BID PROPOSAL INSTRUCTIONS

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

PREQUALIFICATION

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

WHO CAN BID?

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

REQUESTS FOR AUTHORIZATION TO BID

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

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?

When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status" (BDE 124) he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued an **Authorization to Bid or Not for Bid Report**, approved by the Central Bureau of Construction and the Chief Procurement Officer that indicates which items have been approved For Bidding. If **Authorization to Bid** cannot be approved, the **Authorization to Bid or Not for Bid Report** will indicate the reason for denial.

ABOUT AUTHORIZATION TO BID

Firms that have not received an Authorization to Bid or Not For Bid Report within a reasonable time of complete and correct original document submittal should contact the Department as to the status. Firms unsure as to authorization status should call the Prequalification Section of the Bureau of Construction at the number listed at the end of these instructions.

ADDENDA AND REVISIONS

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

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

The Internet is the Department's primary way of doing business. The subscription service emails are an added courtesy the Department provides. It is suggested that bidders check IDOT's website at http://www.idot.illinois.gov/doing-business/procurements/construction-services/construction-bulletins/transportation-bulletin/index#TransportationBulletin 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 DOT.D&Econtracts@illlinois.gov

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

STANDARD GUIDELINES FOR SUBMITTING BIDS

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

BID SUBMITTAL CHECKLIST

Cover page (the sheet that has the item number on it) – This should be the first page of your bid proposal, followed by your bid (the Schedule of Prices/Pay Items). If you are using special software or CBID to generate your schedule of prices, do not include the blank pages of the schedule of prices that came with the proposal package.
☐ Page 4 (Item 9) — Check "YES" if you will use a subcontractor(s) with an annual value over \$50,000. Include the subcontractor(s) name, address, general type of work to be performed and the dollar amount. If you will use subcontractor(s) but are uncertain who or the dollar amount; check "YES" but leave the lines blank.
☐ After page 4 – Insert the following documents: Cost Adjustments for Steel, Bituminous and Fuel (if applicable) and the Contractor Letter of Assent (if applicable). The general rule should be, if you don't know where it goes, put it after page 4.
☐ Page 10 (Paragraph J) – Check "YES" or "NO" whether your company has any business in Iran.
☐ Page 10 (Paragraph K) – (Not applicable to federally funded projects) List the name of the apprenticeship and training program sponsor holding the certificate of registration from the US Department of Labor. If no applicable program exists, please indicate the work/job category. Do not include certificates with your bid. Keep the certificates in your office in case they are requested by IDOT.
☐ Page 11 (Paragraph L) – A copy of your State Board of Elections certificate of registration is no longer required with your bid.
☐ Page 11 (Paragraph M) – Indicate if your company has hired a lobbyist in connection with the job for which you are submitting the bid proposal.
☐ Page 12 (Paragraph C) – This is a work sheet to determine if a completed Form A is required. It is not part of the form and you do not need to make copies for each completed Form A.
□ Pages 14-17 (Form A) – One Form A (4 pages) is required for each applicable person in your company. Copies of the forms can be used and only need to be changed when the information changes. The certification signature and date must be original for each letting. Do not staple the forms together. If you answered "NO" to all of the questions in Paragraph C (page 12), complete the first section (page 14) with your company information and then sign and date the Not Applicable statement on page 17.
Page 18 (Form B) - If you check "YES" to having other current or pending contracts it is acceptable to use the phrase, "See Affidavit of Availability on file". Ownership Certification (at the bottom of the page) - Check N/A if the Form A(s) you submitted accounts for 100 percent of the company ownership. Check YES if any percentage of ownership falls outside of the parameters that require reporting on the Form A. Checking NO indicates that the Form A(s) you submitted is not correct and you will be required to submit a revised Form A.
☐ Page 20 (Workforce Projection) – Be sure to include the Duration of the Project. It is acceptable to use the phrase "Per Contract Specifications".

☐ Proposal Bid Bond – (Insert after the proposal signature page) Submit you using the current Proposal Bid Bond form provided in the proposal package. the Proposal Bid Bond. If you are using an electronic bond, include your bid the Proof of Insurance printed from the Surety's Web Site.	The Power of Attorney page should be stapled to
☐ Disadvantaged Business Utilization Plan and/or Good Faith Effort – T Utilization Plan (SBE 2026), followed by the DBE Participation Statement (SB documentation of a Good Faith Effort, it is to follow the SBE Forms.	
The Bid Letting is now available in streaming Audio/Video from the IDOT the main page of the current letting on the day of the Letting. The stream will bids does not begin until approximately 10:30 AM.	T Web Site. A link to the stream will be placed on not begin until 10 AM. The actual reading of the
Following the Letting, the As-Read Tabulation of Bids will be posted by the en Web page for the current letting.	nd of the day. You will find the link on the main
QUESTIONS: pre-letting up to execution of the contract	
Contractor pre-qualification	217-782-3413
Small Business, Disadvantaged Business Enterprise (DBE)	
Contracts, Bids, Letting process or Internet downloads	
Estimates Unit	
Aeronautics	
IDNR (Land Reclamation, Water Resources, Natural Resources)	217-782-6302
QUESTIONS: following contract execution	
Subcontractor documentation, payments	217-782-3413
Railroad Insurance	217-785-0275

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Proposal Submitted By
Name
Address
City

Letting April 24, 2015

NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction.

BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL

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



Springfield, Illinois 62764

Contract No. 61B25
MCHENRY County
Section 10-00378-00-BR
Route FAS 33 (Franklinville Road)
Project BRS-0033(102)
District 1 Construction Funds

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

Prepared by

Checked by

'

(Printed by authority of the State of Illinois)

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1.

PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

District 1 Construction Funds

Proposal of
Taxpayer Identification Number (Mandatory) For the improvement identified and advertised for bids in the Invitation for Bids as:
Contract No. 61B25 MCHENRY County Section 10-00378-00-BR Project BRS-0033(102) Route FAS 33 (Franklinville Road)

This project consists of the removal of the existing structure and the construction of a new bridge with channel relocation, HMA binder and surface courses, pavement markings, landscaping, drainage and guardrail on Franklinville Road, 0.06 miles south of Perkins Road over Tributary of Kishwaukee River.

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 will govern performance and payments.

- 3. **ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER.** The undersigned bidder further declares that he/she has carefully examined the proposal, plans, specifications, addenda form of contract and contract bond, and special provisions, and that he/she has inspected in detail the site of the proposed work, and that he/she has familiarized themselves with all of the local conditions affecting the contract and the detailed requirements of construction, and understands that in making this bid proposal he/she waives all right to plead any misunderstanding regarding the same.
- 4. **EXECUTION OF CONTRACT AND CONTRACT BOND.** The undersigned bidder 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, or as specified in the special provisions, 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		roposal luaranty
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\$	3400,000
\$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\$	000,008
\$1,000,000	to	\$1,500,000	\$50,000	\$30,000,000	to	\$35,000,000\$	3900,000
\$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 bid proposals will be made payable to the Treasurer, State of Illinois.

If a combination bid is submitted, the proposal guaranties which accompany the individual bid 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 will fail to execute a contract bond as required herein, it is hereby	y agreed that the amount of	the proposal guaranty will become the
property of the State of Illinois, and shall be considered as payment of damages due	e to delay and other causes	s suffered by the State because of the
failure to execute said contract and contract bond; otherwise, the bid bond will bec	ome void or the proposal	guaranty check will be returned to the
undersigned.		

undersigned.		sine told of the proposal guaranty officer, will be foldined to the
Attach Cashier's C	heck or Certif	ied Check Here
In the event that one proposal guaranty check is intended to cover two of the proposal guaranties which would be required for each individual proposal, state below where it may be found.		
The proposal guaranty check will be found in the bid proposal for:	Item	
	Section No.	
	County	

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

6.	following combination proportion to the	BIDS. The undersigned bidder further agrees that if awarded the ation, he/she will perform the work in accordance with the requirement bid specified in the schedule below, and that the combination bid bid submitted for the same. If an error is found to exist in the gross in a combination, the combination bid shall be corrected as provide	ents of each individual contract comprisir shall be prorated against each section s sum bid for one or more of the individu
		a combination bid is submitted, the schedule below must be coising the combination.	ompleted in each proposal
		nate bids are submitted for one or more of the sections compri nation bid must be submitted for each alternate.	sing the combination, a
		Schedule of Combination Bids	
Со	mbination No.	Sections Included in Combination	Combination Bid Dollars Cents
7.	schedule of price all extensions ar schedule are app is an error in the will be made only The scheduled q	PRICES. The undersigned bidder submits herewith, in accordant is for the items of work for which bids are sought. The unit prices and summations have been made. The bidder understands that proximate and are provided for the purpose of obtaining a gross surextension of the unit prices, the unit prices will govern. Payment to actual quantities of work performed and accepted or materials unantities of work to be done and materials to be furnished may be the in the contract.	bid are in U.S. dollars and cents, and the quantities appearing in the bid in for the comparison of bids. If there to the contractor awarded the contract is furnished according to the contract.
8.	500/20-43) provid	DO BUSINESS IN ILLINOIS. Section 20-43 of the Illinois Produces that a person (other than an individual acting as a sole proprietor or conduct affairs in the State of Illinois prior to submitting the bid.	
9.	Department proc and make payme Purchasing Office Neither the CPO	F CONTRACT: The Department of Transportation will, in accurements, execute the contract and shall be the sole entity having ents under the contract. Execution of the contract by the Chief Proper (SPO) is for approval of the procurement process and execution on the SPO shall be responsible for administration of the coayment there under except as otherwise permitted in the Code.	the authority to accept performance ocurement Officer (CPO) or the State of the contract by the Department.
10.	The services of	a subcontractor will be used.	
	Check box Check box	Yes No	
		ubcontractors with subcontracts with an annual value of more than \$ address, general type of work to be performed, and the dollar allocat 0/20-120)	

ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 03/17/15 RUN TIME - 183241 ILLINOIS DEPARTMENT OF TRANSPORTATION . SCHEDULE OF PRICES CONTRACT NUMBER - 61825

STATE JOB #- C-91-743-10 PPS NBR -

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COUNTY NAME MCHENRY	ITEM	00291	2005016	2005116	0013030	02982	56277	56622	56852	XX007958	23260	0030	3049	2100	117	3011

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FAS 33 10-00378-00-BR MCHENRY

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ITEM	701021	0013797	0013798	0030850	0046304	066100	0066400	0068800	0076600	0076604	0100110	0100210	0101000	0	20101700

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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE DOLLARS CENTS	TOTAL PRICE DOLLARS CTS
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020120	REM & DISP UNS MATL	CU YD	330.000 X	11	
 0 8	FURNISHED EXCAVATION	QV US	578.000 X	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
080015	TRENCH BACKFILL	CN YD	X 000.7	- II	
100100	GEOTECH FAB F/GR STAB	OY QX	X 000.069	- 11	
110150	TOPSOIL EXC & PLAC	CN YD	567.000 X	- H - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
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500060	POTASSIUM FERT NUTR	POUND	00.	- I)	
5100630	EROSION CONTR BLANKET	SQ YD	6,193.000 X	11	
51006	HD EROS CONTR BLANK	SQ YD	232.000 X	- II —	

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	PAY ITEM DESCRIPTION	TEMP EROS CONTR	AGG DITCH CHECKS	PERIMETER EROS BAR	INLET & PIPE PROTECT	TEMP EROS CONTR BLANK	STONE RIPRAP CL A3	STONE RIPRAP CL A4	FILTER FABRIC	AGG SUBGRADE IMPROVE	AGG SUBGRADE IMPR 12	SUB GRAN MAT B 4	HMA BASE CSE 4	BIT MATLS PR CT	HMA SURF REM BUTT JT	HMA BC IL-19.0 N70
	ITEM	8000250	8000315	8000400	8000500	8001100	8100105	8100107	8200200	0300001	0300112	1101200	5501300	0600275	600982	0603085

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NUMBER -	
CONTRACT NUMBER - 61B25	

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42001430	R APPR PVT CON (FLX)	SQ YD	87.00	11 11 1 1 1 1 1 -
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00016	HMA SURF REM 4 1/4		09.000	
40002	DRIVE PAVEMENT REM	YD	0	- II
4201	CL D PATCH T4 12		22.000 X	- 11 - 11 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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820301	HMA SHOULDERS 5	>- I	31.00	
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22	PIPE CULVERT REMOV	00	48.00	
020010	STRUCTURE EXCAVATION		232.000 x	
3002	CONC STRUCT	CU YD	73.80	
030025	CONC SUP-STR	cu YD	195.600	
0300260	BR DECK GROOVING	> 1	436.000 ×	- 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
50300300	PROTECTIVE COAT	SQ YD	455.000	- 11 -

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3 ECMR003 PAGE 7/15 41	TOTAL PRICE DOLLARS CTS	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								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	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
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S DEPARTMENT OF SCHEDULE OF P CONTRACT NUMBER	UNIT OF MEASURE	POUND		F 004	l	FOOT	EACH	7	ō :	ō	Ö	-	_	٩		ō
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FAS 33 10-00378-00 MCHENRY	ITEM	08002	0800515	901050	1200959	1202305	1203200	1500100	42A0220	42D0211	4210012	4213660	9100100	0100060	100945	0107600

ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 03/17/15 RUN TIME - 183241 ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 61825 FAS 33 10-00378-00-BR MCHENRY

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מאם ו	QUANTITY	3.000	1.000	1.000	212.500	4.000	3.000	1.000	308.000	.00	12.000	135.000	2,000.000	45.000	62.500	4.000
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EACH PAY ITEM SHOULD HAVE A UNIT PRICE AND A TOTAL PRICE NOTE

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 - IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER ESTABLISH A UNIT PRICE. .
- A BID MAY BE DECLARED UNACCEPTABLE IF NEITHER A UNIT PRICE NOR A TOTAL PRICE IS SHOWN. 4

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

I. GENERAL

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

II. ASSURANCES

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

A. Conflicts of Interest

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 State 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 State 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 calendar 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.

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. Information concerning the exemption process is available from the Department upon request.

B. Negotiations

Section 50-15. Negotiations.

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.

The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-15, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

C. Inducements

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 provide a submission to a vendor portal or 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, not making a submission to a vendor portal, or who withholds a bid or submission to a vendor portal in consideration of the promise for the payment of money or other valuable thing is guilty of a Class 4 felony.

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

D. Revolving Door Prohibition

Section 50-30. Revolving door prohibition.

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

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

E. Reporting Anticompetitive Practices

Section 50-40. Reporting anticompetitive practices.

When, for any reason, any vendor, bidder, contractor, CPO, SPO, designee, elected official, or State employee suspects collusion or other anticompetitive practice among any bidders, offerors, contractors, proposers, or employees of the State, a notice of the relevant facts shall be transmitted to the Attorney General and the CPO.

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 or submission to a vendor portal is submitted.

F. Confidentiality

Section 50-45. Confidentiality.

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

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

G. Insider Information

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.

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.

☐ I acknowledge, understand and accept these terms and conditions for the above assurances.

III. CERTIFICATIONS

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

A. Bribery

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
 - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
 - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
 - (1) the business has been finally adjudicated not guilty; or
 - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 2012.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50-5.

B. Felons

Section 50-10. Felons.

- (a) Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.
- (b) Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code and every vendor's submission to a vendor portal shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any of the certifications required by this Section are false.

C. Debt Delinquency

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

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

D. Prohibited Bidders, Contractors and Subcontractors

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

The bidder or contractor or subcontractor, respectively, certifies in accordance with Section 50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 or if in violation of Subsection (c) for a period of five years from the date of conviction. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontract under this Section and acknowledges that the CPO shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

E. Section 42 of the Environmental Protection Act

Section 50-14 Environmental Protection Act violations.

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

F. Educational Loan

Section 3 of the Educational Loan Default Act, 5 ILCS 385/3.

Pursuant to the Educational Loan Default Act no State agency shall contract with an individual for goods or services if that individual is in default on an educational loan.

The bidder, if an individual as opposed to a corporation, partnership or other form of business organization, certifies that the bidder is not in default on an educational loan as provided in Section 3 of the Act.

G. Bid-Rigging/Bid Rotating

Section 33E-11 of the Criminal Code of 2012, 720 ILCS 5/3BE-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.
- (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.

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

H. International Anti-Boycott

Section 5 of the International Anti-Boycott Certification Act provides 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.

The bidder makes the certification set forth in Section 5 of the Act.

I. Drug Free Workplace

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.

The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace in compliance with the provisions of the Act.

J. Disclosure of Business Operations in Iran

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

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

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

Failure to make the disclosure required by the Code may cause the bid, offer or proposal to be considered not responsive. The disclosure will be considered when evaluating the bid 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 appro	priate statement:
//	Company has no business operations in Iran to disclose.
//	Company has business operations in Iran as disclosed on the attached document.

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

In accordance with the provisions of Section 30-22 (6) of the 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.

Addtionally, Section 30-22 of the Code requires that the bidder certify that an Illinois office be maintained as the primary place of employment for persons employed for this contract.

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

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

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

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

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

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

M. Lobbyist Disclosure

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

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

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

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

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

		Bidder has not hired any person required to register pursuant to the Illinois Lobbyist Registration Act in connection with this contract.
	Or	
		Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with the contract:
		address of person:ees, compensation, reimbursements and other remuneration paid to said person:
□lac	knc	welledge understand and accept these terms and conditions for the above certifications

IV. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

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

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual 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 individual 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 individual making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

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

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

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

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

Form A Instructions for Financial Information & Potential Conflicts of Interest

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. If a bidder is not subject to Federal 10K reporting, the bidder must determine if any individuals are required by law to complete a financial disclosure form. To do this, the bidder should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on Form A must be signed and dated by an individual that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

1.	Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO
2.	Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES NO
3.	Does anyone in your organization receive more than 60% of the annual salary of the Governor of the bidding entity's or parent entity's distributive income? 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 60% of the annual salary of the Governor? YES NO
	(Note: Only one set of forms needs to be completed <u>per individual per bid</u> even if a specific individual would require a yes answer to more than one question.)

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

If the answer to each of the above questions is "NO", then the <u>NOT APPLICABLE STATEMENT</u> of Form A must be signed and dated by an individual that is authorized to execute contracts for your company.

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

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

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

Contractor Name		
Legal Address		
O'the Otate 7's		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

FOR IND	IVIDUAL (type	or print information)		
NA	ME:			
AD	DRESS			
Тур	e of ownership	/distributable income share:	:	
stoo		sole proprietorship	Partnership	other: (explain on separate sheet):
% 0	r \$ value of own	ership/distributable income sh	are:	

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

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

- Are you currently an officer or employee of either the Capitol Development Board or the Illinois State
 Toll Highway Authority?
 Yes ___No __
- Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor provide the name the State agency for which you are employed and your annual salary.

3.	If you are currently appointed to or employed by any agency of the Salary exceeds 60% of the annual salary of the Governor, are you e (i) more than 7 1/2% of the total distributable income of your firm corporation, or (ii) an amount in excess of 100% of the annual salary	ntitled to receive n, partnership, association or
4.	If you are currently appointed to or employed by any agency of the Salary exceeds 60% of the annual salary of the Governor, are you a or minor children entitled to receive (i) more than 15% in aggregate of your firm, partnership, association or corporation, or (ii) an amour salary of the Governor?	nd your spouse of the total distributable income
	employment of spouse, father, mother, son, or daughter, including con previous 2 years.	
If your	answer is yes, please answer each of the following questions.	YesNo
1.	Is your spouse or any minor children currently an officer or employee Board or the Illinois State Toll Highway Authority?	of the Capitol Development YesNo
2.	Is your spouse or any minor children currently appointed to or employ of Illinois? If your spouse or minor children is/are currently appointed agency of the State of Illinois, and his/her annual salary exceeds 60 annual salary of the Governor, provide the name of the spouse and/of the State agency for which he/she is employed and his/her annual	d to or employed by any 0% of the or minor children, the name
3.	If your spouse or any minor children is/are currently appointed to or estate of Illinois, and his/her annual salary exceeds 60% of the annual are you entitled to receive (i) more than 71/2% of the total distributable firm, partnership, association or corporation, or (ii) an amount in excannual salary of the Governor?	I salary of the Governor, e income of your
4.	If your spouse or any minor children are currently appointed to or er State of Illinois, and his/her annual salary exceeds 60% of the annual and your spouse or any minor children entitled to receive (i) more that aggregate of the total distributable income from your firm, partnership (ii) an amount in excess of two times the salary of the Governor?	salary of the Governor, are you an 15% in the
		Yes No
unit of	e status; the holding of elective office of the State of Illinois, the govern local government authorized by the Constitution of the State of Illinoi currently or in the previous 3 years.	
	nship to anyone holding elective office currently or in the previous 2 ye daughter.	ears; spouse, father, mother, YesNo
Americ of the S	tive office; the holding of any appointive government office of the State a, or any unit of local government authorized by the Constitution of the State of Illinois, which office entitles the holder to compensation in exceptage of that office currently or in the previous 3 years.	State of Illinois or the statues
	nship to anyone holding appointive office currently or in the previous 2 daughter.	years; spouse, father, mother, YesNo
(g) Employ	yment, currently or in the previous 3 years, as or by any registered lob	byist of the State government. YesNo

e previous 2 years; spouse, father, mother, YesNo
s, by any registered election or reelection elerk of the State of Illinois, or any political the Federal Board of Elections. YesNo
r; who was a compensated employee in the registered with the Secretary of State or any ttee registered with either the Secretary of
Yes No
t of the bidder or offeror who is not identified ig, or may communicate with any State officer continuing obligation and must be prompout the term of the contract. If no person

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below:

Name of person(s):	
Nature of disclosure:	
Trace of dississance.	
ADDITO ADI E CTATEMENT	
APPLICABLE STATEMENT This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Un	dor
penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of knowledge.	
Completed by:	
Signature of Individual or Authorized Representative Date	
NOT APPLICABLE STATEMENT	<u>.</u>
Under penalty of perjury, I have determined that no individuals associated with this organization the criteria that would require the completion of this Form A.	n meet
This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page	е.
Signature of Authorized Representative Date	_

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Financial Related Information Disclosure

Contractor Na	ıme				
Legal Address	3				
City, State, Zi	p				
Telephone Nu	ımber		Email Address	Fax Number (if avail	able)
			l s Form is required by Section 50 dicly available contract file. This		
	DISCLOSURE (OF OTHER (CONTRACTS AND PROCURE	MENT RELATED INF	ORMATION
has any per any other S	nding contracts (incl state of Illinois agend	luding leases cy: Yes _	ement Related Information. The s), bids, proposals, or other ongo	ping procurement rela	
	such as bid or proje		relationship by showing State o attach additional pages as neces		
		THE FOL	LOWING STATEMENT MUST I	BE CHECKED	
	П				
			Signature of Authorized Representative		Date
			OWNERSHIP CERTIFICA	TION	
	e certify that the foll of ownership.	owing stater	nent is true if the individuals for	all submitted Form F	A disclosures do not total
			erest is held by individuals rec outive income or holding less tha		
	☐ Yes ☐ No	□ N/A (I)	Form A disclosure(s) established	d 100% ownership)	

SPECIAL NOTICE TO CONTRACTORS

The following requirements of the Illinois Department of Human Rights Act 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 Title 44, Illinois Administrative Code, Section 750.120. If it is determined that the contract awardee's projections reflect an underutilization of minority persons and/or women in any job classification, it shall be advised in writing of the manner in which it is underutilizing and such awardee shall be considered to be in breach of the contract unless, prior to commencement of work on the contract project, it submits revised satisfactory projections or an acceptable written affirmative action plan to correct such underutilization including a specific timetable geared to the completion stages of the contract.
- (c) The Department of Transportation shall provide to the Department of Human Rights a copy of the contract awardee's Employee Utilization Form, a copy of any required written affirmative action plan, and any written correspondence related thereto. The Department of Human Rights may review and revise any action taken by the Department of Transportation with respect to these requirements.



PART I. IDENTIFICATION

Contract No. 61B25
MCHENRY County
Section 10-00378-00-BR
Project BRS-0033(102)
Route FAS 33 (Franklinville Road)
District 1 Construction Funds

Dept. of Human Rights #							[Duratio	n of P	roject:								
Name of Bidder:																		
PART II. WORKFO A. The undersigned which this contract wor projection including a p	bidder hark is to be	as analyz e perform	ed mir ed, an	d for th d fema	ne locati	ons froi	n whic	h the b	idder re	cruits	employe	ees, and he	reby	submi	its the foll	owir con	ng workfo	
		TOTA	AL Wo	rkforce	Project	tion for	Contra	ct						С	URRENT	EM	PLOYEE	S
				MINORITY EMPLOYEES TRAINEES									TO BE ASSIGNED TO CONTRACT					
JOB	TO	TAL		IVIIIV		LIVII LO	*OTI	HER	APPF			HE JOB		TO	TAL		MINO	RITY
CATEGORIES		OYEES		ACK	HISP		MIN	_	TIC			INEES			OYEES	. ,	EMPLO	
OFFICIALS (MANAGERS)	M	F	M	F	M	F	М	F	M	F	М	F		M	F		М	F
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		
T	TAE OTAL Tra	BLE C	ninatio	n for C	ontract				7			FOR	DEP	ARTM	ENT USE	ON	ILY	
EMPLOYEES		TAL	Jectio	11 101 0	Onitact		*OT	HER	1									
IN	1	OYEES	BLA	ACK	HISP	ANIC	_	NOR.										
TRAINING	М	F	М	F	М	F	М	F]									
APPRENTICES																		
ON THE JOB TRAINEES																		

Note: See instructions on page 2

BC 1256 (Rev. 12/11/07)

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

Contract No. 61B25
MCHENRY County
Section 10-00378-00-BR
Project BRS-0033(102)
Route FAS 33 (Franklinville Road)
District 1 Construction Funds

PART II. WORKFORCE PROJECTION - continued

The undersigned bidder projects that: (number)	B.	Included in "Total Employees" under Table A is the total event the undersigned bidder is awarded this contract.	I number of new hires that	would be employed in the							
new hires would be recruited from the area in which the bidder's principal office or base of operation is located. C. Included in "Total Employees" under Table A is a projection of numbers of persons to be employed directly by the undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors. The undersigned bidder estimates that (number)		The undersigned bidder projects that: (number)		new hires would be							
Office or base of operation is located. C. Included in "Total Employees" under Table A is a projection of numbers of persons to be employed directly by the undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors. The undersigned bidder estimates that (number)		recruited from the area in which the contract project is I	ocated; and/or (number)								
C. Included in "Total Employees" under Table A is a projection of numbers of persons to be employed directly by the undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors. The undersigned bidder estimates that (number)		office or base of operation is located new hires would	d be recruited from the area	in which the bidder's principal							
undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors. The undersigned bidder estimates that (number)		·									
be directly employed by the prime contractor and that (number) persons will be employed by subcontractors. PART III. AFFIRMATIVE ACTION PLAN A. The undersigned bidder understands and agrees that in the event the foregoing minority and female employee utilization projection included under PART II is determined to be an underutilization of minority persons or women in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior to commencement of work, develop and submit a written Affirmative Action Plan including a specific timetable (geared to the completion stages of the contractly whereby deficiencies in minority and/or female employee utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency and the Illinois Department of Human Rights. B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications. Company Telephone Number Address	C.										
be directly employed by the prime contractor and that (number) persons will be employed by subcontractors. PART III. AFFIRMATIVE ACTION PLAN A. The undersigned bidder understands and agrees that in the event the foregoing minority and female employee utilization projection included under PART II is determined to be an underutilization of minority persons or women in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior to commencement of work, develop and submit a written Affirmative Action Plan including a specific timetable (geared to the completion stages of the contractly whereby deficiencies in minority and/or female employee utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency and the Illinois Department of Human Rights. B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications. Company Telephone Number Address		The undersigned bidder estimates that (number)		persons will							
A. The undersigned bidder understands and agrees that in the event the foregoing minority and female employee utilization projection included under PART II is determined to be an underutilization of minority persons or women in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior to commencement of work, develop and submit a written Affirmative Action Plan including a specific timetable (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employee utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency and the Illinois Department of Human Rights. B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications. Company Telephone Number		be directly employed by the prime contractor and that (number)	persons will be							
utilization projection included under PART II is determined to be an underutilization of minority persons or women in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior to commencement of work, develop and submit a written Affirmative Action Plan including a specific timetable (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employee utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency and the Illinois Department of Human Rights. B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications. Company	PART II	III. AFFIRMATIVE ACTION PLAN									
submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications. Company Telephone Number Address NOTICE REGARDING SIGNATURE The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed only if revisions are required. Signature: Title: Date: Instructions: All tables must include subcontractor personnel in addition to prime contractor personnel. Table A - Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.	A.	utilization projection included under PART II is determined in any job category, and in the event that the undersicommencement of work, develop and submit a writt (geared to the completion stages of the contract) wutilization are corrected. Such Affirmative Action Plan	ned to be an underutilization igned bidder is awarded the ien Affirmative Action Plan whereby deficiencies in mir	n of minority persons or women is contract, he/she will, prior to n including a specific timetable nority and/or female employee							
NOTICE REGARDING SIGNATURE The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed only if revisions are required. Signature:		submitted herein, and the goals and timetable included	ne minority and female emp under an Affirmative Action	oloyee utilization projection n Plan if required, are deemed							
NOTICE REGARDING SIGNATURE The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed only if revisions are required. Signature:	Compa	any	Telephone Number	· 							
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The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed only if revisions are required. Signature:			NO CIONATURE								
Instructions: All tables must include subcontractor personnel in addition to prime contractor personnel. Table A - Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work. Table B - Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.	D.										
Instructions: All tables must include subcontractor personnel in addition to prime contractor personnel. Table A - Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work. Table B - Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.			ate the signing of this form. The	he following signature block needs							
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(Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work. Table B - Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.	Instruction	ions: All tables must include subcontractor personnel in addition to	o prime contractor personnel.								
currently employed.	Table A	(Table B) that will be allocated to contract work, and include	e all apprentices and on-the-job tra	ainees. The "Total Employees" column							
Table C - Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.	Table B		ted to the contract work including a	any apprentices and on-the-job trainees							
	Table C	C - Indicate the racial breakdown of the total apprentices and or	n-the-job trainees shown in Table A	۹.							

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

Contract No. 61B25 MCHENRY County Section 10-00378-00-BR Project BRS-0033(102) Route FAS 33 (Franklinville Road) District 1 Construction Funds

PROPOSAL SIGNATURE SHEET

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

	Firm Name	
(IF AN INDIVIDUAL)	Signature of Owner	
	Business Address	
	Firm Name	
	Ву	
(IF A CO-PARTNERSHIP)	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	Decision Address	· ·
FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)	Business Address	
	Corporate Name	
(IF A JOINT VENTURE)	_,	Signature of Authorized Representative
		Turned or uninted groups and title of A. they and Dayres and title
		Typed or printed name and title of Authorized Representative
	Attest	
		Signature
	Business Address	
If more than two parties are in the joint venture.	nlease attach an addit	ional signature sheet

Return with Bid



Division of Highways Annual Proposal Bid Bond

This Annual Proposal Bid Bond shall become effective at 12:01 AM (CDST) on	and shall be valid until 11:59 PM (CDST).
KNOW ALL PERSONS BY THESE PRESENTS, That We	
as PRINCIPAL, and	
price, or for the amount specified in the bid proposal under '	ne STATE OF ILLINOIS in the penal sum of 5 percent of the total bid 'Proposal Guaranty" in effect on the date of the Invitation for Bids, d STATE OF ILLINOIS, for the payment of which we bind ourselves,
	SUCH that whereas, the PRINCIPAL may submit bid proposal(s) to tof Transportation, for various improvements published in the e.
the time and as specified in the bidding and contract document into a contract in accordance with the terms of the bidding ar coverages and providing such bond as specified with good and the prompt payment of labor and material furnished in the prosenter into such contract and to give the specified bond, the P penalty hereof between the amount specified in the bid propo	d proposal(s) of the PRINCIPAL; and if the PRINCIPAL shall, within its; and if, after award by the Department, the PRINCIPAL shall enter and contract documents including evidence of the required insurance I sufficient surety for the faithful performance of such contract and for secution thereof; or if, in the event of the failure of the PRINCIPAL to RINCIPAL pays to the Department the difference not to exceed the sal and such larger amount for which the Department may contract oposal, then this obligation shall be null and void, otherwise, it shall
preceding paragraph, then Surety shall pay the penal sum to t Surety does not make full payment within such period of time	PAL has failed to comply with any requirement as set forth in the he Department within fifteen (15) days of written demand therefor. If e, the Department may bring an action to collect the amount owed. If attorney's fees, incurred in any litigation in which it prevails either in
In TESTIMONY WHEREOF, the said PRINCIPAL has caused this instrument to be signed by its officer day of A.D.,	In TESTIMONY WHEREOF, the said SURETY has caused this instrument to be signed by its officer day of A.D.,
(Company Name)	(Company Name)
Ву	Ву
(Signature and Title)	(Signature of Attorney-in-Fact)
Notary for PRINCIPAL	Notary for SURETY
STATE OF	STATE OF
COUNTY OF	COUNTY OF
Signed and attested before me on (date)	Signed and attested before me on (date)
by	
(Name of Notary Public)	(Name of Notary Public)
(Seal) (Signature of Notary Public)	(Seal) (Signature of Notary Public)
(19 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(-3 , , , , , , , , , , , , , , , , ,
(Date Commission Expires)	(Date Commission Expires)

signing the proposal(s) the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety
are firmly bound unto the State of Illinois under the conditions of the bid bond as shown above.

In lieu of completing the above section of the Annual Proposal Bid Bond form, the Principal may file an Electronic Bid Bond. By

Electronic Bid Bond ID #	Company/Bidder Name	Signature and Title

This bond may be terminated, at Surety's request, upon giving not less than thirty (30) days prior written notice of the cancellation/termination of the bond. Said written notice shall be issued to the Illinois Department of Transportation, Chief Contracts Official, 2300 South Dirksen Parkway, Springfield, Illinois, 62764, and shall be served in person, by receipted courier delivery or certified or registered mail, return receipt requested. Said notice period shall commence on the first calendar day following the Department's receipt of written cancellation/termination notice. Surety shall remain firmly bound to all obligations herein for proposals submitted prior to the cancellation/termination. Surety shall be released and discharged from any obligation(s) for proposals submitted for any letting or date after the effective date of cancellation/termination.

Illinois Department of Transportation

Return with Bid

Division of Highways Proposal Bid Bond

		Item No.	
		Letting Date	e
(NOW ALL PERSONS BY THE	SE PRESENTS, That We		
as PRINCIPAL, and			
the amount specified in the bid	proposal under "Proposal Guaranty" i	in effect on the date of the Invitation for	of 5 percent of the total bid price, or for r Bids, whichever is the lesser sum, well s, executors, administrators, successors
			omitted a bid proposal to the STATE OF retation Bulletin Item Number and Letting
specified in the bidding and cor with the terms of the bidding and with good and sufficient surety prosecution thereof; or if, in the pays to the Department the diffe	ntract documents; and if, after award documents including evide for the faithful performance of such event of the failure of the PRINCIP perence not to exceed the penalty here tract with another party to perform the	by the Department, the PRINCIPAL sence of the required insurance coverage contract and for the prompt payment AL to enter into such contract and to go for between the amount specified in the	RINCIPAL shall, within the time and as shall enter into a contract in accordance es and providing such bond as specified to of labor and material furnished in the give the specified bond, the PRINCIPAL bid proposal and such larger amount for the this obligation shall be null and void,
hen Surety shall pay the penal within such period of time, the [sum to the Department within fiftee	n (15) days of written demand therefo ollect the amount owed. Surety is liable	as set forth in the preceding paragraph, r. If Surety does not make full payment e to the Department for all its expenses,
n TESTIMONY WHEREOF, caused this instrument to be day of		In TESTIMONY WHEREOF, instrument to be signed by its day of	the said SURETY has caused this officer A.D.,
(Compa	any Name)	(Com	pany Name)
Зу		Ву	
(Sign	ature and Title)		e of Attorney-in-Fact)
Notary for PRINCIPAL		Notary for SURETY	
STATE OF		STATE OF	
COUNTY OF		COUNTY OF	
Signed and attested before r	ne on (date)	Signed and attested before m	ne on (date)
(Name of	Notary Public)	(Name o	f Notary Public)
(Seal)		(Seal)	
,,	(Signature of Notary Public)		(Signature of Notary Public)
	(Date Commission Expires)	_	(Date Commission Expires)
proposal the Principal is en		oid bond has been executed and	Electronic Bid Bond. By signing the the Principal and Surety are firmly
Electronic Bid Bond ID #	Company/Bidder Nan	ne	Signature and Title



DBE Utilization Plan

(1) Policy

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

(2) Obligation

Date

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

(3) Pro	ject and Bid Identification			
Complet	te the following information concerning the project and bid:			
Route		Total Bid		_
Section		Contract DBE Goal		
Project			(Percent)	(Dollar Amount)
County				
Letting [Date			
Contrac	t No.			
Letting I	Item No.			
(4) Ass	surance			
	in my capacity as an officer of the undersigned bidder (or bidding company: (check one) Meets or exceeds contract award goals and has provided do Disadvantaged Business Participation percent Attached are the signed participation statements, forms SBE use of each business participating in this plan and assuring the work of the contract. Failed to meet contract award goals and has included good for provided participation as follows: Disadvantaged Business Participation percent The contract goals should be accordingly modified or waiv support of this request including good faith effort. Also a required by the Special Provision evidencing availability and	cumented participation as fort 2025, required by the Spectat each business will perfort aith effort documentation to the ed. Attached is all informattached are the signed participation.	cial Provision evicem a commercial meet the goals a cation required by articipation state	dencing availability and ly useful function in the and that my company has the Special Provision in the ments, forms SBE 2025,
	business will perform a commercially useful function in the wo			
Bv	Company	The "as read" Low Bidder is re		•
•		Submit only one utilization pla submitted in accordance with		
Title		Bureau of Small Business Ent	erprises	Local Let Projects

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

2300 South Dirksen Parkway

Springfield, Illinois 62764

Submit forms to the

Local Agency



DBE Participation Statement

	•				
Subcontractor	r Registration Number		Le	etting	
Participation	Statement		Ite	em No.	
(1) Instruction	าร		Co	ontract No.	
	st be completed for each disadvantaged busines: vith the special provision and will be attached to t n for the firm.				
(2) Work:					
Please indica	te: J/V Manufacturer	Supplier (60%)	Subcon	tractor	Trucking
Pay Item No.	Description		Quantity	Unit Price	Total
				l Total	
	yment Items (For any of the above items which a ust be sufficient to determine a Commercially Usefu				et dollar amount:
Boothpaon	active comments to determine a commencial, cools	ii r unotion, opoon	iodily docorroo the t	von and odpooning	or donar arribarri
	ent is to be a second-tier subcontractor, or if the first t must be clearly indicated on the DBE Participat				
	DBE subcontractor second-tiers a portion of its			•	•
	orime must submit a DBE Participation Statemen				
perform a con contractor or	ned certify that the information included herein is nmercially useful function in the work of the contr 1 st Tier subcontractor. The undersigned further u	ract item(s) listed understand that r	d above and to exe no changes to this	cute a contract wit statement may be	h the prime made without
	from the Department's Bureau of Small Busines erformed on this project and the payment therefo				ation regarding
aotaa wom p	one med on the project and the payment thereof	no maor do provi	idod to the Doparti		
Sigr	nature for Contractor 1 st Tier 2 nd Tier		Signature for D	BE Firm 1 st Tier	2 nd Tier
Title		Title			
Date		Date			
Contact Pers	on	Cont	act Person		
Phone		Phor	ıΔ		
Firm Name		Firm	Nama		
Address		Addr	ess		
City/State/Zip		City/S			
		ŕ		E	
The Department of Tr	ansportation is requesting disclosure of information that is necessary to acco	mnlish the statutory purpo	ose as outlined under the stat	e and WC	
federal law. Disclosur	an spondator in sequesting obscission of information that is necessary to according to the original of the sequestion of	esult in the contract not be	ing awarded. This form has t	peen	

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

lame:	
address:	
Phone No.	

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

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

NOTICE

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

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

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

Contract No. 61B25
MCHENRY County
Section 10-00378-00-BR
Project BRS-0033(102)
Route FAS 33 (Franklinville Road)
District 1 Construction Funds



SUBCONTRACTOR DOCUMENTATION

Public Acts 96-0795, 96-0920, and 97-0895 enacted substantial changes to the provisions of the Code (30 ILCS 500). Among the changes are provisions affecting subcontractors. The Contractor awarded this contract will be required as a material condition of the contract to implement and enforce the contract requirements applicable to subcontractors that entered into a contractual agreement with a total value of \$50,000 or more with a person or entity who has a contract subject to the Code and approved in accordance with article 108.01 of the Standard Specifications for Road and Bridge Construction.

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

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

STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

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

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

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

A. Bribery

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
 - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
 - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
 - (1) the business has been finally adjudicated not guilty; or
 - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract to which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 2012.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50-5.

B. Felons

Section 50-10. Felons.

- (a) Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.
- (b) Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any of the certifications required by this Section are false.

C. <u>Debt Delinquency</u>

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

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

D. Prohibited Bidders, Contractors and Subcontractors

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

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

E. Section 42 of the Environmental Protection Act

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

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

Name of Subcontracting Company

Authorized Officer

Date

SUBCONTRACTOR DISCLOSURES

I. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

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

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the subcontracting entity or its parent entity, whichever is less, unless the subcontractor is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual 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 individual 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 individual making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

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

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

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

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

Form A Instructions for Financial Information & Potential Conflicts of Interest

If the subcontractor is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. If a subcontractor is not subject to Federal 10K reporting, the subcontractor must determine if any individuals are required by law to complete a financial disclosure form. To do this, the subcontractor should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on the second page of Form A must be signed and dated by an individual that is authorized to execute contracts for the subcontracting company. Note: These questions are for assistance only and are not required to be completed.

1.	Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO
2.	Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YESNO
3.	Does anyone in your organization receive more than 60% of the annual salary of the Governor of the subcontracting entity's or parent entity's distributive income? YES NO
	(Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)
4.	Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES NO
	(Note: Only one set of forms needs to be completed <u>per individual per subcontract</u> even if a specific individual would require a yes answer to more than one question.)
'FS"	answer to any of these questions requires the completion of Form A. The subcontractor must determine each individual in

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

If the answer to each of the above questions is "NO", then the <u>NOT APPLICABLE STATEMENT</u> on page 2 of Form A must be signed and dated by an individual that is authorized to execute contracts for your company.

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

Subcontractor Name		
Subcontractor Name		
Legal Address		
Legal Address		
City, State, Zip		
Oity, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
relephone Number	Liliali Addiess	i ax inuitibei (ii available)

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

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

FOR INDIVIDUAL (type or print information)

DISCLOSURE OF FINANCIAL INFORMATION

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

TOTT INDIVIDUAL (type or print information)		
NAME:			
ADDRESS _			
Type of owner	ship/distributable income share:	:	
stock % or \$ value of	sole proprietorship ownership/distributable income sh	Partnershipare:	other: (explain on separate shee
	nterest relationships apply. If the		dicate which, if any, of the following is "Yes", please attach additional
(a) State employme	nt, currently or in the previous 3	years, including contractu	ual employment of services. Yes No
If your answer is	yes, please answer each of the	e following questions.	<u> </u>
-	currently an officer or employee way Authority?	e of either the Capitol Deve	elopment Board or the Illinois State YesNo
currently exceeds	currently appointed to or emploration appointed to or employed by a 60% of the annual salary of the or which you are employed and	ny agency of the State of le Governor, provide the na	Illinois, and your annual salary

	3.	If you are currently appointed to or employed by any agency of t salary exceeds 60% of the annual salary of the Governor, are yo (i) more than 7 1/2% of the total distributable income of your corporation, or (ii) an amount in excess of 100% of the annual salary	ou entitled to receive firm, partnership, association or
	4.	If you are currently appointed to or employed by any agency of the salary exceeds 60% of the annual salary of the Governor, are your minor children entitled to receive (i) more than 15% in the income of your firm, partnership, association or corporation, or the salary of the Governor?	ou and your spouse aggregate of the total distributable
(b)		employment of spouse, father, mother, son, or daughter, includir previous 2 years.	ng contractual employment services YesNo
	If	your answer is yes, please answer each of the following question	
	1.	Is your spouse or any minor children currently an officer or empl Board or the Illinois State Toll Highway Authority?	oyee of the Capitol Development YesNo
		Is your spouse or any minor children currently appointed to or er of Illinois? If your spouse or minor children is/are currently agency of the State of Illinois, and his/her annual salary ex annual salary of the Governor, provide the name of your spouse of the State agency for which he/she is employed and his/her an	appointed to or employed by any ceeds 60% of the and/or minor children, the name
	3.	If your spouse or any minor children is/are currently appointed to State of Illinois, and his/her annual salary exceeds 60% of the are you entitled to receive (i) more than 71/2% of the total distribution, partnership, association or corporation, or (ii) an amount annual salary of the Governor?	nnual salary of the Governor, utable income of your
	4.	If your spouse or any minor children are currently appointed to State of Illinois, and his/her annual salary exceeds 60% of the are you and your spouse or minor children entitled to receive aggregate of the total distributable income of your firm, partner (ii) an amount in excess of two times the salary of the Governor?	nual salary of the Governor, (i) more than 15 % in the ship, association or corporation, or
(-)	- 1		YesNo
(C)	unit of	ve status; the holding of elective office of the State of Illinois, the glocal government authorized by the Constitution of the State of Illicurrently or in the previous 3 years.	
(d)		onship to anyone holding elective office currently or in the previour daughter.	s 2 years; spouse, father, mother, YesNo
(e)	Americ of the	ntive office; the holding of any appointive government office of the ca, or any unit of local government authorized by the Constitution State of Illinois, which office entitles the holder to compensation is charge of that office currently or in the previous 3 years.	of the State of Illinois or the statutes
		onship to anyone holding appointive office currently or in the previous daughter.	ous 2 years; spouse, father, mother, YesNo
(g)	Emplo	yment, currently or in the previous 3 years, as or by any registere	d lobbyist of the State government. YesNo

(h) Relationship to anyone who is or was a registered lobbyist son, or daughter.	in the previous 2 years; spouse, father, mother, YesNo
(i) Compensated employment, currently or in the previous 3 y committee registered with the Secretary of State or any contact action committee registered with either the Secretary of States	ounty clerk of the State of Illinois, or any political
(j) Relationship to anyone; spouse, father, mother, son, or data last 2 years by any registered election or re-election common county clerk of the State of Illinois, or any political action of State or the Federal Board of Elections.	ttee registered with the Secretary of State or any ommittee registered with either the Secretary of
	YesNo
Communication Disclosure.	
Disclose the name and address of each lobbyist and other a Section 2 of this form, who is has communicated, is communic employee concerning the bid or offer. This disclosure i supplemented for accuracy throughout the process and throidentified, enter "None" on the line below:	eating, or may communicate with any State officer or s a continuing obligation and must be promptly
Name and address of person(s):	

3

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

supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below: Name of person(s): Nature of disclosure: APPLICABLE STATEMENT This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge. Completed by: Signature of Individual or Authorized Officer Date **NOT APPLICABLE STATEMENT** Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A. This Disclosure Form A is submitted on behalf of the SUBCONTRACTOR listed on the previous page. Signature of Authorized Officer Date

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Subcontractor: Other Contracts & Financial Related Information Disclosure

Subcontractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
Disclosure of the information contained in information shall become part of the publicl a total value of \$50,000 or more, from subcontracts.	y available contract file. This Form	B must be completed for subcontracts with
DISCLOSURE OF OTHER CONTRA	CTS, SUBCONTRACTS, AND PRO	OCUREMENT RELATED INFORMATION
1. Identifying Other Contracts & Procure any pending contracts, subcontracts, includ any other State of Illinois agency: Ye If "No" is checked, the subcontractor only	ing leases, bids, proposals, or othe sNo	r ongoing procurement relationship with
2. If "Yes" is checked. Identify each such information such as bid or project number (a INSTRUCTIONS:		
THE FOLLO	WING STATEMENT MUST BE CH	ECKED
П		
	Signature of Authorized Officer	Date
	OWNERSHIP CERTIFICATION	
Please certify that the following statement is of ownership	s true if the individuals for all submit	ted Form A disclosures do not total 100%
Any remaining ownership interest is parent entity's distributive income o		han \$106,447.20 of the bidding entity's or interest.
□ Ves □ No □ N/A (Form	A disclosura(s) established 100% of	wnershin)

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. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). Paper-based bids are to be submitted to the Chief Procurement Officer for the Department of Transportation in care of the Chief Contracts Official at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 a.mApril 24, 2015. 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 10:00 a.m.
- **2. DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 61B25
MCHENRY County
Section 10-00378-00-BR
Project BRS-0033(102)
Route FAS 33 (Franklinville Road)
District 1 Construction Funds

This project consists of the removal of the existing structure and the construction of a new bridge with channel relocation, HMA binder and surface courses, pavement markings, landscaping, drainage and guardrail on Franklinville Road, 0.06 miles south of Perkins Road over Tributary of Kishwaukee River.

- 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

Randall S. Blankenhorn, Acting Secretary

CONTRACT 61B25

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2015

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS, frequently used RECURRING SPECIAL PROVISIONS, and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-12) (Revised 1-1-15)

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LR # LR SD12 LR SD13 LR 107-2 LR 107-4 LR 108 LR 109 LR 212	Pg# 135		Special Provision Title Slab Movement Detection Device Required Cold Milled Surface Texture Railroad Protective Liability Insurance for Local Lettings Insurance Combination Bids Equipment Rental Rates Shaping Roadway	Effective Nov. 11, 1984 Nov. 1, 1987 Mar. 1, 2005 Feb. 1, 2007 Jan. 1, 1994 Jan. 1, 2012 Aug. 1, 1969	Revised Jan. 1, 2007 Jan. 1, 2007 Jan. 1, 2006 Aug. 1, 2007 Mar. 1, 2005 Jan. 1, 2002
LR 355-1			Bituminous Stabilized Base Course, Road Mix or Traveling Plant Mix	Oct. 1, 1973	Jan. 1, 2007
LR 355-2 LR 400-1 LR 400-2 LR 400-3			Bituminous Stabilized Base Course, Plant Mix Bituminous Treated Earth Surface Bituminous Surface Plant Mix (Class B) Hot In-Place Recycling (HIR) – Surface Recycling	Feb. 20, 1963 Jan. 1, 2007 Jan. 1, 2008 Jan. 1, 2012	Jan. 1, 2007 Apr. 1, 2012
LR 400-4 LR 400-5 LR 400-6 LR 400-7			Full-Depth Reclamation (FDR) with Emulsified Asphalt Cold In-Place Recycling (CIR) With Emulsified Asphalt Cold In Place Recycling (CIR) with Foamed Asphalt Full-Depth Reclamation (FDR) with Foamed Asphalt	Apr. 1, 2012 Apr. 1, 2012 June 1, 2012 June 1, 2012	Jun. 1, 2012 Jun. 1, 2012
LR 402			Salt Stabilized Surface Course	Feb. 20, 1963	Jan. 1, 2007
LR 403-1			Surface Profile Milling of Existing, Recycled or Reclaimed Flexible Pavement	Apr. 1, 2012	Jun. 1, 2012
LR 403-2			Bituminous Hot Mix Sand Seal Coat	Aug. 1, 1969	Jan. 1, 2007
LR 406 LR 420		H	Filling HMA Core Holes with Non-shrink Grout PCC Pavement (Special)	Jan. 1, 2008 May 12, 1964	Jan. 2, 2007
LR 442		H	Bituminous Patching Mixtures for Maintenance Use	Jan. 1, 2004	Jun. 1, 2007
LR 451			Crack Filling Bituminous Pavement with Fiber-Asphalt	Oct. 1, 1991	Jan. 1, 2007
LR 503-1			Furnishing Class SI Concrete	Oct. 1, 1973	Jan. 1, 2002
LR 503-2			Furnishing Class SI Concrete (Short Load)	Jan. 1, 1989	Jan. 1, 2002
LR 542			Pipe Culverts, Type (Furnished)	Sep. 1, 1964	Jan. 1, 2007
LR 663 LR 702		님	Calcium Chloride Applied	Jun. 1, 1958	Jan. 1, 2007
LR 1000-1		H	Construction and Maintenance Signs Cold In-Place Recycling (CIR) and Full Depth Reclamation	Jan. 1, 2004	Jun. 1, 2007
LIV 1000-1		ш	(FDR) with Emulsified Asphalt Mix Design Procedures	Apr. 1, 2012	Jun. 1, 2012
LR 1000-2			Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with Foamed Asphalt Mix Design Procedures	June 1, 2012	
LR 1004			Coarse Aggregate for Bituminous Surface Treatment	Jan. 1, 2002	Jan. 1, 2007
LR 1030			Growth Curve	Mar. 1, 2008	Jan. 1, 2010
LR 1032-1		Ц	Emulsified Asphalts	Jan. 1, 2007	Feb. 7, 2008
LR 1102			Road Mix or Traveling Plan Mix Equipment	Jan. 1, 2007	

BDE SPECIAL PROVISIONS

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

<u>File</u> Name	<u>Pg.</u>	Special Provision Title	Effective	Revised
80240		Above Grade Inlet Protection	July 1, 2009	Jan. 1, 2012
80099		Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
80274		Aggregate Subgrade Improvement	April 1, 2012	Jan. 1, 2013
80192		Automated Flagger Assistance Device	Jan. 1, 2008	
80173		Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2013
80241		Bridge Demolition Debris	July 1, 2009	3 ,
50261		Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481		Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50491		Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50531		Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
80310		Coated Galvanized Steel Conduit	Jan. 1, 2013	Jan. 1, 2015
80341		Coilable Nonmetallic Conduit	Aug. 1, 2014	Jan. 1, 2015
80198		Completion Date (via calendar days)	April 1, 2008	
8019 9		Completion Date (via calendar days) Plus Working Days	April 1, 2008	
* 80293		Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5	April 1, 2012	April 1, 2015
		Feet		
80294		Concrete Box Culverts with Skews ≤ 30 Degrees Regardless of	April 1, 2012	April 1, 2014
		Design Fill and Skews > 30 Degrees with Design Fills > 5 Feet		
80311		Concrete End Sections for Pipe Culverts	Jan. 1, 2013	
80334		Concrete Gutter, Curb, Median, and Paved Ditch	April 1, 2014	Aug. 1, 2014
80277		Concrete Mix Design – Department Provided	Jan. 1, 2012	Jan. 1, 2014
80261	136	X Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80335	139	X Contract Claims	April 1, 2014	
* 80029	140	X Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2015
* 80358	151	X Equal Employment Oppurtunity	April 1, 2015	
80265	155	X Friction Aggregate	Jan. 1, 2011	Nov. 1, 2014
80229		Fuel Cost Adjustment	April 1, 2009	July 1, 2009
80329		Glare Screen	Jan. 1, 2014	A 4 0044
80304	450	Grooving for Recessed Pavement Markings	Nov. 1, 2012	Aug. 1, 2014
80246	159	X Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2012
80322		Hot-Mix Asphalt – Mixture Design Composition and Volumetric	Nov. 1, 2013	Nov. 1, 2014
80323		Requirements Het Mix Applet - Mixture Design Verification and Braduction	Nov. 1 2012	Nov. 1. 2014
* 80347		Hot-Mix Asphalt – Mixture Design Verification and Production Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits –	Nov. 1, 2013 Nov. 1, 2014	Nov. 1, 2014 April 1, 2015
00341		Jobsite Sampling	1407. 1, 2014	April 1, 2013
80348	161	X Hot-Mix Asphalt – Prime Coat	Nov. 1, 2014	MENTAL CONTROL OF CONTROL OF STREET OF STREET, STREET CONTROL OF STREET, STREET
80315	101	Insertion Lining of Culverts	Jan. 1, 2013	Nov. 1, 2013
80351		Light Tower	Jan. 1, 2015	1404. 1, 2010
80336		Longitudinal Joint and Crack Patching	April 1, 2014	
* 80324	166	X LRFD Pipe Culvert Burial Tables	Nov. 1, 2013	April 1, 2015
* 80325	885	LRFD Storm Sewer Burial Tables	Nov. 1, 2013	April 1, 2015
80045		Material Transfer Device	June 15, 1999	Aug. 1, 2014
80342		Mechanical Side Tie Bar Inserter	Aug. 1, 2014	Jan. 1, 2015
80165		Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80337		Paved Shoulder Removal	April 1, 2014	· · · · · · · · · · · · · · · · ·
80349		Pavement Marking Blackout Tape	Nov. 1, 2014	
80298		Pavement Marking Tape Type IV	April 1, 2012	
80254	186	X Pavement Patching	Jan. 1, 2010	
80352		Pavement Striping - Symbols	Jan. 1, 2015	
* 80359	187	X Portland Cement Concrete Bridge Deck Curing	April 1, 2015	

<u>File</u> <u>Name</u>	<u>Pg.</u>		Special Provision Title	<u>Effective</u>	Revised
* 80353			Portland Cement Concrete Inlay or Overlay	Jan. 1, 2015	April 1, 2015
80338			Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	
80343			Precast Concrete Handhole	Aug. 1, 2014	
80300			Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	
80328	190	Х	Progress Payments	Nov. 2, 2013	
34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157			Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80306			Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt	Nov. 1, 2012	Jan. 2, 2015
			Shingles (RAS)		
80350	[Retroreflective Sheeting for Highway Signs	Nov. 1, 2014	
80327	191	Χ	Reinforcement Bars	Nov. 1, 2013	
80344			Rigid Metal Conduit	Aug. 1, 2014	
* 80354	160-0505	(6)	Sidewalk, Corner, or Crosswalk Closure	Jan. 1, 2015	April 1, 2015
80340			Speed Display Trailer	April 2, 2014	
80127			Steel Cost Adjustment	April 2, 2004	April 1, 2009
80317			Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	•
80355			Temporary Concrete Barrier	Jan. 1, 2015	
80301			Tracking the Use of Pesticides	Aug. 1, 2012	
80356			Traffic Barrier Terminals Type 6 or 6B	Jan. 1, 2015	
20338	193	X	Training Special Provisions	Oct. 15, 1975	
80318			Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
* 80345	(49,69.6)	0.000 (1985) 0.000 (1985)	Underpass Luminaire	Aug. 1, 2014	April 1, 2015
80357			Urban Half Road Closure with Mountable Median	Jan. 1, 2015	annonskum var rantakus delli Uslav isi ik kuniak akkantakanan.
* 80346		Graney.	Waterway Obstruction Warning Luminaire	Aug. 1, 2014	April 1, 2015
80288	196	X	Warm Mix Asphalt	Jan. 1, 2012	Nov. 1, 2014
* 80302	198	X	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80289			Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071			Working Days	Jan. 1, 2002	

The following special provisions are in the 2015 Supplemental Specifications and Recurring Special Provisions:

<u>File</u> Name	Special Provision Title	New Location	<u>Effective</u>	Revised
80292	Coarse Aggregate in Bridge Approach Slabs/Footings	Articles 1004.01(b) and 1004.02(f)	April 1, 2012	April 1, 2013
80303	Granular Materials	Articles 1003.04, 1003.04(c), and 1004.05(c)	Nov. 1, 2012	
80330	Pavement Marking for Bike Symbol	Article 780.14	Jan. 1, 2014	
80331	Payrolls and Payroll Records	Recurring CS #1 and #5	Jan. 1, 2014	
80332	Portland Cement Concrete – Curing of Abutments and Piers	Article 1020.13	Jan. 1, 2014	
80326	Portland Cement Concrete Equipment	Article 1103.03(a)(5)	Nov. 1, 2013	
80281	Quality Control/Quality Assurance of Concrete Mixtures	Recurring CS #31	Jan. 1, 2012	Jan. 1, 2014
80283	Removal and Disposal of Regulated Substances	Articles 669.01, 669.08, 669.09, 669.14, and 669.16	Jan. 1, 2012	Nov. 2, 2012
80319	Removal and Disposal of Surplus Materials	Article 202.03	Nov. 2, 2012	
80307	Seeding	Article 250.07	Nov. 1, 2012	
80339	Stabilized Subbase	Article 312.06	April 1, 2014	
80333	Traffic Control Setup and Removal Freeway/Expressway	Articles 701.18(I) and 701.19(a)	Jan. 1, 2014	

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:

- Bridge Demolition Debris
- 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
- Training Special Provisions
- Working Days

GUIDE BRIDGE SPECIAL PROVISION INDEX/CHECK SHEET

Effective as of the: March 6, 2015 Letting

<u>Pg</u> #	V	File Name	<u>Title</u>	Effective	Revised
"		GBSP 4	Polymer Modified Portland Cement Mortar	June 7, 1994	July 26, 2013
		GBSP 12	Drainage System	June 10, 1994	Jan 1, 2007
		GBSP 13	High-Load Multi-Rotational Bearings	Oct 13, 1988	Oct 30, 2012
		GBSP 14	Jack and Remove Existing Bearings	April 20, 1994	Jan 1, 2007
	-	GBSP 15	Three Sided Precast Concrete Structure	July 12, 1994	Dec 29, 2014
		GBSP 16	Jacking Existing Superstructure	Jan 11, 1993	Jan 1, 2007
		GBSP 17	Bonded Preformed Joint Seal	July 12, 1994	Jan 1, 2007
		GBSP 18	Modular Expansion Joint	May 19, 1994	Dec 29, 2014
		GBSP 21	Cleaning and Painting Contact Surface Areas of Existing Steel	June 30, 2003	May 18, 2011
			Structures		
		GBSP 25	Cleaning and Painting Existing Steel Structures	Oct 2, 2001	April 19, 2012
		GBSP 26	Containment and Disposal of Lead Paint Cleaning Residues	Oct 2, 2001	April 30, 2010
		GBSP 28	Deck Slab Repair	May 15, 1995	Oct 15, 2011
		GBSP 29	Bridge Deck Microsilica Concrete Overlay	May 15, 1995	Dec 29, 2014
		GBSP 30	Bridge Deck Latex Concrete Overlay	May 15, 1995	Dec 29, 2014
		GBSP 31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	Dec 29, 2014
		GBSP 32	Temporary Sheet Piling	Sept 2, 1994	Jan 31, 2012
		GBSP 33	Pedestrian Truss Superstructure	Jan 13, 1998	Dec 29, 2014
		GBSP 34	Concrete Wearing Surface	June 23, 1994	Feb 6, 2013
		GBSP 35	Silicone Bridge Joint Sealer	Aug 1, 1995	Oct 15, 2011
		GBSP 38	Mechanically Stabilized Earth Retaining Walls	Feb 3, 1999	Dec 29, 2014
		GBSP 42	Drilled Soldier Pile Retaining Wall	Sept 20, 2001	Jan 3, 2014
		GBSP 43	Driven Soldier Pile Retaining Wall	Nov 13, 2002	Jan 3, 2014
		GBSP 44	Temporary Soil Retention System	Dec 30, 2002	May 11, 2009
		GBSP 45	Bridge Deck Thin Polymer Overlay	May 7, 1997	Feb 6, 2013
		GBSP 46	Geotextile Retaining Walls	Sept 19, 2003	July 26, 2013
199	Х	GBSP 51	Pipe Underdrain for Structures	May 17, 2000	Jan 22, 2010
		GBSP 53	Structural Repair of Concrete	Mar 15, 2006	Aug 29, 2014
		GBSP 55	Erection of Curved Steel Structures	June 1, 2007	
		GBSP 56	Setting Piles in Rock	Nov 14, 1996	April 19, 2012
		GBSP 57	Temporary Mechanically Stabilized Earth Retaining Walls	Jan 6, 2003	Dec 29, 2014
		GBSP 59	Diamond Grinding and Surface Testing Bridge Sections	Dec 6, 2004	Jan 3, 2014
		GBSP 60	Containment and Disposal of Non-Lead Paint Cleaning	Nov 25, 2004	Mar 6, 2009
<u> </u>		000004	Residues	1 0007	D
		GBSP 61	Slipform Parapet	June 1, 2007	Dec 29, 2014
	<u> </u>	GBSP 62	Concrete Deck Beams	June 13, 2008	Oct 9, 2009
	<u> </u>	GBSP 64	Segmental Concrete Block Wall	Jan 7, 1999	Oct 30, 2012
<u></u>	<u> </u>	GBSP 65	Precast Modular Retaining Walls	Mar 19, 2001	Dec 29, 2014
		GBSP 67	Structural Assessment Reports for Contractor's Means and Methods	Mar 6, 2009	
		GBSP 70	Braced Excavation	Aug 9, 1995	May 18, 2011
		GBSP 71	Aggregate Column Ground Improvement	Jan 15, 2009	Oct 15, 2011

		GBSP 72	Bridge Deck Fly Ash or GGBF Slag Concrete Overlay	Jan 18, 2011	Dec 29, 2014
		GBSP 73	Cofferdams	Oct 15, 2011	
		GBSP 74	Permanent Steel Sheet Piling (LRFD)	Jan 31, 2012	Aug 17, 2012
		GBSP 75	Bond Breaker for Prestressed Concrete Bulb-T Beams	April 19, 2012	
200	X	GBSP 76	Granular Backfill for Structures	April 19, 2012	Oct 30, 2012
		GBSP 77	Weep Hole Drains for Abutments, Wingwalls, Retaining Walls And Culverts	April 19, 2012	Oct 22, 2013
202	Х	GBSP 78	Bridge Deck Construction	Oct 22, 2013	April 18, 2014
		GBSP 79	Bridge Deck Grooving (Longitudinal)	Dec 29, 2014	
		GBSP 80	Fabric Reinforced Elastomeric	Aug 29, 2014	

LIST ANY ADDITIONAL S	PECIAL PROVISIONS E	BELOW	

The following Guide Bridge Special Provisions have been incorporated into the 2012 Standard Specifications:

File	Title	Std Spec
Name		Location
GBSP22	Cleaning and Painting New Metal Structures	506
GBSP36	Surface Preparation and Painting Req. for Weathering Steel	506
GBSP50	Removal of Existing Non-composite Bridge Decks	501
GBSP58	Mechanical Splicers	508
GBSP63	Demolition Plans for Removal of Existing Structures	501
GBSP68	Piling	512
GBSP69	Freeze-Thaw Aggregates for Concrete Superstructures Poured on Grade	1004

The following Guide Bridge Special Provisions have been discontinued or have been superseded:

File	Title	Disposition:
Name		
GBSP37	Underwater Structure Excavation Protection	Replaced by GBSP73
GBSP11	Permanent Steel Sheet Piling	Replaced by GBSP74
GBSP47	High Performance Concrete Structures	Discontinued
GBSP52	Porous Granular Embankment (Special)	Replaced by GBSP76
GBSP66	Wave Equation Analysis of Piles	Discontinued

STATE OF ILLINOIS SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2012, 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 Contract No. 61B25, Section 10-00378-00-BR, Project BRS-0033(102), Job No. C-91-743-10 and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

The project is located along the centerline of Franklinville Road northeast of the Village of Union and southwest of the City of Woodstock in Seneca Township, McHenry County. The net and gross length of the improvement is 726 feet (0.138 mile).

DESCRIPTION OF PROJECT

The work consists of bridge removal, new bridge, channel relocation, approach slab construction, pavement removal and reconstruction, placement of embankment, shoulder construction, guardrail installation, placement of pavement marking, landscaping and all incidental and collateral work necessary to complete the project as shown on plans and as described herein.

COMPLETION DATE PLUS WORKING DAYS

Effective: September 30, 1985 Revised: January 1, 2007

Revise Article 108.05 (b) of the Standard Specifications as follows:

"When a completion date plus working days is specified, the Contractor shall complete all contract items and safely open all roadways to traffic by 11:59 PM on, <u>July 29, 2016</u> except as specified herein.

Interim Completion Dates will be required for this contract.

There will be an interim date for work elements identified as Stage 1, which includes, but not limited to, the roadway closure and traffic detour for the construction of the new bridge, approaches, full depth patch, channel relocation, and all finished pavement, guardrail, and shoulders south of the bridge. The Stage 1 work needs to be constructed and roadway open to traffic no later than <u>September 4, 2015</u>, with an additional <u>5</u> working days for landscaping items that shall be completed no later than <u>October 31, 2015</u>.

The Contractor will be allowed to complete all clean-up work and punch list items within 10 working days, following the final completion date for opening the roadway to traffic. Under extenuating circumstances the Engineer may direct that certain items of work, not affecting the safe opening of the roadway to traffic, may be completed within the working days allowed for cleanup work and punch list items. Temporary lane closures for this work may be allowed at the discretion of the Engineer.

The Contractor will be allowed to complete all landscaping restoration and planting items that are restricted to a planting season between August 15 and September 15 (wetland plants) or October 15 to December 1 (seeding). The work for the perennial plantings, wetland type will be completed within 3 working days after the first day that this work begins. This work will resume no later than 10 calendar days following August 15. Seeding and all remaining work items will be completed within 7 working days after the first day that this work begins. This work will resume no later than 10 calendar days following October 15. This work will include all cleanups and punch list items relative to the restoration and planting work. Temporary lane closures for this work may be allowed at the discretion of the Engineer.

Article 108.09 or the Special Provision for "Failure to Complete the Work on Time", if included in this contract, shall apply to the completion date, interim completion date and the number of working days.

EXPLORATION TRENCH (SPECIAL)

<u>Description:</u> This work shall be in accordance with Section 213 of the Standard Specifications insofar as applicable and the following provisions.

This item shall consist of excavating a trench at locations as directed by the Engineer for the purpose of locating existing sewer lines, water mains, sanitary sewers and other utilities within or adjacent to the proposed project limits.

The trench shall be deep enough to expose the sewer lines, water mains, sanitary sewers or other utilities. The width of the trench shall be sufficient to allow proper investigation to determine if the existing facility needs to be adjusted.

The Contractor shall familiarize himself with the locations of all underground utilities of facilities as outlined in applicable Articles 105 of the Standard Specifications and shall save such facilities from damage.

The exploration trench shall be backfilled with trench backfill meeting the requirements of the Standard Specifications, the cost of which shall be included in the item Exploration Trench (Special).

Payment shall be based on actual length of trench explored without change in unit price because of adjustment in plan quantities due to field conditions.

Basis of Payment. This work shall be measured in place and measured per cubic yard.

Basis of Payment. This work will be paid for at the contract unit price per cubic yard for EXPLORATION TRENCH (SPECIAL) and no extra compensation will be allowed for any delays, inconvenience or damage sustained by the Contractor in performing this work. This price shall include excavation, backfill, and disposal of excess material.

TEMPORARY DITCH CHECKS (SPECIAL)

<u>Description:</u> This work shall consist of installing, maintaining, removing of plastic-poroustriangular temporary ditch checks in accordance with the applicable portions of Section 280 of the Standard Specifications, the details in the plans and as modified herein. The furnished materials shall remain the property of the Contractor upon removal.

<u>Materials</u>: High Density Polyethylene (HDPE) ditch checks shall be triangular shaped, having a minimum height of 8 inches in the center. The ditch checks shall be porous in nature, approximately 35% porosity, allowing the water to flow through, while reducing the velocity and trapping sediment. Standard lengths of each ditch check shall be no less than 3 feet and they shall be a minimum of 6 feet long. Pins/spikes at least 10 inches long shall be used to attach the ditch check to the ground. The upstream end for each ditch check section shall be secured with a minimum of 3 pins and the downstream with a minimum of 2. The pin pattern shall be as specified by the manufacturer. Staples a minimum of 6" in length shall be used to secure the erosion control blanket on the upstream and downstream ends of the temporary ditch check, placed at approximately 1.5' intervals, at the locations indicated in the plan detail.

Installation: The temporary ditch check shall be installed according to the manufacturer specifications.

Method of Measurement: Temporary ditch checks (special) will be measured for payment in foot

<u>Basis of Payment:</u> Payment for TEMPORARY DITCH CHECKS (SPECIAL) will be made at the Contract unit price for FOOT measured along the top line of the ditch checks when placed and shall include furnishing all labor, material and equipment necessary to furnish, construct, maintain and remove the HDPE temporary ditch check.

AGGREGATE SHOULDERS (SPECIAL)

<u>Description:</u> This work will consist of constructing aggregate shoulder in the areas of the SM Railing adjacent to the PC concrete bridge approach slabs at locations shown on the plans or as directed by the Engineer. The aggregate shoulder shall be constructed according to Section 481 of the Standard Specifications.

<u>Materials</u>: The aggregate shoulder shall consist of IDOT gradation CA-1 in accordance with Section 1004 of the standard Specifications.

<u>Construction Methods:</u> The aggregate shoulder shall be laid on geotechnical fabric in such a manner not to damage the bridge rail post. The aggregate shall be seated by hand compaction, vibrating plate, jumping jack or other means approved by the Engineer.

Method of Measurement: Aggregate shoulder will be measured for payment in cubic yards.

Basis of Payment: This work will be paid for at the contract unit price per Cubic Yard for AGGREGATE SHOULDERS (SPECIAL) which price shall be full compensation for all labor, equipment and materials, and compaction required for performing the work as herein specified and detailed on the plans.

The geotechnical fabric will be measured separately for payment at the contract unit price per square yard for GEOTECHNICAL FABRIC FOR GROUND STABILIZATION.

TEMPORARY SEDIMENT TRAP

<u>Description:</u> This item will consist of constructing a dewatering filtering system consisting of filtration or sediment bags for collecting sediment from construction dewatering operations. Construction waters will include, but not be limited to, all waters generated from the installation and removal of bridge piers, abutments, channel grading, riprap placement, proposed drainage systems, and aggregate base construction.

<u>Dewatering Plans</u>: When dewatering the construction area is necessary; all waters shall be filtered by using filter/sediment bags. The contractor shall submit manufacturer's specifications for filter/sediment bags and pump for approval to the Engineer and the McHenry-Lake Soil & Water Conservation District. All filter/sediment bags must have secondary containment devices, and should be placed on level ground. Water must have sediment removed before being allowed to return to Franklinville Creek. The discharge shall be designed so that returning waters do not cause erosion. The contractor will coordinate the method, design and location of the dewatering plan and filter/sediment bag(s) with the Engineer and McHenry-Lake Soil & Water Conservation District at the pre-construction meeting.

<u>Materials</u>: The material for the filtration bag shall meet the requirements of material specification in Table 2, Class I with a minimum tensile strength of 200 lbs. The filtration bag shall be sized per manufacturer recommendations and based on the size of the pump. The largest size pump to be used with a filtration bag shall be 4-inch diameter.

TABLE 2. REQUIREMENTS FOR NONWOVEN GEOTEXTILES

Property	Test method	Class I	Class II	Class III	Class IV 3/
Tensile strength	ASTM D 4632 grab test	180 minimum	120 minimum	90 minimum	115 minimum
Elongation at failure (%) ^{1/}	ASTM D 4632	≥50	≥50	≥50	≥50
Puncture (pounds)	ASTM D 4833	80 minimum	60 minimum	40 minimum	40 minimum
Ultraviolet light (% residual tensile strength)	ASTM D 4355 150-hr exposure	70 minimum	70 minimum	70 minimum	70 minimum
Apparent opening size (AOS)	ASTM D 4751	As specified max. #40 ^{2/}	As specified max. #40 ^{2/}	As specified max. #40 ^{2/}	As specified max. #40 ^{2/}
Permittivity sec ⁻¹	ASTM D 4491	0.70 minimum	0.70 minimum	0.70 minimum	0.10 minimum

^{1/} Minimum average roll value (weakest principal direction).

<u>Operation and Maintenance</u>: The frequency of inspections shall depend on the dewatering method, amount of discharge, potential damage, and quality of the receiving bodies of water. The frequency of inspections and specific tasks shall be identified.

- 1. Inspections shall be conducted to ensure proper operation and compliance with any permits or water quality standards.
- 2. Accumulated sediment shall be removed from the flow area and temporary diversions shall be repaired, as required.
- 3. Outlet areas shall be checked and repairs shall be made in a timely manner, as needed.
- 4. Pump outlets shall be inspected for erosion, and sumps shall be inspected for accumulated sediment.
- 5. Dewatering bags shall be removed and replaced when half full of sediment or when the pump discharge has reduced to an impractical rate.
- 6. If the receiving area is showing any signs of cloudy water, erosion, or sediment accumulation, discharges shall be stopped immediately once safety and property damage concerns have been addressed.
- 7. Sediment shall be disposed in accordance with all applicable laws and regulations.

Removal of Dewatering Facilities - The temporary dewatering filtering system shall be removed after it has served its purpose. The dewatering areas shall be graded, stabilized and permanently restored with appropriate erosion control practices and as shown on the plans. The dewatering sites after removal shall not create any obstruction of the flow of water or any other interference with the operation of or access to the permanent works.

Basis of Payment: Filter/sediment bags will be paid as TEMPORARY SEDIMENT TRAP, per EACH bag used, which shall be full compensation for all labor, equipment and materials

^{2/} U.S. standard sieve size.

^{3/} Heat-bonded or resin-bonded geotextile may be used for classes III and IV. They are particularly well suited to class IV. Needle-punched geotextiles are required for all other classes.

required for performing the work as herein specified, including removal and disposal. Dewatering will <u>not</u> be measured separately for payment but shall be INCLUDED in the cost of relevant construction operation requiring the dewatering.

SEDIMENT BASIN

<u>Description:</u> This item shall consist of constructing and maintaining a sump pit for the collection of sedimentation on the downstream end of the proposed channel for the duration of Stage 1, once the temporary channel has been excavated. The sump pit will be as detailed on the plans.

<u>Maintenance:</u> The Contractor shall clean out the sump pit once it is approximately half way filled with silt and sedimentation. Maintenance of the sump pit will occur during a time of low flow in the proposed channel, defined as no rain or water was allowed in the channel within the last 7 days, unless approved by the Engineer. All materials removed shall be disposed offsite to the satisfaction of the Engineer.

<u>Detwatering:</u> If dewatering is required, sediment shall be removed from the water as detailed in the specification for Temporary Sediment Trap.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price per Each for SEDIMENT BASIN, which prices shall include general maintenance and removal of all debris as outlined, labor, tools, equipment, disposal of surplus material, and incidentals necessary to complete this item of work. Dewatering will <u>not</u> be measured separately for payment but shall be INCLUDED in the cost of relevant construction operation requiring the dewatering.

GATE VALVES, 6"

<u>Description:</u> This item shall consist of installing a 6" gate valve on the irrigation pipe at the north end of the proposed channel for Stage 1, prior to the completion of the grading. The gate valve will be as detailed on the plans.

<u>Irrigation:</u> During Stage 1, the channel will need to be filled with water from the existing creek to achieve acceptable conditions for growth of the wetland plants. At the direction of the Engineer, the channel shall be filled to an elevation of 829.5, periodically, to hydrate the soils.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price per Each for GATE VALVES, 6", which prices shall include installation, maintenance, labor, tools, equipment, disposal of surplus material, and incidentals necessary to complete this item of work. The cost of irrigation is included in the unit price for PERENNIAL PLANTS, WETLAND TYPE.

EMERGENT/SHORELINE SEED MIX

<u>Description:</u> This item shall consist of preparing the seed bed and spreading emergent/shoreline seed mix at the locations indicated in the plans, according to Section 250 of the Standard Specifications, except the mix shall be according to the seed mix schedule detailed on the plans.

Fertilizer: Fertilizer will not be required for the emergent/shoreline seed mix.

<u>Seeding Methods</u>: The methods used to establish Class 4 seed in Article 250.06 of the Standard Specifications shall be applied to the emergent/shoreline mix as well.

Basis of Payment: This work shall be paid for at the contract unit price per Acre for EMERGENT/SHORELINE SEED MIX, which prices shall include preparation of the soil, seed and all material, labor, tools, equipment, and incidentals necessary to complete this item of work. EROSION CONTROL BLANKET shall be paid for separately.

DIVERSION STRUCTURE

<u>Description:</u> This item shall consist of installing, reorienting, and removing a diversion structure to perform the grading required to connect the existing channel to the proposed channel and avoid construction activities in the running water. Diversion structure will mean a "diversion system" constructed of non-erodible materials, such as steel sheets, aqua barriers, sand bags, rip rap and geotextile liner, or other materials approved by the Engineer. The diversion structure shall reroute the water so that the construction activities are conducted outside of the channel flow.

Installation and Removal: The Contractor shall coordinate with the Engineer to assure the McHenry-Lake Soil and Water Conservation District is notified at least 24 hours in advance and onsite for any work that is executed in the channel. A schedule shall be submitted to the Engineer for the construction activities set to occur for the duration of the diversion. The Contractor will have 5 days to work in the waterway which includes diverting the existing channel, connecting the proposed channel, blocking the existing channel with an earth berm, and removing the diversion structure.

A suggested channel staging plan for Franklinville Creek has been included in the plans for the construction of the bridge and connecting the existing and proposed channels. The Contractor is ultimately responsible for the choice of the materials, product(s) and equipment; the subsequent removal of the diversion structure(s) and their safety and for their conformity with local codes, regulations, and these Specifications, as well as "means and methods" for the diversion work to be performed. The Contractor's "means and methods" are subject to review of the McHenry-Lake Soil and Water Conservation District.

The diversion structure shall be installed to the height of the surrounding areas. At the upstream and downstream ends, the top of the diversion structure shall be no lower than the elevation of 831.0.

Once the construction and installation of all items are complete in the diversion location, the diversion structure shall be removed. After the diversion structure is removed, the diversion area shall be returned to its original condition, and shall not create an obstruction to the flow of water or any other interference with the operation of or access to the permanent works.

<u>Submittal</u>: This Contractor shall submit a written detailed plan outlining the process he plans to use in order to divert the water for the excavation and construction a minimum of 14 days in advance of the scheduled work, for approval by the Engineer. The detailed plan shall show all of the primary components used for the diversion. A description of the methods and operations shall be included with the detail. The diversion structure shall not be installed if the local forecast, as determined by means of the Engineer, has a chance of rain exceeding 50% in the

following 5 days. The Engineer may waive this requirement if the anticipated rain event is a 6 month event or less in intensity.

<u>Method of Measurement.</u> The diversion structure shall be measured for payment per each end of the channel which is to be connected (upstream and downstream locations). Regardless if multiple diversion structure orientations are required at each end to connect the proposed channel and dewater the existing channel, each location shall be paid at a quantity of one each, two total.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price per each for DIVERSION STRUCTURE, which prices shall include the diversion structure, installation, different orientations, removal, all other materials, labor, tools, equipment and incidentals necessary to complete this item of work at each location.

STABILIZED CONSTRUCTION ENTRANCE

<u>Description</u>: This work shall consist of the excavation, placement of aggregate fill and filter fabric, removal, and restoration required for the building of the stabilized construction entrance. Entrance locations shown in the plans may be moved based on staging and site conditions as directed by the McHenry-Lake Soil & Water Conservation District, or as directed by the Engineer.

<u>Materials:</u> Materials for aggregate fill and bedding shall meet the requirements of Section 1004 of the Standard Specifications. The aggregate materials shall be gradations for CA-1, CA-2, CA-3, or CA-4.

The filter fabric shall be placed under the aggregate fill and shall conform to the requirements of Section 1080.03 of the Standard Specifications.

<u>Foundation Preparation:</u> Foundations for aggregate fill shall be stripped to remove vegetation and other unsuitable materials or shall be excavated as specified.

Except as otherwise specified, earth foundation surfaces shall be graded to remove surface irregularities, and test pits or other cavities shall be filled with compacted earth fill of approximately the same kind and density as the adjacent foundation material.

Placement and Compaction:

The aggregate fill shall be dumped and spread into position over the filter fabric in approximately horizontal layers not to exceed twelve (12) inches in thickness. It shall be placed in a manner to produce a reasonably homogeneous stable fill that contains no segregated pockets of large or small fragments or large unfilled spaces caused by bridging of the larger rock fragments.

Aggregate fill shall be compacted as described below:

Each layer of fill shall be compacted by a minimum of four (4) passes, over the entire surface, with a steel-drum vibrating roller having a minimum weight of five (5) tons and exerting a vertical vibrating force of not less than 20,000 pounds at a frequency not less than 1200 times per minute or,

Each layer of fill shall be compacted by a minimum of four (4) passes over the entire surface by a track of a crawler-type tractor weighing a minimum of twenty (20) tons.

Compaction by means of drop weights operating from a crane, hoist or similar equipment will not be permitted.

Removal and Restoration: Once the stabilized construction entrance is no longer needed for construction activities, which includes all restoration and planting, the Contractor has 7 days to remove and restore the disturbed entrance site to final grade. The Contractor shall seed the restored area as indicated in the plans. If the location will not be permanently seeded within 7 days, the Contractor shall use temporary erosion control seeding to stabilize the location.

Basis of Payment: The work to construct the stabilized construction entrance will be paid for at the contract unit price Square Yard for STABILIZED CONSTRUCTION ENTRANCE, which price shall include excavation, bedding, aggregate fill, filter fabric, placing and compacting, removal, grading, labor, tools, equipment and incidentals required to complete the work as specified. There shall be no adjustment in contract cost if this work is <u>not</u> required. Seeding, temporary erosion control seeding, erosion control blanket, and temporary pipe culverts shall be paid for separately.

STABILIZATION FABRIC

<u>Description:</u> This work shall consist of furnishing, transporting, placing, securing and maintaining topsoil stabilization fabric at locations shown in the plans.

<u>Materials:</u> The Contractor shall submit a sample and full product description of the product for approval by the Engineer prior to installation.

Installation: The Contractor shall clean and grade the top of the stream bank to an elevation 9-18" below the next lift/final grade prior to installation of the topsoil stabilization fabric. Place a stabilizer board (3/4" plywood cut to the lift height) vertically on the outside face of the base lift. Unroll the topsoil stabilization fabric so that it is parallel to finished elevation contour. Drape the fabric over the stabilization board so that it forms a 90 degree angle with the surface, making sure there is an embedment length of 2' as shown in the typical sections. Anchor the stabilization fabric with 2"x4" wedge stakes at 3' spacing's along the stabilizer board and the edge of the stabilization fabric. Place and compact the topsoil and embankment to the degree specified, and seed the area as indicated in the plans. After the topsoil is placed in a minimum 6" lift for the 6' (4' minimum depending on material specifications) nearest the channel, tighten the fabric by mechanical pulling to create a bulbous nose begins to form and pulls away from the stabilizer board. The topsoil stabilization fabric (now stretched) shall be anchored at 6' (4' minimum depending on material dimensions) prior to release of tension. The toe of the topsoil stabilization fabric shall be angled and anchored so that it is buried beneath the remaining 3'-4' wide lift of embankment and topsoil (see plan typical sections for detail) that shall be placed once secured. Use the wedge stakes at a 3' spacing at the end of the topsoil stabilization fabric to secure it in place. Once the end is secure, fill-in the remaining 3'-4' width of topsoil and embankment, and seed as indicated in the plans. At locations where Perennial Plant plugs and trees conflict with the Stabilization fabric, they shall be inserted in the top layer of the soil stabilization fabric and bench locations by creating a hole in the fabric that is the same size as the plug or root ball.

Method of Measurement. This work will be measured and paid for at the contract unit price per square yard. Measurement for payment will be the 10' width from the face of the bank multiplied by the installed length along the channel bank. No additional payment will be made for overlapped sections or the length that is wrapped beneath the topsoil/embankment mix at the channel slope.

Basis of Payment. The topmost 6" of topsoil at exposed locations shall be paid for as TOPSOIL EXCAVATION AND PLACEMENT, while the additional earth excavation and topsoil, required for installation shall be included in the cost of STABILIZATION FABRIC. The wedge stakes used to pin the stabilization fabric in place shall not be paid for separately but shall be included in the cost of this item. This work shall be paid at the contract unit price per square yard for STABILIZATION FABRIC, which price shall include all materials, labor, and equipment necessary to complete the work.

STABILIZED DRIVEWAYS

<u>Description:</u> This work shall consist of furnishing, placing and compacting hot-mix asphalt driveway pavement at locations shown on the plans and as directed by the Engineer.

This work shall conform to the applicable Sections of Articles 311, 355 and 406.

<u>Materials:</u> Residential driveways and field entrances shall be constructed to a nominal thickness of 6 inches. Commercial driveways shall be constructed to a nominal thickness of 8 inches. Each shall have a minimum 2" thick surface course (HMA Surface Course, Mix "D", N70) with the balance constructed using hot mix asphalt base course (HMA Base Course, 4" or 6"). Aggregate and bituminous material prime coats shall be applied according to Article 406 and as directed by the Engineer. The driveway shall be constructed on a 4 inch compacted aggregate subbase conforming to the applicable Sections of Article 311 for Subbase Granular Materials, Type B.

Method of Measurement. Stabilized driveways will be measured in place and the area computed in square yards. Aggregate subbase and aggregate and bituminous material prime coats will not be measured for payment but shall be considered included in payment for Stabilized Driveways of the thickness specified.

Basis of Payment. The work will be paid at the contract unit price per square yard for STABILIZED DRIVEWAYS 6" or STABILIZED DRIVEWAYS 8", which price shall include all materials, labor, and equipment necessary to complete the work.

STONE LINED DITCH

<u>Description:</u> This item shall consist of excavating, installing a 6" pipe underdrain, aggregate fill, and bio-swale soil mix layer to create a stone lined ditch (referred to as 'bio-swale' for remainder of specification) along the ditch bottom at locations shown in the plans.

Seed and Erosion Control Blanket: The bio-swale shall be seeded with Type 4A mix and meet the requirements in Section 250 of the Standard Specifications. Erosion control blanket will be used to stabilize the seed once it has been spread and shall meet the requirements in Articles 251.04, 251.06, and 251.07 of the Standard Specifications.

<u>Materials:</u> The materials required for the pipe underdrain, aggregate subgrade, and bio-swale soil mix shall be as follows.

Pipe Underdrain

The 6" pipe underdrain shall be perforated polyvinyl chloride (PVC) pipe with a filter fabric envelope meeting the requirements according to Articles 601.02 and 1040.03 of the Standard Specifications. The upstream end shall be a cleanout and capped, constructed of similar materials, for future maintenance.

Aggregate Fill

CA 7 shall be used for the 12" layer of aggregate subgrade on the bottom of the bio-swale and shall meet the requirements of Section 1004 in the Standard Specifications.

Bio-swale Soil Mix

The following materials shall be in accordance to Article 1081.05, 1003.04, and 1081.08 of the Standard Specifications except as modified herein:

Article

(a) Topsoil 1081.05 (a)

Topsoil is derived from existing soil furnished from either onsite or outside of the ROW. In addition to Article 1081.05(a) of the Standard Specifications, topsoil shall consist of no more than 10% clay.

(b) Compost 1081.05 (b)

Add the following to Article 1081.05(b) of the Standard Specifications:

Compost should be derived from either leaf compost or mushroom compost. Leaf compost would be made of landscape/yard trimmings, and grass clippings. Mushroom compost should be derived from agricultural materials such as hay, straw, straw horse bedding, poultry litter, cottonseed meal, cocoa shells and gypsum. Compost shall be of an approved commercial grade as determined by the Engineer and composed of organic matter. Compost shall be free of pests, their eggs, pathogens, and weed seeds. Other deleterious material, plastic, glass, metal, or rocks shall not exceed 0.1 percent by weight or volume. Compost shall be of 35% to 75% dry weight of organic matter and a minimum of 0.9% of Total Nitrogen.

For leaf compost, the Contractor will be required to add gypsum as approved by the Engineer or use other methods approved by the Engineer to the soil if necessary to improve saline soils by replacing sodium attached to clay particles with calcium in this Special Provision. Gypsum is calcium sulfate and can be added to amended topsoil to improve saline soils by replacing sodium attached to clay particles with calcium. Gypsum shall be approximately 3.8 tons/acres, an average of 0.83 tons of gypsum for every 230 ppm of exchangeable sodium.

For leaf compost application, fertilizer will meet the requirements outlined in Article 1081.08 of the Standard Specifications for single total Nitrogen (N) application. The analysis of single nutrient is optional as specified in Article 1081.08 of Standard Specifications.

(c) Sand 1003.04 (d) Fertilizer 1081.08

Bio-swale Soil Mix Composition

The bio-swale soil mix shall be composed of 50% topsoil, 20% compost, and 30% sand.

<u>Placing Bio-swale Soil Mix:</u> Article 211.04 of the Standard Specifications shall govern the requirements of topsoil and compost, except as modified herein:

Add the following to Article 211.04 of the Standard Specifications:

The Bio-swale Soil Mix shall be tested for approved pH levels and nutrient content. Contractor shall provide the Engineer with receipt of soil source and soil test results from a qualified lab as approved by the Engineer every 1,000 square yards or upon request from the Engineer. The testing of the Bio-swale Soil Mix material will not be paid for separately, but will be considered included in the cost of the contract unit price for STONE LINED DITCH.

Any areas outside the limit of bio-swale construction that is disturbed as a result of the Contractor/Sub-Contractor operations and activities shall be replaced to its original limits and conditions. All restored areas will include erosion control blanket. Any excavation, soil stabilization, restoration of existing ground lines, erosion control blanket or seeding for the purpose of access to the bio-swale ditch, shall not be paid for separately but shall be considered included in the cost of EARTH EXCAVATION.

General Components: The pH levels shall be between the following.

pH value Minimum Maximum 5.5 7.5

<u>Installation:</u> The following steps shall be used to install the Stone Lined Ditch unless revisions are approved by the Engineer.

- 1. Complete upland grading, utility installation, and other earth disturbing operations prior to excavating for bio-swale.
- 2. Prior to installing the bio-swale, install erosion and sediment control practices upstream to protect the bio-swale from sediment in stormwater runoff.
- 3. Complete rough grading activities to excavate the bio-swale area to the length, width, and depth specified in the plans.
- 4. Excavate the trench for the 6" pipe underdrain as shown in the plan typical sections.
- 5. Verify the bottom of the bio-swale trench is free of debris or other material and remains at the proper subgrade elevation to allow for the pipe underdrain installation.
- 6. Place the pipe underdrain along the bottom of the bio-swale trench and place first 4" of CA 7 aggregate to keep the pipe underdrain in place. Install a cleanout at the upstream end of the bio-swale for future maintenance.
- 7. After the pipe underdrain has been installed in the center of the trench at the bottom, and held in place by the first 4" of aggregate, place the remaining 8" of aggregate subgrade layer to the elevation specified in the plans. The surface of the aggregate layer should be graded so that it is generally smooth. Do not compact or operate heavy machinery on the bio-swale subgrade.

- 8. Place the bio-swale soil mix in two lifts of 6" to the elevation specified in the plans. Do not operate heavy machine directly on top of the soil mix layer during placement to avoid over compaction. Overfill the area with an additional 5-10% of soil mix to allow for natural compaction.
- 9. Uniformly grade and rake the top of the bio-swale soil mix to a flat, smooth, uniform surface.
- 10. Perform stabilization and install Type 4A seed along the surface of the bio-swale soil mix as described in Section 250 of the Standard Specifications.
- 11. The Engineer shall have final approval of the bio-swale and its components.

Final Grading: Revise Article 211.05 of the Standard Specification to read:

The surface of the Bio-swale Soil Mix shall be free from clods, stones, sticks and debris and shall be according to the lines, grades and the minimum thickness shown on the plans. Finish grading shall be completed in a manner and time frame to minimize compaction during equipment operation. The Contractor shall not unnecessarily run heavy construction equipment across completed areas with amended topsoil. The Bio-swale Soil Mix shall not be worked where moisture content is so great that excessive compaction will occur, nor when it is so dry that dust will be generated or clods produced which will not break readily. Apply water if necessary, to bring amended topsoil to an optimum moisture content for tillage by typical farming equipment. Do not compact Bio-swale Soil Mix greater than 50 psi. The Contractor will be required to follow the cone penetrometer methods outlined in the American Society of Agricultural and Biological Engineers Standards S313.3 and EP542 and use the applicable penetrometer to test soil compaction.

<u>Clearing Area and Disposal of Surplus Material:</u> Article 211.06 of the Standard Specification shall govern the requirements of clearing area of disposal of surplus material.

<u>Method of Measurement:</u> The bio-swale shall be measured for payment in Square Yards along the surface width as shown in the plan detail for the installed length.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price per Square Yard for STONE LINED DITCH, which prices shall include the bio-swale soil mix, pipe underdrain with filter fabric envelope, fittings, cleanout, course aggregate subgrade, all excavation, furnishing, transporting, placement, all labor, tools, equipment and incidentals required to complete the work as specified. EROSION CONTROL BLANKET and SEEDING, CLASS 4A, shall be paid for separately.

AGGREGATE DITCH (SPECIAL)

<u>Description:</u> This item shall consist of excavation and grading of subgrade, placing, grading, and compacting a nominal 15" thick layer of cobble in the channel bottom in locations shown in the plans.

<u>Materials</u>: Cobble shall be natural occurring stone either river-run or bank run or glacial deposit, generally round and screened to remove fraction less than 2-inches. Angular, Crushed or quarried stone shall <u>not</u> be acceptable. The acceptable size class is 4" to 10" with a D50 of 8". If these size classes cannot be readily obtained, other gradations may be considered provided no fraction is less than 1 ½". The stone shall be reasonably free of laminations, seams, cracks and other structural defects of imperfections tending to destroy its resistance to weather.

The Engineer shall be given 48-hours' notice prior to loading of the source of cobble, and the Contractor shall supply pictures of the cobble stockpile at the proposed source. Pictures shall be provided with a representative measuring device in the picture to illustrate the sizes available. The Engineer may approve or reject the cobble source if it does not meet these specifications based on pictures or a site visit, or if cobble delivered deviate substantially from representations made by the Contractor including pictures.

<u>Installation:</u> The Contractor shall excavate and grade the subgrade to an elevation 15" below the final elevation. At locations indicated for stream bank enhancement, additional excavation will be required to place the cobble as indicated in the plant typical sections. Suitable excavated material may be used for grading at other locations as directed by the engineer. All costs and work associated with excavating, transporting, placement, grading, and disposal of excavated material required for the aggregate ditch shall be included in the unit price of AGGREGATE DITCH (SPECIAL).

The Cobble shall be dumped and scattered by excavator or loader bucket. The material shall be reasonably uniformly scattered with no piles left on the finished surface.

<u>Method of Measurement:</u> The aggregate ditch (special) shall be measured for payment in Tons according to Article 311.08(b) of the Standard Specifications.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price per Ton for AGGREGATE DITCH (SPECIAL), which prices shall include furnishing, transporting, spreading and hand sorting, excavation, disposal of excess excavation, grading, all labor, tools, equipment and incidentals required to complete the work as specified.

AGGREGATE SUBGRADE IMPROVEMENT (D-1)

Effective: February 22, 2012 Revised: November 1, 2014

Add the following Section to the Standard Specifications:

"SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

303.01 Description. This work shall consist of constructing an aggregate subgrade improvement.

303.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004
(b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2 and 3)	1031

Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradations CS 01 or CS 02 but shall not exceed 40 percent of the total product. The top size of the Coarse RAP shall be less than 4 in. (100 mm) and well graded.

- Note 2. RAP having 100 percent passing the 1 1/2 in. (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradations CS 01 or CS 02 are used in lower lifts. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders.
- Note 3. The RAP used for aggregate subgrade improvement shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- **303.03 Equipment.** The vibratory machine shall be according to Article 1101.01, or as approved by the Engineer.
- **303.04 Soil Preparation.** The stability of the soil shall be according to the Department's Subgrade Stability Manual for the aggregate thickness specified.
- **303.05 Placing Aggregate.** The maximum nominal lift thickness of aggregate gradations CS 01 or CS 02 shall be 24 in. (600 mm).
- **303.06 Capping Aggregate.** The top surface of the aggregate subgrade shall consist of a minimum 3 in. (75 mm) of aggregate gradations CA 06 or CA 10. When Reclaimed Asphalt Pavement (RAP) is used, it shall be crushed and screened where 100 percent is passing the 1 1/2 in. (37.5 mm) sieve and being well graded. RAP that has been fractionated to size will not be permitted for use in capping. Capping aggregate will not be required when the aggregate subgrade improvement is used as a cubic yard pay item for undercut applications. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders.
- **303.07 Compaction.** All aggregate lifts shall be compacted to the satisfaction of the Engineer. If the moisture content of the material is such that compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.
- **303.08** Finishing and Maintenance of Aggregate Subgrade Improvement. The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.
- **303.09 Method of Measurement.** This work will be measured for payment according to Article 311.08.
- **303.10** Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) for AGGREGATE SUBGRADE IMPROVEMENT or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified.

Add the following to Section 1004 of the Standard Specifications:

"1004.06 Coarse Aggregate for Aggregate Subgrade Improvement. The aggregate shall be according to Article 1004.01 and the following.

- (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete.
- (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.
- (c) Gradation.
 - (1) The coarse aggregate gradation for total subgrade thicknesses of 12 in. (300 mm) or greater shall be CS 01 or CS 02.

	COARSE AGGREGATE SUBGRADE GRADATIONS						
Grad No.		Sieve Size and Percent Passing					
Gradino.	8"	6"	4"	2"	#4		
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20		
CS 02		100	80 ± 10	25 ± 15			

	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)							
Grad No.		Sieve Size and Percent Passing						
Giau No.	200 mm	150 mm	100 mm	50 mm	4.75 mm			
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20			
CS 02		100	80 ± 10	25 ± 15				

(2) The 3 in. (75 mm) capping aggregate shall be gradation CA 6 or CA 10.

AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS (D-1)

Effective: April 1, 2001 Revised: January 2, 2007

Revise Article 402.10 of the Standard Specifications to read:

"402.10 For Temporary Access. The contractor shall construct and maintain aggregate surface course for temporary access to private entrances, commercial entrances and roads according to Article 402.07 and as directed by the Engineer.

The aggregate surface course shall be constructed to the dimensions and grades specified below, except as modified by the plans or as directed by the Engineer.

- (a) Private Entrance. The minimum width shall be 12 ft (3.6 m). The minimum compacted thickness shall be 6 in. (150 mm). The maximum grade shall be eight percent, except as required to match the existing grade.
- (b) Commercial Entrance. The minimum width shall be 24 ft (7.2 m). The minimum compacted thickness shall be 9 in. (230 mm). The maximum grade shall be six percent, except as required to match the existing grade.

(c) Road. The minimum width shall be 24 ft (7.2 m). The minimum compacted thickness shall be 9 in. (230 mm). The grade and elevation shall be the same as the removed pavement, except as required to meet the grade of any new pavement constructed.

Maintaining the temporary access shall include relocating and/or regrading the aggregate surface coarse for any operation that may disturb or remove the temporary access. The same type and gradation of material used to construct the temporary access shall be used to maintain it

When use of the temporary access is discontinued, the aggregate shall be removed and utilized in the permanent construction or disposed of according to Article 202.03."

Add the following to Article 402.12 of the Standard Specifications:

"Aggregate surface course for temporary access will be measured for payment as each for every private entrance, commercial entrance or road constructed for the purpose of temporary access. If a residential drive, commercial entrance, or road is to be constructed under multiple stages, the aggregate needed to construct the second or subsequent stages will not be measured for payment but shall be included in the cost per each of the type specified."

Revise the second paragraph of Article 402.13 of the Standard Specifications to read:

"Aggregate surface course for temporary access will be paid for at the contract unit price per each for TEMPORARY ACCESS (PRIVATE ENTRANCE), TEMPORARY ACCESS (COMMERCIAL ENTRANCE) or TEMPORARY ACCESS (ROAD).

COARSE AGGREGATE FOR BACKFILL, TRENCH BACKFILL AND BEDDING (D-1)

Effective: November 1, 2011 Revised: November 1, 2013

This work shall be according to Section 1004.05 of the Standard Specifications except for the following:

Reclaimed Asphalt Pavement (RAP) maybe blended with gravel, crushed gravel, crushed stone crushed concrete, crushed slag, chats, crushed sand stone or wet bottom boiler slag. The RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications". The RAP shall be uniformly graded and shall pass the 1.0 in. (25 mm) screen. When RAP is blended with any of the coarse aggregate listed above, the blending shall be done mechanically with calibrated feeders. The feeders shall have an accuracy of \pm 2.0 percent of the actual quantity of material delivered. The final blended product shall not contain more than 40 percent by weight RAP.

The coarse aggregate listed above shall meet CA 6 and CA 10 gradations prior to being blended with the processed and uniformly graded RAP. Gradation deleterious count shall not exceed 10% of total RAP and 5% of other by total weight.

EMBANKMENT I

Effective: March 1, 2011

Revised: November 1, 2013

<u>Description</u>. This work shall be according to Section 205 of the Standard Specifications except for the following.

<u>Material</u>. All material shall be approved by the District Geotechnical Engineer. The proposed material must meet the following requirements.

- a) The laboratory Standard Dry Density shall be a minimum of 90 lb/cu ft (1450 kg/cu m) when determined according to AASHTO T 99 (Method C).
- b) The organic content shall be less than ten percent determined according to AASHTO T 194 (Wet Combustion).
- c) Soils which demonstrate the following properties shall be restricted to the interior of the embankment and shall be covered on both the sides and top of the embankment by a minimum of 3 ft (900 mm) of soil not considered detrimental in terms of erosion potential or excess volume change.
 - 1) A grain size distribution with less than 35 percent passing the number 75 um (#200) sieve.
 - 2) A plasticity index (PI) of less than 12.
 - 3) A liquid limit (LL) in excess of 50.
- d) Reclaimed asphalt shall not be used within the ground water table or as a fill if ground water is present.
- e) The RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications". Gradation deleterious count shall not exceed 10% of total RAP and 5% of other by total weight.

CONSTRUCTION REQUIREMENTS

<u>Samples</u>. Embankment material shall be sampled, tested, and approved before use. The contractor shall identify embankment sources, and provide equipment as the Engineer requires, for the collection of samples from those sources. Samples will be furnished to the Geotechnical Engineer a minimum of three weeks prior to use in order that laboratory tests for approval and compaction can be performed. Embankment material placement cannot begin until tests are completed and approval given.

<u>Placing Material</u>. In addition to Article 202.03, broken concrete, reclaimed asphalt with no expansive aggregate, or uncontaminated dirt and sand generated from construction or demolition activities shall be placed in 6 inches (150 mm) lifts and disked with the underlying lift until a uniform homogenous material is formed. This process also applies to the overlaying lifts. The disk must have a minimum blade diameter of 24 inches (600 mm).

When embankments are to be constructed on hillsides or existing slopes that are steeper than 3H:1V, steps shall be keyed into the existing slope by stepping and benching as shown in the plans or as directed by the engineer.

<u>Compaction</u>. Soils classification for moisture content control will be determined by the Soils Inspector using visual field examination techniques and the IDH Textural Classification Chart.

When tested for density in place each lift shall have a maximum moisture content as follows.

- a) A maximum of 110 percent of the optimum moisture for all forms of clay soils.
- b) A maximum of 105 percent of the optimum moisture for all forms of clay loam soils.

<u>Stability.</u> The requirement for embankment stability in Article 205.04 will be measured with a Dynamic Cone Penetrometer (DCP) according to the test method in the IDOT Geotechnical Manual. The penetration rate must be equal or less than 1.5 inches (38 mm) per blow.

<u>Basis of Payment.</u> This work will not be paid separately but will be considered as included in the various items of excavation.

GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1)

Effective: June 26, 2006 Revised: January 1, 2013

Add the following to the end of article 1032.05 of the Standard Specifications:

"(c) Ground Tire Rubber (GTR) Modified Asphalt Binder. A quantity of 10.0 to 14.0 percent GTR (Note 1) shall be blended by dry unit weight with a PG 64-28 to make a GTR 70-28 or a PG 58-28 to make a GTR 64-28. The base PG 64-28 and PG 58-28 asphalt binders shall meet the requirements of Article 1032.05(a). Compatible polymers may be added during production. The GTR modified asphalt binder shall meet the requirements of the following table.

Test	Asphalt Grade GTR 70-28	Asphalt Grade GTR 64-28
Flash Point (C.O.C.), AASHTO T 48, °F (°C), min.	450 (232)	450 (232)
Rotational Viscosity, AASHTO T 316 @ 275 °F (135 °C), Poises, Pa·s, max.	30 (3)	30 (3)
Softening Point, AASHTO T 53, °F (°C), min.	135 (57)	130 (54)
Elastic Recovery, ASTM D 6084, Procedure A (sieve waived) @ 77 °F, (25 °C), aged, ss, 100 mm elongation, 5 cm/min., cut immediately, %, min.	65	65

Note 1. GTR shall be produced from processing automobile and/or light truck tires by the ambient grinding method. GTR shall not exceed 1/16 in. (2 mm) in any dimension and shall contain no free metal particles or other materials. A mineral powder (such as talc) meeting the requirements of AASHTO M 17 may be added, up to a maximum of four percent by weight of GTR to reduce sticking and caking of the GTR particles. When tested in accordance with Illinois modified AASHTO T 27, a 50 g sample of the GTR shall conform to the following gradation requirements:

Sieve Size	Percent Passing
No. 16 (1.18 mm)	100
No. 30 (600 μm)	95 ± 5
No. 50 (300 μm)	> 20

Add the following to the end of Note 1. of article 1030.03 of the Standard Specifications:

"A dedicated storage tank for the Ground Tire Rubber (GTR) modified asphalt binder shall be provided. This tank must be capable of providing continuous mechanical mixing throughout by continuous agitation and recirculation of the asphalt binder to provide a uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of \pm 0.40 percent."

Revise 1030.02(c) of the Standard Specifications to read:

"(c) RAP Materials (Note 3)1031"

Add the following note to 1030.02 of the Standard Specifications:

Note 3. When using reclaimed asphalt pavement and/or reclaimed asphalt shingles, the maximum asphalt binder replacement percentage shall be according to the most recent special provision for recycled materials.

HEAT OF HYDRATION CONTROL FOR CONCRETE STRUCTURES (D-1)

Effective: November 1, 2013

Article 1020.15 shall not apply.

HMA MIXTURE DESIGN REQUIREMENTS (D-1)

Effective: January 1, 2013 Revised: November 1, 2014

1) Design Composition and Volumetric Requirements

Revise the last sentence of the first paragraph of Article 312.05 of the Standard Specifications to read:

"The minimum compacted thickness of each lift shall be according to Article 406.06(d)."

Delete the minimum compacted lift thickness table in Article 312.05 of the Standard Specifications.

Revise the second paragraph of Article 355.02 of the Standard Specifications to read:

"The mixture composition used shall be IL-19.0."

Revise Article 355.05(a) of the Standard Specifications to read:

"(a) The top lift thickness shall be 2 1/4 in. (60 mm) for mixture composition IL-19.0."

Revise the Leveling Binder table and second paragraph of Article 406.05(c) of the Standard Specifications to read:

"Leveling Binder					
Nominal, Compacted, Leveling Mixture Composition Binder Thickness, in. (mm)					
≤ 1 1/4 (32)	IL-4.75, IL-9.5, or IL-9.5L				
> 1 1/4 to 2 (32 to 50)	IL-9.5 or IL-9.5L				

The density requirements of Article 406.07(c) shall apply for leveling binder, machine method, when the nominal compacted thickness is: 3/4 in. (19 mm) or greater for IL-4.75 mixtures; and 1 1/4 in. (32 mm) or greater for IL-9.5 and IL-9.5L mixtures."

Revise the table in Article 406.06(d) of the Standard Specifications to read:

"MINIMUM COMPACTED LIFT THICKNESS					
Mixture Composition Thickness, in. (mm)					
IL-4.75	3/4 (19)				
SMA-9.5, IL-9.5, IL-9.5L	1 1/2 (38)				
SMA-12.5	2 (50)				
IL-19.0, IL-19.0L	2 1/4 (57)"				

Revise the ninth paragraph of Article 406.14 of the Standard Specifications to read: "Test strip mixture will be evaluated at the contract unit price according to the following."

Revise Article 406.14(a) of the Standard Specifications to read:

"(a) If the HMA placed during the initial test strip is determined to be acceptable the mixture will be paid for at the contract unit price."

Revise Article 406.14(b) of the Standard Specifications to read:

"(b) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was not produced within 2.0 to 6.0 percent air voids or within the individual control limits of the JMF according to the Department's test results, the mixture will not be paid for and shall be removed at the Contractor's expense. An additional test strip shall be constructed and the mixture will be paid for in full, if produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF."

Revise Article 406.14(c) of the Standard Specifications to read:

"(c) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF according to the Department's test results, the mixture shall be removed. Removal will be paid according to Article 109.04. This initial mixture will be paid for at the contract unit price. An additional test strip shall be constructed and the mixture will be paid for in full, if produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF."

Delete Article 406.14(d) of the Standard Specifications.

Delete Article 406.14(e) of the Standard Specifications.

Delete the last sentence of Article 407.06(c) of the Standard Specifications.

Revise Note 2. of Article 442.02 of the Standard Specifications to read:

"Note 2. The mixture composition of the HMA used shall be IL-19.0 binder, designed with the same Ndesign as that specified for the mainline pavement."

Delete the second paragraph of Article 482.02 of the Standard Specifications.

Revise the first sentence of the sixth paragraph of Article 482.05 of the Standard Specifications to read:

"When the mainline HMA binder and surface course mixture option is used on resurfacing projects, shoulder resurfacing widths of 6 ft (1.8 m) or less may be placed simultaneously with the adjacent traffic lane for both the binder and surface courses."

Revise the second sentence of the fourth paragraph of Article 601.04 of the Standard Specifications to read:

"The top 5 in. (125 mm) of the trench shall be backfilled with an IL-19.0L Low ESAL mixture meeting the requirements of Section 1030 and compacted to a density of not less than 90 percent of the theoretical density."

Revise the second sentence of the fifth paragraph of Article 601.04 of the Standard Specifications to read:

"The top 8 in. (200 mm) of the trench shall be backfilled with an IL-19.0L Low ESAL mixture meeting the requirements of Section 1030 and compacted to a density of not less than 90 percent of the theoretical density."

Revise Article 1003.03(c) of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradation for all HMA shall be FA 1, FA 2, FA 20, FA 21, or FA 22. The fine aggregate gradation for SMA shall be FA/FM 20.

For mixture IL-4.75 and surface mixtures with an Ndesign = 90, at least 50 percent of the required fine aggregate fraction shall consist of either stone sand, slag sand, or steel slag meeting the FA 20 gradation.

For mixture IL-19.0, Ndesign = 90 the fine aggregate fraction shall consist of at least 67 percent manufactured sand meeting FA 20 or FA 22 gradation. For mixture IL-19.0, Ndesign = 50 or 70 the fine aggregate fraction shall consist of at least 50 percent manufactured sand meeting FA 20 or FA 22 gradation. The manufactured sand shall be stone sand, slag sand, steel slag sand, or combinations thereof.

Gradation FA 1, FA 2, or FA 3 shall be used when required for prime coat aggregate application for HMA."

Delete the last sentence of the first paragraph of Article 1004.03(b) of the Standard Specifications.

Revise the table in Article 1004.03(c) of the Standard Specifications to read:

"Use	Size/Application	Gradation No.
Class A-1, 2, & 3	3/8 in. (10 mm) Seal	CA 16
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & 3	Cover	CA 14
HMA High ESAL	IL-19.0	CA 11 ^{1/}
	IL-9.5	CA 16, CA 13 ^{3/}
HMA Low ESAL	IL-19.0L	CA 11 ^{1/}
	IL-9.5L	CA 16
	Stabilized Subbase	
	or Shoulders	
SMA ^{2/}	1/2 in. (12.5mm)	CA13 ^{3/} , CA14 or CA16
	Binder & Surface	
	IL 9.5	CA16, CA 13 ^{3/}
	Surface	

- 1/ CA 16 or CA 13 may be blended with the gradations listed.
- 2/ The coarse aggregates used shall be capable of being combined with stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.
- 3/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve.

Revise Article 1004.03(e) of the Supplemental Specifications to read:

"(e) Absorption. For SMA the coarse aggregate shall also have water absorption ≤ 2.0 percent."

Revise the nomenclature table in Article 1030.01 of the Standard Specifications to read:

"High ESAL	IL-19.0 binder; IL-9.5 surface; IL-4.75; SMA-12.5, SMA-9.5
Low ESAL	IL-19.0L binder; IL-9.5L surface; Stabilized Subbase (HMA) ^{1/} ; HMA Shoulders ^{2/}

- 1/ Uses 19.0L binder mix.
- 2/ Uses 19.0L for lower lifts and 9.5L for surface lift."

Revise Article 1030.02 of the Standard Specifications and Supplemental Specifications to read:

"1030.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.03
(b) Fine Aggregate	1003.03
(c) RAP Material	1031
(d) Mineral Filler	
(e) Hydrated Lime	1012.01
(f) Slaked Quicklime (Note 1)	
(g) Performance Graded Asphalt Binder (Note 2)	1032
(h) Fibers (Note 3)	
(i) Warm Mix Asphalt (WMA) Technologies (Note 4)	

- Note 1. Slaked quicklime shall be according to ASTM C 5.
- Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be an Elvaloy or SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.
- Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included meets AASHTO T305 requirements. The RAS shall be from a certified source that

produces either Type I or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

Note 4. Warm mix additives or foaming processes shall be selected from the current Bureau of Materials and Physical Research Approved List, "Warm Mix Asphalt Technologies"."

Revise Article 1030.04(a)(1) of the Standard Specifications and the Supplemental Specifications to read:

"(1) High ESAL Mixtures. The Job Mix Formula (JMF) shall fall within the following limits.

High ESAL, MIXTURE COMPOSITION (% PASSING) 1/										
Sieve Size	IL-19.	0 mm	SM IL-12.		SM IL-9.5		IL-9.5	mm	IL-4.7	5 mm
	min	max	min	max	min	max	min	max	min	max
1 1/2 in (37.5 mm)										
1 in. (25 mm)		100								
3/4 in. (19 mm)	90	100		100						
1/2 in. (12.5 mm)	75	89	80	100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	90	100
#8 (2.36 mm)	20	42	16	24 ^{5/}	16	32 ^{5/}	34 ^{6/}	52 ^{2/}	70	90
#16 (1.18 mm)	15	30					10	32	50	65
#30 (600 µm)			12	16	12	18				
#50 (300 µm)	6	15					4	15	15	30
#100 (150 µm)	4	9					3	10	10	18
#200 (75 µm)	3	6	7.0	9.0 3/	7.5	9.5 ^{3/}	4	6	7	9 ^{3/}
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.
- 3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.
- The maximum percent passing the #635 (20 μm) sieve shall be ≤ 3 percent.

- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.
- 6/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

Delete Article 1030.04(a)(3) of the Standard Specifications.

Delete Article 1030.04(a)(4) of the Standard Specifications.

Revise Article 1030.04(b)(1) of the Standard Specifications to read:

"(1) High ESAL Mixtures. The target value for the air voids of the HMA shall be 4.0 percent and for IL-4.75 it shall be 3.5 percent at the design number of gyrations. The VMA and VFA of the HMA design shall be based on the nominal maximum size of the aggregate in the mix, and shall conform to the following requirements.

VOLUMETRIC REQUIREMENTS High ESAL								
	Voids ir	n the Mineral Ago	gregate	Voids Filled				
		(VMA),		with Asphalt				
		% minimum		Binder (VFA),				
Ndesign		1L-4.75 ^{1/}						
	IL-19.0	%						
50		65 – 78 ^{2/}						
70	13.5	65 - 75						
90	75.0	15.0		00-70				

- 1/ Maximum Draindown for IL-4.75 shall be 0.3 percent
- 2/ VFA for IL-4.75 shall be 72-85 percent"

Revise the table in Article 1030.04(b)(2) of the Standard Specifications to read:

"VOLUMETRIC REQUIREMENTS						
		Low ESAL				
Mixture	Design	Design	VMA (Voids	VFA (Voids		
Composition	Compactive	Air Voids	in the	Filled with		
Effort Target % Mineral Asphalt						
	Aggregate), Binder),					
% min. %						
IL-9.5L	N _{DES} =30	4.0	15.0	65-78		
IL-19.0L	N _{DES} =30	4.0	13.5	N/A"		

Replace Article 1030.04(b)(3) of the Standard Specifications with the following:

"(3) SMA Mixtures.

	Volumetric Ro SM/		
Ndesign Design Air Voids Voids in the Voids Filled Mineral Aggregate with Asphalt (VMA), % min. (VFA), %			
80 ^{4/}	3.5	17.0 ^{2/} 16.0 ^{3/}	75 - 83

- 1/ Maximum draindown shall be 0.3 percent. The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30 °F.
- 2/ Applies when specific gravity of coarse aggregate is \geq 2.760.
- 3/ Applies when specific gravity of coarse aggregate is < 2.760.
- 4/ Blending of different types of aggregate will not be permitted. For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone. For binder course, coarse aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone.

Delete Article 1030.04(b)(4) of the Standard Specifications.

Delete Article 1030.04(b)(5) from the Supplemental Specifications.

Delete last sentence of the second paragraph of Article 1102.01(a) (13) a.

Add to second paragraph in Article 1102.01 (a) (13) a.:

"As an option, collected bag-house dust may be used in lieu of manufactured mineral filler, provided; 1) there is enough available for the production of the SMA mix for the entire project and 2) a mix design was prepared with collected bag-house dust."

Revise the table in Article 1030.05(d)(2)a. of the Standard Specifications to read:

"Parameter	Frequency of Tests High ESAL Mixture Low ESAL Mixture	Test Method See Manual of Test Procedures for Materials
Aggregate Gradation % passing sieves: 1/2 in. (12.5 mm), No. 4 (4.75 mm), No. 8 (2.36 mm), No. 30 (600 µm) No. 200 (75 µm)	1 washed ignition oven test on the mix per half day of production Note 3.	Illinois Procedure
Asphalt Binder Content by Ignition Oven Note 1.	1 per half day of production	Illinois-Modified AASHTO T 308
VMA Note 2.	Day's production ≥ 1200 tons: 1 per half day of production Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	Illinois-Modified AASHTO R 35
Air Voids Bulk Specific Gravity of Gyratory Sample Note 4.	Day's production ≥ 1200 tons: 1 per half day of production Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	Illinois-Modified AASHTO T 312
Maximum Specific Gravity of Mixture	Day's production ≥ 1200 tons: 1 per half day of production Cap's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	Illinois-Modified AASHTO T 209

- Note 1. The Engineer may waive the ignition oven requirement for asphalt binder content if the aggregates to be used are known to have ignition asphalt binder content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the asphalt binder content.
- Note 2. The G_{sb} used in the voids in the mineral aggregate (VMA) calculation shall be the same average G_{sb} value listed in the mix design.
- Note 3. The Engineer reserves the right to require additional hot bin gradations for batch plants if control problems are evident.
- Note 4. The WMA compaction temperature for mixture volumetric testing shall be 270 ± 5 °F (132 ± 3 °C) for quality control testing. The WMA compaction temperature for quality assurance testing will be 270 ± 5 °F (132 ± 3 °C) if the mixture is not allowed to cool to room temperature. If the mixture is allowed to cool to room temperature, it shall be reheated to standard HMA compaction temperatures."

Revise the table in Article 1030.05(d)(2)b. of the Standard Specifications to read:

"Parameter	High ESAL Mixture Low ESAL Mixture
Ratio Dust/Asphalt Binder	0.6 to 1.2
Moisture	0.3 %"

Revise the Article 1030.05(d)(4) of the Supplemental Specifications to read:

"(4) Control Limits. Target values shall be determined by applying adjustment factors to the AJMF where applicable. The target values shall be plotted on the control charts within the following control limits.

		"CONTRO	DL LIMITS			
	High ESAL		SMA		IL-4.75	
Parameter	Individual Test	Moving Avg. of 4	Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4
% Passing: 1/						
1/2 in. (12.5 mm)	±6%	±4%	±6%	±4%		
3/8 in. (9.5mm)			±4%	±3%		
No. 4 (4.75 mm)	±5%	±4%	±5%	±4%		
No. 8 (2.36 mm)	±5%	±3%	±4%	±2%		
No. 16 (1.18 mm)			±4%	± 2 %	±4%	±3%
No. 30 (600 µm)	±4%	± 2.5 %	±4%	± 2.5 %		
Total Dust Content No. 200 (75 µm)	± 1.5 %	± 1.0 %			± 1.5 %	± 1.0 %
Asphalt Binder	± 0.3 %	± 0.2 %	± 0.2 %	± 0.1 %	± 0.3 %	± 0.2 %
Content						
Voids	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %
VMA	-0.7 % ^{2/}	-0.5 % ^{2/}	-0.7 % ^{2/}	-0.5 % ^{2/}	-0.7 % ^{2/}	-0.5 % ^{2/}

- 1/ Based on washed ignition oven
- 2/ Allowable limit below minimum design VMA requirement

DENSITY CONTROL LIMITS				
Mixture Composition	Parameter	Individual Test		
IL-4.75	Ndesign = 50	93.0 - 97.4 % ^{1/}		
IL-9.5	Ndesign = 90	92.0 - 96.0 %		
IL-9.5,IL-9.5L	Ndesign < 90	92.5 - 97.4 %		
IL-19.0	Ndesign = 90	93.0 - 96.0 %		
IL-19.0, IL-19.0L	Ndesign < 90	93.0 ^{2/} - 97.4 %		
SMA	Ndesign = 80	93.5 - 97.4 %		

- 1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.
- 2/ 92.0 % when placed as first lift on an unimproved subgrade."

Revise the table in Article 1030.05(d)(5) of the Supplemental Specifications to read:

"CONTROL CHART	High ESAL,	
REQUIREMENTS	Low ESAL, SMA	
	& IL-4.75	
	% Passing Sieves:	
	1/2 in. (12.5 mm) ^{2/}	
Gradation 1/3/	No. 4 (4.75 mm)	
	No. 8 (2.36 mm)	
	No. 30 (600 µm)	
Total Dust Content 1/	No. 200 (75 μm)	
	Asphalt Binder Content	
	Bulk Specific Gravity	
	Maximum Specific	
	Gravity of Mixture	
	Voids	
	Density	
	VMA	

- 1/ Based on washed ignition oven.
- 2/ Does not apply to IL-4.75.
- 3/ SMA also requires the 3/8 in. (9.5 mm) sieve."

Delete Article 1030.05(d)(6)a.1.(b.) of the Standard Specifications.

Delete Article 1030.06(b) of the Standard Specifications.

Delete Article 1102.01(e) of the Standard Specifications.

2) Design Verification and Production

<u>Description</u>. The following states the requirements for Hamburg Wheel and Tensile Strength testing for High ESAL, IL-4.75, and Stone Matrix Asphalt (SMA) hot-mix asphalt (HMA) mixes during mix design verification and production.

Mix Design Testing. Add the following below the referenced AASHTO standards in Article 1030.04 of the Standard Specifications:

AASHTO T 324 Hamburg Wheel Test

AASHTO T 283 Tensile Strength Test

Add the following to Article 1030.04 of the Standard Specifications:

"(d) Verification Testing. High ESAL, IL-4.75, and SMA mix designs submitted for verification will be tested to ensure that the resulting mix designs will pass the required criteria for the Hamburg Wheel Test (IL mod AASHTO T-324) and the

Tensile Strength Test (IL mod AASHTO T-283). The Department will perform a verification test on gyratory specimens compacted by the Contractor. If the mix fails the Department's verification test, the Contractor shall make the necessary changes to the mix and resubmit compacted specimens to the Department for verification. If the mix fails again, the mix design will be rejected.

All new and renewal mix designs will be required to be tested, prior to submittal for Department verification and shall meet the following requirements:

(1)Hamburg Wheel Test criteria. The maximum allowable rut depth shall be 0.5 in. (12.5 mm). The minimum number of wheel passes at the 0.5 in. (12.5 mm) rut depth criteria shall be based on the high temperature binder grade of the mix as specified in the mix requirements table of the plans.

Illinois Modified AASHTO T 324 Requirements 1/

Asphalt Binder Grade	# Repetitions	Max Rut Depth (mm)
PG 70 -XX (or higher)	20,000	12.5
PG 64 -XX (or lower)	10,000	12.5

1/ When produced at temperatures of 275 ± 5 °F (135 ± 3 °C) or less, loose Warm Mix Asphalt shall be oven aged at 270 ± 5 °F (132 ± 3 °C) for two hours prior to gyratory compaction of Hamburg Wheel specimens.

Note: For SMA Designs (N-80) the maximum rut depth is 6.0 mm at 20,000 repetitions.

For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000

(2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 60 psi (415 kPa) for non-polymer modified performance graded (PG) asphalt binder and 80 psi (550 kPa) for polymer modified PG asphalt binder. The

maximum allowable unconditioned tensile strength shall be 200 psi (1380 kPa)."

Production Testing. Revise Article 1030.06(a) of the Standard Specifications to read:

repetitions.

"(a) High ESAL, IL-4.75, WMA, and SMA Mixtures. For each contract, a 300 ton (275 metric tons) test strip, except for SMA mixtures it will be 400 ton (363 metric ton), will be required at the beginning of HMA production for each mixture with a quantity of 3000 tons (2750 metric tons) or more according to the Manual of Test Procedures for Materials "Hot Mix Asphalt Test Strip Procedures".

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

Before constructing the test strip, target values shall be determined by applying gradation correction factors to the JMF when applicable. After any JMF adjustment, the JMF shall become the Adjusted Job Mix Formula (AJMF). Upon completion of the first acceptable test strip, the JMF shall become the AJMF regardless of whether or not the JMF has been adjusted. If an adjustment/plant change is made, the Engineer may require a new test strip to be constructed. If the HMA placed during the initial test strip is determined to be unacceptable to remain in place by the Engineer, it shall be removed and replaced.

The limitations between the JMF and AJMF are as follows.

Parameter	Adjustment
1/2 in. (12.5 mm)	± 5.0 %
No. 4 (4.75 mm)	± 4.0 %
No. 8 (2.36 mm)	± 3.0 %
No. 30 (600 μm)	*
No. 200 (75 μm)	*
Asphalt Binder	± 0.3 %
Content	

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

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

Mixture sampled to represent the test strip shall include additional material sufficient for the Department to conduct Hamburg Wheel testing according to Illinois Modified AASHTO T324 (approximately 60 lb (27 kg) total).

The Contractor shall immediately cease production upon notification by the Engineer of failing Hamburg Wheel test. All prior produced material may be paved out provided all other mixture criteria is being met. No additional mixture shall be produced until the Engineer receives passing Hamburg Wheel tests.

The Department may conduct additional Hamburg Wheel tests on production material as determined by the Engineer."

Revise the title of Article 1030.06(b) of the Standard Specifications to read:

"(b) Low ESAL Mixtures."

Add the following to Article 1030.06 of the Standard Specifications:

"(c) Hamburg Wheel Test. All HMA mixtures shall be sampled within the first 500 tons (450 metric tons) on the first day of production or during start up with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T 324 and shall meet the requirements specified herein. Mix production shall not exceed 1500 tons (1350 metric tons) or one day's production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The

requirement to cease mix production may be waived if the plant produced mixture demonstrates conformance prior to start of mix production for a contract.

The Department may conduct additional Hamburg Wheel Tests on production material as determined by the Engineer. If the mixture fails to meet the Hamburg Wheel criteria, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria"

The Contractor shall immediately cease production upon notification by the Engineer of failing Hamburg Wheel test. All prior produced material may be paved out provided all other mixture criteria are being met. No additional mixture shall be produced until the Engineer receives passing Hamburg Wheel tests.

Method of Measurement:

Add the following after the fourth paragraph of Article 406.13 (b):

"The plan quantities of SMA mixtures shall be adjusted using the actual approved binder and surface Mix Design's G_{mb}."

Basis of Payment.

Replace the seventh paragraph of Article 406.14 of the Standard Specifications with the following:

"For all mixes designed and verified under the Hamburg Wheel criteria, the cost of furnishing and introducing anti-stripping additives in the HMA will not be paid for separately, but shall be considered as included in the contract unit price of the HMA item involved.

No additional compensation will be awarded to the Contractor because of reduced production rates associated with the addition of the anti-stripping additive."

HOT MIX ASPHALT - QUANTITY CORRECTION (BMPR)

Effective: October 1, 2014 Revised: October 2, 2014

Revise the fifth paragraph of Article 406.13(b) of the Standard Specifications to read as follows:

"HMA and Stone Matrix Asphalt (SMA) mixture in excess of 103 percent of the quantity shown on the plans or the plan quantity as specified by the Engineer will not be measured for payment. The "adjusted quantity to be placed" and the "adjusted pay quantity" for HMA and SMA mixtures will be calculated as follows.

Adjusted Quantity To Be Placed = $C \times Q$ quantity shown on the plans or the plan quantity as specified by the Engineer

where: C = English:
$$C = \frac{G_{mb} \times 46.8}{U}$$
 Metric: $C = \frac{G_{mb} \times 24.99}{U}$

and where: G_{mb} = average bulk specific gravity from approved mix design

U = unit weight of HMA shown on the plans in lb/sq yd/in. (kg/sq m/25 mm), used to estimate plan quantity

46.8 = English constant 24.99 = metric constant

Adjusted Pay Quantity (not to exceed 103 percent of the quantity shown on the plans or the plan quantity as specified by the Engineer) = B x HMA tons actually placed

where: $B = \frac{1}{C}$

If project circumstances warrant a new mix design, the above equations shall be used to calculate the adjusted plan quantity and adjusted pay quantity for each mix design using its respective average bulk specific gravity."

MAINTENANCE OF ROADWAYS

Effective: September 30, 1985 Revised: November 1, 1996

Beginning on the date that work begins on this project, the Contractor shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvement. This normal maintenance shall include all repair work deemed necessary by the Engineer, but shall not include snow removal operations. Traffic control and protection for maintenance of roadways will be provided by the Contractor as required by the Engineer.

If items of work have not been provided in the contract, or otherwise specified for payment, such items, including the accompanying traffic control and protection required by the Engineer, will be paid for in accordance with Article 109.04 of the Standard Specifications.

PUBLIC CONVENIENCE AND SAFETY (DIST 1)

Effective: May 1, 2012 Revised: July 15, 2012

Add the following to the end of the fourth paragraph of Article 107.09:

"If the holiday is on a Saturday or Sunday, and is legally observed on a Friday or Monday, the length of Holiday Period for Monday or Friday shall apply."

Add the following sentence after the Holiday Period table in the fourth paragraph of Article 107.09:

"The Length of Holiday Period for Thanksgiving shall be from 5:00 AM the Wednesday prior to 11:59 PM the Sunday After"

Delete the fifth paragraph of Article 107.09 of the Standard Specifications:

"On weekends, excluding holidays, roadways with Average Daily Traffic of 25,000 or greater, all lanes shall be open to traffic from 3:00 P.M. Friday to midnight Sunday except where structure construction or major rehabilitation makes it impractical."

RECLAIMED asphalt pavement and reclaimed asphalt shingles (D-1)

Effective: November 1, 2012 Revise: January 2, 2015

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

1031.01 Description. Reclaimed asphalt pavement and reclaimed asphalt shingles shall be according to the following.

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material resulting from cold milling or crushing an existing hot-mix asphalt (HMA) pavement. RAP will be considered processed FRAP after completion of both crushing and screening to size. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Bureau of Materials and Physical Research Policy Memorandum "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Bureau of Materials and Physical Research approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 90 percent passing the #4 (4.75 mm) sieve. RAS shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.
 - (1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
 - (2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

1031.02 Stockpiles. RAP and RAS stockpiles shall be according to the following.

(a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. Additional processed RAP (FRAP) shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the sealed stockpile when test results for the working pile are complete and are found to meet tolerances specified herein for the original sealed FRAP stockpile. Stockpiles shall be sufficiently separated to prevent intermingling at the base. All stockpiles (including unprocessed RAP and FRAP) shall be identified by signs indicating the type as listed below (i.e. "Non-Quality, FRAP -#4 or Type 2 RAS", etc...).

- (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mix the FRAP will be used in.
- (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, Superpave (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 inch single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP or FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, plant cleanout etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

(b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall be sufficiently separated to prevent intermingling at the base. Each stockpile shall be signed indicating what type of RAS is present.

However, a RAS source may submit a written request to the Department for approval to blend mechanically a specified ratio of type 1 RAS with type 2 RAS. The source will not be permitted to change the ratio of the blend without the Department prior written approval. The Engineer's written approval will be required, to mechanically blend RAS with any fine aggregate produced under the AGCS, up to an equal weight of RAS, to improve workability. The fine aggregate shall be "B Quality" or better from an approved

Aggregate Gradation Control System source. The fine aggregate shall be one that is approved for use in the HMA mixture and accounted for in the mix design and during HMA production.

Records identifying the shingle processing facility supplying the RAS, RAS type and lot number shall be maintained by project contract number and kept for a minimum of three years.

1031.03 Testing. FRAP and RAS testing shall be according to the following.

- (a) FRAP Testing. When used in HMA, the FRAP shall be sampled and tested either during processing or after stockpiling. It shall also be sampled during HMA production.
 - (1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).
 - (2) Incoming Material. For testing as incoming material, washed extraction samples shall be run at a minimum frequency of one sample per 2000 tons (1800 metric tons) or once per week, whichever comes first.
 - (3) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Before extraction, each field sample of FRAP, shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

- (b) RAS Testing. RAS shall be sampled and tested during stockpiling according to Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources". The Contractor shall also sample as incoming material at the HMA plant.
 - (1) During Stockpiling. Washed extraction and testing for unacceptable materials shall be run at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 1000 tons (900 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS shall be in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

(2) Incoming Material. For testing as incoming material at the HMA plant, washed extraction shall be run at the minimum frequency of one sample per 250 tons (227 metric tons). A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). The incoming material test results shall meet the tolerances specified herein.

The Contractor shall obtain and make available all test results from start of the initial stockpile sampled and tested at the shingle processing facility in accordance with the facility's QC Plan.

Before extraction, each field sample shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedures. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

1031.04 Evaluation of Tests. Evaluation of tests results shall be according to the following.

(a) Evaluation of FRAP Test Results. All test results shall be compiled to include asphalt binder content, gradation and, when applicable (for slag), G_{mm}. A five test average of results from the original pile will be used in the mix designs. Individual extraction test results run thereafter, shall be compared to the average used for the mix design, and will be accepted if within the tolerances listed below.

Parameter	FRAP		
No. 4 (4.75 mm)	±6%		
No. 8 (2.36 mm)	± 5 %		
No. 30 (600 μm)	± 5 %		
No. 200 (75 μm)	± 2.0 %		
Asphalt Binder	± 0.3 %		
G _{mm}	± 0.03 ^{1/}		

1/ For stockpile with slag or steel slag present as determined in the current Manual of Test Procedures Appendix B 21, "Determination of Reclaimed Asphalt Pavement Aggregate Bulk Specific Gravity".

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the FRAP stockpile shall not be used in Hot-Mix Asphalt unless the FRAP representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

The Contractor shall maintain a representative moving average of five tests to be used for Hot-Mix Asphalt production.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose

of Characterizing Reclaimed Asphalt Pavement (RAP)" or Illinois Modified AASHTO T-164-11, Test Method A.

(b) Evaluation of RAS Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. A five test average of results from the original pile will be used in the mix designs. Individual test results run thereafter, when compared to the average used for the mix design, will be accepted if within the tolerances listed below.

Parameter	RAS
No. 8 (2.36 mm)	±5%
No. 16 (1.18 mm)	± 5 %
No. 30 (600 μm)	± 4 %
No. 200 (75 µm)	± 2.5 %
Asphalt Binder Content	± 2.0 %

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the RAS shall not be used in Hot-Mix Asphalt unless the RAS representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

(c) Quality Assurance by the Engineer. The Engineer may witness the sampling and splitting conduct assurance tests on split samples taken by the Contractor for quality control testing a minimum of once a month.

The overall testing frequency will be performed over the entire range of Contractor samples for asphalt binder content and gradation. The Engineer may select any or all split samples for assurance testing. The test results will be made available to the Contractor as soon as they become available.

The Engineer will notify the Contractor of observed deficiencies.

Differences between the Contractor's and the Engineer's split sample test results will be considered acceptable if within the following limits.

Test Parameter	Acceptable Limits of Precision	
% Passing: ^{1/}	FRAP	RAS
1 / 2 in.	5.0%	
No. 4	5.0%	
No. 8	3.0%	4.0%
No. 30	2.0%	3.0%
No. 200	2.2%	2.5%
Asphalt Binder Content	0.3%	1.0%
G _{mm}	0.030	

1/ Based on washed extraction.

In the event comparisons are outside the above acceptable limits of precision, the Engineer will immediately investigate.

(d) Acceptance by the Engineer. Acceptable of the material will be based on the validation of the Contractor's quality control by the assurance process.

1031.05 Quality Designation of Aggregate in RAP and FRAP.

- (a) RAP. The aggregate quality of the RAP for homogenous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.
 - (1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
 - (2) RAP from Superpave/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
 - (3) RAP from Class I, Superpave/HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
 - (4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.
- (b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Fractionated RAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5,000 tons (4,500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant prequalified by the Department for the specified testing. The consultant shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications. The fine aggregate portion of the fractionated RAP shall not be used in any HMA mixtures that require a minimum of "B" quality aggregate or better, until the coarse aggregate fraction has been determined to be acceptable thru a MicroDeval Testing.

1031.06 Use of FRAP and/or RAS in HMA. The use of FRAP and/or RAS shall be a Contractor's option when constructing HMA in all contracts.

- (a) FRAP. The use of FRAP in HMA shall be as follows.
 - (1) Coarse Aggregate Size (after extraction). The coarse aggregate in all FRAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.

- (2) Steel Slag Stockpiles. FRAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) mixtures regardless of lift or mix type.
- (3) Use in HMA Surface Mixtures (High and Low ESAL). FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall have coarse aggregate that is Class B quality or better. FRAP shall be considered equivalent to limestone for frictional considerations unless produced/screened to minus 3/8 inch.
- (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP in which the coarse aggregate is Class C quality or better.
- (5) Use in Shoulders and Subbase. FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, Restricted FRAP, conglomerate, or conglomerate DQ.
- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with FRAP in HMA mixtures up to a maximum of 5.0% by weight of the total mix.

When FRAP is used alone or FRAP is used in conjunction with RAS, the percent of virgin asphalt binder replacement (ABR) shall not exceed the amounts indicated in the table below for a given N Design.

Max Asphalt	Binder	· Replacement	for FRAP with	RAS Combination

HMA Mixtures 1/2/	Maximum % ABR		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified 3/
30L	50	40	10
50	40	35	10
70	40	30	10
90	40	30	10⁴′
4.75 mm N-50			30
SMA N-80			20

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N-30, the percent asphalt binder replacement shall not exceed 50% of the total asphalt binder in the mixture.
- 2/ When the binder replacement exceeds 15 percent for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder

grades shall each be reduced by one grade (i.e. 25 percent binder replacement using a virgin asphalt binder grade of PG64-22 will be reduced to a PG58-28). When constructing full depth HMA and the ABR is less than 15 percent, the required virgin asphalt binder grade shall be PG64-28.

- 3/ When the ABR for SMA or IL-4.75 is 15 percent or less, the required virgin asphalt binder shall be SBS PG76-22 and the elastic recovery shall be a minimum of 80. When the ABR for SMA or IL-4.75 exceeds 15%, the virgin asphalt binder grade shall be SBS PG70-28 and the elastic recovery shall be a minimum of 80.
- 4/ For polymerized surface mix used for overlays, with up to 10 percent ABR, an SBS PG70-22 will be required. However if used in full depth HMA, an SBS PG70-28 will be required.

1031.07 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP and/or RAS material meeting the detailed requirements specified herein.

- (a) FRAP and/or RAS. FRAP and /or RAS mix designs shall be submitted for verification. If additional FRAP or RAS stockpiles are tested and found to be within tolerance, as defined under "Evaluation of Tests" herein, and meet all requirements herein, the additional FRAP or RAS stockpiles may be used in the original design at the percent previously verified.
- (b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design. A RAS stone bulk specific gravity (Gsb) of 2.300 shall be used for mix design purposes.

1031.08 HMA Production. HMA production utilizing FRAP and/or RAS shall be as follows.

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAS and FRAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If during mix production, corrective actions fail to maintain FRAP, RAS or QC/QA test results within control tolerances or the requirements listed herein the Contractor shall cease production of the mixture containing FRAP or RAS and conduct an investigation that may require a new mix design.

(a) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within ± 0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.

- (b) HMA Plant Requirements. HMA plants utilizing FRAP and/or RAS shall be capable of automatically recording and printing the following information.
 - (1) Dryer Drum Plants.
 - a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - d. Accumulated dry weight of RAS and FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
 - f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
 - g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.
 - h. Aggregate RAS and FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAS and FRAP are printed in wet condition.)
 - i. When producing mixtures with FRAP and/or RAS, a positive dust control system shall be utilized.
 - Accumulated mixture tonnage.
 - k. Dust Removed (accumulated to the nearest 0.1 ton)
 - (2) Batch Plants.
 - a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - d. Mineral filler weight to the nearest pound (kilogram).
 - e. RAS and FRAP weight to the nearest pound (kilogram).
 - f. Virgin asphalt binder weight to the nearest pound (kilogram).

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g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

1031.09 RAP in Aggregate Surface Course and Aggregate Shoulders. The use of RAP or FRAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used to construct aggregate surface course and aggregate shoulders shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications"
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded, FRAP, or single sized will not be accepted for use as Aggregate Surface Course and Aggregate Shoulders."

SLIPFORM PAVING (D-1)

Effective: November 1, 2014

Revise Article 1020.04 Table 1, Note (5) of Standard Specifications to read:

"The slump range for slipform construction shall be 1/2 to 1 1/2 in."

Revise Article 1020.04 Table 1 (metric), Note (5) of Standard Specifications to read:

"The slump range for slipform construction shall be 13 to 40 mm."

STATUS OF UTILITIES TO BE ADJUSTED

Effective: January 30, 1987 Revised: January 24, 2013

Utilities companies involved in this project have provided the following estimated durations:

Name of Utility	Туре	Location	Estimated Duration of Time for the Completion of Relocation or Adjustments
AT&T Distribution Legal Mandate Engineer 1000 Commerce Drive Oak Brook, IL 60523 630-573-5759 AT&T #UN1107	buried cable telephone and fiber	West Side Sta. 80+00 to Sta. 90+752 with roadway	Verified cables and determined this cables is in conflict with project. 28 working days to complete work
ComEd Mr. Joe Ziemba 630-669-0580 Proj. #H11045DKB	Overhead Electric and poles	West Side Sta. 80+00 to Sta. 90+752 with roadway 4 potential poles to relocate. Poles at: 85+37 86+63 87+75 88+78	5 working days to complete work
Constance Lane Engineering Administrator Nicor Gas 1844 Ferry Road Naperville, IL 60563-9600 630-388-3830 #N7968	gas	West Side Sta. 80+00 to Sta. 90+752 with roadway potential depth conflict with relocated channel at approximately Sta. 88+00 to Sta. 88+50	10 working days to complete work

The above represents the best information available to the Department and is included for the convenience of the bidder. The applicable portions of Articles 105.07 and 107.31 of the Standard Specifications shall apply.

In accordance with 605 ILCS 5/9-113 of the Illinois Compiled Statutes, utility companies have 90 days to complete the relocation of their facilities after receipt of written notice from the Department. The 90-day written notice will be sent to the utility companies after the following occurs:

- 1) Proposed right of way is clear for contract award.
- 2) Final plans have been sent to and received by the utility company.
- 3) Utility permit is received by the Department and the Department is ready to issue said permit.
- 4) If a permit has not been submitted, a 15 day letter is sent to the utility company notifying them they have 15 days to provide their permit application. After allowing 15 days for submission of the permit the 90 day notice is sent to the utility company.
- 5) Any time within the 90 day relocation period the utility company may request a waiver for additional time to complete their relocation. The Department has 10 days to review and respond to a waiver request.

TEMPORARY INFORMATION SIGNING

Effective: November 13, 1996 Revised: January 2, 2007

<u>Description:</u> This work shall consist of furnishing, installing, maintaining, relocating for various states of construction, and eventually removing temporary informational signs. Included in this item may be ground mount signs, skid mount signs, truss mount signs, bridge mount signs, and overlay sign panels which cover portions of existing signs.

Materials:

Materials shall be according to the following Articles of Section 1000- Materials:

	Item	Article/Section
a.	Sign Base (Notes I & 2)	1090
b.	Sign Face (Note 3)	1091
c.	Sign Legends	1092
d.	Sign Supports	1093
e.	Overlay Panels (Note 4)	1090.02

- Note 1. The Contractor may use 5/8 inch instead of 3/4 inch thick plywood.
- Note 2. Type A sheeting can be used on the plywood base.
- Note 3. All sign faces shall be Type A except all orange signs shall meet the requirements of Article 1106.01.
- Note 4. The overlay panels shall be 0.08 inch thick.

General Construction Requirements:

<u>Installation:</u> The sign sizes and legend sizes shall be verified by the Contractor prior to fabrication.

Signs which are placed along the roadway and/or within the construction zone shall be installed according to the requirements of Article 701.14 and Article 720.04. The signs shall be 7 ft (2.1 m) above the near edge of the pavement and shall be a minimum of 2 ft (600 mm) beyond the edge of the paved shoulder. A minimum of two (2) posts shall be used.

The attachment of temporary signs to existing sign structures or sign panels shall be approved by the Engineer. Any damage to the existing signs due to the Contractor's operations shall be repaired or signs replaced, as determined by the Engineer, at the Contractor's expense.

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Signs which are placed on overhead bridge structures shall be fastened to the handrail with stainless steel bands. These signs shall rest on the concrete parapet where possible. The Contractor shall furnish mounting details for approval by the Engineer.

<u>Method Of Measurement:</u> This work shall be measured for payment in square feet (square meters) edge to edge (horizontally and vertically).

All hardware, posts or skids, supports, bases for ground mounted signs, connections, which are required for mounting these signs will be included as part of this pay item.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price per square foot (square meter) for TEMPORARY INFORMATION SIGNING.

TRAFFIC CONTROL PLAN

Effective: September 30, 1985 Revised: January 1, 2007

Traffic Control shall be according to the applicable sections of the Standard Specifications, the Supplemental Specifications, the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", any special details and Highway Standards contained in the plans, and the Special Provisions contained herein.

Special attention is called to Article 107.09 of the Standard Specifications and the following Highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control.

The Contractor shall contact the District One Bureau of Traffic at least 72 hours in advance of beginning work.

STANDARDS:

701001-02	701006-05	701011-04	701201-04	701301-04	701306-03
701311-03	701901-04				

DETAILS:

- a. Traffic Control and Protection for Side Roads, Intersections, and Driveways (TC-10)
- b. District One Typical Pavement Markings (TC-13)
- c. Detour Signing For Closing State Highways (TC-21)
- d. Driveway Entrance Signing (TC-26)

SPECIAL PROVISIONS:

- a. Maintenance of Roadways
- b. Public Convenience and Safety (District 1)
- c. Traffic Control and Protection (Arterials)
- d. Temporary Information Signing

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e. Work Zone Traffic Control Surveillance (LRS 3)

TRAFFIC CONTROL AND PROTECTION (ARTERIALS)

Effective: February 1, 1996 Revised: March 1, 2011

Specific traffic control plan details and Special Provisions have been prepared for this contract. This work shall include all labor, materials, transportation, handling and incidental work necessary to furnish, install, maintain and remove all traffic control devices required as indicated in the plans and as approved by the Engineer.

When traffic is to be directed over a detour route, the Contractor shall furnish, erect, maintain and remove all applicable traffic control devices along the detour route according to the details shown in the plans.

<u>Method of Measurement</u>: All traffic control (except Traffic Control and Protection (Expressways) and temporary pavement markings) indicated on the traffic control plan details and specified in the Special Provisions will be measured for payment on a lump sum basis.

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

Temporary pavement markings will be paid for separately unless shown on a Standard.

IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION (TPG)

Effective: August 1, 2012 Revised: February 1, 2014

In addition to the Contractor's equal employment opportunity affirmative action efforts undertaken as elsewhere required by this Contract, the Contractor is encouraged to participate in the incentive program to provide additional on-the-job training to certified graduates of IDOT funded pre-apprenticeship training programs outlined by this Special Provision.

It is the policy of IDOT to fund IDOT pre-apprenticeship training programs throughout Illinois to provide training and skill-improvement opportunities to assure the increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The intent of this IDOT Training Program Graduate (TPG) Special Provision is to place certified graduates of these IDOT funded pre-apprentice training programs on IDOT project sites when feasible, and provide the graduates with meaningful on-the-job training intended to lead to journey-level employment. IDOT and its sub-recipients, in carrying out the responsibilities of a state contract, shall determine which construction contracts shall include "Training Program Graduate Special Provisions." To benefit from the incentives to encourage the participation in the additional on-the-job training under this Training Program Graduate Special Provision, the Contractor shall make every reasonable effort to employ certified graduates of IDOT funded Pre-apprenticeship Training Programs to the extent such persons are available within a reasonable recruitment area.

Participation pursuant to IDOT's requirements by the Contractor or subcontractor in this Training Program Graduate (TPG) Special Provision entitles the Contractor or subcontractor to be reimbursed at \$15.00 per hour for training given a certified TPG on this contract. As approved by the Department, reimbursement will be made for training persons as specified herein. This reimbursement will be made even though the Contractor or subcontractor may receive additional training program funds from other sources for other trainees, provided such other source does not specifically prohibit the Contractor or subcontractor from receiving other reimbursement. For purposes of this Special Provision the Contractor is not relieved of requirements under applicable federal law, the Illinois Prevailing Wage Act, and is not eligible for other training fund reimbursements in addition to the Training Program Graduate (TPG) Special Provision reimbursement.

No payment shall be made to the Contractor if the Contractor or subcontractor fails to provide the required training. It is normally expected that a TPG will begin training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project through completion of the contract, so long as training opportunities exist in his work classification or until he has completed his training program. Should the TPG's employment end in advance of the completion of the contract, the Contractor shall promptly notify the designated IDOT staff member under this Special Provision that the TPG's involvement in the contract has ended and supply a written report of the reason for the end of the involvement, the hours completed by the TPG under the Contract and the number of hours for which the incentive payment provided under this Special Provision will be or has been claimed for the TPG.

The Contractor will provide for the maintenance of records and furnish periodic reports documenting its performance under this Special Provision.

METHOD OF MEASUREMENT: The unit of measurement is in hours.

BASIS OF PAYMENT: This work will be paid for at the contract unit price of \$15.00 per hour for certified TRAINEES TRAINING PROGRAM GRADUATE. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

The Contractor shall provide training opportunities aimed at developing full journey worker in the type of trade or job classification involved. The initial number of TPGs for which the incentive is available under this contract is 1. During the course of performance of the Contract the Contractor may seek approval from the Department for additional incentive eligible TPGs. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the TPGs are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this Special Provision. The Contractor shall also insure that this Training Program Graduate Special Provision is made applicable to such subcontract if the TPGs are to be trained by a subcontractor and that the incentive payment is passed on to each subcontractor.

For the Contractor to meet the obligations for participation in this TPG incentive program under this Special Provision, the Department has contracted with several entities to provide screening, tutoring and pre-training to individuals interested in working in the applicable construction classification and has certified those students who have successfully completed the program and are eligible to be TPGs. A designated IDOT staff member, the Director of the Office of Business and Workforce Diversity (OBWD), will be responsible for providing assistance and referrals to the Contractor for the applicable TPGs. For this contract, the Director of OBWD is designated as the responsible IDOT staff member to provide the assistance and referral services related to the placement for this Special Provision. For purposes of this Contract, contacting the Director of OBWD and interviewing each candidate he/she recommends constitutes reasonable recruitment.

Prior to commencing construction, the Contractor shall submit to the Department for approval the TPGs to be trained in each selected classification. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. No employee shall be employed as a TPG in any classification in which he/she has successfully completed a training course leading to journeyman status or in which he/she has been employed as a journeyman. Notwithstanding the on-the-job training purpose of this TPG Special Provision, some offsite training is permissible as long as the offsite training is an integral part of the work of the contract and does not comprise a significant part of the overall training.

Training and upgrading of TPGs of IDOT pre-apprentice training programs is intended to move said TPGs toward journeyman status and is the primary objective of this Training Program Graduate Special Provision. Accordingly, the Contractor shall make every effort to enroll TPGs by recruitment through the IDOT funded TPG programs to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance and entitled to the Training Program Graduate Special Provision \$15.00 an hour incentive.

The Contractor or subcontractor shall provide each TPG with a certificate showing the type and length of training satisfactorily completed.



Storm Water Pollution Prevention Plan

Route	F.A.S. 0033	Marked Rte.	Franklinville Road			
Section	10-00378-00-BR	Project No.	BRS-0033(102)			
County	McHenry	Contract No.	61B25			
Permit No	This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.					
accordance submitted gathering am aware	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Walter Dittrich, P.E. Print Name					
	Walter Dittrich, P.E.					
	Print Name	•	Signature /			
	Design Manager					
	Title		Date			
N	IcHenry County Division of Transportation					
	Agency					

I. Site Description:

A. Provide a description of the project location (include latitude and longitude):

The Franklinville Road Bridge over Franklinville Creek project is located just south of the Franklinville Road and Perkins Road intersection in unincorporated McHenry County, Illinois. The project area is located in the E ½ of Section 22 and the W ½ of Section 23, Township 44N, Range 6E, and is centered at 42.275546° N latitude and 88.511034° W longitude.

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

The purpose of the project is to replace the existing bridge over Franklinville Creek with a new bridge because the existing bridge is structurally deficient. The construction will happen over two construction stages which allows for the proposed channel to be stabilized with vegetation and to be excavated in dry conditions.

The proposed project includes the replacement of a structurally deficient bridge with a bridge that meets current design criteria and is structurally adequate for the proposed loading criteria. The project also involves roadway improvements that meet the current design standards of the Illinois Department of Transportation. The Franklinville Creek channel will be relocated approximately 70 feet south to allow for access to the northwest property and meet the Federal Highway Standard for guardrail requirements. The channel will be naturalized with a 15" thick river rock bottom, and planted with native species. The proposed work will also provide erosion control for the bridge abutments. All disturbed areas that are not being paved or covered with aggregate will be seeded with the appropriate vegetation and erosion protection. Native trees will be planted at appropriate spacings. Any trees that are removed and not replaced on site will be included in the McDOT tree replacement program.

The proposed soil erosion and sediment controls for this project include temporary ditch checks, perimeter erosion barrier (silt fence), erosion control blanket, temporary inlet protection, filtering bag systems, streambank protection, rock check in the waterway, sump pit, stabilized construction entrances, and temporary and permanent seeding.

C. Provide the estimated duration of this project:

The project will be constructed over two (2) construction seasons. The first season is estimated to take five (5) months and the second season is estimated to take four (4) months.

D. The total area of the construction site is estimated to be 1.9 acres.

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The total area of the site estimated to be disturbed by excavation, grading or other activities is 1.9 acres.

E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

0.48

F. List all soils found within project boundaries. Include map unit name, slope information, and erosivity:

Using the Predological Soil Map for the site as prepared by the Natural Resources Conservation Service, the following two (2) soil types were identified within the project limits:

379A Dakota Loam, 0 to 2 percent slopes 8776A Comfrey Loam, 0 to 2 percent slopes

G. Provide an aerial extent of wetland acreage at the site:

WBK identified 1.69 acres of wetland on-site, of which, 0.577 acres are being impacted by the project improvements. The breakdown of wetland type is as follows, 0.37 acres of stream, 1.15 acres forested, and 0.17 farmed.

H. Provide a description of potentially erosive areas associated with this project:

During construction activities, the areas with the greatest potential for erosion are the ditches, side slopes, exposed abutments, and bridge cone under the bridge. After construction, the bridge cone and abutments will be covered with riprap to prevent erosion. The ditches and side slopes will be vegetated and covered with temporary erosion control blanket. The proposed channel will be lined with a 15" thick stone treatment consisting of river rock. The banks will be vegetated with wetland type plugs and seeding.

I. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):

In Stage 1, the entire project site will be disturbed south of the existing channel. The existing roadway will be removed to the south limits of the existing bridge. Grading for the proposed channel will occur in the dry as a berm will remain at each end until stage 2. The proposed channel slope is very flat and less than 0.5%, and will be lined with river rock. Side slopes of the proposed roadway and channel vary in steepness between 2:1 and 4:1 but are short in length, ranging between 8 and 20 feet. The potential for erosion is moderate in the ditches due to the concentrated flow, although the amount of runoff is small. Erosion along the side slopes in the exposed condition should be relatively minimal due to the short length of slope. Several temporary erosion control measures will be used to control erosion and sedimentation.

In Stage 2, the proposed channel will be connected to the existing channel at the east and west ends, and most of the area north of the proposed channel and existing bridge will be disturbed. In order to minimize sedimentation a diversion structure will be used to divert flow and final grade the channel. The existing channel will be filled in and worked to final grade, with soft slopes, erosion should be minimal. After the channel is diverted, the existing creek will be pumped and the existing structure will be removed in dry conditions. The bridge cone is the only location where moderate erosion may be expected. Temporary seeding and other erosion control measures will be used to minimize the sedimentation. Permanent vegetation planted in Stage 1 will greatly reduce sedimentation and erosion near the proposed channel.

- J. 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.
- K. Identify who owns the drainage system (municipality or agency) this project will drain into:

Since the drainage system currently lies within the Mchenry County right of way, McHenry County Division of Transportation is the agency responsible for the system.

L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located.

McHenry County will have reporting jurisdiction for this project location.

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			following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the ving waters can be found on the erosion and sediment control plans:				
				Creek is the prinver, a section 10 7			te, which flows into the Kishwaukee River before entering rway (TNP).
							main undisturbed. These areas may include steep slopes, trees, natural vegetation, nature preserves, etc.
		undis	turbed		silt fence. In sta		g stages 1 or 2. The area outside of the project will remain e will be areas of vegetation that were planted during stage
				g sensitive enviro		es are ass	sociated with this project, and may have the potential to be
			Threa Histor 303(d Receiv	nd Riparian tened and Endang ic Preservation) Listed receiving ving waters with To able Federal, Trib	waters for suspe	ly Load (TM	ls, turbidity, or siltation MDL) for sediment, total suspended solids, turbidity or siltation s
		1.	303(d) Listed receiving	waters (fill out th	is section i	if checked above):
			a.	The name(s) of the	he listed water bo	ody, and id	dentification of all pollutants causing impairment:
			b.		ig from a storm e		d sediment control practices will prevent a discharge of al to or greater than a twenty-five (25) year, twenty-four (24)
			C.	Provide a descri body:	ption of the loca	ation(s) of	direct discharge from the project site to the 303(d) water
			d.	Provide a descri	otion of the locati	ion(s) of an	ny dewatering discharges to the MS4 and/or water body:
		2.	TMD	L (fill out this secti	on if checked ab	ove)	
			a.	The name(s) of t	he listed water b	ody:	
			b.				diment control strategy that will be incorporated into the site ons and requirements of the TMDL:
			C.				on has been established that would apply to the project's cessary steps to meet that allocation:
	Р.	The	followi	ng pollutants of co	oncern will be as	sociated wi	vith this construction project:
Printed	12/2/2	⊠ ⊠ 2014		Sediment acrete	F	⊠ □ Page 3 of 9	Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) Antifreeze / Coolants BDE 2342 (Rev. 3/20/14)

\times	Concrete Truck Waste	\boxtimes	Waste water from cleaning construction equipment
\boxtimes	Concrete Curing Compounds		Other (specify)
\boxtimes	Solid Waste Debris		Other (specify)
	Paints		Other (specify)
	Solvents		Other (specify)
\boxtimes	Fertilizers / Pesticides		Other (specify)

II. Controls:

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 ILR10. 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: At a minimum, controls must be coordinated, installed and maintained to:
 - 1. Minimize the amount of soil exposed during construction activity;
 - 2. Minimize the disturbance of steep slopes;
 - 3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
 - 4. Minimize soil compaction and, unless infeasible, preserve topsoil.
- B. Stabilization 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(B)(1) and II(B)(2), stabilization measures shall be initiated immediately where construction activities have temporarily or permanently ceased, but in no case more than one (1) day 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 fourteen (14) or more calendar days.
 - 1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 - 2. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used.

The following stabilization practices will be used for this project:

X	Preservation of Mature Vegetation	\boxtimes	Erosion Control Blanket / Mulching
\boxtimes	Vegetated Buffer Strips		Sodding
\times	Protection of Trees		Geotextiles
\times	Temporary Erosion Control Seeding		Other (specify)
\boxtimes	Temporary Turf (Seeding, Class 7)		Other (specify)
	Temporary Mulching		Other (specify)
\boxtimes	Permanent Seeding		Other (specify)

Describe how the stabilization practices listed above will be utilized during construction:

Mature vegetation at the project limits will remain undisturbed during the project. After the vegetation is established in stage 1, the Contractor shall be careful to avoid disturbing those areas during stage 2. The established vegetation will act as a buffer and minimize runoff in several locations.

Trees will be protected by temporary fence as shown in the plan details.

Temporary erosion control seeding shall be used in locations where work activities have ceased for more than 7 calendar days, or as described in the erosion control plan notes.

Permanent Seeding shall be established no more than 14 days after final grade has been established.

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Describe how the stabilization practices listed above will be utilized after construction activities have been completed:

Areas that are disturbed by construction that will not be paved will be stabilized with permanent seeding and erosion control blanket.

C. 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:

\boxtimes	Perimeter Erosion Barrier	\boxtimes	Rock Outlet Protection
\boxtimes	Temporary Ditch Check	\boxtimes	Riprap
\boxtimes	Storm Drain Inlet Protection		Gabions
	Sediment Trap		Slope Mattress
	Temporary Pipe Slope Drain		Retaining Walls
	Temporary Sediment Basin		Slope Walls
	Temporary Stream Crossing		Concrete Revetment Mats
\boxtimes	Stabilized Construction Exits		Level Spreaders
	Turf Reinforcement Mats	\boxtimes	Other (specify) Sump Pit
	Permanent Check Dams		Other (specify)
	Permanent Sediment Basin		Other (specify)
\boxtimes	Aggregate Ditch		Other (specify)
	Paved Ditch		Other (specify)

Describe how the structural practices listed above will be utilized during construction:

Perimeter Erosion Barrier will be installed along the perimeter of the project area to prevent sediment from leaving the site.

Temporary Ditch Checks will be placed in the ditches at the beginning of the project and may require adjusting during grading. The checks will remain in place until final stabilization has been achieved in the ditches.

Storm Drain Inlet Protection will be utilized around the upstream end of culverts at field entrances or driveways. The protection will be in place from project initiation until final stabilization in the ditches has been achieved.

Stabilized construction entrance/exits are shown in the plans at locations where vehicles will be entering and leaving the existing roadway.

The proposed ditch will be lined with 15" of river rock to prevent erosion, and promote habitat.

Riprap will be used at the bridge and remain in place following construction. Rock outlet protection will be used that the lone driveway culvert within the project corridor.

A sump pit is shown as a temporary erosion control item on the downstream end of the proposed ditch grading to catch any sedimentation that may occur during grading activities.

Describe how the structural practices listed above will be utilized after construction activities have been completed:

The Riprap will remain in place after construction to prevent erosion of the abutments and bridge cones. Riprap will also be left in place at the outlet of proposed culverts.

D.	Treatment Chemicals
	Will polymer flocculants or treatment chemicals be utilized on this project: ☐ Yes ☒ No
	If yes above, identify where and how polymer flocculants or treatment chemicals will be utilized on this project.

- E. Permanent Storm Water Management Controls: Provided below is a description of measures that will be installed during the construction process to control volume and 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.
 - 1. 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 Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design and Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.
 - 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 permanent storm water management controls:

The roadside ditches will be vegetated to promote infiltration and filtration of stormwater runoff.

F. 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. 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 the 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:

In accordance with the current McHenry County Stormwater Management Ordinance, McHenry-Lake County Soil & Water Conservation District, and the US Army Corps of Engineers.

- G. Contractor Required Submittals: Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.
 - The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:

- Approximate duration of the project, including each stage of the project
- Rainy season, dry season, and winter shutdown dates
- Temporary stabilization measures to be employed by contract phases
- · Mobilization timeframe
- Mass clearing and grubbing/roadside clearing dates
- Deployment of Erosion Control Practices
- Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
- Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
- Paving, saw-cutting, and any other pavement related operations
- Major planned stockpiling operations
- Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
- Permanent stabilization activities for each area of the project
- 2. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
 - Vehicle Entrances and Exits Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
 - Material Delivery, Storage and Use Discuss where and how materials including chemicals, concrete
 curing compounds, petroleum products, etc. will be stored for this project.
 - Stockpile Management Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
 - Waste Disposal Discuss methods of waste disposal that will be used for this project.
 - Spill Prevention and Control Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
 - Concrete Residuals and Washout Wastes Discuss the location and type of concrete washout facilities
 to be used on this project and how they will be signed and maintained.
 - Litter Management Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
 - Vehicle and Equipment Fueling Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
 - Vehicle and Equipment Cleaning and Maintenance Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
 - Dewatering Activities Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
 - Polymer Flocculants and Treatment Chemicals Identify the use and dosage of treatment chemicals and
 provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the
 chemicals will be used and identify who will be responsible for the use and application of these
 chemicals. The selected individual must be trained on the established procedures.
 - · Additional measures indicated in the plan.

III. Maintenance:

When requested by the Contractor, the Resident Engineer will provide general maintenance guides to the Contractor for the practices associated with this project. The following additional procedures 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. It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

Vegetative soil erosion measures - the vegetative growth of temporary and permanent seeding, vegetative filters, etc., shall be maintained periodically and supplied adequate watering and fertilizer. The vegetative cover shall be removed and reseeded as necessary.

Water treatment system and/or sump pits will be cleaned and items replaced as recommended by the designer of the system. Sediment accumulation will be removed at a minimum when the height is equal to 50% of the original depth.

Perimeter erosion barrier, temporary ditch checks, and rolled excelsior logs will be examined regularly and repaired as necessary. Sediment shall be removed when it reaches a height equal to 50% of the height of the barrier.

Stabilized access road and stabilized construction entrances (if required) shall have sediment build up removed as necessary.

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 using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm or by the end of the following business or work day that is 0.5 inch or greater or equivalent snowfall.

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA 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 non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

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

Additional Inspections Required:

V. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the Contractor.

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FAS 0033

Route

Contractor Certification Statement

Franklinville Road

Prior to conducting any professional services at the site covered by this contract, the Contractor and every subcontractor must complete and return to the Resident Engineer the following certification. A separate certification must be submitted by each firm. Attach to this certification all items required by Section II.G of the Storm Water Pollution Prevention Plan (SWPPP) which will be handled by the Contractor/subcontractor completing this form.

Marked Rte.

Section	10-00378-00-BR	Project No.	BRS-0033(102)
County	McHenry	Contract No.	61B25
Permit N I certify usesociate In addition	tification statement is a part of SWPPP for the lo. ILR10 issued by the Illinois Environmental Prounder penalty of law that I understand the terms of with industrial activity from the construction sit on, I have read and understand all of the informal have received copies of all appropriate mainter	tection Agency. of the Permit No. IL e identified as part of ation and requirementance procedures; a	R 10 that authorizes the storm water discharges of this certification. ents stated in SWPPP for the above mentioned and, I have provided all documentation required
to be in	compliance with the Permit ILR10 and SWPPP ar	nd will provide timel	y updates to these documents as necessary.
☐ Cor	ntractor		
☐ Sub	o-Contractor		
.	Print Name		Signature
	Title		Date
	Name of Firm		Telephone
Marror .	Street Address	200012-X-01-X-000	City/State/ZIP
Items w	hich this Contractor/subcontractor will be respons	sible for as required	in Section II.G. of SWPPP:
		. ALM 10 11	

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Illinois Environmental Protection Agency

• 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 Bureau of Water

Division of Water Pollution Control Notice of Intent (NOI) for General Permit to Discharge Storm Water Associated with Construction Site Activities

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at the above address. For Office Use Only

OWNER INFORMATION	Permit No. ILR10			
Company/Owner Name: McHenry County Division of Transportation				
Mailing Address: 16111 Nelson Road Phone: 815-334-4980				
City: Woodstock State: IL Zip: 60098	Fax: <u>815-334-4989</u>			
Contact Person: Wally R. Dittrich	E-mail: wdittrich@co.mchenry.il.us			
Owner Type (select one) County				
CONTRACTOR INFORMATION	MS4 Community: 📝 Yes 🗌 No			
Contractor Name:				
Mailing Address:				
City: State: Zip:				
CONSTRUCTION SITE INFORMATION				
Select One: New Change of information for: ILR10				
Project Name: Franklinville Road at Franklinville Creek	County: McHenry			
Street Address: Franklinville Road City: Unincor	p. McHenry IL Zip:			
Latitude: 42 16 31.97 Longitude: 88 30	39.72 22/23 44N 6E			
(Deg) (Min) (Sec) (Deg) (Min	ı) (Sec) Section Township Range			
Approximate Construction Start DateJun 1, 2015 Approxim	nate Construction End Date Aug 1, 2016			
Total size of construction site in acres: 2.0	Fee Schedule for Construction Sites:			
If less than 1 acre, is the site part of a larger common plan of development? Less than 5 acres - \$250				
☐ Yes ☐ No	5 or more acres - \$750			
STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
Has the SWPPP been submitted to the Agency?	✓ Yes □ No			
(Submit SWPPP electronically to: epa.constilr10swppp@illinois.gov)	Ciba			
Location of SWPPP for viewing: Address: Field Trailer at the Site	City:			
SWPPP contact information:	Inspector qualifications:			
Contact Name:				
Phone: Fax:				
Project inspector, if different from above	Inspector qualifications:			
Inspector's Name:				
Phone: Fax:				
This Agency is authorized to require this information under Section 4 and	Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39), Failure to			

IL 532 2104 WPC 623 Rev 5/10

disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

TYPE OF CONSTRUCTION (select one) Construction Type Transportation	
SIC Code:	
Type a detailed description of the project:	
This project involves the replacement of the existing bridge of	over Franklinville Creek with new bridge including
improvements to the roadway approaches, pavement and ch	nannel relocation. The embankment widened to
accommodate new shoulders. Ditches will be regraded. Grad	ding adjacent to the roadway improvements will be
completed for compensatory storm water storage.	
HISTORIC PRESERVATION AND ENDANGERED SP	ECIES COMPLIANCE
Has the project been submitted to the following state agencies Illinois law on:	es to satisfy applicable requirements for compliance with
Historic Preservation Agency	
Endangered Species	
RECEIVING WATER INFORMATION	
Does your storm water discharge directly to:	the State or Storm Sewer
Owner of storm sewer system:	
Name of closest receiving water body to which you discharge	e: Franklinville Creek
Mail completed form to: Illinois Environmental Protection Age Division of Water Pollution Control Attn: Permit Section Post Office Box 19276 Springfield, Illinois 62794-9276 or call (217) 782-0610 FAX: (217) 782-9891	ency - ∴≒⊊
Or submit electronically to: epa.constilr10swppp@illinois.gov	<u>'</u>
I certify under penalty of law that this document and all attact in accordance with a system designed to assure that qualifies submitted. Based on my inquiry of the person or persons who for gathering the information, the information submitted is, to complete. I am aware that there are significant penalties for and imprisonment. In addition, I certify that the provisions of of a storm water pollution prevention plan and a monitoring process.	d personnel properly gather and evaluate the information o manage this system, or those persons directly responsible the best of my knowledge and belief, true, accurate, and submitting false information, including the possibility of fine the permit, including the development and implementation
Any person who knowingly makes a false, fictitious, or fraudul commits a Class 4 felony. A second or subsequent offense after the committee of	lent material statement, orally or in writing, to the Illinois EPA ter conviction is a Class 3 felony. (415 ILCS 5/44(h))
MINICI	1-14-15
Owner Signature:	Date:
Walter Dittrich, P.E.	Design Manager
Printed Name:	Title:

INSTRUCTIONS FOR COMPLETION OF CONSTRUCTION ACTIVITY NOTICE OF INTENT (NOI) FORM

Submit original, electronic or facsimile copies. Facsimile and/or electronic copies should be followed-up with submission of an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the upper right hand corner of the first page.

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at:

Illinois Environmental Protection Agency Division of Water Pollution Control Permit Section Post Office Box 19276 Springfield, Illinois 62794-9276 or call (217) 782-0610 FAX: (217) 782-9891

Or submit electronically to: epa.constilr10swppp@illinois.gov

Reports must be typed or printed legibly and signed.

Any facility that is not presently covered by the General NPDES Permit for Storm Water Discharges From Construction Site Activities is considered a new facility.

If this is a change in your facility information, renewal, etc., please fill in your permit number on the appropriate line, changes of information or permit renewal notifications do not require a fee.

NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.

Use the formats given in the following examples for correct form completion.

	Example	Format
Section	12	1 or 2 numerical digits
Township	12N	1 or 2 numerical digits followed by "N" or "S"
Range	12W	1 or 2 numerical digits followed by "E" or "W"

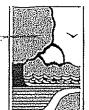
For the Name of Closest Receiving Waters, do not use terms such as ditch or channel. For unnamed tributaries, use terms which include at least a named main tributary such as "Unnamed Tributary to Sugar Creek to Sangamon River."

Submission of initial fee and an electronic submission of Storm Water Pollution Prevention Plan (SWPPP) for Initial Permit prior to the Notice of Intent being considered complete for coverage by the ILR10 General Permits. Please make checks payable to: Illinois EPA at the above address.

Construction sites with less than 5 acres of land disturbance - fee is \$250.

Construction sites with 5 or more acres of land disturbance - fee is \$750.

SWPPP should be submitted electronically to: epa.constilr10swppp@illinois.gov. When submitting electronically, use Project Name and City as indicated on NOI form.



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271 http://dnr.state.il.us

Pat Quinn, Governor Marc Miller, Director

Office of Water Resources • 2050 West Stearns Road • Bartlett, Illinois 60103

May 6, 2014

SUBJECT: Permit No. NE2014032

Franklinville Road Bridge Replacement

Franklinville Creek

McHenry County, Application No. 2013183

Wally Dittrich, P.E. McHenry County Division of Transportation 16111 Nelson Road Woodstock, Illinois 60098

Dear Mr. Dittrich:

Enclosed is Illinois Department of Natural Resources, Office of Water Resources Permit No. NE2014032 authorizing the subject project. This permit does not supersede any other federal, state or local authorizations that may be required for the project.

Please be advised that the Illinois Department of Natural Resources, Office of Realty and Environmental Planning (OREP) participates in the regulatory programs of the U.S. Army, Corps of Engineers (USACE) and may review this project if a USACE Section 10 or 404 permit is required. Issuance of a permit by the Office of Water Resources does not preclude OREP's provision of comments and/or recommendations, primarily related to biological effects of the proposed action, to the USACE and other federal agencies concerning your project.

If any changes of the permitted work are found necessary, revised plans should be submitted promptly to this office for review and approval. Also, this permit expires on the date indicated in Condition (13). If unable to complete the work by that date, the permittee may make a written request for a time extension.

Please call me at 847/608-3100, ext. 32025 if you have any questions.

Sincerely,

Gary W. Gereb, P.E., Chief

Northeastern Illinois Regulatory Programs Section

RECEIVED

MAY 0 7 2014

Wills Burke Kelsey Associates

GJ:crw Enclosure

CC:

Chicago District, U.S. Army Corps of Engineers

McHenry County Planning and Development Department John Witte, Wills Burke Kelsey Associates, Ltd.



PERMIT NO. NE2014032 DATE: May 6, 2014

State of Illinois Department of Natural Resources, Office of Water Resources

Permission is hereby granted to:

McHenry County Division of Transportation 16111 Nelson Road Woodstock, Illinois 60098

to construct a replacement 65 ft. long two-span bridge on Franklinville Road and to relocate the channel in the floodway of Franklinville Creek in the Southeast Quarter of Section 22, Township 44 North, Range 6 East of the Third Principal Meridian in McHenry County,

in accordance with an application dated October 2, 2013, and the plans and specifications entitled:

FRANKLINVILLE ROAD, LOCATION MAP, EXHIBIT 1, DATED JULY 31, 2013, PLAN AND PROFILE, FRANKLINVILLE ROAD OVER FRANKLINVILLE CREEK, SHEET 1 OF 1, UNDATED, GENERAL PLAN AND ELEVATION, FRANKLINVILLE ROAD OVER FRANKLINVILLE CREEK, SECTION 10-00378-00-BR, MCHENRY COUNTY, SHEET 1 OF 1, UNDATED, FRANKLINVILLE ROAD OVER FRANKLINVILLE CREEK, CHANNEL RELOCATION, EXHIBIT 8, DATED JUNE 27, 2013, ALL SHEETS RECEIVED OCTOBER 4, 2013.

Examined and Recommended:

Gary W. Jereb, Chief

Northeastern IL Regulatory

Programs Section

Approval Recommended:

Arlan R. Juhl, Director

Office of Water/Resources

Approved:

Marc Miller, Director

Department of Natural Resources

This PERMIT is subject to the terms and special conditions contained herein.

THIS PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:

- This permit is granted in accordance with the Rivers, Lakes and Streams Act "615 ILCS 5."
- This permit does not convey title to the permittee or recognize title of the permittee to any submerged or other lands, and furthermore, does not convey, lease or provide any right or rights of occupancy or use of the public or private property on which the activity or any part thereof will be located, or otherwise grant to the permittee any right or interest in or to the property, whether the property is owned or possessed by the State of Illinois or by any private or public party or parties.
- 3) This permit does not release the permittee from liability for damage to persons or property resulting from the work covered by this permit, and does not authorize any injury to private property or invasion of private rights.
- 4) This permit does not relieve the permittee of the responsibility to obtain other federal, state or local authorizations required for the construction of the permitted activity; and if the permittee is required by law to obtain approvals from any federal or state agency to do the work, this permit is not effective until the federal and state approvals are obtained.
- 5) The permittee shall, at the permittee's own expense, remove all temporary piling, cofferdams, false work, and material incidental to the construction of the project. If the permittee fails to remove such structures or materials, the Department may have removal made at the expense of the permittee.
- 6) In public waters, if future need for public navigation or other public interest by the state or federal government necessitates changes in any part of the structure or structures, such changes shall be made by and at the expense of the permittee or the permittee's successors as required by the Department or other properly constituted agency, within sixty (60) days from receipt of written notice of the necessity from the Department or other agency, unless a longer period of time is specifically authorized.
- 7) The execution and details of the work authorized shall be subject to the review and approval of the Department. Department personnel shall have the right of access to accomplish this purpose.
- 8) Starting work on the activity authorized will be considered full acceptance by the permittee of the terms and conditions of the permit.
- 9) The Department in issuing this permit has relied upon the statements and representations made by the permittee; if any substantive statement or representation made by the permittee is found to be false, this permit will be revoked; and when revoked, all rights of the permittee under the permit are voided.
- 10) In public waters, the permittee and the permittee's successors shall make no claim whatsoever to any interest in any accretions caused by the activity.
- 11) In issuing this permit, the Department does not ensure the adequacy of the design or structural strength of the structure or improvement.
- Noncompliance with the conditions of this permit will be considered grounds for revocation.
- 13) If the construction activity permitted is not completed on or before <u>December 31, 2017</u> this permit shall cease and be null and void.

THIS PERMIT IS SUBJECT TO THE FOLLOWING SPECIAL CONDITION:

a) The Permittee shall use riprap or other design measures to prevent increases in scour, erosion and sedimentation if the increase in average channel velocity due to the work herein authorized is beyond the scour velocity of the predominant soil type of the channel.

DEPARTMENT OF THE ARMY



CHICAGO DISTRICT, CORPS OF ENGINEERS 231 SOUTH LA SALLE STREET CHICAGO, ILLINOIS 60604-1437

March 12, 2015

Technical Services Division Regulatory Branch LRC-2011-00050

SUBJECT: Authorization for the Franklinville Road Bridge Replacement over Franklinville Creek near Woodstock, McHenry County, Illinois

Wally Dittrich McHenry County Division of Transportation 16111 Nelson Road Woodstock, Illinois 60098

Dear Mr. Dittrich:

This office has verified that your proposed activity complies with the terms and conditions of Regional Permit 3 (Transportation Projects) and 7 (Temporary Construction Activities), Category II of the Regional Permit Program (RPP).

This verification expires three (3) years from the date of this letter and covers only your activity as described in your notification and as shown on the plans entitled "Franklinville Road (FAS 0033) over Franklinville Creek – Bridge Replacement – Section 10-00378-00-BR – Project BRS-003(101) – Seneca Township – McHenry County – Job No. C-91-743-10" dated December 4, 2014 (received December 31, 2014), prepared by WBK Associates. Caution must be taken to prevent construction materials and activities from impacting waters of the United States beyond the scope of this authorization. If you anticipate changing the design or location of the activity, you should contact this office to determine the need for further authorization.

The activity may be completed without further authorization from this office provided the activity is conducted in compliance with the terms and conditions of the RPP, including conditions of water quality certification issued under Section 401 of the Clean Water Act by the Illinois Environmental Protection Agency (IEPA). If the design, location, or purpose of the project is changed, you should contact this office to determine the need for further authorization.

The following special conditions are a requirement of your authorization:

 You shall fully implement the Project Mitigation Document titled, "Management and Monitoring Plans – Franklinville Road over Franklinville Creek", dated December 30, 2014, prepared by WBK Associates, within the first year of project construction. All restored areas must meet the performance standards in accordance with the approved mitigation document. Your responsibility to complete the required compensatory mitigation will not be considered fulfilled until you have demonstrated compensatory

- mitigation project success and have received written verification of that success from the U.S. Army Corps of Engineers.
- 2. This authorization is contingent upon implementing and maintaining soil erosion and sediment controls in a serviceable condition throughout the duration of the project. You shall comply with the McHenry-Lake County Soil and Water Conservation District's (SWCD) written and verbal recommendations regarding the soil erosion and sediment control (SESC) plan and the installation and maintenance requirements of the SESC practices on-site.
 - a. You shall schedule a preconstruction meeting with SWCD to discuss the SESC plan and the installation and maintenance requirements of the SESC practices on the site.
 - b. You shall notify the SWCD of any changes or modifications to the approved plan set. Field conditions during project construction may require the implementation of additional SESC measures. If you fail to implement corrective measures, this office may require more frequent site inspections to ensure the installed SESC measures are acceptable.
 - c. Prior to commencement of any in-stream work, you shall submit constructions plans and a detailed narrative to the SWCD that disclose the contractor's preferred method of cofferdam and dewatering method. Work in the waterway shall NOT commence until the SWCD notifies you, in writing, that the plans have been approved.
- 3. You are responsible for all work authorized herein and for ensuring that all contractors are aware of the terms and conditions of this authorization.
- 4. A copy of this authorization must be present at the project site during all phases of construction.
- 5. You shall notify this office of any proposed modifications to the project, including revisions to any of the plans or documents cited in this authorization. You must receive approval from this office before work affected by the proposed modification is performed.
- 6. You shall notify this office prior to the transfer of this authorization and liabilities associated with compliance with its terms and conditions. The transferee must sign the authorization in the space provided and forward a copy of the authorization to this office.
- 7. Work in Franklinville Creek should be timed to take place during low or no-flow conditions. Low flow conditions are flow at or below the normal water elevation.
- 8. The plan will be designed to allow for the conveyance of the 2-year peak flow past the work area without overtopping the cofferdam. The Corps has the discretion to reduce this requirement if documented by the applicant to be infeasible or unnecessary.

- 9. Water shall be isolated from the in-stream work area using a cofferdam constructed of non-erodible materials (steel sheets, aqua barriers, rip rap and geotextile liner, etc.). Earthen cofferdams are not permissible.
- 10. The cofferdam must be constructed from the upland area and no equipment may enter flowing water at any time. If the installation of the cofferdam cannot be completed from shore and access is needed to reach the area to be coffered, other measures, such as the construction of a causeway, will be necessary to ensure that equipment does not enter the water. Once the cofferdam is in place and the isolated area is dewatered, equipment may enter the coffered area to perform the required work.
- 11. If bypass pumping is necessary, the intake hose shall be placed on a stable surface or floated to prevent sediment from entering the hose. The bypass discharge shall be placed on a non-erodible, energy dissipating surface prior to rejoining the stream flow and shall not cause erosion. Filtering of bypass water is not necessary unless the bypass water has become sediment-laden as a result of the current construction activities.
- 12. During dewatering of the coffered work area, all sediment-laden water must be filtered to remove sediment. Possible options for sediment removal include baffle systems, anionic polymers systems, dewatering bags, or other appropriate methods. Water shall have sediment removed prior to being re-introduced to the downstream waterway. A stabilized conveyance from the dewatering device to the waterway must be identified in the plan. Discharge water is considered clean if it does not result in a visually identifiable degradation of water clarity.
- 13. The portion of the side slope that is above the observed water elevation shall be stabilized as specified in the plans prior to accepting flows. The substrate and toe of slope that has been disturbed due to construction activities shall be restored to proposed or preconstruction conditions and fully stabilized prior to accepting flows.

This office is in receipt of a letter from the Kishwaukee Bottoms Wetland Mitigation Bank confirming your purchase of 0.966 acres of certified mitigation credits and a letter from the Slough Creek Wetland Mitigation Bank confirming your purchase of 0.264 acres of certified mitigation credits.

The authorization is without force and effect until all other permits or authorizations from local, state, or other Federal agencies are secured. Please note that IEPA has issued Section 401 Water Quality Certification for this RP. These conditions are included in the enclosed fact sheet. If you have any questions regarding Section 401 certification, please contact Mr. Dan Heacock at IEPA's Division of Water Pollution Control, Permit Section #15, by telephone at (217) 782-3362.

Once you have completed the authorized activity, please sign and return the enclosed compliance certification. If you have any questions, please contact Mr. Soren Hall of my staff by telephone at 312-846-5532, or email at Soren.G.Hall@usace.army.mil.

Sincerely,

Keith L. Wozniak Chief, West Section

Hery lyman

Regulatory Branch

Enclosures

Copy Furnished:

McHenry-Lake County SWCD (Ed Weskerna) WBK (Natalie Paver)

PERMIT COMPLIANCE

CERTIFICATION

Permit Number:	LRC-2011-00050			
Permittee:	Wally Dittrich McHenry County Division of Transportation			
Date:	March 12, 2015			
I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of said permit and if applicable, compensatory wetland mitigation was completed in accordance with the approved mitigation plan. ¹				
PERMITTEE	DATE			
Upon completion of the activity authorized by this permit and any mitigation required by the permit, this certification must be signed and returned to the following address:				
Chica 231 S	Army Corps of Engineers ago District, Regulatory Branch couth LaSalle Street, Suite 1500 ago, Illinois 60604-1437			
Please note that you	r permitted activity is subject to compliance inspections by Corps of			

If compensatory mitigation was required as part of your authorization, you are certifying that the mitigation area has been graded and planted in accordance with the approved plan. You are acknowledging that the maintenance and monitoring period will begin after a site inspection by a Corps of Engineers representative or after thirty days of the Corps' receipt of this certification. You agree to comply with all permit terms and conditions, including additional reporting requirements, for the duration of the maintenance and monitoring period.

Engineers representatives. If you fail to comply with this permit, you may be subject to permit

suspension, modification, or revocation.



GENERAL CONDITIONS APPLICABLE TO THE 2012 REGIONAL PERMIT PROGRAM

The permittee shall comply with the terms and conditions of the Regional Permits and the following general conditions for all activities authorized under the RPP:

1. State 401 Water Quality Certification - Water quality certification under Section 401 of the Clean Water Act may be required from the Illinois Environmental Protection Agency (IEPA). The District may consider water quality, among other factors, in determining whether to exercise discretionary authority and require an Individual Permit. Please note that Section 401 Water Quality Certification is a requirement for projects carried out in accordance with Section 404 of the Clean Water Act. Projects carried out in accordance with Section 10 of the Rivers and Harbors Act of 1899 do not require Section 401 Water Quality Certification

On March 2, 2012, the IEPA granted Section 401 certification, with conditions, for all Regional Permits, except for activities in certain waterways noted under RPs 4 and 8. The following conditions of the certification are hereby made conditions of the RPP:

- 1. The applicant shall not cause:
 - a) 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;
 - c) interference with water use practices near public recreation areas or water supply intakes;
 - d) a violation of applicable provisions of the Illinois Environmental Protection Act.
- 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.
- 3. Except as allowed under condition 9, 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 the Illinois EPA. Any backfilling must be done with clean material 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 soil erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining a NPDES Stormwater 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. A NPDES Stormwater Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Illinois EPA'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; 2011, http://aiswcd.org/IUM/index.html).
- 6. The applicant is advised that the following permits(s) must be obtained from the Illinois EPA: The applicant must obtain permits to construct sanitary sewers, water mains, and related facilities prior to construction.
- 7. Backfill used in the stream-crossing trench shall be predominantly sand or larger size material, with less than 20% passing a #230 U.S. sieve.
- 8. Any channel relocation shall be constructed under dry conditions and stabilized to prevent erosion prior to the diversion of flow.
- 9. Backfill used within trenches passing through surface waters of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material may be used only if:
 - a) particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using #230 U.S. sieve; or
 - b) excavation and backfilling are done under dry conditions.
- 10. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
- 11. Any applicant proposing activities in a mined area or previously mined area shall provide to the IEPA a written determination regarding the sediment and materials used which are considered "acid-producing material" as defined in 35 Il. Adm. Code,

- Subtitle D. If considered "acid-producing material," the applicant shall obtain a permit to construct pursuant to 35 Il. Adm. Code 404.101.
- 12. Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/stream banks, or 3) placed in waters of the State.
- 13. Applicants that use site dewatering techniques in order to perform work in waterways for construction activities approved under Regional Permits 1 (Residential, Commercial and Institutional Developments), 2 (Recreation Projects), 3 (Transportation Projects), 7 (Temporary Construction Activities), 9 (Maintenance) or 12 (Bridge Scour Protection) shall maintain flow in the stream during such construction activity by utilizing dam and pumping, fluming, culverts or other such techniques.
- 14. In addition to any action required of the Regional Permit 13 (Cleanup of Toxic and Hazardous Materials Projects) applicant with respect to the "Notification" General Condition 22, the applicant shall notify the Illinois EPA Bureau of Water, of the specific activity. This notification shall include information concerning the orders and approvals that have been or will be obtained from the Illinois EPA Bureau of Land (BOL) for all cleanup activities under BOL jurisdiction, or for which authorization or approval is sought from BOL for no further remediation. This Regional Permit is not valid for activities that do not require or will not receive authorization or approval from the BOL.
- 2. Threatened and Endangered Species If the District determines that the activity may affect Federally listed species or critical habitat, the District will initiate section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with the Endangered Species Act of 1973, as amended (Act). Applicants shall provide additional information that would enable the District to conclude that the proposed action will have no effect on federally listed species.

The application packet shall indicate whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Act, may be present within areas affected (directly or indirectly) by the proposed project. Applicants shall provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at www.fws.gov/midwest/Endangered. Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Review all documentation pertaining to the species list, provide the rationale for your effects determination for each species, and send the information to this office for review.

If no species, their suitable habitats, or critical habitat are listed, then a "no effect" determination can be made, and section 7 consultation is not warranted. If species or critical habitat appear on the list or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have "no effect" or "may effect" the species or suitable habitat. The District will request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effect determinations in the biological assessment or biological evaluation. If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit process.

Projects in Will, DuPage, or Cook Counties that are located in the recharge zones for Hine's emerald dragonfly critical habitat units may be reviewed under the RPP, with careful consideration due to the potential impacts to the species. All projects reviewed that are located within 3.25 miles of a critical habitat unit will be reviewed under Category II of the RPP. Please visit the following website for the locations of the Hine's emerald dragonfly critical habitat units in Illinois. http://www.fws.gov/midwest/endangered/insects/hed/FRHinesFinalRevisedCH.html

3. <u>Historic Properties</u> - In cases where the District determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity may require an Individual Permit. A determination of whether the activity may be authorized under the RPP instead of an Individual Permit will not be made until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the District with the appropriate documentation to demonstrate compliance with those requirements.

Non-Federal permittees must include notification to the District if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the permit application must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing permit submittals, the District will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. Based on the information submitted and these efforts, the District shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the District, the non-Federal applicant shall not begin the activity until notified by the District either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

The District will take into account the effects on such properties in accordance with 33 CFR Part 325, Appendix C, and 36 CFR 800. If all issues pertaining to historic properties have been resolved through the consultation process to the satisfaction of the District, Illinois Historic Preservation Agency (IHPA) and Advisory Council on Historic Preservation, the District may, at its discretion, authorize the activity under the RPP instead of an Individual Permit.

Applicants are encouraged to obtain information on historic properties from the IHPA and the National Register of Historic Places at the earliest stages of project planning. For information, contact:

Illinois Historic Preservation Agency 1 Old State Capitol Plaza Springfield, IL 62701-1507 (217) 782-4836 www.illinoishistory.gov

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity, you must immediately notify this office of what you have found, and to the maximum extent practicable, stop activities that would adversely affect those remains and artifacts until the required coordination has been completed. We will initiate the Federal, Tribal and State coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. <u>Soil Erosion and Sediment Control</u> - Measures shall be taken to control soil erosion and sedimentation at the project site to ensure that sediment is not transported to waters of the U.S. during construction. Soil erosion and sediment control measures shall be implemented before initiating any clearing, grading, excavating or filling activities. All temporary and permanent soil erosion and sediment control measures shall be maintained throughout the construction period and until the site is stabilized. All exposed soil and other fills, and any work below the ordinary high water mark shall be permanently stabilized at the earliest practicable date.

Applicants are required to prepare a soil erosion and sediment control (SESC) plan including temporary BMPs. The plan shall be designed in accordance with the Illinois Urban Manual, 2011 (http://aiswcd.org/IUM/index.html). Practice standards and specifications for measures outlined in the soil erosion and sediment control plans will follow the latest edition of the "Illinois Urban Manual: A Technical Manual Designed for Urban Ecosystem Protection and Enhancement." Additional Soil Erosion and Sediment Control (SESC) measures not identified in the Illinois Urban Manual may also be utilized upon District approval.

At the District's discretion, an applicant may be required to submit the SESC plan to the local Soil and Water Conservation District (SWCD), or the Lake County Stormwater Management Commission (SMC) for review. When the District requires submission of an SESC plan, the following applies: An activity may not commence until the SESC plan for the project site has been approved; The SWCD/SMC will review the plan and provide a written evaluation of its adequacy; A SESC plan is considered acceptable when the SWCD/SMC has found that it meets technical standards. Once a determination has been made, the authorized work may commence unless the SWCD/SMC has requested that they be notified prior to commencement of the approved plans. The SWCD/SMC may attend pre-construction meetings with the permittee and conduct inspections during construction to determine compliance with the plans. Applicants are encouraged to begin coordinating with the appropriate SWCD/SMC office at the earliest stages of project planning. For information, contact:

Kane-DuPage SWCD 2315 Dean Street, Suite 100 St. Charles, IL 60174 (630) 584-7961 ext.3 www.kanedupageswcd.org

North Cook SWCD 899 Jay Street Elgin, IL 60120 (847) 468-0071 www.northcookswcd.org McHenry-Lake County SWCD 1648 South Eastwood Dr. Woodstock, IL 60098 (815) 338-0099 ext.3 www.mchenryswcd.org

Lake County SMC 500 W. Winchester Rd, Suite 201 Libertyville, IL 60048 (847) 377-7700 www.lakecountyil.gov/stormwater

- 5. Total Maximum Daily Load For projects that include a discharge of pollutant(s) to waters for which there is an approved Total Maximum Daily Load (TMDL) allocation for any parameter, the applicant shall develop plans and BMPs that are consistent with the assumptions and requirements in the approved TMDL. The applicant must incorporate into their plans and BMPs any conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within any timeframes established in the TMDL. The applicant must carefully document the justifications for all BMPs and plans, and install, implement and maintain practices and BMPs that are consistent with all relevant TMDL allocations and with all relevant conditions in an implementation plan. Information regarding the TMDL program, including approved TMDL allocations, can be found at the following website: www.epa.state.il.us/water/tmdl/
- 6. <u>Floodplain</u> Discharges of dredged or fill material into waters of the United States within the 100-year floodplain (as defined by the Federal Emergency Management Agency) resulting in permanent above-grade fills shall be avoided and minimized to the maximum extent practicable. When such an above-grade fill would occur, the applicant may need to obtain approval from the Illinois

Department of Natural Resources, Office of Water Resources, (IDNR-OWR) which regulates activities affecting the floodway and the local governing agency (e.g., Village or County) with jurisdiction over activities in the floodplain. Compensatory storage may be required for fill within the floodplain. Applicants are encouraged to obtain information from the IDNR-OWR and the local governing agency with jurisdiction at the earliest stages of project planning. For information on floodway construction, contact:

IDNR/OWR 2050 Stearns Road Bartlett, IL 60103 (847) 608-3100 http://dnr.state.il.us/owr/

For information on floodplain construction, please contact the local government and/or the Federal Emergency Management Agency. Pursuant to 33 CFR 320.4(j), the District will consider the likelihood of the applicant obtaining approval for above-ground permanent fills in floodplains in determining whether to issue authorization under the RPP.

- 7. Navigation No activity may cause more than a minimal adverse effect on navigation. Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. The permittee understands and agrees that, if future operations 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 or 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 or 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.
- 8. Proper Maintenance Any authorized structure or fill shall be properly maintained, including that necessary to ensure public safety.
- 9. <u>Aquatic Life Movements</u> No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including species that normally migrate through the area, unless the activity's primary purpose is to impound water.
- 10. Equipment Soil disturbance and compaction shall be minimized through the use of matting for heavy equipment, low ground pressure equipment, or other measures as approved by the District.
- 11. Wild and Scenic Rivers No activity may occur in a component of the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status. Information on Wild and Scenic Rivers may be obtained from the appropriate land management agency in the area, such as the National Park Service and the U.S. Forest Service.
- 12. <u>Tribal Rights</u> No activity or its operation may impair reserved tribal rights, such as reserved water rights, treaty fishing and hunting rights.
- 13. <u>Water Supply Intakes</u> No discharge of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structures or adjacent bank stabilization.
- 14. Shellfish Production No discharge of dredged or fill material may occur in areas of concentrated shellfish production.
- 15. <u>Suitable Material</u> No discharge of dredged or fill material may consist of unsuitable material and material discharged shall be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act). Unsuitable material includes trash, debris, car bodies, asphalt, and creosote treated wood.
- 16. Spawning Areas Discharges in spawning areas during spawning seasons shall be avoided to the maximum extent practicable.
- 17. Obstruction of High Flows Discharges shall not permanently restrict or impede the passage of normal or expected high flows. All crossings shall be culverted, bridged or otherwise designed to prevent the restriction of expected high water flows, and shall be designed so as not to impede low water flows or the movement of aquatic organisms.
- 18. <u>Impacts From Impoundments</u> If the discharge creates an impoundment of water, adverse impacts on aquatic resources caused by the accelerated passage of water and/or the restriction of its flow shall be avoided to the maximum extent practicable.
- 19. <u>Waterfowl Breeding Areas</u> Discharges into breeding areas for migratory waterfowl shall be avoided to the maximum extent practicable.
- 20. <u>Removal of Temporary Fills</u> Any temporary fill material shall be removed in its entirety and the affected area returned to its pre-existing condition.
- 21. <u>Mitigation</u> All appropriate and practicable steps must first be taken to avoid and minimize impacts to aquatic resources. For unavoidable impacts, compensatory mitigation is required to replace the loss of wetland, stream, and/or other aquatic resource functions (33 CFR 332). The proposed compensatory mitigation shall utilize a watershed approach and fully consider the ecological needs of the watershed. Where an appropriate watershed plan is available, mitigation site selection should consider recommendations in the plan. The applicant shall describe in detail how the mitigation site was chosen and will be developed, based on the specific

resource need of the impacted watershed. Permit applicants are responsible for proposing an appropriate compensatory mitigation option to offset unavoidable impacts. However, the District is responsible for determining the appropriate form and amount of compensatory mitigation required when evaluating compensatory mitigation options, and determining the type of mitigation that would be environmentally preferable. In making this determination, the District will assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed. Methods of providing compensatory mitigation include aquatic resource restoration, establishment, enhancement, and in certain circumstances, preservation. Compensatory mitigation will be accomplished by establishing a minimum ratio of 1.5 acres of mitigation for every 1.0 acre of impact to waters of the U.S. Furthermore, the District has the discretion to require additional mitigation to ensure that the impacts are no more than minimal. Further information is available at www.lrc.usace.army.mil/Missions/Regulatory/Illinois/Mitigation.aspx

22. Notification - The applicant shall provide written notification (i.e., a complete application) for a proposed activity to be authorized under the RPP prior to commencing a proposed activity. The District's receipt of the complete application is the date when the District receives all required notification information from the applicant (see below). If the District informs the applicant within 60 calendar days that the notification is incomplete (i.e., not a complete application), the applicant shall submit to the District, in writing, the requested information to be considered for review under the Regional Permit Program. A new 60 day review period will commence when the District receives the requested information. Applications that involve unauthorized activities that are completed or partially completed by the applicant are not subject to the 60-day review period.

For all activities, notification shall include:

- a. A cover letter providing a detailed narrative of the proposed activity describing all work to be performed, a clear project purpose and need statement, the Regional Permit(s) to be used for the activity, the area (in acres) of waters of the U.S. to be impacted (be sure to specify if the impact is permanent or temporary, and identify which area it affects), and a statement that the terms and conditions of the RPP will be followed.
- b. A completed joint application form for Illinois signed by the applicant or agent. The application form is available at www.lrc.usace.army.mil/Portals/36/docs/regulatory/forms/appform.pdf. If the applicant does not sign the joint application form, notification shall include a signed, written statement from the applicant designating the agent as their representative.
- c. A delineation of waters of the U.S., including wetlands, for the project area, and for areas adjacent to the project site (off-site wetlands shall be identified through the use of reference materials including review of local wetland inventories, soil surveys and the most recent available aerial photography), shall be prepared in accordance with the current U.S. Army Corps of Engineers methodology (www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/reg_supp.aspx) and generally conducted during the growing season. Our wetland delineation standards are available at www.lrc.usace.army.mil/Portals/36/docs/regulatory/pdf/Delineations.pdf. For sites supporting wetlands, the delineation shall include a Floristic Quality Assessment (Swink and Wilhelm. 1994, latest edition, Plants of the Chicago Region). The delineation shall also include information on the occurrence of any high-quality aquatic resources (see Appendix A), and a listing of waterfowl, reptile and amphibian species observed while at the project area. The District reserves the right to exercise judgment when reviewing submitted wetland delineations. Flexibility of the requirements may be determined by the District on a case-by-case basis only.
- d. A street map showing the location of the project area.
- e. Latitude and longitude for the project in decimal degrees format (i.e. 41.88377N, -87.63960W).
- f. Preliminary engineering drawings sized 11" by 17" (full-sized may be requested by the project manager and you may also submit plans in PDF format on a disc) showing all aspects of the proposed activity and the location of waters of the U.S. to be impacted and not impacted. The plans shall include grading contours, proposed and existing structures such as buildings footprints, roadways, road crossings, stormwater management facilities, utilities, construction access areas and details of water conveyance structures. The plans shall also depict buffer areas, outlots or open space designations, best management practices, deed restricted areas and restoration areas, if required under the specific RP.
- g. Submittal of soil erosion and sediment control (SESC) plans that identify all SESC measures to be utilized during construction of the project.
- h. The application packet shall indicate whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Endangered Species Act of 1973, as amended, may be present within areas affected (directly or indirectly) by the proposed project. Applicants shall provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at www.fws.gov/midwest/Endangered. Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Print all documentation pertaining to the species list, include the rationale for your effects determination for each species, and forward the information to this office for review.

^{*} If a wetland delineation is conducted outside of the growing season, the District will determine on a case-by-case basis whether sufficient evidence is available to make an accurate determination. If the District finds that the delineation lacks sufficient evidence, the application will not be considered complete until the information is provided. This may involve re-delineating the project site during the growing season.

In the event there are no species, their suitable habitats, or critical habitat, then a "no effect" determination can be made and section 7 consultation is not warranted. If species or critical habitat appear on the list, or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have "no effect" or "may effect" on the species or suitable habitat. The District will request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effect determinations in the biological assessment or biological evaluation. If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit process.

- i. A determination of the presence or absence of any State threatened or endangered species. Please contact the Illinois Department of Natural Resources (IDNR) to determine if any State threatened and endangered species could be in the project area. You can access the IDNR's Ecological Compliance Assessment Tool (EcoCAT) at the following website: http://dnrecocat.state.il.us/ecopublic/. Once you complete the EcoCAT and consultation process, forward all resulting information to this office for consideration. The report shall also include recommended methods as required by the IDNR for minimizing potential adverse effects of the project.
- j. A statement about the knowledge of the presence or absence of Historic Properties, which includes properties listed, or properties eligible to be listed in the National Register of Historic Places. A letter from the Illinois Historic Preservation Agency (IHPA) can be obtained indicating whether your project is in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. The permittee shall provide all pertinent correspondence with the IHPA documenting compliance. The IHPA has a checklist of documentation required for their review located here: www.illinoishistory.gov/PS/rcdocument.htm.
- k. Where an appropriate watershed plan is available, the applicant shall address in writing how the proposed activity is aligned with the relevant water quality, hydrologic, and aquatic resource protection recommendations in the watershed plan.
- 1. A discussion of measures taken to avoid and/or minimize impacts to aquatic resources on the project site.
- m. A compensatory mitigation plan for all impacts to waters of the U.S. (if compensatory mitigation is required under the specific RP).
- n. A written narrative addressing all items listed under the specific RP.

For Category II activities, the District will provide an Agency Request for Comments (ARC) which describes the proposed activity. The ARC will be sent to the following agencies: United States Fish & Wildlife Service (USFWS), United States Environmental Protection Agency (USEPA), Illinois Department of Natural Resources (IDNR), Illinois Department of Natural Resources/Office of Water Resources (IDNR/OWR), Illinois Environmental Protection Agency (IEPA), Illinois Historic Preservation Agency (IHPA), Illinois Nature Preserves Commission (INPC) and U.S. Coast Guard (Section 10 activities only). Additional entities may also be notified as needed. These agencies have ten (10) calendar days from the date of the ARC to contact the District and either provide comments or request an extension not to exceed fifteen (15) calendar days. The District will fully consider agency comments received within the specified time frame. If the District determines the activity complies with the terms and conditions of the RPP and impacts on aquatic resources are minimal, the District will notify the applicant in writing and include special conditions if deemed necessary. If the District determines that the impacts of the proposed activity are more than minimal, the District will notify the applicant that the project does not qualify for authorization under the RPP and instruct the applicant on the procedures to seek authorization under an Individual Permit.

- 23. Compliance Certification Any permittee who has received authorization under the RPP from the District shall submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the District with the authorization letter and will include: a) a statement that the authorized work was done in accordance with the District's authorization, including any general or specific conditions; b) a statement that any required mitigation was completed in accordance with the permit conditions and; c) the signature of the permittee certifying the completion of the work and mitigation.
- 24. <u>Multiple use of Regional Permits</u> In any case where a Regional Permit is combined with any other Regional Permit to cover a single and complete project (except where prohibited under specific Regional Permits), the applicant shall notify the District in accordance with General Condition 22. If multiple Regional Permits are used, the total impact may not exceed the maximum allowed by the Regional Permit with the greatest impact threshold.
- 25. Other Restrictions Authorization under the RPP does not obviate the need to obtain other Federal, State or local permits, approvals, or authorizations required by law nor does it grant any property rights or exclusive privileges, authorize any injury to the property or rights of others or authorize interference with any existing or proposed Federal project.

Approved by:	
//ORIGINAL SIGNED//	February 24, 2012
Frederic A. Drummond, Jr.	Date
Colonel, U.S. Army	
District Commander	

McKenry-Lake County Soil of Water Conservation District win Approval Email **Matt Baldwin**

Subject:

FW: SESC review Franklinville Rd (LRC-2011-50)

From: Ed [mailto:ed.weskerna@mchenryswcd.org]

Sent: Friday, January 30, 2015 12:12 PM

To: Natalie Paver

Subject: Re: SESC review Franklinville Rd (LRC-2011-50)

Natalie. No I figured the e-mail message I sent you would suffice. If you absolutely need something more official I can write something but for now consider the e-mail sufficient.

On Jan 30, 2015, at 9:54 AM, Natalie Paver < NPaver@wbkengineering.com > wrote:

Ed.

I just left a message at your office. Were you going to send us an official approval letter for this project? Thanks!

From: Ed Weskerna [mailto:ed.weskerna@mchenryswcd.org]

Sent: Monday, January 26, 2015 10:03 AM

To: Natalie Paver

Cc: Hall, Soren G LRC; Julie Rimbault

Subject: RE: SESC review Franklinville Rd (LRC-2011-50)

Natalie, I'm sorry for the delay, I've been out of the office due to the flu for the past week. I did see that you sent me a narrative and added diagrams to the plans indicating the approximate areas where you will be pumping. Due to the dynamics of the earth moving activities of relocating the creek, I realize the dewatering areas may need to be relocated on an as needed basis. The only thing to keep in mind is that the dewatering areas should not be located in a designated wetland areas or in a flood plain. Your plans now meet technical standards for erosion control.

From: Natalie Paver [mailto:NPaver@wbkengineering.com]

Sent: Monday, January 26, 2015 8:52 AM

To: Ed Weskerna (Ed.Weskerna@mchenryswcd.org) Subject: RE: SESC review Franklinville Rd (LRC-2011-50)

Ed.

Just checking in to see if you have had a chance to review the additional information we submitted on the Franklinville Road project on Dec 31? Let me know if you have any questions. Thanks much!

Natalie Paver, PWS

Senior Environmental Scientist

WILLS BURKE KELSEY ASSOCIATES

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Mediating the Built and Natural Environments www.wbkengineering.com | WBK LinkedIn | WBK Twitter

The information contained in this e-mail is intended only for the individual or entity to whom it is addressed and should not be

STRUCTURE GEOTECHNICAL REPORT BRIDGE REPLACEMENT FRANKLINVILLE ROAD OVER KISHWAUKEE TRIBUTARY SECTION 10-00378-00-BR McHENRY COUNTY, ILLINOIS

IDOT S.N. 056-3016 (EXISTING) IDOT S.N. 056-3195 (PROPOSED)

PREPARED FOR:
WILLS BURKE KELSEY ASSOCIATES, LTD.
116 WEST MAIN STREET
ST. CHARLES, ILLINOIS 60174

PREPARED BY:
TESTING SERVICE CORPORATION
457 EAST GUNDERSEN DRIVE
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(630) 653-3920

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II. APPENDIX

STRUCTURE GEOTECHNICAL REPORT BRIDGE REPLACEMENT FRANKLINVILLE ROAD OVER KISHWAUKEE TRIBUTARY SECTION 10-00378-00-BR McHENRY COUNTY, ILLINOIS

1.0 INTRODUCTION

This report presents results of a subsurface investigation performed for the reconstruction of the Franklinville Road bridge over Kishwaukee Tributary in McHenry County, Illinois. These geotechnical services have been provided in accordance with TSC Proposal Nos. 44,871B and 49,805 dated April 19, 2010 and October 5, 2012, respectively.

The existing Franklinville Road (County Highway 15) bridge (Structure No. 056-3016) over Franklinville Creek (Kishwaukee Tributary) is located immediately south of Perkins Road/Garden Valley Road, lying approximately 4 miles west of IL Route 47 and 1.5 miles north of IL Route 176 in McHenry County. The project site lies in the Southeast ¼ of Section 22 and Southwest ¼ of Section 23 in Seneca Township (T 44 N, R 6 E), approximately 2 miles southwest of Woodstock city limits.

The existing structure consists of a single-span bridge having a length of approximately 37 feet and width of about 26 feet. It currently accommodates two lanes of traffic with narrow shoulders. The new bridge (Structure No.056-3195) will be shifted approximately 60 south of its current location. It will consist of a two-span structure with a center pier and integral type abutments. The new bridge will have an overall length of 64'-8" back-to-back of abutments. The bridge deck will be widened to 32' (out to out) and include two 12' lanes and 4' shoulders. It is understood that the new abutments are to be



supported on a pile foundation. Pavement reconstruction and widening is also planned for this project. The limits of the reconstruction will extend for a short distance north and south of the bridge.

2.0 SITE DESCRIPTION AND GEOLOGY

The project site is located in the southwest quadrant of McHenry County, approximately 2 miles southwest of Woodstock city limits. Franklinville Road is the dividing line between Sections 22 (southeast) and 23 (southwest) of Seneca Township (T 44 N, R 6 E). Franklinville Road crosses Kishwaukee Tributary approximately 1½ miles north of IL Route 176. The existing roadway and bridge accommodate two lanes of traffic trending north and south.

According to the Illinois State Geological Survey the proposed bridge structure is not located over any mapped mines. Geologically the project site lies within the Batavia Member which is part of the Henry Formation. These materials are to consist mostly of well sorted Sand and Gravel deposited as outwash in glacial streams and rivers.

Uppermost soils across many portions of this area consist of wind-blown loess which has been weathered, decomposed and otherwise modified such that it presently consists of a silty clay of relatively high plasticity. Peat, organic clay and/or soft slopewash deposits may also be found in relatively low-lying areas associated with the moraine topography. Shale and dolostone bedrock of Ordovician age is expected to be overlain by about 150 feet of feet of overburden in the site vicinity.

Included in the Appendix is the Pedological Soil Map for the site as prepared by the Natural Resources Conservation Service. A review of this map indicates that the immediate vicinity of the Franklinville Road bridge over the Kishwaukee Tributary contains the following soil classifications:

379A Dakota Loam, 0 to 2 percent slopes 8776A Comfrey Loam, 0 to 2 percent slopes

The Natural Resources Conservation Service rates these soils as Poor road fill material with a "very limited" rating for local roads and streets due to wetness, low strength, frost action and shrink/swell tendencies. There were no areas of organic "muck" type deposits within close proximity to the project.



3.0 PRECIPITATION SUMMARY

The majority of the soil borings for this project were drilled in April 2011, with scour borings (SC-1 & SC-2) and an additional bridge boring (SB-3) drilled in April and May 2013. Observations made of precipitation during the six months preceding our field work are summarized in the following table. These observations were obtained at the Crystal Lake weather station located approximately 5.5 miles east-southeast of the project site.

	Precipitation Data (in inches)						
Month	Total (inches)	Departure From 20yr Avg.					
October, 2010	1.87	-1.15					
November, 2010	1.07	-1.37					
December, 2010	1.30	-0.79					
January, 2011	1.07	-0.79					
February, 2011	2.74	+0.89					
March, 2011	3.68	+1.42					
April, 2011 4.74		+0.81					

	Precipitation Data (in inches)						
Month	Total (inches)	Departure From 20yr Avg.					
October, 2012	3.60	+0.58					
November, 2012	0.69	-1.75					
December, 2012	2.57	+0.48					
January, 2013	4.00	+2.14					
February, 2013	2.78	+0.93					
March, 2013	2.55	÷0.29					
April, 2013	7.28	+3.35					



Based on the above data, it is anticipated that groundwater levels and soil moisture were probably above normal seasonal conditions due to higher than normal precipitation during the 3 to 5 months prior to drilling in 2011 and 2013, respectively.

4.0 SUMMARY OF WORK PERFORMED

A total of three (3) structure borings (SB-1, SB-2 & SB-3) were drilled for the new Franklinville Road bridge structure over Kishwaukee Tributary. They were extended to a depth of 70 feet below existing grade. Structure Boring 1 was drilled at the northeast corner of the existing bridge prior to the new bridge location having been shifted south. Structure Boring 2 was drilled near the northwest corner of the new bridge and SB-3 approximately 45' south of the southeast corner of the new bridge abutment.

Two streambed scour borings (SC-1 & SC-2) were extended to a depth of 20 feet, located on the east and west sides of the new bridge location, respectively (i.e. new creek location). Also included were two (2) subgrade borings (B-1 & B-2) extending to a depth of 10 feet. They were located at approximately 300 feet north and south of the existing bridge abutments, along the shoulder/edge of pavement of the approach roadway. Three (3) pavement cores were also obtained north and south of the bridge, with two (2) bridge deck cores (C-101 & C-102) taken of the existing Franklinville Road bridge structure over Kishwaukee Tributary for asbestos testing. Reference is made to the appended Location Plan showing the specific boring and core locations.

Two-inch diameter bridge deck cores were obtained at two (2) locations using an electric drill and core barrel with impregnated diamond matrix cutting bits. The core samples were sent to TEM Incorporated in Glen Ellyn, Illinois (NVLAP Lab ID 101130-0) for asbestos testing. Appended to this report is a copy of their test results.

The pavement cores were obtained at three (3) locations along Franklinville Road using a 4" diameter core barrel with impregnated diamond matrix cutting bits. Granular base course materials were also hand-augered at the core locations to determine their thickness, with split-spoon samples then taken of the upper subgrade to a depth of approximately 3 feet below the top of pavement. The core holes were immediately backfilled and patched to preclude possible hazards to the public.



The pavement cores and aggregate samples were examined by a construction materials technician in the laboratory. These detailed results are shown on attached sheet titled "Pavement Core Results". Bituminous layers are listed individually, including average thickness and condition comments. Total asphalt thicknesses are also given, rounded to the nearest ½"; base course thicknesses are shown to the nearest inch.

The structure and scour borings were extended using conventional drilling equipment, with the subgrade borings performed using an ATV GeoProbe rig which employs continuous Macro-core (1.5 inch diam.) sampling methods. The GeoProbe rig was used to negotiate the uneven terrain along the side of the road. Representative test specimens were obtained at approximate 2-foot intervals from them.

The structure and scour borings were drilled, sampled and tested in accordance with IDOT boring criteria. Soil sampling was performed in conjunction with the Standard Penetration Test, for which driving resistance to a 2" split-spoon sampler (in blows per 6" interval) provides an indication of the relative density of granular materials and consistency of cohesive soils. It should be noted that the SPT samples were obtained using an automatic hammer which has relatively high energy.

Soil samples were examined in the laboratory to verify field descriptions and to classify them in accordance with the AASHTO and/or Unified Soil Classification System as well as the Illinois Department of Transportation Classification Chart. Laboratory testing included moisture content determinations for all cohesive and intermediate (silt or loamy) soil types. An estimate of unconfined compressive strength was obtained for all inorganic native clay soils using a calibrated pocket penetrometer, with actual measurements of unconfined compressive strength being performed by Rimac methods. Water level readings were taken during and following completion of drilling operations.

For classification purposes and to verify field identifications, two (2) Atterberg limit tests and ten (10) grain-size analyzes were performed on representative soil samples. Results of these tests are summarized on Soil Test Data Sheets which are included in the Appendix.

Reference is made to the boring logs in the Appendix of this report which indicate subsurface stratigraphy and soil descriptions, results of field and laboratory tests, as well as water level



observations. Soil Test Data sheets are attached giving results of laboratory testing, along with grain size distribution curves. Definitions of descriptive terminology are also enclosed. While strata changes are shown as a definite line on the boring logs, the actual transition between soil layers may be more gradual.

5.0 DISCUSSION OF RESULTS

5.1 Pavement Composition (Cores 1-3)

Cores 1-3 were taken north and south of the existing Franklinville Road bridge structure in order to accurately determine the thickness and composition of the pavement and subbase materials. They revealed on the order of 6½ inches bituminous concrete overlying 9 to 11 inches crushed and uncrushed base course materials. Examination of the core samples revealed that the asphalt sections were comprised of 5 to 6 surface and/or binder layers along with a chip and seal layer. An emulsified bituminous layer was also found in Core 2. Appended to this report is a detailed summary of Pavement Core Results.

Stiff native Clay soils were found below the pavement section at Core 1. It had a pocket penetrometer value (estimate of unconfined compressive strength) of 1.5 tons per square foot (tsf) at a moisture content 20 percent. Sandy Loam materials were found below the pavement sections at Cores 2 and 3.

5.2 Roadway Borings (B-1 & B-2)

Borings 1 and 2 were located approximately 300 feet behind the existing Franklinville Road bridge abutments, taken along the edge of pavement. They revealed 6 to 7 inches bituminous concrete, overlying approximately 8 to 9 inches granular base materials. The pavement thicknesses were estimated from the disturbed sides of the augered boreholes and should be considered approximate; Cores 1-3 were taken in order to provide more accurate measurements of the asphalt pavement.

Stiff to very stiff native Clay and Loam materials were found underlying the pavement sections in the B-1 and B-2, extending 3 to 4 feet below existing grade. Samples of cohesive soils exhibited unconfined compressive strengths ranging from 1.0 to 3.0 tsf at water contents of 11 to 16 percent.



Sand and Sandy Loam materials were otherwise found extending to boring completion depths. These granular and intermediate materials were in a wet to saturated condition. Free water was initially encountered at approximately 4 feet below existing grade in Borings 1 and 2. Upon completion of drilling operations the water levels dropped 1 to 2 feet of initial readings.

5.3 Structure Borings (SB-1, SB-2 & SB-3)

Structure Boring 1 was drilled at the northeast corner of the existing bridge prior to the new bridge location having been shifted south. Structure Boring 2 was drilled near the northwest corner of the new bridge and SB-3 approximately 45' south of the southeast corner of the new bridge. Surficial topsoil materials (native and/or Fill) was 12 to 18 inches thick at SB-1 and SB-2, respectively. Structure Boring 3 was drilled on the shoulder of the road revealing about 3 inches crushed stone.

Clay Fill materials were found underlying the gravel shoulder at SB-3, extending approximately 3 feet below existing grade. The sample of Clay Fill had an unconfined compressive strength of 1.0 tsf at a water content 18 percent. Sandy Loam Fill materials were found below the sandy topsoil layer in SB-2, extending about 5 feet deep. These intermediate materials were in a relatively loose condition, with SPT N values of 5 to 6 blow per foot (bpf).

Soft Clay, Clay Loam and Loam materials were found below the topsoil layer and/or Fill materials in SB-1 and SB-3, extending on the order of 5½ below existing grade. They exhibited unconfined compressive strengths of 0.4 to 0.6 tsf at water contents of 20 in SB-3 and up to 39 percent in SB-1.

Loose to dense Sand, Sand/Gravel, Sandy Loam and Silty Loam materials otherwise predominated in SB-1, SB-2 and SB-3, extending to completion depths. The granular and intermediate materials had SPT N-values typically ranging from 10 to 60 bpf, being as low as 4 bpf in the upper 15 feet at SB-1 and SB-2. These materials were in a wet to saturated condition below Elevation 829.0.

Free water was initially encountered at between 2 to 8 feet below existing grade (approximate Elevation 827 to 829). Upon completion of drilling operations, the water level in SB-2 had remained constant and dropped 2 feet of initial readings in SB-3. Drilling mud was introduced into SB-1 during the drilling, making subsequent water level readings meaningless.



5.4 Scour Borings (SC-1 & SC-2)

Surficial topsoil Fill was 14 to 18 inches thick at SC-1 and SC-2. Sand and Sandy Loam Fill materials were found below the topsoil layer in SC-1 and SC-2, extending approximately 3 and 8 feet below existing grade, respectively. These intermediate materials were in a relatively loose condition, with SPT N values in the range of 3 to 6 bpf.

Loose to firm native Sand materials otherwise predominated in the borings, extending to completion depths at 20 feet. These intermediate materials had SPT N-values ranging from 4 to 15 bpf. Free water was initially encountered at between 2 to 3 feet below existing grade (approximate Elevation 829 to 831). Upon completion of drilling operations, the borehole caved in at about 2 feet below existing grade.

5.4 Bridge Deck Core for Asbestos Determination (C-101 & C-102)

Two (4) bridge deck cores were taken along the existing Franklinville bridge crossing Kishwaukee Tributary. They revealed on the order of 8 inches of bituminous concrete overlying the P.C. concrete bridge deck. The core samples were analyzed in accordance with criteria outlined in BDE Procedure Memorandum 26-02A. They broke down the core by using the Gravimetric Reduction Method to release any potential asbestos fibers. The material was then analyzed by using Polarized Light Microscopy (PLM) to determine if asbestos fibers were present. Appended to this report is a copy of their test results. The test results did not detect any asbestos containing material in the asphalt core samples.

5.5 Additional Laboratory Testing

Two (2) Atterberg limit determinations were performed on Loam materials encountered in the upper 3 feet of B-1 and B-2. These soil types revealed liquid limits usually ranging from 15 to 25, plastic limits from 9 to 11 and plasticity indices from 6 to 10. One (1) loss-on-ignition (LOI) and wet combustion tests were run on a Loam sample from Structure Boring 1. The tests revealed a moderate organic contents of 7.5 and 5.1 percent for the LOI and wet combustion, respectively. These results can also be seen on the Soil Test Data sheet attached.



6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Seismic Considerations

The project site is located in McHenry County, lying approximately 4 miles southwest of the City of Woodstock. The Spectral Acceleration values are expressed as fraction of gravity based on 7 percent probability of exceedance in 75 years. In accordance with Appendix 3.15.A of the IDOT Bridge Manual and the LRFD Code, following is a summary of seismic information:

Seismic Performance Zone (SPZ): 1

Design Spectural Acceleration at 1.0 sec (S_{D1}): 0.079 Design Spectural Acceleration at 0.2 sec (S_{DS}): 0.136

Soil Site Class: D

Based on the site stratigraphy, the relatively low seismic design loads will not have a significant impact on geotechnical issues such as slope stability, liquefaction, settlement or bearing capacity.

6.2 Scour Potential

The bottom of the new pile caps for the abutments on the north and south sides of the new creek location are currently set at approximate Elevations 830. The replacement bridge drawing provided on July 22, 2013 shows bottom of the new streambed at Elevation 827.55. Borings SC-1 and SC-2 were drilled on the east and west sides of the proposed bridge, respectively. The ground surface at the borings ranged from Elevation 831.7 to 832.8. Therefore the new stream bed will be about 4 to 5 feet below existing grade.

Loose Sand and/or Sandy Loam materials were encountered at the new streambed elevation in the borings, with loose Sand materials otherwise extended 20+ feet below existing grade. It is understood that the abutments will be protected against scour with rip-rap stone. Grain-size analyses were performed on two representative samples from both SC-1 and SC-2, with D50 particle sizes summarized in the following table.



_	Sample	Location	D50	Deil Oleasification	
Boring	Depth (Ft)	Elevation	Particle Size	Soil Classification	
	3.5 - 5.0	826.7 - 828.2	0,25 mm	Silty Sand A-2-4	
SC-1	8.5 - 10.0	821.7 - 823.2	0.22 mm	Silty Sand A-2-4	
	3.5 - 5.0	827.8 - 829.3	0.18 mm	Silty Sand A-2-4	
SC-2	11.0 - 12.5	820.3 - 821.8	0.19 mm	Silty Sand A-2-4	

6.3 Scour Analysis

The most recent scour analysis results performed by Willis Burke Kelsey Associates, Ltd were provided to TSC on August 19, 2013. Summarized in the following table are the scour elevations during a 100 year storm event, which was comprised of contraction scour and local scour added together.

Freq. Year	Freq. Year North Abutment		South Abutment	
400	Elevation	Elevation	Elevation	
100	821.5	820.25	811.75	

It is understood that the proposed bridge design is to include placement of large rip-rap adjacent to the new abutments for scour protection. Therefore, the estimated pile lengths at the abutments do not take scour in to account. However, the estimated pile lengths for the center pier should take into account the scour elevation for a 100 year storm event.

6.4 Pile Foundations

The new bridge will consist of a two-span structure with a center pier and integral type abutments. The bridge deck will have an overall length of 64'-8" back to back of abutments and a width of 32' out to out. The new bridge will be widened to accommodate two (2) 12' traffic lanes and 4' shoulders. The bridge approach slabs will consist of 30-foot long sections, with one side supported by the abutment on either end of the bridge. It is understood that the new bridge substructure units will be supported by driven pile type foundations.



The bridge abutments and center pier are to be supported by metal shell (MS) piles or steel H-piles. Seven (7) pile sections have been evaluated in connection with them, i.e. HP 12x63, 12x84, 14x73, 14x89, 12" diameter MS and 14" diameter MS, with various wall thicknesses. The following table provides the maximum Nominal Required Bearing (R_N) and maximum Factor Resistence Available (R_F) for each of the different piles.

Pile Designation	Maximum Nominal Required Bearing (kips)	Maximum Factored Resistance Available (kips) *		
Metal Shell 12"	355	195		
Metal Shell 14" φ w/ 0.25" walls	416	228		
Metal Shell 14" ϕ w/ 0.312" walls	516	283		
Steel HP 12x63	497	273		
Steel HP 14x73	578	317		
Steel HP 12x84	664	365		
Steel HP 14x89	705	387		

* Factored Resistance Available computed using a geotechnical resistance factor of 0.55 (AGMU Memo 10.2); no reduction taken for scour, downdrag or liquefaction.

The estimated pile lengths for the bridge abutments and center pier are summarized in the following table. Seven (7) typical pile sections have been evaluated for seven (7) typical Nominal Required Bearing (R_N) values. They have been prepared in connection with Design Guide 3.10.1, LRFD Geotechnical Pile Design Procedure and AGMU Memo 10.2 (Geotechnical Pile Design).



North Abutment (Structure Boring 2)

	Nominal Required Bearing - R _N (kips)							
	180	270	300	360	390	420	450	
Pile Desig	nation	F	actored	Resista	nce Ava	ilable - F	R _f (kips)	*
		99	148	165	198	214	231	247
Metal Shell	Depth (ft)**	25	35	38	NIA	NΙΛ	NΙΔ	NA
12" φ w/ 0.25" walls	Elevation**	804	794	791	NA	NA	NA	IVA
Metal Shell	Depth (ft)**	23	31	32	37 39		NΙΔ	
14" φ w/ 0.25" walls	Elevation**	806	798	797	792	790	NA	NA
Metal Shell	Depth (ft)**	23	31	32	37	39	41	42
14" φ w/ 0.312" walls	Elevation**	806	798	797	792	790	788	787
110.40.00	Depth (ft)**	66			#	#	#	#
HP 12x63	Elevation**	763	#	#	#	#		#
115 40 04	Depth (ft)**	65	 #	#	#	#	#	#
HP 12x84	Elevation**	764] #	#	#			#
LID 4470	Depth (ft)**	59	#	#	#	#	#	#
HP 14x73	Elevation**	770] #	#	#	#	#	#
HP 44.00	Depth (ft)**	57		4	44	# #	#	44
HP 14x89	Elevation**	772	#	#	#			#

^{*} Factored Resistance Available was computed using a geotechnical resistance factor of 0.55.

NA Nominal Required Bearing exceeds maximum nominal required bearing for the pile.

^{**} Depth/Elevation for estimated pile length includes 2.0 feet embedment into the abutment pile cap, being rounded to the nearest foot.

[#] Borings were not extended deep enough to estimate HP pile length.



South Abutment (Structure Boring 3)

	Nominal Required Bearing - R _N (kips)							
	180	270	300	360	390	420	450	
Pile Desigr	ation	Factored Resistance Available - R _F (kips)*						
		99	148	165	198	214	231	247
Metal Shell	Depth (ft)**	25	29	34	NA	NA	NIA	NA
12" φ w/ 0.25" walls	Elevation**	804	800	795	INA	INA	NA	. NA
Metal Shell	Depth (ft)**	19	25	27	30	30 37	NIA	N 1 A
14" φ w/ 0.25" walls	Elevation**	810	804	802	799	792	NA	NA
Metal Shell	Depth (ft)**	19	25	27	30	37	38	38
14" φ w/ 0.312" walls	Elevation**	810	804	802	799	792	791	791
LID 40C0	Depth (ft)**	51	62	66	#	#	#	#
HP 12x63	Elevation**	778	767	763	#	#		#
115.40.04	Depth (ft)**	50	64	66	#	#	#	#
HP 12x84	Elevation**	779	765	763	#	#	#	++
UD 44.70	Depth (ft)**	48	59	63	67		т	44
HP 14x73	Elevation**	781	770	766	762	#	#	#
LID 44.00	Depth (ft)**	47	58	63	66	ш	44	#
HP 14x89	Elevation**	782	771	766	763	#	#	#

^{*} Factored Resistance Available was computed using a geotechnical resistance factor of 0.55.

NA Nominal Required Bearing exceeds maximum nominal required bearing for the pile.

^{**} Depth/Elevation for estimated pile length includes 2.0 feet embedment into the abutment pile cap, being rounded to the nearest foot.

[#] Borings were not extended deep enough to estimate HP pile length.



Center Pier (Structure Boring 2)

Pile Designation		Nominal Required Bearing - R _N (kips)							
		180	270	300	360	390	420	450	
Metal Shell	Factored Resistance Available - R _F (kips)*	90	139	156					
12" \(\psi \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Depth (ft)**	26	36	39	NA	NA	NA	NA	
	Elevation**	803	793	790					
	Factored Resistance Available - R _F (kips)*	89	138	155	188	204			
Metal Shell 14" ф w/ 0.25" walls	Depth (ft)**	25	32	34	38	40	NA	NA	
T	Elevation**	804	797	795	791	789			
Metal Shell	Factored Resistance Available - R _F (kips)*	89	138	155	188	204	221	237	
14" ¢ w/ 0.312" walls	Depth (ft)**	25	32	34	38	40	42	43	
	Elevation**	804	797	795	791	789	787	786	
	Factored Resistance Available - R _F (kips)*	97		#	#	#	#		
HP 12x63	Depth (ft)**	68	#					#	
	Elevation**	761							
	Factored Resistance Available - R _F (kips)*	97				#			
HP 12x84	Depth (ft)**	67	#	#	#		#	#	
	Elevation**	762							
	Factored Resistance Available - R _r (kips)*	96							
HP 14x73	Depth (ft)**	61	#	#	#	#	#	#	
	Elevation**	768							
	Factored Resistance Available - R _F (kips)*	96							
HP 14x89	Depth (ft)**	59] #	#	#	#	#	#	
	Elevation**	770							

Factored Resistance Available was computed using a geotechnical resistance factor of 0.55 and also takes scour in to account.



- ** Depth/Elevation for estimated pile length includes 1.0 foot embedment into the center pier pile cap, being rounded to the nearest foot.
- # Borings were not extended deep enough to estimate HP pile length.
- NA Nominal Required Bearing exceeds maximum nominal required bearing for the pile.

Based on the estimated pile lengths provided above metal shell piles will likely be the most economical option. The above estimated pile lengths are being provided for contract estimates. They were estimated using the Modified IDOT Static Method and the soil revealed by the borings. It should be noted that piles not driven to rock are more difficult to predict. The actual pile lengths should be determined during installation based on resistance to driving criteria. It should also be noted that SB-3 was drilled approximately 45' south of the south abutment and SB-2 is approximately 40' north of the center pier. Therefore the soils and pile lengths at the south abutment and center pier will likely vary. It is recommended that at least one test pile be driven at each substructure prior to ordering piles for production driving. The test piles are normally driven to 110 percent of the Nominal Required Bearing shown on the plans.

The driving equipment should be selected so that the piles can be driven to the required capacity (Nominal Required Bearing) at an adequate final penetration resistance and without inducing pile stresses that exceed allowable values. Once the driving equipment has been selected, a wave equation analysis may be performed to further evaluate pile driveability which is to ultimately be confirmed during the driving of test piles. Dynamic pile testing may also be performed during test pile driving operations to more accurately assess the capacity being achieved by the piles (nominal driven bearing) and to establish the driving criteria.

6.5 Subgrade Support Values for Pavement Design

No specific information is available on pavement reconstruction and widening at this time. However, uppermost subgrade soils primarily consisted of Clay, Loam and Sandy Loam materials. Work performed for this study did not include performing any IBR tests on representative subgrade samples. However, for a Modified AASHTO type pavement design, a nominal IBR value of no greater than 3.0 is recommended.



Included in the Appendix is a Subgrade Support Rating (SSR) chart where two (2) representative soil samples obtained from the upper subgrade from Borings 1 and 2 have been plotted. The samples consisted of Loam materials plotting within the "Poor" rating. Based on these results it is recommended that a mechanistic pavement design be based on a SSR rating of "Poor" for the entire length of Franklinville Road.

6.6 Topsoil Stripping

Normal topsoil stripping of all vegetation and root zone materials will be required for widening beyond existing shoulder areas along Franklinville Road, prior to placement of any Fill materials. While the borings were taken on the existing roadway, for estimation of contract quantities a nominal root zone stripping depth on the order of 12 inches is typically used.

6.7 Guidelines for Subgrade Remediation

Once initial stripping operations have been completed, exposed subgrade soils should be tested with a Cone Penetrometer in accordance with the IDOT Subgrade Stability Manual to determine the remedial treatment depths. Observations of heavy construction vehicles on subgrade areas will help to delineate areas which have deficient strength.

All earthwork, new embankment construction and subgrade preparation should be in accordance with Division 200 and 300 of the IDOT Standard Specifications. Compaction for subgrade materials should be to at least 95 percent Standard Proctor density (AASHTO T-99). Remedial work for unstable subgrade should consist of discing, aerating, and recompacting exposed subgrade soils, as provided for in Section 301.04 of the 2013 IDOT Standard Specifications. Depending upon grading requirements and specific site conditions, solutions to a persistent pumping problem may include use of geotextile stabilization fabric or geogrid product, removal of unstable soils and replacement with granular backfill, construction of trench drains or a combination thereof.

The subgrade stability will be influenced by such factors as surface drainage provided by the Contractor as well as the prevailing temperature and precipitation experienced during construction. The amount of trafficking and subgrade disturbance created by heavy construction vehicles will also have an influence on subgrade stability. The Contractor should try to make full use of inlets or ditches



in order to maintain positive drainage for subgrade areas. Temporary drainage ditches or pumping from depressional areas should be provided as needed during construction in order to prevent ponded water from affecting the stability of the roadway.

Aggregate Fill may be required for bridging over weak subgrade soils which demonstrate persistent stability problems. Aggregate materials needed beneath the Improved Aggregate Subgrade layer should consist of IDOT Aggregate Subgrade Improvement materials (CA-2, CA-6, CA-10, or CS-01) in accordance with Article 1004.01 of the IDOT Standard Specifications. Please note that the Aggregate Subgrade Improvement materials are to be placed beneath the aggregate base course and are to be used only as a bridging layer over soft, pumpy subgrade or for replacement of unsuitable soils. The use of geotextile fabric can help to reduce the depth of undercutting and aggregate Fill required.

A Shrinkage Factor on the order of 15 percent should be used to correlate the volume of earth borrow materials for use as new earth embankment or subgrade Fill. Unsuitable organic soils should not be included as suitable earth Fill.

6.8 Estimated Quantities for Stripping and Aggregate Fill

Summarized in the following table is the existing grade at the boring locations as well as the depth of cut to proposed subgrade elevation, (estimated at about 2 feet below top of pavement, including 12 inches Aggregate Subgrade). The soil condition at the subgrade level at each boring location is also identified, as well as the estimated quantities of undercut/Aggregate Subgrade Improvement materials below proposed pavement section that is recommended. Note that the Aggregate Subgrade Improvement materials are to be placed beneath the granular subbase layer and are to be used only as a bridging layer over soft, pumpy subgrade or for replacement of unsuitable black organic soils.



Estimated Quantities for Undercutting and Aggregate Subgrade Improvement Replacement Fill

Boring No.	Location	Existing Grade	Cut Depth to Subgrade (ft)*	Estimated Undercut	Soil Conditions at Subgrade Level		
Franklinville Road							
B-1	Station 91+80	836.1	C 2.0	12"	Stiff Loam, moist Qu = 1.05 tsf WC = 16%		
B-2	Station 85+92	830.8	C 2.0	NR	Very Stiff Loam, moist Qu = 3.0 tsf WC = 11%		

- * Cut (C) estimated at about 2 feet below top of pavement, including 12 inches Aggregate Subgrade.
- NR Undercutting and/or Aggregate Subgrade Improvement materials are not required at boring location.

The need for undercutting unstable subgrade and Aggregate Subgrade Improvement should be based on direct observations made during construction once the subgrade soils are exposed and proof-rolling or cone penetrometer testing procedures can be conducted. All quantities of Aggregate Subgrade Improvement materials not required during construction should be deleted from the construction costs. Normal IDOT procedure requires cone penetrometer testing immediately prior to undercutting subgrade in order to document the need for the undercut and replacement Fill.

6.9 Underdrain Placement

Underdrains are not specifically recommended for the reconstruction/widening of Franklinville Road. However, Consideration should be given to the installation of longitudinal underdrains in order to provide drainage to the aggregate subgrade layer for the pavement section. They should consist of longitudinal underdrains which are placed at the outside edges of the proposed roadway widening, extending 50 to 100-foot in both directions of outlets. Wherever possible, it is best to install transverse underdrains at the low points of undercut areas where an open-graded coarse aggregate backfill is placed, such as the Aggregate Subgrade Improvement materials or otherwise at the low points of the



roadway profile. They should be installed in accordance with Check Sheet 19 of the IDOT Recurring Special Provisions. All underdrains should outlet into ditches or storm sewers in such manner as to allow positive drainage and should be installed to a depth of at least 30 inches below pavement grade.

7.0 CLOSURE

It is recommended that full-time technician services be provided by Testing Service Corporation personnel during construction, so that the soils at undercut and subgrade levels can be verified and tested. In addition pavement construction should be closely checked and monitored for compliance with the recommended procedures and specifications.

The analysis and recommendations submitted in this report are based upon the data obtained from the three (3) structure borings, two (2) scour borings, two (2) roadway borings and three (3) pavement cores performed at the locations indicated on the Boring Location Plan. This report does not reflect any variations which may occur between these boring or cores or elsewhere on the site, the nature and extent of which may not become evident until during the course of construction. If variations are then identified, recommendations contained in this report should be re-evaluated after performing on-site observations.

We are available to review this report with you at your convenience.

Timothy R. Peceniak, P.E. Project Engineer Registered Professional Engineer Illinois No. 062-061269 Charles R. DuBose, P.E. Vice President

IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING REPORT

As the client of a consulting geotechnical engineer, you should know that site subsurface conditions cause more construction problems than any other factor. ASFE/The Association of Engineering Firms Practicing in the Geosciences offers the following suggestions and observations to help you manage your risks.

A GEOTECHNICAL ENGINEERING REPORT IS BASED ON A UNIQUE SET OF PROJECT-SPECIFIC FACTORS

Your geotechnical engineering report is based on a subsurface exploration plan designed to consider a unique set of project-specific factors. These factors typically include: the general nature of the structure involved, its size, and configuration; the location of the structure on the site; other improvements, such as access roads, parking lots, and underground utilities; and the additional risk created by scope-of-service limitations imposed by the client. To help avoid costly problems, ask your geotechnical engineer to evaluate how factors that change subsequent to the date of the report may affect the report's recommendations.

Unless your geotechnical engineer indicates otherwise, do not use your geotechnical engineering report:

- when the nature of the proposed structure is changed, for example, if an office building will be erected instead of a parking garage, or a refrigerated warehouse will be built instead of an unrefrigerated one;
- when the size, elevation, or configuration of the proposed structure is altered;
- when the location or orientation of the proposed structure is modified;
- · when there is a change of ownership; or
- · for application to an adjacent site.

Geotechnical engineers cannot accept responsibility for problems that may occur if they are not consulted after factors considered in their report's development have changed.

SUBSURFACE CONDITIONS CAN CHANGE

A geotechnical engineering report is based on conditions that existed at the time of subsurface exploration. Do not base construction decisions on a geotechnical engineering report whose adequacy may have been affected by time. Speak with your geotechnical consultant to learn if additional tests are advisable before construction starts. Note, too, that additional tests may be required when subsurface conditions are affected by construction operations at or adjacent to the site, or by natural events such as floods, earthquakes, or ground water fluctuations. Keep your geotechnical consultant apprised of any such events.

MOST GEOTECHNICAL FINDINGS ARE PROFESSIONAL JUDGMENTS

Site exploration identifies actual subsurface conditions only at those points where samples are taken. The data were extrapolated by your geotechnical engineer who then applied judgment to render an opinion about overall subsurface conditions. The actual interface between materials may be far more gradual or abrupt than your report indicates. Actual conditions in areas not sampled may differ from those predicted in your report. While nothing can be done to prevent such situations, you and your geotechnical engineer can work together to help minimize their impact. Retaining your geotechnical engineer to observe construction can be particularly beneficial in this respect.

A REPORT'S RECOMMENDATIONS CAN ONLY BE PRELIMINARY

The construction recommendations included in your geotechnical engineer's report are preliminary, because they must be based on the assumption that conditions revealed through selective exploratory sampling are indicative of actual conditions throughout a site. Because actual subsurface conditions can be discerned only during earthwork, you should retain your geotechnical engineer to observe actual conditions and to finalize recommendations. Only the geotechnical engineer who prepared the report is fully familiar with the background information needed to determine whether or not the report's recommendations are valid and whether or not the contractor is abiding by applicable recommendations. The geotechnical engineer who developed your report cannot assume responsibility or liability for the adequacy of the report's recommendations if another party is retained to observe construction.

GEOTECHNICAL SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES AND PERSONS

Consulting geotechnical engineers prepare reports to meet the specific needs of specific individuals. A report prepared for a civil engineer may not be adequate for a construction contractor or even another civil engineer. Unless indicated otherwise, your geotechnical engineer prepared your report expressly for you and expressly for purposes you indicated. No one other than you should apply this report for its intended purpose without first conferring with the geotechnical engineer. No party should apply this report for any purpose other than that originally contemplated without first conferring with the geotechnical engineer.

GEOENVIRONMENTAL CONCERNS ARE NOT AT ISSUE

Your geotechnical engineering report is not likely to relate any findings, conclusions, or recommendations

about the potential for hazardous materials existing at the site. The equipment, techniques; and personnel used to perform a geoenvironmental exploration differ substantially from those applied in geotechnical engineering. Contamination can create major risks. If you have no information about the potential for your site being contaminated, you are advised to speak with your geotechnical consultant for information relating to geoenvironmental issues.

A GEOTECHNICAL ENGINEERING REPORT IS SUBJECT TO MISINTERPRETATION

Costly problems can occur when other design professionals develop their plans based on misinterpretations of a geotechnical engineering report. To help avoid misinterpretations, retain your geotechnical engineer to work with other project design professionals who are affected by the geotechnical report. Have your geotechnical engineer explain report implications to design professionals affected by them, and then review those design professionals' plans and specifications to see how they have incorporated geotechnical factors. Although certain other design professionals may be familiar with geotechnical concerns, none knows as much about them as a competent geotechnical engineer.

BORING LOGS SHOULD NOT BE SEPARATED FROM THE REPORT

Geotechnical engineers develop final boring logs based upon their interpretation of the field logs (assembled by site personnel) and laboratory evaluation of field samples. Geotechnical engineers customarily include only final boring logs in their reports. Final boring logs should not under any circumstances be redrawn for inclusion in architectural or other design drawings, because drafters may commit errors or omissions in the transfer process. Although photographic reproduction eliminates this problem, it does nothing to minimize the possibility of contractors misinterpreting the logs during bid preparation. When this occurs, delays, disputes, and unanticipated costs are the all-too-frequent result.

To minimize the likelihood of boring log misinterpretation, give contractors ready access to the complete geotechnical engineering report prepared or authorized for their use. (If access is provided only to the report prepared for you, you should advise contractors of the report's limitations, assuming that a contractor was not one of the specific persons for whom the report was prepared and that developing construction cost esti-

mates was not one of the specific purposes for which it was prepared. In other words, while a contractor may gain important knowledge from a report prepared for another party, the contractor would be well-advised to discuss the report with your geotechnical engineer and to perform the additional or alternative work that the contractor believes may be needed to obtain the data specifically appropriate for construction cost estimating purposes.) Some clients believe that it is unwise or unnecessary to give contractors access to their geotechnical engineering reports because they hold the mistaken impression that simply disclaiming responsibility for the accuracy of subsurface information always insulates them from attendant liability. Providing the best available information to contractors helps prevent costly construction problems. It also helps reduce the adversarial attitudes that can aggravate problems to disproportionate scale.

READ RESPONSIBILITY CLAUSES CLOSELY

Because geotechnical engineering is based extensively on judgment and opinion, it is far less exact than other design disciplines. This situation has resulted in wholly unwarranted claims being lodged against geotechnical engineers. To help prevent this problem, geotechnical engineers have developed a number of clauses for use in their contracts, reports, and other documents. Responsibility clauses are not exculpatory clauses designed to transfer geotechnical engineers' liabilities to other parties. Instead, they are definitive clauses that identify where geotechnical engineers' responsibilities begin and end. Their use helps all parties involved recognize their individual responsibilities and take appropriate action. Some of these definitive clauses are likely to appear in your geotechnical engineering report. Read them closely. Your geotechnical engineer will be pleased to give full and frank answers to any questions.

RELY ON THE GEOTECHNICAL ENGINEER FOR ADDITIONAL ASSISTANCE

Most ASFE-member consulting geotechnical engineering firms are familiar with a variety of techniques and approaches that can be used to help reduce risks for all parties to a construction project, from design through construction. Speak with your geotechnical engineer not only about geotechnical issues, but others as well, to learn about approaches that may be of genuine benefit. You may also wish to obtain certain ASFE publications. Contact a member of ASFE or ASFE for a complimentary directory of ASFE publications.



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HGP0294



TESTING SERVICE CORPORATION

- 1. PARTIES AND SCOPE OF WORK: If Client is ordering the services on behalf of another, Client represents and warrants that Client is the duly authorized agent of said party for the purpose of ordering and directing said services, and in such case the term "Client" shall also include the principal for whom the services are being performed. Prices quoted and charged by TSC for its services are predicated on the conditions and the allocations of risks and obligations expressed in these General Conditions. Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of the services ordered by Client are adequate and sufficient for Client's intended purpose. Client shall communicate these General Conditions to each and every third party to whom the Client transmits any report prepared by TSC. Unless otherwise expressly assumed in writing, TSC shall have no duty to any third party, and in no event shall TSC have any duty or obligation other than those duties and obligations expressly set forth in this Agreement. Ordering services from TSC shall constitute acceptance of these General Conditions.
- 2. SCHEDULING OF SERVICES: The services set forth in this Agreement will be accomplished in a timely and workmanlike manner. If TSC is required to delay any part of its services to accommodate the requests or requirements of Client, regulatory agencies, or third parties, or due to any cause beyond its reasonable control, Client agrees to pay such additional charges, if any, as may be applicable.
- 3. ACCESS TO SITE: TSC shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as a result of its services or the use of its equipment however, TSC has not included in its fee the cost of restoration of damage which may occur. If Client desires or requires TSC to restore the site to its former condition, TSC will, upon written request, perform such additional work as is necessary to do so and Client agrees to pay to TSC the cost thereof plus TSC's normal markup for overhead and profit.
- 4. CLIENT'S DUTY TO NOTIFY ENGINEER: Client represents and warrants that Client has advised TSC of any known or suspected hazardous materials, utility lines and underground structures at any site at which TSC is to perform services under this agreement.
- 5. DISCOVERY OF POLLUTANTS: TSC's services shall not include investigation for hazardous materials as defined by the Resource Conservation Recovery Act, 42 U.S.C.§ 6901, et, seq., as amended ("RCRA") or by any state or Federal statute or regulation. In the event that hazardous materials are discovered and identified by TSC, TSC's sole duty shall be to notify Client.
- 6. MONITORING: If this Agreement includes testing construction materials or observing any aspect of construction of improvements. Client's construction personnel will verify that the pad is properly located and sized to meet Client's projected building loads. Client shall cause all tests and inspections of the site, materials and work to be timely and properly performed in accordance with the plans, specifications, contract documents, and TSC's recommendations. No claims for loss, damage or injury shall be brought against TSC unless all tests and inspections have been so performed and unless TSC's recommendations have been followed.

TSC's services shall not include determining or implementing the means, methods, techniques or procedures of work done by the contractor(s) being monitored or whose work is being tested. TSC's services shall not include the authority to accept or reject work or to in any manner supervise the work of any contractor. TSC's services or failure to perform same shall

not in any way operate or excuse any contractor from the performance of its work in accordance with its contract. "Contractor" as used herein shall înclude subcontractors,

suppliers, architects, engineers and construction managers.

Information obtained from borings, observations and analyses of sample materials shall be reported in formats considered appropriate by TSC unless directed otherwise by Client. Such information is considered evidence, but any inference or conclusion based thereon is, necessarily, an opinion also based on engineering judgment and shall not be construed as a representation of fact. Subsurface conditions may not be uniform throughout an entire site and ground water levels may fluctuate due to climatic and other variations. Construction materials may vary from the samples taken. Unless otherwise agreed in writing, the procedures employed by TSC are not designed to detect intentional concealment or misrepresentation of facts by others.

- 7. SAMPLE DISPOSAL: Unless otherwise agreed in writing, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed sixty (60) days after submission of TSC's report.
- 8. TERMINATION: This Agreement may be terminated by either party upon seven days prior written notice. In the event of termination, TSC shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses.
- 9. PAYMENT: Client shall be invoiced periodically for services performed. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts involced and not paid or objected to in writing for valid cause within sixty (60) days at the rate of twelve (12%) per annum (or the maximum interest rate permitted by applicable law, whichever is the lesser) until paid and TSC's costs of collection of such accounts, including court costs and reasonable attorney's fees.
- 10. WARRANTY: TSC's professional services will be performed, its findings obtained and its reports prepared in accordance with these General Conditions and with generally accepted principles and practices. In performing its professional services, TSC will use that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. In performing physical work in pursuit of its professional services, TSC will use that degree of care and skill ordinarily used under similar circumstances. This warranty is in lieu of all other warranties or representations, either express or implied. Statements made in TSC reports are opinions based upon engineering judgment and are not to be construed as representations of fact.

Should TSC or any of its employees be found to have been negligent in performing professional services or to have made and breached any express or implied warranty, representation or contract, Client, all parties claiming through Client and all parties claiming to have in any way relied upon TSC's services or work agree that the maximum aggregate amount of damages for which TSC, its officers, employees and agents shall be liable is limited to \$50,000 or the total amount of the fee paid to TSC for its services performed with respect to the project, whichever amount is greater.

In the event Client is unwilling or unable to limit the damages for which TSC may be liable in accordance with the provisions set forth in the preceding paragraph, upon written request of Client received within five days of Client's acceptance of TSC's proposal together with payment of an additional fee in the amount of 5% of TSC's estimated cost for its services (to be adjusted to 5% of the amount actually billed by TSC for its services on the project at time of completion), the limit on

Geotechnical and Construction Services

GENERAL CONDITIONS

damages shall be increased to \$500,000 or the amount of TSC's fee, whichever is the greater. This charge is not to be construed as being a charge for insurance of any type, but is increased consideration for the exposure to an award of greater damages.

- 11. INDEMNITY: Subject to the provisions set forth herein, TSC and Client hereby agree to indemnify and hold harmless each other and their respective shareholders, directors, officers, partners, employees, agents, subsidiaries and division (and each of their heirs, successors, and assigns) from any and all claims, demands, liabilities, suits, causes of action, judgments, costs and expenses, including reasonable attorneys' fees, arising, or allegedly arising, from personal injury, including death, property damage, including loss of use thereof, due in any manner to the negligence of either of them or their agents or employees or independent contractors. In the event both TSC and Client are found to be negligent or at fault, then any liability shall be apportioned between them pursuant to their pro rata share of negligence or fault. TSC and Client further agree that their liability to any third party shall, to the extent permitted by law, be several and not joint. The liability of TSC under this provision shall not exceed the policy limits of insurance carried by TSC. Neither TSC nor Client shall be bound under this indemnity agreement to liability determined in a proceeding in which it did not participate represented by its own independent counsel. The indemnities provided hereunder shall not terminate upon the termination or expiration of this Agreement, but may be modified to the extent of any waiver of subrogation agreed to by TSC and paid for by Client.
- 12. SUBPOENAS: TSC's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay TSC pursuant to TSC's then current fee schedule for any TSC employee(s) subpoenaed by any party as an occurrence witness as a result of TSC's services.
- 13. OTHER AGREEMENTS: TSC shall not be bound by any provision or agreement (i) requiring or providing for arbitration of disputes or controversies arising out of this Agreement or its performance, (ii) wherein TSC waives any rights to a mechanics lien or surety bond claim; (iii) that conditions TSC's right to receive payment for its services upon payment to Client by any third party or (iv) that requires TSC to indemnify any party beyond its own negligence These General Conditions are notice, where required, that TSC shall file a lien whenever necessary to collect past due amounts. This Agreement contains the entire understanding between the parties. Unless expressly accepted by TSC in writing prior to delivery of TSC's services, Client shall not add any conditions or impose conditions which are in conflict with those contained herein, and no such additional or conflicting terms shall be binding upon TSC. The unenforceability or invalidity of any provision or provisions shall not render any other provision or provisions unenforceable or invalid. This Agreement shall be construed and enforced in accordance with the laws of the State of Illinois. In the event of a dispute arising out of or relating to the performance of this Agreement, the breach thereof or TSC's services, the partles agree to try in good faith to settle the dispute by mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent to filing any demand for arbitration, or any petition or complaint with any court. Should litigation be necessary, the parties consent to jurisdiction and venue in an appropriate Illinois State Court in and for the County of DuPage, Wheaton, Illinois or the Federal District Court for the Northern District of Illinois. Paragraph headings are for convenience only and shall not be construed as limiting the meaning of the provisions contained in these General Conditions.

REV 06/05

APPENDIX

PAVEMENT CORE RESULTS (2)

SUBGRADE TEST DATA

SOIL TEST DATA (3)

SOIL DATA SHEETS (4)

SUBGRADE SUPPORT RATING (SSR)

PEDOLOGICAL SOIL MAP (3)

IDH TEXTURAL CLASSIFICATION CHART

AASHTO CLASSIFICATION CHART

UNIFIED CLASSIFICATION CHART

LEGEND FOR BORING LOGS

BORING LOGS (7)

ASBESTOS DETERMINATION CERTIFICATION (2)

BORING LOCATION PLAN



PAVEMENT CORE RESULTS

(Each component of pavement section listed from top down)

Franklinville Road

C-1	Franklin	ville Roa	d - Sta	91+79	7' RT
U-1	i i aitriiii	AIME LICE	iu - Cla.	J1'' IJ.	1 111

- 1.3" Bituminous Surface Course
- 1.7" Bituminous Surface Course
- 1.1" Bituminous Surface Course (Not bonded to underlying lift)
- 0.9" Bituminous Surface Course
- 1.1" Bituminous Surface Course
- 0.9" Chip and Seal
- 7" Total Asphalt Thickness
- 5" Uncrushed Gravel (2" max)
- 6" Crushed Gravel (1" to fine)
- 11" Total Gravel Thickness

C-2 Franklinville Road - Sta. 88+42, 7' LT

- 1.3" Bituminous Surface Course
- 1,3" Bituminous Binder Course
- 1.3" Bituminous Surface Course (Not bonded to underlying lift)
- 1.5" Emulsified Bituminous Concrete
- 1.2" Chip and Seal
- 61/2" Total Asphalt Thickness
- 5" Uncrushed Gravel (2" max)
- 4" Crushed Gravel (1" to fine)
- 9" Total Gravel Thickness

C-3 Franklinville Road - Sta. 86+41, 7' RT

- 1.4" Bituminous Surface Course
- 2.3" Bituminous Binder Course
- 0.9" Bituminous Surface Course
- 1.0" Bituminous Surface Course
- 0.8" Chip and Seal
- 61/2" Total Asphalt Thickness
- 3" Uncrushed Gravel (2" max)
- 8" Crushed Gravel (1" to fine)
- 11" Total Gravel Thickness



Franklinville Bridge

C-101 Franklinville Road - Sta. 89+21, 6' LT

- 1.5" Bituminous Surface Course (Not bonded to underlying lift)
- Bituminous Binder Course 1.0"
- 3.6" **6"** Emulsified Bituminous Concrete (Fractured horizontally)
- **Total Asphalt Thickness**

Over P.C. Concrete (top of bridge deck partially deteriorated)

C-102 Franklinville Road - Sta. 88+98, 8' RT

- 1.5" Bituminous Surface Course
- 1.4" Bituminous Binder Course (Not bonded to underlying lift)
- Emulsified Bituminous Concrete (bottom 1/3 deteriorated) 3.1"
- **Total Asphalt Thickness**

Over P.C. Concrete (bridge deck)



SUBGRADE TEST DATA

TESTING SERVICE CORPORATION

457 EAST GUNDERSEN DR. · CAROL STREAM, ILLINOIS 60188-2492 · FAX: (630) 653-2726 · TEL: (630) 653-3920

Client: Wills Burke Kelsey Associates, Ltd. 116 West Main Street, Suite 201 St. Charles, Illinois 60174 Date Tested
04/08/11
Job Number
L-79,848
Page Number
1 of 1

Project: Structure Geotechnical Report

Bridge Replacement

Franklinville Road over Kishwaukee Tributary

McHenry County, Illinois

		Test	Data
Location	Moisture	Qр	Soil Description
Core 1	19.5	1.5	Stiff brown silty CLAY, little sand and gravel, moist (CL) A-6 CLAY
Core 2	13.6		Brown clayey Sand, trace gravel, moist (SC) A-2-4 SANDY LOAM
Core 3	10.8		Brown and gray clay Sand, little gravel, moist (SC) A-2-4 SANDY LOAM

Depth/Elevation = Depth in Feet below existing grade

Qp = Unconfined compressive strength in tons per square foot based on readings with a calibrated pocket penetrometer

Comments

Subgrade samples taken to approximately 3 feet below top of pavement'

Field Technician	Lab Technician	Reviewed By
J.J.M.	Larry L.	T. Peceniak

TESTING SERVICE CORPORATION 457 East Gundersen Drive Carol Stream, Illinois

CLIENT: Wills Burke Kelsey Associates, Ltd.

116 West Main Street St. Charles, Illinois 60174 TSC Job No. L - 79,848

Page 1 of 3

PROJECT: Franklinville Road over Kishwaukee Tributary

Bridge Replacement McHenry County, Illinois

SOIL TEST DATA

LOCATION	Sta. 88+62, 26' RT	Sta. 88+62, 26' RT	Sta. 88+36, 43' LT	Sta. 88+36, 43' LT
BORING NUMBER	SC-1	SC-1	SC-2	SC-2
SAMPLE NUMBER	2	4	2	5
DEPTH IN FEET	3½ - 5	8½ - 10	3½ - 5	11 - 12½
AASHTO SOIL CLASSIFICATION	A-2-4	A-2-4	A-2-4	A-2-4
UNIFIED SOIL CLASSIFICATION	SM	SM	SM	SM
IDH TEXTURAL CLASSIFICATION	SAND	SAND	SANDY LOAM	SAND
GRADATION - PASSING 1½" SIEVE %	100	100	100	100
GRADATION - PASSING 1" SIEVE %	100	100	100	100
GRADATION - PASSING 3/4" SIEVE %	100	100	100	100
GRADATION - PASSING 3/8" SIEVE %	100	100	100	100
GRADATION - PASSING # 4 SIEVE %	99	100	100	100
GRADATION - PASSING # 10 SIEVE %	97	99	100	100
GRADATION - PASSING # 40 SIEVE %	85	92	99	100
GRADATION - PASSING # 100 SIEVE %	21	29	44	39
GRADATION - PASSING # 200 SIEVE %	13	18	28	14
D ₅₀ PARTICLE SIZE	0.25	0.22	0.18	0.19
GRAVEL %	1	0	0	0
SAND %	87	82	72	86
SILT %	8	11	17	7
CLAY % (<0.002 MM)	5	7	11	7
NATURAL MOISTURE CONTENT %	19.2	17.0	31.1	23.5
LIQUID LIMIT %	-	-		-
PLASTIC LIMIT %	-	<u>-</u>	-	
PLASTICITY INDEX %		_	_	

TESTING SERVICE CORPORATION

457 East Gundersen Drive Carol Stream, Illinois

> TSC Job No. L - 79,848 Page 2 of 3

SOIL TEST DATA

LOCATION		Sta. 89+43, 25' RT	Sta.88+77, 21' LT	Sta. 87+68, 22' RT	Sta. 87+68, 22' RT	Sta. 87+68, 22' RT
BORING NUMBER		SB-1	SB-2	SB-3	\$B-3	\$B-3
SAMPLE NUI	MBER	1	13	6	12	15
DEPTH IN FE	EET	1 - 3½	33½ - 35	13½ - 15	28½ - 30	43½ - 45
AASHTO SO	IL CLASSIFICATION	A-4	A-1-b	A-4	A-2-4	A-3
IDH TEXTUR	AL CLASSIFICATION	LOAM	SAND	SILTY LOAM	SAND	SAND
GRADATION	- PASSING 1½ " SIEVE %	-	100	100	100	100
GRADATION	- PASSING 1" SIEVE %	<u>-</u>	100	100	100	100
GRADATION	- PASSING 3/4" SIEVE %	-	100	100	100	100
GRADATION - PASSING 3/8" SIEVE %		-	99	100	100	100
GRADATION - PASSING #4 SIEVE %		-	91	100	100	99
GRADATION - PASSING # 10 SIEVE %		-	75	100	100	98
GRADATION - PASSING #40 SIEVE %		-	48	99	99	78
GRADATION - PASSING # 100 SIEVE %		_	19	90	33	15
GRADATION - PASSING # 200 SIEVE %		-	18	81	15	7
GRAVEL %		-	9	0	0	1
SAND %		-	73	19	85	92
SILT %		-	12	75	10	5
CLAY % (<0.002 MM)		-	6	6	5	2
LIQUID LIMIT %		•	-	-	-	
PLASTIC LIMIT %		-	-	-	-	-
PLASTICITY INDEX %		-	-	-	-	
NATURAL MOISTURE CONTENT %		38.8	-	20.6	_	-
ORGANIC	L-O-1 %	7.5	-	-	-	
CONTENT	WET COMBUSTION %	5.1	-	_	_	

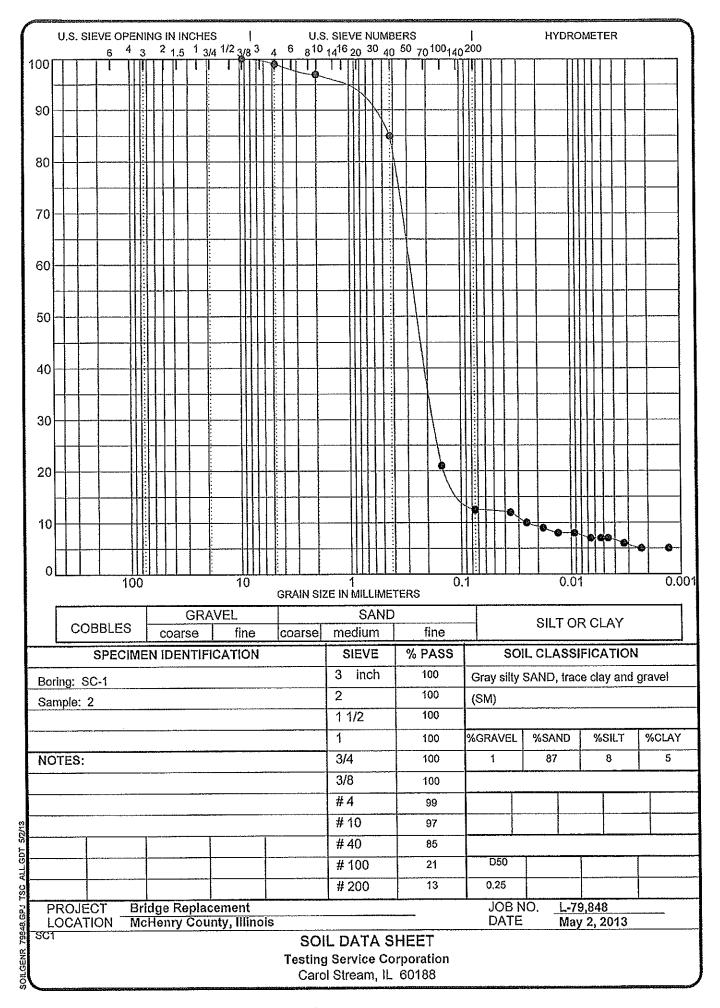
TESTING SERVICE CORPORATION

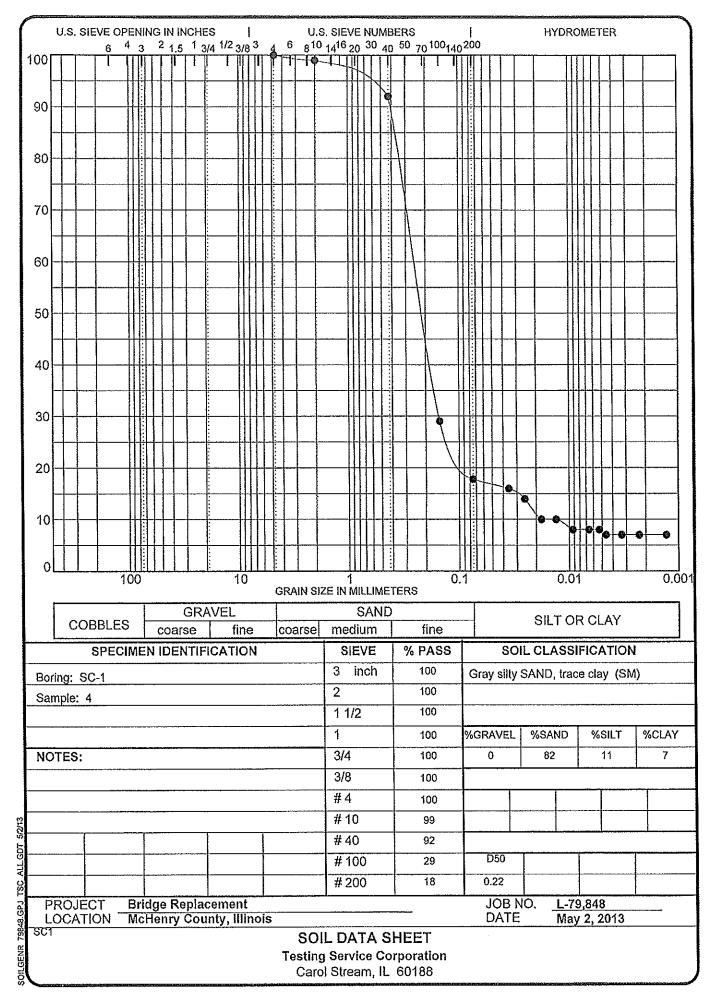
457 East Gundersen Drive Carol Stream, Illinois

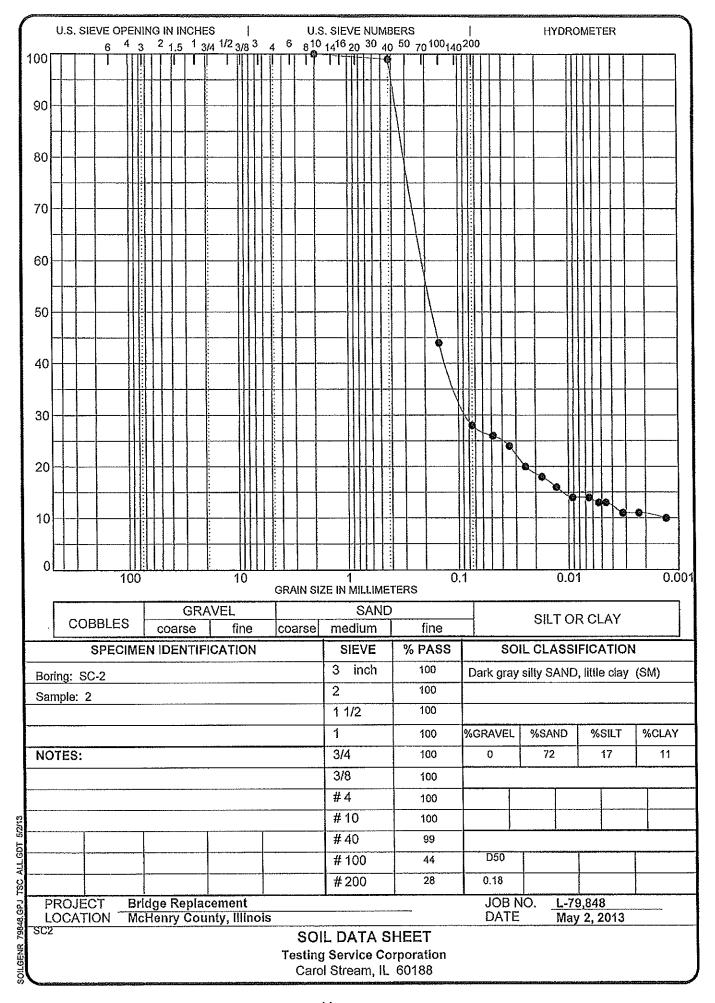
> TSC Job No. L - 79,848 Page 3 of 3

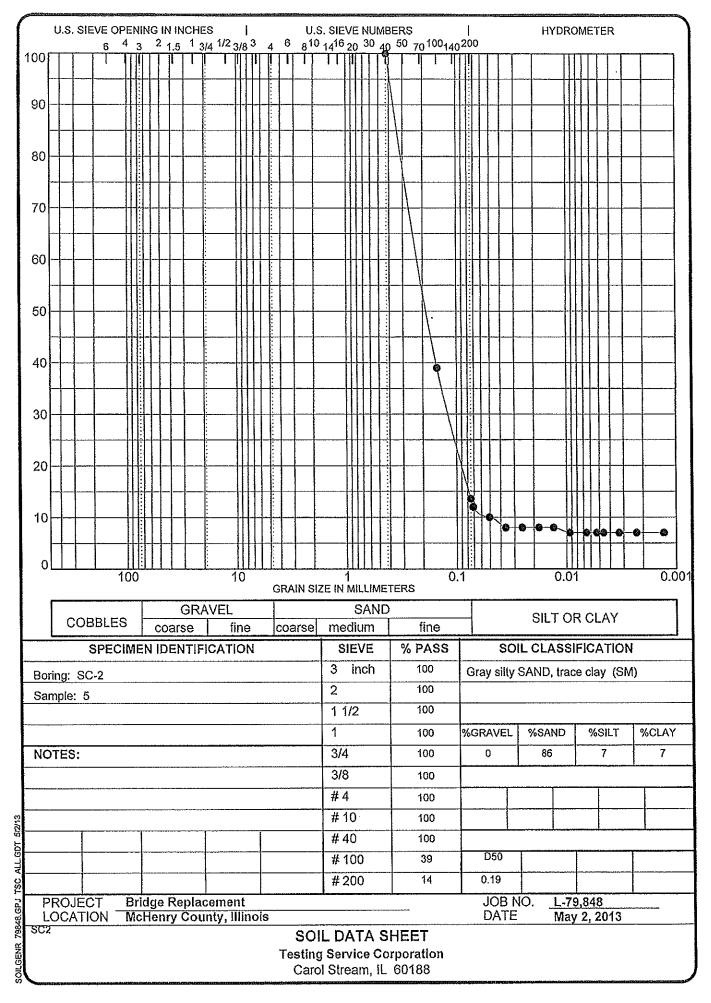
SOIL TEST DATA

LOCATION		Sta. 91+80, 10' LT	Sta. 85+92, 10' RT	
BORING NUMBER		B-1	B-2	
SAMPLE NUMBER		1A	1A	
DEPTH IN FEET		1½ - 3	1½ - 2½	
AASHTO SOIL CLASS	SIFICATION	A-4	A-4	
IDH TEXTURAL CLAS	SSIFICATION	LOAM	LOAM	
GRADATION - PASSI	NG 1½" SIEVE %	100	100	
GRADATION - PASSI	NG 1" SIEVE %	100	100	
GRADATION - PASSI	NG 3/4" SIEVE %	100	100	
GRADATION - PASSING 3/8" SIEVE %		100	99	
GRADATION - PASSI	NG#4 SIEVE%	98	96	
GRADATION - PASSING # 10 SIEVE %		96	86	
GRADATION - PASSING # 40 SIEVE %		81	64	
GRADATION - PASSING # 100 SIEVE %		48	48	
GRADATION - PASSING # 200 SIEVE %		54	51	
GRAVEL %		2	4	
SAND %		44	45	
SILT %		39	41	
CLAY % (<0.002 MM)		15	10	
LIQUID LIMIT %		25	15	
PLASTIC LIMIT %		15	9	
PLASTICITY INDEX %		10	6	
NATURAL MOISTURE CONTENT %		15.6	10.7	
ORGANIC	L-O-I %	-	-	
CONTENT	WET COMBUSTION %	ii e		



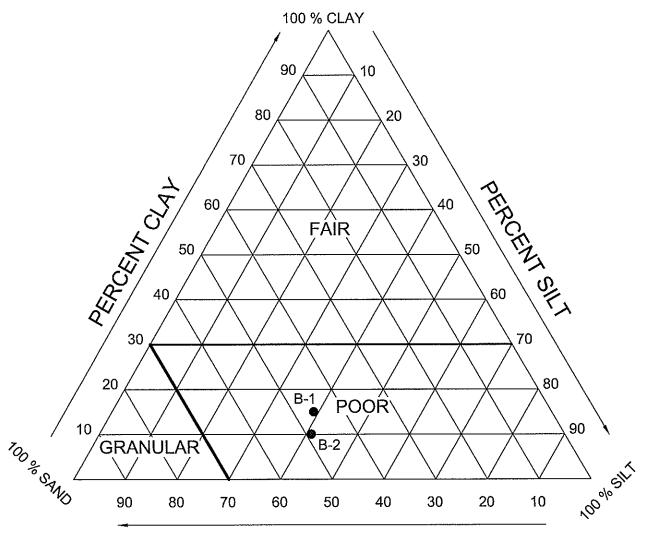






SUBGRADE SUPPORT RATING (SSR)

L-79,848
Bridge Replacement
Franklinville Road over Kishwaukee Tributary
McHenry, Illinois

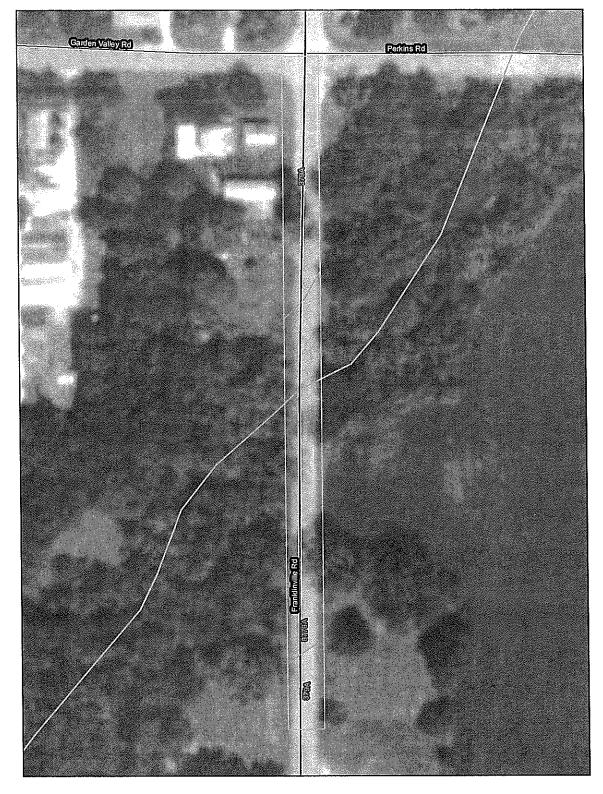


PERCENT SAND

PARTICLE-SIZE LIMITS

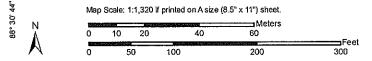
SAND 2.000 - 0.075 mm SILT 0.075 - 0.002 mm CLAY finer than 0.002 mm 42° 16' 36"

42° 16' 36"



42° 16' 27"

42° 16' 28"

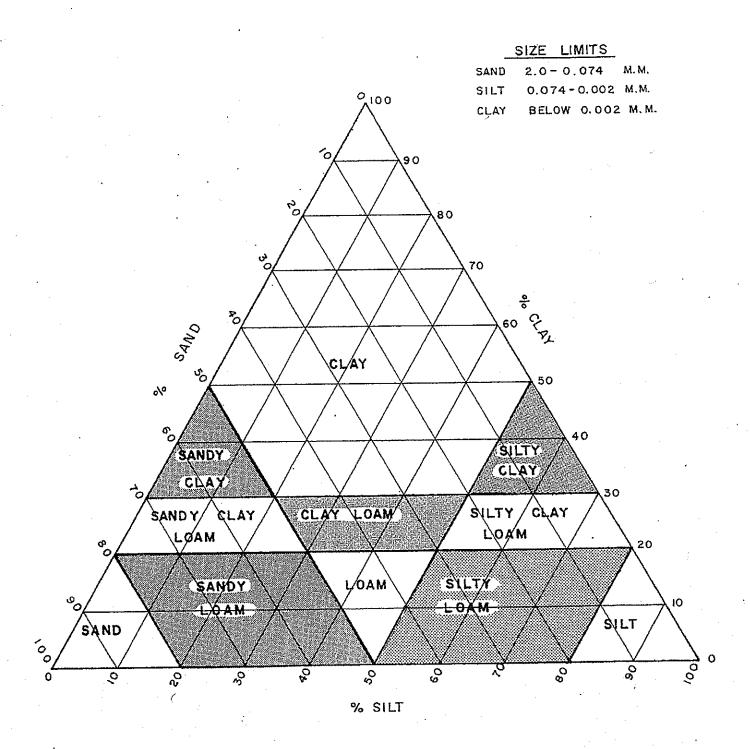


This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line imagery displayed on these maps. As a result, some minor shifting The soil surveys that comprise your AOI were mapped at 1:12,000. placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale. Please rely on the bar scale on each map sheet for accurate map The orthophoto or other base map on which the soil lines were Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 16N NAD83 compiled and digitized probably differs from the background Map Scale: 1:1,320 if printed on A size (8.5" × 11") sheet. Date(s) aerial images were photographed: 7/21/2007 MAP INFORMATION Warning: Soil Map may not be valid at this scale. McHenry County, Illinois Version 8, Jan 20, 2012 of map unit boundaries may be evident. Survey Area Data: Soil Survey Area: measurements. Streams and Canals Interstate Highways Short Steep Slope Very Stony Spot Major Roads Special Line Features Local Roads US Routes Wet Spot Other Guliy Other Cities Political Features Rails Water Features Transportation MAP LEGEND ۲ Constitution of the Consti ţ 8 **X** S. Market 1 ⊚ ¢ Severely Eroded Spot Area of Interest (AOI) Miscellaneous Water Closed Depression Marsh or swamp Perennial Water Mine or Quarry Soil Map Units Rock Outcrop Special Point Features **Gravelly Spot** Saline Spot Slide or Slip Sandy Spot Sodic Spot Stony Spot Gravel Pit Borrow Pit Lava Flow Spoil Area Clay Spot Area of Interest (AOI) Sinkhole Blowout Landfill Ø 111 Э 0 0 0 Soils

Map Unit Legend

	McHenry County, Illinois (IL	111)	
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
379A	Dakota loam, 0 to 2 percent slopes	0.4	47.5%
8776A	Comfrey loam, 0 to 2 percent slopes, occasionally flooded	0.4	52.5%
Totals for Area of Intere	st	0.8	100.0%

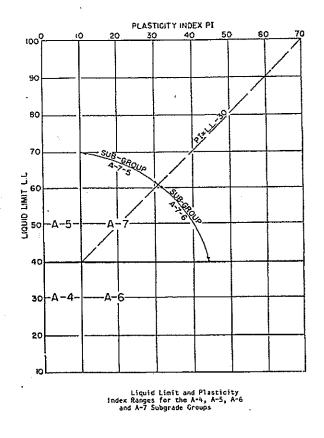
I DH TEXTURAL CLASSIFICATION CHART

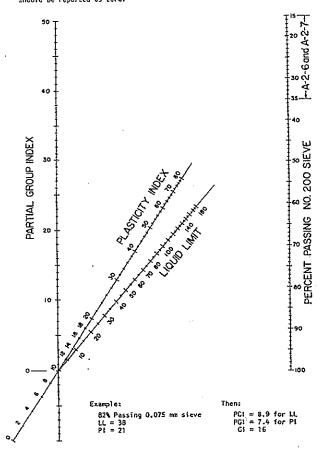


TESTING SERVICE CORPORATION AASHTO CLASSIFICATION CHART

Group Index (GI) = $\{F-35\}\{0.2+0.005 \ (LL-40\}\}+0.01\{F-15\}\{P\}-10\}$ where F=8 Passing 0.075 nm sieve, LL = Liquid Limit, and PI = Plasticity Index

When working with A-2-6 and A-2-7 subgroups the Partial Group index (PG) is determined from the PI only.





AASHTO SOIL CLASSIFICATION SYSTEM

General Classification	,	2.	Gra (35% or .	Silt-Clay Materials (more than 35% passing No. 200)								
	A-I			1	A-	2					A-7 A-7-5,	
Group Classification	A-1-a	A-I-b	A-3	A-2-4	A-2-5	A-2-6	A-2-7	A-4	A-5	A-6	A-7-6	
Sieve analysis, % passing: No. 10 No. 40 No. 200	50 max 30 max 15 max	50 max 25 max	51 min 10 max	35 max	35 max	35 max	35 max	36 min	36 min	36 min	36 min	
Characteristics of frac- tion passing No. 40: Liquid limit Plasticity index	6 max		N.P.	40 max 10 max	41 min 10 max	40 max 11 min	41 min 11 min	40 max 10 max	41 min 10 max	40 max 11 min	41 min 11 min	
Usual types of signifi- cant constituent ma- terials	Stone fragments, gravel and sand		Fine Silty		or clayey	gravel and	ravel and sand		Silty soils		Clayey soils	
General rating as sub- grade		Ex	cellent to	good		1		Fair to poor				

[†] Plasticity index of A-7-5 subgroup is equal to or less than LL minus 30. Plasticity index of A-7-6 subgroup is greater than LL minus 30.

TESTING SERVICE CORPORATION UNIFIED CLASSIFICATION CHART

	CRITERIA	FOR AS	SSIGNING GR	OUP SYMBOLS AND	S	OIL CLASSIFICATION
	GROUP	NAMES U	SING LABO	PRATORY TESTS "	GROUP SYMBOL	GROUP NAME b
200	GRAVELS More than 50%	CLEAN GRAVELS Less than 5% fines ^C		C _U ≥ 4 and 1 ≤ C ¢ ≤ 3 *	GW	Well graded gravel ^f
	of course fraction retained			Cu <4 ond/or !> Cc > 3 *	GP	Poorty graded gravel
	on No. 4 sieve	GRAVELS		Fines clossify as ML or MH	GM	Silty grovel f,g,h
		FINES More than 12% fines ^c		Fines classify as CL or CH	GC	Clayey graves 1,9,h
	SANDS	CLEAN SANDS Less than 5 % tines d		C _U <u>> 6</u> and 1 <u><</u> C _C ≤3 °	sw	Well-graded sand l
	50 % or more of coorse fraction passes No. 4			Cu < 6 and/or 1 > Cc > 3 °	SP	Poorly graded sand I
			WITH FINES	Fines classify as ML ar MH	SM	Silty sand g,h,f
	tieve	More than 12 % finesd		Fines classify as CL or CH	sc	Clayey sand g,h,f
0	SILTS & CLAYS		PI	>-7 and plots on ar above "A" line j	CL	Lean clay k,l,m
.S No. 200	Liquid limit less than 50%	Inorganic	PI≪	4 or plots below "A" line j	ML	Silt k,l,m
SOII		Organic	<u>Liqu</u> Liqu	OL	Organic ctay k _i l _i m _i n Organic sitt k _i l _i m _i n	
Mere Brained	SILTS & CLAYS	,	PIp	ials on ar above "A" line	сн	Fat clay k,i,m
FINE-	Liquid limit 50 % or more	Inorganic	PIp	PI plots below "A" line		Elostic sitt k,l,m
		Organic	nic Liquid limit—oven dried <0.75			Organic clay k _i l _i m _i p Organic silt k _i l _i m _i q
Highly	organic soils	Primarily	organic mat	ter,dark in color, and arganic ador	PŢ	Peof

- a. Based on the moterial passing the 3-in (75-mm) sieve.

 If field sample contained cobbles and/or boulders, add "with cobbles and/or boulders"

 to group name.

 Gravels with 5 to 12 % fines require dual symbols

 GW-GN well graded gravel with silt

 GP-GM poorty graded gravel with clay

 SSW-SM will graded gravel with taly

 M-Sands with 5 % to 12 % fines require dual symbols

 SW-SC well graded sond with silt

 SW-SC well graded sond with clay

 SP-SM poorty graded sond with clay

 SP-SM poorty graded sond with clay

 SP-SM poorty graded sond with clay

 EN-SC poorty graded sond with clay

 CL-ML, sitty clay.

 k.!! soil contains ≥ 15 to 29 % plus No. 200, predominantly sand, add "sandy" to group name.

 I. If soil contains ≥ 30 % plus No. 200, predominantly gravel, add "sandy" to group name.

 I. If soil contains ≥ 30 % plus No. 200, predominantly gravel, add "gravelity" to group name.

 I. If soil contains ≥ 30 % plus No. 200, predominantly gravel, add "gravelity" to group name.

 I. If soil contains ≥ 30 % plus No. 200, predominantly gravel, add "gravelity" to group name.

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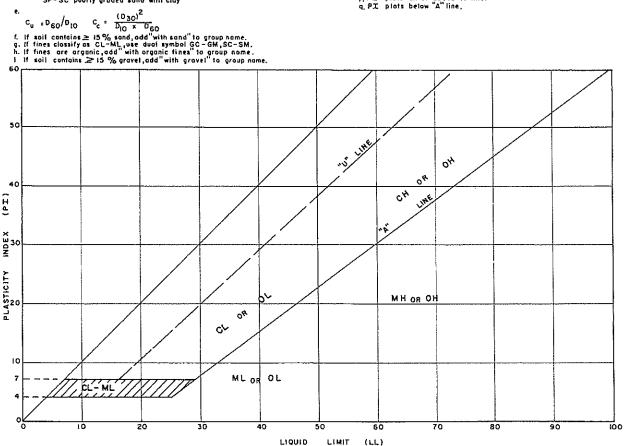
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 I. If soil contains ≥ 30 % plus No. 200, predominantly gravel, add "gravelity" to group name.

 I. If soil contai



TESTING SERVICE CORPORATION

LEGEND FOR BORING LOGS (FPS Units)

SAMPLE TYPE:

SS = Split Spoon

ST = Thin-Walled Tube

A = Auger

FIELD AND LABORATORY TEST DATA:

BLOWS = Standard Penetration Resistance in Blows per 6 inches

W% = In-Situ Water Content in percent

Qu = Unconfined Compressive Strength in tons per square foot (tsf)
 * = Hand Penetrometer Measurement; Max. Reading = 4.5+ tsf

SOIL DESCRIPTION:

MATERIAL	PARTICLE SIZE RANGE
BOULDER	Over 12 inch
COBBLE	12 - 3 inch
Coarse GRAVEL	3 - ¾ inch
Small GRAVEL	¾ inch to No. 10 Sieve
Coarse SAND	No. 10 Sieve to No. 40 Sieve
Fine SAND	No. 40 Sieve to No. 200 Sieve
SILT and CLAY	Passing No. 200 Sieve

COHESIV	E SOILS	COHESIONLESS SOILS					
CONSISTENCY	Qu (tsf)	RELATIVE DENSITY	<u>N</u>				
Very Soft	Less than 0.3	Very Loose	0 - 4				
Soft	0.3 to 0.6	Loose	4 - 10				
Medium Stiff	0.6 to 1.0	Medium Dense	10 - 30				
Stiff	1.0 to 2.0	Dense	30 - 50				
Very Stiff	2.0 to 4.0	Very Dense	50 and over				
Hard	4.0 and over						

MODIFYING TERM	PERCENT BY WEIGHT
Trace	1 - 10
Little	10 - 20
Some	20 - 35

PROJ	ECT E	3rid	lge R	eplac	emen	t, Fran	klinvi	lle Roa	d, McF	lenry County, IL	
CLIEN	ĭ⊥ Ž	Nill	s Bur	ke K	elsey	Assoc	iates,	Ltd., S	t. Char	les, IL	
BORII	NG 1	1			DATE	STAR	red	4-6-1	1	DATE COMPLETED	4-6-11 JOB L-79,848
	JND SU OF BOF		_	836 826						▼ WHILE DRILLING✓ AT END OF BORING	WATER LEVEL OBSERVATIONS 4.0 ' 6.0 '
	1 SRY	St	a. 91-	-80; 1	0' LT					▼ 24 HOURS	
0-	51 51 Fm		IPLE TYPE	N	wc	Qu	γ_{DRY}	DEPTH	ELEV.		DESCRIPTIONS
		А	-		8.3			0.5		6" Bituminous Cond 8" Sand and Grave	
		1 B	мС		15.6	1.0*		3.0	833.1	Stiff dark brown sar organic, very moist A-4 LOAM LL/PL	ndy CLAY, trace gravel, trace (CL-ML) /PI = 25/15/10
		С	:		11.4		44Wit	4.0		Brown silty SAND, ▼ A-2-4 SANDY LOA	moist (SM) AM
5—//		A 2	мс		8.8					∇	
-\ <i>\\\</i>		В			8.9		-			Brown SAND, trace A-2-4 SANDY LOA	e gravel, wet to saturated (SP) M
10		3	МС		12.8		444				
-	A. C.				L		The state of the s			End of Boring at 1 * Approximate und	0.0' confined compressive strength rements with a calibrated
							a de la companya de l	dar .		based on measu pocket penetrom	rements with a calibrated neter.
15—				Li de constante de la constant		T WATER TO THE TOTAL THE TOTAL TO THE TOTAL TOTAL TO THE					
-	Lucani				E		- Carver				
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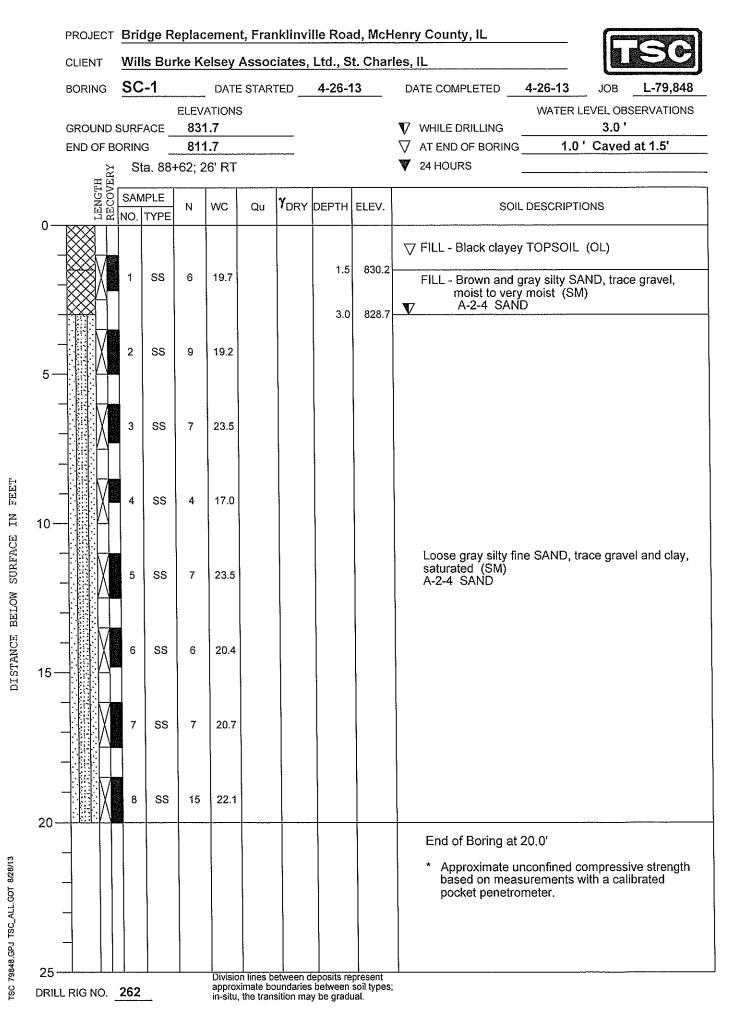
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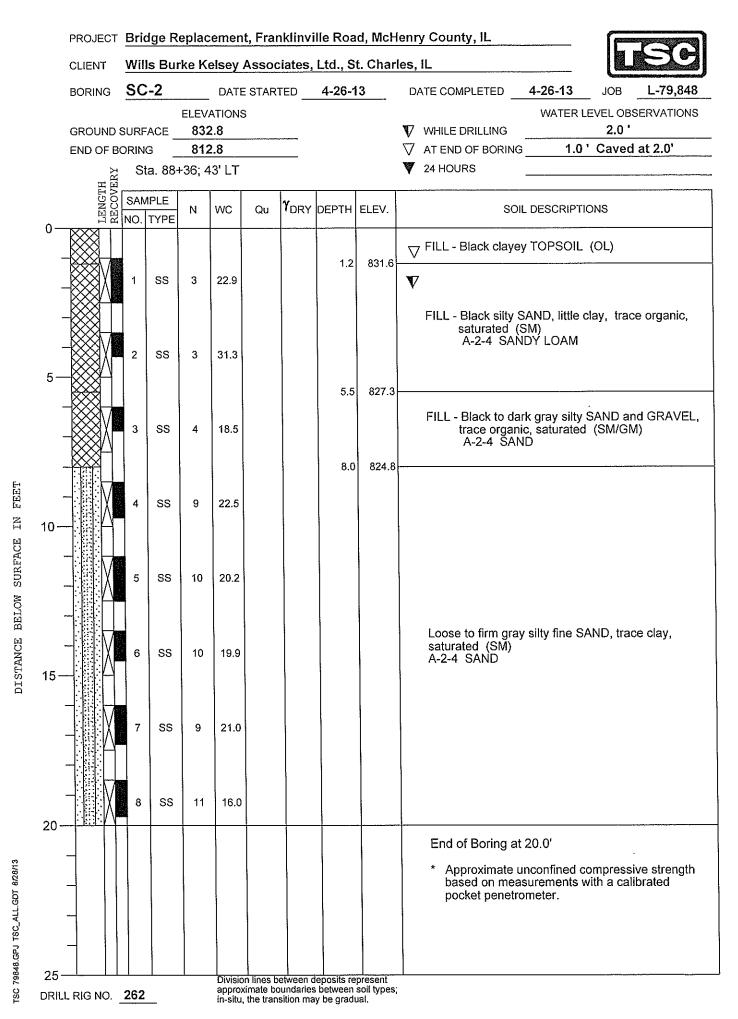
DISTANCE BELOW SURFACE IN FEET

TSC 79848.GPJ TSC_ALL.GDT 8/28/13

		PROJECT	Brid	dge R	eplac	emer	ıt, Fra	nklinv	ille Roa	d, McH	enry County, IL
		CLIENT	Will	ls Bui	rke K	elsey	Asso	ciates,	Ltd., S	t. Char	es, IL
		BORING	2_			DATI	E STAR	TED _	4-6-1	1	DATE COMPLETED 4-6-11 JOB L-79,848
		GROUND :	ORIN	G _	830 820						WATER LEVEL OBSERVATIONS ▼ WHILE DRILLING 4.0 ' AT END OF BORING 5.0 ' ▼ 24 HOURS
		TH VERY	ان -	a. 00	F9Z, I	10 K1	r	1	1 1	ı	¥ 24 HOURS
	0-	LENG	SAN NO.	a. 85· 1PLE TYPE	N	wc	Qu	YDRY	DEPTH	ELEV.	SOIL DESCRIPTIONS
	Ů	i de la companya de							0.6	830.2	7" Bituminous Concrete
	-		A 1	мс		10.7	3.0*	L	1.3	829.5	9" Sand and Gravel Base Very stiff dark brown sandy CLAY, trace gravel, trace organic, moist (CL-ML) A-4 LOAM LL/PL/PL = 15/9/6
	-		В			16.1	1.5*		2.5	828.3	Stiff brown silty CLAY, little sand and gravel, moist (CL) A-6 CLAY
	5-		Α			11.7			4.0	826.8	∇
			2 B	мс		11.3		- Market			Brown SAND, trace gravel, wet to saturated (SP) A-1-b SAND
N FEET			3	мс	1. Domini	13.0		- SPANTER			
ICE IN	10-										End of Boring at 10.0'
ELOW SURFACE				, mytum.	ill divine to		ALL VALUE OF THE PROPERTY OF T		i usaan	The state of the s	 * Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.
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TSC 79848.GPJ TSC_ALL.GDT 8/28/13





Page 1 of 2

		STI	RUCT	TURE	BORING LOG	ì	Date :	Started		/11
ROUTE 0033 DESCR	RIPTIO	N <u>Fra</u>	anklinv	ille Brid	dge Over Kishwau	ikee D	ate Con	pleted	4/1	/11
SECT. <u>10-00378-00-BR</u>	STRU	CT. NO). <u>05</u>	<u>6-319</u>		_ DRILLED BY	TSC L	79,848	3	
COUNTY McHenry LOCA	TION	Nort	h Abut	ment (I	Existing Bridge)	s. 22SE/22SW	, TWP.	<u>44N</u>	, RNG.	_6E_
Boring No. SB-1 Station 89+43 Offset 25.00ft RT Surface Elev. 831.30 ft	D E P T H	B L O ∀ S	Qu tsf	W %	Surface Water E Groundwater Ele when drilling at Completion after		D E P T H	B L O W S	Qu tsf	W %
Black clayey TOPSOIL 830.30										
Soft dark brown LOAM, trace gravel, trace organic, very moist A-4 828.30		1 1 2	P 0.5	38.8	Firm gray SAND trace to little grav saturated A-2-4	Y LOAM, vel, wet to		6 9 11		22.0
Soft dark brown CLAY LOAM, trace organic, very moist A-4		1 2 3	B 0.6 15%	37.1			-30	7 7 7		20.1
Loose gray SAND, trace gravel, saturated A-1-b		1 2 3			Firm gray SAND	799. and	30.			
Loose gray SANDY LOAM, wet to saturated A-2-4		3 2 3		24.6	GRAVEĽ, satura A-1-b	ated	-35	10 9 10		
		1 2 2		22.4						
		2 2 2		22.3				11 12 10		
Firm gray SANDY LOAM, trace to little gravel, wet to saturated A-2-4		4 4 5		25.9						
128/13	-20	4 5 6		21.7				7 7 8		
30RING 79848-IDOT.GPJ IDOT.GDT 8/28/13		5 7 8		21.0						
30RING 78848-I	-25	6 9 9		20.3			-50	10 9 10		

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet

Testing Service Corporation STRUCTURE BORING LOG

Page 2 of 2
Date Started 4/1/11
Date Completed 4/1/11

STRUCTURE NO. 056-319 ROUTE 0033 SECTION 10-00378-00-BR COUNTY McHenry				<u>.</u>
Boring No. SB-1 Station 89+43 Offset 25.00ft RT Elevation 781.30 ft	DEPTH	B L O W S	Qu tsf	W %
Firm gray SAND and GRAVEL, saturated A-1-b				
	-55 -	7 9 11		
		8 8 10		
	60 			
	65	9 11 11		
		12 11 12		
761.30 Find of Boring at 70.0' End of Boring at 70.0'	70	12		
BORING 79848-IDOT.				

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet

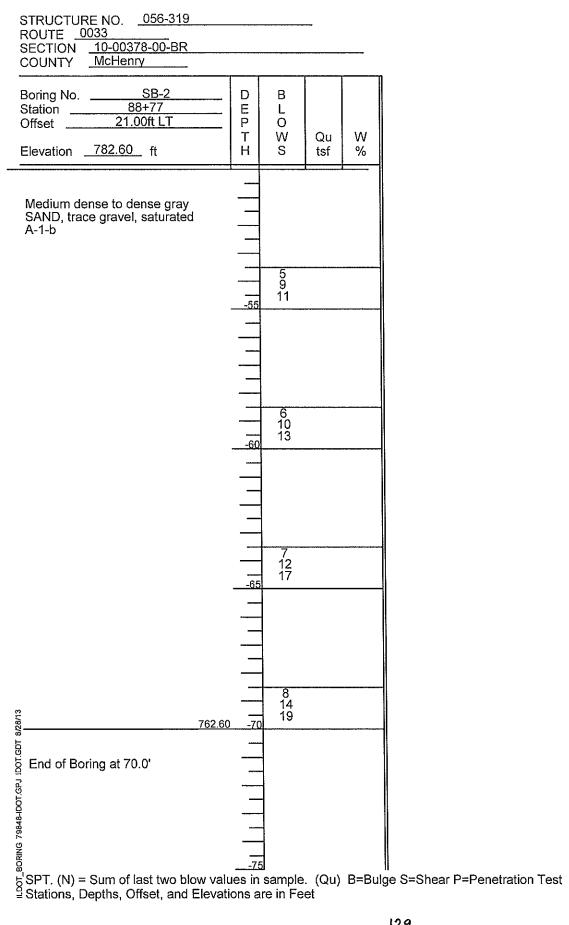
Page 1 of 2 4/21/11 Date Started

STRUCTURE BORING LOG 4/21/11 Date Completed DESCRIPTION Franklinville Bridge Over Kishwaukee ROUTE <u>0033</u> SECT. 10-00378-00-BR DRILLED BY TSC L-79,848 STRUCT, NO. 056-319 North Abutment (Proposed Bridge) S. 22SE/22SW , TWP. 44N , RNG. 6E McHenry COUNTY **LOCATION** D В Surface Water Elev. D В Boring No. 88+77 Station Ε L Groundwater Elev .: Е L 21.00ft LT 829.6 P Р 0 when drilling 0 Offset 829.6 Т Т W at Completion W W W Qu Qu _832.60_ ft S Н % Surface Elev. Н tsf % tsf after . Hrs. FILL - Black Black sandy TOPSOIL, very moist Medium dense to dense gray SAND, trace gravel, saturated 31.4 5 9 12 831.10 1 3 3 A-1-b FILL - Brown SANDY LOAM 12.5 trace Cinders, v. moist A-2-4 829.60 FILL - Gray SANDY LOAM, some gravel, wet to 223 17.2 saturated A-2-4 827.10 Loose gray SAND and GRAVEL, saturated 333 A-1-b 824.60 Loose gray SANDY LOAM, trace gravel, wet to saturated 445 21.5 A-2-4 822.10 Medium dense gray SILTY LOAM, wet 6 11 13 22.1 A-4 819.60 Medium dense gray SANDY LOAM, wet to saturated 8 13 16 5 8 27.3 A-2-4 6 7 13 25.5 Medium dense gray SILT, wet A-4 5 8 10 11 16 22 22.1 8/28/13 812.10 BORING 79848-IDOT.GPJ IDOT.GDT Medium dense gray fine SAND, saturateď 25.0 A-1-b 12 10 15 20 4 5 8

ธี SPT. (N) = Sum or เลรเ เพช blow values ... ระบา Stations, Depths, Offset, and Elevations are in Feet SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test

STRUCTURE BORING LOG

Page 2 of 2 4/21/11 Date Started 4/21/11 Date Completed _



STRUCTURE BORING LOG

Page 1 of 2
Date Started ____5/13/13

ROUTE 0033 DESCR	IPTION _F	ranklinville Bri	dge Over Kishwaukee Date Completed 5/13/13
SECT. <u>10-00378-00-BR</u>	STRUCT. N	NO. <u>056-319</u>	DRILLED BY TSC L-79,848
COUNTY McHenry LOCA	TION <u>So</u>	uth Abutment	Proposed Bridge) S. 22SE/22SW , TWP. 44N , RNG. 6E
Boring No. SB-3 Station 87+68 Offset 22.00ft RT Surface Elev. 835.00 ft	D B L P O W S	Qu W	Surface Water Elev. D B
2" Crushed Stone 834.60 FILL - Brown and black CLAY, trace gravel, trace		B 1.0 18.1	Medium dense gray fine SAND, trace silt, saturated A-3 — 6 — 6
organic, very moist A-6	3 3 5	1.0 18.1 15%	9
Soft dark brown CLAY, trace gravel, trace organic very moist A-6	3 3	B 0.4 20.0 15%	Medium dense gray SAND, trace silt, saturated A-2-4 9 13 15 -30
Medium dense gray SANDY LOAM, very moist to saturated A-2-4	-5 	19.6	
	6		Medium dense to very dense gray fine SAND, trace gravel, trace silt, saturated A-3
	4 4 10 6	20.7	7 - 7 - 15 - 18 - 35
	- 4 - 5 7	22.6	
Medium dense gray SILTY LOAM, wet A-4	3 4 7	20.6	
Medium dense gray SANDY	-15		17
LOAM, wet to saturated A-2-4	- 4 6 9	19.6	
28/13	6 9 20	17.5	16 22 31
Medium dense gray fine SAND, trace silt, saturated A-3	8 8 10	19.2	
812.00 g Medium dense gray fine			
SAND, trace silt, saturated A-3			13 24
ទីSPT. (N) = Sum of last two blow values Stations, Depths, Offset, and Elevati	ies in sampi ons are in F	le. (Qu) B=Bu eet	lge S=Shear P=Penetration Test

130

STRUCTURE BORING LOG

STRUCTURE NO. 056-319 ROUTE 0033 SECTION 10-00378-00-BR COUNTY McHenry			-	
Boring No. SB-3 Station 87+68 Offset 22.00ft RT Elevation 785.00 ft	D E P T H	B L O W S	Qu tsf	W %
Medium dense to very dense gray fine SAND, trace gravel, trace silt, saturated A-3	-55 -60 -65 -65 -65 -70	15 25 29 15 21 27 13 19 21		
End of Boring at 70.0'				

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet



Asbestos Determination Certification for Local Highway Bridges

Structure Ide	entification	
Structure Nur	mber(s) (000-0000):	
Existing Brid	lge No. S.N. 056-3016	
Asbestos De	etermination	
1. 🗌	The identified structure(s) were included in the notification requirements in its letter of October	5/10/02 list that the USEPA exempted from the asbestos 19, 2001.
2. 🗌		r asbestos involvement as of 5/10/02 but have subsequently vailable from the local highway authority, not to involve surface or waterproofing membrane.
3. 🖾	been determined, through testing, not to contain waterproofing membrane. The test results were Testing Procedures for Asbestos in Bituminous	r asbestos involvement as of 5/10/02 but have subsequently n asbestos in a bituminous bridge deck wearing surface or e obtained in conformance with the approved "Sampling and Bridge Deck Wearing Surface or Waterproofing Membrane" n 26-02). Attach result of testing procedures from approved
4.	surface and/or waterproofing membrane. The lasbestos notification requirements for work on materials. The local highway authority also will Membrane and Asbestos Bituminous Concrete these structures or for other work involving rem	ed to involve asbestos in a bituminous bridge deck wearing local highway authority will ensure compliance with the these structures that could disturb the asbestos-containing ensure that the special provision for "Asbestos Waterproofing Surface Removal" is included in any contract for demolition of loval of the existing bituminous bridge deck wearing surface of testing procedures from approved testing facility.
5. 🗌	surface and/or waterproofing membrane. Rem	d to involve asbestos in a bituminous bridge deck wearing oval operations have been completed for all asbestos erproofing membrane on the identified structures in
Certification	ı	
Name: Tim	nothy R. Peceniak, P.E.	Position Title: Project Engineer
Office Addre	ss: 457 E. Gundersen Drive, Carol Stream, IL	60188
E-mail Addre	ess: trp@tsccorp.com	Telephone Number: (630) 784-4079
Illinois No. (062-061269 icense No of Registered Professional Engineer	_
	Signature	05/15/2013 Date
	oignature	Date

Page 1 of 1 Printed on 5/15/2013 9:39:37 AM BLR 10220 (Rev. 7/05)

BULK ASBESTOS SAMPLE EVALUATION - ASPHALT SAMPLES POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

GRAVIMETRIC REDUCTION

NVLAP LAB ID 101130-0

Company Name:	Testing Service Corporation	Corporation				Client Project Ref:	L-75,488		
Contact	Timothy Peceniak	iak .	÷			Project Location:	Franklinvill	Franklinville Bridge Replacement	lacement
Address:	457 E. Gunderson Drive	son Drive			•	TEM Project:	43753		
	Carol Stream	Illinois	60188-2492			Analyzed by:	Lori Boersma	na	
						Date Analyzed:	5/9/2011		
, and a second s	Sample Information	ation			Fibrous	Fibrous Materials		Non-Fibro	Non-Fibrous Materials
Client Sample ID	TEM	COLOR	ACM	Asbest	Asbestos Fibers	Non-Asbestos Fibers	žrS	Filler	Comments
Description	Ð.			Type	Percent	Type Percent	ent	Binder	

0.83	0.97
0	. Û.
5.03	6.43
Organic Mtl. Acid Soluble	Organic Mtl. Acid Soluble
Chrysotile Amosite	Chrysotile Amosite
N/D	N/D
209203 - Oray	209204 Gray
C - 101 Asphalt Core	C - 102 Asphalt Core

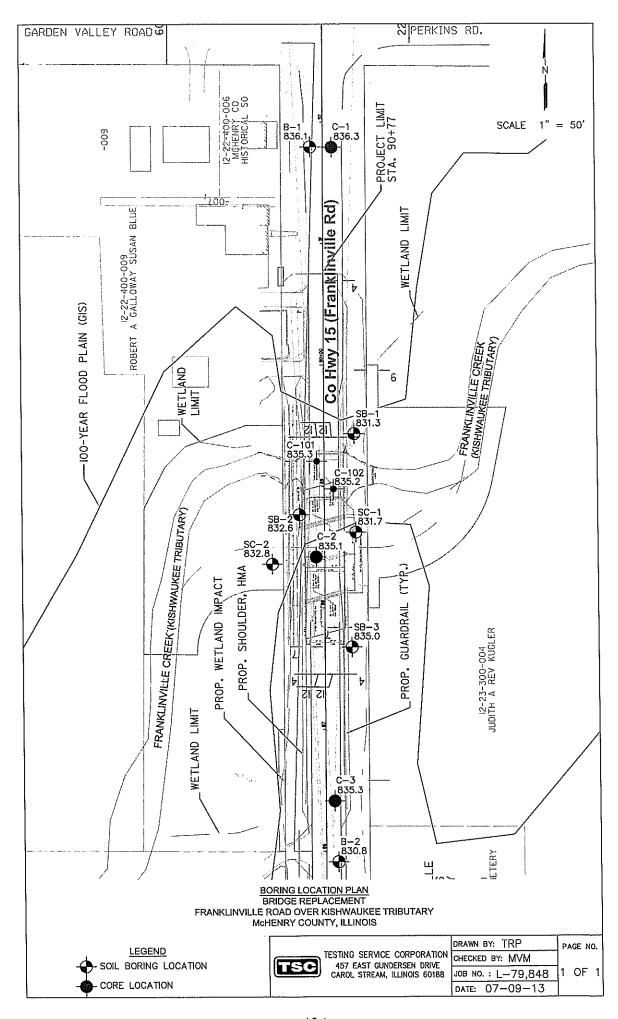
Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993 including the use of gravimetric reduction to enhance the ability to aobserve asbesoe fibers in the sample. This report applies only to samples tested.

·SLM: The optical resolution of polarized light microscopy limits the size of fibers that are visible. In sumples where very small fibers may be present, the asbestos fibers may be smaller than the resolution limit of a polarized light microscope. In those cases, the result of the PLM analysis is not conclusive where the sample is reported as non-asbestos. Samples that are expected to confain small fibers (such as floor file samples) and that are reported as non-asbestos by PLM should be further aniayzed by transmission electron microscopy.

Key: ACM = Ashestos Containing Material as defined in USEPA NESEIAP Regulation; TR = Trace; N/D = None Detected

Signature of Analyst

443 Duane Street, Glen Ellvn. Illinois 60137 Phone (630) 790-6880 Fax (630) 790-0882



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:

MCHENRY COUNTY

The entities listed above and their officers, employees, and agents shall be indemnified and

held harmless in accordance with Article 107.26.

CONSTRUCTION AIR QUALITY - DIESEL RETROFIT (BDE)

Effective: June 1, 2010 Revised: November 1, 2014

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

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

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

^{1/} Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

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

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

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

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

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

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

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

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

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

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

Diesel Retrofit Deficiency Deduction

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

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

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

CONTRACT CLAIMS (BDE)

Effective: April 1, 2014

Revise the first paragraph of Article 109.09(a) of the Standard Specifications to read:

"(a) Submission of Claim. All claims filed by the Contractor shall be in writing and in sufficient detail to enable the Department to ascertain the basis and amount of the claim. As a minimum, the following information must accompany each claim submitted."

Revise Article 109.09(e) of the Standard Specifications to read:

"(e) Procedure. The Department provides two administrative levels for claims review.

Level I Engineer of Construction

Level II Chief Engineer/Director of Highways or Designee

- (1) Level I. All claims shall first be submitted at Level I. Two copies each of the claim and supporting documentation shall be submitted simultaneously to the District and the Engineer of Construction. The Engineer of Construction, in consultation with the District, will consider all information submitted with the claim and render a decision on the claim within 90 days after receipt by the Engineer of Construction. Claims not conforming to this Article will be returned without consideration. The Engineer of Construction may schedule a claim presentation meeting if in the Engineer of Construction's judgment such a meeting would aid in resolution of the claim, otherwise a decision will be made based on the claim documentation submitted. If a Level I decision is not rendered within 90 days of receipt of the claim, or if the Contractor disputes the decision, an appeal to Level II may be made by the Contractor.
- (2) Level II. An appeal to Level II shall be made in writing to the Engineer of Construction within 45 days after the date of the Level I decision. Review of the claim at Level II shall be conducted as a full evaluation of the claim. A claim presentation meeting may be scheduled if the Chief Engineer/Director of Highways determines that such a meeting would aid in resolution of the claim, otherwise a decision will be made based on the claim documentation submitted. A Level II final decision will be rendered within 90 days of receipt of the written request for appeal.

Full compliance by the Contractor with the provisions specified in this Article is a contractual condition precedent to the Contractor's right to seek relief in the Court of Claims. The Director's written decision shall be the final administrative action of the Department. Unless the Contractor files a claim for adjudication by the Court of Claims within 60 days after the date of the written decision, the failure to file shall constitute a release and waiver of the claim."

80335

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000 Revised: January 2, 2015

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

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

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

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

- (a) Withholding progress payments;
- (b) Assessing sanctions;
- (c) Liquidated damages; and/or
- (d) Disqualifying the Contractor from future bidding as non-responsible.

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. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform ____15.00% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

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

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

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

- (a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.

- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:
 - (1) The names and addresses of DBE firms that will participate in the contract;
 - (2) A description, including pay item numbers, of the work each DBE will perform;
 - (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
 - (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
 - (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
 - (6) If the contract goal is not met, evidence of good faith efforts; the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document that good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work performance to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

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

efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with Section 6 of the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

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

order to consider all issues of documentation and 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 consideration, 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.

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 contract. Credit will be given for the following:
 - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.

- (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

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

- (a) <u>NO AMENDMENT</u>. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) <u>CHANGES TO WORK</u>. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be

required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

- (c) <u>SUBCONTRACT</u>. The Contractor must provide DBE subcontracts to IDOT upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
- (d) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractorinitiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
 - (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
 - (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
 - (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a). Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE listed in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of

Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

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

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law.
- (6) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime

Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated, or fails to complete its work on the Contract for any reason the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department shall provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) ENFORCEMENT. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor my 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.

EQUAL EMPLOYMENT OPPORTUNITY (BDE)

Effective: April 1, 2015

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

"EQUAL EMPLOYMENT OPPORTUNITY

In the event of the Contractor's noncompliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act, or the Illinois Department of Human Rights Rules and Regulations, the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political sub-divisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation.

During the performance of this Contract, the Contractor agrees as follows:

- (1) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
- (2) That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability (according to the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- (3) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service.
- (4) That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the

Contractor will promptly so notify the Illinois Department of Human Rights and IDOT and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

- (5) That it will submit reports as required by the Illinois Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Illinois Department of Human Rights or IDOT, and in all respects comply with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
- (6) That it will permit access to all relevant books, records, accounts, and work sites by personnel of IDOT and the Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
- (7) That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify IDOT and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply with these provisions. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations."

<u>STATE CONTRACTS</u>. Revise Section II of Check Sheet #5 of the Recurring Special Provisions to read:

"II. EQUAL EMPLOYMENT OPPORTUNITY

In the event of the Contractor's noncompliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Illinois Department of Human Rights Rules and Regulations, the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political sub-divisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation.

During the performance of this Contract, the Contractor agrees as follows:

That it will not discriminate against any employee or applicant for employment because
of race, color, religion, sex, sexual orientation, marital status, order of protection status,
national origin or ancestry, citizenship status, age, physical or mental disability unrelated
to ability, military status, or an unfavorable discharge from military service; and further

that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.

- 2. That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability (according to the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- 3. That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service.
- 4. That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the Contractor will promptly so notify the Illinois Department of Human Rights and IDOT and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
- 5. That it will submit reports as required by the Illinois Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Illinois Department of Human Rights or IDOT, and in all respects comply with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
- 6. That it will permit access to all relevant books, records, accounts and work sites by personnel of IDOT and the Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
- 7. That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify IDOT and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply with these provisions. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights

Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations."

FRICTION AGGREGATE (BDE)

Effective: January 1, 2011 Revised: November 1, 2014

Revise Article 1004.01(a)(4) of the Standard Specifications to read:

- "(4) Crushed Stone. Crushed stone shall be the angular fragments resulting from crushing undisturbed, consolidated deposits of rock by mechanical means. Crushed stone shall be divided into the following, when specified.
 - a. Carbonate Crushed Stone. Carbonate crushed stone shall be either dolomite or limestone. Dolomite shall contain 11.0 percent or more magnesium oxide (MgO). Limestone shall contain less than 11.0 percent magnesium oxide (MgO).
 - b. Crystalline Crushed Stone. Crystalline crushed stone shall be either metamorphic or igneous stone, including but is not limited to, quartzite, granite, rhyolite and diabase."

Revise Article 1004.03(a) of the Standard Specifications to read:

"1004.03 Coarse Aggregate for Hot-Mix Asphalt (HMA). The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate for HMA shall be according to the following table.

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	Allowed Alone or in Combination 5/:
		Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete

Use	Mixture	Aggregates Allowed	
HMA Low ESAL	Stabilized Subbase or Shoulders	Allowed Alone or in Con Gravel Crushed Gravel Carbonate Crushed Sto Crystalline Crushed Sto Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete	ne
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	Allowed Alone or in Cor Crushed Gravel Carbonate Crushed Sto Crystalline Crushed Sto Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/}	ne ²⁾
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-9.5 or IL-9.5L SMA Ndesign 50 Surface	Allowed Alone or in Cor Crushed Gravel Carbonate Crushed Sto Crystalline Crushed Sto Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}	one ^{2/}
HMA High ESAL	D Surface and Leveling Binder IL-9.5 SMA Ndesign 50 Surface	Allowed Alone or in Col Crushed Gravel Carbonate Crushed Sto Limestone) ^{2/} Crystalline Crushed Sto Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}	one (other than
and the state of t		Other Combinations Al Up to 25% Limestone	lowed: With Dolomite

Use	Mixture	Aggregates Allowed		
		50% Limestone	Any Mixture D aggregate other than Dolomite	
		75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone	
HMA High ESAL	E Surface IL-9.5	Allowed Alone or in Combination ^{5/} : Crushed Gravel		
	SMA Ndesign 80 Surface	Crystalline Crushed Sf Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete ^{3/} No Limestone.	one	
		Other Combinations A	llowed:	
		Up to	With	
		50% Dolomite ^{2/}	Any Mixture E aggregate	
		75% Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone	
		75% Crushed Gravel or Crushed Concrete ^{3/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag	
HMA	F Surface	Allowed Alone or in Combination 5/:		
High ESAL	IL-9.5 SMA Ndesign 80 Surface	Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.		
		Other Combinations /	<u>Allowed</u> :	

Use	Mixture	Aggregates Allowed	
		Up to	With
		50% Crushed Gravel, Crushed Concrete ^{3/} , or Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone

- 1/ Crushed steel slag allowed in shoulder surface only.
- 2/ Carbonate crushed stone shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.
- 3/ Crushed concrete will not be permitted in SMA mixes.
- 4/ Crushed steel slag shall not be used as leveling binder.
- 5/ When combinations of aggregates are used, the blend percent measurements shall be by volume."

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010 Revised: April 1, 2012

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

Quality Control/Quality Assurance (QC/QA). Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. Confined Edge. Each confined edge density shall be represented by a oneminute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced ten feet apart longitudinally along the unconfined pavement edge and centered at the random density test location."

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

"Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-4.75	Ndesign = 50	93.0 - 97.4%	91.0%
IL-9.5, IL-12.5	Ndesign ≥ 90	92.0 – 96.0%	90.0%
IL-9.5,IL-9.5L, IL-12.5	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0, IL-25.0	Ndesign ≥ 90	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L, IL-25.0	Ndesign < 90	93.0 – 97.4%	90.0%

SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%
All Other	Ndesign = 30	93.0 - 97.4%	90.0%"

HOT MIX ASPHALT - PRIME COAT (BDE)

Effective: November 1, 2014

Revise Note 1 of Article 406.02 of the Standard Specifications to read:

"Note 1. The bituminous material used for prime coat shall be one of the types listed in the following table.

When emulsified asphalts are used, any dilution with water shall be performed by the emulsion producer. The emulsified asphalt shall be thoroughly agitated within 24 hours of application and show no separation of water and emulsion.

Application	Bituminous Material Types
Prime Coat on Brick, Concrete, or HMA Bases	SS-1, SS-1h, SS-1hP, SS-1vh, RS-1, RS-2, CSS-1, CSS-1h, CSS-1hp, CRS-1, CRS-2, HFE-90, RC-70
Prime Coat on Aggregate Bases	MC-30, PEP"

Add the following to Article 406.03 of the Standard Specifications.

"(i)	Vacuum Sweeper	
(j)	Spray Paver	1102.06"

Revise Article 406.05(b) of the Standard Specifications to read:

- "(b) Prime Coat. The bituminous material shall be prepared according to Article 403.05 and applied according to Article 403.10. The use of RC-70 shall be limited to air temperatures less than 60 °F (15 °C).
 - (1) Brick, Concrete or HMA Bases. The base shall be cleaned of all dust, debris and any substance that will prevent the prime coat from adhering to the base. Cleaning shall be accomplished by sweeping to remove all large particles and air blasting to remove dust. As an alternative to air blasting, a vacuum sweeper may be used to accomplish the dust removal. The base shall be free of standing water at the time of application. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface as specified in the following table.

Type of Surface to be Primed	Residual Asphalt Rate
	lb/sq ft (kg/sq m)
Milled HMA, Aged Non-Milled HMA, Milled Concrete,	0.05 (0.244)
Non-Milled Concrete & Tined Concrete	
Fog Coat between HMA Lifts, IL-4.75 & Brick	0.025 (0.122)

The bituminous material for the prime coat shall be placed one lane at a time. If a spray paver is not used, the primed lane shall remain closed until the prime coat is

fully cured and does not pickup under traffic. When placing prime coat through an intersection where it is not possible to keep the lane closed, the prime coat may be covered immediately following its application with fine aggregate mechanically spread at a uniform rate of 2 to 4 lb/sq yd (1 to 2 kg/sq m).

(2) Aggregate Bases. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface of 0.25 lb/sq ft \pm 0.01 (1.21 kg/sq m \pm 0.05).

The prime coat shall be permitted to cure until the penetration has been approved by the Engineer, but at no time shall the curing period be less than 24 hours for MC-30 or four hours for PEP. Pools of prime occurring in the depressions shall be broomed or squeegeed over the surrounding surface the same day the prime coat is applied.

The base shall be primed 1/2 width at a time. The prime coat on the second half/width shall not be applied until the prime coat on the first half/width has cured so that it will not pickup under traffic.

The residual asphalt rate will be verified a minimum of once per type of surface to be primed as specified herein for which at least 2000 tons (1800 metric tons) of HMA will be placed. The test will be according to the "Determination of Residual Asphalt in Prime and Tack Coat Materials" test procedure.

Prime coat shall be fully cured prior to placement of HMA to prevent pickup by haul trucks or paving equipment. If pickup occurs, paving shall cease in order to provide additional cure time, and all areas where the pickup occurred shall be repaired.

If after five days, loss of prime coat is evident prior to covering with HMA, additional prime coat shall be placed as determined by the Engineer at no additional cost to the Department."

Revise the last sentence of the first paragraph of Article 406.13(b) of the Standard Specifications to read:

"Water added to emulsified asphalt, as allowed in Article 406.02, will not be included in the quantities measured for payment."

Revise the second paragraph of Article 406.13(b) of the Standard Specifications to read:

"Aggregate for covering prime coat will not be measured for payment."

Revise the first paragraph of Article 406.14 of the Standard Specifications to read:

"406.14 Basis of Payment. Prime Coat will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT), or POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)."

Revise Article 407.02 of the Standard Specifications to read:

"407.02 Materials. Materials shall be according to Article 406.02, except as follows.

Revise Article 407.06(b) of the Standard Specifications to read:

"(b) A bituminous prime coat shall be applied between each lift of HMA according to Article 406.05(b)."

Delete the second paragraph of Article 407.12 of the Standard Specifications.

Revise the first paragraph of Article 408.04 of the Standard Specifications to read:

"408.04 Method of Measurement. Bituminous priming material will be measured for payment according to Article 406.13."

Revise the first paragraph of Article 408.05 of the Standard Specifications to read:

"408.05 Basis of Payment. This work will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT) or POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) and at the contract unit price per ton (metric ton) for INCIDENTAL HOT-MIX ASPHALT SURFACING."

Revise Article 1032.02 of the Standard Specifications to read:

"1032.02 Measurement. Asphalt binders, emulsified asphalts, rapid curing liquid asphalt, medium curing liquid asphalts, slow curing liquid asphalts, asphalt fillers, and road oils will be measured by weight.

A weight ticket for each truck load shall be furnished to the inspector. The truck shall be weighed at a location approved by the Engineer. The ticket shall show the weight of the empty truck (the truck being weighed each time before it is loaded), the weight of the loaded truck, and the net weight of the bituminous material.

When an emulsion or cutback is used for prime coat, the percentage of asphalt residue of the actual certified product shall be shown on the producer's bill of lading or attached certificate of analysis. If the producer adds extra water to an emulsion at the request of the purchaser, the amount of water shall also be shown on the bill of lading.

Payment will not be made for bituminous materials in excess of 105 percent of the amount specified by the Engineer."

Add the following to the table in Article 1032.04 of the Standard Specifications.

"SS-1vh	160-180	70-80
RS-1, CRS-1	75-130	25-55"

Add the following to Article 1032.06 of the Standard Specifications.

"(g) Non Tracking Emulsified Asphalt SS-1vh shall be according to the following.

Requirements for SS-1vh				
Test		SPEC	AASHTO Test Method	
Saybolt Viscosity @ 25C,	SFS	20-200	T 72	
Storage Stability, 24hr.,	%	1 max.	T 59	
Residue by Evaporation,	%	50 min.	T 59	
Sieve Test,	%	0.3 max.	T 59	
Tests on Residue from Evaporation				
Penetration @25°C, 100g., 5	sec., dmm	20 max.	T 49	
Softening Point,	°C	65 min.	T 53	
Solubility,	%	97.5 min.	T 44	
Orig. DSR @ 82°C,	kPa	1.00 min.	T 315"	

Revise the last table in Article 1032.06(f)(2)d. of the Standard Specifications to read:

"Grade	Use
SS-1, SS-1h, RS-1, RS-2, CSS-1, CRS-1, CRS-2, CSS-1h, HFE-90, SS-1hP, CSS-1hP, SS-1vh	Prime or fog seal
PEP	Bituminous surface treatment prime
RS-2, HFE-90, HFE-150, HFE- 300, CRSP, HFP, CRS-2, HFRS-2	Bituminous surface treatment
CSS-1h Latex Modified	Microsurfacing"

Add the following to Article 1101 of the Standard Specifications.

"1101.19 Vacuum Sweeper. The vacuum sweeper shall have a minimum sweeping path of 52 in. (1.3 m) and a minimum blower rating of 20,000 cu ft per minute (566 cu m per minute)."

Add the following to Article 1102 of the Standard Specifications:

"1102.06 Spray Paver. The spreading and finishing machine shall be capable of spraying a rapid setting emulsion tack coat, paving a layer of HMA, and providing a smooth HMA mat in one pass. The HMA shall be spread over the tack coat in less than five seconds after the

application of the tack coat during normal paving speeds. No wheel or other part of the paving machine shall come into contact with the tack coat before the HMA is applied. In addition to meeting the requirements of Article 1102.03, the spray paver shall also meet the requirements of Article 1102.05 for the tank, heating system, pump, thermometer, tachometer or synchronizer, and calibration. The spray bar shall be equipped with properly sized and spaced nozzles to apply a uniform application of tack coat at the specified rate for the full width of the mat being placed."

LRFD PIPE CULVERT BURIAL TABLES (BDE)

Effective: November 1, 2013 | Revised: November 1, 2014

Revise Article 542.02 of the Standard Specifications to read as follows:

		"Item	Article/Section
	(a)	Galvanized Corrugated Steel Pipe	1006.01
	(b)	Galvanized Corrugated Steel Pipe Arch	1006.01
•	(c)	Bituminous Coated Corrugated Steel Pipe	1006.01
	(d)	Bituminous Coated Corrugated Steel Pipe Arch	1006.01
	(e)	Reserved	
•	(f)	Aluminized Steel Type 2 Corrugated Pipe	1006.01
	(g)	Aluminized Steel Type 2 Corrugated Pipe Arch	1006.01
	(ĥ)	Precoated Galvanized Corrugated Steel Pipe	
	(i)	Precoated Galvanized Corrugated Steel Pipe Arch	1006.01
	(j)	Corrugated Aluminum Alloy Pipe	1006.03
	(k)	Corrugated Aluminum Alloy Pipe Arch	
	(1)	Extra Strength Clay Pipe	
	(m)	Concrete Sewer, Storm Drain, and Culvert Pipe	1042
	(n)	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	1042
	(o)	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe	1042
	(p)	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe	1042
	(q)	Polyvinyl Chloride (PVC) Pipe	1040.03
	(r)	Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior	1040.03
	(s)	Corrugated Polypropylene (CPP) pipe with smooth Interior	
	(t)	Corrugated Polyethylene (PE) Pipe with a Smooth Interior	1040.04
	(u)	Polyethylene (PE) Pipe with a Smooth Interior	1040.04
	(v)	Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete Pip	e1056
	(w)	Mastic Joint Sealer for Pipe	1055
	(x)	External Sealing Band	1057
	(y)	Fine Aggregate (Note 1)	1003.04
	(z)	Coarse Aggregate (Note 2)	1004.05
	(aa)	Packaged Rapid Hardening Mortar or Concrete	1018
	(bb)	Nonshrink Grout	1024.02
	(cc)	Reinforcement Bars and Welded Wire Fabric	1006.10
		Handling Hole Plugs	
	• •		

Note 1. The fine aggregate shall be moist.

Note 2. The coarse aggregate shall be wet."

Revise the table for permitted materials in Article 542.03 of the Standard Specifications as follows:

"Class	Materials
Α	Rigid Pipes:
	Extra Strength Clay Pipe Conserts Source Storm Prain and Cultiert Pipe. Class 3
	Concrete Sewer Storm Drain and Culvert Pipe, Class 3 Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
С	Rigid Pipes:
	Extra Strength Clay Pipe
	Concrete Sewer Storm Drain and Culvert Pipe, Class 3
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
	Flexible Pipes:
	Aluminized Steel Type 2 Corrugated Pipe
	Aluminized Steel Type 2 Corrugated Pipe Arch
	Precoated Galvanized Corrugated Steel Pipe
	Precoated Galvanized Corrugated Steel Pipe Arch Corrugated Aluminum Alloy Pipe
	Corrugated Aluminum Alloy Pipe Arch
1	Polyvinyl Chloride (PVC) Pipe
	Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior
	Polyethylene (PE) Pipe with a Smooth Interior
	Corrugated Polypropylene (CPP) Pipe with Smooth Interior
D	Rigid Pipes: Extra Strength Clay Pipe
	Concrete Sewer Storm Drain and Culvert Pipe, Class 3
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
	Flexible Pipes:
	Galvanized Corrugated Steel Pipe
1	Galvanized Corrugated Steel Pipe Arch Bituminous Coated Corrugated Steel Pipe
	Bituminous Coated Corrugated Steel Pipe Arch
	Aluminized Steel Type 2 Corrugated Pipe
	Aluminized Steel Type 2 Corrugated Pipe Arch
	Precoated Galvanized Corrugated Steel Pipe
	Precoated Galvanized Corrugated Steel Pipe Arch
ļ	Corrugated Aluminum Alloy Pipe Corrugated Aluminum Alloy Pipe Arch
1	Polyvinyl Chloride (PVC) Pipe
	Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior
	Corrugated Polyethylene (PE) Pipe with a Smooth Interior
	Polyethylene (PE) Pipe with a Smooth Interior"
	Corrugated Polypropylene (CPP) Pipe with Smooth Interior

Revise Articles 542.03(b) and (c) of the Standard Specifications to read:

- "(b) Extra strength clay pipe will only be permitted for pipe culverts Type 1, for 10 in., 12 in., 42 in. and 48 in. (250 mm, 300 mm, 1050 mm and 1200 mm), Types 2, up to and including 48 in. (1200 mm), Type 3, up to and including 18 in. (450 mm), Type 4 up to and including 10 in. (250 mm), for all pipe classes.
- (c) Concrete sewer, storm drain, and culvert pipe Class 3 will only be permitted for pipe culverts Type 1, up to and including 10 in (250 mm), Type 2, up to and including 30 in. (750 mm), Type 3, up to and including 15 in. (375 mm); Type 4, up to and including 10 in. (250 mm), for all pipe classes."

Replace the pipe tables in Article 542.03 of the Standard Specifications with the following:

	Type 7	Fill Height:	Greater than 30'	TOLESCEROING SO	> :	> :	> :	> :	> ;	> ;	> :	> :	>	> :	> >	>	> 0	2730	2/40	2/50	2/50	2760	2//0	
Pipe	Туре 6	Fill Height:	Greater than 25'	not fixthead and and and and and and and and and a	> :	> :	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	>:	> :	>	> :	> :	>	> :	> 2	> :	> 0	2370	7380	2390	2400	2410	2410	
"Table IA: Classes of Reinforced Concrete Pipe for the Respective Diameters of Pipe and Fill Heights over the Top of the Pipe	Type 5	Fill Height:	Greater than 20' not exceeding	25'	≥	≥	\	≥ :	<u></u>	>	≥ :	≥ ;	<u>\</u>	≥	≥ ;	>	>	2020	2020	2030	2040	2050	2060	
"Table IA: Classes of Reinforced Concrete Pipe ive Diameters of Pipe and Fill Heights over the	Type 4	Fill Height:	Greater than 15' not exceeding	20,	2	≥	2	≥	2	2	2	≥	2	≥	≥ ;	2	≥ '	≥ '	2	1680	1690	1700	1710	
"Table IA: Classe ective Diameters of	Type 3	Fill Height:	Greater than 10' not exceeding	15'		=		=	=		=	=		=	=		=	=		=	=	=	1360	
for the Resp	Type 2	Fill Height:	Greater than 3'	10,		_	=		=	=	=	=	=	=	=		=	_	=	=	=	=	=	
	Type 1	Fill Height:	3' and less	1' min cover	2	≥	≥		=	2		=	=		=		_	=	=		-		=	
		Nominal	Diameter in.		12	ή	8	21	24	30	36	42	48	54	90	99	72	78	84	06	96	102	108	

Notes: A number indicates the D-Load for the diameter and depth of fill and that a special design is required. Design assumptions; Water filled pipe, Type 2 bedding and Class C Walls

Notes:
A number indicates the D-Load for the diameter and depth of fill and that a special design is required.
Design assumptions; Water filled pipe, Type 2 bedding and Class C Walls

		<u> </u>	OR THE	FOR THE RESPECTIVE DIAM	STIVE D		R OF PIF	TABL PE AND	E IB: TH FILL HEN	ICKNES:	S OF CO /ER THE	RRUGA1 TOP OF	IED STE THE PIF	EL PIPE PE FOR 2	2/3"×1/2"	TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE IETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2", 3"x1" AND 5"x1" CORRUGATIONS	D 5"x1" C	ORRUGA	TIONS		
		Type 1			Type 2			Type 3			Type 4			Type 5			Type 6			Type 7	
		Fill Height:		u.	Fill Height:		u.	Fill Height:		ŧΣ	Fill Height:		ш,	Fill Height			Fill Height			Fill Height:	
O Isnim *.ni		3' and less 1' min. cover	L	Gre not e	Greater than 3' not exceeding 10	13' 310'	Gre not e	Greater than 10' not exceeding 15'	10' 15'	Gree	Greater than 15' not exceeding 20'	15,	Gre	Greater than 20' not exceeding 25'	20,	Gre	Greater than 25' not exceeding 30'	25' 30'	ig g	Greater than 30' not exceeding 35'	30, 35
οN	2 2/3" x 1/2"	3"x1"	5"X1"	2 2/3" × 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"×1"	2 2/3" x 1/2"	3"×1"	5"x1"	2 2/3" × 1/2"	3"×1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"X1"	5"x1"
12	0.064			0.064			0.064			0.064			0.064			0.064			0.064		
15	0.064			0.064			0.064			0.064			0.064			0.064			(0.079)		
18	(0.079)			0.064			0.064			0.064			0.064			(0.079)			(0.079)		
72	(0.079)			0.064			0.064			0.064			(0.079)			(0.079)			(0.079)		
24	(0.079)			0.064			0.064			0.064			(0.079)	<i></i>		(0.079)			(0.109)		
8	(0.109E)			0.064			0.064			(0.079)			(0.079)			(0.109)	į		0.109		-
98	(0.109E)			0.064			(0.079)			(0.079)			(0.109)			0.109			(0.138E)		
42	0.079	~~~		0.064			(0.079)			(0.079)			(0.109)			(0.109E)			(0.109E)		
48	0.109	(0.109)	0.109	(0.109)	0.079	0.079	(0.109)	0.079	(0.109)	0.109	(0.109)	0.109	(0.138)	(0.109)	0.109	(0.138E)	0.109	0.109	(0.138E)	0.109	(0.138)
72	0,109	(0.109)	0.109	(0.109)	0.079	0.079	0.109	(0.109)	0.109	0.109	(0.109)	0.109	(0.138)	0.109	0.109	(0.138E)	0.109	(0.138)	(0.138E)	0.138	0.138
09	0.109	0.109	0.109	0.109	0.079	(0.109)	0.109	(0.109)	0.109	0.109	(0.109)	0.109	(0.138)	0.109	0.109	(0.138E)	(0.138)	(0.138)	0.138E	(0.138E)	(0.138E)
99	(0.138)	0.109	0.109	0.109	0.079	(0.109)	0.109	(0.109)	0.109	0.109	0.109	0.109	(0.138)	0.109	(0.138)	(0.138E)	0.138	0.138	0.138E	(0.138E)	0.138E
72	0.138		(0.138)	0.138	(0.109)	(0.109)	0.138	(0.109)	0.109	0.138	0.109	0.109	0.138	(0.138)	(0.138)	(0.168E)	(0.138E)	0.138E	(0.168E)		0.138E
78	0.168		(0.138)	0.168	(0.109)	0.109	0.168	0.109	0.109	0.168		(0.138)	0.168	(0.138)	(0.138)	H0.168E	(0.138E)	0.138E	H0.168E		(0.168E)
8	0.168	(0.138)	(0.138)	0.168	(0.109)	0.109	0.168	0.109	0.109	0.168		(0.138)	0.168	(0.138)	0.138	H0.168E	(0.138E)	0.138년	H0.168E		(n. 168E)
8		(0.138)	(0.138)		(0.109)	0.109		0.109	0.109			(0.138)		(0.138)	0.138		0.138E			(0.168E)	(0.168E)
96		(0.138)	(0.138)		(0.109)	0.109		0.109	0.109		(0.138)	(0.138)		(0.138)	0.138		(0.168E)			(0.153E)	(U. 100E)
102		0.109Z	0.1092	•	(0.109)	0.109		0.109	(0.138)			(0.138)		(0.138)	0.138		(0.160E)	(C. 100E)		100.1.00	
108		0.109Z (0.138Z	0,138Z)		0.109	0.109		0.103	(0.138)		(0.138)	0.138		0.138	(0.166)		(0. 100E)		- Carrier and a second	100,1001	
114		0.109Z (0.138Z)	(0.138Z)		0,109	0.109		0.109	(0.138)		(0.138)	0.138		(0.168)	(0.168)		(0.168E)	0,168E		TU. 138E	HU.138E HU.100E
120		0.109Z (0.138Z)	(0.138Z)		0,109	0.109		(0.138)	(0.138)		(0.138)	0.138		(0.168)	(0.168)		H0.138E	H0.138E H0.168E		HO.158E	HU.168E HU.168E
126		0.138Z 0.138Z	0.138Z		0.138	0.138		0.138	0.138		0.138	(0.168)		(0.168)	(0.168)		H0.138E	H0.138E H0.168E		H0.168E	H0.168E H0.168E
132		0.138Z 0.138Z	0.138Z		0.138	0.138		0.138	0.138	,	(0.168)	(0.168)		0.168	0.168		HD.138E	HD.138E HO.168E		H0.168E	HO.168E HO.168E
138		0.138Z 0.138Z	0.138Z		0.138	0,138		0.138	0.138			(0.168)			H0.168E		H0.168E	H0.168E H0.168E		H0.168E	
144		0.168Z 0.168Z	0.168Z		0.168	0.168		0.168	0.168		0.168	0.168		H0.168E	H0.168E		H0.168E	H0.168E		HO.168E	

* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for diameters up to 42" according to Article 1006.01, 1 1/2" x 1/4" corrugations shall be used for diameters less than 12". Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.

A thickness preceded by "H" indicates only helical seam fabrication is allowed.

E Elongation according to Article 542.04(e)

Z 1'-5" Minimum fill

	FOR T	HE RESP	FOR THE RESPECTIVE DIAMETER OF PIF	IAMETER	OF PIPE	TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE FE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 mm, 75 mm x 25 mm AND 125 mm x 25 mm CORRUGATIONS	TAI L HEIGH	BLE IB: TS OVEF	TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE GHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 m	SS OF C	ORRUGA E PIPE F	TED STE	EL PIPE n x 13 m	m, 75 mi	n x 25 mr	n AND 12	ss mm x	25 mm C(ORRUGA	TIONS	
										(Metric)	(C)									1	
15		Type 1			Type 2			Туре 3			Type 4			Type 5		ľ	Type 6			Type 7	
nətu	<u> </u>	Fill Height	ı.	1.1.	Fill Height:		u.	Fill Height:	.,	L	Fill Height		_	FIII Heignt		_	Fill Height		_		
eiO ler • mm	0.3	1 m and less 0.3 m min. cover	ss	Grean	Greater than 1 m not exceeding 3 m	a E	Gree	Greater than 3 m not exceeding 4.5 m	3 m 4.5 m	Great not e	Greater than 4.5 m not exceeding 6 m	.5 m 6 m	Gree not ex	Greater than 6 m not exceeding 7.5 m	6 m 7.5 m	Grea	Greater than 7.5 m not exceeding 9 m	.5 m 9 m	Grean not ex	Greater than 9 m not exceeding 10.5 m	9 m 0.5 m
nimoV	68 × 13	75×25	68 x 13 75 x 25 125 x 25	68 x 13	75 x 25	125 x 25	68 x 13 75 x 25	75 x 25	125 x 25	68 x 13 75 x 25	75 x 25	125 x 25	68 x 13	75 x 25 mm	68 x 13 75 x 25 125 x 25 mm mm	68 x 13	75 x 25	68 x 13 75 x 25 125 x 25	68 x 13 75 x 25 mm mm		125 x 25 mm
۽ ا	1.63			1.63		3	1.63			1.63			1.63			1.63			1.63		
375	. 63			1.63			1.63			1.63			1.63			1.63			(2.01)		
450	(2.01)			1.63			1.63			1.63			1.63			(2.01)			(2.01)		
525	(2.01)			1.63			1.63			1.63		·	(2.01)			(2.01)			(2.01)		
009	(2.01)			1.63			1.63			1.63			(2.01)			(2.01)			(2.77)		
750	(2.77E)			1,63			1.63			(2.01)			(2.01)			(2.77)			2.77		
006	(2.77E)			1.63			(2.01)			(2.01)			(2.77)			2.77			(3.51E)		
1050	2.01			1.63			(2.01)	******		(2.01)			(2.77)			(2.77E)			(2.77E)		
1200	2.77	(2.77)	2.77	(2.77)	2.01	2.01	(2.77)	2.01	(2.77)	2.77	(2.77)	2.77	(3.51)	(2.77)	2.77	(3.51E)	2.77	2.77	(3.51E)	2.77	(3.51)
1350	2.77	(2.77)	2.77	(2.77)	2.01	2.01	2.77	(2.77)	2.77	2.77	(2.77)	2.77	(3.51)	2.77	2.77	(3.51E)	2.77	(3.51)	(3.51E)	3.51	3.51
1500	2.77	2.77	2.77	2.77	2.01	(2.77)	2.77	(2.77)	2.77	2.77	(2.77)	2.77	(3.51)	2.77	2.77	(3.51E)	(3.51)	(3.51)		(3.51E)	(3.51E)
1650	(3.51)	2.77	2.77	2.77	2.01	(2.77)	2.77	(2.77)	2.77	2.77	2.77	2.77	(3.51)	2.77	(3.51)	(3.51E)	3.51	3,51	3.51E	(3.51E)	3.51E
1800	3.51	2.77	(3.51)	3.51	(2.77)	(2.77)	3.51	(2.77)	2.77	3.51	2.77	2.77	3.51	(3.51)	(3.51)	(4.27E)	(3.51E)	3.51E	(4.27E)	(3.51层)	3.51E
1950	4.27	2.77	(3.51)	4.27	(2.77)	2.77	4.27	2.77	2.77	4.27	2.77	(3.51)	4.27	(3.51)	(3.51)	H 4.27E (3.51E)	(3.51E)	3.51E	H 4.27E	3.511	(4.27E)
2100	4 27	(3.51)	(3.51)	4.27	(2.77)	2.77	4.27	2.77	2.77	4.27	2.77	(3.51)	4.27	(3.51)	3.51	H 4.27E	(3.51E)	3.51E	H 4.27E (4.27E)	(4.27E)	(4.27E)
2250		(3.51)	(3.51)		(2.77)	2.77		2.77	2.77		(3.51)	(3.51)		(3.51)	3.51		3.51Ε	(4.27E)			(4.27E)
2400		(3.51)	(3.51)		(2.77)	2.77		2.77	2.77		(3.51)	(3.51)		(3.51)	3.51		(4.27E)	(4.27E)			(4.27E)
2550		2.77Z	2.77Z		(2.77)	2.77		2.77	(3.51)		(3.51)	(3.51)		(3.51)	3.51		(4.27E)	(4.27E)			H 4.27E
2700		2.77Z	(3.51Z)		2.77	2.77		2.77	(3.51)		(3.51)	3.51		3.51	(4.27)		(4.27E)	(4.27E)		H 3.51E	H 4.27E
2850		2.772	(3.512)		2.77	2.77		2.77	(3.51)		(3.51)	3.51		(4.27)	(4.27)		(4.27E)	4.27E		H 3.51E H 4.27E	H 4.27E
3000		2,772	(3.51Z)		2.77	2.77		(3.51)	(3.51)		(3.51)	3.51		(4.27)	(4.27)		H 3.51E	H 4.27E		H 4.27E	H 4.27E
3150		3.51Z	3.512		3,51	3,51		3,51	3.51		3.51	(4.27)		(4.27)	(4.27)		H 3.51E H 4.27E	H 4.27E		H 4.27E H 4.27E	H 4.27E
3300		3.512	3.51Z		3.51	3.51		3.51	3.51		(4.27)	(4.27)		4.27	4.27		13.51E	H 3.51E H 4.27E			H 4.27E
3450		3.512	3.51Z		3.51	3.51		3,51	3.51		(4.27)	(4.27)		(4.27E)	H 4.27E		+4.27 E	H 4.27E H 4.27E		H 4.27E	
3600		4.272	4.27Z		4.27	4.27		4.27	4.27		4.27	4.27		1 4.27E	H 4.27E H 4.27E		14.27日	H 4.27E H 4.27E		H 4.27E	

Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for diameters up to 1050 mm according to Article 1006.01, 38 mm x 6.5 mm corrugations shall be used for diameters less than 300 mm.

Thicknesses assed on longitudinat riveted seam fabrication, values in "0" can be reduced by one gage thicknesses if helical seam fabrication is allowed.

A thickness preceded by an "1" indicates only helical seam fabrication is allowed.

E Elongation according to Article 542.04(e)

Z 450 mm Minimum Fill

	Ţ		1							اہ	Щ	ল ল	ᆔ	n n	<u></u>	പ	n n	ា :	긺	<u></u>	ធ្ល	ıй	щ	Щ	٦
	e7	əight	than 30' eding 35'	3"x1"						H 0.060	H 0.060E	(0.105E)	(0.135E)	(0.135E)	(0.135E)	(0.135E)	(0.164E)	(0.164E)	(0.164E)	(0.164E)	H 0.135E	H 0.135E	H 0.164E	H 0.164E	
TIONS	Type 7	Fill Height:	Greater than 30' not exceeding 35'	2 2/3"x1/2"	0.060	(0.075)	H 0.060	H 0.060E	(0.105E)	H 0.075E	H 0.075E	0.105E	0.105E	(0.135E)	(0.164E)	H 0.164E	H 0.164E						- Andrew		
CORRUGA	Type 6	Fill Height:	Greater than 25' not exceeding 30'	3"×1"						H 0.060	H 0.060	0.105	(0.105E)	(0.105E)	(0.135E)	(0.135E)	(0.135E)	(0.135E)	(0.164E)	(0.164E)	(0.164E)	(0.164E)	(0.164E)	H 0.164E	H 0.164E
" AND 3"X1"	Typ	H III	Greater not exce	2 2/3"×1/2"	090'0	090'0	(0.075)	H 0.060	(0.105)	H 0.075E	H 0.075E	0.105臣	0.105E	0.105E	0.135E	0.164E	H 0.164E								
PIPE R 2 2/3"x1/2	Type 5	sight:	than 20' eding 25'	3"x1"						H 0.060	H 0.060	(0.075)	(0.105)	(0.105)	(0.105)	(0.135)	(0.135)	(0.135)	(0.135)	(0.135)	(0.135)	(0.164)	(0.164)	0.164	0.164
NUM ALLOY HE PIPE FO	Typ	Fill Height:	Greater than 20' not exceeding 25'	2 2/3"×1/2"	090.0	090'0	0.060	(0.075)	(0.105)	(0.105)	(0.135)	0.105	0.105	0.105	0.135	0.164	0.164								
TED ALUMINE TOP OF TI	4	ight:	han 15' ding 20'	3"X1"						H 0.060	H 0.060	0.060	(0.075)	(0.075)	(0.105)	(0.105)	(0.105)	(0.105)	(0.135)	(0.135)	(0.135)	0.135	0.135	0.164	0.164
CORRUGA S OVER THE	Type 4	Fill Height	Greater than 15' not exceeding 20'	2 2/3"x1/2"	0.060	0.060	0.060	0.060	(0.075)	(0.105)	(0.105)	0.105	0.105	0.105	0.135	0.164	0.164								
KNESS OF LL HEIGHT	33	ight:	han 10' ding 15'	3"x1"						H 0.060	H 0.060	090.0	090.0	090.0	(0.075)	(0.075)	(0.075)	(0.105)	0.105	0.105	0.105	0.135	0.135	0.164	0.164
TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/	Type 3	Fill Height	Greater than 10' not exceeding 15'	2 2/3"×1/2"	090.0	0.060	0.060	090'0	090'0	0.075	(0.105)	0.105	0.105	0.105	0.135	0.164	0.164								
TAB ETER OF F	2	feight	nan 3' iing 10'	3"x1"						H 0.060	H 0.060	090'0	090.0	0.060	090.0	090.0	090:0	0.075	0.105	0.105	0.105	0.135	0.135	0.164	0.164
TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2" AND 3"x1" CORRUGATIONS	Type 2	Fill Hei	Greater than 3' not exceeding 10'	2 2/3"x1/2"	0.060	090.0	0.060	0.060	090.0	0.075	0.075	0.105	0.105	0.105	0.135	0.164	0.164								
HE RESPE	1	ght:	less	3"x1"						H 0.060	H 0.060E	(0.075)	(0.075)	(0.105)	(0.105)	(0.105)	(0.105)	(0.135)	(0.135)	(0.135)	(0.135)	0.135Z	0.135Z	0.164Z	0.164Z
FOR T	Type 1	Fill Height	3' and less	2 2/3"×1/2"	(0.075)	(0.075)	(0.075)	H 0.060E	(0.105E)	H 0.075E	(0.135E)	0.105E	0.105E	0.105E	0.135E	0.164E	0.164E			-					
	.et	təms	iO Isni .ni	moV	12	15	18	21	74	<u>ج</u>	98	42	48	54	9	99	72	78	84	06	96	102	108	114	. 52

Notes:

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.

A thickness preceded by an "H" indicates only helical seam fabrication is allowed.

E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 1-6"

Z 1"-6" Minimum fill

			FOR THE	TABLE RESPECT FC	TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 mm AND 75 mm x 25 mm CORRUGATIONS (Metric)	NESS OF (TER OF PIF 13 mm ANI	CORRUGA DE AND FIL D 75 mm x (Metric)	TED ALUIV LL HEIGHT 25 mm CO	IINUM ALL(S OVER TH IRRUGATIC	JY PIPE HE TOP OF NS	THE PIPE			
	Type 1)e 1	Typ	Type 2	Type 3	33	Type 4	e 4	Type 5	e 5	Type 6	9	Type 7	7
ıətəm	¥ III	Fill Height	H	Fill Height:	Fill Height	ight	Fill Height	aight:	Fill Height	eight:	Fill Height	ight:	Fill Height:	ght:
isiO Isr mm	1 m and less	nd less in, cover	Greater not excet	Greater than 1 m	Greater than 3 m not exceeding 4.5 m	han 3 m ling 4.5 m	Greater than 4.5 m not exceeding 6 m	ian 4.5 m ding 6 m	Greater than 6 m not exceeding 7.5 m	han 6 m ling 7.5 m	Greater than 7.5 m not exceeding 9 m		Greater than 9 m not exceeding 10.5 m	ian 9 m ng 10.5 m
nimoM	68 × 13 mm	75 x 25 mm	68 x 13 mm	75 × 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm
300	(1.91)		1.52		1.52		1.52		1.52		1.52		1.52	
375	(1.91)		1.52		1.52		1.52		1.52		1.52		(1.91)	
450	(E		1.52		1.52		1.52		1.52		(1.91)		H 1.52	
525	H 1.52E		1.52		1.52		1.52		(1.91)		H 1.52		H 1.52E	
009	(2.67E)		1.52		1.52		(1.91)	············	(2.67)		(2.67)		(2.67E)	1
750	H 191E	H 1.52	1.91	H 1.52	1.91	H 1.52	(2.67)	H 1.52	(2.67)	H 1.52	H 1.91E	H 1.52	H 1.91E	H 1.52
06	(3.43E)	H 1.52E	1.91	H 1.52	(2.67)	H 1.52	(2.67)	H 1.52	(3.43)	H 1.52	H 1.91E	H 1.52	H 1.91E	H 1.52E
1050	2.67E	(1.91)	2.67	1.52	2.67	1.52	2.67	1.52	2.67	(1.91)	2.67E	2.67	2.67E	(2.67E)
1200	2.67E	(1.91)	2.67	1.52	2.67	1.52	2.67	(1.91)	2.67	(2.67)	2.67E	(2.67E)	2.67E	(3.43E)
1350	2,67E	(2.67)	2.67	1.52	2.67	1.52	2.67	(1.91)	2.67	(2.67)	2.67E	(2.67E)	(3.43E)	(3.43E)
1500	3,43€	(2.67)	3.43	1.52	3.43	(1.91)	3.43	(2.67)	3.43	(2.67)	3.43E	(3.43E)	(4.17E)	(3.43E)
1650	4.17E	(2.67)	4.17	1.52	4.17	(1.91)	4.17	(2.67)	4.17	(3.43)	4.17E	(3.43E)	H 4.17E	(3.43E)
1800	4.17E	(2.67)	4.17	1.52	4.17	(1.91)	4.17	(2.67)	4.17	(3.43)	H 4.17E	(3.43E)	H 4.17E	(4.17E)
1950		(3.43)		1.91		(2.67)		(2.67)		(3.43)		(3.43E)		(4.17E)
2100		(3.43)		2.67		2.67		(3.43)		(3.43)		(4.17E)		(4.1/E)
2250		(3.43)		2.67		2.67		(3.43)		(3.43)		(4.17E)		(4.17E)
2400		(3.43)		2.67		2.67		(3.43)		(3.43)		(4.17E)		H 3.43E
2550		3.43Z		3.43		3.43		3.43		(4.17)		(4.17E)		H 3.43E
2700		3.43Z		3.43		3.43		3.43		(4.17)		(4.17E)		H 4.17E
2850		4.172		4.17		4.17		4.17		4.17		H 4.17E		H 4.17E
3000		4.17Z		4.17		4.17		4.17		4.17		H 4.17E		

Notes:
Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.
A thickness preceded by an "H" indicates only helical seam fabrication is allowed.
E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 450 mm.
Z 450 mm Minimum fill

Steel & Stee	T Kound in.		Corrugated Steel & Aluminum Pipe Arch	Corru Ste Alum Pipe	1 2	Corru	FOR TH FOR TH Corrugated Steel Fipe Arch 5" x 1"	Table IIA: THICKNESS FOR CORRUGATED STEEL PIPE ARCHES AND CORRUGATED ALUMINUM ALLOY PIPE ARCHES FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE Corrugated Min. Fill Height Fill Height Greater than 3' and less Greater than 3' not exceeding 10' Greate	R CORRU	GATED IVALEN	NT ROUND Type 1 Fill Height:	IPE ARC	SHES AN	AND FILL	UGATED HEIGHT	Type 2 Type 2 Fill Height:	THE TO	10' PIP	ARCHE PE	ES F	Type 3 Fill Height.	CHES Type 3 Fill Height: Greater than 10' not exceeding 15'	5.
Span Rise Rise <th< td=""><td>9ZIS</td><td></td><td>× 1/2"</td><td>to to</td><td>× 1</td><td>,</td><td>(</td><td></td><td></td><td></td><td></td><td></td><td>muni</td><td></td><td>Steel</td><td></td><td>Alumi</td><td>unu</td><td></td><td>Steel</td><td></td><td>Alumi</td><td>mnu</td></th<>	9ZIS		× 1/2"	to to	× 1	,	(muni		Steel		Alumi	unu		Steel		Alumi	mnu
17 13 1.5 1.6 0.064 1.0 0.060 0.064 0.064 0.064 0.060 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.064 0.066 0.064	b=	Span (in.)*	Rise (n.)	Span (in.)		Span (in.)		Steel & Aluminum	2 2/3" × 1/2"	3"x1"	_	2 2/3" x 1/2"	3"X1"	2 2/3" × 1/2"	3"x1"	x 7	2 2/3" × 1/2"	3"x1"	2 2/3" × 1/2"	3"x1"	\rightarrow	2 2/3" × 1/2"	3"x1"
21 15 1.6° 0.064 0.075 0.075 0.064 0.075<	15	17	13					1'-6"	0.064			0.060		0.064			0.060		0.064			0.060	
28 20 4 11-5° 0.0054 4 0.0054 0.0054 0.0054 0.0056 0.0056 0.0056 0.0056 0.0055 0.0056 0.0055 0.0055 0.0054 0.0055 0.0054 0.0055 0.0056 0.0054 0.0055 0.0056 0.	18	7	15					1.6.	0.064			090'0		0.064			0.060		0.064			0.060	
28 20 3 4 1-6° (0.75) 4 0.064 4 0.075 0.064 6 0.075 0.075 0.075 0.075 0.075 0.075 0.075 0.075 0.075 0.075 0.075 0.075 0.075 0.075 0.075 0.075 0.075 0.076 0.075 0.	2	24	82					1'-6"	0.064			(0.075)		0.064			0.060		0,064			0.060	
35 24 35 24 35 44 35 44 45 (0.079) 45 (0.076) 45 (0.079) 45	24	88	8			_		16"	(0.079)			(0.105)		0.064			0.075		0.064			0.075	
42 29 42 29 42 29 42 29 42 29 42 29 42 29 42 29 42 29 44 23 44 23 44 24 24 23 44 23 44 14-6" 0.109	30	35	24					1.6	(0.079)			(0.105)		0.064			0.075		(0.079)			(0.105)	
49 33 44 33 4.1-5° 0.109 0.105 0.105 0.105 0.105 0.105 0.105 0.105 0.109 0.109 0.105 0.105 0.109 0.109 0.109 0.105 0.109 0.109 0.109 0.105 0.109	36	45	29					1-6	(0.079)			0.105		0.064			0,105		0.064			0.105	
57 38 53 41 53 41 1-6" 0.109 (0.109) 0.135 0.060 0.109 0.079	42	49	33					16"	0.109			0.105		(0.109)			0.105		(0.109)			0.105	
64 48 60 46 60 46 1-6** 0.109 0.109 0.109 0.079	48	57	38	53	41	53	41	-6	0.109	(0.109)		0.135	090'0	0.109	0.079	0.079	0.135		0.109	0.079	(0.109)	0.135	0.000
71 47 66 51 66 51 1-6" 0.138 (0.109) 0.164 (0.075) 0.138 (0.109) 0.164 0.079 (0.169) 0.164 0.060 0.138 (0.109) 0.109 0.108 0.075 0.168 0.079 (0.109) 0.169 0.075 0.168 0.079 0.109<	54	2	43	9	46	09	46	1.6	0.109	(0.109)	0.109	0.164	(0.075)	0.109	0.079	0.079	0.164	0.060	0.109	(0.109)	0.109	0.164	(0.075)
77 52 73 55 74 63 60<	8	12	47	99	51	98	51	1,-6"	0.138	(0.109)	0.109	0.164	(0.075)		0.079	(0.109)	0.164	0.060		(0.109)	0.109	0.164	(0.075)
83 57 81 59 81 59 1'-6" 0.108 (0.109) 0.105 0.005 0.105 0.105 0.109 0.109 0.109 0.109 0.105 0.109 0.109 0.109 0.105 0.109	99	77	52	73	52	73	55	1-6	0.168	(0.109)	0.109		0.075	0.168	0.079	(0.109)		0.075		(0.109)	0.109		0.075
87 63 87 63 1-6" 0.109 0.105 0.109 0.105 0.109 0.105 0.105 0.109 0.105 0.109	72	83	25	25	29	8	29	1-6"	0.168	(0.109)	0.109		0.105	0.168	0.079	(0.109)		0.105	0.168	(0.109)	0.109		0.105
95 67 96 67 1-6" 0.109 0.105 0.109 0.105 0.109	78			8,	ន	87	83	1-6"		0.109	0.109		0.105		(0.109)			0,105		0.109	0.109		0,105
103 71 103 71 11-6" 0.109 <td>84</td> <td></td> <td></td> <td>92</td> <td>29</td> <td>99</td> <td>29</td> <td>1-6"</td> <td></td> <td>0,109</td> <td>0.109</td> <td></td> <td>0,105</td> <td></td> <td>(0.109)</td> <td></td> <td></td> <td>0.105</td> <td></td> <td>0.109</td> <td>0.109</td> <td></td> <td>0.105</td>	84			92	29	99	29	1-6"		0,109	0.109		0,105		(0.109)			0.105		0.109	0.109		0.105
112 75 112 75 112 75 11-6" 0.109 (0.138) 0.164 0.109 0.109 0.109 0.109 0.109 0.109 0.138 117 79 11-6" 0.138 0.148 0.168 0.168 0.168 0.168 0.168 0.168 0.168 0.168 0.168 0.168 0.168 0.168 0.168 <t< td=""><td>06</td><td></td><td></td><td>103</td><td>7</td><td>103</td><td>71</td><td>1-6"</td><td></td><td>0.109</td><td>0.109</td><td></td><td>0.135</td><td></td><td>(0:109)</td><td>-</td><td></td><td>0.135</td><td></td><td>0.109</td><td>0.109</td><td></td><td>0.135</td></t<>	06			103	7	103	71	1-6"		0.109	0.109		0.135		(0:109)	-		0.135		0.109	0.109		0.135
17 79 11-7 79 11-6" 0.109 (0.138) 0.164 0.109 0.109 0.109 (0.138) 128 83 128 83 11-6" 0.138 0.148 0.168	96			112	75	112	75	1-6"		0.109	(0.138)		0.164		0.109	0.109		0.164			(0.138)		0.164
128 83 128 83 1-6" 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.138 0.168 0.168 0.168 0.168 0.168 0.168 0.168	102			117	79	117	79	1-6		0.109	(0.138)		0.164		0.109	0.109		0.164			(0.138)		0.164
137 87 142 91 142 91 142 91 142 91 142 93 142 0.168 0.168 0.168 0.168 0.168 0.168	108			128	83	128	83	1-6"		0.138	0.138				0.138	0.138				0.138	0.138		
142 91 142 91 142 91 142 91 142 91 142 91 142 91 142 91 143 143 143 143 143 144	114			137	87	137	87	1-6		0.138	0.138				0.138					0.138	0.138		
	120			142	9	142	9	1'-6"		0.168	0.168				0.168	0.168				0.168	0.168		

*** Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 42" according to Article 1006.01.

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.

The Type 1 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 3 tons per square foot.

The Type 2 and 3 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 2 tons per square foot.

This minimum bearing capacity will be determined by the Engineer in the field.

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	ł			ļ i ≍	Table IIA: THICK FOR THE	A: THICK FOR THE	KNESS FOR CORRUGATED STEEL PIPE ARCHES AND CORRUGATED ALUMINUM ALLOY PIPE ARCHES IE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE (Metric)	R CORRI	UGATED	STEEL IT ROUN	PIPE AR(JD SIZE ((Me	ARCHES AN ZE OF PIPE / (Metric)	ND CORF	NGATE	D ALUM TS OVE	INUM AL	LOY PIP OP OF P	E ARCH IPE	ES			
		-								Type 1					Type 2					Type 3		
əzi2 brı	Corrugated Steel & Aluminum		Corrugated Steel & Aluminum	gated el inum	Corrugated Steel Pine Arch	gated sel Arch	Min. Cover		"	Fill Height:	نن			ட	FIII Height	ı.				Fill Height	11	
no兄 tra (mm)	Pipe Arch 68 x 13 mm		Pipe Arch 75 x 25 mm	Arch 5 mm	125 x 2	125 x 25 mm			~	1 m and less	SS		Grea	Greater than 1 m not exceeding 3 m	1 m not €	xceedin	33 m	Grea	ter than	Greater than 3 m not exceeding 4.5 m	ceeding	4.5 m
elsvi			1	;		i	0		Steel		Aluminum	mau		Steel		Alum	Aluminum		Steel		Alun	Aluminum
nb∃	Span F (mm)* (r	Rise (mm)	Span (mm)	Kise (mm)	(mm)	(mm)	Steel & Afuminum	68 x 13	68 x 13 75 x 25 125 x 25	125 x 25 mm	68 x 13 mm	75 x 25 mm		68 x 13 75 x 25 125 x 25 68 x 13 75 x 25 mm mm mm	125 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	125 x 25 mm		68 x 13 75 x 25 mm mm
375	430	330					0.5 m	1.63			1.52		1.63			1.52		1.63			1.52	
450		380					0.5 m	1.63			1.52		1.63		_	1.52		1.63			1.52	
525		460					0,5 m	1.63			(1.91)		1.63			1.52		1.63			1.52	
99		570					0,5 m	(2.01)			(2.67)		1.63		_	1.91		1.63			1.91	
750		630					0.5 m	(2.01)			(2.67)		1.63		_	1.91		(2.01)			(2.67)	
900	1060 7	740					0.5 m	(2.01)			2.67		1.63		-	2.67		1.63			2.67	
1050	1240	840					0.5 m	2.77			2.67		(2.77)			2.67		(2.77)			2.67	
1200	1440		1340	1050	1340	1050	0.5 m	2.77	(2.77)	(2.77)	3.43	1.52	2.77	2.01	2.01	3.43	1.52	2.77	2.01	(2.77)	3.43	1.52
1350	1620		1520	1170	1520	1170	0.5 m	2.77	(2.77)	2.77	4.17	(1.91)	2.77	2.01	2.01	4.17	1.52	2.77	(2.77)	2.77	4.17	(1.91)
1500	1800		•	1300	ı	1300	0.5 m	3.51	(2.77)	2.77	4.17	(1.91)	3.51	2.01	(2.77)	4.17	1.52	3,51	(2.77)	2.77	4.17	(1.91)
1650	1950			1400		1400	0.5 m	4.27	(2.77)	2.77		1,91	4.27	2.01	(2.77)		1.91	4.27	(2.77)	2.77		1.91
1800	2100		2050	1500	2050	1500	0.5 m	4.27	(2.77)	2.77		2.67	4.27	2.01	(2.77)		2.67	4.27	(2.77)	2.77		2.67
1950			2200	1620	2200	1620	0.5 m		2.77	2.77		2.67		(2.77)	2.77		2.67		2.77	2.77		2.67
2100			2400	1720	2400	1720	0.5 m		2.77	2.77		2.67		(2.77)	2.77		2.67		2.77	2.77		7.6/
2250				1820	2600	1820	0.5 m		2.77	2.77		3.43		(2.77)	2.77		3.43		2.77	2.77		3.43
2400			ı	1920	2840	1920	0.5 m		2.77	(3.51)		4.17		2.77	2.77		4.17		2.77	(3.51)		4.17
2550			2970	2020	2970	2020	0.5 m		2.77	(3.51)		4.17		2.77	2.77		4.17		2.77	(3.51)		4.1
2700			3240	2120	3240	2120	0.5 m		3.51	3.51	L			3.51	3.51				3.51	3.51		
2850			3470	2220	3470	2220	0.5 m		3.51	3.51				3.51	3.51				3.51	3.51		
3000			3600	2320	3600	2320	0.5 m		4.27	4.27				4.27	4.27				4.27	4.27		
Notes																						

Notes:

* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 1060 mm according to Article 1006.01.

* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 1060 mm according to an inveled seam fabrication is utilized. Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized. The Type 1 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 192 kN per square meter. The Type 2 and 3 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity will be determined by the Engineer in the field.

		+														
	Type 3	Fill Height: Greater than 10' not exceeding 15'	Arch	A-IV	A-I<	A-I<	A-IV	_ A-IV	\ - -	Y-I<	A-I<	1450	1460	1470	1480	1480
CH PIPE IF PIPE	Ty	Fill H Greater th excee	프	HE-IV	HE-IV	HE-IV	HE-IV	∕II-∃H	HE-I∨	HE-IV	HE-IV	1460	1460	1460	1470	1470
CRETE AR THE TOP C	Type 2	Fill Height: Greater than 3' not exceeding 10'	Arch	₩	Y-III	H-III	A-III	A-III	A-III	A-III	H-H	H-H	A-III	H-H	A-III	A-III
RCED CON	Tyr	Fill H Greater t exceed	빞	# -₩	≡ -₩	HE-II	H-H	HE-II	量量	HE-III	⊪-∃H	≡- ₩	= -₩	HE-III	HF-II	里里
ID REINFOF	e 1	-ill Height: 3' and less	Arch	H-H	H-⊩	∃-¥	∃-¥	A-III	₩-₩	A-II	H-A	H-A	A-II	H-H	A-II	A-II
PTICALL AN	Type 1	Fill Height: 3' and les	用	岩二	≡ ₋ Ψ	HE-III	HE-III	HE-III	HE-III	H	五一一	业	卫	HË-	里	HE-I
Table IIB: CLASSES OF REINFORCED CONCRETE ELLIPTICALL AND REINFORCED CONCRETE ARCH PIPE FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE		Minimum Cover	RCCP HE & A	1, -0,,	1'-0"	1. 'o	1-0-1-	1-0"	1. -0.	 -	1,0-,1		1, -0,,	1-0-1	-0 -0	1' -0"
IFORCED C		Reinforced Concrete Arch pipe (in.)	Rise	11	13 1/2	15 1/2	8	22 1/2	22 1/2	26 5/8	31 5/16	36	40	45	5.45	54
S OF REIN		Reinf Con Arch pi	Span	18	22	56	28 1/2	36 1/4	36 1/4	43 3/4	51 1/8	58 1/2	65	73	800	88
S: CLASSE HE RESPE	-	Reinforced Concrete Elliptical pipe (in.)	Rise	14	4	. Q	6	22	24	73	34	, e.	43	48		28 8
Table IIE FOR TI		Reint Con Elliptic (ir	Span	23	33	30	S &	34	œ.	45	53	9 6	8 8	76	2 6	9 6
		Equivalent Round Size (in.)		15	, ¢	2 :	24	27	i e	38	42	iα	75	9	8 6	72

Notes:
A number indicates the D-Load for the diameter and depth of fill and that a special design is required.
Design assumptions; Water filled pipe, AASHTO Type 2 installation per AASHTO LRFD Table 12.10.2.1-1

							Т			Т						
	Type 3	Fill Height: Greater than 3 m not exceeding 4.5 m	Arch	A-IV	A-I\	A-IV	A-IV	A-I<	A-I<	}- -	A-I<	22	2	2	2	70
: : ۲	Tyr	Fill H Greater th exceedi	里	/I-∃H	HE-IV	HE-IV	스	수및	무	HE-IV	HE-IV	02	70	20	20	70
E ARCH PIF	3.2	sight: in 1 m not ng 3 m	Arch	H-HI	H-A	H-III	A-III	H-H	A-III	H-₩	Y-III	H-III	H-Ⅲ	⊪-W	H-F	A-III
ED CONCRET OVER THE T	Type 2	Fill Height: Greater than 1 m not exceeding 3 m		HE-III	HE-III	HE-III	HE-III	무무	무무	HE-III	<u></u>	무	HE-III	H-H	≡	HE-III
REINFORCE	e 1	eight: id less	Arch	A-III-A	A-III	A-III	A-III	A-III	¥.	A-II	H-K	H-K	A-II	H-A	A-II	A-II
IPTICALL ANI F PIPE AND F ric)	Type 1	Fill Height: 1 m and less	뿟	HE-III	HE-III	HE-III	HE-III	HE-III	H-H-H	HE-II	긒	핖	HE-I	业	护	빞
Table IIB: CLASSES OF REINFORCED CONCRETE ELLIPTICALL AND REINFORCED CONCRETE ARCH PIPE FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE (Metric)		Minimum Cover	RCCP HE & A	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m
EQUIVALEN		Reinforced Concrete ch pipe (mm)	Rise	279	343	394	457	572	572	929	795	914	1016	1143	1372	1372
ASSES OF RESPECTIVE		Reinforced Concrete Arch pipe (mm)	Span	457	559	099	724	921	921	177	1299	1486	1651	1854	2235	2235
able IIB: CL/ FOR THE R		Reinforced Concrete Elliptical pipe (mm)	Rise	356	356	483	483	559	610	737	864	965	1092	1219	1346	1473
		Rein Cor Elliptical	Span	584	584	762	762	864	965	1143	1346	1524	1727	1930	2108	2311
		Equivalent Round Size (mm)		375	450	525	900	686	750	006	1050	1200	1350	1500	1676	1800

Notes:
A number indicates the D-Load for the diameter and depth of fill and that a special design is required.
A number indicates the D-Load for the diameter and depth of fill and that a special design is required.
Design assumptions; Water filled pipe, AASHTO Type 2 installation per AASHTO LRFD Table 12.10.2.1-1

					FOR A (GIVEN	TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE	ILE IIIA: METER	PLAST AND FIL	IC PIPE L HEIGH	TABLE IIIA: PLASTIC PIPE PERMITTED DIAMETER AND FILL HEIGHT OVER TH	TED THE TO	P OF TH	E PIPE					
								7,700					Tyne 3				Type 4	4 6	
Nominal		Fill Height: 3' and less,	ight: 3' and	nd less,		<u> </u>	Fill Height: Greater than 3'	eight: Greater tha	er than 3	20.		Fill Height: Greater than not exceeding 15'	sight: Greater than	than 10'	_	Fill He	Fill Height: Greater than 15' not exceeding 20'	eater the	ın 15',
Diameter (in.)	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	СРР	PVC	CPVC	믭	CPE	СРР	PVC	CPVC	PE	СРР
9	×	×	×	×	ΑΝ	×	×	×	×	ΑΝ	×	×	×	×	ž	×	×	×	ξ
5 5	< ×	< ×	×	×	×	: ×	×	×	×	×	×	×	×	NA	×	×	×	×	ΑΝ
i f	< >	< ×	ΔN	×	×	×	×	¥	×	×	×	×	¥	ΑN	×	×	×	Ϋ́	×
Ξ α	< ×	< ×	×	×	: ×	: ×	: ×	×	×	×	×	×	×	A	×	×	×	×	¥
2 5	< ×	< ×	₹ 2	Ϋ́Z	Υ A	×	: ×	¥	ž	Ą	×	×	Ϋ́	Ϋ́	NA	×	×	ΑN	Ϋ́
24	× ×	×	×	×	×	×	×	×	×	×	×	×	ΑÑ	NA	ΝA	×	×	×	Ϋ́
Į 6	: ×	×		×	×	×	×	×	×	×	×	×	×	ΑĀ	×	×	×	×	ž
36	×	×	×	×	×	×	×	×	×	×	×	×	×	ΑĀ	≨	×	×	×	¥
42	×	Ϋ́	×	×	AN	×	Ā	×	NA	ΑN	×	ž	×	¥	ΑN	×	¥ Z	×	₹ :
48	×	Ą	×	×	×	×	NA	×	Ϋ́	ΑN	×	ΑΝ	×	NA	¥	×	ΨN	×	Ϋ́
Notes:																			

Notes:
PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
PVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
CPC Corrugated Polyethylene (PE) pipe with a smooth interior
CPE Corrugated Polyethylene (PE) pipe with a smooth interior
CPP Corrugated Polypropylene (CPP) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available

						,			·····					
		an 4.5 m	Ç	ָ בֿ	Ϋ́	¥	×	ž	Ϋ́	ž	ž	₹	¥	Ą
	9.4	eding 6	L	<u>т</u>	×	\times	Ž	×	¥	×	×	\times	×	×
	Type 4	Fill Height: Greater than 4.5 m, not exceeding 6 m	0.00	CFVC	X	×	×	×	×	×	×	×	NA NA	Š
		FIII He m,	Ç, ii	PVC	X	×	×	×	×	×	×	×	×	×
		'n,		<u>}</u>	NA	×	×	×	NA	NA	×	NA	ΑĀ	ΑA
JE PIPE	Type 3	Fill Height: Greater than 3 m not exceeding 4.5 m	1	2 11	×	AN	AN	Ϋ́	NA	ΑN	¥	ΑN	ΑĀ	Ϋ́
- OF 11			ı	ፓ ከ	×	×	AN	×	ΑĀ	ΑN	×	×	×	×
TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE (Metric)				CPVC	×	×	×	×	×	×	×	×	NA	Ą
				S S	×	×	×	×	×	×	×	×	×	×
		Fill Height: Greater than 1 m, not exceeding 3 m		d d	ž	×	×	×	¥	×	×	×	ΑΝ	Ϋ́
				CPE	×	×	×	×	Ą	×	×	×	ž	ΑĀ
	Type 2	eight: Greater than	*	<u>г</u> П	×	×	AN	×	Ϋ́	×	×	×	×	×
		II Height:		CPVC	×	×	×	×	×	×	×	×	AN	AN
		Ī		PVC	×	×	×	×	×	×	×	×	×	×
	Type 1			CPP	¥	×	×	×	¥	×	×	×	¥	×
		and less		CPE	×	×	×	×	. ₹	×	×	×	×	×
		I Height: 1 m and les		핎	×	×	¥	×	. ₹	×	×	×	×	×
		Fill Height: 1 m and less		CPVC	×	×	×	×	×	×	×	×	Ą	ΑN
				PVC	×	×	×	×	×	×	×	×	×	×
		Nominal	Diameter	Î	250	800	375	0.70	40g	909	750	800	1000	1200

Notes:
PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
PE Polyethylene (PE) pipe with a smooth interior
CPE Corrugated Polyethylene (PE) pipe with a smooth interior
CPP Corrugated Polypropylene (CPP) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available

	THE PIPE	Type 7	Fill Height: Greater than 30', not exceeding 35'	CPVC	××		×:	~ >		~××	<>	<u> </u>	AN .	NA NA
IPE PERMITTED	FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE	Type 6	Fill Height: Greater than 25', not exceeding 30'	CPVC	× >			×:	×	×:	···	×		NA.
TABLE IIIB: PLASTIC PIPE PERMITTED	JAMETER AND FILL H	•	Fill Height: Greater 1	PVC	×>	\ \	×	×	×	×	×:	×	×:	×
		rc.	20', not exceeding 25'		, and the same of									
		Type 5	Fill Height: Greater than	CPVC	×	×	×	×	×	×	×	X	AN	NA
			Fill Height:	PVC	×	×	×	×	×	×	×	×	×	×
			Nominal	(in.)	10	7	15	9	74	24	99	36	42	48

Notes:
PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available

Polyvinyl Chloride (PVC) pipe with a smooth interior Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior Polyethylene (PE) pipe with a smooth interior This material may be used for the given pipe diameter and fill height Not Available" Notes:
PVC
CPVC
CPVC
NA

Revise the first sentence of the first paragraph of Article 542.04(c) of the Standard Specifications to read:

"Compacted aggregate, at least 4 in. (100 mm) in depth below the pipe culvert, shall be placed the entire width of the trench and for the length of the pipe culvert, except compacted impervious material shall be used for the outer 3 ft (1 m) at each end of the pipe culvert."

Revise the seventh paragraph of Article 542.04(d) of the Standard Specifications to read:

"PVC, PE and CPP pipes shall be joined according to the manufacturer's specifications."

Replace the third sentence of the first paragraph of Article 542.04(h) of the Standard Specifications with the following:

"The total cover required for various construction loadings shall be the responsibility of the Contractor."

Delete "Table IV: Wheel Loads and Total Cover" in Article 542.04(h) of the Standard Specifications.

Revise the first and second paragraphs of Article 542.04(i) of the Standard Specifications to read:

"(i) Deflection Testing for Pipe Culverts. All PE, PVC and CPP pipe culverts shall be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted. The testing shall be performed in the presence of the Engineer.

For PVC, PE, and CPP pipe culverts with diameters 24 in. (600 mm) or smaller, a mandrel drag shall be used for deflection testing. For PVC, PE, and CPP pipe culverts with diameters over 24 in. (600 mm), deflection measurements other than by a mandrel shall be used."

Revise Articles 542.04(i)(1) and (2) of the Standard Specifications to read:

- "(1) For all PVC pipe: as defined using ASTM D 3034 methodology.
- (2) For all PE and CPP pipe: the average inside diameter based on the minimum and maximum tolerances specified in the corresponding ASTM or AASHTO material specifications."

Revise the second sentence of the second paragraph of Article 542.07 of the Standard Specifications to read:

"When a prefabricated end section is used, it shall be of the same material as the pipe culvert, except for polyethylene (PE), polyvinylchloride (PVC), and polypropylene (PP) pipes which shall have metal end sections."

Revise the first paragraph of Article 1040.03 of the Standard Specifications to read:

"1040.03 Polyvinyl Chloride (PVC) Pipe. Acceptance testing of PVC pipe and fittings shall be accomplished during the same construction season in which they are installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements."

Delete Articles 1040.03(e) and (f) of the Standard Specifications.

Revise Articles 1040.04(c) and (d) of the Standard Specifications to read:

- "(c) PE Profile Wall Pipe for Insertion Lining. The pipe shall be according to ASTM F 894. When used for insertion lining of pipe culverts, the pipe liner shall have a minimum pipe stiffness of 46 psi (317 kPa) at five percent deflection for nominal inside diameters of 42 in. (1050 mm) or less. For nominal inside diameters of greater than 42 in. (1050 mm), the pipe liner shall have a minimum pipe stiffness of 32.5 psi (225 kPa) at five percent deflection. All sizes shall have wall construction that presents essentially smooth internal and external surfaces.
 - (d) PE Pipe with a Smooth Interior. The pipe shall be according to ASTM F 714 (DR 32.5) with a minimum cell classification of PE 335434 as defined in ASTM D 3350. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties and the resin used to manufacture the pipe meets or exceeds the minimum cell classification requirements."

Add the following to Section 1040 of the Standard Specifications:

"1040.08 Polypropylene (PP) Pipe. Storage and handling shall be according to the manufacturer's recommendations, except in no case shall the pipe be exposed to direct sunlight for more than six months. Acceptance testing of the pipe shall be accomplished during the same construction season in which it is installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements.

- (a) Corrugated PP Pipe with a Smooth Interior. The pipe shall be according to AAHSTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type S or D.
- (b) Perforated Corrugated PP Pipe with A Smooth Interior. The pipe shall be according to AASHTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be

Type SP. In addition, the top centerline of the pipe shall be marked so that it is readily visible from the top of the trench before backfilling, and the upper ends of the slot perforations shall be a minimum of ten degrees below the horizontal."

PAVEMENT PATCHING (BDE)

Effective: January 1, 2010

Revise the first sentence of the second paragraph of Article 701.17(e)(1) of the Standard Specifications to read:

"In addition to the traffic control and protection shown elsewhere in the contract for pavement, two devices shall be placed immediately in front of each open patch, open hole, and broken pavement where temporary concrete barriers are not used to separate traffic from the work area."

PORTLAND CEMENT CONCRETE BRIDGE DECK CURING (BDE)

Effective: April 1, 2015

Replace the table in Article 1020.13 of the Supplemental Specifications with the following:

"INDEX TABLE OF CURING AND PROTECTION OF CONCRETE CONSTRUCTION										
TYPE OF CONSTRUCTION	CURING METHODS	CURING PERIOD DAYS	LOW AIR TEMPERATURE PROTECTION METHODS							
Cast-in-Place Concrete 11/		The state of the s								
Pavement Shoulder	1020.13(a)(1)(2)(3)(4)(5) 3/5/	3	1020.13(c)							
Base Course Base Course Widening	1020.13(a)(1)(2)(3)(4)(5) ^{2/}	3	1020.13(c)							
Driveway Median Barrier Curb Gutter Curb & Gutter Sidewalk Slope Wall Paved Ditch	1020.13(a)(1)(2)(3)(4)(5) ^{4/ 5/}	3	1020.13(c) ^{16/}							
Catch Basin Manhole Inlet Valve Vault	1020.13(a)(1)(2)(3)(4)(5) 4/	3	1020.13(c)							
Pavement Patching	1020.13(a)(1)(2)(3)(4)(5) ^{2/}	3 ^{12/}	1020.13(c)							
Bridge Deck Patching	1020.13(a)(3)(5)	3 or 7 ^{12/}	1020.13(c)							
Railroad Crossing	1020.13(a)(3)(5)	1	1020.13(c)							
Piles and Drilled Shafts	1020.13(a)(3)(5)	7	1020.13(d)(1)(2)(3)							
Foundations & Footings Seal Coat	1020.13(a)(1)(2)(3)(4)(5) 4/6/	7	1020.13(d)(1)(2)(3)							
Substructure	1020.13(a)(1)(2)(3)(4)(5) 1/7/	7	1020.13(d)(1)(2)(3)							
Superstructure (except deck)	1020.13(a)(1)(2)(3)(5) 8/	7	1020.13(d)(1)(2)							
Deck Bridge Approach Slab	1020.13(a)(5)(6) ^{19/}	7	1020.13(d)(1)(2) ^{17/}							
Retaining Walls	1020.13(a)(1)(2)(3)(4)(5) 1/7/	7	1020.13(d)(1)(2)							
Pump Houses	1020.13(a)(1)(2)(3)(4)(5) 1/	7	1020.13(d)(1)(2)							
Culverts	1020.13(a)(1)(2)(3)(4)(5) 4/6/	7	1020.13(d)(1)(2) 18/							
Other Incidental Concrete	1020.13(a)(1)(2)(3)(5)	3	1020.13(c)							

Precast Concrete 11/	and the second s		
Bridge Slabs Piles and Pile Caps Other Structural Members	1020.13(a)(3)(5) ^{9/10/}	As Required ^{13/}	9/
All Other Precast Items	1020.13(a)(3)(4)(5) ^{2/9/10/}	As Required ^{14/}	9/
Precast, Prestressed Concrete	11/		
All Items	1020.13(a)(3)(5) ^{9/10/}	Until Strand Tensioning is Released ^{15/}	9/"

Add the following footnote to the end of the Index Table of Curing and Protection of Concrete Construction in Article 1020.13 of the Supplemental Specifications:

"19/ The cellulose polyethylene blanket method shall not be used on latex modified concrete."

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

"(6) Cellulose Polyethylene Blanket Method. The cellulose polyethylene blanket shall consist of a white polyethylene sheeting with cellulose fiber backing. After the surface of concrete has been textured or finished, it shall be covered immediately with a cellulose polyethylene blanket. The blankets shall be installed with the white perforated polyethylene side facing up. Adjoining blankets shall overlap a minimum of 4 in. (100 mm). On pours wider than 20 ft (6 m), a foot bridge shall be used to place the blankets and to spray water on the blankets immediately after placement on the concrete surface. The blankets shall be placed in a manner which will not create indentations greater than 1/4 in. (6 mm) in the concrete surface. Any air bubbles trapped during placement shall be removed without tearing the blanket. The blankets shall then be immediately flooded with a gentle spray of water to ensure complete saturation of the cellulose. The overlaps and outside edges of the cellulose polyethylene blankets, as well as tears in the blanket, shall be weighted down to prevent displacement as needed with care taken not to indent the concrete surface. Soaker hoses shall be placed along the length of the bridge so 100 percent of the deck surface is continuously saturated for the duration of the cure. Damaged cellulose polyethylene blankets shall be repaired or replaced at the direction of the Engineer."

Revise the first paragraph of Article 1022.03 of the Standard Specifications to read:

"1022.03 Waterproof Paper Blankets, White Polyethylene Sheeting, Burlap-Polyethylene Blankets, and Cellulose Polyethylene Blankets. These materials shall be white and according to ASTM C 171, except moisture loss test specimens shall be made according to Illinois Modified AASHTO T 155. Cellulose polyethylene blankets shall be limited to single use only. The cellulose polyethylene blankets shall be delivered to the jobsite unused and in the manufacturer's unopened packaging until ready for installation. Each roll shall be

clearly labeled with product name, manufacturer, and manufacturer's certification of compliance with ASTM C 171."

PROGRESS PAYMENTS (BDE)

Effective: November 2, 2013

Revise Article 109.07(a) of the Standard Specifications to read:

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

Progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics' Lien Act, 770 ILCS 60/23(c).

If a Contractor or subcontractor has defaulted on a loan issued under the Department's Disadvantaged Business Revolving Loan Program (20 ILCS 2705/2705-610), progress payments may be reduced pursuant to the terms of that loan agreement. In such cases, the amount of the estimate related to the work performed by the Contractor or subcontractor, in default of the loan agreement, will be offset, in whole or in part, and vouchered by the Department to the Working Capital Revolving Fund or designated escrow account. Payment for the work shall be considered as issued and received by the Contractor or subcontractor on the date of the offset voucher. Further, the amount of the offset voucher shall be a credit against the Department's obligation to pay the Contractor, the Contractor's obligation to pay the subcontractor, and the Contractor's or subcontractor's total loan indebtedness to the Department. The offset shall continue until such time as the entire loan indebtedness is satisfied. The Department will notify the Contractor and Fund Control Agent in a timely manner of such offset. The Contractor or subcontractor shall not be entitled to additional payment in consideration of the offset.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved."

REINFORCEMENT BARS (BDE)

Effective: November 1, 2013

Revise the first and second paragraphs of Article 508.05 of the Standard Specifications to read:

"508.05 Placing and Securing. All reinforcement bars shall be placed and tied securely at the locations and in the configuration shown on the plans prior to the placement of concrete. Manual welding of reinforcement may only be permitted or precast concrete products as indicated in the current Bureau of Materials and Physical Research Policy Memorandum "Quality Control / Quality Assurance Program for Precast Concrete Products", and for precast prestressed concrete products as indicated in the Department's current "Manual for Fabrication of Precast Prestressed Concrete Products". Reinforcement bars shall not be placed by sticking or floating into place or immediately after placement of the concrete.

Bars shall be tied at all intersections, except where the center to center dimension is less than 1 ft (300 mm) in each direction, in which case alternate intersections shall be tied. Molded plastic clips may be used in lieu of wire to secure bar intersections, but shall not be permitted in horizontal bar mats subject to construction foot traffic or to secure longitudinal bar laps. Plastic clips shall adequately secure the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. Plastic clips may be recycled plastic, and shall meet the approval of the Engineer. The number of ties as specified shall be doubled for lap splices at the stage construction line of concrete bridge decks when traffic is allowed on the first completed stage during the pouring of the second stage."

Revise the fifth paragraph of Article 508.05 of the Standard Specifications to read:

"Supports for reinforcement in bridge decks shall be metal. For all other concrete construction the supports shall be metal or plastic. Metal bar supports shall be made of cold-drawn wire, or other approved material and shall be either epoxy coated, galvanized or plastic tipped. When the reinforcement bars are epoxy coated, the metal supports shall be epoxy coated. Plastic supports may be recycled plastic. Supports shall be provided in sufficient number and spaced to provide the required clearances. Supports shall adequately support the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. The legs of supports shall be spaced to allow an opening that is a minimum 1.33 times the nominal maximum aggregate size used in the concrete. Nominal maximum aggregate size is defined as the largest sieve which retains any of the aggregate sample particles. All supports shall meet the approval of the Engineer."

Revise the first sentence of the eighth paragraph of Article 508.05 of the Standard Specifications to read:

"Epoxy coated reinforcement bars shall be tied with plastic coated wire, epoxy coated wire, or molded plastic clips where allowed."

Add the following sentence to the end of the first paragraph of Article 508.06(c) of the Standard Specifications:

"In addition, the total slip of the bars within the splice sleeve of the connector after loading in tension to 30 ksi (207 MPa) and relaxing to 3 ksi (20.7 MPa) shall not exceed 0.01 in. (254 microns)."

Revise Article 1042.03(d) of the Standard Specifications to read:

"(d) Reinforcement and Accessories: The concrete cover over all reinforcement shall be within ±1/4 in. (±6 mm) of the specified cover.

Welded wire fabric shall be accurately bent and tied in place.

Miscellaneous accessories to be cast into the concrete or for forming holes and recesses shall be carefully located and rigidly held in place by bolts, clamps, or other effective means. If paper tubes are used for vertical dowel holes, or other vertical holes which require grouting, they shall be removed before transportation to the construction site."

TRAINING SPECIAL PROVISIONS (BDE)

Effective: October 15, 1975

This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be $\underline{1}$. In the event the Contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather then clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented Training in the laborer classification may be permitted toward construction applications. provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

Method of Measurement. The unit of measurement is in hours.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price, and total price have been included in the schedule of prices.

WARM MIX ASPHALT (BDE)

Effective: January 1, 2012 Revised: November 1, 2014

<u>Description</u>. This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

"1102.01 Hot-Mix Asphalt Plant. The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, "Approval of Hot-Mix Asphalt Plants and Equipment". Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements."

Add the following to Article 1102.01(a) of the Standard Specifications.

- "(13) Equipment for Warm Mix Technologies.
 - a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ± 2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

- "(e) Warm Mix Technologies.
 - (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
 - (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C). WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012 Revised: April 2, 2015

The Contractor shall submit a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used for DBE goal credit.

The report shall be submitted to the Engineer on Department form "SBE 723" within ten business days following the reporting period. The reporting period shall be Monday through Sunday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

PIPE UNDERDRAINS FOR STRUCTURES

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

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

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

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

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

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

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

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

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

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

GRANULAR BACKFILL FOR STRUCTURES

Effective: April 19, 2012 Revised: October 30, 2012

Revise Section 586 of the Standard Specifications to read:

SECTION 586. GRANULAR BACKFILL FOR STRUCTURES

586.01 Description. This work shall consist of furnishing, transporting and placing granular backfill for abutment structures.

586.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Fine Aggregate	
(b) Coarse Aggregates	

CONSTRUCTION REQUIREMENTS

586.03 General. This work shall be done according to Article 502.10 except as modified below. The backfill volume shall be backfilled, with granular material as specified in Article 586.02, to the required elevation as shown in the contract plans. The backfill volume shall be placed in convenient lifts for the full width to be backfilled. Unless otherwise specified in the contract plans, mechanical compaction will not be required. A deposit of gravel or crushed stone placed behind drain holes shall not be required. All drains not covered by geocomposite wall drains or other devices to prevent loss of backfill material shall be covered by sufficient filter fabric material meeting the requirements of Section 1080 and Section 282 with either 6 or 8 oz/sq yd (200 or 270 g/sq m) material allowed, with free edges overlapping the drain hole by at least 12 in. (300 mm) in all directions.

The granular backfill shall be brought to the finished grade as shown in the contract plans. When concrete is to be cast on top of the granular backfill, the Contractor, subject to approval of the Engineer, may prepare the top surface of the fill to receive the concrete as he/she deems necessary for satisfactory placement at no additional cost to the Department.

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

- (a) Contract Quantities. The requirements for the use of contract quantities shall conform to Article 202.07(a).
- (b) Measured Quantities. This work will be measured for payment in place and the volume computed in cubic yards (cubic meters). The volume will be determined by the method of average end areas behind the abutment.

586.05 Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) for GRANULAR BACKFILL FOR STRUCTURES.

BRIDGE DECK CONSTRUCTION

Effective: October 22, 2013 Revised: April 18, 2014

Revise the Second Paragraph of Article 503.06(b) to read as follows.

"When the Contractor uses cantilever forming brackets on exterior beams or girders, additional requirements shall be as follows."

Revise Article 503.06(b)(1) to read as follows.

"(1) Bracket Placement. The spacing of brackets shall be per the manufacturer's published design specifications for the size of the overhang and the construction loads anticipated. The resulting force of the leg brace of the cantilever bracket shall bear on the web within 6 inches (150 mm) of the bottom flange of the beam or girder."

Revise Article 503.06(b)(2) to read as follows.

"(2) Beam Ties. The top flange of exterior steel beams or girders supporting the cantilever forming brackets shall be tied to the bottom flange of the next interior beam. The top flange of exterior concrete beams supporting the cantilever forming brackets shall be tied to the top flange of the next interior beam. The ties shall be spaced at 4 ft (1.2 m) centers. Permanent cross frames on steel girders may be considered a tie. Ties shall be a minimum of 1/2 inch (13 mm) diameter threaded rod with an adjusting mechanism for drawing the tie taut. The ties shall utilize hanger brackets or clips which hook onto the flange of steel beams. No welding will be permitted to the structural steel or stud shear connectors, or to reinforcement bars of concrete beams, for the installation of the tie bar system. After installation of the ties and blocking, the tie shall be drawn taut until the tie does not vary from a straight line from beam to beam. The tie system shall be approved by the Engineer."

Revise Article 503.06(b)(3) to read as follows.

"(3) Beam Blocks. Suitable beam blocks of 4 in x 4 in (100 x 100 mm) timbers or metal structural shapes of equivalent strength or better, acceptable to the Engineer, shall be wedged between the webs of the two beams tied together, within 6 inches (150 mm) of the bottom flange at each location where they are tied. When it is not feasible to have the resulting force from the leg brace of the cantilever brackets transmitted to the web within 6 inches (150 mm) of the bottom flange, then additional blocking shall be placed at each bracket to transmit the resulting force to within 6 inches (150 mm) of the bottom flange of the next interior beam or girder."

Delete the last paragraph of Article 503.06(b).

Revise the third paragraph of Article 503.16 to read as follows.

"Fogging equipment shall be in operation unless the evaporation rate is less than 0.1 lb/sq ft/hour (0.5kg/sq m/hour) and the Engineer gives permission to stop. The evaporation rate shall be determined according to the following formula.

$$E = (T_c^{2.5} - rT_a^{2.5})(1 + 0.4V)x10^{-6} (English)$$

$$E = 5[(T_c + 18)^{2.5} - r(T_a + 18)^{2.5}](V + 4)x10^{-6} (Metric)$$

Where:

 $E = \text{Evaporation Rate, lb/ft}^2/\text{h (kg/sq m/h)}$

 T_c = Concrete Temperature, °F (°C)

 T_a = Air Temperature, °F (°C)

r = Relative Humidity in percent/100

V = Wind Velocity, mph (km/h)

The Contractor shall provide temperature, relative humidity, and wind speed measuring equipment. Fogging equipment shall be adequate to reach or cover the entire pour from behind the finishing machine or vibrating screed to the point of curing covering application, and shall be operated in a manner which shall not accumulate water on the deck until the curing covering has been placed."

Revise the third paragraph of Article 503.16(a)(1) to read as follows.

"At the Contractor's option, a vibrating screed may be used in lieu of a finishing machine for superstructures with a pour width less than or equal to 24 ft (7.3 m). After the concrete is placed and consolidated, it shall be struck off with a vibrating screed allowing for camber, if required. The vibrating screed shall be of a type approved by the Engineer. A slight excess of concrete shall be kept in front of the cutting edge at all times during the striking off operation. After screeding, the entire surface shall be finished with hand-operated longitudinal floats having blades not less than 10 ft (3 m) in length and 6 in. (150 mm) in width. Decks so finished need not be straightedge tested as specified in 503.16(a)(2)."

Delete the fifth paragraph of 503.16(a)(1).

Revise Article 503.16(a)(2) to read as follows.

"(2) Straightedge Testing and Surface Correction. After the finishing has been completed and while the concrete is still plastic, the surface shall be tested for trueness with a 10 ft (3 m) straightedge, or a hand-operated longitudinal float having blades not less than 10 ft (3 m) in length and 6 in. (150 mm) in width. The Contractor shall furnish and use an accurate 10 ft (3 m) straightedge or float which has a handle not less than 3 ft (1 m) longer than 1/2 the pour width. The straightedge or float shall be held in contact with the surface and passed gradually from one side of the superstructure to the other. Advance along the surface

shall be in successive stages of not more than 1/2 the length of the straightedge or float. Any depressions found shall be immediately filled with freshly mixed concrete, struck off, consolidated, and refinished. High areas shall be cut down and refinished."

Replace the second sentence of the first paragraph of Article 1020.13(a)(5) with the following sentences.

"Cotton mats in poor condition will not be allowed. The cotton mats shall be placed in a manner which will not create indentations greater than 1/4 inch (6 mm) in the concrete surface. Minor marring of the surface is tolerable and is secondary to the importance of timely curing."

Revise Article 1020.14(b) to read as follows.

- "(b) Concrete in Structures. Concrete may be placed when the air temperature is above 40 °F (4 °C) and rising, and concrete placement shall stop when the falling temperature reaches 45 °F (7 °C) or below, unless otherwise approved by the Engineer.
 - (1) Bridge Deck Concrete. For concrete in bridge decks, slabs, and bridge approach slabs the Contractor shall schedule placing and finishing of the concrete during hours in which the ambient air temperature is forecast to be lower than 85 °F (30 °C). It shall be understood this may require scheduling the deck pour at night in order to utilize the temperature window available. The temperature of the concrete immediately before placement shall be a minimum of 50 °F (10 °C) and a maximum of 85 °F (30 °C).
 - (2) Non-Bridge Deck Concrete. Except as noted above, the temperature of the concrete immediately before placement shall be a minimum of 50 °F (10 °C) and a maximum of 90 °F (32 °C).

If concrete is pumped, the temperature restrictions above shall be considered at point of placement. When insulated forms are used according to Article 1020.13(d)(1), the maximum temperature of the concrete mixture immediately before placement shall be 80 °F (25 °C). When concrete is placed in contact with previously placed concrete, the temperature of the freshly mixed concrete may be increased by the Contractor to offset anticipated heat loss, but in no case shall the maximum concrete temperature be permitted to exceed the limits stated in this Article."

Revise Article 1103.13(a) to read as follows.

'(a) Bridge Deck. The finishing machine shall be equipped with: (1) a mechanical strike off device; (2) either a rotating cylinder(s) or a longitudinal oscillating screed which transversely finishes the surface of the concrete. The Contractor may attach other equipment to the finishing machine to enhance the final finish when approved by the Engineer. The finishing machine shall produce a deck surface of uniform texture, free from porous areas, and with the required surface smoothness.

The finishing machine shall be operated on rails or other supports that will not deflect under the applied loads. The maximum length of rail segments supported on top of beams and within the pour shall be 10 ft (3 m). The supports shall be adjustable for elevation and shall be completely in place to allow the finishing machine to be used for the full length of the area to be finished. The supports shall be approved by the Engineer before placing of the concrete is started."

Revise Article 1103.17(k) to read as follows.

"(k) Fogging Equipment. Fogging equipment shall be hand held fogging equipment for humidity control. The equipment shall be capable of atomizing water to produce a fog blanket by the use of pressure 2500 psi minimum (17.24 MPa) and an industrial fire hose fogging nozzle or equivalent. Fogging equipment attached to the finishing machine will not be permitted."

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

- 2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work 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.
- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

- 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, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) 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 provisions of the Americans with 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 contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its 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, pre-apprenticeship, and/or onthe-job training."
- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program 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 minorities and women.
- 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 minorities and women 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 employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women 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, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such 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 its 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 their avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- 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. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- 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 employees who are minorities and women 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 good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 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 good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith 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 contracting agency 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 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 minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. 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 contracting agency.

- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. 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. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. 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 the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
 - a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority 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; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency 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. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color,

religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. Davis-Bacon and Related Act Provisions

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

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

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency 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.

3. Payrolls and basic records

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose Wage and Hour Division Web http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

- (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or 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 Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the 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.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor 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. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
 - d. 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.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for

debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- **9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the 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 or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such

contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 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 contracting agency. 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 contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased 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 or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
 - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- 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 or propose 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 VI 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 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 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 contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 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 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. 3704).
- 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.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

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, Form FHWA-1022 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:

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 under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more — as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier 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 first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier 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 contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier 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," "participant," "person," "principal," and "voluntarily excluded,"

as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier 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 Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- 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 is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective 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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2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) 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 (a)(2) of this certification; and

- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- 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," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- 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 exceeding the \$25,000 threshold.
- 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 is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- 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 dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 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 participating in covered transactions 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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XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is 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 its bid or proposal that the participant 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.