	
80129			Notched Wedge Longitudinal Joint	July 1, 2004	Jan. 1, 2007
80182			Notification of Reduced Width	April 1, 2007	
80069			Organic Zinc-Rich Paint System	Nov. 1, 2001	Jan. 1, 2008
80216			Partial Exit Ramp Closure for Freeway/Expressway	Jan. 1, 2009	· · · • • • • • • • • • • • • • • • • •
* 80231			Payement Marking Removal	April 1, 2009	
80022	114	Х	Payments to Subcontractors	June 1, 2000	Jan. 1, 2006
* 80235	116	X		Mar. 1, 2009	, =
ರಿ೧೯೧೨	, iu	(A)			

File Name	Pa#		Special Provision Title	<u>Effective</u>	Revised
80209	118	Х	Personal Protective Equipment	Nov. 1, 2008	***************************************
* 80232			Pipe Culverts	April 1, 2009	
80134			Plastic Blockouts for Guardrail	Nov. 1, 2004	Jan. 1, 2007
80119	119	X	Polyurea Pavement Marking	April 1, 2004	Jan. 1, 2009
80210			Portland Cement Concrete Inlay or Overlay	Nov. 1, 2008	
80170			Portland Cement Concrete Plants	Jan. 1, 2007	
80217			Post Clips for Extruded Aluminum Signs	Jan. 1, 2009	
80171	126	X	Precast Handling Holes	Jan. 1, 2007	
* 80218			Preventive Maintenance Bituminous Surface Treatment	Jan. 1, 2009	April 1, 2009
* 80219			Preventive Maintenance – Cape Seal	Jan. 1, 2009	April 1, 2009
80220			Preventive Maintenance – Micro-Surfacing	Jan. 1, 2009	
80221		L	Preventive Maintenance – Slurry Seal	Jan. 1, 2009	
80211	128	X	Prismatic Curb Reflectors	Nov. 1, 2008	
80015		ļ	Public Convenience and Safety	Jan. 1, 2000	
34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157			Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80223			Ramp Closure for Freeway/Expressway	Jan. 1, 2009	
* 80172			Reclaimed Asphalt Pavement (RAP)	Jan. 1, 2007	April 1, 2009
80183	129	X	Reflective Sheeting on Channelizing Devices	April 1, 2007	Nov. 1, 2008
* 80151	130	Х	Reinforcement Bars	Nov. 1, 2005	April 1, 2009
* 80206	132	Х	Reinforcement Bars – Storage and Protection	Aug. 1, 2008	April 1, 2009
80224			Restoring Bridge Approach Pavements Using High-Density Foam	Jan. 1, 2009	
80184	133	Х	Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay	April 1, 2007	
			Film for Highway Signs	_	
* 80233			Right-of-Entry Permit	April 1, 2009	
80131			Seeding	July 1, 2004	Jan. 1, 2009
80152			Self-Consolidating Concrete for Cast-In-Place Construction	Nov. 1, 2005	Jan. 1, 2009
80132	139	X	Self-Consolidating Concrete for Precast Products	July 1, 2004	Jan. 1, 2007
80212	141	Χ	Sign Panels and Sign Panel Overlays	Nov. 1, 2008	
80197	142	X	Silt Filter Fence	Jan. 1, 2008	
* 80127			Steel Cost Adjustment	April 2, 2004	April 1, 2009
80153			Steel Plate Beam Guardrail	Nov. 1, 2005	Aug. 1, 2007
80191	143	Χ	Stone Gradation Testing	Nov. 1, 2007	
* 80234			Storm Sewers	April 1, 2009	
80143	144	X	Subcontractor Mobilization Payments	April 2, 2005	
80075			Surface Testing of Pavements	April 1, 2002	Jan. 1, 2007
80087	145	Χ_	Temporary Erosion Control	Nov. 1, 2002	Jan. 1, 2008
80225			Temporary Raised Pavement Marker	Jan. 1, 2009	
80176			Thermoplastic Pavement Markings	Jan. 1, 2007	
20338			Training Special Provisions	Oct. 15, 1975	
80185			Type ZZ Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs	April 1, 2007	
80149	146	X	Variable Spaced Tining	Aug. 1, 2005	Jan. 1, 2007
80071	147	Х	Working Days	Jan. 1, 2002	
80204			Woven Wire Fence	April 1, 2008	

The following special provisions are in the 2009 Supplemental Specifications and Recurring Special Provisions:

<u>File Name</u>	Special Provision Title	New Location	<u>Effective</u>	<u>Revised</u>
80108	Asbestos Bearing Pad Removal	Check Sheet #32	Nov. 1, 2003	
72541	Asbestos Waterproofing Membrane and Asbestos Hot-Mix	Check Sheet #33	June 1, 1989	Jan. 2, 2007
	Asphalt Surface Removal			
80167	Electrical Service Installation – Traffic Signals	Section 805	Jan. 1, 2007	
80164	Removal and Disposal of Regulated Substances	Section 669	Aug. 1, 2006	Jan. 1, 2007
80161	Traffic Signal Grounding	Sections 873 and 1076	April 1, 2006	Jan. 1, 2007
80162	Uninterruptable Power Supply (UPS)	Sections 801, 862 and 1074	April 1, 2006	Jan. 1, 2007
80163	Water Blaster with Vacuum Recovery	Articles 783.02 and 1101.12	April 1, 2006	Jan. 1, 2007

The following special provisions require additional information from the designer. The additional information needs to be included in a separate document attached to this check sheet. The Project Development and Implementation section will then include the information in the applicable special provision. The Special Provisions are:

- Building Removal-Case I
- Building Removal-Case II
 Building Removal-Case III
 Building Removal-Case IV

- Completion Date
- Completion Date Plus Working Days
- DBE Participation
- Material Transfer Device
- Railroad Protective Liability Insurance
- Right-of-Entry Permit
 Training Special Provisions
- Working Days

STATE OF ILLINOIS SPECIAL PROVISIONS)**(

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2007, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials", in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of Access Roads, National Great Rivers Research and Education Center, Section 05-00001-00-PK, Madison County, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

DESCRIPTION OF WORK

The proposed project is located southeast of the intersection of IL Route 143 and Lock and Dam Way in the City of Alton, Madison County, Illinois.

Major items of work included in this project consists of Portland cement concrete pavement, concrete paver pavement, subgrade, base, and bedding material, sidewalk, concrete paver sidewalk, earth excavation, embankment, storm sewers, inlets, combination concrete curb and gutter, seeding, and other miscellaneous items of construction.

UTILITY ADJUSTMENTS

The following companies have facilities within the limits of this project:

Ameren CIPS 700 Oakwood Avenue P.O. Box 478 Alton, IL 62002 (618) 463-4043 (Gas) (618) 463-4051 (Electric) Charter Communications 508 Niagra East Alton, IL 62024 (618) 251-2660

City of Alton Public Works Department #2 Emma L. Kaus Lane Alton, IL 62002 (618) 463-3530 SBC Communications 203 Goethe Collinsville, IL 62234 (618) 346-6400

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Village of East Alton Water Department 610 Levee Road East Alton, IL 62024 (618) 259-4646

These utilities will require adjustment or relocation as shown on the form for Status of Utilities to be Adjusted contained within these Special Provisions.				
STATUS OF UTILITIE	S TO BE ADJUSTE	<u>D</u>		
Name and Address of Utilities	<u>Type</u>	Location	Estimated Date Relocation Completed	
There are no utility adj	ustments anticipated	i.		
convenience of the Bio	dder. The applicable	of the Department and provisions of Sections cations for Road and B		
operations, the Contra	ctor should notify the		required by the Contractor's request for an extension of vere affected.	
TRAFFIC CONTROL	<u>PLAN</u>			
Specifications for Roathe "National Manual Co	d and Bridge Constru on Uniform Traffic Co	the applicable sections uction", the applicable g ontrol Devices", these S s contained herein and	guidelines contained in Special Provisions, and	
		and 107.14 of the "Sta following Highway Sta		
701001	701301		·	
701006	701326			
701011		·		

Access Roads A, C, and D shall remain closed during the duration of the project until all roads are completed.

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Lock and Dam Way shall remain open to two way traffic to the greatest extent possible and to one lane of traffic at all times.

All lanes of Illinois Route 143 shall remain open to traffic.

In addition, the following Special Provision(s) will also govern traffic control for this project:

Traffic Control and Protection, Reflective Sheeting on Channelizing Devices

Construction and Maintenance Sign Supports

CONSTRUCTION AND MAINTENANCE SIGN SUPPORTS

All construction signs mounted on permanent support for use in temporary traffic control having an area of 10 square feet or more shall be mounted on two 4 in \times 4 in or two 4 in \times 6 in wood posts.

Type A metal post (two for each sign) conforming to Article 1006.29 of the Standard Specifications may be used in lieu of wood posts. Type A metal posts used for these signs may be unfinished.

This work shall not be measured and paid for but shall be considered included in the cost of TRAFFIC CONTROL AND PROTECTION.

TRAFFIC CONTROL AND PROTECTION

This work consists of providing all Traffic Control required to complete this project including all necessary barricades, flashers, signs, flagmen, etc.

This work shall be done according to the details shown on the plans, Sections 701 of the Standard Specifications and other special provisions herein relating to Traffic Control.

This work shall be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION.

DEPARTMENT OF THE ARMY PERMIT

Construction of this project is authorized under Permit No. P-2654 from the Department of the Army. A copy of this permit and conditions and management practices applicable to this project is attached with this Special Provision. The Contractor is required to comply with the provisions of this permit. No extra compensation shall be allowed in complying with the provisions of this permit.

TREE REMOVAL

This work consists of tree removal.

This work shall be done according to Section 201 of the Standard Specifications and as described herein.

Measurement for payment for this project shall be limited to the actual areas where brush and trees exist and are removed as shown on the plans.

Payment for this work shall be made at the contract unit price per acre for TREE REMOVAL. ACRES.

TEST PIT LOGS

Test pits were excavated at various locations to determine existing materials that will be encountered. Logs of these test pits are included in these special provisions. Test pit locations are shown on the plans. Test pit number 11 was not completed.

REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

After the tree removal and top soil stripping work is completed, any earth materials encountered within the limits of the proposed embankment or sub-grade that is deemed by the Engineer as unstable or unsuitable for embankment construction, shall be excavated and removed as directed by the Engineer.

Replacement materials shall be as directed by the Engineer and shall consist of either suitable excavated materials or sub-base granular material type B.

Payment for this work will be made at the contract unit price per cubic yard for REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL and per ton for SUB-BASE GRANULAR MATERIAL, TYPE B.

EARTH EXCAVATION

This work shall be done according to Section 202 of the Standard Specifications.

At locations where the existing gravel surface lies beneath the finished grade of the proposed subgrade, the Contractor shall scarify and recompact the existing surface prior to placing the earth embankment. At locations where the existing gravel surface lies above the finished grade of the proposed subgrade, the Contractor shall remove the existing surface. Quantities for the removal of the existing surface where necessary are included in the quantity of Earth Excavation.

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Based on the information in the test pit logs, much of the materials to be excavated are expected to consist of granular materials such as sand and crushed stone. The granular materials will not be allowed in the top 18 inches of finished surfaces to be seeded, therefore, excavated granular materials shall be used to the fullest extent possible in the embankment 18 inches below seeded surfaces and below the modified soil layer or below the porous granular embankment.

In the event that there is a surplus of excavated granular material, it shall be stock piled in an area to be designated by the Engineer located southeast of the roundabout. This stock pile will be used for future road construction and therefore only suitable embankment materials may be deposited here.

In areas to be seeded, the top 18 inches of the finished surface shall consist of earth materials suitable for seeding. Where existing gravel or rock materials are encountered in this 18 inch zone, the material shall be removed and replaced with earth material. Quantities for the removal of gravel materials where necessary are included in the quantity of Earth Excavation.

At the locations shown on the plans where pavement or sidewalk is to be constructed over an existing grass surface, the Contractor shall clear the area to remove and dispose of vegetation. The Contractor shall also strip the top 6 inches of top soil. This work shall be performed as a separate operation and the top soil shall be segregated and stock piled separately in an area between ROAD D and the existing bike trail. Quantities for the removal of the top soil, where necessary, are included in the quantity of Earth Excavation.

In the event that there is a shortage of suitable embankment material, then the Contractor shall excavate material from the existing earth stock pile located near the west end of the project site and this material shall be included in the quantity of Earth Excavation.

Payment for this work shall be made at the contract unit price per cubic yard for EARTH EXCAVATION.

EMBANKMENT

This work consists of the embankment construction required to complete the project as shown on the plans and described herein.

This work shall be done according to Section 205 of the Standard Specifications and as described herein.

The existing ground surface shall be prepared according to Article 205.03 of the Standard Specifications. Prior to placing any embankment materials, the entire subgrade under proposed pavement areas shall be proof rolled with a loaded tandem axle dump truck.

Based on Engineer's observation of the proofrolling operations, remove and replace any unsuitable materials according to the special provision for Removal and Disposal of Unsuitable Material.

Based on the information in the test pit logs, much of the materials to be excavated are expected to consist of granular materials such as sand and crushed stone. The granular materials will not be allowed in the top 18 inches of finished surfaces to be seeded, therefore, excavated granular materials shall be used to the fullest extent possible in the embankment 18 inches below seeded surfaces and below the modified soil layer or below the porous granular embankment.

At locations where fly ash modified soil is shown in fill areas, the soil material to be used shall come from the existing earth stock pile located near the west end of the project site. Material used from this stock pile will be included in the quantity of Earth Excavation.

In areas to be seeded, the final 18 inches of embankment material shall be made with earth materials suitable for final grading and seeding. The top soil material that was stripped and stock piled in the initial earth excavation operation shall be placed on surfaces of areas to be seeded.

All embankments constructed for this project regardless of embankment height or location shall be compacted to not less than 95 percent of the standard laboratory density and in addition to this, all layers of the embankment shall be stable without excessive rutting or pumping. If the embankment shows signs of rutting or pumping, then the Contractor shall reduce the moisture content by discing or processing to allow the embankment material to dry. The Contractor may use additives to effect a quicker drying process, however, chemical stabilization additives will not be allowed under permeable pavement or permeable sidewalk.

This work shall not be paid for separately.

FURNISHED EXCAVATION

This item is included and only to be used in the event that there is a shortage of on-site suitable embankment materials to complete the project.

In the event this item is needed, this work shall be done according to Section 204 of the Standard Specifications.

In order to be approved for use as embankment material, embankment must meet all applicable requirements of Sections 202, 203, 204, 205, and 502 of the Standard Specifications and meet the following requirements:

1. It must fall in one of the following Highway Research Classifications: A-4, A-6, or A-7-6.

- 2. It shall have a Liquid Limit of 49 or less.
- 3. Any A-4, A-6, or A-7-6 material to be used as furnished excavation for embankment construction shall not have an organic content greater than 7%.
- 4. Classification of the material for points 1 and 2 shall be determined in accordance with the latest AASHTO Designation: M 145.
- 5. When tested for density in place, any soil classified as an A-4 shall not contain more than 100% of optimum moisture content determined according to AASHTO T-99.

The top 18 inches of surfaces to be seeded shall be constructed with earth materials of a classification that will support vegetation and having a plasticity index of 12 or greater.

This work shall be paid for at the contract unit price per cubic yard for FURNISHED EXCAVATION.

SEEDING

All earth areas within the construction limits which have been disturbed by construction shall be seeded with the seeding mixture as shown on the landscaping plan.

This work shall be done according to Section 250 of the Standard Specifications and as described herein.

The following seeding classes shall be used:

Seeding, Class 4A (Modified)

Botanical Name	Common Name	Pure Live Seed Application Rate Ibs./Acre
Andropogon gerardii	Big Bluestem	3
Bouteloua curtipendula	Side-Oats Gramma	2
Carex sparganioides v. cephaloidea	Rough-Clustered Sedge	0.25
Elymus canadensis	Canada Wild Rye	2
Panicum virgatum	Switch Grass	0.5
Schizachyrium scoparium	Little Bluestem	2
Sorghastrum nutans	Indian Grass	2
Avena sativa	Common Oat	32
Lolium multiflorum	Annual Rye	14

Fertilizer and agricultural ground limestone will not be required.

Seeding, Class 4 (Modified)

Botanical Name	Common Name	Pure Live Seed Application Rate Ibs./Acre
Bouteloua curtipendula	Side-Oats Gramma	2.6
Carex sparganioides v. cephaloidea	Rough-Clustered Sedge	0.5
Elymus canadensis	Canada Wild Rye	2.6
Schizachyrium scoparium	Little Bluestem	3
Sporobolus heterolepsis	Prairie Dropseed	3
Avena sativa	Common Oat	32
Lolium multiflorum	Annual Rye	14

Fertilizer and agricultural ground limestone will not be required.

Seeding, Special

Botanical Name	Common Name	Pure Live Seed Application Rate
		lbs./Acre
Festuca arundinacea	Tall Fescue	225

Fertilizer and agricultural ground limestone is required and shall be applied at the rate specified in Article 250.04 of the Standard Specifications.

In areas with cellular confinement system, geoblock polyethylene porous pavement system and geoblock 2 polyethylene porous pavement system, the seed bed preparation and application of the seed shall be done by hand raking. Disks and power equipment will not be allowed to prevent damage to the reinforcing materials.

This work shall be paid for at the contract unit price per acre for SEEDING, CLASS 4A (MODIFIED); SEEDING, CLASS 4 (MODIFIED); and SEEDING, SPECIAL.

MULCH (SPECIAL)

This work consists of mulching of all seeded surfaces, including Seeding Class 4A (Modified), Class 4 (Modified) and Seeding, Special.

This work shall be done according to Section 251 of the Standard Specifications and as described herein.

Method 3 hydraulic mulch shall be used. The mulch material to be used shall meet the requirements of Article 1081.06 and shall consist of a blend of both wood and paper fibers and shall consist of a minimum of 30% recycled materials. A chemical mulch binder shall be used meeting the requirements of Article 1081.06 (a)(3).

Payment for this work shall be made at the contract unit price per acre for MULCH (SPECIAL).

INLETS

Storm sewer pipe connections at all inlets and manholes shall be sealed on both the outside and the inside of the structure with a Class SI Concrete collar. In addition a Class SI Concrete wash shall be poured in the bottom of the structure providing a channel with a half circle cross-section of the same diameter of the storm sewer pipe.

This work shall be considered included in the cost of the inlet and no additional payment will be made.

INLET BOX, SPECIAL

This work consists of constructing special inlet boxes as shown on the plans. This work shall be done according to Section 602 of the Standard Specifications and the details shown on the plans.

Special cast iron frame and grates to be used shall be similar to a frame and lid type 5 in accordance with Highway Standard 604021 except that the frame shall be cast into the top of the inlet box.

Payment for this work shall be made at the contract unit price per each for INLET BOX, SPECIAL.

INLETS, TYPE 3V FRAME AND GRATE, SPECIAL

This work consists of the construction of precast concrete storm sewer inlets as shown on the plans.

This work shall be done according to Section 602 of the Standard Specifications.

A type 3V frame and grate shall be used in accordance with Highway Standard 604011 except that the curb box shall have an open mouth (or throat) free of any metal grating or restriction.

This work shall be paid for at the contract unit price per each for INLETS, TYPE A, TYPE 3V FRAME AND GRATE, SPECIAL and INLETS, TYPE B, TYPE 3V FRAME AND GRATE, SPECIAL.

INLETS, WITH SPECIAL FRAME AND GRATE

This work consists of the construction of precast concrete storm sewer inlets as shown on the plans.

This work shall be done according to Section 602 of the Standard Specifications.

Frames and grates shall conform to the details in the plans.

This work shall be paid for at the contract unit price per each for INLETS, of the type specified, WITH SPECIAL FRAME AND GRATE.

SEEPAGE COLLAR

This work shall consist of constructing a concrete seepage collar on the discharge pipe of the detention basin.

The seepage collar shall be constructed of Class SI concrete as shown in the detail on the plans.

This work shall be paid for at the contract unit price per each for SEEPAGE COLLAR.

PORTLAND CEMENT CONCRETE

All cast in place and precast Portland cement concrete used for this project, shall use 15% or more fly ash as allowed by Section 1020 of the Standard Specifications. Mix designs for all concrete used on the project shall be submitted to the Resident Engineer.

PORTLAND CEMENT CONCRETE PAVEMENT (SPECIAL)

This work consists of the construction of Portland cement concrete pavement as shown on the plans.

All references to Sections or Articles in this specification shall be construed to mean a specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

All work shall be according to Section 420 and applicable provisions of Section 606 except as follows:

420.03 <u>Equipment</u>. The following equipment will not be required:

- (c) Mechanical Concrete Spreader
- (d) Mechanical Longitudinal Float

Add the following paragraph to this Article:

"The subgrade template shall be of a design approved by the Engineer and shall be capable of accurately indicating high and low spots in the subgrade with relation to the side forms."

420.04 <u>Preparation of Subgrade or Subbase</u>. Revise the third paragraph of Article 301.06 to read:

"The subgrade shall be brought to true shape by means of a subgrade planer, subgrade machine, and/or other methods approved by the Engineer according to the following:"

Add the following subparagraph (c) to Article 301.07:

"(c) Other methods when approved by the Engineer."

420.05 Joints. Add the following to subparagraph (a) and (b) of Article 420.05:

"Longitudinal construction joints conforming to the details shown on the plans will be permitted at any longitudinal joint location."

Add the following paragraph to subparagraph (c)(2) of this Article:

"The requirement for load transfer assemblies will be a shown on the plans."

Revise subparagraph (e) of this Article to read:

"Transverse Construction Joints. Transverse construction joints shall be constructed in accordance with the details shown on the plans. Transverse construction joints that occur at regular construction joints shall be keyed but not tied, and the thickness of the pavement for a distance of 600 mm (2 feet) in each direction from the joint shall be not less than 200 mm (8 inch). Joints that the contractor makes within the limits of a contraction panel shall be tied with deformed tiebars."

420.09 <u>Strike Off, Consolidation, and Finishing, Longitudinal Floating, Straitedging, Edging, and Final Finish.</u>

Revise the first sentence of subparagraph (b)(3) of this Article to read:

"This method may be used when approved by the Engineer."

Fifteen percent or more fly ash shall be used as allowed by Section 1020 of the Standard Specifications.

A textured surface shall be used as shown on the plans for the truck apron in the roundabout. In order to match textured concrete surfaces constructed by others in the

adjacent building construction, the Contractor shall use Bomanite, River Rock (4" to 6") pattern. No color shall be used. The textured concrete shall be installed by an installer with a minimum of three years of documented experience with Bomanite/Bomacron.

420.19 <u>Method of Measurement</u>. Revise the first paragraph of subparagraph (b) of Article 420.19 to read:

"Portland cement concrete pavement (special) will be measured in place and the area computed in square meters (square yards) completed and accepted. The width for measurement shall be the width from the outsides of the completed pavement, including integral curb when required, as shown on the plans or as directed by the Engineer."

Article 1103.13 Finishing Machine. Revise Article 1103.13 to read:

"The finishing machine shall be of a type approved by the Engineer, shall be self-propelled and shall be capable of striking off, consolidating and finishing concrete of the consistency required by the specifications to the proper crown and grade."

This work shall be paid for at the contract unit price per square yard for PORTLAND CEMENT CONCRETE PAVEMENT 7" (SPECIAL), PORTLAND CEMENT CONCRETE PAVEMENT 7" (SPECIAL, TEXTURED), PORTLAND CEMENT CONCRETE PAVEMENT 8" (SPECIAL).

CLASS D PATCHES

This work consists of patching the existing bike trail pavement over a storm sewer trench.

This work shall be done according to Section 442 of the Standard Specifications.

The thickness of pavement patch shall be 4 inches.

Payment for this work shall be made at the contract unit price per square yard for CLASS D PATCHES of the type specified.

GEOBLOCK POLYETHYLENE POROUS PAVEMENT SYSTEM

This work shall consist of installing a vegetated porous pavement system. The system shall be Geoblock GBM-5150 as manufactured by Presto Products Company and is considered an experimental feature on this project. The Contractor shall submit complete manufacturers product data and installation instructions. The installation shall be done according to this special provision and the manufacturers' installation instructions.

Material Properties

Material
Color
Chemical Resistance
Carbon Black for Ultraviolet Light Stabilization
Unit Minimum Crush Strength @ 21°C (70°F)
Material Flexural Modulus at 23°C (73°F)
Dimensions (width x length)
Unit Depth
Coverage Area
Cells per Unit
Cell Size
Top Open Area per Unit

Dimensions (width x length)
Unit Depth
Coverage Area
Cells per Unit
Cell Size
Top Open Area per Unit
Bottom Open Area per Unit
Interlocking Offset Shear Transfer Tabs
Nominal Weight per Unit
Runoff Coefficient @ 63.5 mm/hr (2.5 in) Rainfall
Units per Pallet

Up to 100% Recycled Polyethylene Dark shades of gray to black Superior 1.5% - 2.0% 2,900 kPa (420 psi) 240,000 kPa (35,000 psi) 0.50 m x 1.00 m (1.64 ft x 3.28 ft) 50 mm (1.97 in) 0.50m² (5.38 ft²) 72 79 mm x 81 mm (3.1 in x 3.2 in) 87% 40% 1 tab for each peripheral cell 4.49 kg (9.9 lb) 1.5%

Subgrade Preparation

Excavate the area, allowing for the Geoblock unit thickness and the required base depth. When working with in-situ soils that have poor permeability, provide adequate drainage from the excavated area if the area has the potential to collect water. The in-situ soil should be relatively dry and free from any standing water.

50

Orientation and Laying Pattern of Units

Place the Geoblock units with the round hole to the ground. For best performance under traffic loading, stagger the units such that the long direction of the unit is perpendicular to the direction of traffic as in the bricklayer pattern. The staggered pattern is developed by using half Geoblock units made by field cutting a full unit and placing the units in the pattern. Cut the units with a hand or power saw to custom fit both contours and/or around obstructions. Final seam pattern should be such that seams perpendicular to traffic flow are straight and seams parallel to traffic flow are staggered. This assures maximum load transfer and support.

All seams shall be butted tight and square. No deflections will be allowed at joints. The outer edge units shall be cut to conform to curves.

Positioning of Units

Place the first row of Geoblock units against a stationary edge when available. Slide the units together so that the interlocking tab joint is fully engaged. Units should be placed such that corners and seams do not protrude above the desired surface elevation.

Anchoring Units

The Geoblock units can be fixed in-place to prevent the units from shifting during installation with optional wood or metal stakes, or, by placing thread-forming tapping screws or nails through the perimeter interlocking tabs. This may be needed if 1) construction traffic causes movement of the units during the installation process or 2) large temperature changes occur during the installation process.

Plastic has a relatively high rate of thermal expansion. Joint separation occurring from large temperature fluctuations is normal. Rejoining of the Geoblock units should be considered normal construction practice. Once a healthy turf is developed, thermal expansion is minimal since the root system provides all necessary anchoring of the system.

Infilling the Units

Infill the Geoblock units with a suitable on site topsoil. Infilling should take place immediately after the units are installed to minimize the potential of joint separation caused by thermal expansion/contraction. Spread the topsoil infill uniformly over the units to a level even with the top of the cell wall. Do not overfill the Geoblock cells. Use spreading methods that will leave the cell infill uncompacted. Overfilling the cells is not recommended since vehicular loading will result in compaction of the topsoil.

Seeding

The units shall be seeded according to the special provision for seeding.

This work shall be paid for at the contract unit price per square yard for GEOBLOCK POLYETHYLENE POROUS PAVEMENT SYSTEM. Seeding shall be paid for according to the special provision for SEEDING.

GEOBLOCK 2 POLYETHYLENE POROUS PAVEMENT SYSTEM

This work shall consist of installing a vegetated porous pavement system. The system shall be Geoblock 2 as manufactured by Presto Products Company and is considered an experimental feature on this project. The Contractor shall submit complete manufacturers product data and installation instructions. The installation shall be done according to this special provision and the manufacturers' installation instructions.

Material Properties

Material
Color
Carbon Black for Ultraviolet Light Stabilization
Nominal Dimensions (width x length)
Nominal Unit Depth
Nominal Coverage Area

Up to 97% Recycled Polyethylene* Variant Color; Dark shades of gray to black 1.5% - 2.0% 0.50 m x 1.0 m (20 in x 40 in) 30 mm (1.2 in) 0.50m² (5.38 ft²)

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Cells per Unit 128 (8 x 16 cells)

Cell Size 57 mm x 57 mm (2.25 in x 2.25 in)

Top Open Area per Unit 88% Bottom Open Area per Unit 56%

Weight per Unit (nominal) 2.1 kg (4.7 lb)

Runoff Coefficient @ 63.5 mm/hr (2.5 in) Rainfall 1.5% 92

Units per Pallet

End-to-end or side-to-side warpage of the Geoblock 2 unit shall not be greater than 6 mm (0.5 in).

* The percentage of recycled content may vary depending on availability of recycled materials.

Subgrade Preparation

Excavate the area, allowing for the Geoblock 2 unit thickness and the required base depth. When working with in-situ soils that have poor permeability, provide adequate drainage from the excavated area if the area has the potential to collect water. The insitu soil should be relatively dry and free from any standing water.

Orientation and Laying Pattern of Units

The Geoblock 2 units are placed with the square hole to the ground. The laying pattern is bricklayer. Other laying patterns shall not be used.

Positioning of Units

Place the first row of Geoblock 2 units against a stationary edge when available. If the units are placed between two perpendicular or near-perpendicular stationary edges (i.e. two parallel concrete curbs) allow for potential thermal expansion of the Geoblock 2 units by keeping the units away from the stationary edge. Slide the units together so that the interlocking tab joint is fully engaged.

All seams shall be butted tight and square. No deflection will be allowed at joints. The outer edge units shall be cut to conform to curves.

Anchoring Units

The Geoblock 2 units shall be fixed in-place to prevent the units from shifting during installation with metal stakes through the perimeter units, and by placing thread-forming tapping screws through the perimeter interlocking tabs.

The Geoblock 2 polyethylene stabilized with carbon black and has a relatively high rate of thermal expansion. Joint separation occurring from large temperature fluctuations is normal. Therefore, rejoining of the Geoblock 2 units should be considered normal construction practice.

The rate of thermal expansion is approximately 1.7% per 100°F (55°C). Based on the temperature of the Geoblock 2 unit exposed to full sunlight for several hours, a temperature gain of 60-70°F (33-38°C) is typical. As a result, a compensation of 1.375 in (34 mm) could be applied for each 10 ft (3 m) increment of length.

Grout Fill

The outer two cells shall be filled with a white colored nonshrink grout for delineation. The nonshrink grout shall meet the requirements of Section 1024 of the Standard specifications and shall use white cement or white coloring to achieve a white color.

Infilling the Units

Infill the units with infill material immediately after the units are installed to minimize the potential of joint separation or upward buckling caused by thermal expansion/contraction. Infill the Geoblock 2 units with on site topsoil. Use spreading methods that will leave the cell infill uncompacted. Overfilling the cells is not recommended since vehicular loading will result in compaction of the topsoil.

Seeding

The units shall be seeded according to the special provision for seeding.

This work shall be paid for at the contract unit price per square yard for GEOBLOCK 2 POLYETHYLENE POROUS PAVEMENT SYSTEM. Seeding shall be paid for according to the special provision for SEEDING.

CELLULAR CONFINEMENT SYSTEM

This work consists of the installation of a perforated polyethylene cellular confinement system to add strength to a soil mixture. The system shall be Geoweb 20V61003 as manufactured by Presto Products Company and is considered an experimental feature on this project. The Contractor shall submit complete manufacturers product data and installation instructions. The installation shall be done according to this special provision and the manufacturers' installation instructions.

Material Properties

Base Material

- Material Composition Polymer Polyethylene with density of 58.4 60.2 lb/ft³
- Color -- Black -- from Carbon Black
- Stabilizer Carbon black content 1.5% to 2% by weight.
- Minimum ESCR 3,000 hr

Strip Properties

Sheet Thickness – 50 mil – 5% to 10%

- Surface Treatment the polyethylene strips shall be perforated. The quantity of perforations shall remove 19.6% ± 3% of the cell wall area.
- Strip Length = 142 inches

Cell & Seam Properties

- Cell Details Cell Depth 6 inches
- Cell Length 8.8 inches; Width = 10.2 inches
- Density: 28.9 per square yard
- Nominal Area 44.8 square inches
- Short-Term Seam Peel Strength 480 lbf
- Long-Term Seam Peel Strength A 4 in. wide seam sample shall support a 160 lb load for a period of 168 hours (7 days) minimum in a temperature-controlled environment undergoing a temperature change on a 1-hour cycle from ambient room to 130°F. Ambient room temperature is per ASTM E 41.

Section Properties

• Section Width Variable - 7.7 ft to 9.2 ft

Weld Spacing = 14 inches ± 0.10 inch

Stakes

• Steel J-pin stakes shall be fabricated from mild steel or reinforcing steel rod. Each stake shall have a minimum radius, 180-degree return at one end. Rod diameter shall be 0.375 inch. Stake length shall be 18 inches.

Subgrade Preparation

Excavate the area, allowing for the depth of the confinement system. Compaction of the subgrade shall be to the satisfaction of the Engineer.

Installation

Expand the confinement section into position and anchor with stakes. Installing sections on curves can be done by 2 methods. Method 1: Sections can be adapted to cover the curved areas by varying the degree of cell expansion across the width of individual sections. Method 2: Progressively vary the degree of cell expansion along the length of a section. Connect sections by interleafing sides and abutting ends of adjoining sections, ensuring that the upper surfaces of adjoining sections are flush. Connect each of the interleaved and abutted cells with a series of staples per manufacturer requirements.

Placement of Infill

Infill shall consist of a mixture of aggregate and topsoil. The material shall meet the requirements of the special provision AGGREGATE BASE COURSE, SPECIAL.

Place fill into expanded cells with suitable material handling equipment such as a frontend loader or excavator. Limit drop-height of infill material to a maximum of 3 feet.

Overfill sections at least 2 inches above the cell walls before trafficking or compacting. Compact infill material with conventional compaction equipment. Compaction shall be to the satisfaction of the Engineer.

Seeding

The units shall be seeded according to the special provision for SEEDING.

This work will be paid for at the contract unit price per square yard for CELLULAR CONFINEMENT SYSTEM. Infill will not be paid for separately but shall be included in the contract unit price per square yard for CELLULAR CONFINEMENT SYSTEM.

Seeding will be paid for according to the special provision SEEDING.

AGGREGATE BASE COURSE, SPECIAL

This work will consist of placing a mixture of aggregate and topsoil as a base.

The aggregate base is a homogenous mixture consisting of 1) a clear-stone/crushed rock having an AASHTO #5 or similar designation blended with 2) on site topsoil.

The aggregate portion shall have particles ranging in size from 0.375 to 1.0 inch with a D_{50} of 0.5 inch. The percentage void-space or the aggregate portion when compacted shall be at least 30%. Topsoil, equal to but not exceeding the aggregate void percentage, shall be added and blended to produce a homogenous mixture prior to placement. Once placed, the mixture shall be compacted to a density that will produce a California Bearing Ratio (CBR) of 7% minimum.

This work shall be paid for at the contract unit price per square yard for AGGREGATE BASE COURSE, SPECIAL.

CONCRETE PAVER PAVEMENT AND CONCRETE PAVER SIDEWALK

PART 1 – GENERAL

1.01 SECTION INCLUDES

A. This work shall consist of constructing pavement and sidewalk composed of permeable concrete pavers, on a prepared subgrade, base and bedding.

1.02 DEFINITIONS

- A. <u>Base Course</u>: Layer of open-graded aggregate beneath the bedding course layer, comprised of small- to medium-particle-sized crushed stone (typically 1/2" to 1"). Recommended depth of the sub-base layer shall be four inches (4"), but shall not exceed six inches (6").
- B. <u>Bedding Course</u>: Layer of open-graded aggregate directly beneath the unit pavers, comprised of small particle-sized stone chips (typically ½" to 3/8" rock). Also commonly called the "setting bed". Recommended depth of the bedding course layer shall be two inches (2").
- C. <u>Bundle</u>: Several layers of paver clusters stacked vertically, packaged, and tagged for shipment. Also commonly called a "cube".
- D. <u>Chamfer</u>: A 45 degree beveled edge around the top of a paver unit, usually 1/8" to ¼" wide. It facilitates snow removal, helps prevent edge chipping, and delineates the individual paver units.
- E. <u>Cluster</u>: The group of pavers forming a single layer taken from a bundle of pavers or the group of pavers held by the clamp of a paver laying machine.
- F. <u>Flats</u>: The portion of the vertical side faces of a paver other than the spacer bars.
- G. <u>Laying Face</u>: The working edge of the pavement where the laying of pavers is occurring.
- H. <u>Mechanical Installation</u>. The use of specialized machines to lift clusters of pavers from the bundles and place them on the prepared bedding course. These specialized machines are designed specifically for this application.
- I. <u>Method Statement</u>: The paver installer's and manufacturer's plan for construction and quality control of the pavers.
- J. <u>Spacer Bars</u>: Small protrusions on each side of pavers which are used to keep them uniformly spaced while minimizing chipping and spalling. Mechanically installed pavers must have spacer bars.
- K. <u>Sub-base Course</u>: Layer of open-graded aggregate beneath the base course layer, comprised of large particle-sized stone (typically 2-1/2" to 3" fractured rock). Depth shall vary depending upon site conditions and specific requirements. Minimum depth of the sub-base course shall be twelve inches (12").
- L. <u>Void Filler</u>. Open-graded aggregate used to fill the openings in the paver units. The bedding course aggregate may be used as the void filler. Smaller particle-sized stone chips (1/8" to 1/4") are preferable, if available.

M. Wearing Course: The top surface of the paver surrounded by a chamfer.

1.05 SUBMITTALS

A. Submit the following:

- 1. The dimensions of the manufacturer's proposed mold assembly including pattern, dimensions of all cavities including radii, spacer bars and the top portion of the mold known as the head or shoe.
- 2. The Method Statement.
- 3. The Quality Control Plan.
- 4. Material samples of pavers, void filler aggregate, bedding course aggregate, base and sub-base course aggregate, including a current sieve analysis of each showing conformance to the specifications.
- 5. A detailed description of the manufacturer's quality control procedures.
- 6. Examples of the manufacturer's record-keeping forms.
- 7. Examples of the installer's record-keeping forms.
- 8. Certified test results from an independent testing lab showing the solar reflectance index (SRI).

1.06 QUALITY ASSURANCE

A. Quality Control Plan

The installer and manufacturer shall establish, provide and maintain a quality control plan. The quality control plan shall provide reasonable assurance that the materials and completed construction submitted for acceptance will conform to the contract requirements. Although guidelines are established and certain requirements are specified, they are minimal, and the installer and manufacturer shall assume full responsibility for meeting all requirements.

The installer and manufacturer shall agree upon a method for measuring the clusters at the factory and in the field. That method shall be submitted in writing to the owner for approval.

The Quality Control Plan shall contain at a minimum, but not limited to, the following elements:

1. The manufacturer's quality control procedures.

- 2. The manufacturer's production records showing at a minimum the date of manufacture, a mix design designation, mold number, mold cycles, and sequential pallet numbers. Copies of such records shall be made available to the owner upon request.
- 3. A description of the anticipated growth in the cluster size and a plan for managing the growth so as to not interfere with placement by paving machine(s), if mechanically installed.
- 4. The installer's quality control procedures, including but not limited to, dimensional control methods, paving machine(s) head adjustment, typical daily work schedule to insure that all pavers placed on the bedding course on any given day are adjusted as required and vibrated, and installation of void filler completed at the end of that work day.
- 5. Provision for identifying and recording actual daily production and the bundle numbers of pavers used in each day's installation.

B. Sampling and Testing

The manufacturer shall employ an independent testing company, qualified to undertake tests in accordance with the applicable standards specified herein. Test results shall be provided to the installer and the owner, upon request.

Pavers shall be checked for density and dimensional variation, compressive strength (ASTM C140), density and absorption (ASTM C140) and abrasion resistance (ASTM C418).

- 1. The initial testing frequency shall be one set of tests for each 100,000 full-sized pavers delivered to the site or at any time a change in the manufacturing process, mix design, cement, aggregate or other material occurs.
- 2. The following number of full-sized pavers shall be randomly sampled for each test: five (5) for dimensional variation; three (3) for density and absorption; three (3) for compressive strength; and three (3) for abrasion resistance.
- 3. If all pavers tested pass all requirements for a sequence of 400,000 pavers, then the testing frequency may be relaxed to one set of tests for each 200,000 full-sized pavers. If any pavers fail any of the required tests, then the testing frequency shall revert to the initial testing frequency.
- 4. When any of the individual test results fail to meet the specified requirements, the cluster of pavers represented by that test sample

shall be rejected. The manufacturer shall provide additional testing from both before and after the rejected test sample to determine the sequence of the paver production run that should be considered unacceptable.

- 5. Additional testing, as described above, shall be carried out at no additional expense to the owner. The sequence of pavers found to be defective shall, if they have been delivered to the site, be removed from the site promptly at no expense to the owner or installer.
- 6. Pavers shall be sound and free from defects that would interfere with the proper placing of the pavers or impair the strength or performance of the construction.

C. Method Statement

The installer and manufacturer shall prepare a Method Statement describing the overall plan to complete the work. This plan shall include at a minimum:

- 1. The quality control plan.
- 2. A description of the anticipated mold life, rate and effect of mold wear on pavers produced, individual mold runs, and a mold rotation plan.
- 3. Clear diagrams showing the proposed starting point of the installation, the proposed direction of installation, progress on a week-by-week basis, and the dimensional controls to be used to maintain specified joint width and straight joint lines.
- 4. A method of measuring the clusters at the factory and in the field.
- 5. A description of the anticipated growth in cluster size due to mold wear and a plan for dealing with that growth or other dimensional variances.
- 6. A description of the personnel and equipment to be employed for each portion of the work including manufacture, installation and quality control.
- 7. The manufacturer's proposed production rate and mold life for this project and supply data demonstrating experience on similar past projects. Installer shall state the proposed daily installation rate.
- 8. The installer's intention to machine-lay or hand-lay the pavers and provide qualifying experience to date for the appropriate method of proposed installation.

D. Qualifications

Every manufacturer and installer shall demonstrate that they have supplied and/or installed ecological pavers for projects of a similar nature, with regard to installation and production capacity of at least 300,000 square feet.

Paver Manufacturer's Qualifications

- 1. The producer must be on the IDOT approved list of certified precast concrete producers for concrete pavers.
- 2. The manufacturer shall demonstrate a minimum of 5 years successful experience in the manufacture of interlocking concrete block pavers.
- 3. The manufacturer shall have sufficient production capacity and established quality control procedures to produce, transport, and deliver the required number of pavers with the quality specified, without causing a delay to the work.
- 4. The manufacturer shall have suitably experienced personnel and a management capability sufficient to produce the number of quality pavers as depicted on the contract drawings and as specified herein.

Paver Installer's Qualifications

- Installers shall be required to provide installation history, including references in writing with contact information, demonstrating to the satisfaction of the owner their ability to perform the paver installation and related work indicated in the plans and specifications.
- 2. The installer shall have suitably experienced personnel and a management capability sufficient to execute the work shown on the contract drawings and specified herein.
- 3. The installer's foreman shall demonstrate, including references, a minimum of 5 years experience in the installation of unit paver systems similar in size and nature to this project.

1.07 DELIVERY, STORAGE AND HANDLING

1. Concrete paving stones shall be delivered to the site, with or without pallets, in such a way that no damage occurs to the product during hauling and unloading.

- 2. All pavers shall be delivered to the site in approximately the chronological order in which they were manufactured. They shall be staged on the site, as per the method statement.
- 3. Each bundle of pavers shall be marked with a weather-proof tag identifying at a minimum the manufacturer, the date of manufacture, the mold number, the project name and phase for which the pavers were manufactured and the sequential bundle number.

PART 2 - PRODUCTS

2.01 CONCRETE PAVERS

- A. All interlocking paving stones shall comply with the quality specifications for solid concrete interlocking paving units as required per ASTM C 936.
 - 1. Portland Cement: Conform to ASTM C 150.
 - 2. <u>Aggregates</u>: Conform to ASTM C 33 for normal weight concrete aggregate (no expanded shale or lightweight aggregate) except that grading requirements shall not necessarily apply.
 - 3. Water. Clean and free from any deleterious matter.
 - 4. <u>Other Constituents</u>: Air-entraining admixtures, integral water repellents and finely ground silica shall have a proven record of performance and shall conform to the relevant ASTM standards.
 - 5. <u>Compressive Strength</u>: At the time of delivery to the work site, the average compressive strength of the pavers shall not be less than 8,000 psi, with no individual unit less than 7,200 psi. Testing procedures shall be in accordance with ASTM C 140 specifications.
 - 6. <u>Absorption</u>: The average absorption shall not be greater than five percent (5%), with no individual unit result greater than seven percent (7%) per ASTM C 140 specifications.
 - 7. <u>Resistance to Freezing and Thawing</u>: The manufacturer shall satisfy the purchaser by laboratory testing that the paving units have adequate resistance to freezing and thawing per ASTM C 67-83 specifications. The specimens shall have no breakage and not greater than one percent (1%) loss in dry weight of any individual unit when subjected to 50 cycles of freezing and thawing.
 - 8. <u>Dimensional Tolerances</u>: Pavers shall be prismatic in plan and formed with straight, uniform edges. The tolerance for the flat portions of the sides shall not exceed 1/32" as measured with a steel straight edge. "Slumped" pavers exceeding this tolerance will be rejected. The length,

width and thickness of the paving stones shall meet the allowable tolerances specified in ASTM C 936.

- 9. <u>Color</u>. All pavers used on this project shall be a light color having a solar reflectance index (SRI) of greater than 29 but less than 45 in order to meet the LEED requirement SS 7.1 Heat Island Effect Non-Roof. The color shall be selected by the Owner.
- 10. No paver shall be used for this project which has been manufactured in a mold that exceeds the mold life specified in the Method Statement, without written approval of the installer and owner.
- 11. The measurement across a cluster for any mold shall not increase more than ½" for the entirety for the use of the mold for this project.
- 12. <u>Concrete Paver Pavement</u>: These units shall be permeable interlocking concrete pavers and shall have the nominal dimensions of 5"x10"x3 1/8". These units shall be considered pedestrian friendly and surface openings shall not exceed ½ inch.
- 13. Concrete Paver Sidewalk: These units shall be permeable interlocking concrete pavers and shall have the nominal dimensions of 5"x10"x2 3/8". These units shall be considered pedestrian friendly and surface openings shall not exceed ½ inch. The Contractor may substitute thicker units and reduce the thickness of the bedding layer by a corresponding amount. Concrete pavers with precast truncated domes shall be used for all detectable warnings located in the sidewalk ramps. Each paver shall have 8 truncated domes and a nominal dimension of 5"x10"x1 3/4".

2.02 VISUAL INSPECTION

All units shall be sound and free of defects that would interfere with the proper placing of the unit or impair the strength or permanence of the construction. Minor cracks incidental to the usual methods of manufacture, or minor chipping resulting from customary methods of handling in shipment, delivery and installation, shall not be deemed grounds for rejection.

2.03 AGGREGATE MATERIALS

A. Bedding Course and Void Filler Aggregate (Porous Granular Embankment, Bedding 2" and Porous Granular Capping Material)

This material shall meet the requirements of Section 1004 of the Standard Specifications. The bedding course and void filler aggregate shall be free of organics and soluble salts, or other contaminants likely to cause efflorescence. The grading requirement shall be in compliance with the following gradation chart or shall conform to IDOT gradation CA 16.

ASTM Sieve Size	Percent Passing (by weight)
1/2 inch	100 – 100
3/8 inch	94 – 100
1/4 inch	39 – 94
No. 4	23 – 39
No. 8	8 – 23
No. 16	0 - 8

B. Base Course Aggregate (Porous Granular Embankment, Base 4")

This material shall meet the requirements of Section 1004 of the Standard Specifications. The base course aggregate shall consist of open-graded stone and meet the following gradation chart or shall conform to IDOT gradation CA-7.

ASTM Sieve Size	Percent Passing (by weight)
1-1/2 inch	100 – 100
1 inch	90 – 100
3/4 inch	48 – 90
½ inch	27 – 48
½ inch	12 – 27
No. 4	0 – 12

C. Sub-Base Course Aggregate (Porous Granular Embankment, Subgrade 12")

This material shall meet the requirements of Section 1004 of the Standard Specifications. The sub-base course aggregate shall consist of open-graded stone and meet the following gradation chart or shall conform to IDOT gradation CA-1.

ASTM Sieve Size	Percent Passing (by weight)
4 inch	100 – 100
3 inch	80 – 100
2-1/2 inch	50 – 80
2 inch	20 – 50
1-1/2 inch	5 – 20
1 inch	0 – 5

PART 3 – EXECUTION

3.01 SUBGRADE

A. The subgrade shall be prepared according to Section 301 of the Standard Specifications and shall be stable without excessive rutting or pumping.

3.02 FILTER FABRIC

A. Filter fabric shall be placed according to Section 210 of the Standard Specifications except that the fabric shall be Filter Fabric according to Article 1080.03 of the Standard Specifications.

3.03 SUB-BASE COURSE

- A. The sub-base course shall be placed on the filter fabric according to Article 210.04 of the Standard Specifications.
- B. The sub-base course shall consist of a minimum thickness of twelve inches (12") and be compacted using a vibratory smooth-drum roller. It shall be installed in lifts not to exceed six inches (6"). Upon completion of the sub-base course installation, the area shall be proof-rolled using a heavy rubber-tired vehicle (such as a loaded tandem truck) to identify any areas requiring additional compaction. The sub-base course shall be installed to the elevation and cross-section per the plan documents.

3.03 EDGE RESTRAINTS

A. All edge restraints shall be constructed as shown on the plans and in place prior to the installation of the base course, bedding course and pavers. Poured-in-place concrete curbs are recommended for the Bio-Aquifer Storm System.

3.04 BASE COURSE

A. The base course shall consist of a thickness of four inches (4"), placed in one lift, and be compacted using a vibratory smooth-drum roller until there is no visible movement of aggregate under static rolling. The base course shall be installed to the elevation and cross-section per the plan documents.

3.05 BEDDING COURSE

- A. The bedding course shall be spread loose in a uniform layer to give a depth after compaction of the paving units of two inches (2"), plus or minus ½". The contractor shall screed the bedding course using either a mechanical screed beam apparatus or by the use of screed guides and boards.
- B. The screeded bedding aggregate shall not be subjected to any traffic by either mechanical equipment or pedestrian use prior to the installation of the paver units. The voids left after the removal of the screed rails shall be filled with loose aggregate as the paver bedding course proceeds.

3.06 ECOLOGICAL PAVERS

- A. The laying pattern for concrete paver pavement shall be herringbone, or other pattern approved by the Owner, and shall incorporate a full soldier course around the perimeter adjacent to the edge restraint.
- B. The laying pattern for concrete paver sidewalk shall be a running bond brick layer pattern. The running bond will be allowed to deflect to conform to curves that parallel the roadway. Courses may begin with a full paver, however, the end course shall be saw cut to fit flush to the concrete border.
- C. The pavers shall be installed in approximately the order in which they were manufactured. No cluster shall be installed next to a cluster that was manufactured more than 2,500 cycles before or after.
- D. Lay pavers away from the existing laying face or edge restraint in such a manner as to ensure that the pattern remains square. Chalk lines shall be used upon the bedding course to maintain straight joint lines. Joint spacing between pavers shall be between 1/8" and ½"; however, the joint width may need to be increased to 3/8" (if necessary) to maintain straight joint lines. Lines and grades shown on the plans shall be established and maintained during the installation of the wearing course.
- E. Pavers shall be cut using a table-mounted masonry saw. Block splitting shall not be permitted. All cut faces shall be vertical. Dry cutting of the pavers shall be performed utilizing a dust collection system.
- F. Once the pavers have been placed upon the bedding course and all cut pavers have been inserted to provide a full and complete surface, inspect the pavers for damaged units and remove and replace those units. Once all pattern lines have been straightened, the void filler shall then be placed into the paver openings to the top of the chamfer on the pavers and the surface swept broom clean.
- G. The pavement surface shall be compacted to achieve consolidation of the bedding course and paving stones and brought to design levels and profiles by two passes of a suitable plate compactor. Compaction of the pavers shall be accomplished by the use of a vibratory plate compactor capable of a minimum of 4,500 pounds of compaction force. No compaction shall be permitted within three feet (3') of unrestrained edges of the pavement. After compaction, inspect the pavers for damaged units and remove and replace those units.
- H. On completion of vibration after void filling, the surface tolerances shall be plus or minus ½" from finish levels. The pavers shall be flush to ½" above edge restraints. Additional void filler material shall be swept in the paver voids, as required, to within ½" from the bottom of the chamfer on the paving

stones. Upon completion, the wearing course surface shall be swept clean of all excess materials. Remove from the site all surplus materials, equipment and debris resulting from these operations.

I. For concrete paver pavement, the completed surface will be tested for smoothness with a 16 ft (5 m) straightedge. Surface variations of the mainline pavement shall not exceed 3/16 in. (5 mm).

PART 4 - MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. This work will be measured for payment as follows:
 - 1. Contract Quantities. The requirements for the use of contract quantities shall conform to Article 202.07(a) of the Standard Specifications.
 - 2. Measured Quantities. This work will be measured for payment in place and the area computed in square yards. Measurements will not include the edge restraints.

4.02 PAYMENT

A. BASIS OF PAYMENT

This work will be paid for at the contract unit price per square yard for CONCRETE PAVER PAVEMENT; CONCRETE PAVER SIDEWALK; FILTER FABRIC; POROUS GRANULAR EMBANKMENT, SUBGRADE 12 INCH; POROUS GRANULAR EMBANKMENT, BASE 4 INCH; and POROUS GRANULAR EMBANKMENT, BEDDING 2 INCH.

Porous Granular Capping Material will be included in the cost of Concrete Paver Pavement and Concrete Paver Sidewalk.

Edge restraints will be paid for according to the special provision CONCRETE BORDER.

CONCRETE BORDER

This work shall consist of constructing a flush concrete border at the edge of the concrete pavers and sidewalk pavers at locations shown on the plans. This work shall be done according to the applicable portions of Section 606 of the Standard Specifications.

The Contractor will be allowed to slip form the border using a type B curb template with the square edge facing the pavement or sidewalk.

This work shall be paid for at the contract unit price per foot for 6" WIDE FLUSH CONCRETE BORDER, 8-3/8" and 6" WIDE FLUSH CONCRETE BORDER, 18".

BICYCLE RACKS ADDITIONAL REQUIREMENTS

This work shall consist of the installation of a bicycle rack at the location shown on the plans. This work shall be done according to check sheet 21, Bicycle Racks, of the Recurring Special Provisions except for the following:

The color shall be selected by the Architect. The bicycle rack shall accommodate 7 bikes. The bicycle rack may be manufactured by one of the manufacturers listed below or approved equal provided it meets the specifications.

Belson: Product – H36-7-P-SF Saris Parking Solutions; Product – 2100 Wave Series Delco Bike Rack Company; Product – Rolling Rack

The concrete pad shall be constructed and paid for as P.C.C. Sidewalk 5 Inch.

The bicycle rack shall be paid for at the contract unit price per each for BICYCLE RACKS.

PROCESSING MODIFIED SOIL 12"

This work shall consist of modifying the soil with the use of fly ash. This work shall be done according to applicable portions of Section 302 of the Standard Specification.

The soil used must come from the on-site stock pile. Fly ash shall be applied at a rate of 10% by weight of the soil. The fly ash must be obtained from Concrete Supply of Illinois from the Union Electric Labadie Power Plant. The Contractor may obtain fly ash from a different source, but the Contractor shall provide a mix design from an independent testing lab.

At locations where fly ash modified soil is shown in fill areas, the soil material to be used shall come from the existing earth stock pile located near the west end of the project site.

Payment for this work shall be made at the contract unit price per square yard for PROCESSING MODIFIED SOIL 12".

HEAVY DUTY HANDHOLE (SPECIAL)

This work consists of building heavy-duty handholes over existing handholes HH-E8C and HH-E8P as shown on the plans.

This work shall be done according to Section 814 of the Standard Specifications.

A Portland cement concrete heavy duty handhole according to Highway Standard 814001 shall be constructed around the existing handhole. Portions of the existing handhole shall be removed as needed to construct the new handhole.

A rectangular heavy duty frame and cover shall be provided with opening dimensions of 18"x30". The frame and cover shall be able to withstand AASHTO H-20 loading and shall meet the requirements of Article 1088.06. The lids of each heavy-duty handhole shall be marked "ELECTRIC" or "COMMUNICATION", respective to the existing handhole that is being covered.

The tops of the heavy-duty handholes shall match the elevation and slope of the finished grade where they are to be constructed per the plans. The heavy-duty handholes shall be constructed in a manner to maintain access to the conduits and wires in the existing handholes.

Payment for this work shall be made at the contract unit price per each for HEAVY DUTY HANDHOLE (SPECIAL).

REMOVE AND RELOCATE EXISTING LIGHT STANDARD

This work consists of removing and relocating the existing light poles P11 and P12 to the proposed locations shown on the plans.

This work shall be done according to Sections 842 and 844 of the Standard Specifications and as described herein.

This work shall be performed as to not disrupt normal nighttime operation of the lighting system along Lock and Dam Way. This work shall be performed so that the lights to be removed and relocated are in service and functioning as during normal nighttime operation at the end of the workday. The contractor shall coordinate any necessary disruptions in electrical service with the lockmaster at the Melvin Price Lock and Dam.

The existing foundations for light poles P11 and P12 shall be removed per Article 842.04 of the Standard Specifications and payment for this work shall be included in the cost of REMOVE AND RELOCATE EXISTING LIGHT STANDARD.

Payment for this work shall be made at the contract unit price per each for REMOVE AND RELOCATE EXISTING LIGHT STANDARD.

WATER MAIN QUALITY PIPE FOR STORM SEWERS

This work consists of constructing water main quality pipe for storm sewers in order to meet the requirements of the IEPA for horizontal and vertical separation of water mains from storm sewers.

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This work shall be done according to Section 550 of the Standard Specifications.

The Contractor shall use Polyvinyl Chloride (PVC) water transmission pipe with integral bell and spigot gasketed joints available in cast iron outside diameter (CIOD) nominal sizes of 12", 14", 16", 18", 20", 24" and 30". The pipe shall meet the requirements of the American Water Works Association standard ANSI/AWWA C-900 or C-905.

The pipe shall have a minimum water service pressure rating of 100 psi or more. The pipe push-on joints shall use elastomeric seals that comply with ASTM Standard F-477 and pressure rated in accordance with ASTM D3139.

Payment for this work shall be made at the contract unit price per foot for STORM SEWERS, WATER MAIN QUALITY PIPE of the type and size specified.

SLAG

This work consists of the use of slag in various subgrade, base, and backfill items. Slag shall be defined to mean slag materials according to Article 1003.01 or Article 1004.01 of the Standard Specifications.

This work shall be paid for at the contract unit price per square yard for POROUS GRANULAR EMBANKMENT, SUBGRADE 12 INCH (SLAG); POROUS GRANULAR EMBANKMENT, BASE 4 INCH (SLAG); POROUS GRANULAR EMBANKMENT, BEDDING 2 INCH (SLAG), at the contract unit price per cubic yard for TRENCH BACKFILL (SLAG) and POROUS GRANULAR BACKFILL (SLAG).

FURNISH AND INSTALL POND LINER

1.0 GENERAL

1.1 SCOPE

This specification covers the technical requirements for the furnishing and installation of the reinforced geosynthetic clay liner described herein. All materials used shall meet the requirements of this specification, and all work shall be performed in accordance with the procedures provided herein and the contract drawings.

1.2 DEFINITIONS

For the purposes of this specification guideline, the following terms are defined below:

<u>Geosynthetic Clay Liner (GCL)</u>. A manufactured hydraulic barrier consisting of clay bonded to a layer or layers of geosynthetics.

<u>Geomembrane</u>. An essentially impermeable geosynthetic composed of one or more geosynthetic sheets.

Geotextile. Any permeable geosynthetic comprised solely of textiles.

Minimum Average Roll Value. For geosynthetics, the value calculated as the typical value minus two (2) standard deviations from documented quality control test results for a defined population from one specific test method associated with one specific property.

Overlap. Where two adjacent GCL panels contact, the distance measuring perpendicular from the overlying edge of one panel to the underlying edge of the other.

<u>Typical Value.</u> The mean value calculated from documented manufacturing quality control test results for a defined population obtained from one test method associated with one specific property.

1.3 SUBMITTALS

- A. The Contractor shall furnish the following information:
 - 1. Conceptual description of the proposed plan for placement of the GCL panels over the area of installation.
 - 2. GCL manufacturer's MQC Plan for documenting compliance to Sections 2.1 and 2.2 of these specifications.
 - 3. GCL manufacturer's historical data for reinforced GCL of a) 10,000-hour creep shear testing per Section 2.1 D and b) seam flow data at 2 psi confining pressure per Section 2.1 E.
 - 4. A copy of GCL manufacturer's ISO quality Certificate of Registration.
- B. At the Engineer's or Owner's request the Contractor shall furnish:
 - 1. A representative sample of the GCLs.
 - 2. A project reference list for the GCL(s) consisting of the principal details of at least ten projects totaling at least 10 million square feet (100,000 square meters) in size.
- C. Upon shipment, the Contractor shall furnish the GCL manufacturer's Quality Assurance/Quality Control (QA/QC) certifications to verify that the materials supplied for the project are in accordance with the requirements of this specification.

1.4 QUALIFICATIONS

- A. GCL Manufacturer must have produced at least 10 million square feet (1 million square meters) of GCL, with at least 8 million square feet (800,000 square meters) installed.
- B. The GCL Installer must either have installed at least 1 million square feet (100,000 square meters) of GCL, or must provide to the Engineer satisfactory evidence, through similar experience in the installation of other types of geosynthetics, that the GCL will be installed in a competent, professional manner.

2.0 PRODUCTS

A. The GCLs shall consist of a layer of natural sodium bentonite clay encapsulated between two geotextiles and shall comply with all of the criteria listed in this Section.

2.1 MATERIALS

- A. The reinforced GCL shall have 10,000 hour test data for large-scale constant-load (creep) shear testing under hydrated conditions. The displacement shall be 0.11 in. (2.7 mm) or less at a constant shear load of 250 psf (12 kPa) and a normal load of 500 psf (24 kPa).
- B. The reinforced GCL shall have seam test data from an independent laboratory showing that the seam flow with a grooved cut in the nonwoven geotextile is less than 1 x 10⁻⁸ m³/m²/s at 2 psi hydraulic pressure.
- C. The minimum acceptable dimensions of full-size GCL panels shall be 150 feet (45.7 m) in length. Short rolls [(those manufactured to a length greater than 70 feet (21 m) but less than a full-length roll)] may be supplied at a rate no greater than 3 per truckload or 3 rolls every 36,000 square feet (3,500 square meters) of GCL, whichever is less.
- D. A 6-inch (150 mm) overlap guideline shall be imprinted on both edges of the upper geotextile component of the GCL as a means for providing quality assurance of the overlap dimension. Lines shall be printed in easily visible, non-toxic ink.

2.2 PRODUCT QUALITY DOCUMENTATION

The GCL manufacturer shall provide the Contractor or other designated party with manufacturing QA/QC certifications for each shipment of GCL. The certifications shall be signed by a responsible party employed by the GCL manufacturer and shall include:

- A. Certificates of analysis for the bentonite clay used in GCL production demonstrating compliance with the parameters swell index and fluid loss shown in the Certified Properties tables.
- B. Manufacturer's test data for finished GCL product(s) of bentonite mass/area, GCL tensile strength and GCL peel strength (reinforced only) demonstrating compliance with the index parameters shown in the Certified Properties tables.
- C. GCL lot and roll numbers supplied for the project (with corresponding shipping information).

CERTIFIED PROPERTIES TABLE

MATERIAL PROPERTY	TEST METHOD	TEST FREQUENCY ft ² (m ²)	REQUIRED VALUES
Bentonite Swell Index ¹	ASTM D 5890	1 per 50 tonnes	24 ml/2g min.
Bentonite Fluid Loss ¹ .	ASTM D 5891	1 per 50 tonnes	18 ml max.
Bentonite Mass/Area ²	ASTM D 5993	40,000 ft ² (4,000 m ²)	0.75 lb/ft² (3.6 kg/m²) min
GCL Grab Strength ³	ASTM D 6768	200,000 ft ² (20,000 m ²)	30 lbs/in (53 N/cm) MARV
GCL Peel Strength ³	ASTM D 6496	40,000 ft ² (4,000 m ²)	3.5 lbs/in (6.1 N/cm) min
GCL Index Flux⁴	ASTM D 5887	Weekly	1 x 10 ⁻⁸ m ³ /m ² /sec max
GCL Hydraulic Conductivity ⁴	ASTM D 5887	Weekly	5 x 10 ⁻⁹ cm/sec max
GCL Hydrated Internal Shear Strength⁵	ASTM D 5321 ASTM D 6243	Periodic	500 psf (24 kPa) typ @ 200 psf

2.3 PRODUCT LABELING

- A. Prior to shipment, the GCL manufacturer shall label each roll, identifying:
 - 1. Product identification information (Manufacturer's name and address, brand product code).
 - 2. Lot number and roll number.
 - 3. Roll length, width and weight.

2.4 PACKAGING

- A. The GCL shall be wound around a rigid core whose diameter is sufficient to facilitate handling. The core is not necessarily intended to support the roll for lifting but should be sufficiently strong to prevent collapse during transit.
- B. All rolls shall be labeled and bagged in packaging that is resistant to photodegradation by ultraviolet (UV) light.

2.5 Accessory Bentonite

A. The granular bentonite sealing clay used for overlap seaming, penetration sealing and repairs shall be made from the same natural sodium bentonite as used in the GCL and shall be as recommended by the GCL manufacturer. Seaming of GCLs shall be conducted in accordance with the manufacturer's guidelines for each particular GCL.

3.0 EXECUTION

Construction of the GCL shall follow the manufacturer's installation instructions and these specifications.

3.1 HANDLING

- A. A visual inspection of each roll should be made during unloading to identify if any packaging has been damaged. Rolls with damaged packaging should be marked and set aside for further inspection. The packaging should be repaired prior to being placed in storage.
- B. The party responsible for unloading the GCL should contact the Manufacturer prior to shipment to ascertain the appropriateness of the proposed unloading methods and equipment.

3.2 STORAGE

- A. Storage of the GCL rolls shall be the responsibility of the installer. A dedicated storage area shall be selected at the job site that is away from high traffic areas and is level, dry and well drained.
- B. Rolls should be stored in a manner that prevents sliding or rolling from the stacks and may be accomplished by the use of chock blocks. Rolls should be stacked at a height no higher than that at which the lifting apparatus can be safely handled (typically no higher than four).
- C. All stored GCL materials and the accessory bentonite must be covered with a plastic sheet or tarpaulin until their installation.

D. The integrity and legibility of the labels shall be preserved during storage.

3.3 EARTHWORK

- A. Any earthen surface upon which the GCL is installed shall be prepared and compacted in accordance with the project specifications and drawings. The surface shall be smooth, firm, and unyielding, and free of:
 - 1. Vegetation.
 - 2. Construction Debris.
 - 3. Sticks.
 - 4. Sharp rocks.
 - 5. Void spaces.
 - Ice.
 - 7. Abrupt elevation changes.
 - 8. Standing water.
 - 9. Cracks larger than one-quarter inch (6 mm) in width.
 - 10. Any other foreign matter that could contact the GCL.
- B. Subgrade surfaces consisting of granular soils or gravels may not be acceptable due to their large void fraction and puncture potential. In applications where the GCL is the only barrier, subgrade soils should have a particle-size distribution at least 80 percent finer than the #60 sieve (0.25 mm). In other applications, subgrade soils should range between fines and 1 inch (25 mm).
- C. Immediately prior to GCL deployment, the subgrade shall be final-graded to fill in all voids or cracks and then smooth-rolled to provide the best practicable surface for the GCL. At completion of this activity, no wheel ruts, footprints or other irregularities shall exist in the subgrade. Furthermore, all protrusions extending more than one-half inch (12 mm) from the surface shall either be removed, crushed or pushed into the surface with a smooth-drum compactor.
- D. On a continuing basis, the Engineer shall certify acceptance of the subgrade before GCL placement.
- E. It shall be the installer's responsibility thereafter to indicate to the Engineer any change in the condition of the subgrade that could cause the subgrade to be out of compliance with any of the requirements listed in this Section.
- F. At the top of sloped areas of the job site, an anchor trench for the GCL shall be excavated. No loose soil shall be allowed at the bottom of the trench and no sharp corners or protrusions shall exist anywhere within the trench.

3.4 GCL PLACEMENT

- A. GCL rolls should be delivered to the working area of the site in their original packaging. Immediately prior to deployment, the packaging should be carefully removed without damaging the GCL. The orientation of the GCL (i.e., which side faces up) should be in accordance with the Engineer's recommendations.
- B. Equipment, which could damage the GCL, shall not be allowed to travel directly on it. If the installation equipment causes rutting of the subgrade, the subgrade must be restored to its originally accepted condition before placement continues.
- C. Care must be taken to minimize the extent to which the GCL is dragged across the subgrade in order to avoid damage to the bottom surface of the GCL. A temporary geosynthetic subgrade covering commonly known as a slip sheet or rub sheet may be used to reduce friction damage during placement.
- D. The GCL panels shall be placed parallel to the direction of the slope.
- E. All GCL panels should lie flat on the underlying surface, with no wrinkles or fold, especially at the exposed edges of the panels.
- F. Only as much GCL shall be deployed as can be covered at the end of the working day with soil, a geomembrane, or a temporary waterproof tarpaulin. The GCL shall not be left uncovered overnight. If the GCL is hydrated when no confining stress is present, it may be necessary to remove and replace the hydrated material. The project Engineer and GCL supplier should be consulted for specific guidance if premature hydration occurs.

3.5 ANCHORAGE

A. As directed by the project drawings and specifications, the end of the GCL roll shall be placed in an anchor trench at the top of the slope. When utilizing an anchor trench design, the front edge of the trench should be rounded so as to eliminate any sharp corners. Loose soil should be removed from the floor of the trench. The GCL should cover the entire trench floor but does not extend up the rear trench wall.

3.6 SEAMING

- A. The GCL seams are constructed by overlapping their adjacent edges. Care should be taken to ensure that the overlap zone is not contaminated with loose soil or other debris.
- B. The minimum dimension of the longitudinal overlap should be 6 inches (150 mm). If the GCL is manufactured with a grooved cut in the nonwoven

geotextile that allows bentonite to freely extrude into the longitudinal overlap then no supplemental bentonite is required for this overlap. If the GCL does not have a grooved cut in the nonwoven geotextile longitudinal overlap, then bentonite-enhanced seams are required as described below.

- C. End-of-roll overlapped seams should be constructed with a minimum overlap of 24 inches. Seams at the ends of the panels should be constructed such that they are shingled in the direction of the grade to prevent the potential for runoff flow to enter the overlap zone. End-of-roll overlapped seams for all reinforced GCL seams require bentonite-enhanced seams as described below.
- D. Bentonite-enhanced seams are constructed between the overlapping adjacent panels as follows. The underlying edge of the longitudinal overlap is exposed and then a continuous bead of granular sodium bentonite is applied along a zone defined by the edge of the underlying panel and the 6-inch (150-mm) line. The granular bentonite shall be applied at a minimum application rate of one quarter pound per lineal foot (0.4 kg/m). A similar bead of granular sodium bentonite is applied at the end-of-roll overlap.

3.7 PENETRATION SEALING

For sealing around penetrations, a small notch should be made around the circumference of the pipe, into the subgrade. Bentonite should then be packed around the pipe in the notch and on adjacent areas so that the pipe is encased by a pure bentonite seal.

The liner panel should then be paced over the penetration and slit into a "pie" configuration where the pipe is to protrude. This procedure will create a snug fit between the liner and the pipe once the laps are trimmed. More sodium bentonite should be spread around the cut edges of the liner against the pipe and over adjacent areas. To complete the detail, a collar liner should be cut in a manner similar to that made on the main panel and fit around the pipe, with additional sodium bentonite applied into any gaps that may remain.

3.8 STRUCTURE SEALING

Sealing panel edges against a wall or foundation is accomplished with the use of pure bentonite.

To start, a small notch should be made against the edge of the object to be sealed. The notch should be packed full of bentonite. The liner panel is then brought up to the structure and trimmed to fit against the wall of the structure. Care must be taken to ensure that the liner is kept directly against the structure as the cover material is applied. Once hydrated, the bentonite seal will allow for settlement or other stresses that may tend to pull the liner from the edge.

3.9 DAMAGE REPAIR

If the GCL is damaged (torn, punctured, perforated, etc.) during installation, it may be possible to repair it by cutting a patch to fit over the damaged area. The patch shall be obtained from a new GCL roll and shall be cut to size such that a minimum overlap of 12 inches (300 mm) is achieved around all of the damaged area. Granular bentonite or bentonite mastic should be applied around the damaged area prior to placement of the patch. It may be desirable to use an adhesive to affix the patch in place so that it is not displaced during cover placement.

3.10 COVER PLACEMENT

- A. Cover soils shall be free of angular stones or other foreign matter that could damage the GCL. Cover soils should be approved the project Engineer with respect to particle size, uniformity and chemical compatibility. Cover soils with high concentrations of calcium (e.g., limestone, dolomite) are not acceptable.
- B. Soil cover shall be placed over the GCL using construction equipment that minimizes stresses on the GCL. A minimum thickness of 1foot (300 mm) of cover should be maintained between the equipment tires/tracks and the GCL at all times during the covering process. This thickness recommendation does not apply to frequently trafficked areas or roadways, for which a minimum thickness of 2 feet (600 mm) is required.
- C. Soil cover should be placed in a manner that prevents the soil from entering the GCL overlap zones. Cover soil shall be pushed up slopes, not down slopes, to minimize tensile forces on the GCL.
- D. Although direct vehicular contact with the GCL is to be avoided, lightweight, low ground pressure vehicles (such as 4-wheel all-terrain vehicles) may be used to facilitate the installation of any geosynthetic material placed over the GCL. The GCL supplier should be contacted with specific recommendations on the appropriate procedures in this situation.
- E. When a textured geomembrane is installed over the GCL, a temporary geosynthetic covering known as a slip sheet or rub sheet should be used to minimize friction during placement and to allow the textured geomembrane to be more easily moved into its final position.
- F. Cyclical wetting and drying of GCL covered only with geomembrane can cause overlap separation. Soil cover should be placed promptly whenever possible. Geomembranes should be covered with a white geotextile and/or operations layer without delay to minimize the intensity of wet-dry cycling. If there is the potential for unconfined cyclic wetting and drying over an extended period of time, the longitudinal seam overlaps should be increased based on the project engineer's recommendations.

- G. To avoid seam separation, the GCL should not be put in excessive tension by the weight or expansion of textured geomembrane on steep slopes. The project Engineer should be consulted about the potential for GCL tension to develop.
- H. Cover soil shall be compacted to 95% of the standard laboratory density.

4.0 METHOD OF MEASUREMENT

This work will be measured for payment as:

- A. Contract Quantities. The requirements for the use of contract quantities shall conform to Article 202.07(a) of the Standard Specifications.
- B. Measured Quantities. The GCL will be measured for payment in square yards of the total surface area covered as shown on the contract drawings. Allowance will be made for GCL in anchor trenches but no allowance will be made for waste, overlap, or materials used for the convenience of the Contractor.

5.0 BASIS OF PAYMENT

This work shall be paid for at the contract unit price per square yard for FURNISH AND INSTALL POND LINER. The excavation and earth cover shall be included in the cost of EARTH EXCAVATION.

REMOVING AND RESETTING STREET SIGNS

This work consists of removing and resetting existing street signs along Lock and Dam Way.

This work shall be done according to Section 724 of the Standard Specifications except as herein modified.

Existing street signs shall be removed and re-erected on their existing sign supports as directed by the Engineer.

Measurement for one sign shall include all existing sign panels and sign panel assemblies on a single sign support.

This work shall be paid for at the contract unit price per each for REMOVING AND RESETTING STREET SIGNS.

SAW CUTTING

This work consists of full depth saw cutting the edge of the existing pavement and removal and disposal of the pavement that is removed in order to provide a clean vertical face for the proposed widening of Lock and Dam Way.

This work shall be done according to the applicable requirements of Section 442 of the Standard Specifications.

Payment for this work shall be made at the contract unit price per foot for SAW CUTTING.

FLEXIBLE DELINEATORS

This work shall consist of installing flexible delineators at the locations shown on the plans. This work shall be done according to the applicable portions of Section 701 and Article 1106.02 of the Standard Specifications.

The delineators shall match the size and shape as shown on Highway Standard 701901. The delineators shall be white in color having two white fluorescent bands. Epoxy shall be used to anchor the delineator base to the concrete pavement. The pavement shall be clean and dry before the epoxy is applied. A rapid setting (hard in one hour) epoxy meeting the requirements of AASHTO M 237 shall be poured on the pavement surface to anchor the delineator.

This work shall be paid for at the contract unit price each for FLEXIBLE DELINEATORS.

PAINT CURB

This work shall consist of painting the face and top of curb of the proposed combination concrete curb and gutter type B-9.12 around the center island of the roundabout.

The paint shall be yellow and be applied according to Section 780 of the Standard Specifications.

This work will be measured for pavement in place in feet along the face of the curb.

This work will be paid for at the contract unit price per foot for PAINT CURB.

PIPE UNDERDRAINS 4"

This work consists of constructing pipe underdrains at the locations shown on the plans.

This work shall be done according to Section 601 of the Standard Specifications except that the pipe materials to be used shall be perforated corrugated polyethylene (PE) pipe

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with a smooth interior according to Article 1040.04 of the Standard Specifications. The pipe shall not be encased in a fabric envelope as filter fabric is being used to line the trench and subgrade.

This work shall be paid for at the contract unit price per foot for PIPE UNDERDRAINS 4".

BOLLARDS

This work consists of the installation of bollards on the Bike Trail Connector.

This work shall be done according to the details shown on the plans. The steel pipe shall be cleaned before painting. The Engineer shall approve before paint is applied. All exterior surfaces are to be given 1 coat of primer and 2 coats of exterior enamel (safety yellow).

This work shall include all excavation, Class SI concrete, steel pipe, paint, and any other items required to install the bollards.

This work will be paid for at the contract unit price per each for BOLLARDS.

BROKEN CONCRETE DUMPED RIPRAP

This work shall consist of placing broken concrete dumped riprap at the locations shown on the plans.

This work shall be done according to the applicable portions of Section 281 of the Standard Specifications.

Filter fabric and bedding material is required. The broken concrete dumped riprap and bedding thickness shall be placed to the thickness shown for the gradation specified and according to Article 281.04 of the Standard Specifications.

This work will be measured for payment in place, and the area computed in square yards.

This work will be paid for at the contract unit price per square yard for BROKEN CONCRETE DUMPED RIPRAP of the gradation specified.

LEED REQUIREMENTS

PART 1 - GENERAL

This work consists of complying with the requirements needed to achieve the LEED points associated with work under this contract.

The work under this contract is one component of an overall larger project to construct the National Great Rivers Research and Education Center (NGRREC). This facility will be constructed to a high level certification of the U.S. Green Building Council LEED (Leadership in Energy and Environmental Design) rating system.

The rating system applicable to this project is LEED-NC (New Construction), Version 2.2.

The following references govern the LEED requirements:

- 1. U.S. Green Building Council, LEED-NC "Green Building Rating System For New Construction & Major Renovations, Version 2.2".
- 2. U.S. Green Building Council, "New Construction & Major Renovation Version 2.2 Reference Guide". Herein after referred to as the "LEED Reference Guide".

Attached at the end of this special provision is a copy of the registered project check list showing the credits that are to be achieved for the entire project.

Some of the credits shown on the check list do not apply to this contract. LEED credits that place requirements on the work of this contract are listed below:

Sustainable Sites (SS)

- SS Prerequisite 1 Construction Activity Pollution Prevention
- SS Credit 4.2 Alternative Transportation, Bicycle Storage & Changing Rooms
- SS Credit 4.4 Alternative Transportation, Parking Capacity
- SS Credit 5.1 Site Development, Protect or Restore Habitat
- SS Credit 5.2 Site Development, Maximize Open Space
- SS Credit 6.1 Stormwater Design, Quantity Control
- SS Credit 7.1 Heat Island Effect, Non-Roof

Material & Resources (MR)

- MR Credit 2.1 Construction Waste Management, Divert 50% from Disposal
- MR Credit 4.1 Recycled Content, 10% (post-consumer + ½ pre-consumer)
- MR Credit 5.1 Regional Materials, 10% Extracted, Processed & Manufactured Regionally
- MR Credit 5.2 Regional Materials, 20% Extracted, Processed & Manufactured Regionally

Innovation & Design Process (ID)

ID Credit 1.4 – Innovation in Design: 40% Regional Materials

PART 2 – PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 SS PREREQUISTE 1 – CONSTRUCTION ACTIVITY POLLUTION PREVENTION

A. This credit will be satisfied by complying with the plans and special provisions relating to erosion control including the Storm Water Pollution Prevention Plan and the Erosion Control Plan. There are no additional special requirements to obtain this credit.

3.2 SS CREDIT 4.2 – ALTERNATIVE TRANSPORTATION, BICYCLE STORAGE & CHANGING ROOMS

A. This credit will be satisfied by complying with the plans and special provisions relating to furnishing and installing a bike rack. There are no additional special requirements to obtain this credit.

3.3 SS CREDIT 4.4 – ALTERNATIVE TRANSPORTATION, PARKING CAPACITY

A. This credit will be satisfied by complying with the plans and special provisions relating to providing signs that reserve parking spaces as carpool/vanpool spaces. There are no additional special requirements to obtain this credit.

3.4 SS CREDIT 5.1 – SITE DEVELOPMENT, PROTECT OR RESTORE HABITAT

A. This credit will be satisfied by complying with the plans and special provisions relating to site clearing and restoration. The Contractor shall not disturb any portion of the site beyond the construction limits shown on the plans. There are no additional special requirements to obtain this credit.

3.5 SS CREDIT 5.2 – SITE DEVELOPMENT, MAXIMIZE OPEN SPACE

A. This credit will be satisfied by complying with the plans and special provisions. There are no additional special requirements to obtain this credit.

3.6 SS CREDIT 6.1 – STORMWATER DESIGN, QUANTITY CONTROL

A. This credit will be satisfied by complying with the plans and special provisions relating to the construction of a detention basin. There are no additional special requirements to obtain this credit.

3.7 SS CREDIT 7.1 – HEAT ISLAND EFFECT, NON-ROOF

- A. This credit will be satisfied by complying with the plans and special provisions relating to the selection of paving materials for the site hardscape surfaces. There are no additional special requirements to obtain this credit.
- 3.8 MR CREDIT 2.1 CONSTRUCTION WASTE MANAGEMENT, DIVERT 50% FROM DISPOSAL
 - A. The intent of this credit is to divert construction and demolition debris from disposal in landfills and incinerators. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites.
 - B. A minimum of 50% (75% preferred) by weight of the total waste generated by the work shall be diverted from disposal in landfills and incineration by salvaging or recycling.
 - C. Excavated soil and land-clearing debris does not contribute to this credit.
 - D. River City Construction is the Contractor who is constructing the NGRREC Building adjacent to the proposed roadway construction. River City Construction is required to develop a waste management plan for the building construction in order to meet this Credit. This waste management plan is included herein. The Contractor for this roadway project shall conduct his operations in accordance with this waste management plan.
 - E. The Contractor shall train workers, subcontractors and suppliers on proper waste management procedures as appropriate for the work occurring at this project.
 - F. All surplus excavated materials that would be suitable embankment materials for future roadway construction shall be stock piled in an area to be designated by the Engineer located southeast of the roundabout.
 - G. Surplus excavated materials that are unsuitable for embankments shall be removed from the site by the Contractor and do not need to be tracked for LEED credit
 - H. All other waste materials generated by construction operations shall be temporarily stock piled and segregated according to the following categories:
 - 1. Plastic/Cardboard

- 2. Scrap Metal
- 3. Wood
- 4. Trash
- 5. Aluminum Cans
- I. From time to time, as directed by the Engineer, the waste materials shall be deposited into River City Construction's on site dumpsters for disposal. Payment for disposal fees will be worked out by the Owner or will be paid for according to Article 109.05 of the Standard Specifications.
- 3.9 MR CREDIT 4.1 RECYCLED CONTENT, 10% (POST-CONSUMER + ½ PRE-CONSUMER)
 - A. The Contractor shall comply with the plans and special provisions relating to the materials to be incorporated into the project. The Contractor shall maximize the use of recycled materials wherever possible.
 - B. All cast in place and precast Portland cement concrete used on this project, shall use 15% or more fly ash as allowable by Section 1020 of the Standard Specifications. Mix designs for all concrete used in the project shall be submitted to the Resident Engineer.
 - C. The Contractor shall provide tabulation of each material used on the project that is being tracked for recycled content. The tabulation must include a description of the material, the manufacturer of the material, the product cost, the pre-consumer recycled content percentage, the post-consumer recycled content, and the source of the recycled content data. The tabulation shall be submitted on forms to be provided by the Engineer. All documentation shall be according to MR Credit 4.1 of the LEED Reference Guide.
 - D. For all concrete items on the project, provide additional documentation showing the supplementary cementitious materials (SCM) calculation including the following items:
 - 1. Item
 - 2. Mix#
 - 3. Mass of Portland Cement (lbs.)
 - 4. Mass of recycled SCMs (lbs.)
 - 5. Mass of total comentitious materials (lbs.)
 - 6. SCMs as a percentage of total cementitious materials (%)
 - 7. Dollar value of all cementitious material (from concrete supplier)
 - 8. Recycled content value per yard [(SCM/2) x dollar value]

The documentation shall be submitted on forms to be provided by the Engineer. All documentation shall be according to MR Credit 4.1 of the LEED Reference Guide.

3.10 REGIONAL MATERIALS

- A. This item covers the following credits:
 - MR Credit 5.1 Regional Materials, 10% Extracted Processed & Manufactured Regionally
 - 2. MR Credit 5.2 Regional Materials, 20% Extracted Processed & Manufactured Regionally
 - 3. ID Credit 1.4 Innovation in Design: 40% Regional Materials
- B. The Contractor shall comply with the plans and special provisions relating to the materials to be incorporated into the project. The Contractor shall maximize the use of regional materials wherever possible.
- C. The Contractor shall provide the documentation required for this credit according to MR Credit 5 of the LEED Reference Guide. The documentation shall be submitted on forms to be provided by the Engineer and shall include as a minimum the following items for all of the materials incorporated into the project:
 - 1. Product name
 - 2. Manufacturer
 - 3. Total product cost
 - 4. % of product weight that meets both the extraction and manufacture criteria
 - 5. Distance between project site and extraction/harvest/recovery site
 - 6. Distance between the project site and the final manufacturing location

4.0 BASIS OF PAYMENT

This work shall not be paid for separately, but shall be included in the cost of the contract.



LEED-NC Version 2.2 Registered Project Checklist
The National Great Rivers Research and Education Field Station
Alton, IL

Yes ? No

7 2 5	Sustail	nable Sites	14 Points
Y	Prereq 1	Construction Activity Pollution Prevention	Required
1	Credit 1	Site Selection	1
1	Credit 2	Development Density & Community Connectivity	1
1	Credit 3	Brownfield Redevelopment	1
1	Credit 4.1	Alternative Transportation, Public Transportation Access	1
1	Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1
1	Credit 4.3	Alternative Transportation, Low-Emitting and Fuel-Efficient Vehicles	· 1
1 5	Credit 4.4	Alternative Transportation, Parking Capacity	1
11	Credit 5.1	Site Development, Protect or Restore Habitat	.1
	Credit 5.2	Site Development, Maximize Open Space	1
1	Credit 6.1	Stormwater Design, Quantity Control	1
1	Credit 6.2	Stormwater Design, Quality Control	1
10 20 22	Credit 7.1	Heat Island Effect, Non-Roof	1
1 4 2	Credit 7.2	Heat Island Effect, Roof	1
1	Credit 8	Light Pollution Reduction	1
Yes ? No.			
5	Water	Efficiency	5 Points
1	Credit 1.1	Water Efficient Landscaping, Reduce by 50%	1
10	Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	1
1	Credit 2	Innovative Wastewater Technologies	1
1	Credit 3.1	Water Use Reduction, 20% Reduction	1
1 20	Credit 3.2	Water Use Reduction, 30% Reduction	1
Yes ? No			
15 2	Energ	y & Atmosphere	17 Points
X	Prereq 1	Fundamental Commissioning of the Building Energy Systems	Required
Y	Prereq 2	Minimum Energy Performance	Required
Y	Prereq 3	Fundamental Refrigerant Management	Required
10	Credit 1	Optimize Energy Performance - 42%	1 to 10
3	Credit 2	On-Site Renewable Energy - at least 50%	1 to 3
1	Credit 3	Enhanced Commissioning	1
1	Credit 4	Enhanced Refrigerant Management	1
1	Credit 5	Measurement & Verification	1
1	Credit 6	Green Power	1
1	Credit 6	Green Power	1

Yes	?	No			
6	2	5	Materi	als & Resources	13 Points
Y			Prereq 1	Storage & Collection of Recyclables	Required
		1	Credit 1.1	Building Reuse, Maintain 75% of Existing Walls, Floors & Roof	1
		1	Credit 1.2	Building Reuse, Maintain 100% of Existing Walls, Floors & Roof	1
		1	Credit 1.3	Building Reuse, Maintain 50% of Interior Non-Structural Elements	1
1		1	Credit 2.1	Construction Waste Management, Divert 50% from Disposal	1
	1	1	Credit 2.2	Construction Waste Management, Divert 75% from Disposal	1
	,	1	Credit 3.1	Materials Reuse, 5%	1
	,	1	Credit 3.2	Materials Reuse,10%	1
1			Credit 4.1	Recycled Content, 10% (post-consumer + ½ pre-consumer)	· 1
	1			Recycled Content, 20% (post-consumer + ½ pre-consumer)	1

Credit 5.1 Regional Materials, 10% Extracted, Processed & Manufactured Regic

Credit 5.2 Regional Materials, 20% Extracted, Processed & Manufactured Regic

Rapidly Renewable Materials, 2.5%

Certified Wood, 50% of wood based materials

Yes ? No

1

1

1

Yes ?

48 7

Credit 2

Credit 6

Credit 7

1

1

1

10 3 2		Environmental Quality	io in one
Y	Prereq 1	Minimum IAQ Performance	Required
V	Prereq 2	Environmental Tobacco Smoke (ETS) Control	Required
31 8 4.3 347	Credit 1	Outdoor Air Delivery Monitoring	1
1 7 8	Credit 2	Increased Ventilation	1
10	Credit 3.1	Construction IAQ Management Plan, During Construction	1
	Credit 3.2	Construction IAQ Management Plan, Before Occupancy	1
1 3	Credit 4.1	Low-Emitting Materials, Adhesives & Sealants	1
1	Credit 4.2	Low-Emitting Materials, Paints & Coatings	1
4	Credit 4.3	Low-Emitting Materials, Carpet Systems	1
	Credit 4.4	Low-Emitting Materials, Composite Wood & Agrifiber Products	1
发射的 一致经	Credit 5	Indoor Chemical & Pollutant Source Control	1
1	Credit 6.1	Controllability of Systems, Lighting	1
11 15 100	Credit 6.2	Controllability of Systems, Thermal Comfort	1
16	Credit 7.1	Thermal Comfort, Design	. 1
3 1	Credit 7.2	Thermal Comfort, Verification	1
1	Credit 8.1	Daylight & Views, Daylight 75% of Spaces	1
4	Credit 8.2	Daylight & Views, Views for 90% of Spaces	1
Yes ? No			
5	Innova	ation & Design Process	5 Points
1	Credit 1.1	Innovation in Design: 100% Wastewater Treatment	1

Certified 26-32 points Silver 33-38 points Gold 39-51 points Platinum 52-69 points

69 Points

Credit 1.2 Innovation in Design: 40% Water Reduction

LEED® Accredited Professional

Project Totals (pre-certification estimates)

Credit 1.3 Innovation in Design: Innovation in Education - GTS
Credit 1.4 Innovation in Design: 40% Regional Materials

CONSTRUCTION WASTE MANAGEMENT PLAN

Project: National Great Rivers Research and Education Field Station

Owner: Lewis and Clark Community College

Contractor: River City Construction Company, L.L.C.

Date: 04/22/2008

MAGEMENT WASTE GOALS

This project will recycle or salvage for reuse a minimum of 50 percent (75% preferred) by weight of the total waste generated on-site.

COMMUNICATION PLAN

1. Waste prevention and recycling activates will be discussed at the beginning of each safety meeting.

2. As each new subcontractor comes on-site, the recycling coordinator (Todd Jackson) will present him/her with a copy of the Waste Management Plan and provide a tour of the recycling areas.

3. The subcontractor will be expected to make sure all their crews comply with the Waste Management Plan.

4. All recycling containers will be clearly labeled.

5. List of acceptable/unacceptable materials will be posted throughout the site.

EXPECTED PROJECT WASTE, DISPOSAL, AND HANDLING

The following chart identifies waste materials estimated on this project, their disposal methods, and handling procedures.

MATERIAL	QUANTITY	DISPOSAL METHOD	HANDLING PROCEDURE
Concrete/Soil	55 Ton	Reused at Fill	Dispose of in "Concrete/Soil"
Waste		by Sanders Waste	Dumpster
Brick/Block	40 Ton	Reused as Fill	Dispose of in "Brick/Block"
Waste		by Sanders Waste	Dumpster
Plastics/Cardboard	10 Ton	Hauled to Resource Management	Dispose of in "Plastic/Cardboard"
Packaging		by Sanders Waste	Dumpster
Scrap Metal	10 Ton	Sold to Recycling Center	Dispose of in "Scrap Metal"
•		by MAW Salvage	Dumpster
Remaining Materials	20 Ton	Hauled to Landfill	Dispose of in 'Trash"
		by Sanders Waste	Dumpster

Weighing of dumpster will be provided by:

Robert Bob Sanders Waste System Inc. 916 Tonsor Road Alton IL 62002

Resource Management in St. Louis, MO will separate plastics and cardboard for recycling. Maw Salvage of Brighton, IL will separate miscellaneous metal for recycling.

FORMS

See the attached Waste Management Progress Report that will be forwarded on regular bases to the architect.

National Great River Research & Education Field Station River City Construction, L.L.C.

Construction Waste Management Progress Report

Date: From: To:		
Signed By:		
Select units for Diverted and L	andfill waste calculation in <u>TONS</u>	
Diverted/Recycled Materials Description	Diversion/Recycling Hauler or Location	Quantity of Diverted/Recycled Waste
A CARACTER AND A CARA		
Total Construction Waste Ger		Tons Tons

Total Percentage of Construction Waste Diverted from Landfill

NO EXCEPTION TAKE	n 🗆	REVISE & RESUBMIT
MAKE CORRECTIONS	NOTED	REJECTED .
Reviewing is only for general project and compliance with th Documents. The contractor is quantities, dimensions, fabrica methods, coordination of his was afe and satisfactory manner.	e information g responsible for tion process and ork with all oth	given in the Contract confirming and correcting all d techniques of construction
aaic	BY:	1-30-08



Storm Water Pollution Prevention Plan

Route	Access Roads for the NGRREC	Marked Rt.	Lock and Dam Way	
Section	05-00001-00-PK	Project No.	HPD-3162(001)	
County	Madison	Contract No.	97365	
Environn has also	n has been prepared to comply with the promental Protection Agency on May 30, 2003 for been prepared to comply with the provisions storm sewer systems if checked below.	storm water discharges	from Construction Site Activities. This plan	
NPDES ⊠ □	permits associated with this project: ILR10 Permit No. (if applicable): ILR40 Permit No. (if applicable):			
accordar submitte gathering am awar	under penalty of law that this document and all ance with a system designed to assure that qualited. Based on my inquiry of the person or person g the information, the information submitted is, the that there are significant penalties for submitting violations.	fied personnel properly one who manage the system to the best of my knowles	gathered and evaluated the information em, or those persons directly responsible for dge and belief, true, accurate and complete. I	
	Dr. Dale Chapman Print Name	_ ffly	Signature	
	President	1/16/		
	Title		Date	
	Lewis & Clark Community College			
	Agency			

I. Site Description:

A. The following is a description of the project location:

The proposed project is located southeast of the intersection of IL Route 143 and Lock and Dam Way in the City of Alton, Madison County, Illinois.

B. The following is a description of the construction activity which is the subject of this plan:

The construction activity consists of clearing, earth excavation, modifying soil, aggregate base, bedding material, pavement, pavers, sidewalk, curb and gutter, storm sewers, and inlets.

C. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as grubbing, excavation and grading:

Work will begin with clearing of the site, then excavation for the roadway section, excavation for the detention pond, construction of the pavement structure, and final grading.

D. The total area of the construction site is estimated to be 3.2 acres.

The total area of the site that is estimated will be disturbed by excavation, grading or other activities is 3.2 acres.

E.	The following is a weighted average of the runoff coefficient for this project after construction activities are completed:				
	0.35				
F.	The following is a description of the soil types found at the project site followed by information regarding their erosivity:				
	3070 Beaucoup Silty Clay Loam – High Erodibility K = 0.32 802B Orthents, Loamy, Undulating – Low Erodibility K = 0.15				
G.	The following is a description of potentially erosive areas associated with this project:				
	The left sideslopes along Road A.				
H.	The following is a description of soil disturbing activities, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):				
	The removal of trees from the left sideslopes along Road A. These slopes are fairly steep as well. Stone riprap, bedding material, and filter fabric will be used to stabilize the slopes.				
1.	See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.				
J.	The following is a list of receiving water(s) and the ultimate receiving water(s), and areal extent of wetland acreage at the site. The location of the receiving waters can be found on the erosion and sediment control plans:				
	Storm water from this project will flow into an on-site detention pond and will be released into the Mississippi River.				
K.	The following pollutants of concern will be associated with this construction project:				
	⊠ Soil Sediment □ Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) □ Concrete □ Antifreeze / Coolants □ Concrete Truck Waste □ Waste water from cleaning construction equipment □ Concrete Curing Compounds □ Other (specify) □ Solid Waste Debris □ Other (specify) □ Paints □ Other (specify) □ Solvents □ Other (specify) □ Fertilizers / Pesticides □ Other (specify)				
Со	ntrols:				

II.

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the contractor will be responsible for its implementation as indicated. The contractor shall provide to the resident engineer a plan for the implementation of the measures indicated. The contractor, and subcontractors, will notify the resident engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the permit. Each such contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

A. Erosion and Sediment Controls

1. Stabilized Practices: Provided below is a description of interim and permanent stabilization practices, including site specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization

practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(A)(1)(a) and II(A)(3), stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of 21 or more calendar days.

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. The following Stabilization Practices will be used for this project: ☐ Preservation of Mature Vegetation Erosion Control Blanket / Mulching ☐ Vegetated Buffer Strips Soddina ☐ Protection of Trees Geotextiles Other (specify) ☐ Temporary Turf (Seeding, Class 7) Other (specify) ☐ Temporary Mulching Other (specify) □ Permanent Seeding Other (specify) Describe how the Stabilization Practices listed above will be utilized: Temporary Erosion Control Seeding will be applied to all areas of the disturbed site in accordance with Section 280 of IDOT's Standard Specifications All areas that are at final grade will be prepared for seeding and permanently seeded. Erosion Control Blanket will be installed at slopes around the detention pond, along ditches, and areas near sidewalks where silt could affect the sidewalk. 2. Structural Practices: Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act. The following Structural Practices will be used for this project: Rock Outlet Protection □ Perimeter Erosion Barrier \boxtimes Riprap Gabions ☐ Sediment Trap Slope Mattress ☐ Temporary Pipe Slope Drain Retaining Walls ☐ Temporary Sediment Basin Slope Walls ☐ Temporary Stream Crossing Concrete Revetment Mats □· Level Spreaders ☐ Turf Reinforcement Mats Other (specify) ☐ Permanent Check Dams Other (specify) ☐ Permanent Sediment Basin Other (specify)

Describe how the Structural Practices listed above will be utilized:

☐ Aggregate Ditch

☐ Paved Ditch

1. Perimeter Erosion Barrier - Silt fences will be placed at the bottom of the embankment in an effort to contain silt and runoff from leaving the site. Silt fences will also be placed around riprap areas as well as the detention pond which will not be filled with water to control silt from entering the pond.

Other (specify)

Other (specify)

Construct at beginning of construction. Remove at end of construction.

2. Temporary Ditch Checks- Temporary ditch checks will be placed along various locations of all ditches at locations determined by the Engineer. These will be used to control silt in the ditches until seeding and erosion control blanket can be placed.

Temporary ditch checks shall be located at every 1 foot fall/rise in ditch grade.

Temporary ditch checks, aggregate uses grading No. 3 – remove at end of construction.

Straw bales, hay bales, perimeter erosion barrier and silt fence will not be permitted for temporary or permanent ditch checks. Ditch checks shall be composed of aggregate (if specified). Enviroberm, triangular silt dikes, georidge and rolled excelsior.

- 3. Storm Drain Inlet Protection Inlet and Pipe Protection will be provided for storm sewers and culverts. Sediment filters will be placed in all inlets and upstream flowlines of all culverts during construction and will be cleaned on a regular basis.
- 4. Riprap Riprap will be used to line ditches that will have a higher velocity of flow to prevent erosion and will also to be used to line slopes next to regions where the Mississippi River can encroach. The emergency spillway of the detention pond will also be lined with riprap to protect from high velocity flows.

As soon as reasonable access is available to all locations where water drains away from the project, temporary ditch checks, inlet and pipe protection and perimeter erosion barrier shall be installed as called out in this plan and directed by the Engineer.

All erosion control products furnished shall be specifically recommended by the manufacturer for the use specified in the erosion control plan. Prior to the approval and use of the product, the Contractor shall submit to the Engineer a notarized certification by the producer stating the intended use of the product and that the physical properties required for this application are met or exceeded. The Contractor shall provide manufacturer installation procedures to facilitate the Engineer in construction inspection.

- 3. Storm Water Management: Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.
 - a. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Section 59-8 (Erosion and Sediment Control) in Chapter 59 (Landscape Design and Erosion Control) of the Illinois Department of Transportation Bureau of Design and Environment Manual. If practices other than those discussed in Section 59-8 are selected for implementation or if practices are applied to situations different from those covered in Section 59-8, the technical basis for such decisions will be explained below.

b. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of Storm Water Management Controls.

A detention pond will be constructed which will contain all runoff from the site. Portions of the pavement and sidewalk itself will slow and filter runoff by the use of permeable concrete pavers. Rain gardens as well as the use of bio swales to slow run off will be used. Seeding with native grasses will limit runoff and help with infiltration.

4. Other Controls:

a. Vehicle Entrances and Exits – Stabilized construction entrances and exits must be constructed to prevent tracking of sediments onto roadways.

The contractor will provide the resident engineer with a written plan identifying the location of stabilized entrances and exits and the procedures (s)he will use to construct and maintain them.

- b. Material Delivery, Storage, and Use The following BMPs shall be implemented to help prevent discharges of construction materials during delivery, storage, and use:
 - All products delivered to the project site must be properly labeled.
 - Water tight shipping containers and/or semi trailers shall be used to store hand tools, small parts, and most construction materials that can be carried by hand, such as paint cans, solvents, and grease.
 - A storage/containment facility should be chosen for larger items such as drums and items shipped or stored on pallets. Such material is to be covered by a tin roof or large sheets of plastic to prevent precipitation from coming in contact with the products being stored.
 - Large items such as light stands, framing materials and lumber shall be stored in the open in a general storage area. Such material shall be elevated with wood blocks to minimize contact with storm water runoff.
 - Spill clean-up materials, material safety data sheets, an inventory of materials, and emergency
 contact numbers shall be maintained and stored in one designated area and each Contractor is
 to inform his/her employees and the resident engineer of this location.
- c. Stockpile Management BMPs shall be implemented to reduce or eliminate pollution of storm water from stockpiles of soil and paving materials such as but not limited to portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, aggregate sub base, and pre-mixed aggregate. The following BMPs may be considered:
 - Perimeter Erosion Barrier
 - Temporary Seeding
 - Temporary Mulch
 - Plastic Covers
 - Soil Binders
 - Storm Drain Inlet Protection

The contractor will provide the resident engineer with a written plan of the procedures (s)he will use on the project and how they will be maintained.

- d. Waste Disposal. No materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.
- e. The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.
- f. The contractor shall provide a written and graphic plan to the resident engineer identifying where each of the above areas will be located and how they are to be managed.

5. Approved State or Local Laws

The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual, 1995. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

None

III. Maintenance:

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. The resident engineer will provide maintenance guides to the contractor for the practices associated with this project.

All procedures used to maintain erosion control devices shall adhere to Section 280 of IDOT's Standard Specifications.

IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site. Such inspections shall be conducted at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater or equivalent snowfall.

- A. Disturbed areas, use areas (storage of materials, stockpiles, machine maintenance, fueling, etc.), borrow sites, and waste sites shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Discharge locations or points that are accessible, shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off site sediment tracking.
- B. Based on the results of the inspection, the description of potential pollutant sources identified in section I above and pollution prevention measures identified in section II above shall be revised as appropriate as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within ½ hour to 1 week based on the urgency of the situation. The resident engineer will notify the contractor of the time required to implement such actions through the weekly inspection report.
- C. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with section IV(B) shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed in accordance with Part VI. G of the general permit.
- D. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the resident engineer shall complete and file an "Incidence of Noncompliance" (ION) report for the identified violation. The resident engineer shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI. G of the general permit.

The Incidence of Non-Compliance shall be mailed to the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Attn: Compliance Assurance Section 1021 North Grand East Post Office Box 19276 Springfield, Illinois 62794-9276

V. Non-Storm Water Discharges:

Except for flows from fire fighting activities, sources of non-storm water that is combined with storm water discharges associated with the industrial activity addressed in this plan must be described below. Appropriate pollution prevention measures, as described below, will be implemented for the non-storm water component(s) of the discharge.

- A. Spill Prevention and Control BMPs shall be implemented to contain and clean-up spills and prevent material discharges to the storm drain system. The contractor shall produce a written plan stating how his/her company will prevent, report, and clean up spills and provide a copy to all of his/her employees and the resident engineer. The contractor shall notify all of his/her employees on the proper protocol for reporting spills. The contractor shall notify the resident engineer of any spills immediately.
- B. Concrete Residuals and Washout Wastes The following BMPs shall be implemented to control residual concrete, concrete sediments, and rinse water:
 - Temporary Concrete Washout Facilities shall be constructed for rinsing out concrete trucks. Signs shall
 be installed directing concrete truck drivers where designated washout facilities are located.
 - The contractor shall have the location of temporary concrete washout facilities approved by the resident engineer.
 - All temporary concrete washout facilities are to be inspected by the contractor after each use and all spills must be reported to the resident engineer and cleaned up immediately.
 - Concrete waste solids/liquids shall be disposed of properly.
- C. Litter Management A proper number of dumpsters shall be provided on site to handle debris and litter associated with the project. The Contractor is responsible for ensuring his/her employees place all litter including marking paint cans, soda cans, food wrappers, wood lathe, marking ribbon, construction string, and all other construction related litter in the proper dumpsters.
- D. Vehicle and Equipment Cleaning Vehicles and equipment are to be cleaned in designated areas only, preferably off site.
- E. Vehicle and Equipment Fueling A variety of BMPs can be implemented during fueling of vehicles and equipment to prevent pollution. The contractor shall inform the resident engineer as to which BMPs will be used on the project. The contractor shall inform the resident engineer how (s)he will be informing his/her employees of these BMPs (i.e. signs, training, etc.). Below are a few examples of these BMPs:
 - Containment
 - Spill Prevention and Control
 - Use of Drip Pans and Absorbents
 - Automatic Shut-Off Nozzles
 - Topping Off Restrictions
 - Leak Inspection and Repair
- F. Vehicle and Equipment Maintenance On site maintenance must be performed in accordance with all environmental laws such as proper storage and no dumping of old engine oil or other fluids on site.

VI. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of an Erosion and Sediment Control Deficiency Deduction against the contractor and/or penalties under the NPDES permit which could be passed onto the contractor.



Print Name

Title

Name of Firm

Street Address

Contractor Certification Statement

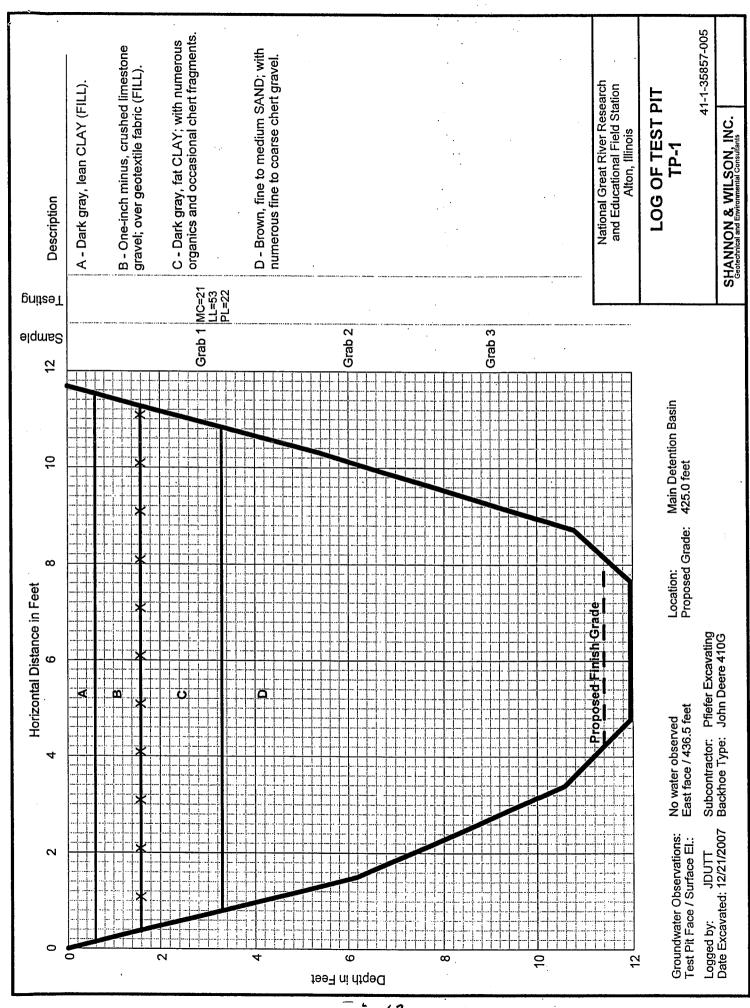
Signature

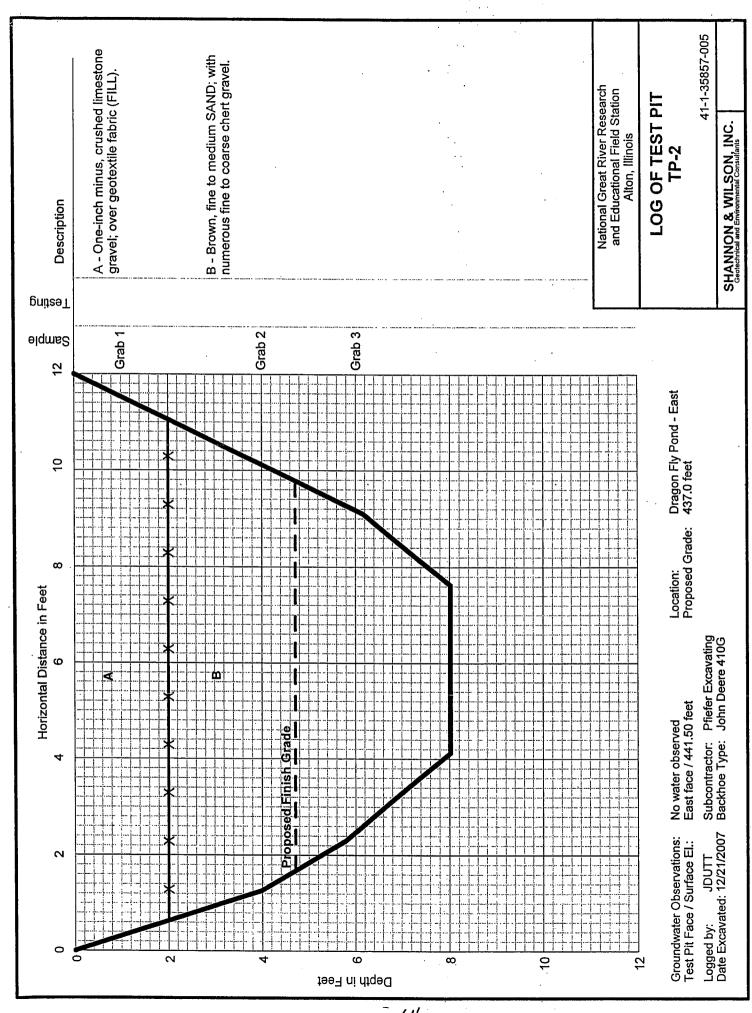
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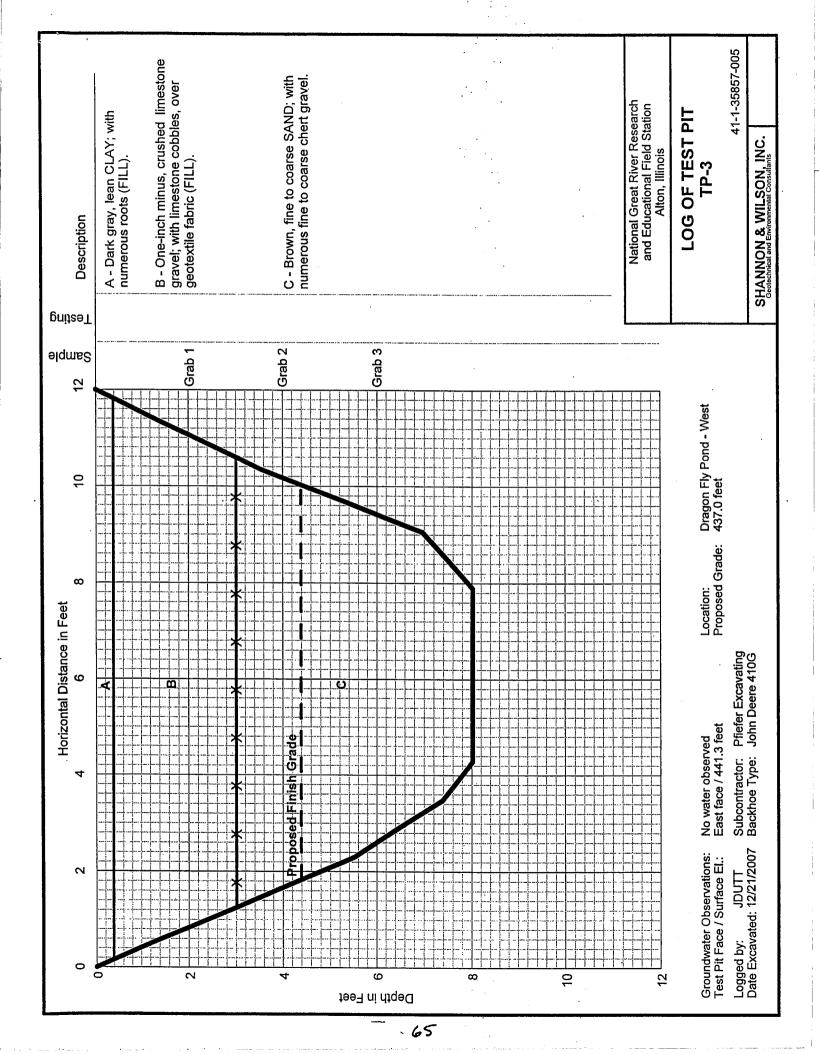
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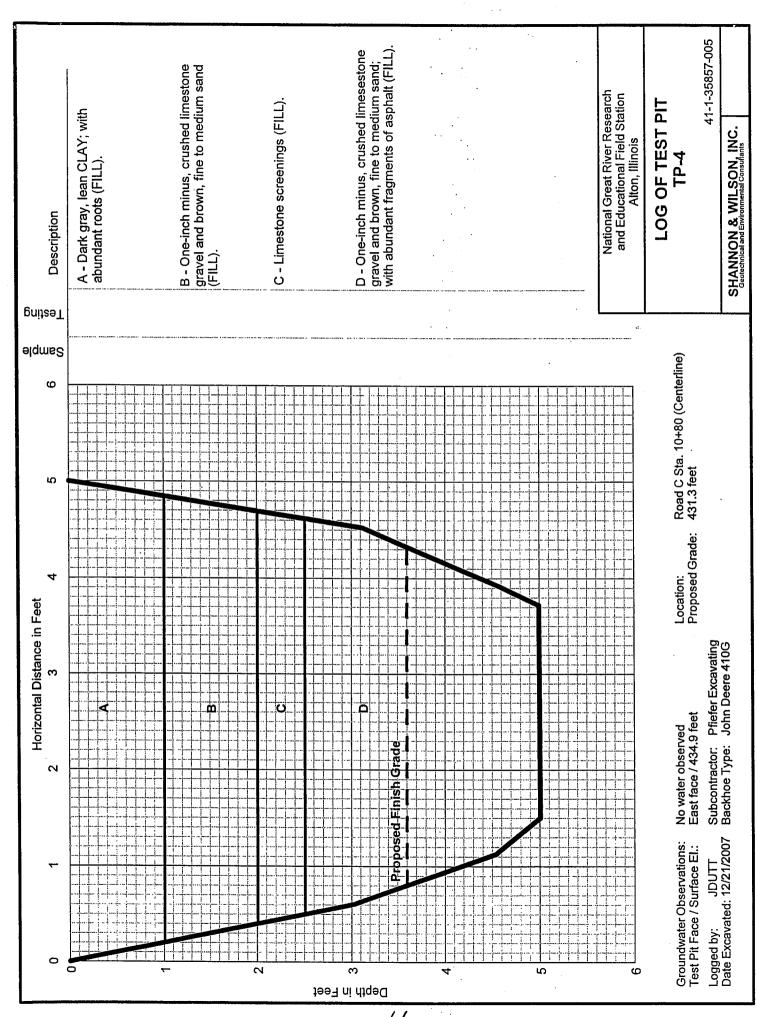
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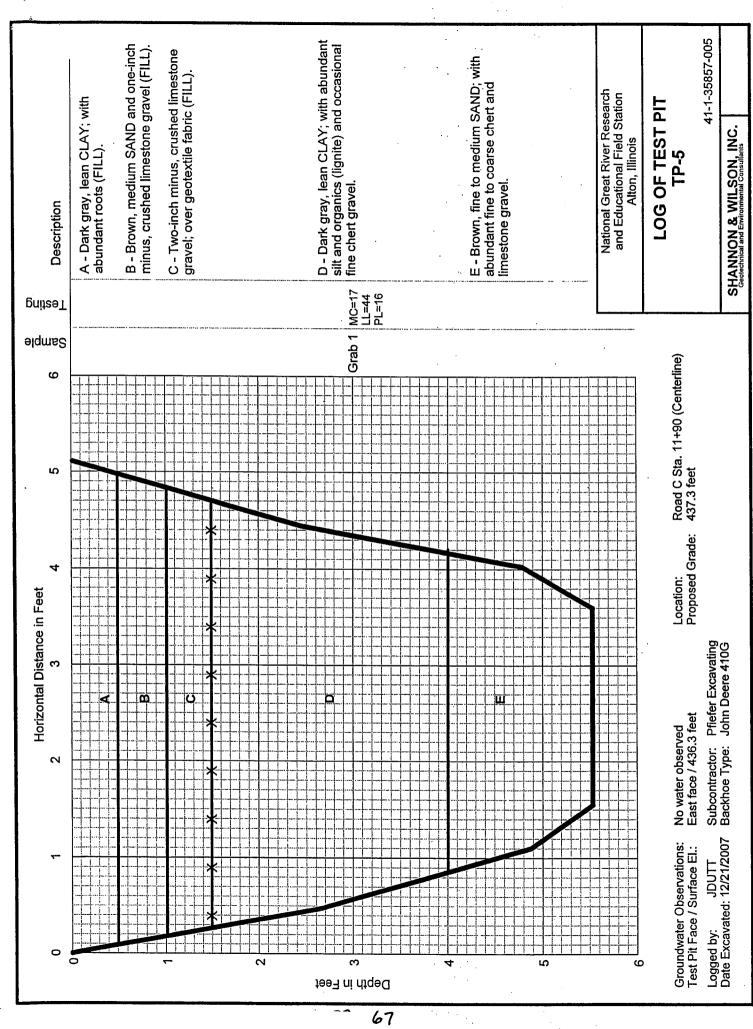
This certification statement is part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency on May 30, 2003. Lock and Dam Way Route Access Roads for the NGRREC Marked Rt. Project No. HPD-3162(001) Section 05-00001-00-PK 97365 Contract No. Madison County I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDÉS) permit (ILR 10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification. I have read and understand all of the information and requirements stated in the Storm Water Pollution Prevention Plan for the above mentioned project. I have provided all documentation required to be in compliance with the ILR10 and Storm Water Pollution Prevention Plan and will provide timely updates to these documents as necessary. ☐ Contractor □ Sub-Contractor

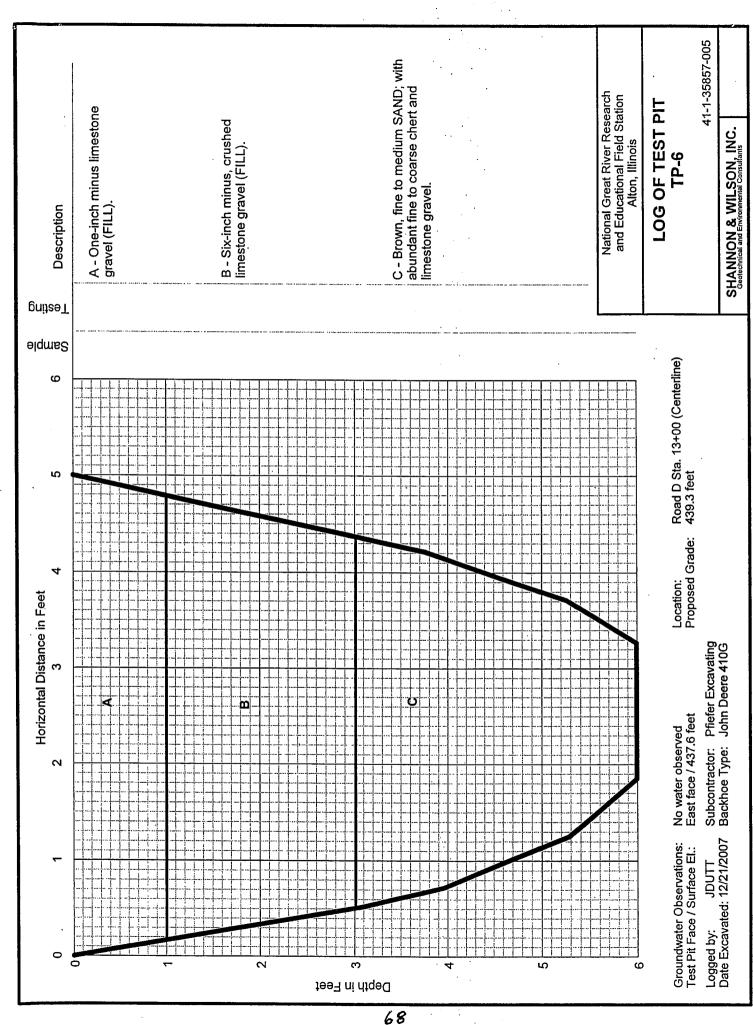


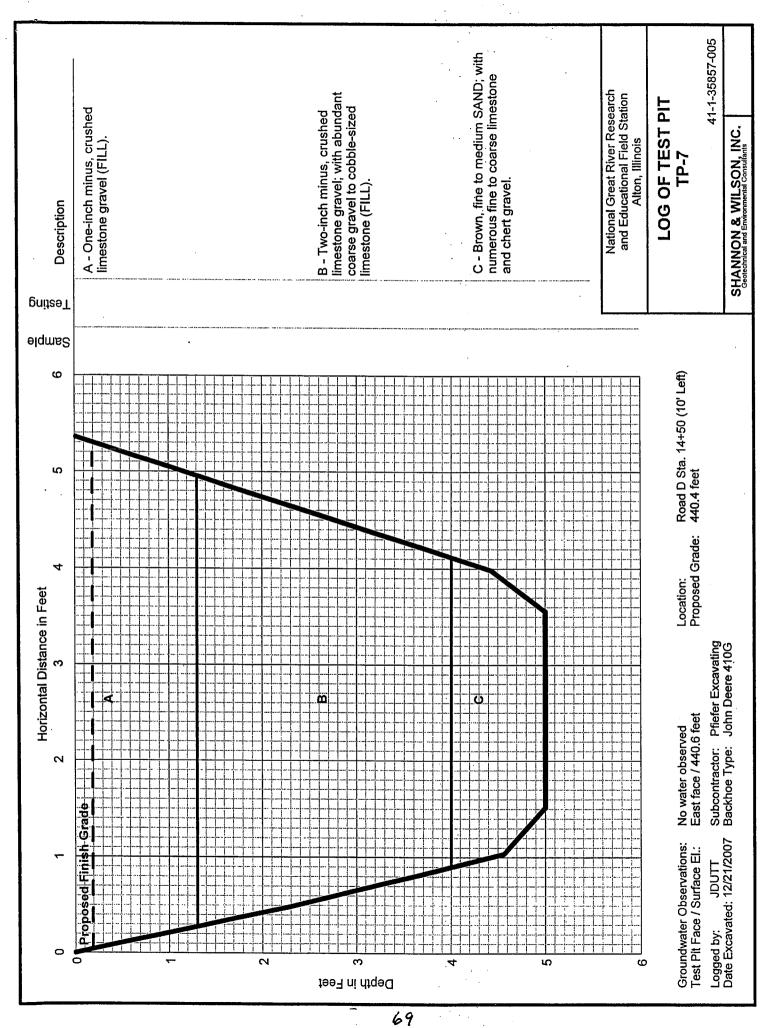


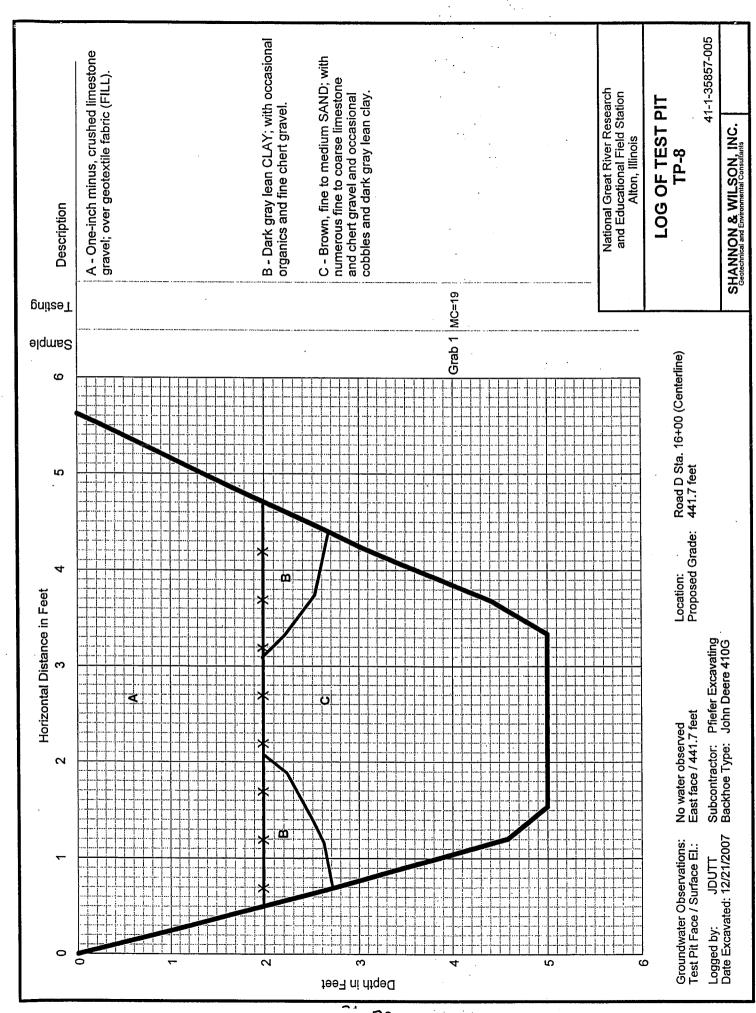


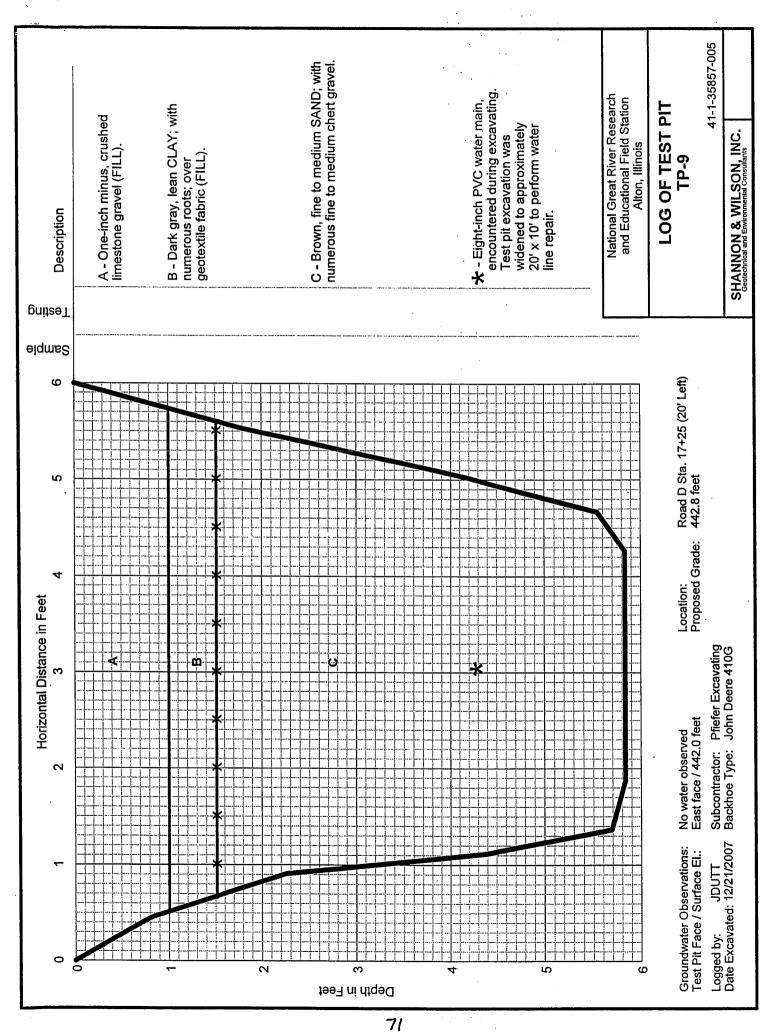


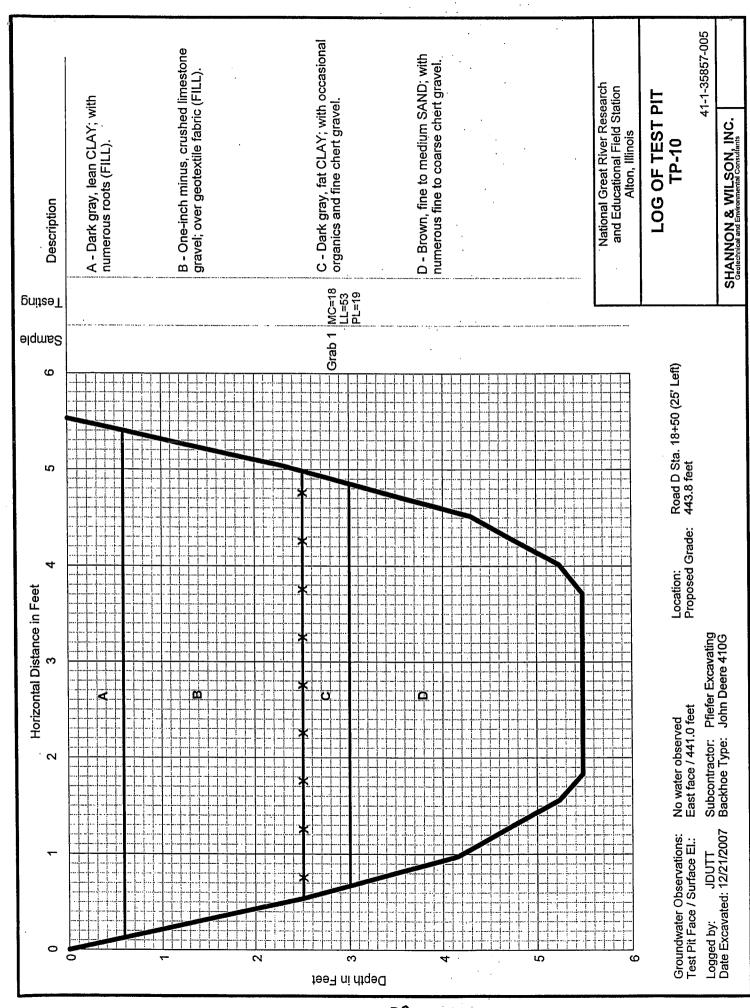


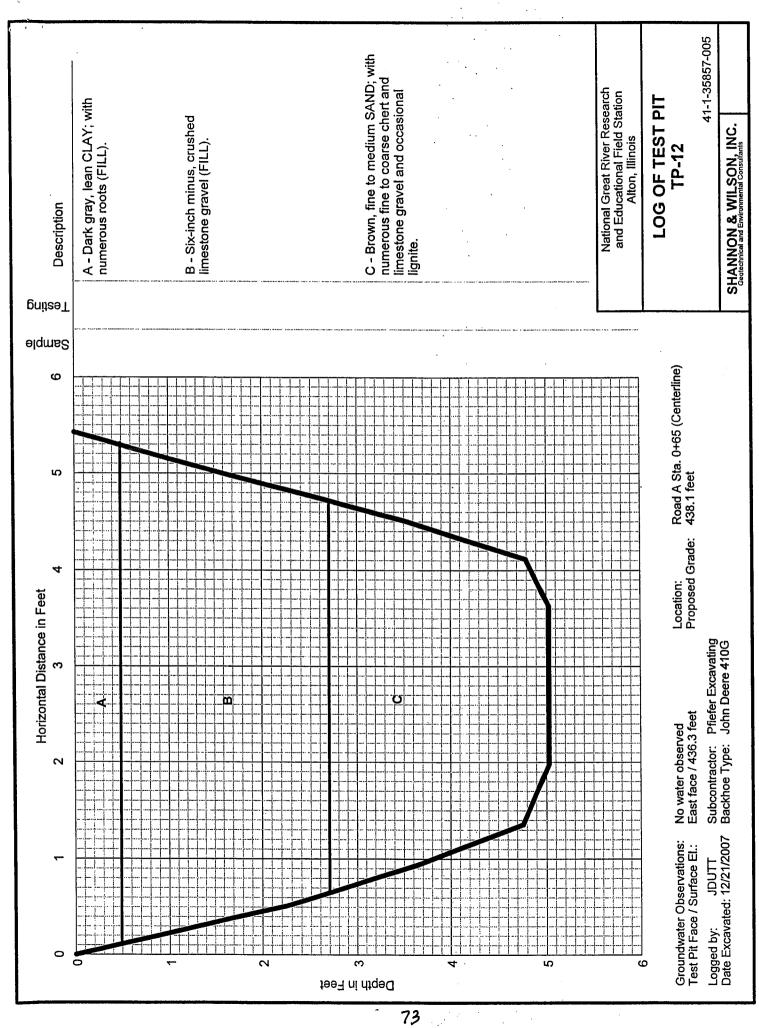


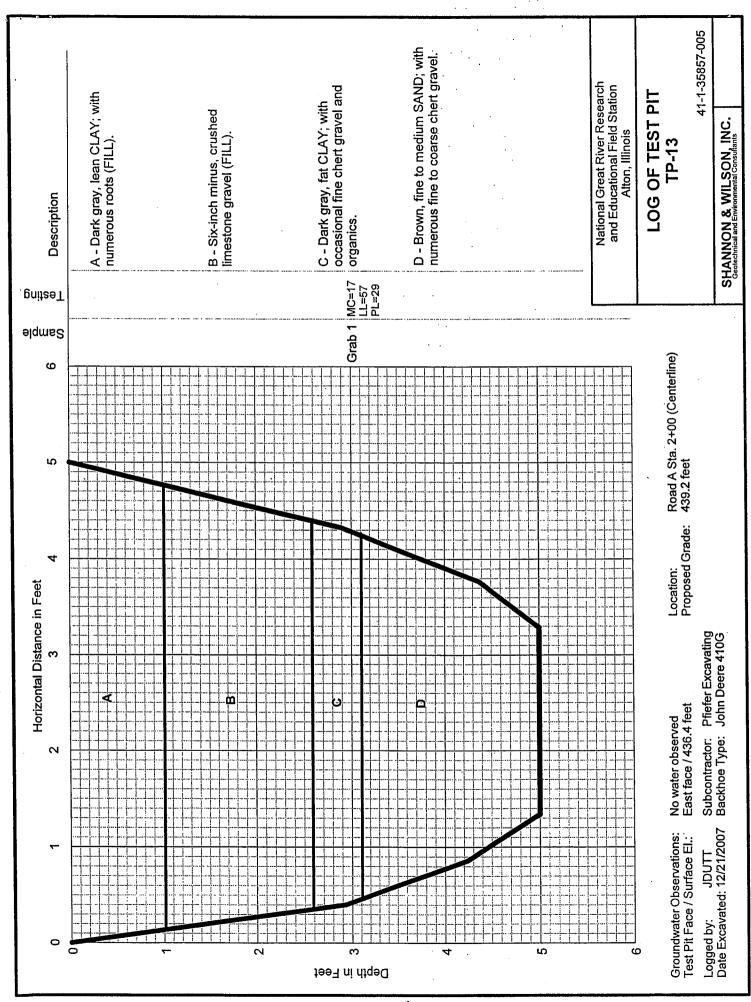












DEPARTMENT OF THE ARMY PERMIT



Permittee: Lewis and Clark Community College

Permit No. P-2654

Issuing Office U.S. Army Engineer District, St. Louis

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: This permit authorizes you to clear and place fill material into approximately 1.08 acres of jurisdictional wooded wetlands, as well as to install structures within the Mississippi River, a jurisdictional navigable water of the United States. The impacts are associated with the construction of features related to the Lewis and Clark Community College, National Great Rivers Research and Education Field Station.

Project Location: The facility is located in the Southeast and Southwest ¼ of Section 19, Township 5 North, Range 9 West, along the left descending bank of the Mississippi River, immediately below the Melvin Price Lock and Dam, in Madison County, Illinois.

Permit Conditions:

General Conditions:

- 1. The time limit for completing the work authorized ends on <u>July 31, 2018</u>. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
- 2. You must maintain the activity authorized by this permit in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
- 3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
- 4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
- 5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

ENG FORM 1721, Nov 86

EDITION OF SEP 82 IS OBSOLETE (33 CFR 325 (Appendix A))

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President's Office

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

See continuation sheets, page 4, 5 and 6, attached to this document.

Further Information:

- 1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
- (x) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- (x) Section 404 of the Clean Water Act (33 U.S.C. 1344).
- () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
- 2. Limits of this authorization.
- a. This permit does not obviate the need to obtain other Federal, state, or local authorization required by law.
- b. This permit does not grant any property rights or exclusive privileges.
- c. This permit does not authorize any injury to the property or rights of others.
- d. This permit does not authorize interference with any existing or proposed Federal project.
- 3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.
- e. Damage claims associated with any future modification, suspension, or revocation of this permit,
- 4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
- 5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a revaluation include, but are not limited to, the following:
 - a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fall to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

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circumstances requiring e	ondition 1 establishes a time limit for the completion of the either a prompt completion of the authorized activity or a re consideration to a request for an extension of this time limit.	evaluat		
Your signature below, as	permittee, indicates that you accept and agree to comply w	vith the	terms and conditions of this permit.	•
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	it of		9123108	
(PERMITTEE)	Lewis and Clark Community College Dr. Date Chapman 5800 Godfrey Road Godfrey, Illinois 62035		(DATE)	
This permit becomes effective	e when the Federal official, designated to act for the Secretary of the	Army, h	nas signed below.	
Danne	D-Mc Clerler		10/2/08	
(DISTRICT E	IGINEER) Thomas E. O'Hara, Jr. Colonel, U.S. Army By: Danny D. McClendon Chief, Regulatory Branch		(DATE)	
When the structures or work a be binding on the new owner conditions, have the transfere	authorized by this permit are still in existence at the time the property s) of the property. To validate the transfer of this permit and the assession and date below.	y is trans sociated	sterred, the terms and conditions of this permission liabilities associated with compliance with its	nit will continue to terms and
		•		• .
(TRANSFERE	E)		(DATE)	•
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P-2654 SPECIAL CONDITIONS

- 1. This permit may be revoked or a stop work order issued if the State of Illinois notifies us that the permitted activities are not being performed in conformance with the Illinois Environmental Protection Agency's Section 401 Water Quality Certification and associated conditions issued for this permit.
- 2. The permittee understands and agrees that if future operation by the United States require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure of work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 3. The boat ramp shall be located and constructed in a manner consistent with the permittee's submitted drawings and plans that accompanied the Department of the Army permit application. The boat ramp shall be approximately 15-feetwide by 145-feet-long and shall be constructed down to an elevation of 394 NGVD. This elevation is approximately three feet below normal low river elevation 397 NGVD. The boat ramp shall be installed by two different methods. The lower 32-feet shall be constructed of pre-cast panels while the remaining 313 feet shall be constructed by cast-in-place methods. The boat ramp shall be protected with a six-foot-high by six-foot-wide class C sized stone.
- 4. Clearing and construction associated with the permitted water discharge pipe and energy dissipater structure shall impact no more than 0.08 acre of wooded wetlands. Construction of the discharge pipe and energy dissipater structure shall be located and conducted in the manner as shown on your submitted drawings and plans that accompanied the permittee's Department of the Army permit application.
- 5. This permit authorizes you to construct a water intake pump station structure and two associated protective river cells at locations and dimensions as shown on drawings and plans submitted with the permittee's Department of the Army permit application. The pump station shall consist of a 10-foot-diameter steel casing with two slide gates located between elevations 399 and 402.5 NGVD. The slide gates shall be 36-inches by 42-inches fitted with fixed bar grates having maximum openings of 1.5 inches wide by 3 inches tall. The intake velocity shall be approximately 0.42 feet per second, based on a maximum flow rate of 1,400 gallons per minute and a completely unobstructed bar grate. The anticipated intake velocity if 50% of the bar grate is blocked shall be approximately 0.83 feet per second. The U.S. Fish and Wildlife Service recommended that the water intake be screened with a 1/4-inch mesh and have an intake velocity of less than 0.5 feet per second, or be placed at water depths greater than 15 feet to protect against entrainment or impingement of pallid sturgeon larvae/fingerlings and larvae/fingerlings of other native fish species. If a screen is used a Johnson (or Johnson type) screen/intake shall be used, if feasible. The use of continuous rotating screens is recommended when feasible, and use of a low-pressure wash increases the survival of fish removed from screens. The U.S. Fish and Wildlife Service also recommended placing the intake in a location of higher water velocity, if feasible (avoid eddies), and no closer than 2 feet from the river bottom. The top of the steel casing shall be constructed to approximate elevation 440 NGVD. The pump station shall accommodate four submersible pumps. The pumps shall be placed on a concrete pad located at approximate elevation 395 NGVD. The top of the steel casing shall be closed with a concrete deck equipped with hatches and railings. The ¾-inch-thick steel casing shall be driven to rock and/or refusal with a vibratory hammer. Approximately 20.5 cubic yards of river sediment that must be excavated from within the steel casing to appropriately house the submersible pumps shall be fully contained and disposed at an approved upland site containing no jurisdictional features. A catwalk bridge structure shall be installed from the top of the pump station casing towards the upper riverbank for maintenance and access purposes. The two, six-foot-diameter, steel monopole protective river cells shall be installed directly upstream and downstream of the proposed pump station intake structure to deflect debris and ice. The monopole structures shall be filled with sand and a steel cap shall be welded on top to seal the structures.

- 6. The permitted facility and attendant features are within close proximity to the navigable lock chamber. The permittee shall coordinate proper lighting requirement with the U.S. Coast Guard for any structures in or near the river to avoid lighting distractions during evening navigation hours. The exterior of the main building and parking area is currently designed with 400-watt metal halide cutoff style shoebox luminaries mounted on 25 feet high poles. These lights, and any other proposed lighting, must be coordinated with the U.S. Coast Guard for approval prior to installation and use. The United States Coast Guard, Marine Safety Office, can be contacted at 1222 Spruce Street, St. Louis, Missouri 63103-2832 for possible lighting requirements and/or safety requirements that may be needed.
- 7. Clearing and construction associated with the proposed water discharge pipe and energy dissipater structure would impact approximately 0.08 acre of wooded wetlands. Clearing and construction requirements for the proposed boat ramp, including the associated parking lot and access road, would impact approximately one acre of wooded wetlands. The total permitted project impacts to wooded wetlands shall not exceed 1.08 acres.
- 8. The permittee shall provide and conduct wooded wetland mitigation replanting activities for the 1.08-acre project induced impacts at a 4:1 compensatory replacement ratio. The total created wooded wetland mitigation area shall be comprised of a contiguous land area of no less than 4.32 acres. A final mitigation and monitoring plan shall be submitted to the Corps of Engineers Regulatory Branch within 45 days from the date of permit issuance for our review and approval. The mitigation and monitoring plan shall include a specific location map of the mitigation area. The final mitigation and monitoring plan shall also include, but is not limited to, the following details and requirements: a minimum 85% survival rate of all planted trees shall be required for five (5) consecutive years. Candidate planting stock shall be of at least six different approved hydrophytic tree species, of equal planting numbers, to be planted on a maximum centered spacing of 20-feet, for a minimum tree density of 108 trees per acre. Mowing between the planted trees shall be required a minimum of three to four times per year to prevent invasive species establishment and to avoid moisture competition for establishing tree stock. Yearly monitoring reports shall be supplied to the St. Louis District Regulatory Branch for five (5) consecutive years to monitor tree survivability, hydric soil establishment and sufficient hydrology indicators. Photographic records must be included in the yearly monitoring report showing pre-construction conditions as well as yearly monitoring. photographs for five (5) consecutive years to prove a minimum 85% survival rate of all planted tree stock. Corrective measures including, but not limited to, vegetative replanting requirements, soil manipulation and hydrology improvements may be required at the discretion of the St. Louis District Regulatory Branch to ensure the mitigation area is establishing the necessary wetland parameters. Additional monitoring will be required if vegetation survival rates and/or other wetland parameters are not acceptable to the Corps of Engineers Regulatory Branch after the first five consecutive monitoring years. The boundaries of the wooded wetland mitigation area shall be surveyed and deed restricted by the county to ensure it remains an undisturbed wooded wetland in perpetuity. The Corps of Engineers Regulatory Branch will prepare a Conservation Easement for the mitigation area after the final mitigation and monitoring plan is reviewed and approved. The Conservation Easement document will include other restrictions and conditions that must be submitted with the permittee's supplied survey of the mitigation area for subsequent deed restriction with the county.
- 9. Usage of the boat ramp and other infrastructure may be restricted by adverse high or low water conditions, as deemed necessary by the U.S. Coast Guard and the U.S. Army Corps of Engineers.
- 10. During construction and boat ramp usage, you shall comply with all U.S. Coast Guard and Corps of Engineers regulations concerning the prevention of navigation obstructions in navigable waters of the United States. You shall conduct operations in the river such that there will be no unreasonable interference with navigation.
- 11. The permittee shall develop and maintain a contingency plan for the prevention and control of any spills of fuel, oils, or other hazardous materials. This plan shall be maintained at the facilities. All personnel shall be familiar with the plan.
- 12. The facility shall not prohibit or interfere with future work, construction of weirs, or dikes, undertaken by the United States Government for navigation purposes.
- 13. The permitted structures shall be removed, at no cost to the United States Government, when deemed necessary for actions required by the United States Government (bankline repairs, construction of new structures, dredging, etc.).

- 14. The United States Government shall not be held liable for any changed conditions resulting from the installation of weirs, dikes, revetment, etc.
- 15. The permittee shall notify the St. Louis District, Corps of Engineers Regulatory Branch at the beginning of construction and at the end of construction.
- 16. If any part of the authorized work is performed by a contractor, before starting work, you shall discuss the terms and conditions of this permit with the contractor; and, you shall give a copy of this entire permit to the contractor.
- 17. You shall store all construction materials, equipment, and/or petroleum products, when not in use, above anticipated high water levels. You shall employ measures to prevent or control spilled fuels or lubricants from entering the waters of the United States.
- 16. The Corps of Engineers shall remain as the immediate point of contact. The Corps of Engineers shall be allowed to inspect this project at irregular intervals to assure that conditions of this permit are in compliance. The failure to comply with permit conditions will result in enforcement actions by the Corps of Engineers.
- 17. This permit does not include any form of authorization for maintenance dredging. This would include, but not be limited to, clamshell, hydraulic, prop wash, etc.
- 18. Any future proposals involving the installation of wind turbines or hydrokinetic turbines must be submitted, reviewed and approved by the Corps of Engineers Regulatory Branch, the U.S. Fish and Wildlife Service and the Illinois Department of Natural Resources.
- 19. The permitted aquatic raceway structures shall be used to conduct experiments on various aspects of the river and floodplain ecology. The raceways shall not be used for aquaculture experiments, hatchery propagation experiments, or any other use resulting in intensive breeding or production of fish. Only animals and plant that are locally occurring within the Mississippi River (including local floodplain habitat and tributaries) shall be used. Animals and plants shall be obtained locally from the Mississippi River, its floodplain and tributaries whenever possible to avoid the introduction of disease. If that is not feasible, then experimental plants and animals shall be obtained from other sources/vendors but shall be used in the facilities and all food items shall be limited to natural prey items that are locally occurring within the Mississippi River.
- 20. River related construction activities should be avoided from April 15th to June 30th in order to avoid impacts during the primary timeframe for spawning.

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Illinois Environmental Protection Agency

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 – (217) 782-3397 JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 – (312) 814-6026

ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/782-3362

AUG - 5 2008

St. Louis District Corps of Engineers 1222 Spruce Street St. Louis, MO 63103

Re: Lewis and Clark Community College (Madison County)

National Great Rivers Research and Education Field Station - Mississippi River and Wetlands

Log # C-0653-07 [CoE # P-2654]



This Agency received a request on September 21, 2007 from Lewis and Clark Community College requesting necessary comments concerning the construction of the National Great Rivers Research and Education Field Station along the Mississippi River immediately below the Melvin Price Lock and Dam. We offer the following comments.

Based on the information included in this submittal, it is our engineering judgment that the proposed project may be completed without causing water pollution as defined in the Illinois Environmental Protection Act, provided the project is carefully planned and supervised.

These comments are directed at the effect on water quality of the construction procedures involved in the above described project and are <u>not</u> an approval of any discharge resulting from the completed facility, nor an approval of the design of the facility. These comments do <u>not</u> supplant any permit responsibilities of the applicant toward the Agency.

This Agency hereby issues certification under Section 401 of the Clean Water Act (PL 95-217), subject to the applicant's compliance with the following conditions:

- 1. The applicant shall not cause:
 - a. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulations;
 - b. water pollution defined and prohibited by the Illinois Environmental Protection Act; or
 - c. interference with water use practices near public recreation areas or water supply intakes.
- 2. The applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.

ROCKFORD - 4302 North Main Street, Rockford, IL 61103 - (815) 987-7760

ELGIN - 595 South State, Elgin, IL 60123 - (847) 608-3131

BUREAU OF LAND - PEORIA - 7620 N. University St., Peoria, IL 61614 - (309) 693-5462

SPRINGFIELD - 4500 S. Sixth Street Rd., Springfield, IL 62706 - (217) 786-6892

MARION - 2309 W. Main St., Suite 116, Marion, IL 62959 - (618) 993-7200

• DES PLAINES - 9511 W. Harrison St., Des Plaines, IL 60016 - (847) 294-4000

PEORIA - 5415 N. University St., Peoria, IL 61614 - (309) 693-5463

• CHAMPAIGN - 2125 South First Street, Champaign, IL 61820 - (217) 278-5800

COLLINSVILLE - 2009 Mall Street, Collinsville, IL 62234 - (618) 346-5120

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- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be constructed during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area on or after March 10, 2003. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- 5. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).
- 6. The applicant is advised that the following permit(s) must be obtained from the Agency: The applicant must obtain permits to construct sanitary sewers, water mains and related facilities prior to construction.
- 7. The proposed work shall be constructed with adequate erosion control measures (i.e., silt fences, straw bales, etc.) to prevent transport of sediment and materials to the adjoining wetlands and downstream.

This certification becomes effective when the Department of the Army, Corps of Engineers, includes the above conditions # 1 through # 7 as conditions of the requested permit issued pursuant to Section 404 of PL 95-217.

This certification does not grant immunity from any enforcement action found necessary by this Agency to meet its responsibilities in prevention, abatement, and control of water pollution.

Sincerely,

Alan Keller, P.E.

Manager, Permit Section

Division of Water Pollution Control

SAK:TJF:0653-07.doc

cc: IEPA, Records Unit

IEPA, DWPC, FOS, Collinsville

IDNR, OWR, Springfield

USEPA, Region 5

Dr. Dale Chapman, Lewis and Clark Community College

Ms. Barb Anderson, AAIC, Inc.

No. 1 Design Mesa Collinsville, IL 62234



This notice of authorization must be conspicuously displayed at the site of work.

October 2, 2008

This permit authorizes Lewis and Clark Community College to clear and place fill material into jurisdictional wooded wetlands as well as install structures within the Mississippi River. The jurisdictional impacts are associated with the construction of features related to the Lewis and Clark Community College, National Great Rivers Research and Education Field Station.

The facility will be located in the Southeast and Southwest % of Section 19. Township 5 North, Range 9 West, along the left descending bank of the Mississippi River, immediately below the Melvin Price Lock and Dam, in Madison County, Illinois.

Permit Number

P-2654

.~:.

Thomas E O'Hara, Jr. Colonel, U.S. Army

By: Danny D. McClendon Chief, Regulatory Branch

ENG FORM 4336, Jul 81 (33 CFR 320-220) EDITION OF JUL 70 MAY BE USED (PROPONENT: CECW-0)



DEPARTMENT OF THE ARMY ST. LOUIS DISTRICT CORPS OF ENGINEERS 1222 SPRUCE STREET ST. LOUIS, MISSOURI 63103-2833

October 2, 2008

Regulatory Branch File Number: P-2654

Dr. Dale Chapman Lewis and Clark Community College 5800 Godfrey Road Godfrey, Illinois 62035

Dear Dr. Chapman:

Transmitted herewith is Department of Army Permit Number P-2654, authorizing you to clear and place fill material into jurisdictional wooded wetlands as well as install structures within the Mississippi River. The jurisdictional impacts are associated with the construction of features related to the Lewis and Clark Community College, National Great Rivers Research and Education Field Station. The facility will be located in the Southeast and Southwest ¼ of Section 19, Township 5 North, Range 9 West, along the left descending bank of the Mississippi River, immediately below the Melvin Price Lock and Dam, in Madison County, Illinois.

It is to be understood this instrument does not give any property rights either in real estate or material, or any exclusive privileges; and it does not authorize any injury to private property or invasion of private rights, or any infringement of Federal, state or local laws or regulations; nor does it obviate the necessity of obtaining state assent to the work authorized.

General conditions designated 1 through 6 and parts 2 through 6 of "Further Information" are standard conditions for all permits. Additional special conditions listed with the signed permit specify measures to ensure permit compliance.

If any material changes in the scope, location and plans of the work are found necessary, due to unforeseen conditions or otherwise, revised plans detailing the proposed modifications in the work must be submitted to the District Engineer for review and approval. Proposed modifications may not be placed under construction until Department of the Army "Approval of Revised Plans" has been granted.

Also, we appreciate any feedback that you are able to offer. Please consider going to the following link: http://per2.nwp.usace.army.mil/survey.html to complete a quick, on-line survey regarding the Corps' Regulatory Program. If you have any questions, please contact Charles Frerker of my Regulatory staff at 314-331-8583.

Sincerely,

Danny D. McClendon

Chief, Regulatory Branch

NOTHFICATION OF ADMINISTRATEVE APPREAL OPTHONS AND PROCESS AND TREQUEST FOR APPEAL

Appli	cant: Lewis and Clark Community College	File No: P-2654	Date: 10-2-2008
Attacl	hed is:		See Section below
S. geo.	INITIAL PROFFERED PERMIT (Standard	Permit or Letter of permission)	A
X	PROFFERED PERMIT (Standard Permit or	Letter of permission)	В
PERMIT DENIAL		C	
ļ.	APPROVED JURISDICTIONAL DETERM	MINATION	D
à	PRELIMINARY JURISDICTIONAL DETI	ERMINATION	E

SECTIONAL: The following identifies wouldights and opnous regarding an administrative appeal of the above decision. Additional information may be found at http://tusace.amiv.mit/inet/functions/ew/cecwo/reg or Comstregulations at 33 GFR Pair 331

- A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.
- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final
 authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your
 signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights
 to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final
 authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your
 signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights
 to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. The division engineer must receive this form within 60 days of the date of this notice.
- C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. The division engineer must receive this form within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.
- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

REQUIRED CONTRACT PROVISIONS ALL CONTRACTS

PAYROLLS and PROCEDURES

EFFECTIVE 2/5/1975, REVISED 11/7/1986, 1/14/1994, and June 2001

The <u>prime contractor and each subcontractor</u> shall submit a weekly certified original and one copy of their company's payroll directly to the District Engineer.

Payrolls must be received within seven days of the payroll ending period.

Payroll data shall be submitted on Payroll Form RE 48 or an approved facsimile.

Every person paid by a contractor or subcontractor in any manner for his or her labor in the construction, prosecution, completion, or repair of this public work is **employed** and receiving "wages", regardless of any contractual relationship alleged to exist between him or her and the real employer.

Payroll data shall include all persons employed on the job site.

The following employee codes are to be used to identify each individual on the payroll:

A.	Gender:	M - Male	F - Female	
B.	Ethnic Group: 4 - American Indian/Ala	1 - White skan Native	2 - Black 5 - Asian/Pacific Islande	3 - Hispanic er
C.	Work Classification: CL - Clerical TD - Truck Drivers EL - Electricians OT - Other	OF - Officials CA - Carpenters IW - Ironworkers PP - Pipefitters	SU - Supervisors EO - Operators PA - Painters TE - Technical	FO Foremen ME - Mechanics CM - Cement Masons LA Laborers
D.	Employee Status:	O - Owner Operator A - Apprentice	J - Journeyman T - Trainee	C - Company

Payroll data shall be submitted by the prime contractor and each subcontractor for each consecutive week, from the start to the completion of their work. When there has been no activity during a work week, a payroll is still required to be sent to the District Engineer, with the appropriate box ("No Work", "Suspended", "Completed") checked at the bottom of the Payroll Form RE 48. Do Not check any of these boxes when payroll data is being reported on the payroll.

The Department of Transportation is requesting disclosure of information necessary to accomplish the statutory purpose as outlined under 23CFR part 230 and 41CFR part 60.4 and the illinois Human Rights Act. Disclosure of this information is REQUIRED. Failure to comply with this special provision may result in the withholding of payments to the contractor, and/or cancellation, termination, or suspension of the contract in whole or part.

Compliance with this Special Provision shall be considered incidental to the cost of the contract and no additional compensation will be allowed for any costs incurred.

This Special Provision must be included in each subcontract agreement.

Required Contract Provisions All Contracts Monthly Labor Summary and Activity Reporting System

Effective: 1-1-1995

Revised June 2001

I. Monthly Labor Summary Report, Form SBE 148

The <u>prime contractor and each first and second tier sub-contractor</u>, (hereinafter referred to as "subcontractor") shall submit a certified Monthly Labor Summary Report directly to the District Engineer.

This report is in lieu of submittal of the Monthly Workforce Analysis Report, Form SBE 956.

This report must be received in District Eight no later than the tenth day of the next month.

This Report shall be submitted by the prime contractor and each subcontractor, for each consecutive month, from the start, to the completion of their work on the contract.

The data source for this Report will be a summation of all personnel and hours worked on each subject contract for the month based on weekly payrolls for that month.

The Monthly Labor Summary Report is required to be submitted in one of the following formats:

- a.). For contractors having IDOT contracts valued in the aggregate at \$250,000 or less, the report may be typed or clearly handwritten using Form SBE 148 for submittal to the District Engineer for District Eight.
- b.) For contractors having IDOT contracts valued in the aggregate at more than \$250,000, the report must be submitted in a specific "Fixed Length Comma Delimited ASCII Text File Format". The subject file format is detailed on the next page. Submittal of this file may be by 3.5 inch disk, modem, or by e-mail.

II. Monthly Contract Activity Report, Form SBE 248

The prime contractor and each subcontractor shall submit a monthly report directly to the District Engineer, reflecting their contract activity on all Illinois Department of Transportation contracts they have in force in District Eight.

This report shall be submitted for each consecutive month, from the start, to the completion of all contracts in District Eight.

The report must be received in the District Office no later than the tenth day of the next month.

Monthly Labor Summary and Activity Reporting System Codes and Formats

Indicated below for your reference are the Employee Codes and File Formats required for this system.

I.) Monthly Labor Summary Report, Form SBE 148

The following employee codes are to be used to identify each individual on the Summary Report:

1. Gender:

3.

4.

M - Male

F - Female

2. Ethnic Group:

1 - White

2 - Black

3 - Hispanic

4 - American Indian/Alaskan Native

OF - Official

5 - Asian/Pacific Islander

SU - Supervisor FO - Foremen

Work Classification: CL - Clerical

CA - Carpenter

EO - Operator

ME - Mechanic

TD - Truck Driver EL - Electrician

IW - Ironworker PP - Pipefitter

PA - Painter TE - Technical

OT - Other LA - Laborer

CM -Cement Mason

O - Owner Operator

Employee Status:

A - Apprentice

J - Journeyman C - Company T - Trainee

Specific "Fixed Length Comma Delimited ASCII File Format"

Order	Field Name	Type	Size
1	Contractor Number	A	4
2	Contractor Reference Number	Α	6
3	Contract Number	Α	5
4	Period (07/28/2000)	D	10
5	SSN (111-11-1111)	Α	11
6	Name	Α	40
7	Gender	Α	1
8	Ethnic Group	Α	1
9	Work Classification	Α	1
10	Employee Status	Α	1
11	Total Hours (0000060.00)	N	10

File Name Conventions: (Contractor Number + Report Month/Year).Txt

i.e. 20001298.Txt

II.) Monthly Contract Activity Report, Form SBE 248

The following activity codes are to be used to identify the contractors contract status each month on the Monthly Activity Report, Form SBE 248:

Contract Status: 1 - Not Started 2 - Active

3 - No Work

4 - Suspended 5- Complete

Failure to comply with this special provision may result in the withholding of payments to the contractor, and/or cancellation, termination, or suspension of the contract in whole or part.

Compliance with this Special Provision shall be considered incidental to the cost of the contract and no additional compensation will be allowed for any costs incurred.

All prime and subcontractors having contracts in the aggregate exceeding \$250,000 must provide a "Fixed Length Comma Delimited ASCII File" for approval prior to the start of construction.

This Special Provision must be included in each subcontract agreement.

monitor/molassp2



State of Illinois Department of Transportation Bureau of Local Roads and Streets

SPECIAL PROVISION FOR INSURANCE

Effective: February 1, 2007 Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

Lewis and Clark Community College Sheppard, Morgan and Schwaab, Inc.			
·			

The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

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

Effective: November 1, 2008

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

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

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

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

80207

CEMENT (BDE)

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

Revise Section 1001 of the Standard Specifications to read:

"SECTION 1001. CEMENT

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

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

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

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

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

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

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

reducing or high range water-reducing admixture which is permitted according to Article 1020.05(b).

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

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

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

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

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

- (d) Rapid Hardening Cement. Rapid hardening cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall be on the Department's current "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs", and shall be according to the following.
 - (1) The cement shall have a maximum final set of 25 minutes, according to Illinois Modified ASTM C 191.
 - (2) The cement shall have a minimum compressive strength of 2000 psi (13,800 kPa) at 3.0 hours, 3200 psi (22,100 kPa) at 6.0 hours, and 4000 psi (27,600 kPa) at 24.0 hours, according to Illinois Modified ASTM C 109.
 - (3) The cement shall have a maximum drying shrinkage of 0.050 percent at seven days, according to Illinois Modified ASTM C 596.

- (4) The cement shall have a maximum expansion of 0.020 percent at 14 days, according to Illinois Modified ASTM C 1038.
- (5) The cement shall have a minimum 80 percent relative dynamic modulus of elasticity; and shall not have a weight (mass) gain in excess of 0.15 percent or a weight (mass) loss in excess of 1.0 percent, after 100 cycles, according to AASHTO T 161, Procedure B.
- (e) Calcium Aluminate Cement. Calcium aluminate cement shall be used only where specified by the Engineer. The cement shall meet the standard physical requirements for Type I cement according to ASTM C 150, except the time of setting shall not apply. The chemical requirements shall be determined according to ASTM C 114 and shall be as follows: minimum 38 percent aluminum oxide (Al₂O₃), maximum 42 percent calcium oxide (CaO), maximum 1 percent magnesium oxide (MgO), maximum 0.4 percent sulfur trioxide (SO₃), maximum 1 percent loss on ignition, and maximum 3.5 percent insoluble residue.
- **1001.02 Uniformity of Color.** Cement contained in single loads or in shipments of several loads to the same project shall not have visible differences in color.
- **1001.03 Mixing Brands and Types.** Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall not be mixed or used alternately in the same item of construction unless approved by the Engineer.
- 1001.04 Storage. Cement shall be stored and protected against damage, such as dampness which may cause partial set or hardened lumps. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall be kept separate."

80166

CONCRETE ADMIXTURES (BDE)

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

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

"(b) Admixtures. The use of admixtures to increase the workability or to accelerate the hardening of the concrete will be permitted when approved by the Engineer. Admixture dosages shall result in the mixture meeting the specified plastic and hardened properties. The Department will maintain an Approved List of Corrosion Inhibitors. Corrosion inhibitor dosage rates shall be according to Article 1020.05(b)(12). Department will also maintain an Approved List of Concrete Admixtures, and an admixture technical representative shall be consulted when determining an admixture dosage from this list. The dosage shall be within the range indicated on the approved list unless the influence by other admixtures, jobsite conditions (such as a very short haul time), or other circumstances warrant a dosage outside the range. The Engineer shall be notified when a dosage is proposed outside the range. To determine an admixture dosage, air temperature, concrete temperature, cement source and quantity, finely divided mineral sources(s) and quantity, influence of other admixtures, haul time, placement conditions, and other factors as appropriate shall be considered. The Engineer may request the Contractor to have a batch of concrete mixed in the lab or field to verify the admixture dosage is correct. An admixture dosage or combination of admixture dosages shall not delay the initial set of concrete by more than one hour. When a retarding admixture is required or appropriate for a bridge deck or bridge deck overylay pour, the initial set time shall be delayed until the deflections due to the concrete dead load are no longer a concern for inducing cracks in the completed work. However, a retarding admixture shall not be used to further extend the pour time and justify the alteration of a bridge deck pour sequence.

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

Revise Section 1021 of the Standard Specifications to read:

"SECTION 1021. CONCRETE ADMIXTURES

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

Corrosion inhibitors will be maintained on the Department's Approved List of Corrosion Inhibitors. All other concrete admixture products will be maintained on the Department's

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

80094

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000 Revised: November 1, 2008

<u>FEDERAL OBLIGATION</u>. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory 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 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

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

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

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

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This determination is

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

<u>BIDDING PROCEDURES</u>. Compliance with 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 working days after the date of letting. To meet the seven day requirement, the bidder may send the Plan by certified mail or delivery service within the seven 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 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 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 companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s).
- (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 working day period in order to cure the deficiency.

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the 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 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

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 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 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 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 of Small Business Enterprises and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau of Small Business Enterprises will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.

- (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 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the 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.

ENGINEER'S FIELD OFFICE TYPE A (BDE)

Effective: April 1, 2007 Revised: August 1, 2008

Revise Article 670.02 of the Standard Specifications to read:

"670.02 Engineer's Field Office Type A. Type A field offices shall have a minimum ceiling height of 7 ft (2 m) and a minimum floor space 450 sq ft (42 sq m). The office shall be provided with sufficient heat, natural and artificial light, and air conditioning.

The office shall have an electronic security system that will respond to any breach of exterior doors and windows. Doors and windows shall be equipped with locks. Doors shall also be equipped with dead bolt locks or other secondary locking device.

Windows shall be equipped with exterior screens to allow adequate ventilation. All windows shall be equipped with interior shades, curtains, or blinds. Adequate all-weather parking space shall be available to accommodate a minimum of ten vehicles.

Suitable on-site sanitary facilities meeting Federal, State, and local health department requirements shall be provided, maintained clean and in good working condition, and shall be stocked with lavatory and sanitary supplies at all times.

Sanitary facilities shall include hot and cold potable running water, lavatory and toilet as an integral part of the office where available. Solid waste disposal consisting of two waste baskets and an outside trash container of sufficient size to accommodate a weekly provided pick-up service.

In addition, the following furniture and equipment shall be furnished.

- (a) Four desks with minimum working surface 42 x 30 in. (1.1 m x 750 mm) each and five non-folding chairs with upholstered seats and backs.
- (b) One desk with minimum working surface 48 x 72 in. (1.2 x 1.8 m) with height adjustment of 23 to 30 in. (585 to 750 mm).
- (c) One four-post drafting table with minimum top size of 37 1/2 x 48 in. (950 mm x 1.2 m). The top shall be basswood or equivalent and capable of being tilted through an angle of 50 degrees. An adjustable height drafting stool with upholstered seat and back shall also be provided.
- (d) Two free standing four drawer legal size file cabinet with lock and an underwriters' laboratories insulated file device 350 degrees one hour rating.
- (e) One 6 ft (1.8 m) folding table with six folding chairs.

- (f) One equipment cabinet of minimum inside dimension of 44 in. (1100 mm) high x 24 in. (600 mm) wide x 30 in. (750 mm) deep with lock. The walls shall be of steel with a 3/32 in. (2 mm) minimum thickness with concealed hinges and enclosed lock constructed in such a manner as to prevent entry by force. The cabinet assembly shall be permanently attached to a structural element of the field office in a manner to prevent theft of the entire cabinet.
- (g) One refrigerator with a minimum size of 16 cu ft (0.45 cu m) with a freezer unit.
- (h) One electric desk type tape printing calculator.
- (i) A minimum of two communication paths. The configuration shall include:
 - (1) Internet Connection. An internet service connection using telephone DSL, cable broadband, or CDMA wireless technology. Additionally, an 802.11g/N wireless router shall be provided, which will allow connection by the Engineer and up to four Department staff.
 - (2) Telephone Lines. Three separate telephone lines.
- (j) One plain paper copy machine capable of reproducing prints up to 11×17 in. (280 x 432 mm) with an automatic feed tray capable of storing 30 sheets of paper. Letter size and 11×17 in. (280 x 432 mm) paper shall be provided.
- (k) One plain paper fax machine with paper.
- (I) Two telephones, with touch tone, where available, and a digital telephone answering machine, for exclusive use by the Engineer.
- (m) One electric water cooler dispenser.
- (n) One first-aid cabinet fully equipped.
- (o) One microwave oven, 1 cu ft (0.03 cu m) minimum capacity.
- (p) One fire-proof safe, 0.5 cu ft (0.01 cu m) minimum capacity.
- (q) One electric paper shredder.
- (r) One post mounted rain gauge, located on the project site for each 5 miles (8 km) of project length."

Revise the first sentence of the first paragraph of Article 670.07 of the Standard Specifications to read:

"The building or buildings fully equipped as specified will be paid for on a monthly basis until the building or buildings are released by the Engineer."

Revise the last sentence of the first paragraph of Article 670.07 of the Standard Specifications to read:

"This price shall include all utility costs and shall reflect the salvage value of the building or buildings, equipment, and furniture which become the property of the Contractor after release by the Engineer, except that the Department will pay that portion of the monthly long distance telephone bills that, when combined, exceed \$150."

EQUIPMENT RENTAL RATES (BDE)

Effective: August 2, 2007 Revised: January 2, 2008

Replace the second and third paragraphs of Article 105.07(b)(4)a. of the Standard Specifications with the following:

"Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4)."

Replace Article 109.04(b)(4) of the Standard Specifications with the following:

- "(4) Equipment. Equipment used for extra work shall be authorized by the Engineer. The equipment shall be specifically described, be of suitable size and capacity for the work to be performed, and be in good operating condition. For such equipment, the Contractor will be paid as follows.
 - a. Contractor Owned Equipment. Contractor owned equipment will be paid for by the hour using the applicable FHWA hourly rate from the "Equipment Watch Rental Rate Blue Book" (Blue Book) in effect when the force account work begins. The FHWA hourly rate is calculated as follows.

FHWA hourly rate = (monthly rate/176) x (model year adj.) x (Illinois adj.) + EOC

Where: EOC = Estimated Operating Costs per hour (from the Blue Book)

The time allowed will be the actual time the equipment is operating on the extra work. For the time required to move the equipment to and from the site of the extra work and any authorized idle (standby) time, payment will be made at the following hourly rate: 0.5 x (FHWA hourly rate - EOC).

All time allowed shall fall within the working hours authorized for the extra work.

The rates above include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance, and all incidentals. The rates do not include labor.

The Contractor shall submit to the Engineer sufficient information for each piece of equipment and its attachments to enable the Engineer to determine the proper equipment category. If a rate is not established in the Blue Book for a particular piece of equipment, the Engineer will establish a rate for that piece of equipment that is consistent with its cost and use in the industry.

b. Rented Equipment. Whenever it is necessary for the Contractor to rent equipment to perform extra work, the rental and transportation costs of the equipment plus five percent for overhead will be paid. In no case shall the rental rates exceed those of established distributors or equipment rental agencies.

All prices shall be agreed to in writing before the equipment is used."

LIQUIDATED DAMAGES (BDE)

Effective: April 1, 2009

Revise the table in Article 108.09 of the Standard Specifications to read:

"Schedule of Deductions for Each Day of Overrun in Contract Time						
Original Contract Amount Daily Charges						
From More Than	To and Including	Calendar Day	Work Day			
\$ 0 100,000 500,000 1,000,000 3,000,000	0 \$ 100,000 100,000 500,000 500,000 1,000,000 ,000,000 3,000,000 8,000,000 5,000,000		\$ 500 875 1,425 1,550 1,950 2,350			
5,000,000 10,000,000	10,000,000 And over	1,700 3,325	4,650"			

METAL HARDWARE CAST INTO CONCRETE (BDE)

Effective: April 1, 2008 Revised: April 1, 2009

Add the following to Article 503.02 of the Standard Specifications:

Add the following to Article 504.02 of the Standard Specifications:

Revise Article 1006.13 of the Standard Specifications to read:

"1006.13 Metal Hardware Cast into Concrete. Unless otherwise noted, all steel hardware cast into concrete, such as inserts, brackets, cable clamps, metal casings for formed holes, and other miscellaneous items, shall be galvanized according to AASHTO M 232 or AASHTO M 111. Aluminum inserts will not be allowed. Zinc alloy inserts shall be according to ASTM B 86, Alloys 3, 5, or 7.

The inserts shall be UNC threaded type anchorages having the following minimum certified proof load.

Insert Diameter	Proof Load
5/8 in. (16 mm)	6600 lb (29.4 kN)
3/4 in. (19 mm)	6600 lb (29.4 kN)
1 in. (25 mm)	9240 lb (41.1 kN)"

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM / EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 2007 Revised: November 1, 2008

Revise Article 105.03(a) of the Standard Specifications to read:

"(a) National Pollutant Discharge Elimination System (NPDES) / Erosion and Sediment Control Deficiency Deduction. When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, or the Contractor's activities represents a violation of the Department's NPDES permits, the Engineer will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 1 week based on the urgency of the situation and the nature of the work effort required. The Engineer will be the sole judge.

A deficiency may be any lack of repair, maintenance, or implementation of erosion and/or sediment control devices included in the contract, or any failure to comply with the conditions of the Department's NPDES permits. A deficiency may also be applied to situations where corrective action is not an option such as the failure to participate in a jobsite inspection of the project, failure to install required measures prior to initiating earth moving operations, disregard of concrete washout requirements, or other disregard of the NPDES permit.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or 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 \$1000.00 or 0.05 percent of the awarded contract value, whichever is greater. For those deficiencies where corrective action was not an option, the monetary deduction will be immediate and will be valued at one calendar day."

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000 Revised: January 1, 2006

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

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

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

When progress payments are made to the Contractor according to Article 109.07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section

7(b) of the State Prompt Payment Act. State law creates other and additional remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

PAYROLLS AND PAYROLL RECORDS (BDE)

Effective: March 1, 2009

<u>FEDERAL AID CONTRACTS</u>. Revise the following section of Check Sheet #1 of the Recurring Special Provisions to read:

"STATEMENTS AND PAYROLLS

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, except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number.). 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."

STATE CONTRACTS. 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, except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). 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."

PERSONAL PROTECTIVE EQUIPMENT (BDE)

Effective: November 1, 2008

Revise the first sentence of Article 701.12 of the Standard Specifications to read:

"All personnel on foot, excluding flaggers, within the highway right-of-way shall wear a fluorescent orange, fluorescent yellow/green, or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of ANSI/ISEA 107-2004 for Conspicuity Class 2 garments."

POLYUREA PAVEMENT MARKING (BDE)

Effective: April 1, 2004 Revised: January 1, 2009

<u>Description</u>. This work shall consist of furnishing and applying pavement marking lines.

The type of polyurea pavement marking applied will be determined by the type of reflective media used. Polyurea Pavement Marking Type I shall use glass beads as a reflective media. Polyurea Pavement Marking Type II shall use a combination of composite reflective elements and glass beads as a reflective media.

Polyurea-based liquid pavement markings shall only be applied by Contractors on the list of Approved Polyurea Contractors maintained by the Engineer of Operations and in effect on the date of advertisement for bids.

Materials. Materials shall meet the following requirements:

- (a) Polyurea Pavement Marking. The polyurea pavement marking material shall consist of 100 percent solid two part system formulated and designed to provide a simple volumetric mixing ratio of two components (must be two or three volumes of Part A to one volume of Part B). No volatile or polluting solvents or fillers will be allowed.
- (b) Pigmentation. The pigment content by weight (mass) of component A shall be determined by low temperature ashing according to ASTM D 3723. The pigment content shall not vary more than ± two percent from the pigment content of the original qualified paint.

White Pigment shall be Titanium Dioxide meeting ASTM D 476 Type II, Rutile.

Yellow Pigment shall be an Organic Yellow and contain no heavy metals.

- (c) Environmental. Upon heating to application temperature, the material shall not exude fumes which are toxic or injurious to persons or property.
- (d) Daylight Reflectance. The daylight directional reflectance of the cured polyurea material (without reflective media) shall be a minimum of 80 percent (white) and 50 percent (yellow) relative to magnesium oxide when tested using a color spectrophotometer with a 45 degrees circumferential /zero degrees geometry, illuminant C, and two degrees observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm. In addition, the color of the yellow polyurea shall visually match Color Number 33538 of Federal Standard 595a with chromaticity limits as follows:

X	0.490	0.475	0.485	0.539
Y	0.470	0.438	0.425	0.456

(e) Weathering Resistance. The polyurea marking material, when mixed in the proper ratio and applied at 14 to 16 mils (0.35 to 0.41 mm) wet film thickness to an aluminum alloy

panel (Federal Test Std. No. 141, Method 2013) and allowed to cure for 72 hours at room temperature, shall be subjected to accelerated weathering for 75 hours. The accelerated weathering shall be completed by using the light and water exposure apparatus (fluorescent UV - condensation type) and tested according to ASTM G 53.

The cycle shall consist of four hours UV exposure at 122 °F (50 °C) and four hours of condensation at 104 °F (40 °C). UVB 313 bulbs shall be used. At the end of the exposure period, the material shall show no substantial change in color or gloss.

- (f) Dry Time. The polyurea pavement marking material, when mixed in the proper ratio and applied at 14 to 16 mils (0.35 to 0.41 mm) wet film thickness and with the proper saturation of reflective media, shall exhibit a no-tracking time of ten minutes or less when tested according to ASTM D 711.
- (g) Adhesion. The catalyzed polyurea pavement marking materials when applied to a 4 x 4 x 2 in. (100 x 100 x 50 mm) concrete block, shall have a degree of adhesion which results in a 100 percent concrete failure in the performance of this test.

The concrete block shall be brushed on one side and have a minimum strength of 3500 psi (24,100 kPa). A 2 in. (50 mm) square film of the mixed polyurea shall be applied to the brushed surface and allowed to cure for 72 hours at room temperature. A 2 in. (50 mm) square cube shall be affixed to the surface of the polyurea by means of an epoxy glue. After the glue has cured for 24 hours, the polyurea specimen shall be placed on a dynamic testing machine in such a fashion so that the specimen block is in a fixed position and the 2 in. (50 mm) cube (glued to the polyurea surface) is attached to the dynamometer head. Direct upward pressure shall be slowly applied until the polyurea system fails. The location of the break and the amount of concrete failure shall be recorded.

- (h) Hardness. The polyurea pavement marking materials when tested according to ASTM D 2240, shall have a shore D hardness of between 70 and 100. Films shall be cast on a rigid substrate at 14 to 16 mils (0.35 to 0.41 mm) in thickness and allowed to cure at room temperature for 72 hours before testing.
- (i) Abrasion. The abrasion resistance shall be evaluated according to ASTM D 4060 using a Taber Abrader with a 1,000 gram load and CS 17 wheels. The duration of the test shall be 1,000 cycles. The loss shall be calculated by difference and be less than 120 mgs. The tests shall be run on cured samples of polyurea material which have been applied at a film thickness of 14 to 16 mils (0.35 to 0.41 mm) to code S-16 stainless steel plates. The films shall be allowed to cure at room temperature for at least 72 hours and not more than 96 hours before testing.
- (j) Reflective Media. The reflective media shall meet the following requirements:
 - (1) Type I The glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications and the following requirements:

a. First Drop Glass Beads. The first drop glass beads shall be tested by the standard visual method of large glass spheres adopted by the Department. The beads shall have a silane coating and meet the following sieve requirements:

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

- b. Second Drop Glass Beads. The second drop glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications for Type B.
- (2) Type II The combination of microcrystalline ceramic elements and glass beads shall meet the following requirements:
 - a. First Drop Glass Beads. The first drop glass beads shall meet the following requirements:
 - 1. Composition. The elements shall be composed of a titania opacified ceramic core having clear and or yellow tinted microcrystalline ceramic beads embedded to the outer surface.
 - 2. Index of Refraction. All microcrystalline reflective elements embedded to the outer surface shall have an index of refraction of 1.8 when tested by the immersion method.
 - 3. Acid Resistance. A sample of microcrystalline ceramic beads supplied by the manufacturer, shall show resistance to corrosion of their surface after exposure to a one percent solution (by weight (mass)) of sulfuric acid. Adding 0.2 oz (5.7 ml) of concentrated acid into the water shall make the one percent acid solution. This test shall be performed by taking a 1 x 2 in. (25 x 50 mm) sample and adhering it to the bottom of a glass tray and placing just enough acid solution to completely immerse the sample. The tray shall be covered with a piece of glass to prevent evaporation and allow the sample to be exposed for 24 hours under these conditions. The acid solution shall be decanted (do not rinse, touch, or otherwise disturb the bead surfaces) and the sample dried while adhered to the glass tray in a 150 °F (66 °C) oven for approximately 15 minutes. Microscope examination (20X) shall show no white (corroded) layer on the entire surface.
 - b. Second Drop Glass Beads. The second drop glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications for Type B or the following manufacturer's specification:
 - 1. Sieve Analysis. The glass beads shall meet the following sieve requirements:

U.S. Standard Sieve Number	Sieve Size	% Passing By Weight (mass)
20	850 μm	100
30	600 μm	75-95
50	300 μm	15-35
100	150 μm	0-5

The manufacturer of the glass beads shall certify that the treatment of the glass beads meets the requirements of the polyurea manufacturer.

- 2. Imperfections. The surface of the glass beads shall be free of pits and scratches. The glass beads shall be spherical in shape and shall contain a maximum of 20 percent by weight (mass) of irregular shapes when tested by the standard method using a vibratile inclined glass plate as adopted by the Department.
- 3. Index of Refraction. The index of refraction of the glass beads shall be a minimum of 1.50 when tested by the immersion method at 77 °F (25 °C).
- (k) Packaging. Microcrystalline ceramic reflective elements and glass beads shall be delivered in approved moisture proof bags or weather resistant bulk boxes. Each carton shall be legibly marked with the manufacturer, specifications and type, lot number, and the month and year the microcrystalline ceramic reflective elements and/or glass beads were packaged. The letters and numbers used in the stencils shall be a minimum of 1/2 in. (12.7 mm) in height.
 - (1) Moisture Proof Bags. Moisture proof bags shall consist of at least five ply paper construction unless otherwise specified. Each bag shall contain 50 lb (22.7 kg) net.
 - (2) Bulk Weather Resistance Boxes. Bulk weather resistance boxes shall conform to Federal Specification PPP-8-640D Class II or latest revision. Boxes are to be weather resistant, triple wall, fluted, corrugated-fiber board. Cartons shall be strapped with two metal straps. Straps shall surround the outside perimeter of the carton. The first strap shall be located approximately 2 in. (50 mm) from the bottom of the carton and the second strap shall be placed approximately in the middle of the carton. All cartons shall be shrink wrapped for protection from moisture. Cartons shall be lined with a minimum 4 mil polyester bag and meet Interstate Commerce Commission requirements. Cartons shall be approximately 38 x 38 in. (1 x 1 m), contain 2000 lb (910 kg) of microcrystalline ceramic reflective elements and/or glass beads and be supported on a wooden pallet with fiber straps.
- (I) Packaging. The material shall be shipped to the job site in substantial containers and shall be plainly marked with the manufacturer's name and address, the name and color of the material, date of manufacture, and batch number.
- (m) Verification. Prior to approval and use of the polyurea pavement marking materials, the manufacturer shall submit a notarized certification of an independent laboratory, together with the results of all tests, stating these materials meet the requirements as set forth

herein. The certification test report shall state the lot tested, manufacturer's name, brand name of polyurea and date of manufacture. The certification shall be accompanied by one 1 pt (1/2 L) samples each of Part A and Part B. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B.

After approval by the Department, certification by the polyurea manufacturer shall be submitted for each batch used. New independent laboratory certified test results and samples for testing by the Department shall be submitted any time the manufacturing process or paint formulation is changed. All costs of testing (other than tests conducted by the Department) shall be borne by the manufacturer.

- (n) Acceptance samples. Acceptance samples shall consist of one 1 pt (1/2 L) samples of Part A and Part B, of each lot of paint. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B. The samples shall be submitted to the Department for testing, together with a manufacturer's certification. The certification shall state the formulation for the lot represented is essentially identical to that used for qualification testing. All, acceptance samples will be taken by a representative of the Department. The polyurea pavement marking materials shall not be used until tests are completed and they have met the requirements as set forth herein.
- (o) Material Retainage. The manufacturer shall retain the test sample for a minimum of 18 months.

Equipment. The polyurea pavement marking compounds shall be applied through equipment specifically designed to apply two component liquid materials, glass beads and/or reflective elements in a continuous and skip-line pattern. The two-component liquid materials shall be applied after being accurately metered and then mixed with a static mix tube or airless The static mixing tube or impingement mixing guns shall impingement mixing guns. accommodate plural component material systems that have a volumetric ratio of 2 to 1 or 3 to 1. This equipment shall produce the required amount of heat at the mixing head and gun tip and maintain those temperatures within the tolerances specified. The guns shall have the capacity to deliver materials from approximately 1.5 to 3 gal/min (5.7 to 11.4 L/min) to compensate for a typical range of application speeds of 6 to 8 mph (10 to 13 km/h). The accessories such as spray tip, mix chamber, and rod diameter shall be selected according to the manufacturer's specifications to achieve proper mixing and an acceptable spray pattern. The application equipment shall be maneuverable to the extent that straight lines can be followed and normal curves can be made in a true arc. This equipment shall also have as an integral part of the gun carriage, a high pressure air spray capable of cleaning the pavement immediately prior to making application.

The equipment shall be capable of spraying both yellow and white polyurea, according to the manufacturer's recommended proportions and be mounted on a truck of sufficient size and stability with an adequate power source to produce lines of uniform dimensions and prevent application failure. The truck shall have at least two polyurea tanks each of 110 gal (415 L) minimum capacity and be equipped with hydraulic systems and agitators. It shall be capable of placing stripes on the left and right sides and placing two lines on a three-line system simultaneously with either line in a solid or intermittent pattern, in yellow or white, and applying the appropriate reflective media according to manufacturer's recommendations. All guns shall be in full view of operations at all times. The equipment shall have a metering device to register

the accumulated installed quantities for each gun, each day. Each vehicle shall include at least one operator who shall be a technical expert in equipment operations and polyurea application techniques. Certification of equipment shall be provided at the pre-construction conference.

The mobile applicator shall include the following features:

- (a) Material Reservoirs. The applicator shall provide individual material reservoirs, or space for the storage of Part A and Part B of the resin composition.
- (b) Heating Equipment. The applicator shall be equipped with heating equipment of sufficient capacity to maintain the individual resin components at the manufacturer's recommended temperature of ± 5 °F (± 2.8 °C) for spray application.
- (c) Dispensing Equipment. The applicator shall be equipped with glass bead and/or reflective element dispensing equipment. The applicator shall be capable of applying the glass beads and/or reflective elements at a rate and combination indicated by the manufacturer.
- (d) Volumetric Usage. The applicator shall be equipped with metering devices or pressure gauges on the proportioning pumps as well as stroke counters to monitor volumetric usage. Metering devices or pressure gauges and stroke counters shall be visible to the Engineer.
- (e) Pavement Marking Placement. The applicator shall be equipped with all the necessary spray equipment, mixers, compressors and other appurtenances to allow for the placement of reflectorized pavement markings in a simultaneous sequence of operations.

The Contractor shall provide an accurate temperature-measuring device(s) that shall be capable of measuring the pavement temperature prior to application of the material, the material temperature at the gun tip and the material temperature prior to mixing.

CONSTRUCTION REQUIREMENTS

<u>General</u>. The pavement shall be cleaned by a method approved by the Engineer to remove all dirt, grease, glaze, or any other material that would reduce the adhesion of the markings with minimum or no damage to the pavement surface. New portland cement concrete pavements shall be air-blast-cleaned to remove all latents.

Widths, lengths, and shapes of the cleaned surface shall be of sufficient size to include the full area of the specified pavement marking to be placed.

The cleaning operation shall be a continuous moving operation process with minimum interruption to traffic.

Markings shall be applied to the cleaned surfaces on the same calendar day. If this cannot be accomplished, the surface shall be re-cleaned prior to applying the markings. No markings shall be applied until the Engineer approves the cleaning.

The pavement markings shall be applied to the cleaned road surface, during conditions of dry weather and subsequently dry pavement surfaces at a minimum uniform wet thickness of 15 mils (0.4 mm) according to the manufacturer's installation instructions. On new hot-mix asphalt (HMA) surfaces the pavement markings shall be applied at a minimum uniform wet thickness of 20 mils (0.5 mm). The application of and combination of reflective media (glass beads and/or reflective elements) shall be applied at a rate specified by the manufacturer. At the time of installation the pavement surface temperature and the ambient temperature shall be above 40 °F (4 °C) and rising. The pavement markings shall not be applied if the pavement shows any visible signs of moisture or it is anticipated that damage causing moisture, such as rain showers, may occur during the installation and set periods. The Engineer will determine the atmospheric conditions and pavement surface conditions that produce satisfactory results.

Using the application equipment, the pavement markings shall be applied in the following manner, as a simultaneous operation:

- (a) The surface shall be air-blasted to remove any dirt and residue.
- (b) The resin shall be mixed and heated according to manufacturer's recommendations and sprayed onto the pavement surface.

The edge of the center line or lane line shall be offset a minimum distance of 2 in. (50 mm) from a longitudinal crack or joint. Edge lines shall be approximately 2 in. (50 mm) from the edge of pavement. The finished center and lane lines shall be straight, with the lateral deviation of any 10 ft (3 m) line not to exceed 1 in. (25 mm).

Notification. The Contractor shall notify the Engineer 72 hours prior to the placement of the markings in order that he/she can be present during the operation. At the time of notification, the Contractor shall provide the Engineer the manufacturer and lot numbers of polyurea and reflective media that will be used.

<u>Inspection</u>. The polyurea pavement markings will be inspected following installation according to Article 780.10 of the Standard Specifications, except, no later than December 15, and inspected following a winter performance period that extends 180 days from December 15.

Method of Measurement. This work will be measured for payment as follows:

- (a) Contract Quantities. The requirements for the use of contract quantities shall be according to Article 202.07(a).
- (b) Measured Quantities. Lines will be measured for payment in place in feet (meters). Double yellow lines will be measured as two separate lines.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot (meter) for POLYUREA PAVEMENT MARKING TYPE I – LINE of the line width specified or for POLYUREA PAVEMENT MARKING TYPE II – LINE of the line width specified.

PRECAST CONCRETE HANDLING HOLES (BDE)

with the following:

Effective: January 1, 2007 Add the following to Article 540.02 of the Standard Specifications: "(g) Handling Hole Plugs......1042.16" Add the following paragraph after the sixth paragraph of Article 540.06 of the Standard Specifications: "Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar, or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar." Add the following to Article 542.02 of the Standard Specifications: "(ee) Handling Hole Plugs1042.16" Revise the fifth paragraph of Article 542.04(d) of the Standard Specifications to read: "Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation." Add the following to Article 550.02 of the Standard Specifications: "(o) Handling Hole Plugs.......1042.16" Replace the fourth sentence of the fifth paragraph of Article 550.06 of the Standard Specifications with the following: "Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation." Add the following to Article 602.02 of the Standard Specifications: Replace the fifth sentence of the first paragraph of Article 602.07 of the Standard Specifications "Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar."

Add the following to Section 1042 of the Standard Specifications:

- "1042.16 Handling Hole Plugs. Plugs for handling holes in precast concrete products shall be as follows.
 - (a) Precast Concrete Plug. The precast concrete plug shall have a tapered shape and shall have a minimum compressive strength of 3000 psi (20,700 kPa) at 28 days.
 - (b) Polyethylene Plug. The polyethylene plug shall have a "mushroom" shape with a flat round top and a stem with three different size ribs. The plug shall fit snuggly and cover the handling hole.

The plug shall be according to the following.

Mechanical Properties	Test Method	Value (min.)
Flexural Modulus	ASTM D 790	3300 psi (22,750 kPa)
Tensile Strength (Break)	ASTM D 638	1600 psi (11,030 kPa)
Tensile Strength (Yield)	ASTM D 638	1200 psi (8270 kPa)

Thermal Properties	Test Method	Value (min.)
Brittle Temperature	ASTM D 746	-49 °F (-45 °C)
Vicat Softening Point	ASTM D 1525	194 °F (90 °C)"

PRISMATIC CURB REFLECTORS (BDE)

Effective: November 1, 2008

Add the following paragraph to the end of Article 782.03 of the Standard Specifications:

"The installed height of the prismatic curb reflectors shall be a maximum of 3/4 in. (19 mm) above the mounting surface. The unit shall have one reflective surface that is placed approximately perpendicular to the mounting surface."

Add the following Article to Section 1097 of the Standard Specifications:

"1097.04 Prismatic Curb Reflectors. The unit shall provide a reflective area between 1 1/2 sq in. (960 sq mm) and 2 sq in. (1290 sq mm). The base of the marker shall be designed for adhesive mounting.

The unit shall support an 800 lb (360 kg) load. This shall be determined by placing the unit on a flat plate and slowly applying the load by means of another plate evenly to the entire top flat surface of the unit. Breakage or significant deformation of the unit shall constitute failure.

The coefficient of luminous intensity of each reflector shall be equal to or exceed the following minimum values regardless of reflector orientation.

Divergence Angle Degrees	Entrance Angle Degrees	Intensity Candle Power per Foot Can (candelas/lux)	
		Crystal	Amber
0.2°	0°	14 (1.3)	11 (1.0)
0.2°	+5° *	14 (1.3)	11 (1.0)
0.2°	+10° *	9 (0.8)	7 (0.7)
0.2°	+20° *	5 (0.5)	7 (0.4)

^{*} Traffic side"

REFLECTIVE SHEETING ON CHANNELIZING DEVICES (BDE)

Effective: April 1, 2007 Revised: November 1, 2008

Revise the seventh paragraph of Article 1106.02 of the Standard Specifications to read:

"At the time of manufacturing, the retroreflective prismatic sheeting used on channelizing devices shall meet or exceed the initial minimum coefficient of retroreflection as specified in the following table. Measurements shall be conducted according to ASTM E 810, without averaging. Sheeting used on cones, drums and flexible delineators shall be reboundable as tested according to ASTM D 4956. Prestriped sheeting for rigid substrates on barricades shall be white and orange. The sheeting shall be uniform in color and devoid of streaks throughout the length of each roll. The color shall conform to the latest appropriate standard color tolerance chart issued by the U.S. Department of Transportation, Federal Highway Administration, and to the daytime and nighttime color requirements of ASTM D 4956.

Initial Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material						
Observation Entrance Angle Fluoresco Angle (deg.) (deg.) White Orange Orange						
	0.2 -4		160	150		
0.2			80	70		
0.5	-4	245	100	95		
0.5	+30	100	50	40"		

Revise the first sentence of the first paragraph of Article 1106.02(c) of the Standard Specifications to read:

"Barricades and vertical panels shall have alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

Revise the third sentence of the first paragraph of Article 1106.02(d) of the Standard Specifications to read:

"The bottom panels shall be 8 x 24 in. (200 x 600 mm) with alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

REINFORCEMENT BARS (BDE)

Effective: November 1, 2005

Revised: April 1, 2009

Revise Article 1006.10(a) of the Standard 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/or Dowel Bar Plant Certification Procedure". The Department will maintain an approved list of producers.
 - (1) Reinforcement Bars (Non-Coated). Reinforcement bars shall be according to ASTM A 706 (A 706M), Grade 60 (420) for deformed bars and the following.
 - a. For straight bars furnished in cut lengths and with a well-defined yield point, the yield point shall be determined as the elastic peak load, identified by a halt or arrest of the load indicator before plastic flow is sustained by the bar and dividing it by the nominal cross-sectional area of the bar.
 - b. Tensile strength shall be a minimum of 1.20 times the yield strength.
 - c. For bars straightened from coils or bars bent from fabrication, there shall be no upper limit on yield strength; and for bar designation Nos. 3 6 (10 19), the elongation after rupture shall be at least 9%.
 - d. Heat Numbers. Bundles or bars at the construction site shall be marked or tagged with heat identification numbers of the bar producer.
 - e. 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 706 (A 706M). The dimensions and clearances of this guided bend test shall be according to ASTM E 190.
 - f. Spiral Reinforcement. 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 284 (M 284M) and the following.
 - a. Certification. The epoxy coating applicator shall be certified according to the current Bureau of Materials and Physical Research Policy Memorandum, "Epoxy

Coating Plant Certification Procedure". The Department will maintain an approved list.

- b. Coating Thickness. When spiral reinforcement is coated after fabrication, the thickness of the epoxy coating shall be 7 to 20 mils (0.18 to 0.50 mm).
- 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 0.5 in. (13 mm) back and the cut is patched before any visible rusting appears. Flame cutting will not be permitted."

REINFORCEMENT BARS - STORAGE AND PROTECTION (BDE)

Effective: August 1, 2008 Revised: April 1, 2009

Revise Article 508.03 of the Standard Specifications to read:

"508.03 Storage and Protection. Reinforcement bars shall be stored off the ground using platforms, skids, or other supports; and shall be protected from mechanical injury and from deterioration by exposure. Epoxy coated bars shall be stored on wooden or padded steel cribbing and all systems for handling shall have padded contact areas. The bars or bundles shall not be dragged or dropped.

When epoxy coated bars are stored in a manner where they will be exposed to the weather more than 60 days prior to use, they shall be protected from deterioration such as that caused by sunlight, salt spray, and weather exposure. The protection shall consist of covering with opaque polyethylene sheeting or other suitable opaque material. The covering shall be secured and allow for air circulation around the bars to minimize condensation under the cover.

Covering of the epoxy coated bars will not be required when the bars are installed and tied, or when they are partially incorporated into the concrete."

RETROREFLECTIVE SHEETING, NONREFLECTIVE SHEETING, AND TRANSLUCENT OVERLAY FILM FOR HIGHWAY SIGNS (BDE)

Effective: April 1, 2007

<u>General</u>. This special provision covers retroreflective sheeting and translucent overlay films intended for application on new or refurbished aluminum. The sheeting serves as the reflectorized background for sign messages and as cutout legends and symbols applied to the reflectorized background. Messages may be applied in opaque black or transparent colors.

This special provision also covers nonreflective sheeting for application on new or refurbished aluminum, and as material for cutout legends and symbols applied to the reflectorized background.

All material furnished under this specification shall have been manufactured within 18 months of the delivery date. All material shall be supplied by the same manufacturer.

<u>Retroreflective Sheeting Properties</u>. Retroreflective sheeting shall consist of a flexible, colored, prismatic, or glass lens elements adhered to a synthetic resin, encapsulated by a flexible, transparent plastic having a smooth outer surface and shall meet the following requirements.

Only suppliers whose products have been tested and approved in the Department's periodic Sheeting Study will be eligible to supply material. All individual batches and or lots of material shall be tested and approved by the Department. The Department reserves the right to sample and test delivered materials according to Federal Specification LS-300.

- (a) Adhesive. The sheeting shall have a Class 1, pre-coated, pressure sensitive adhesive according to ASTM D 4956. The adhesive shall have a protective liner that is easily removed when tested according to ASTM D 4956. The adhesive shall be capable of being applied to new or refurbished aluminum and reflectorized backgrounds without additional adhesive.
- (b) Color. The sheeting shall be uniform in color and devoid of streaks throughout the length of each roll. The color shall conform to the latest appropriate standard color tolerance chart issued by the U.S. Department of Transportation, Federal Highway Administration and to the daytime and nighttime color requirements of ASTM D 4956. Sheeting used for side by side overlay applications shall have a Hunter Lab Delta E of less than 3.
- (c) Coefficient of Retroreflection. When tested according to ASTM E 810, without averaging, the sheeting shall have a minimum coefficient of retroreflection as shown in the following tables. The brightness of the sheeting when totally wet shall be a minimum of 90 percent of the values shown when tested according to the standard rainfall test specified in Section 7.10.1 of AASHTO M 268-84.

Type A Sheeting
Minimum Coefficient of Retroreflection
candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type A

				. , , , ,					
	Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Orange	Red	Green	Blue	Brown
Ì	0.2	-4	250	170	100	45	45	20_	12
l	0.2	+30	150	100	60	25	25	12_	8.5
ı	0.5	-4	95	65	30	15	15	8	5
ı	0.5	+30	75	50	25	10	10	5	3.5

Type AA Sheeting Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AA (0 and 90 degree rotation)

	•	3 PO 7 V C	(0 0 0 0 0	409.00.	- to.t.,		
Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FO
0.2	-4	800	660	215	80	43	200
0.2	+30	400	340	100	35	20	120
0.5	-4	200	160	45	20	9.8	80
0.5	+30	100	85	26	-10	5.0	50

Type AA (45 degree rotation)

Type Wit (To degree retailer)							
Observation Angle (deg.)	Entrance Angle (deg.)	Yellow	FO				
0.2	-4	550	165				
0.2	+30	130	45				
0.5	-4	145	70				
0.5	+30	70	40				

Type AP Sheeting Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AP

					1		1	
Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	Brown	FO
0.2	-4	550	425	100	· 75	50	30	275
0.2	+30	200	150	40	35	25	15	90
0.5	-4	300	250	60	35	25	20	150
0.5	+30	100	70	20	20	10	5	50

Type AZ Sheeting Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AZ (0 degree rotation)

Type 7 to degree retailer,									
Observation	Entrance						1		
Angle (deg.)	Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY	
0.2	-4	430	350	110	45	20	325	240	
0.2	+30	235	140	60	- 24	11	200	150	
0.5	-4	250	200	60	25	10	235_	165	
0.5	+30	170	135	40	19	7	105	75	
1.0	-4	70	45	10	10	4	70	30	
1.0	+30	30	20	7	5	2.5	45	15	

Type AZ (90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY
0.2	-4	320	250	100	45	20	300	220
0.2	+30	235	140	40	24	11	200	150
0.5	-4	240	200	60	25	10	235	165
0.5	+30	100	85	20	10	7	80	75
1.0	-4	30	30	7	5	4	65	20
1.0	+30	15	15	- 5	2	2	30	10

- (d) Gloss. The sheeting surface shall exhibit a minimum 85 degree gloss-meter rating of 50 when tested according to ASTM D 523.
- (e) Durability. When processed and applied, the sheeting shall be weather resistant.

Accelerated weathering testing will be performed for 1000 hours (300 hours for orange/FO) according to ASTM G 151. The testing cycle will consist of 8 hours of light at 140 °F (60 °C), followed by 4 hours of condensation at 104 °F (40 °C). Following accelerated weathering, the sheeting shall exhibit a minimum of 80 percent of its initial minimum coefficient of retroreflection as listed in the previous tables.

Outdoor weathering will entail an annual evaluation of material placed in an outdoor rack with a 45 degree angle and a southern sun exposure. The sheeting will be evaluated for five years. Following weathering, the test specimens will be cleaned by immersing them in a five percent hydrochloric acid solution for 45 seconds, then rinsed with water and blotted dry with a soft clean cloth. Following cleaning, the applied sheeting shall show no appreciable discoloration, cracking, streaking, crazing, blistering, or dimensional change. The sheeting shall exhibit a Hunter Lab Delta E of 5 or less when compared to the original.

- (f) Shrinkage. When tested according to ASTM D 4956, the sheeting shall not shrink in any dimension more than 1/32 in. (0.8 mm) in ten minutes and not more than 1/8 in. (3 mm) in 24 hours.
- (g) Workability. The sheeting shall show no cracking, scaling, pitting, blistering, edge lifting, inter-film splitting, curling, or discoloration when processed and applied using mutually acceptable processing and application procedures.
- (h) Splices. A single roll of sheeting shall contain a maximum of four splices per 50 yd (45 m) length. The sheeting shall be overlapped a minimum of 3/16 in. (5 mm) at each splice.
- (i) Adhesive Bond. The sheeting shall form a durable bond to smooth, corrosion and weather-resistant surfaces and adhere securely when tested according to ASTM D 4956.
- (j) Positionability. Sheeting, with ASTM D 4956 Class 3 adhesive, used for manufacturing cutout legends and borders shall provide sufficient positionability during the fabrication process to permit removal and reapplication without damage to either the legend or sign background and shall have a plastic liner suitable for use on bed cutting machines. Thereafter, all other adhesive and bond requirements contained in the specification shall apply.

Positionability shall be verified by cutting 4 in. (100 mm) letters E, I, K, M, S, W, and Y out of the positionable material. The letters shall then be applied to a sheeted aluminum blank using a single pass of a two pound roller. The letters shall sit for five minutes and then a putty knife shall be used to lift a corner. The thumb and fore finger shall be used to slowly pull the lifted corner to lift letters away from the sheeted aluminum. The letters shall not tear or distort when removed.

- (k) Thickness. The thickness of the sheeting without the protective liner shall be less than or equal to 0.015 in. (0.4 mm), or 0.025 in. (0.6 mm) for prismatic material.
- (I) Processing. The sheeting shall permit cutting and color processing according to the sheeting manufacturer's specifications at temperatures of 60 to 100 °F (15 to 38 °C) and within a relative humidity range of 20 to 80 percent. The sheeting shall be heat resistant and permit forced curing without staining the applied or unapplied sheeting at temperatures recommended by the manufacturer. The sheeting shall be solvent resistant and capable of being cleaned with VM&P naptha, mineral spirits, and turpentine.

Transparent color and opaque black inks shall be single component and low odor. The inks shall dry within eight hours and not require clear coating. After color processing on white sheeting, the sheeting shall show no appreciable discoloration, cracking, streaking, crazing, blistering, or dimensional change when tested for durability (e). The ink on the weathered, prepared panel shall exhibit a Hunter Lab Delta E of 5 or less when compared to the original.

Transparent color electronic cutting films shall be acrylic. After application to white sheeting, the films shall show no appreciable discoloration, cracking, streaking, crazing, blistering, or dimensional change when tested for durability (e). The films on the weathered, prepared panel shall exhibit a Hunter Lab Delta E of 5 or less when compared to the original.

Transparent colors screened, or transparent acrylic electronic cutting films, on white sheeting, shall have a minimum initial coefficient of retroreflection values of 50 percent for yellow and red, and a minimum 70 percent for green, blue, and brown of the 0.2 degree observation angle/-4.0 degree entrance angle values as listed in the previous tables for the color being applied. After durability testing, the colors shall retain a minimum 80 percent of the initial coefficient of retroreflection.

- (m) Identification. The sheeting shall have a distinctive overall pattern in the sheeting unique to the manufacturer. If material orientation is required for optimum retroreflectivity, permanent orientation marks shall be incorporated into the face of the sheeting. Neither the overall pattern nor the orientation marks shall interfere with the reflectivity of the sheeting.
- (n) Packaging. Both ends of each box shall be clearly labeled with the sheeting type, color, adhesive type, manufacturer's lot number, date of manufacture, and supplier's name. Material Safety Data Sheets and technical bulletins for all materials shall be furnished to the Department with each shipment.

<u>Nonreflective Sheeting Properties</u>. Nonreflective sheeting shall consist of a flexible, pigmented cast vinyl film having a smooth, flat outer surface and shall meet the following requirements.

The Department reserves the right to sample and test delivered materials according to Federal Specification LS-300.

- (a) Adhesive. The sheeting shall have a Class 1, pre-coated, pressure sensitive adhesive according to ASTM D 4956. The adhesive shall have a protective liner that is easily removed when tested according to ASTM D 4956. The adhesive shall be capable of being applied to new or refurbished aluminum and reflectorized backgrounds without additional adhesive.
- (b) Color. The sheeting shall be uniform in color and devoid of streaks throughout the length of each roll.
- (c) Gloss. The sheeting shall exhibit a minimum 85 degree gloss-meter rating of 40 when tested according to ASTM D 523.
- (d) Durability. Applied sheeting that has been vertically exposed to the elements for seven years shall show no appreciable discoloration, cracking, crazing, blistering, delamination, or loss of adhesion. A slight amount of chalking is permitted but the sheeting shall not support fungus growth.

- (e) Testing. Test panels shall be prepared by applying the sheeting to 6 1/2 x 6 1/2 in. (165 x 165 mm) pieces of aluminum according to the manufacturer's specifications. The edges of the panel shall be trimmed evenly and aged 48 hours at 70 to 90 °F (21 to 32 °C). Shrinkage and immersion testing shall be as follows.
 - (1) Shrinkage. The sheeting shall not shrink more then 1/64 in. (0.4 mm) from any panel edge when subjected to a temperature of 150 °F (66 °C) for 48 hours and shall be sufficiently heat resistant to retain adhesion after one week at 150 °F (66 °C).
 - (2) Immersion Testing. The sheeting shall show no appreciable decrease in adhesion, color, or general appearance when examined one hour after being immersed to a depth of 2 or 3 in. (50 or 75 mm) in the following solutions at 70 to 90 °F (21 to 32 °C) for specified times.

Solution	Immersion Time (hours)
Reference Fuel (M I L-F-8799A) (15 parts xylol and 85 parts mineral spirits by weight)	1
Distilled Water	- 24
SAE No. 20 Motor Oil	24
Antifreeze (1/2 ethylene glycol, 1/2 distilled water)	24

- (f) Adhesive Bond: The sheeting shall form a durable bond to smooth, corrosion and weather-resistant surfaces and adhere securely when tested according to ASTM D 4956.
- (g) Thickness. The thickness of the sheeting without the protective liner shall be a maximum of 0.005 in. (0.13 mm).
- (h) Cutting. Material used on bed cutting machines shall have a smooth plastic liner.
- (i) Identification. The sheeting shall have a distinctive overall pattern in the sheeting unique to the manufacturer. If material orientation is required for optimum retroreflectivity, permanent orientation marks shall be incorporated into the face of the sheeting. Neither the overall pattern nor the orientation marks shall interfere with the reflectivity of the sheeting.
- (j) Packaging. Both ends of each box shall be clearly labeled with the sheeting type, color, adhesive type, manufacturer's lot number, date of manufacture, and supplier's name. Material Safety Data Sheets and technical bulletins for all materials shall be furnished to the Department with each shipment.

SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)

Effective: July 1, 2004 Revised: January 1, 2007

<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 precast concrete products.

Materials. Materials shall be according to Section 1021 of the Standard Specifications.

Mix Design Criteria. The mix design criteria shall be as follows:

- (a) The minimum cement factor shall be according to Article 1020.04 of the Standard Specifications. If the maximum cement factor is not specified, it shall not exceed 7.05 cwt/cu yd (418 kg/cu m).
- (b) The maximum allowable water/cement ratio shall be according to Article 1020.04 of the Standard Specifications or 0.44, whichever is lower.
- (c) The slump requirements of Article 1020.04 of the Standard Specifications shall not apply.
- (d) The coarse aggregate gradations shall be CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 may be used when the Contractor provides satisfactory evidence to the Engineer that the mix will not segregate. The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used.
- (e) The slump flow range shall be ± 2 in. (± 50 mm) of the Contractor target value, and within the overall Department range of 20 in. (510 mm) minimum to 28 in. (710 mm) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 4 in. (100 mm). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

<u>Placing and Consolidating</u>. The maximum distance of horizontal flow from the point of deposit shall be 25 ft (7.6 m), unless approved otherwise by the Engineer.

Concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator shall be the pencil head type with a maximum diameter or width of 1 in. (25 mm). Any other method for restoring the fluidity of the concrete shall be approved by the Engineer.

Mix Design Approval. The Contractor shall obtain mix design approval according to the Department's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products".

SIGN PANELS AND SIGN PANEL OVERLAYS (BDE)

Effective: November 1, 2008

<u>Description</u>. This work shall consist of furnishing, fabricating, and installing sign panels and/or sign panel overlays. Work shall be according to Sections 720 and 721 of the Standard Specifications, except as modified herein.

Materials. Type AP and AZ sheeting shall meet the requirements of the special provision, "Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs". Type ZZ sheeting shall meet the requirements of the special provision, "Type ZZ Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs".

The sheeting for the background, legend, border, shields, and symbols shall be provided by the same manufacturer.

CONSTRUCTION REQUIREMENTS

<u>Fabrication</u>. Signs shall be fabricated according to the current Bureau of Operations Policy Memorandum, "Fabrication of Highway Signs", the MUTCD, the FHWA Standard Highway Signs manual, the Illinois standard highway signs, and as shown on the plans.

Signs shall be fabricated such that the material for the background, legend, border, shields, and symbols is applied in the preferred orientation for the maximum retroreflectivity per the manufacturer's recommendation. The nesting of legend, border, shields, or symbols will not be permitted.

SILT FILTER FENCE (BDE)

Effective: January 1, 2008

For silt filter fence fabric only, revise Article 1080.02 of the Standard Specifications to read:

"1080.02 Geotextile Fabric. The fabric for silt filter fence shall be a woven fabric meeting the requirements of AASHTO M 288 for unsupported silt fence with less than 50 percent geotextile elongation."

Replace the last sentence of Article 1081.15(b) of the Standard Specifications with the following:

"Silt filter fence stakes shall be a minimum of 4 ft (1.2 m) long and made of either wood or metal. Wood stakes shall be 2 in. x 2 in. (50 mm x 50 mm). Metal stakes shall be a standard T or U shape having a minimum weight (mass) of 1.32 lb/ft (600 g/300 mm)."

STONE GRADATION TESTING (BDE)

Effective: November 1, 2007

Revise the first sentence of note 1/ of the Erosion Protection and Sediment Control Gradations table of Article 1005.01(c)(1) of the Standard Specifications to read:

"A maximum of 15 percent of the total test sample by weight may be oversize material."

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.

TEMPORARY EROSION CONTROL (BDE)

Effective: November 1, 2002 Revised: January 1, 2008

Revise the third paragraph of Article 280.03 of the Standard Specifications to read:

"Erosion control systems shall be installed prior to beginning any activities which will potentially create erodible conditions. Erosion control systems for areas outside the limits of construction such as storage sites, plant sites, waste sites, haul roads, and Contractor furnished borrow sites shall be installed prior to beginning soil disturbing activities at each area. These offsite systems shall be designed by the Contractor and be subject to the approval of the Engineer."

Add the following paragraph after the third paragraph of Article 280.03 of the Standard Specifications:

"The temporary erosion and sediment control systems shown on the plans represent the minimum systems anticipated for the project. Conditions created by the Contractor's operations, or for the Contractor's convenience, which are not covered by the plans, shall be protected as directed by the Engineer at no additional cost to the Department. Revisions or modifications of the erosion and sediment control systems shall have the Engineer's written approval."

Add the following paragraph after the ninth paragraph of Article 280.07 of the Standard Specifications:

"Temporary or permanent erosion control systems required for areas outside the limits of construction will not be measured for payment."

Delete the tenth (last) paragraph of Article 280.08 of the Standard Specifications.

VARIABLY SPACED TINING (BDE)

Effective: August 1, 2005 Revised: January 1, 2007

Revise the first sentence of the third paragraph of Article 420.09(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."

Revise the fifth sentence of the third paragraph of Article 420.09(e)(1) of the Standard Specifications to read:

"The tining device shall be operated so as to a produce a pattern of grooves, 1/8 to 3/16 in. (3 to 5 mm) deep and 1/10 to 1/8 in. (2.5 to 3.2 mm) 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 420.09(e)(1) of the Standard Specifications:

	"O	tor Chaoingo of Me	otal Camb Tines			
"Center to Center Spacings of Metal Comb Tines						
in. (mm) (read spacings left to right)						
1 5/16 (34)	1 7/16 (36)	1 7/8 (47)	2 1/8 (54)	1 7/8 (48)		
1 11/16 (43)	1 1/4 (32)	1 1/4 (31)	1 1/16 (27)	1 7/16 (36)		
1 1/8 (29)	1 13/16 (46)	13/16 (21)	1 11/16 (43)	7/8 (23)		
1 5/8 (42)	2 1/16 (52)	15/16 (24)	11/16 (18)	1 1/8 (28)		
1 9/16 (40)	1 5/16 (34)	1 1/16 (27)	1 (26)	1 (25)		
1 1/16 (27)	13/16 (20)	1 7/16 (37)	1 1/2 (38)	2 1/16 (52)		
2 (51)	1 3/4 (45)	1 7/16 (37)	1 11/16 (43)	2 1/16 (53)		
1 1/16 (27)	1 7/16 (37)	1 5/8 (42)	1 5/8 (41)	1 1/8 (29)		
1 11/16 (43)	1 3/4 (45)	1 3/4 (44)	1 3/16 (30)	1 7/16 (37)		
1 5/16 (33)	1 9/16 (40)	1 1/8 (28)	1 1/4 (31)	1 15/16 (50)		
1 5/16 (34)	1 3/4 (45)	13/16 (20)	1 3/4 (45)	1 15/16 (50)		
2 1/16 (53)	2 (51)	1 1/8 (29)	1 (25)	11/16 (18)		
2 1/16 (53)	11/16 (18)	1 1/2 (38)	2 (51)	1 9/16 (40)		
11/16 (17)	1 15/16 (49)	1 15/16 (50)	1 9/16 (39)	2 (51)		
		1 1/2 (38)	1 13/16 (46)	1 1/8 (29)		
		15/16 (24)	1 5/16 (33)"			
1 7/16 (36) 1 1/2 (38)	1 7/16 (36) 1 15/16 (50)	<u> </u>		1 1/8 (29)		

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within **70** working days.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

I. GENERAL

- 1. These contract provisions shall apply to all word performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.
- **3.** A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.
- **4.** A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2; Section IV, paragraphs 1, 2, 3, 4 and 7; Section V, paragraphs 1 and 2a through 2g.

- **5.** Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.
- **6.** Selection of Labor: During the performance of this contract, the contractor shall not:
 - **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.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60 (and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
 - **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 agreement will be met, the following actions will be taken as a minimum:
 - a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
 - **b.** All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
 - **c.** All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
 - **d.** Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
 - **e.** The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
 - **a.** The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.
 - b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
 - c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
 - **a.** The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
 - **b.** The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
 - c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
 - d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

- **a.** The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.
- c. The contractor will advise employees and applicants for employment of available training programs and entrance

- requirements for each.
- **d.** The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth 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.

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 listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV. 2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainee's and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10

for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall; upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

- **a.** Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
- **b.** The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.
- c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees

(including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for submitting payroll copies of all subcontractors.

- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
- (2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
- (3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.
- **e**. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U/S. C. 1001 and 31 U.S.C. 231.
- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

- 1. On all federal-aid contracts on the national highway system, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:
 - a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
 - **b.** Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed

- on Form FHWA-47, and in the units shown on Form FHWA-47. **c.** Furnish, upon the completion of the contract, to the SHA resident engineer on /Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
- **2**. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractors' own organization (23 CFR 635).
 - a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
 - b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S. C. 333).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more).

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
- 2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
- **3.** That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
- **4.** That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
 b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- **c.** The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
- **d.** The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

- e. The terms "covered transaction," "debarred," "suspended," "ineligible," lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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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.

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2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- **a**. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- **b.** The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- **c.** The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "primary covered transaction,"
 "participant," "person," "principal," "proposal," and
 "voluntarily excluded," as used in this clause, have the
 meanings set out in the Definitions and Coverage sections of
 rules implementing Executive Order 12549. You may contact
 the person to which this proposal is submitted for assistance in
 obtaining a copy of those regulations.
- **e.** The prospective lower tie participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- **g.** A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealing.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

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

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

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XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

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

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

NOTICE

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

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

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

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

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