

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@illinois.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 your proposal Proposal Bid Bond (if applicable) using the current Proposal Bid Bond form provided in the proposal package. The Power of Attorney page should be stapled to the Proposal Bid Bond. If you are using an electronic bond, include your bid bond number on the Proposal Bid Bond and attach the Proof of Insurance printed from the Surety’s Web Site.

Disadvantaged Business Utilization Plan and/or Good Faith Effort – The last items in your bid should be the DBE Utilization Plan (SBE 2026), followed by the DBE Participation Statement (SBE 2025) and supporting paperwork. If you have documentation 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 Web Site. A link to the stream will be placed on the main page of the current letting on the day of the Letting. The stream will not begin until 10 AM. The actual reading of the bids does not begin until approximately 10:30 AM.

Following the Letting, the As-Read Tabulation of Bids will be posted by the end of the day. You will find the link on the main Web page for the current letting.

QUESTIONS: pre-letting up to execution of the contract

Contractor pre-qualification	217-782-3413
Small Business, Disadvantaged Business Enterprise (DBE)	217-785-4611
Contracts, Bids, Letting process or Internet downloads	217-782-7806
Estimates Unit.....	217-785-3483
Aeronautics.....	217-785-8515
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

215

RETURN WITH BID

Proposal Submitted By
Name
Address
City

Letting March 6, 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



**Illinois Department
of Transportation**

Springfield, Illinois 62764

**Contract No. 61B11
DUPAGE County
Section 10-00089-00-BR (Hinsdale)
Route FAU 2999 (Oak Street)
Project BRM-9003(702)
District 1 Construction Funds**

PLEASE MARK THE APPROPRIATE BOX BELOW:

- A Bid Bond 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

F

(Printed by authority of the State of Illinois)

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RETURN WITH BID



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of _____

Taxpayer Identification Number (Mandatory) _____

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

**Contract No. 61B11
DUPAGE County
Section 10-00089-00-BR (Hinsdale)
Project BRM-9003(702)
Route FAU 2999 (Oak Street)
District 1 Construction Funds**

Project consists of replacing the structure that carries Oak Street over the BNSF Railroad, roadway reconstruction and street lighting. Project limits are Oak Street from Walnut Street to Chicago Avenue, the intersection of Oak Street at Chicago Avenue and on Hillgrove Avenue from Oak Street to Walnut Street, located in the Village of Hinsdale.

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.

RETURN WITH BID

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

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

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

Schedule of Combination Bids

Combination No.	Sections Included in Combination	Combination Bid	
		Dollars	Cents

7. **SCHEDULE OF PRICES.** The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices will govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
8. **AUTHORITY TO DO BUSINESS IN ILLINOIS.** Section 20-43 of the Illinois Procurement Code (the Code) (30 ILCS 500/20-43) provides that a person (other than an individual acting as a sole proprietor) must be a legal entity authorized to transact business or conduct affairs in the State of Illinois prior to submitting the bid.
9. **EXECUTION OF CONTRACT:** The Department of Transportation will, in accordance with the rules governing Department procurements, execute the contract and shall be the sole entity having the authority to accept performance and make payments under the contract. Execution of the contract by the Chief Procurement Officer (CPO) or the State Purchasing Officer (SPO) is for approval of the procurement process and execution of the contract by the Department. Neither the CPO nor the SPO shall be responsible for administration of the contract or determinations respecting performance or payment there under except as otherwise permitted in the Code.
10. **The services of a subcontractor will be used.**

Check box Yes
 Check box No

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

STATE JOB # - C-91-756-10
 PPS NBR -

COUNTY NAME	CODE	DIST	SECTION NUMBER	PROJECT NUMBER	ROUTE
DUPAGE	043	01	10-00089-00-BR (HINSDALE)	BRM-9003/702/000	FAU 2999

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
A2004824	T-GLED TRI-I SK 3	EACH	1.000				
A2005024	T-GYMNOCOLA DIO 3	EACH	4.000				
A2005960	T-PLAT X ACR MC 2.5	EACH	1.000				
A2007122	T-QUERCUS RUBRA 3	EACH	3.000				
A2007132	T-QUERCUS SCHUETTI 2	EACH	3.000				
A2008468	T-ULMUS AMER PRINC 2	EACH	6.000				
B2000769	T-AMEL X GF AB SF 8'	EACH	1.000				
B2000770	T-AMEL X GF AB TF 2	EACH	7.000				
B2001116	T-CERCIS CAN TF 2	EACH	4.000				
B2001167	T-CERCIS CAN (E R) 8'	EACH	1.000				
B2001266	T-CORNUS ALT CL 6'	EACH	5.000				
B2001620	T-CRAT CRU-I TF 2-1/2	EACH	11.000				
B2006120	T-SYRG PEK M TF 2-1/2	EACH	7.000				
B2010120	T-CLADRASTIS LUT 2.5	EACH	6.000				
C2C03424	S-HYDRA ARBOR AN 2'C	EACH	51.000				

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
C2C07005	S-ROSA RADTKOPINK 18C	EACH	58.000	X	=	=	=
C2005812	S-RHUS AROMA GRO 2 BB	EACH	91.000	X	=	=	=
D2001024	E-JUNIP HOR WIL 24	EACH	3.000	X	=	=	=
D2002088	E-PICEA OMORIKA 8'	EACH	5.000	X	=	=	=
D2015401	E-JUNIP CHIN KC 24	EACH	40.000	X	=	=	=
K0012990	P PL ORNAMENT T GAL P	UNIT	2.000	X	=	=	=
K1001987	IRRIGATION SYSTEM	SQ YD	925.000	X	=	=	=
XX001249	ORNAMENTAL FENCE	FOOT	202.000	X	=	=	=
XX005283	BRICK PAVER CROSSWALK	SQ FT	2,453.000	X	=	=	=
XX006260	STL CAS P AUG/UKD 16	FOOT	44.000	X	=	=	=
XX007021	PED ACT CRSS WARN SYS	EACH	2.000	X	=	=	=
XX007295	LIGHTING UNIT A, COMP	EACH	24.000	X	=	=	=
XX007296	LIGHTING UNIT B, COMP	EACH	4.000	X	=	=	=
XX007452	RELOCATE BOLLARDS	EACH	2.000	X	=	=	=
XX009005	ARCHITECT CAP METAL	EACH	8.000	X	=	=	=

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
XX009006	ARCHITECT CAP CONC	EACH	4.000 X	=	=	=	=
XX009007	ARTI BLOCK REV MAT SP	SQ YD	545.000 X	=	=	=	=
XX009008	TEMP ACCESS- COM ENT	L SUM	1.000 X	=	=	=	=
XX009009	SS 1 WAT MN EQRS 48	FOOT	89.000 X	=	=	=	=
XX009010	SS 2 WAT MN EQRS 48	FOOT	5.000 X	=	=	=	=
XX009011	LUM LED RM 11.2	EACH	20.000 X	=	=	=	=
X0322024	TRENCH DRAIN	EACH	1.000 X	=	=	=	=
X0323648	LIMESTONE MAS VENEER	SQ FT	2,428.000 X	=	=	=	=
X0325225	BRICK PAVT REM & REPL	SQ FT	478.000 X	=	=	=	=
X0326146	SOIL CONDITIONER	SQ YD	530.000 X	=	=	=	=
X0326658	CUR-IN-PL PIPE LNR 10	FOOT	648.000 X	=	=	=	=
X0326662	CUR-IN-PL PIPE LNR 24	FOOT	169.000 X	=	=	=	=
X0326663	CUR-IN-PL PIPE LNR 30	FOOT	250.000 X	=	=	=	=
X0326864	BRICK SIDEWALK REM	SQ FT	109.000 X	=	=	=	=
X0327785	CUR-IN-PL PIPE LNR 12	FOOT	1,019.000 X	=	=	=	=

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 61B11

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
X0350810	BOLLARD REMOVAL	EACH	2.000	=	=	=	=
X2010510	CLEARING & GRUBBING	L SUM	1.000	=	=	=	=
X2501820	SEEDING CL 5 MOD	ACRE	0.250	=	=	=	=
X2511630	EROS CONT BLANKET SPL	SQ YD	500.000	=	=	=	=
X4021000	TEMP ACCESS- PRIV ENT	EACH	6.000	=	=	=	=
X4022000	TEMP ACCESS- COM ENT	EACH	2.000	=	=	=	=
X4023000	TEMP ACCESS- ROAD	EACH	6.000	=	=	=	=
X5010205	REM EXIST STRUCT SPL	EACH	1.000	=	=	=	=
X5030290	STAIN CONC STRUCTURES	SQ FT	4,136.000	=	=	=	=
X5091730	BRIDGE FENCE RAIL SP	FOOT	168.000	=	=	=	=
X5091755	PARAPET RAILING SPL	FOOT	282.000	=	=	=	=
X5610654	WATER MAIN ABANDON 4	FOOT	398.000	=	=	=	=
X5610656	WATER MAIN ABANDON 6	FOOT	138.000	=	=	=	=
X5610658	WATER MAIN ABANDON 8	FOOT	248.000	=	=	=	=
X5610662	WATER MAIN ABANDON 12	FOOT	711.000	=	=	=	=

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
X5610706	WATER MAIN REMOV 6	FOOT	9.000 X	=	=	=	=
X5610712	WATER MAIN REMOV 12	FOOT	10.000 X	=	=	=	=
X5620128	ADJ WATER SERV LINES	EACH	2.000 X	=	=	=	=
X5630704	CONN TO EX W MAIN 4	EACH	1.000 X	=	=	=	=
X5860110	GRANULAR BACKFILL STR	CU YD	119.000 X	=	=	=	=
X6020074	INLETS TA T3V F&G	EACH	1.000 X	=	=	=	=
X6026622	VV REMOVED	EACH	4.000 X	=	=	=	=
X6026632	VALVE BOX REMOVED	EACH	1.000 X	=	=	=	=
X7010216	TRAF CONT & PROT SPL	L SUM	1.000 X	=	=	=	=
X8900008	TEMP TR SIG INSTAL SP	EACH	1.000 X	=	=	=	=
Z0004002	BOLLARDS	EACH	2.000 X	=	=	=	=
Z0007601	BLDG REMOV NO 1	L SUM	1.000 X	=	=	=	=
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000 X	=	=	=	=
Z0026407	TEMP SHT PILING	SQ FT	4,230.000 X	=	=	=	=
Z0030850	TEMP INFO SIGNING	SQ FT	45.000 X	=	=	=	=

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 61B11

FAU 2999
 10-00089-00-BR (HINSDALE)
 DUPAGE

RUN DATE - 01/30/15
 RUN TIME - 221821

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
Z0044650	PRESS CONNECT 8X4	EACH	1.000 X	=		=	
Z0044700	PRESS CONNECT 8X6	EACH	1.000 X	=		=	
Z0044850	PRESS CONNECT 10X4	EACH	1.000 X	=		=	
Z0044895	PRESS CONNECT 10X8	EACH	1.000 X	=		=	
Z0044900	PRESS CONNECT 10X10	EACH	1.000 X	=		=	
Z0045000	PRESS CONNECT 12X6	EACH	2.000 X	=		=	
Z0045050	PRESS CONNECT 12X10	EACH	1.000 X	=		=	
Z0045100	PRESS CONNECT 12X12	EACH	1.000 X	=		=	
Z0046304	P UNDR FOR STRUCT 4	FOOT	260.000 X	=		=	
Z0048665	RR PROT LIABILITY INS	L SUM	1.000 X	=		=	
Z0056648	SS 1 WAT MN 12	FOOT	93.000 X	=		=	
Z0056652	SS 1 WAT MN 18	FOOT	60.000 X	=		=	
Z0056654	SS 1 WAT MN 24	FOOT	18.000 X	=		=	
Z0056658	SS 1 WAT MN 30	FOOT	3.000 X	=		=	
Z0056659	SS 1 WAT MN 48	FOOT	22.000 X	=		=	

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
Z0056670	SS 2 WAT MN 18	FOOT	101.000 X	=	=	=	=
Z0056672	SS 2 WAT MN 24	FOOT	142.000 X	=	=	=	=
Z0056675	SS 2 WAT MN 30	FOOT	67.000 X	=	=	=	=
Z0056678	SS 2 WAT MN 36	FOOT	54.000 X	=	=	=	=
Z0062456	TEMP PAVEMENT	SQ YD	270.000 X	=	=	=	=
Z0067100	STEEL CASINGS 8	FOOT	22.000 X	=	=	=	=
Z0067200	STEEL CASINGS 10	FOOT	21.000 X	=	=	=	=
Z0067300	STEEL CASINGS 12	FOOT	21.000 X	=	=	=	=
Z0076600	TRAINEES	HOOR	500.000 X	0.80	=	400.00	=
Z0076604	TRAINEES TPG	HOOR	500.000 X	15.00	=	7,500.00	=
20100110	TREE REMOV 6-15	UNIT	175.000 X	=	=	=	=
20100210	TREE REMOV OVER 15	UNIT	450.000 X	=	=	=	=
20101100	TREE TRUNK PROTECTION	EACH	34.000 X	=	=	=	=
20101200	TREE ROOT PRUNING	EACH	34.000 X	=	=	=	=
20101300	TREE PRUN 1-10	EACH	16.000 X	=	=	=	=

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CENTS
20101350	TREE PRUN OVER 10	EACH	18.000				
20200100	EARTH EXCAVATION	CU YD	3,125.000				
20201200	REM & DISP UNS MATL	CU YD	2,845.000				
20400800	FURNISHED EXCAVATION	CU YD	1,000.000				
20800150	TRENCH BACKFILL	CU YD	2,070.000				
20900110	POROUS GRAN BACKFILL	CU YD	266.000				
21101625	TOPSOIL F & P 6	SQ YD	6,733.000				
21101665	TOPSOIL F & P 18	SQ YD	530.000				
21301084	EXPLOR TRENCH 84	FOOT	40.000				
25000400	NITROGEN FERT NUTR	POUND	97.000				
25000500	PHOSPHORUS FERT NUTR	POUND	97.000				
25000600	POTASSIUM FERT NUTR	POUND	97.000				
25100630	EROSION CONTR BLANKET	SQ YD	6,733.000				
25200110	SODDING SALT TOLERANT	SQ YD	6,733.000				
25200200	SUPPLE WATERING	UNIT	260.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 61B11

FAU 2999
 10-00089-00-BR (HINSDALE)
 DUPAGE

RUN DATE - 01/30/15
 RUN TIME - 221821

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
28000250	TEMP EROS CONTR SEED	POUND	139.000 X	=	=	=	=
28000400	PERIMETER EROS BAR	FOOT	3,238.000 X	=	=	=	=
28000510	INLET FILTERS	EACH	45.000 X	=	=	=	=
30300001	AGG SUBGRADE IMPROVE	CU YD	975.000 X	=	=	=	=
30300112	AGG SUBGRADE IMPR 12	SQ YD	4,723.000 X	=	=	=	=
31100500	SUB GRAN MAT A 6	SQ YD	2,244.000 X	=	=	=	=
31101200	SUB GRAN MAT B 4	SQ YD	1,747.000 X	=	=	=	=
40600275	BIT MATLS PR CT	POUND	374.000 X	=	=	=	=
40600827	P LB MM IL-4.75 N50	TON	47.000 X	=	=	=	=
40603335	HMA SC "D" N50	TON	93.000 X	=	=	=	=
42000301	PCC PVT 8 JOINTED	SQ YD	5,840.000 X	=	=	=	=
42000900	HES PCC PVT 8	SQ YD	14.000 X	=	=	=	=
42300200	PCC DRIVEWAY PAVT 6	SQ YD	200.000 X	=	=	=	=
42300400	PCC DRIVEWAY PAVT 8	SQ YD	501.000 X	=	=	=	=
42400200	PC CONC SIDEWALK 5	SQ FT	15,783.000 X	=	=	=	=

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
42400800	DETECTABLE WARNINGS	SQ FT	398.000 X	=	=	=	=
44000100	PAVEMENT REM	SQ YD	6,305.000 X	=	=	=	=
44000159	HMA SURF REM 2 1/2	SQ YD	802.000 X	=	=	=	=
44000200	DRIVE PAVEMENT REM	SQ YD	474.000 X	=	=	=	=
44000500	COMB CURB GUTTER REM	FOOT	4,238.000 X	=	=	=	=
44000600	SIDEWALK REM	SQ FT	19,248.000 X	=	=	=	=
44201723	CL D PATCH T4 6	SQ YD	200.000 X	=	=	=	=
50200100	STRUCTURE EXCAVATION	CU YD	512.000 X	=	=	=	=
50300225	CONC STRUCT	CU YD	373.000 X	=	=	=	=
50300255	CONC SUP-STR	CU YD	445.000 X	=	=	=	=
50300260	BR DECK GROOVING	SQ YD	772.000 X	=	=	=	=
50300285	FORM LINER TEX SURF	SQ FT	4,136.000 X	=	=	=	=
50300300	PROTECTIVE COAT	SQ YD	1,170.000 X	=	=	=	=
50500105	F & E STRUCT STEEL	L SUM	1.000 X	=	=	=	=
50500505	STUD SHEAR CONNECTORS	EACH	6,524.000 X	=	=	=	=

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
50800205	REINF BARS, EPOXY CTD	POUND	139,930.000 X	=	=	=	=
50800515	BAR SPLICERS	EACH	380.000 X	=	=	=	=
50900805	PEDESTRIAN RAIL	FOOT	515.000 X	=	=	=	=
51201800	FUR STL PILE HP14X73	FOOT	1,223.000 X	=	=	=	=
51202305	DRIVING PILES	FOOT	1,223.000 X	=	=	=	=
51203800	TEST PILE ST HP14X73	EACH	4.000 X	=	=	=	=
51500100	NAME PLATES	EACH	1.000 X	=	=	=	=
52100520	ANCHOR BOLTS 1	EACH	56.000 X	=	=	=	=
550A0050	STORM SEW CL A 1 12	FOOT	612.000 X	=	=	=	=
550A0120	STORM SEW CL A 1 24	FOOT	216.000 X	=	=	=	=
550A0340	STORM SEW CL A 2 12	FOOT	162.000 X	=	=	=	=
550A0380	STORM SEW CL A 2 18	FOOT	543.000 X	=	=	=	=
550A0410	STORM SEW CL A 2 24	FOOT	75.000 X	=	=	=	=
550A1010	STORM SEW CL A 4 24	FOOT	10.000 X	=	=	=	=
550A5510	SS CL A 2 EQRS 48	FOOT	64.000 X	=	=	=	=

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 61B11

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
550B0640	STORM SEW CL B 3 12	FOOT	44.000 X				
55100300	STORM SEWER REM 8	FOOT	112.000 X				
55100500	STORM SEWER REM 12	FOOT	261.000 X				
56100600	WATER MAIN 6	FOOT	35.000 X				
56100700	WATER MAIN 8	FOOT	531.000 X				
56100800	WATER MAIN 10	FOOT	300.000 X				
56100900	WATER MAIN 12	FOOT	721.000 X				
56105000	WATER VALVES 8	EACH	3.000 X				
56105100	WATER VALVES 10	EACH	3.000 X				
56105200	WATER VALVES 12	EACH	4.000 X				
56200500	WATER SERV LINE 1 1/2	FOOT	66.000 X				
56200700	WATER SERV LINE 2	FOOT	113.000 X				
56400500	FIRE HYDNPTS TO BE REM	EACH	5.000 X				
56400600	FIRE HYDRANTS	EACH	5.000 X				
56500400	DOM MET VLTS REM	EACH	1.000 X				

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CENTS
56500500	DOM MET VLTS	EACH	1.000				
56500800	DOM WAT SER BOX	EACH	4.000				
59100100	GEOCOMPOSITE WALL DR	SQ YD	190.000				
60200310	CB TA 4 DIA T3VF&G	EACH	2.000				
60201105	CB TA 4 DIA T11F&G	EACH	2.000				
60201110	CB TA 4 DIA T11V F&G	EACH	2.000				
60207115	CB TC T3VF&G	EACH	6.000				
60207605	CB TC T8G	EACH	1.000				
60207915	CB TC T11V F&G	EACH	24.000				
60218400	MAN TA 4 DIA T1F CL	EACH	6.000				
60221100	MAN TA 5 DIA T1F CL	EACH	8.000				
60223700	MAN TA 6 DIA T1F OL	EACH	2.000				
60223800	MAN TA 6 DIA T1F CL	EACH	3.000				
60224445	MAN TA 7 DIA T1F OL	EACH	1.000				
60224446	MAN TA 7 DIA T1F CL	EACH	5.000				

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
60224459	MAN TA 8 DIA T1F CL	EACH	1.000 X	=	=	=	=
60224469	MAN TA 9 DIA T1F CL	EACH	1.000 X	=	=	=	=
60236200	INLETS TA T8G	EACH	1.000 X	=	=	=	=
60236700	INLETS TA T10F&G	EACH	2.000 X	=	=	=	=
60248700	VV TA 4 DIA T1F CL	EACH	6.000 X	=	=	=	=
60248900	VV TA 5 DIA T1F CL	EACH	4.000 X	=	=	=	=
60255500	MAN ADJUST	EACH	15.000 X	=	=	=	=
60265700	VV ADJUST	EACH	2.000 X	=	=	=	=
60266600	VALVE BOX ADJ	EACH	5.000 X	=	=	=	=
60500050	REMOV CATCH BAS	EACH	3.000 X	=	=	=	=
60500060	REMOV INLETS	EACH	6.000 X	=	=	=	=
60603800	COMB CC&G TB6.12	FOOT	3,461.000 X	=	=	=	=
60604400	COMB CC&G TB6.18	FOOT	628.000 X	=	=	=	=
66900200	NON SPL WASTE DISPOSL	CU YD	500.000 X	=	=	=	=
66900205	SPL WASTE DISPOSAL	CU YD	100.000 X	=	=	=	=

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
66900450	SPL WASTE PLNS/REPORT	L SUM	1.000	X	=	=	=
66900530	SOIL DISPOSAL ANALY	EACH	2.000	X	=	=	=
67000400	ENGR FIELD OFFICE A	CAL MO	18.000	X	=	=	=
67100100	MOBILIZATION	L SUM	1.000	X	=	=	=
70106800	CHANGEABLE MESSAGE SN	CAL MO	24.000	X	=	=	=
70300100	SHORT TERM PAVT MKING	FOOT	5,132.000	X	=	=	=
70300220	TEMP PVT MK LINE 4	FOOT	2,786.000	X	=	=	=
70300280	TEMP PVT MK LINE 24	FOOT	143.000	X	=	=	=
70301000	WORK ZONE PAVT MK REM	SQ FT	2,764.000	X	=	=	=
70400100	TEMP CONC BARRIER	FOOT	772.000	X	=	=	=
70400200	REL TEMP CONC BARRIER	FOOT	490.000	X	=	=	=
70600240	IMP ATTN TEMP NRD TL2	EACH	14.000	X	=	=	=
72000100	SIGN PANEL T1	SQ FT	230.000	X	=	=	=
72000200	SIGN PANEL T2	SQ FT	40.000	X	=	=	=
72400100	REMOV SIN PAN ASSY TA	EACH	37.000	X	=	=	=

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
72400500	RELOC SIN PAN ASSY TA	EACH	10.000	=	=	=	=
72800100	TELES STL SIN SUPPORT	FOOT	455.000	=	=	=	=
78000200	THPL PVT MK LINE 4	FOOT	910.000	=	=	=	=
78000400	THPL PVT MK LINE 6	FOOT	52.000	=	=	=	=
78000650	THPL PVT MK LINE 24	FOOT	11.000	=	=	=	=
78008210	POLYUREA PM T1 LN 4	FOOT	3,558.000	=	=	=	=
78008230	POLYUREA PM T1 LN 6	FOOT	1,335.000	=	=	=	=
78008250	POLYUREA PM T1 LN 12	FOOT	84.000	=	=	=	=
78008270	POLYUREA PM T1 LN 24	FOOT	113.000	=	=	=	=
80400100	ELECT SERV INSTALL	EACH	2.000	=	=	=	=
80400200	ELECT UTIL SERV CONN	L SUM	1.000	=	=	5,000 00	5,000 00
81028200	UNDRGRD C GALVS 2	FOOT	380.000	=	=	=	=
81028240	UNDRGRD C GALVS 4	FOOT	70.000	=	=	=	=
81028350	UNDRGRD C PVC 2	FOOT	50.000	=	=	=	=
81400100	HANDHOLE	EACH	7.000	=	=	=	=

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
81603055	UD 3#8 #8G XLP USE 1	FOOT	3,265.000				
81702100	EC C XLP USE 1C 12	FOOT	825.000				
82500330	LT CONT PEDM 240V 60	EACH	2.000				
83600200	LIGHT POLE FDN 24D	FOOT	255.000				
89502375	REMOV EX TS EQUIP	EACH	4.000				
89502380	REMOV EX HANDHOLE	EACH	4.000				
				TOTAL \$			

- NOTE:
1. EACH PAY ITEM SHOULD HAVE A UNIT PRICE AND A TOTAL PRICE.
 2. THE UNIT PRICE SHALL GOVERN IF NO TOTAL PRICE IS SHOWN OR IF THERE IS A DISCREPANCY BETWEEN THE PRODUCT OF THE UNIT PRICE MULTIPLIED BY THE QUANTITY.
 3. IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE.
 4. A BID MAY BE DECLARED UNACCEPTABLE IF NEITHER A UNIT PRICE NOR A TOTAL PRICE IS SHOWN.

RETURN WITH BID

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.

RETURN WITH BID

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.

RETURN WITH BID

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.

RETURN WITH BID

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 subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

E. Section 42 of the Environmental Protection Act

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.

RETURN WITH BID

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 appropriate statement:

Company has no business operations in Iran to disclose.

Company has business operations in Iran as disclosed on the attached document.

RETURN WITH BID

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.**

Additionally, 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.

NA-FEDERAL

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.

RETURN WITH BID

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:

Name and address of person: _____
All costs, fees, compensation, reimbursements and other remuneration paid to said person: _____

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

RETURN WITH BID

IV. DISCLOSURES

- A. The disclosures hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The 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. Disclosure Forms. 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. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 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 per individual per bid even if a specific individual would require a yes answer to more than one question.)

A "YES" answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or the bidding entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by 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 NOT APPLICABLE STATEMENT of Form A must be signed and dated by an individual that is authorized to execute contracts for your company.

RETURN WITH BID

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 NOT APPLICABLE STATEMENT on Form A does not 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.

RETURN WITH BID

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

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

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

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

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

FOR INDIVIDUAL (type or print information)	
NAME:	_____
ADDRESS	_____
Type of ownership/distributable income share:	
stock _____	sole proprietorship _____ Partnership _____ other: (explain on separate sheet):
% or \$ value of ownership/distributable income share: _____	

- 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. _____

RETURN WITH BID

3. 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, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor? Yes ___ No ___
4. 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, are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ___ No ___

(b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years.

Yes ___ No ___

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

1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___ No ___
2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of the spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. _____
-
3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess 100% of the annual salary of the Governor? Yes ___ No ___
4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ___ No ___

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years. Yes ___ No ___

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United State of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes ___ No ___

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes ___ No ___

RETURN WITH BID

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

3. Communication Disclosure.

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

Name and address of person(s): _____

RETURN WITH BID

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

Name of person(s): _____

Nature of disclosure: _____

APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge.

Completed by: _____
Signature of Individual or Authorized Representative Date

NOT APPLICABLE STATEMENT

Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.

This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page.

Signature of Authorized Representative Date

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

RETURN WITH BID

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Financial Related Information Disclosure

Contractor Name, Legal Address, City, State, Zip, Telephone Number, Email Address, Fax Number (if available)

Disclosure of the information contained in this Form is required by Section 50-35 of the Code (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for all bids.

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The BIDDER shall identify whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes ___ No ___

If "No" is checked, the bidder only needs to complete the signature box on this page.

2. If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

THE FOLLOWING STATEMENT MUST BE CHECKED

Signature of Authorized Representative, Date

OWNERSHIP CERTIFICATION

Please certify that the following statement is true if the individuals for all submitted Form A disclosures do not total 100% of ownership.

Any remaining ownership interest is held by individuals receiving less than \$106,447.20 of the bidding entity's or parent entity's distributive income or holding less than a 5% ownership interest.

Yes No N/A (Form A disclosure(s) established 100% ownership)

RETURN WITH BID

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.

RETURN WITH BID

**Contract No. 61B11
DUPAGE County
Section 10-00089-00-BR (Hinsdale)
Project BRM-9003(702)
Route FAU 2999 (Oak Street)
District 1 Construction Funds**

PART II. WORKFORCE PROJECTION - continued

- B. Included in "Total Employees" under Table A is the total number of **new hires** that would be employed in the event the undersigned bidder is awarded this contract.

The undersigned bidder projects that: (number) _____ new hires would be recruited from the area in which the contract project is located; and/or (number) _____ 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) _____ persons will 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 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 _____

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 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.

Table C - Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

RETURN WITH BID

ADDITIONAL FEDERAL REQUIREMENTS

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

- A. By the execution of this proposal, the signing bidder certifies that the bidding entity has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This statement made by the undersigned bidder is true and correct under penalty of perjury under the laws of the United States.
- B. CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:
1. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause. YES _____ NO _____
 2. If answer to #1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations? YES _____ NO _____

RETURN WITH BID

**Contract No. 61B11
DUPAGE County
Section 10-0089-00-BR (Hinsdale)
Project BRM-9003(702)
Route FAU 2999 (Oak Street)
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.

(IF AN INDIVIDUAL)

Firm Name _____
Signature of Owner _____
Business Address _____

(IF A CO-PARTNERSHIP)

Firm Name _____
By _____
Business Address _____
Name and Address of All Members of the Firm:

(IF A CORPORATION)

Corporate Name _____
By _____
Signature of Authorized Representative _____
Typed or printed name and title of Authorized Representative _____

(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)

Attest _____
Signature _____
Business Address _____

(IF A JOINT VENTURE)

Corporate Name _____
By _____
Signature of Authorized Representative _____
Typed or printed name and title of Authorized Representative _____

Attest _____
Signature _____
Business Address _____

If more than two parties are in the joint venture, please attach an additional signature sheet.



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 _____

as SURETY, and held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in the bid proposal under "Proposal Guaranty" in effect on the date of the Invitation for Bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that whereas, the PRINCIPAL may submit bid proposal(s) to the STATE OF ILLINOIS, acting through the Department of Transportation, for various improvements published in the Transportation Bulletin during the effective term indicated above.

NOW, THEREFORE, if the Department shall accept the bid proposal(s) of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in the bidding and contract documents; and if, after award by the Department, the PRINCIPAL shall enter into a contract in accordance with the terms of the bidding and contract documents including evidence of the required insurance coverages and providing such bond as specified with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof; or if, in the event of the failure of the PRINCIPAL to enter into such contract and to give the specified bond, the PRINCIPAL pays to the Department the difference not to exceed the penalty hereof between the amount specified in the bid proposal and such larger amount for which the Department may contract with another party to perform the work covered by said bid proposal, then this obligation shall be null and void, otherwise, it shall remain in full force and effect.

IN THE EVENT the Department determines the PRINCIPAL has failed to comply with any requirement as set forth in the preceding paragraph, then Surety shall pay the penal sum to the Department within fifteen (15) days of written demand therefor. If Surety does not make full payment within such period of time, the Department may bring an action to collect the amount owed. Surety is liable to the Department for all its expenses, including attorney's fees, incurred in any litigation in which it prevails either in whole or in part.

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)

By _____
(Signature and Title)

By _____
(Signature of Attorney-in-Fact)

Notary for PRINCIPAL

Notary for SURETY

STATE OF _____
COUNTY OF _____

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)

Signed and attested before me on _____ (date)

by _____
(Name of Notary Public)

by _____
(Name of Notary Public)

(Seal) _____
(Signature of Notary Public)

(Seal) _____
(Signature of Notary Public)

(Date Commission Expires)

(Date Commission Expires)

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

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.



Item No. _____

Letting Date _____

KNOW ALL PERSONS BY THESE PRESENTS, That We _____

as PRINCIPAL, and _____

as SURETY, and held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in the bid proposal under "Proposal Guaranty" in effect on the date of the Invitation for Bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that whereas, the PRINCIPAL has submitted a bid proposal to the STATE OF ILLINOIS, acting through the Department of Transportation, for the improvement designated by the Transportation Bulletin Item Number and Letting Date indicated above.

NOW, THEREFORE, if the Department shall accept the bid proposal of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in the bidding and contract documents; and if, after award by the Department, the PRINCIPAL shall enter into a contract in accordance with the terms of the bidding and contract documents including evidence of the required insurance coverages and providing such bond as specified with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof; or if, in the event of the failure of the PRINCIPAL to enter into such contract and to give the specified bond, the PRINCIPAL pays to the Department the difference not to exceed the penalty hereof between the amount specified in the bid proposal and such larger amount for which the Department may contract with another party to perform the work covered by said bid proposal, then this obligation shall be null and void, otherwise, it shall remain in full force and effect.

IN THE EVENT the Department determines the PRINCIPAL has failed to comply with any requirement as set forth in the preceding paragraph, then Surety shall pay the penal sum to the Department within fifteen (15) days of written demand therefor. If Surety does not make full payment within such period of time, the Department may bring an action to collect the amount owed. Surety is liable to the Department for all its expenses, including attorney's fees, incurred in any litigation in which it prevails either in whole or in part.

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)

By _____
(Signature and Title)

By _____
(Signature of Attorney-in-Fact)

Notary for PRINCIPAL

Notary for SURETY

STATE OF _____
COUNTY OF _____

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)
by _____

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)

(Date Commission Expires)

(Date Commission Expires)

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

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

(1) Policy

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

(2) Obligation

The contractor agrees to ensure that disadvantageded 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) Project and Bid Identification

Complete the following information concerning the project and bid:

Route _____	Total Bid _____
Section _____	Contract DBE Goal _____ (Percent) _____ (Dollar Amount)
Project _____	
County _____	
Letting Date _____	
Contract No. _____	
Letting Item No. _____	

(4) Assurance

I, acting in my capacity as an officer of the undersigned bidder (or bidders if a joint venture), hereby assure the Department that on this project my company : (check one)

- Meets or exceeds contract award goals and has provided documented participation as follows:
Disadvantaged Business Participation _____ percent

Attached are the signed participation statements, forms SBE 2025, required by the Special Provision evidencing availability and use of each business participating in this plan and assuring that each business will perform a commercially useful function in the work of the contract.

- Failed to meet contract award goals and has included good faith effort documentation to meet the goals and that my company has provided participation as follows:

Disadvantaged Business Participation _____ percent

The contract goals should be accordingly modified or waived. Attached is all information required by the Special Provision in support of this request including good faith effort. Also attached are the signed participation statements, forms SBE 2025, required by the Special Provision evidencing availability and use of each business participating in this plan and assuring that each business will perform a commercially useful function in the work of the contract.

Company

By _____

Title _____

Date _____

The "as read" Low Bidder is required to comply with the Special Provision.	
Submit only one utilization plan for each project. The utilization plan shall be submitted in accordance with the special provision.	
Bureau of Small Business Enterprises 2300 South Dirksen Parkway Springfield, Illinois 62764	Local Let Projects Submit forms to the Local Agency

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

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

Name:
Address:
Phone No.

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

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

NOTICE

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

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

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

**Contract No. 61B11
DUPAGE County
Section 10-00089-00-BR (Hinsdale)
Project BRM-9003(702)
Route FAU 2999 (Oak Street)
District 1 Construction Funds**



Illinois Department of Transportation

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 State Required Ethical Standards Governing Subcontractors.

RETURN WITH SUBCONTRACT

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.

RETURN WITH SUBCONTRACT

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

E. Section 42 of the Environmental Protection Act

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

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

<hr style="width: 80%; margin: 0 auto;"/> <p style="text-align: center;">Name of Subcontracting Company</p>	
<hr style="width: 80%; margin: 0 auto;"/> <p style="text-align: center;">Authorized Officer</p>	<hr style="width: 20%; margin: 0 auto;"/> <p style="text-align: center;">Date</p>

RETURN WITH SUBCONTRACT
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. Disclosure Forms. 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. Disclosure Form Instructions

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? YES ___ NO ___
3. Does anyone in your organization receive more than 60% of the annual salary of the Governor of the subcontracting entity's or parent entity's distributive income? YES ___ NO ___

(Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)

4. Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES ___ NO ___

(Note: Only one set of forms needs to be completed per individual per subcontract 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 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 **NOT APPLICABLE STATEMENT** on page 2 of Form A must be signed and dated by an individual that is authorized to execute contracts for your company.

RETURN WITH SUBCONTRACT

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 NOT APPLICABLE STATEMENT on Form A does not allow the subcontractor to ignore Form B. Form B must be completed, checked, and dated or the subcontract will not be approved.*

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

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

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

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

Disclosure of the information contained in this Form is required by 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 open-ended contracts. **A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.**

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

DISCLOSURE OF FINANCIAL INFORMATION

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

FOR INDIVIDUAL (type or print information)	
NAME:	_____
ADDRESS	_____
Type of ownership/distributable income share:	
stock _____ sole proprietorship _____ Partnership _____ other: (explain on separate sheet):	
% or \$ value of ownership/distributable income share:	_____

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.

1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___ No ___

2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, provide the name the State agency for which you are employed and your annual salary. _____

RETURN WITH SUBCONTRACT

3. 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, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor?
Yes ___ No ___

4. 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, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?
Yes ___ No ___

(b) State employment of spouse, father, mother, son, or daughter, including contractual employment services in the previous 2 years.

Yes ___ No ___

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

1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority?
Yes ___ No ___

2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. _____

3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor?
Yes ___ No ___

4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?
Yes ___ No ___

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years.
Yes ___ No ___

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter.
Yes ___ No ___

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United States of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years.
Yes ___ No ___

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter.
Yes ___ No ___

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government.
Yes ___ No ___

RETURN WITH SUBCONTRACT

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

3 Communication Disclosure.

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

Name and address of person(s): _____

RETURN WITH SUBCONTRACT

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: _____ Date _____
Signature of Individual or Authorized Officer

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.

_____ Date _____
Signature of Authorized Officer

RETURN WITH SUBCONTRACT

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Subcontractor: Other Contracts & Financial Related Information Disclosure

Form with fields: Subcontractor Name, Legal Address, City, State, Zip, Telephone Number, Email Address, Fax Number (if available)

Disclosure of the information contained in this Form is required by Section 50-35 of the Code (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for subcontracts with a total value of \$50,000 or more, from subcontractors identified in Section 20-120 of the Code, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The SUBCONTRACTOR shall identify whether it has any pending contracts, subcontracts, including leases, bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes ___ No ___

If "No" is checked, the subcontractor only needs to complete the signature box on this page.

2. If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

THE FOLLOWING STATEMENT MUST BE CHECKED

Signature box with fields: Signature of Authorized Officer, Date

OWNERSHIP CERTIFICATION

Please certify that the following statement is true if the individuals for all submitted Form A disclosures do not total 100% of ownership

Any remaining ownership interest is held by individuals receiving less than \$106,447.20 of the bidding entity's or parent entity's distributive income or holding less than a 5% ownership interest.

Yes No N/A (Form A disclosure(s) established 100% ownership)



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.m. March 6, 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. 61B11
DUPAGE County
Section 10-00089-00-BR (Hinsdale)
Project BRM-9003(702)
Route FAU 2999 (Oak Street)
District 1 Construction Funds**

Project consists of replacing the structure that carries Oak Street over the BNSF Railroad, roadway reconstruction and street lighting. Project limits are Oak Street from Walnut Street to Chicago Avenue, the intersection of Oak Street at Chicago Avenue and on Hillgrove Avenue from Oak Street to Walnut Street, located in the Village of Hinsdale.

- 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

**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)

SUPPLEMENTAL SPECIFICATIONS

<u>Std. Spec. Sec.</u>	<u>Page No.</u>
101 Definition of Terms	1
102 Advertisement, Bidding, Award, and Contract Execution	2
105 Control of Work	3
106 Control of Materials	5
107 Legal Regulations and Responsibility to Public	6
108 Prosecution and Progress	14
109 Measurement and Payment	15
202 Earth and Rock Excavation	17
211 Topsoil and Compost	19
250 Seeding	20
253 Planting Woody Plants	21
280 Temporary Erosion and Sediment Control	23
312 Stabilized Subbase	24
406 Hot-Mix Asphalt Binder and Surface Course	25
407 Hot-Mix Asphalt Pavement (Full-Depth)	28
420 Portland Cement Concrete Pavement	32
424 Portland Cement Concrete Sidewalk	34
440 Removal of Existing Pavement and Appurtenances	35
502 Excavation for Structures	36
503 Concrete Structures	37
504 Precast Concrete Structures	40
506 Cleaning and Painting New Steel Structures	41
512 Piling	42
516 Drilled Shafts	43
521 Bearings	44
540 Box Culverts	45
588 Bridge Relief Joint System	46
589 Elastic Joint Sealer	48
602 Catch Basin, Manhole, Inlet, Drainage Structure, and Valve Vault Construction, Adjustment, and Reconstruction	49
603 Adjusting Frames and Grates of Drainage and Utility Structures	50
606 Concrete Gutter, Curb, Median, and Paved Ditch	52
610 Shoulder Inlets with Curb	53
639 Precast Prestressed Concrete Sight Screen	54
642 Shoulder Rumble Strips	55
643 Impact Attenuators	56
644 High Tension Cable Median Barrier	58
669 Removal and Disposal of Regulated Substances	60
670 Engineer's Field Office and Laboratory	64

<u>Std. Spec. Sec.</u>	<u>Page No.</u>
701 Work Zone Traffic Control and Protection	65
706 Impact Attenuators, Temporary	68
707 Movable Traffic Barrier	71
708 Temporary Water Filled Barrier	73
730 Wood Sign Support	75
780 Pavement Striping	76
816 Unit Duct	81
836 Pole Foundation	82
860 Master Controller	83
1001 Cement	84
1003 Fine Aggregates	85
1004 Coarse Aggregates	87
1006 Metals	91
1011 Mineral Filler	93
1017 Packaged, Dry, Combined Materials for Mortar	94
1018 Packaged Rapid Hardening Mortar or Concrete	95
1019 Controlled Low-Strength Material (CLSM)	96
1020 Portland Cement Concrete	97
1024 Grout and Nonshrink Grout	136
1030 Hot-Mix Asphalt	137
1040 Drain Pipe, Tile, Drainage Mat, and Wall Drain	142
1042 Precast Concrete Products	143
1069 Pole and Tower	144
1070 Foundation and Breakaway Devices	145
1073 Controller	146
1081 Materials for Planting	147
1082 Preformed Bearing Pads	148
1083 Elastomeric Bearings	149
1088 Wireway and Conduit System	150
1095 Pavement Markings	152
1101 General Equipment	155
1102 Hot-Mix Asphalt Equipment	157
1103 Portland Cement Concrete Equipment	159
1105 Pavement Marking Equipment	160
1106 Work Zone Traffic Control Devices	161

RECURRING SPECIAL PROVISIONS

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

<u>CHECK SHEET #</u>	<u>PAGE NO.</u>
1 X Additional State Requirements for Federal-Aid Construction Contracts	163
2 X Subletting of Contracts (Federal-Aid Contracts)	166
3 X EEO	167
4 Specific EEO Responsibilities Non Federal-Aid Contracts	177
5 Required Provisions - State Contracts	182
6 Asbestos Bearing Pad Removal	188
7 Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	189
8 Temporary Stream Crossings and In-Stream Work Pads	190
9 Construction Layout Stakes Except for Bridges	191
10 X Construction Layout Stakes	194
11 Use of Geotextile Fabric for Railroad Crossing	197
12 Subsealing of Concrete Pavements	199
13 Hot-Mix Asphalt Surface Correction	203
14 Pavement and Shoulder Resurfacing	205
15 Reserved	206
16 Patching with Hot-Mix Asphalt Overlay Removal	207
17 Polymer Concrete	208
18 PVC Pipeliner	210
19 X Pipe Underdrains	211
20 Guardrail and Barrier Wall Delineation	212
21 Bicycle Racks	216
22 Reserved	218
23 Temporary Portable Bridge Traffic Signals	219
24 Work Zone Public Information Signs	221
25 Nighttime Inspection of Roadway Lighting	222
26 English Substitution of Metric Bolts	223
27 English Substitution of Metric Reinforcement Bars	224
28 Calcium Chloride Accelerator for Portland Cement Concrete	225
29 Reserved	226
30 Quality Control of Concrete Mixtures at the Plant	227
31 X Quality Control/Quality Assurance of Concrete Mixtures	235
32 Digital Terrain Modeling for Earthwork Calculations	251
33 Pavement Marking Removal	253
34 Preventive Maintenance – Bituminous Surface Treatment	254
35 Preventive Maintenance – Cape Seal	260
36 Preventive Maintenance – Micro-Surfacing	275
37 Preventive Maintenance – Slurry Seal	286
38 Temporary Raised Pavement Markers	296
39 Restoring Bridge Approach Pavements Using High-Density Foam	297

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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

Table of Contents

<u>CHECK SHEET #</u>	<u>PAGE NO.</u>
LRS 1 Reserved	301
LRS 2 <input type="checkbox"/> Furnished Excavation	302
LRS 3 <input checked="" type="checkbox"/> Work Zone Traffic Control Surveillance	303
LRS 4 <input type="checkbox"/> Flaggers in Work Zones	304
LRS 5 <input type="checkbox"/> Contract Claims	305
LRS 6 <input type="checkbox"/> Bidding Requirements and Conditions for Contract Proposals	306
LRS 7 <input type="checkbox"/> Bidding Requirements and Conditions for Material Proposals	312
LRS 8 Reserved	318
LRS 9 <input type="checkbox"/> Bituminous Surface Treatments	319
LRS 10 Reserved	320
LRS 11 <input type="checkbox"/> Employment Practices	321
LRS 12 <input type="checkbox"/> Wages of Employees on Public Works	323
LRS 13 <input type="checkbox"/> Selection of Labor	325
LRS 14 <input type="checkbox"/> Paving Brick and Concrete Paver Pavements and Sidewalks	326
LRS 15 <input type="checkbox"/> Partial Payments	329
LRS 16 <input type="checkbox"/> Protests on Local Lettings	330
LRS 17 <input type="checkbox"/> Substance Abuse Prevention Program.....	331
LRS 18 <input type="checkbox"/> Multigrade Cold Mix Asphalt	332

SPECIAL PROVISIONS

INDEX OF PAGES

LOCATION OF PROJECT	1
DESCRIPTION OF PROJECT.....	1
MAINTENANCE OF ROADWAYS	1
STATUS OF UTILITIES TO BE ADJUSTED	2
TRAFFIC CONTROL PLAN	3
PUBLIC CONVENIENCE AND SAFETY (D-1).....	3
TRAFFIC CONTROL AND PROTECTION (ARTERIALS)	4
TEMPORARY ACCESS (COMMERCIAL ENTRANCE).....	4
COMPLETION DATE PLUS WORKING DAYS.....	5
ADVANCED PUBLIC NOTIFICATION.....	5
DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (D-1)	6
AGGREGATE SUBGRADE IMPROVEMENT (D-1).....	7
COARSE AGGREGATE FOR BACKFILL, TRENCH BACKFILL AND BEDDING (D-1).....	8
HMA MIXTURE DESIGN REQUIREMENTS (D-1).....	9
HOT MIX ASPHALT - QUANTITY CORRECTION (BMPR)	22
RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (D-1)	23
GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1).....	30
HEAT OF HYDRATION CONTROL FOR CONCRETE STRUCTURES (D-1)	32
SLIPFORM PAVING (D-1).....	32
ADJUSTMENTS AND RECONSTRUCTIONS.....	32
REMOVAL OF EXISTING STRUCTURES, SPECIAL.....	33
FORM LINER TEXTURED SURFACES	33
DRAINAGE STRUCTURE TO BE REMOVED	36
WATER MAIN TO BE ABANDONED	36
WATER MAIN REMOVAL.....	36
ADJUSTING WATER SERVICE LINES.....	37

PRESSURE CONNECTION TO EXISTING WATERMAIN.....	37
CONNECTION TO EXISTING WATER MAIN 4"	37
WATER MAIN.....	38
WATER MAIN LOWERING	38
FILLING, DISINFECTION AND FLUSHING WATER MAINS	38
PRESSURE TEST	39
STORM SEWER ADJACENT TO OR CROSSING WATER MAIN	39
STEEL CASINGS	39
STEEL CASING PIPE, AUGERED AND JACKED, 16"	40
INLETS, TYPE A, TYPE 3V FRAME AND GRATE	40
VALVE VAULTS TO BE REMOVED	40
VALVE BOXES TO BE REMOVED	40
WATER VALVES.....	41
FIRE HYDRANTS TO BE REMOVED.....	41
FIRE HYDRANTS	41
DOMESTIC METER VAULT TO BE REMOVED	42
DOMESTIC METER VAULTS	42
WATER SERVICES.....	42
IRRIGATION SYSTEM	43
GENERAL ELECTRICAL REQUIREMENTS.....	53
ELECTRIC SERVICE INSTALLATION	57
ELECTRIC UTILITY SERVICE CONNECTION (COMED)	57
WIRE AND CABLE.....	58
LUMINAIRE	59
LUMINAIRE, LED, RECESSED MOUNT, 11.2 WATT	65
REMOVAL OF EXISTING SIGNAL AND APPURTENANCES	66
CLEARING AND GRUBBING	66
TOPSOIL FURNISH AND PLACE	66

PLANTING PERENNIAL PLANTS	67
PLANTING WOODY PLANTS	69
WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE	69
SUPPLEMENTAL WATERING	70
TRENCH DRAIN	71
LIMESTONE MASONRY VENEER	71
BRICK PAVEMENT REMOVAL AND REPLACEMENT	74
SOIL CONDITIONER	74
CURED-IN-PLACE PIPE LINER	75
BRICK SIDEWALK REMOVAL	84
BOLLARD REMOVAL	84
SEEDING, CLASS 5 (MODIFIED)	84
EROSION CONTROL BLANKET (SPECIAL)	86
AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS	86
STAINING CONCRETE STRUCTURES	87
TEMPORARY TRAFFIC SIGNAL INSTALLATION (SPECIAL)	89
ORNAMENTAL FENCE (SPECIAL)	90
BRIDGE FENCE RAILING (SPECIAL)	91
PARAPET RAILING, SPECIAL	91
BOLLARDS	92
BUILDING REMOVAL NO. 1	92
TEMPORARY INFORMATION SIGNING	98
TEMPORARY PAVEMENT	99
PEDESTRIAN ACTIVATED CROSSWALK WARNING SYSTEM	99
REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES	103
BRICK PAVER CROSSWALKS	106
RELOCATE BOLLARDS	109
LIGHTING UNIT COMPLETE	110

ARCHITECTURAL CAP, METAL 112

ARCHITECTURAL CAP, CONCRETE 113

ARTICULATED BLOCK REVETMENT MAT (SPECIAL) 114

TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISIONS (TPG) 115

ROADWAY GEOTECHNICAL REPORT 117

STORM WATER POLLUTION PREVENTION PLAN 164

NOTICE OF INTENT (NOI) FORM 173

BNSF RAILWAY COMPANY GUIDELINES FOR PREPARATION OF BRIDGE
DEMOLITION AND REMOVAL PLAN OVER THE BNSF RAILWAY 176

VILLAGE OF HINSDALE – BNSF BRIDGE AGREEMENT 190

INDEX LOCAL ROADS AND STREETS SPECIAL PROVISIONS

<u>LR #</u>	<u>Pg #</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
LR SD12		<input type="checkbox"/> Slab Movement Detection Device	Nov. 11, 1984	Jan. 1, 2007
LR SD13		<input type="checkbox"/> Required Cold Milled Surface Texture	Nov. 1, 1987	Jan. 1, 2007
LR 107-2		<input type="checkbox"/> Railroad Protective Liability Insurance for Local Lettings	Mar. 1, 2005	Jan. 1, 2006
LR 107-4	220	<input checked="" type="checkbox"/> Insurance	Feb. 1, 2007	Aug. 1, 2007
LR 108		<input type="checkbox"/> Combination Bids	Jan. 1, 1994	Mar. 1, 2005
LR 109		<input type="checkbox"/> Equipment Rental Rates	Jan. 1, 2012	
LR 212		<input type="checkbox"/> Shaping Roadway	Aug. 1, 1969	Jan. 1, 2002
LR 355-1		<input type="checkbox"/> Bituminous Stabilized Base Course, Road Mix or Traveling Plant Mix	Oct. 1, 1973	Jan. 1, 2007
LR 355-2		<input type="checkbox"/> Bituminous Stabilized Base Course, Plant Mix	Feb. 20, 1963	Jan. 1, 2007
LR 400-1		<input type="checkbox"/> Bituminous Treated Earth Surface	Jan. 1, 2007	Apr. 1, 2012
LR 400-2		<input type="checkbox"/> Bituminous Surface Plant Mix (Class B)	Jan. 1, 2008	
LR 400-3		<input type="checkbox"/> Hot In-Place Recycling (HIR) – Surface Recycling	Jan. 1, 2012	
LR 400-4		<input type="checkbox"/> Full-Depth Reclamation (FDR) with Emulsified Asphalt	Apr. 1, 2012	Jun. 1, 2012
LR 400-5		<input type="checkbox"/> Cold In-Place Recycling (CIR) With Emulsified Asphalt	Apr. 1, 2012	Jun. 1, 2012
LR 400-6		<input type="checkbox"/> Cold In Place Recycling (CIR) with Foamed Asphalt	June 1, 2012	
LR 400-7		<input type="checkbox"/> Full-Depth Reclamation (FDR) with Foamed Asphalt	June 1, 2012	
LR 402		<input type="checkbox"/> Salt Stabilized Surface Course	Feb. 20, 1963	Jan. 1, 2007
LR 403-1		<input type="checkbox"/> Surface Profile Milling of Existing, Recycled or Reclaimed Flexible Pavement	Apr. 1, 2012	Jun. 1, 2012
LR 403-2		<input type="checkbox"/> Bituminous Hot Mix Sand Seal Coat	Aug. 1, 1969	Jan. 1, 2007
LR 406		<input type="checkbox"/> Filling HMA Core Holes with Non-shrink Grout	Jan. 1, 2008	
LR 420		<input type="checkbox"/> PCC Pavement (Special)	May 12, 1964	Jan. 2, 2007
LR 442		<input type="checkbox"/> Bituminous Patching Mixtures for Maintenance Use	Jan. 1, 2004	Jun. 1, 2007
LR 451		<input type="checkbox"/> Crack Filling Bituminous Pavement with Fiber-Asphalt	Oct. 1, 1991	Jan. 1, 2007
LR 503-1		<input type="checkbox"/> Furnishing Class SI Concrete	Oct. 1, 1973	Jan. 1, 2002
LR 503-2		<input type="checkbox"/> Furnishing Class SI Concrete (Short Load)	Jan. 1, 1989	Jan. 1, 2002
LR 542		<input type="checkbox"/> Pipe Culverts, Type _____ (Furnished)	Sep. 1, 1964	Jan. 1, 2007
LR 663		<input type="checkbox"/> Calcium Chloride Applied	Jun. 1, 1958	Jan. 1, 2007
LR 702		<input type="checkbox"/> Construction and Maintenance Signs	Jan. 1, 2004	Jun. 1, 2007
LR 1000-1		<input type="checkbox"/> Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with Emulsified Asphalt Mix Design Procedures	Apr. 1, 2012	Jun. 1, 2012
LR 1000-2		<input type="checkbox"/> Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with Foamed Asphalt Mix Design Procedures	June 1, 2012	
LR 1004		<input type="checkbox"/> Coarse Aggregate for Bituminous Surface Treatment	Jan. 1, 2002	Jan. 1, 2007
LR 1030		<input type="checkbox"/> Growth Curve	Mar. 1, 2008	Jan. 1, 2010
LR 1032-1		<input type="checkbox"/> Emulsified Asphalts	Jan. 1, 2007	Feb. 7, 2008
LR 1102		<input type="checkbox"/> 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 Name</u>	<u>Pg.</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
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	
5026I		Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5048I		Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5049I		Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5053I		Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
* 80310		Coated Galvanized Steel Conduit	Jan. 1, 2013	Jan. 1, 2015
* 80341		Collable Nonmetallic Conduit	Aug. 1, 2014	Jan. 1, 2015
80198		Completion Date (via calendar days)	April 1, 2008	
80199		Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80293		Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	April 1, 2014
80294		Concrete Box Culverts with Skews ≤ 30 Degrees Regardless of Design Fill and Skews > 30 Degrees with Design Fills > 5 Feet	April 1, 2012	April 1, 2014
80311		Concrete End Sections for Pipe Culverts	Jan. 1, 2013	
80334	221	X 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	222	X Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80335	225	X Contract Claims	April 1, 2014	
* 80029	226	X Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2015
80265	237	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	
80304		Grooving for Recessed Pavement Markings	Nov. 1, 2012	Aug. 1, 2014
80246	241	X Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2012
80322		Hot-Mix Asphalt – Mixture Design Composition and Volumetric Requirements	Nov. 1, 2013	Nov. 1, 2014
80323		Hot-Mix Asphalt – Mixture Design Verification and Production	Nov. 1, 2013	Nov. 1, 2014
80347		Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	
80348	243	X Hot-Mix Asphalt – Prime Coat	Nov. 1, 2014	
80315		Insertion Lining of Culverts	Jan. 1, 2013	Nov. 1, 2013
* 80351		Light Tower	Jan. 1, 2015	
80336		Longitudinal Joint and Crack Patching	April 1, 2014	
80324		LRFD Pipe Culvert Burial Tables	Nov. 1, 2013	Nov. 1, 2014
80325	248	X LRFD Storm Sewer Burial Tables	Nov. 1, 2013	Nov. 1, 2014
80045		Material Transfer Device	June 15, 1999	Aug. 1, 2014
* 80342	258	X 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	260	X Pavement Patching	Jan. 1, 2010	
* 80352		Pavement Striping - Symbols	Jan. 1, 2015	
* 80353		Portland Cement Concrete Inlay or Overlay	Jan. 1, 2015	
80338		Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	

<u>File Name</u>	<u>Pg.</u>		<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80343	261	X	Precast Concrete Handhole	Aug. 1, 2014	
80300			Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	
80328	262	X	Progress Payments	Nov. 2, 2013	
34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	263	X	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
* 80306			Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 2, 2015
80350	265	X	Retroreflective Sheeting for Highway Signs	Nov. 1, 2014	
80327	267	X	Reinforcement Bars	Nov. 1, 2013	
80344			Rigid Metal Conduit	Aug. 1, 2014	
* 80354	269	X	Sidewalk, Corner, or Crosswalk Closure	Jan. 1, 2015	
80340			Speed Display Trailer	April 2, 2014	
80127	270	X	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	274	X	Training Special Provisions	Oct. 15, 1975	
80318			Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
80345			Underpass Luminaire	Aug. 1, 2014	
* 80357			Urban Half Road Closure with Mountable Median	Jan. 1, 2015	
80346			Waterway Obstruction Warning Luminaire	Aug. 1, 2014	
80288	277	X	Warm Mix Asphalt	Jan. 1, 2012	Nov. 1, 2014
80302	279	X	Weekly DBE Trucking Reports	June 2, 2012	
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 Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
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(l) 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: November 21, 2014 Letting

Pg #	√	File Name	Title	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	Oct 15, 2011
		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	April 18, 2014
		GBSP 21	Cleaning and Painting Contact Surface Areas of Existing Steel Structures	June 30, 2003	May 18, 2011
		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	Oct 30, 2012
		GBSP 30	Bridge Deck Latex Concrete Overlay	May 15, 1995	Jan 18, 2011
		GBSP 31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	Oct 30, 2012
280	X	GBSP 32	Temporary Sheet Piling	Sept 2, 1994	Jan 31, 2012
		GBSP 33	Pedestrian Truss Superstructure	Jan 13, 1998	April 18, 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	Aug 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
282	X	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	Aug 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 Residues	Nov 25, 2004	Mar 6, 2009
		GBSP 61	Slipform Parapet	June 1, 2007	Aug 17, 2012
		GBSP 62	Concrete Deck Beams	June 13, 2008	Oct 9, 2009
		GBSP 64	Segmental Concrete Block Wall	Jan 7, 1999	Oct 30, 2012
		GBSP 65	Precast Modular Retaining Walls	Mar 19, 2001	Jan 3, 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	Oct 15, 2011
		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	
283	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
		GBSP 78	Bridge Deck Construction	Oct 22, 2013	April 18, 2014
		GBSP 79	Reserved		
		GBSP 80	Fabric Reinforced Elastomeric	Aug 29, 2014	

LIST ANY ADDITIONAL SPECIAL PROVISIONS BELOW

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

File Name	Title	Std Spec 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 Name	Title	Disposition:
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 Illinois Department of Transportation's (IDOT) "Standard Specifications for Road and Bridge Construction," adopted January 1, 2012, (hereinafter referred to as the "Standard Specifications"); the "Manual on Uniform Traffic Control Devices for Streets and Highways" the "Manual of Test Procedures of Materials", in effect on the date of invitation for bids; the "Supplemental Specifications and Recurring Special Provisions," latest edition as indicated on the Check Sheet included herein, and Standard Specifications for Water and Sewer Main Construction in Illinois latest edition which apply to and govern the construction of the Oak Street Bridge Over the BNSF Railroad Reconstruction, Section 10-00089-00-BR, Project BRM-9003(702), Job C-91-756-10, Contract No. 61B11, Village of Hinsdale, DuPage County. In case of conflict with any part or parts of the Standard Specifications, these Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

The project is located within the Village of Hinsdale in DuPage County, Illinois on Oak Street (FAU 2999) from Chicago Avenue to Walnut Street and over the BNSF Railroad. The total net and gross length of the project is 2,465 Linear Feet (0.4672 Miles). The following streets will have improvements:

Oak Street, Chicago Avenue, Hillgrove Avenue, and County Line Road

DESCRIPTION OF PROJECT

The work consists of removal and disposal of unsuitable material, earth excavation, erosion control, subbase granular material, aggregate subgrade improvements, portland cement concrete (PCC) pavement, combination concrete curb and gutter, bridge removal, street lighting, new concrete structure, water main removal and replacement, storm sewer removal and replacement, sanitary sewer lining, PCC driveways, PCC sidewalk, retaining wall, polyurea pavement marking and signing, restoration, and all incidental and collateral work necessary to complete the project and described herein.

MAINTENANCE OF ROADWAYS

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

Beginning on the date that the Contractor begins work on this project, he 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 for 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.

STATUS OF UTILITIES TO BE ADJUSTED

Effective: January 30, 1987

Revised: December 16, 2013

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

Name of Utility	Type	Location	Estimated Duration of Time for the Completion of Relocation or Adjustments
AT&T John Evers 1000 Commerce Drive Oakbrook, IL 60523 630-573-5705	Telephone, Cable	Chicago Ave., Walnut St.	10 days
ComEd Brad Shinabargar Public Relocation Dept. 708-235-2692	Electric: Overhead	Oak St., Hillgrove Ave., Chicago Ave.	40 days
Comcast Robert Schulter 688 Industrial Drive Elmhurst, Illinois 60126 630-600-6307	Cable: Aerial and Underground	Oak St., Hillgrove Ave., Chicago Ave.	10 days
DuPage Water Commission Michael Schweizer 600 E Butterfield Rd, Elmhurst, IL 60126 630-834-0100	Water	N/A	No conflict
Village of Hinsdale Dan Deeter, P.E. 19 East Chicago Avenue Hinsdale, IL 60521 630-789-7030	Sanitary Sewer and Water Main	Oak St., Hillgrove Ave., Chicago Ave.	No conflict
Flagg Creek Water Reclamation District Jim Liubicich 7001 N. Frontage Rd. Burr Ridge, IL 60527 630-323-3299 Ext. 6130	Storm Sewer, Sanitary Sewer	Walnut St.	No relocations or adjustments required.
Level 3 Communications Kelli Whitehead 1025 Eldorado Blvd Broomfield, CO 80021 720-888-4988	Underground Fiber	Chicago Ave	No conflict anticipated
Verizon Dean Boyers 972-729-6322	Telephone: Aerial and Buried	Oak St., BNSF Railroad	No conflict anticipated
Nicor Gas Jeff Leifheit 1844 Ferry Road Naperville, IL 60563 815-754-3140	Gas	Oak Street, Chicago Ave.	20 days

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.

TRAFFIC CONTROL PLAN

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 and Village of Hinsdale at least 72 hours in advance of beginning work.

Standards

701006-05, 701101-04, 701301-04, 701311-03, 701501-06, 701801-05, and 701901-04

Details

Suggested Maintenance of Traffic Plans
Traffic Control and Protection for Side Roads, Intersections and Driveways (TC-10)
District One Typical Pavement Markings (TC-13)
Pavement Marking Letters and Symbols For Traffic Staging (TC-16)

Special Provisions

Maintenance of Roadways
Public Convenience and Safety (Dist. 1)
Temporary Information Signing
Traffic Control and Protection (Arterials)
Pavement Marking Removal (BDE)
Pavement Patching (BDE)
Advance Public Notification

PUBLIC CONVENIENCE AND SAFETY (D-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."

TRAFFIC CONTROL AND PROTECTION (ARTERIALS)

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.

For construction activities along Oak Street, especially at the intersection of Chicago Avenue and Walnut Avenue, the Contractor shall keep at least one lane of traffic open during the day and open the road to two-way traffic at the end of each work day, if feasible. The Contractor shall take care and assure construction activities remain consistent and steady throughout the duration of the Contract. Upon the start of construction along Chicago Avenue the maximum duration of one-way traffic shall be **60 calendar days**. Upon the start of Stage V construction along the west side of Oak Street, the maximum duration which eastbound Walnut Street shall be detoured is **14 calendar days**.

Method of Measurement: 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.

Basis of Payment: 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.

TEMPORARY ACCESS (COMMERCIAL ENTRANCE)

Description: This work shall consist of maintaining temporary access for various stages of construction at locations noted in the plans.

Maintaining access to the Adventist Hinsdale Hospital is of the utmost importance to the Village of Hinsdale. Access to the hospital shall be maintained at all times for the duration of the contract. The Contractor shall be responsible for staging the construction of the driveways per general notes and details as specified in the plans. Special attention shall be made to the following timeline table describing the maximum allowable time the driveway shall remain under construction for the various stages of construction:

MOT Stage for Hospital Entrance	Maximum Duration
Stage I	5 calendar days
Stage II	18 calendar days
Stage III	18 calendar days
Stage IV	21 calendar days
Stage V	14 calendar days
Total Hospital MOT duration	76 calendar days

The relocated hospital entrance shall be stage constructed during Stages III and IV. The main portion of the driveway shall be constructed during Stage III. During Stage IV the remaining portion of the driveway shall be poured using HIGH-EARLY-STRENGTH PORTLAND CEMENT CONCRETE PAVEMENT 8". **The existing exit shall be closed to traffic at 6:00PM the day of construction and shall be opened to vehicular traffic no later than 6:00AM the following morning.** No additional payment shall be made for night time activities.

Should the Contractor fail to complete the work within the above referenced timeframe, the Contractor shall be liable and shall pay liquidated damages in the amount of \$2,500.00 per calendar day of overrun.

Basis of Payment: This item will be paid for at the contract lump sum price for TEMPORARY ACCESS (COMMERCIAL ENTRANCE).

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, December 1, 2015 except as specified herein.

The Contractor will be allowed to complete all clean-up work and punch list items within 10 working days after the 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 clean-up work and punch list items. 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 both the completion date and the number of working days.

ADVANCED PUBLIC NOTIFICATION

Description: This work shall consist of furnishing, installing, maintaining, relocating temporary information signing and changeable message signs for various stages of construction.

The Contractor shall provide notice to the public a minimum of 5 days in advance of any work that requires the closure of lanes through the use of a changeable message sign or temporary information signing.

Basis of Payment: This work will be paid as TEMPORARY INFORMATION SIGNING in sq. ft. or as CHANGEABLE MESSAGE SIGN in calendar months.

DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (D-1)

Effective: April 1, 2011

Revised: April 2, 2011

Add the following to Article 603.02 of the Standard Specifications:

- “(i) Temporary Hot-Mix Asphalt (HMA) Ramp (Note 1) 1030
- “(j) Temporary Rubber Ramps (Note 2)

Note 1. The HMA shall have maximum aggregate size of 3/8 in. (95 mm).

Note 2. The rubber material shall be according to the following.

Property	Test Method	Requirement
Durometer Hardness, Shore A	ASTM D 2240	75 ±15
Tensile Strength, psi (kPa)	ASTM D 412	300 (2000) min
Elongation, percent	ASTM D 412	90 min
Specific Gravity	ASTM D 792	1.0 - 1.3
Brittleness, °F (°C)	ASTM D 746	-40 (-40)°

Revise Article 603.07 of the Standard Specifications to read:

“**603.07 Protection Under Traffic.** After the casting has been adjusted and the Class PP concrete has been placed, the work shall be protected by a barricade and two lights according to Article 701.17(e)(3)b.

When castings are under traffic before the final surfacing operation has been started, properly sized temporary ramps shall be placed around the drainage and/or utility castings according to the following methods.

- (a) Temporary Asphalt Ramps. Temporary hot-mix asphalt ramps shall be placed around the casting, flush with its surface and decreasing to a featheredge in a distance of 2 ft (600 mm) around the entire surface of the casting.
- (b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with permanent posted speeds of 40 mph or less and when the height of the casting to be protected meets the proper sizing requirements for the rubber ramps as shown below.

Dimension	Requirement
Inside Opening	Outside dimensions of casting + 1 in. (25 mm)
Thickness at inside edge	Height of casting ± 1/4 in. (6 mm)
Thickness at outside edge	1/4 in. (6 mm) max.
Width, measured from inside opening to outside edge	8 1/2 in. (215 mm) min

Placement shall be according to the manufacturer’s specifications.

Temporary ramps for castings shall remain in place until surfacing operations are undertaken within the immediate area of the structure. Prior to placing the surface course, the temporary ramp shall be removed. Excess material shall be disposed of according to Article 202.03.”

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.

Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete.

Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.

Gradation.

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				
	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				
	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	

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

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 ± 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.

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 Binder Thickness, in. (mm)	Mixture Composition
≤ 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 IL-9.5	CA 11 ^{1/} CA 16, CA 13 ^{3/}
HMA Low ESAL	IL-19.0L IL-9.5L Stabilized Subbase or Shoulders	CA 11 ^{1/} CA 16
SMA ^{2/}	1/2 in. (12.5mm) Binder & Surface IL 9.5 Surface	CA13 ^{3/} , CA14 or CA16 CA16, CA 13 ^{3/}

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	1011
(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		SMA ^{4/} IL-12.5 mm		SMA ^{4/} IL-9.5 mm		IL-9.5 mm		IL-4.75 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.
- 4/ 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				
Ndesign	Voids in the Mineral Aggregate (VMA), % minimum			Voids Filled with Asphalt Binder (VFA), %
	IL-19.0	IL-9.5	IL-4.75 ^{1/}	
50	13.5	15.0	18.5	65 – 78 ^{2/}
70			65 - 75	
90				

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 Composition	Design Compactive Effort	Design Air Voids Target %	VMA (Voids in the Mineral Aggregate), % min.	VFA (Voids Filled with Asphalt Binder), %
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 Requirements SMA ^{1/}			
Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %
80 ^{4/}	3.5	17.0 ^{2/}	75 - 83
		16.0 ^{3/}	

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 ≥ 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	Day's production ≥ 1200 tons: 1 per half day of production	Illinois-Modified AASHTO T 312

"Parameter	Frequency of Tests High ESAL Mixture Low ESAL Mixture	Test Method See Manual of Test Procedures for Materials
Note 4.	Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	
Maximum Specific Gravity of Mixture	Day's production ≥ 1200 tons: 1 per half day of production	Illinois-Modified AASHTO T 209
	Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	

Note 1. The 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.

"CONTROL LIMITS						
Parameter	High ESAL		SMA		IL-4.75	
	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 Content	± 0.3 %	± 0.2 %	± 0.2 %	± 0.1 %	± 0.3 %	± 0.2 %
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 REQUIREMENTS	High ESAL, Low ESAL, SMA & IL-4.75
Gradation ^{1/3/}	% Passing Sieves: 1/2 in. (12.5 mm) ^{2/} 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

Description. 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 repetitions.

- (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:

- "(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 Content	± 0.3 %

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

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

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 x 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.”

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)	$\pm 6 \%$
No. 8 (2.36 mm)	$\pm 5 \%$
No. 30 (600 μm)	$\pm 5 \%$
No. 200 (75 μm)	$\pm 2.0 \%$
Asphalt Binder	$\pm 0.3 \%$
G_{mm}	$\pm 0.03 \%$

- 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	
	FRAP	RAS
% Passing: ^{1/}		
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 BMR 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		
	Binder/Leveling Binder	Surface	Polymer Modified ^{3/}
Ndesign			
30L	50	40	10
50	40	35	10
70	40	30	10
90	40	30	10 ^{4/}
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.
 - j. 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.
 - c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - d. Mineral filler weight to the nearest pound (kilogram).
 - f. RAS and FRAP weight to the nearest pound (kilogram).
 - g. Virgin asphalt binder weight to the nearest pound (kilogram).
 - h. 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."

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 ± 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.

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.”

ADJUSTMENTS AND RECONSTRUCTIONS

Effective: March 15, 2011

Revise the first paragraph of Article 602.04 to read:

“**602.04 Concrete.** Cast-in-place concrete for structures shall be constructed of Class SI concrete according to the applicable portions of Section 503. Cast-in-place concrete for pavement patching around adjustments and reconstructions shall be constructed of Class PP-1 concrete, unless otherwise noted in the plans, according to the applicable portions of Section 1020.”

Revise the third, fourth and fifth sentences of the second paragraph of Article 602.11(c) to read:

“Castings shall be set to the finished pavement elevation so that no subsequent adjustment will be necessary, and the space around the casting shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b.”

Revise Article 603.05 to read:

“**603.05 Replacement of Existing Flexible Pavement.** After the castings have been adjusted, the surrounding space shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b.”

Revise Article 603.06 to read:

“**603.06 Replacement of Existing Rigid Pavement.** After the castings have been adjusted, the pavement and HMA that was removed, shall be replaced with Class PP-1 concrete, unless otherwise noted in the plans, not less than 9 in. (225 mm) thick. The pavement may be opened to traffic according to Article 701.17(e)(3)b.”

The surface of the Class PP concrete shall be constructed flush with the adjacent surface.”

Revise the first sentence of Article 603.07 to read:

“603.07 Protection Under Traffic. After the casting has been adjusted and the Class PP concrete has been placed, the work shall be protected by a barricade and two lights according to Article 701.17(e)(3)b.”

REMOVAL OF EXISTING STRUCTURES, SPECIAL

Description: This work shall consist of the removal of the existing bridge, including all superstructure and substructure elements as noted on the plans and in conformance with Section 501 of the Standard Specification. Where the Standard Specification conflicts with the BNSF Railway Company Guidelines for Preparation of Bridge Demolition and Removal Plan Over the BNSF Railway (a copy of which is located in the specifications of this project), the BNSF Railway Company Guidelines shall govern.

Protective shield systems will not be measured for payment separately, but shall be included in the unit price per each for REMOVAL OF EXISTING STRUCTURES, SPECIAL. Protective Shield systems should generally follow the requirements of Article 501.03 in the Standard Specifications, but must also comply with the requirements of the BNSF Railway Company Guidelines for Preparation of Bridge Demolition and Removal Plan Over the BNSF Railway.

The Contractor shall submit a demolition plan in accordance with BNSF Railway Company Guidelines for Preparation of Bridge Demolition and Removal Plan Over the BNSF Railway. The Contractor’s schedule shall allow for adequate review time by the BNSF of the Contractor’s submitted demolition plan.

Existing bridge plans will be made available for the Contractor’s reference, though the Contractor shall understand that the existing bridge plans are not “as-built” and may not include modifications made to the bridge since its original construction. Additional information regarding the existing bridge is noted in the proposed bridge plans for the Contractor’s reference.

No separate measurements will be made for removal of railings or other components attached to the existing bridge that are to be removed. Such items will be included in the unit price per each for REMOVAL OF EXISTING STRUCTURES, SPECIAL.

Basis of Payment: This work shall be paid for at the contract unit price per each for REMOVAL OF EXISTING STRUCTURES, SPECIAL and no additional compensation will be allowed.

FORM LINER TEXTURED SURFACES

Description: This work shall consist of furnishing and installing reusable, high-strength urethane form liners for cast-in-place concrete walls to achieve a simulated limestone masonry appearance. The work shall be completed in accordance with Section 503 of the Standard Specifications except as specified herein, as shown on the plans, and as directed by the Engineer.

Form liner shall be applied on exposed parapet wall surfaces as shown on the plans. The form liner pattern module is to be integrated into the specified surfaces such that there are no joints crossing the modules except where joints are indicated on the plans.

Manufacturer Requirements: Manufacturer of form liner must have a minimum of five (5) years of experience creating formed concrete surfaces to match actual brick masonry shapes and surface textures. Manufacturers listed herein have been pre-approved to provide textured surface form liners. Other manufacturer’s products will be considered, provided sufficient information is submitted 30-days prior to use to allow the Engineer to determine that the products proposed are equivalent to those named. All manufacturers of form liners shall adhere to the provisions listed herein and in the plans.

Contractor Qualifications: The concrete stain applicator shall have a minimum of five (5) years demonstrated experience in applying stains [to simulate rock]. The Contractor shall submit evidence of appropriate experience, job listings, and project photographs from previous work.

Submittals: Submit shop drawings of the concrete facing patterns for each area of concrete form liner.

Shop drawing submittals shall include:

1. Individual form liner pattern descriptions, dimensions, and sequencing of form liner sections. Include details showing typical cross sections, joints, corners, step footings, relief, size, pitch/working line, mortar joint and bed depths, joint locations, edge treatments, and any other special conditions.
2. Elevation views of the form liner panel layouts for the texture showing the full length and height of the structures including the footings with each form liner panel outlined. The arrangement of the form liner panels shall provide a continuous pattern of desired textures and colors with no interruption of the pattern made at the panel joints.

Mockup: The Contractor shall provide a cast concrete mockup containing the form liner surfaces. The form liner manufacturer's technical representative shall be on-site for technical supervision during the installation and removal operations. The purpose of the mockup is to select and verify the masonry pattern to be used. The form liner pattern and stain colors shall be consistent with the Limestone Masonry Veneer specified for several locations elsewhere along this project. The form liner pattern and Limestone Masonry Veneer are both required to reasonably match the color and style of masonry of the existing Highland Metra Station Shelter near the project site.

1. The contractor shall furnish the mockup a minimum of 30 days prior to the need to order form liner materials. This will provide curing time necessary to apply stain samples.
2. Locate mockup on site as directed by the Owner's Representative.
3. The mockup shall be a minimum 10 ft x 10 ft x 6 in. thick. Size shall be varied as required to demonstrate patterning.
4. Include examples of each condition required for construction i.e. liner joints, construction joints, expansion joints, steps, corners, and special conditions due to topography or man made elements, etc.
5. Upon receipt of comments from inspection of the mockup, adjustments or corrections shall be made to the molds where imperfections are found. If required, additional mockups shall be prepared when the initial mockup is found to be unsatisfactory.
6. General application to actual surfaces on the cast-in-place concrete structures shall not proceed until jobsite mockup has been approved in writing by the Owner's Representative.
7. The approved mockup shall serve as a standard of comparison with respect to color and overall appearance.

Materials: Form liners shall be of high quality, highly reusable and capable of withstanding anticipated concrete pour pressures without causing leakage or causing physical defects. Form liners shall attach easily to pour-in-place forms and be removable without causing concrete surface damage or weakness in the substrate. Liners used for the texture shall be made from high-strength elastomeric urethane material which shall not compress more than 0.02 feet when poured at a rate of 10 vertical feet per hour. Form release agents shall be non-staining, non-residual, non-reactive and shall not contribute to the degradation of the form liner material. Forms for smooth faced surfaces shall be plastic coated or metal to provide a smooth surface free of any impression or pattern.

If the contractor elects to use form ties for concrete forming, fiberglass form ties shall be used. Removable metallic form ties will not be allowed unless approved in writing by Owner's Representative.

Deliver materials in original and sealed containers, clearly marked with the manufacturer's name, brand name, type of material, batch number, and date of manufacture.

Form liner shall provide a finish that mimics an ashler stone pattern with approximate stone sizes of 8" to 25", and an average relief of 1" and maximum relief of 1-3/4". The following product is pre-approved:

1. Milestones Incorporated, Pattern MS-1006 Small Random Ashlar, 235 Monroe Street, Hudson, WI 54016 (Paul Nasvik: 715-381-9660) www.milestones-online.com

Other products will be considered if the Contractor demonstrates that they meet the listed requirements

as approved by the Engineer.

Construction Requirements: Form liners shall be installed in accordance with the manufacturers' recommendations. Form liners shall withstand concrete placement pressures without leakage causing physical or visual defects. A form release agent shall be applied to all surfaces of the liner which will come in contact with concrete as per the manufacturer's recommendations. After each use, liners shall be cleaned and made free of build-up prior to the next placement, and visually inspected for blemishes or tears. If necessary, the form liners shall be repaired in accordance with the manufacturer's recommendations. All form liner panels that will not perform as intended or are no longer repairable shall be replaced. An on-site inventory of each panel type shall be established based on the approved form liner shop drawings and anticipated useful life for each form liner type.

The liner shall be securely attached to the forms according to the manufacturer's recommendations. Liners shall be attached to each other with flush seams and seams filled as necessary to eliminate visible evidence of seams in cast concrete. Liner butt joints shall be blended into the pattern so as to create no visible vertical or horizontal seams or conspicuous form butt joint marks. Liner joints must fall within pattern joints or reveals. Finished textures shall be continuous without visual disruption and properly aligned over adjacent and multiple liner panels and at corners. Continuous or single liner panels shall be used where liner joints may interrupt the intended pattern. Panel remnants shall not be pieced together.

The Contractor shall coordinate concrete pours to prevent visible differences between individual pours or batches. Concrete pours shall be continuous between construction or expansion joints. Cold joints shall not occur within continuous form liner pattern fields. Wall ties shall be coordinated with the liner and form to achieve the least visible result. Liners shall be stripped between 12 and 24 hours as recommended by the manufacturer. Curing methods shall be compatible with the desired aesthetic result. Use of curing compounds will not be allowed. Concrete slump requirements shall meet the form liner manufacturers' recommendations for optimizing the concrete finish, as well as IDOT's material specifications and special provisions.

With the use of standard Portland cement concrete mixtures, the Contractor shall employ proper consolidation methods to ensure the highest quality finish. Internal vibration shall be achieved with a vibrator of appropriate size, the highest frequency and low to moderate amplitude. Concrete placement shall be in lifts not to exceed 1.5 feet. Internal vibrator operation shall be at appropriate intervals and depths and withdrawn slowly enough to assure a minimal amount of surface air voids and the best possible finish without causing segregation. External form vibrators may be required to assure the proper results. Any use of external form vibrators must be approved by the form liner manufacturer and the Engineer. The use of internal or external vibratory action shall not be allowed with the use of self consolidating concrete mixtures. It is the intention of this specification that no rubbing of flat areas or other repairs shall be required after form removal. The finished exposed formed concrete surfaces shall be free of visible vertical seams, horizontal seams, and butt joint marks. Grinding and chipping of finished formed surfaces shall be avoided.

Method of Measurement: The contract unit price for concrete form liner work shall include submittals, preparation of shop drawings, mock-ups, and all work necessary for fabrication and placement of form liner for concrete structures including all materials, labor, and equipment required to complete this work.

Basis of Payment: This work shall be paid for at the contract unit price per square foot for FORM LINER TEXTURED SURFACE and no additional compensation will be allowed.

DRAINAGE STRUCTURE TO BE REMOVED

This work shall consist of the removal of existing drainage and sanitary structures and shall be performed in accordance with all applicable articles of Section 605 of the Standard Specifications except that manholes, catch basins and inlets shall all be considered as drainage structures. This work shall include all trench backfill required to fill excavated trenches.

Basis of Payment: Drainage structure removal will be paid for at the contract unit price per each for REMOVING CATCH BASINS and REMOVING INLETS, regardless of type, which price shall include all excavation and backfilling, removing and disposing of structure and all sheeting or shoring required.

WATER MAIN TO BE ABANDONED

Water mains shall be abandoned by saw cutting the main at the point to be abandoned and installing a mechanical joint plug or cap. Bricking and mortaring the main to be abandoned will not be allowed. The Contractor shall be responsible for dewatering the trench, which cost is considered included to the price of abandonment of water main.

Caps shall be ductile iron and equipped with rubber gaskets to prevent the infiltration of water and/or sediment. Installation of caps or plugs must be witnessed by the Village or its authorized representative prior to backfilling.

When necessary, the Contractor shall install line stops at the locations shown on the Plans and at such additional locations as requested by the Engineer. All line stops must be approved and witnessed by the Village or its authorized representative.

Method of Measurement: WATER MAIN TO BE ABANDONED will be measured for payment on a per foot basis.

Basis of Payment: This work will be paid for at the contract unit price per foot for WATER MAIN TO BE ABANDONED of the size specified, which price shall include all line stops, cutting, and capping, labor, material and equipment necessary to perform the work.

WATER MAIN REMOVAL

This work shall consist of the removal of existing water main at the locations indicated in the plans or as directed by the Engineer.

The Contractor shall sawcut the existing water main. A mechanical joint end cap shall be installed on the end of the existing water main if the existing water main is to be abandoned in place

If the water main is not to be abandoned, the sawcut shall be filed smooth and prepared for connection to proposed water main.

No pipe removed shall be considered as salvage. All material shall be disposed of, in accordance with Article 202.03 of the Standard Specifications.

Excavation of trenches shall be performed according to the applicable requirements of Article 550.04. Backfill of trenches shall be performed according to the applicable requirements of Article 550.07.

Method of Measurement: This work will be measured for payment in feet, along the pipe to be removed. The length measured will include stops, fittings and valves.

Basis of Payment: This work will be paid for at the contract unit price per foot for WATER MAIN REMOVAL, of the diameter specified and shall include all labor, material, and equipment.

ADJUSTING WATER SERVICE LINES

Description: The work shall be performed in accordance with Division IV of the Standard Specifications for Water and Sewer Main Construction in Illinois, Section 500 of the Village of Hinsdale Required Improvements, Engineering Design Standards, and Standard Details, and the details shown in the plans.

This work shall consist of repairing/replacing all existing water service lines that are encountered during the installation of all required sewer pipes. Each existing water service that is required to be split, in order for the required trench box to be pulled past its location, must be reconnected in order for service to continue.

Prior to cutting the water service, a line freeze must be used in order to prevent excess amounts of water from entering the sewer trench. Each line freeze shall remain in place until the water service line has been reconnected.

All residents and businesses shall be notified by the Contractor 48 hours prior to the interruption of the water service. All services must be restored so that no service is interrupted for more than four (4) hours. The Contractor shall take all necessary precautions to ensure that no dirt/debris enters the split service line. The Contractor shall arrange for a representative from the Village to be present during the reinstatement of the water service line in order to flush the water line prior to the water meter in order to ensure that the water meter is not damaged or clogged.

A Village of Hinsdale Representative will be present during and to inspect all proposed water service line connections to existing water service lines and water mains.

Reconnection of the water service lines is to be done using two (2) brass couplings with flared end fittings and the necessary length of one and one half (1.5) inch K-type copper tubing. If the existing water service is made of lead tubing, the brass couplings shall have compression fittings that shall compensate for the difference in outside diameter between the types of tubing. Any water service line other than copper will be replaced with copper pipe conforming to the requirements of Division IV of the Standard Specifications for Water and Sewer Main Construction in Illinois.

Basis of Payment: This work will be paid for at the contract unit price per EACH for ADJUSTING WATER SERVICE LINES, which price shall include all of the work as specified above. Trench backfill for this item will not be paid for separately, but will be included in the unit price.

PRESSURE CONNECTION TO EXISTING WATERMAIN

This work shall be done in accordance with Division IV of the Standard Specifications for Water and Sewer Main Construction in Illinois, Section 500 of the Village of Hinsdale Required Improvements, Engineering Design Standards, Standard Details and the detail shown on the plans.

This work shall consist of the excavation, installation of a tapping sleeve and related appurtenances and the tapping of the existing water main. The installation of a valve and vault in conjunction with the pressure connection is not included and shall be paid for separately.

Basis of Payment: This work will be paid for at the contract unit price per EACH for PRESSURE CONNECTION, of the size specified.

CONNECTION TO EXISTING WATER MAIN 4"

This work shall be done in accordance with Division IV of the Standard Specifications for Water and Sewer Main Construction in Illinois, Section 500 of the Village of Hinsdale Required Improvements, Engineering Design Standards, Standard Details and the detail shown on the plans.

This item shall cover all work necessary to connect the new water main to the old water main when a pressure connection is not required in the locations indicated on the plans or as directed by the resident engineer. The installation of a valve and vault in conjunction with the pressure connection is not included

and shall be paid for separately.

The Contractor shall expose the water main to be connected to and shall confirm the size and type of piping present. The Contractor shall obtain the necessary materials required to make a proper connection. The Contractor shall not proceed until he has all the required materials on site. Once the new water mains have been tested and approved for service, then the Contractor shall, under the direction of the Engineer, place the new water main in service.

Basis of Payment: This work will be paid for at the contract unit price per EACH for DIRECT CONNECTION, of the size specified, which prices shall include all labor, fittings and other materials necessary, regardless of pipe sizes, to complete the connection. The contractor shall be paid for each connection, even if it is a temporary connection required for staging purposes.

WATER MAIN

This work shall be performed in accordance with Section 561 of the Standard Specifications, Division IV of the Standard Specifications for Water and Sewer Main Construction in Illinois and Section 500 of the Village of Hinsdale Required Improvements, Engineering Design Standards, and Standard Details.

The work shall consist of the installation of PVC water main and all associated work including; excavation; bracing; bedding and cover; pipe joint restraint; reducers; tees; wyes; trench dewatering; trench backfilling with excavated materials; testing; disinfecting; finish grading; removal and disposal of waste excavated materials; protection; replacement or repair of existing utilities.

Backfilling with select granular trench backfill materials, where located under or within five (5) feet of a pavement, driveway or sidewalk or other paved surface, shall be paid for separately at the contract prices for TRENCH BACKFILL

Basis of Payment: This work will be paid for at the contract unit price per FOOT for WATER MAIN of the size specified, which prices shall include all excavation and backfill, bedding and cover, joint materials and restraints, fittings (including, but not limited to reducers, tees & bends) and appurtenances, hydrostatic tests, disinfection of the water main, water main, and shall be measured along the installed centerline of pipe.

WATER MAIN LOWERING

This work shall be performed in accordance with Division IV of the Standard Specifications for Water and Sewer Main Construction in Illinois and Section 500 of the Village of Hinsdale Required Improvements, Engineering Design Standards, and Standard Details and the detail shown on the plans.

This work shall consist of lowering existing and proposed water mains to meet the Illinois Environmental Protection Agency standards.

This work shall be included in the contract unit price per FOOT for WATER MAIN of the size specified, which price shall include all excavation and backfill, bedding and cover, bracing, pipe joint material and restraint, pipe and fittings, trench dewatering, disinfection, removal and disposal of waste excavated materials, protection, replacement or repair of existing utilities, removal of existing fittings and installation of new fittings, labor, materials, transportation, handling, and incidentals necessary to lower water mains.

FILLING, DISINFECTION AND FLUSHING WATER MAINS

This work shall be performed in accordance with Section 500 of the Village of Hinsdale Required Improvements, Engineering Design Standards, and Standard Details and shall be performed by an independent firm exhibiting experience in the methods and techniques of this operation, and shall be done in the presence of the Director of Public Works or his designated representative. The Director of Public Works shall be notified of the time of disinfection a minimum of twenty-four (24) hours prior to the disinfection. The disinfection shall be performed on all pipes that are newly constructed or tapped on to.

All water main shall be Flushed per applicable IEPA specifications and witnessed by Village Representative prior to final approval and turn-on of system.

The cost of filling, disinfecting and flushing water mains shall be included in the contract unit price for WATER MAIN, of the size specified.

PRESSURE TEST

This work shall be performed in accordance with Section 500 of the Village of Hinsdale Required Improvements, Engineering Design Standards, and Standard Details. The Director of Public Works shall be notified of the time of the test a minimum of twenty-four (24) hours prior to the test. All pressure tests shall be done in the presence of the Director of Public Works or his designated representative.

The cost of pressure testing the water mains shall be included in the contract unit price for WATER MAIN, of the size specified.

STORM SEWER ADJACENT TO OR CROSSING WATER MAIN

Effective: February 1, 1996

Revised: January 1, 2007

This work consists of constructing storm sewer adjacent to or crossing a water main, at the locations shown on the plans. The material and installation requirements shall be according to the latest edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", and the applicable portions of Section 550 of the Standard Specifications; which may include concrete collars and encasing pipe with seals if required.

Pipe materials shall meet the requirements of Sections 40 and 41-2.01 of the "Standard Specifications for Water and Sewer Main Construction in Illinois", except PVC pipe will not be allowed. Ductile-iron pipe shall meet the minimum requirements for Thickness Class 50.

Encasing of standard type storm sewer, according to the details for "Water and Sewer Separation Requirements (Vertical Separation)" in the "STANDARD DRAWINGS" Division of the "Standard Specifications for Water and Sewer Main Construction in Illinois", may be used for storm sewers crossing water mains.

Basis of Payment: This work will be paid according to Article 550.10 of the Standard Specifications, except the pay item shall be STORM SEWER, WATER MAIN QUALITY PIPE, of the type and diameter specified.

STEEL CASINGS

Description: This work shall include providing a casing pipe for the water main at locations specified in the plans. The casing pipe shall conform to the Standard Specifications for Water & Sewer Construction. This work shall be in compliance with all applicable details included in the approved plans.

Method of Measurement: STEEL CASINGS, of the size specified, shall be measured for payment per FOOT of casing.

Basis of Payment: This work shall be paid for at the contract unit price per FOOT for STEEL CASINGS, of the size specified, which price shall include the casing pipe, spacers, brick and mortar, labor and equipment necessary to complete this work.

STEEL CASING PIPE, AUGERED AND JACKED, 16"

Description: This work shall consist of placing a steel pipe casing beneath the existing Hospital steam tunnel as shown on the plans utilizing an auger and jacked in place method. Work shall be performed according to the applicable portions of Section 552 of the Standard Specifications.

The location of the jack pit shall be approved by the Engineer prior excavation for the pit.

The steel casing pipe shall conform to the Standard Specifications for Water & Sewer Construction. Upon completion of the pipe jacking all spoils shall be removed from the casing pipe and the casing pipe thoroughly cleaned. Upon insertion of the storm sewer of the size specified on the plans any annular space shall be filled with grout according to Article 552.04 of the Standard Specifications.

Method of Measurement: STEEL CASING PIPE, AUGERED AND JACKED, 16" shall be measured in place in feet. Any waste associated with pipe cutting will not be measured for payment.

Basis of Payment: STEEL CASING PIPE, AUGERED AND JACKED, 16" shall be paid for at the contract unit price per foot of pipe installed.

INLETS, TYPE A, TYPE 3V FRAME AND GRATE

Description: This work shall consist of fabricating, furnishing, transporting, and placing inlets with a type 3V frame and grate according to Section 602 and Section 604 of the Standard Specifications.

Method of Measurement: INLETS, TYPE A, TYPE 3V FRAME AND GRATE shall be measured in place per each inlet installed.

Basis of Payment: INLETS, TYPE A, TYPE 3V FRAME AND GRATE shall be paid for at the contract unit price per each inlet installed.

VALVE VAULTS TO BE REMOVED

This work shall consist of removing valve vaults at the locations indicated in the plans. In addition to this special provision, this work shall be in accordance with Articles 605.03 and 605.05 of the Standard Specifications.

Removal of vaults shall be coordinated with the Village of Hinsdale and disposal of the vault shall be made at the public works facility.

Basis of Payment

This work will be paid for at the contract unit price per each for VALVE VAULTS TO BE REMOVED.

VALVE BOXES TO BE REMOVED

This work shall consist of removing valve boxes at the locations indicated in the plans. In addition to this special provision, this work shall be in accordance with Articles 605.03 and 605.05 of the Standard Specifications.

Removal of boxes shall be coordinated with the Village of Hinsdale and disposal of the box shall be made at the public works facility.

Basis of Payment

This work will be paid for at the contract unit price per each for VALVE BOXES TO BE REMOVED.

WATER VALVES

This work shall consist of furnishing and installing water valves at the locations indicated in the plans or as directed by the Engineer. In addition to this special provision, this work shall be in accordance with the Village of Hinsdale Required Improvements, Engineering Design Standards, and Standard Details and the details included in the plans.

All valves shall be iron body, resilient seated, bronze mounted, nonrising stem gate valves conforming to AWWA C-500. Valves shall be Mueller, Clow, or US Pipe with stainless trim. Other valves may be allowed upon review and approval of the Engineer.

At least 30 calendar days prior to installation of water mains covered in these specifications, the Contractor shall submit to the Engineer shop drawings of all items to be installed. The manufacturer's catalog description of all fittings and other related items shall also be submitted for review and approval.

Basis of Payment: This work will be paid for at the contract unit price per each for WATER VALVES, of the size specified.

FIRE HYDRANTS TO BE REMOVED

This work shall be done in accordance with Section 564 of the Standard Specifications and Village standards except as modified herein and as shown on the details in the plans. This item includes the removal of existing auxiliary valve and valve boxes and fire hydrants (as directed by the Engineer).

All work, including operation of valves and water main shut-downs, shall be coordinated with the Village of Hinsdale. All materials required must be on site prior to water turn off so that the service interruption will be minimal.

The excavated areas shall be backfilled with fine aggregate and mechanically compacted. All required trench backfill shall be included in the pay item FIRE HYDRANT TO BE REMOVED.

Basis of Payment: This work will be paid for at the contract unit price per each for FIRE HYDRANT TO BE REMOVED which price shall be payment in full for all labor, equipment, and materials necessary to complete the work specified herein.

FIRE HYDRANTS

This work shall consist of constructing valve vaults at the locations indicated in the plans or as directed by the Engineer. In addition to this special provision, this work shall be in accordance with Section 564 of the Standard Specifications, the Village of Hinsdale Required Improvements, Engineering Design Standards, and Standard Details and the details included in the plans.

Fire hydrants shall be dry barrel type with breakaway type flange and auxiliary gate valves and shall conform to AWWA C-502.

Hydrants shall have two (2), two and one-half inch (2 ½") hose nozzles and one (1), four and one half (4 ½") National standard pumper nozzle. Hose threads shall be the standard NSHT.

Hydrants shall have a main valve opening of five and one-quarter inches (5 ¼") with a 6" auxiliary valve with mechanical joints. The auxiliary valve shall have a two-piece valve box and plastic valve box stabilizer.

Hydrants shall be painted red.

Hydrants shall be US Pipe Metropolitan / M-94 Type. Other hydrants may be allowed upon review and approval of the Engineer.

The maximum length for a fire hydrant lead is 50 feet.

New fire hydrant is to be located as close as possible to the location shown on the plans, but the hydrant's final location will depend on presence of utilities and will be field located with the approval of the Engineer and the Owner.

Basis of Payment: This work shall be paid for at the contract unit price per each for FIRE HYDRANT. The price shall include the fire hydrant, valve, valve box, 6" ductile iron hydrant lead, fittings, materials, labor, tools, equipment, and incidentals necessary to complete the work as specified.

DOMESTIC METER VAULT TO BE REMOVED

This work shall consist of removing meter vaults at the locations indicated in the plans. In addition to this special provision, this work shall be in accordance with Articles 605.03 and 605.05 of the Standard Specifications.

Removal of vaults and meters shall be coordinated with the Village of Hinsdale and disposal of the vault shall be made at the public works facility

Basis of Payment: This work will be paid for at the contract unit price per each for DOMESTIC METER VAULT TO BE REMOVED, of the size specified.

DOMESTIC METER VAULTS

This work shall consist of furnishing and installing water meter vaults at the locations indicated in the plans or as directed by the Engineer. In addition to this special provision, this work shall be in accordance with the Village of Hinsdale Required Improvements, Engineering Design Standards, and Standard Details and the details included in the plans.

All valves shall be iron body, resilient seated, bronze mounted, nonrising stem gate valves conforming to AWWA C-500. Valves shall be Mueller, Clow, or US Pipe with stainless trim. Other valves may be allowed upon review and approval of the Engineer.

At least 30 calendar days prior to installation of water mains covered in these specifications, the Contractor shall submit to the Engineer shop drawings of all items to be installed. The manufacturer's catalog description of all fittings and other related items shall also be submitted for review and approval.

Basis of Payment: This work will be paid for at the contract unit price per each for DOMESTIC METER VAULTS, of the size specified.

WATER SERVICES

All water services are to be constructed of one and one half (1 1/2) inch diameter Type K copper for residential properties and two (2) inch diameter Type K copper for commercial properties as illustrated on the plans and in a manner consistent with Section 502.08 of the Hinsdale Design Standards and all applicable sections of the Village of Hinsdale' Subdivision Ordinance.

The contractor shall be responsible for disconnecting the existing service line at the existing B-Box and curb stop. The service line between the main and curb stop shall then be plugged and the existing curb box, curb stop and excess service line material shall be removed and disposed of by the Contractor. New copper service line from the new main to the new B-box shall be paid for as WATER SERVICE LINE, of the size specified. Any trench backfill required for the installation of water services, water service line, water service reconnection and domestic water service boxes (curb stop) shall be considered incidental to the associated pay item with no additional compensation.

All residents shall be notified by the Contractor twenty-four (24) hours prior to the interruption of the water service. All services must be restored so that no service is interrupted for more than three (3) hours. Any interruption in service for longer than three (3) hours will result in a penalty of \$500.00 plus an additional

\$200.00/hour for every additional hour.

All materials used shall comply with those indicated on the approved plans. Restoration of any and all disturbed areas beyond that shown on the plans and associated with the re-connection of the services shall be considered included in this pay item. All copper service lines and fittings between the B-box and the point of reconnection shall be considered included in this pay item. Restoration shall be performed to the satisfaction of the Village's Contracts Inspector.

Basis of Payment: This work will be paid for at the contract unit price per EACH for DOMESTIC WATER SERVICE BOXES, and at the contract unit price per FOOT for WATER SERVICE LINE, of the size specified. The contract unit prices shall include all labor, material and equipment necessary to perform the work.

IRRIGATION SYSTEM

Description: This work includes removal, relocating and repair of the existing irrigation system based on the A/E record drawings, dated June 6, 2012 as indicated on the drawings, and as specified herein.

Contractor shall submit required shop drawings for approval by the Engineer and the Owner prior to commencement of any work on this item.

This work shall include all labor, material, equipment, tools, transportation, permits, and services to remove, relocate and repair the existing irrigation system per the drawings, in accordance with sections 561, 562, 563, and 565 of the Standard Specification for Road and Bridge Construction and the Standard Construction Details, except as herein modified.

Spacing of the sprinkler lines, heads or quick coupling valves to match the existing system layout and shall be exceeded only with the permission of the Engineer. Based on the A/E record drawings, the planting beds were to have pop-up irrigation heads and lawn areas were to receive rotary spray heads.

Contractor shall furnish and install equipment, control valves, associated piping and incidentals as common in the industry to retrofit the existing system and provide a complete and operating irrigation system.

Contractor is responsible for field adjustments and final spray head nozzles selections to eliminate run off spray onto the existing pavement.

This work shall include monitoring and adjusting the completed system to assure healthy plant development.

Electrical and Water Services: Based on the A/E record drawings, water connection and water service components are located in a mechanical room located in the hospital basement. The locations of Water Service Components are shown on the plans schematically. These service connections should be verified and documented in the field.

It is assumed electrical and water connections and service components have been installed properly and per code. Contractor is responsible for electrical and water connection repairs only based on adjustments to the existing irrigation system to provide a complete and operating irrigation system.

Codes and Standards: Codes: All plumbing work shall be installed within applicable provisions of the Village of Hinsdale building and plumbing codes.

Standards: Items listed to conform to ASTM, ANSI, or manufactures recommendations, for installation.

Any permits for the installation or construction of the work included under this contract which are required by any of the legally constituted authorities having jurisdiction, shall be obtained and paid for by the Contractor, each at the proper time. He shall also arrange for and pay all costs concerning any

inspections and examinations required by these authorities.

In all cases where inspection of the sprinkler system work is required and/or where portions of the work are specified to be performed under the direction and/inspection of the Engineer, the Contractor shall notify the Engineer at least 48 hours in advance of the time and such inspection and/or direction is required.

Any necessary re-excavation or alterations to the system needed because of failure of the Contractor to have the required inspections, in the opinion of the Engineer, shall be performed at the "Contractor's" own expense.

Submittals: Any required shop drawings for design changes shall be prepared by the Contractor. Submit samples unless directed otherwise by the Engineer.

Material Sample List: Include valves, sprinklers, wire, wire connectors, pipe, fittings, valve boxes, swing joints and quick couplers to be used on the project prior to purchasing materials. Quantities of material need not be included.

Manufacturer's Data: Submit manufacturer's catalog cuts, specifications, and operating instructions for the equipment mentioned above and equipment shown on the materials list.

Project Record (As-Built) Drawings: The Contractor is to provide the Owner a scaled drawing of the completed field "As-Built" of the system.

All components of the system are to be drawn and referenced to a fixed location on the site.

Components of the system but not limited to, sprinkler heads, electric valves, isolation valves, all PVC piping, quick couplers, PVC pipe sizing, grounding, power wire routes and size and 24v wire routes or decoder routes from the controller to the electric valves including common runs.

All PVC piping shall be referenced in the trench for lengths of run, change in direction and distance and locations of all components referenced in feet from a known point.

Two final hard copies of the overall drawings with dimension and notes are to be provided to the Owner and one copy of the As-Built in AutoCad 2013 digital format at the same scale drawing as provided to the Contractor. The Contractor is to provide individual controller sequencing sheets in a 24" x 36" size and 8 ½" x 11" format. Both submittals shall be laminated and placed as directed by the Engineer.

Rules and Regulations:

Work and materials shall be in accordance with the latest edition of the National Electric Code, the Uniform Plumbing Code, and applicable laws and regulations of the governing authorities.

Quality Assurance:

The Contractor shall maintain continuously a competent superintendent, satisfactory to the Engineer, with authority to act for him in all matters pertaining to the work. The Contractor shall coordinate his work with the other trades.

The Contractor shall confine his operations to the area to be improved and to the areas allotted him by the Engineer for material and equipment storage.

The Contractor shall have a minimum of 5 years of experience installing irrigation systems of comparable size and complexity. The contractor shall also have suitable financial status to meet obligations for this project.

Delivery, Storage and Handling:

Deliver irrigation system components in manufacturer's original undamaged and unopened containers with labels intact and legible.

Deliver plastic piping in bundles, packaged to provide adequate protection of pipe ends either threaded or plain. Store and handle materials to prevent damage and deterioration.

Provide secure, locked storage for valves, sprinkler heads and similar components that cannot be immediately replaced, to prevent installation delays.

Materials:

Manufacturers and Minimum Requirements:

Use materials that are new and without flaws or defects of any type, and which are the best of their class and kind. All material overages at the completion of the installation are the property of the Contractor and are to be removed from the site.

Each major component of equipment shall have manufacturer's name, address, catalog and serial number permanently attached in a conspicuous place.

Match the existing system brand or manufacturer where possible. The same brand or manufacturer shall be used for each specific application of valves, fittings, controls, and other equipment. Acceptable irrigation manufacturers include Hunter, RainBird or Toro.

All materials shall be new and of the quality specified.

All equipment shall be listed, approved or rated by a nationally recognized testing and rating bureau of recognized manufacturer's association responsible for setting industry standards. All electrical equipment and apparatus shall be U.L. listed.

It is the intent of this specification to establish a uniform equipment pallet for this and phases of the project. Substitutions will only be allowed by the Engineer.

PVC or Polyethylene Piping & Fittings:

Shall match the existing irrigation system.

Preferred PVC Mainline Piping and Open Trench Sleeving: Use rigid, unplasticized polyvinyl chloride (PVC) 1120, 1220 National Sanitation Foundation (NSF) approved pipe, extruded from material meeting the requirements of Cell Classification 12454-A or 12454-B, ASTM Standard D1784, with an integral belled end. Use Class 200, SDR-21, conforming to the dimensions and tolerances established by ASTM Standard D2241 for all main lines and sleeving within the median. Sleeving under concrete or roadways is to be galvanized steel. Pipe sleeving shall be equal to twice that of the pipe being sleeved. Minimum wire sleeve shall be 2".

Use solvent weld pipe for mainline pipe with a nominal diameter 2 1/2" inches and less or where a pipe connection occurs in a sleeve. Use Schedule 40, Type 1, PVC solvent weld fittings conforming to ASTM Standard D2466 and D1784. Use primer approved by the pipe manufacturer. Solvent cement to conform to ASTM Standard D2564.

Provide pipe homogeneous throughout and free from visible cracks, holes, foreign materials, blisters, wrinkles and dents.

Provide pipe continuously and permanently marked with manufacturer's name and trademark, size schedule and type of pipe working pressure at 73 degrees F. and (NSF) approval.

Pipe sizes to match existing irrigation system minimum sizes, and may be increased at the option of the Contractor at no cost to the Owner.

All pipes damaged or rejected because of defects shall be removed from the site at the time of said rejection.

Polyethylene Pipe-PE Lateral Lines:

All polyethylene (PE) pipe shall be virgin, high impact, polyethylene pipe, having minimum 100 PSI working pressure rating. All polyethylene pipe shall be continuously and permanently marked with manufacturer's name, material, size, and schedule of type.

Pipe shall conform to U.S. Department of Commerce Commercial Standard CS207-60, at latest revision. Material shall conform to all requirements of Commercial Standard (CS256-63), at latest revision.

Polyethylene insert pipe fittings shall be constructed of Schedule 80 and shall conform to ASTM D2466. Polyethylene pipe shall be secured to fitting by means of two(2) stainless steel hose clamps for fittings of 1.5" and 2". Fittings 1" and smaller shall use one(1) stainless steel crimp clamp or approved methods.

If conditions are appropriate and rock free for vibratory plowing, the contractor may plow lateral piping, but must get the Engineer's approval prior to installation.

All road bores are to be Galvanized steel pipe.

Specialized Pipe and Fittings:

All above grade pipe shall be copper pipe: Use Type "M" rigid conforming to ASTM Standard B88. Use wrought copper or cast bronze fitting, soldered or threaded per the installation details. Use 95% tin and 5% antimony solder.

Galvanized steel pipe: Use Schedule 40 conforming to ASTM Standard A120. Use galvanized, threaded, standard weight malleable iron fittings.

S-80 PVC fittings may be used and may be threaded or solvent weld. S-80 TOE nipples with S-80 couplings for plastic to metal connections. S-80 nipples cut in half will not be allowed.

Low-Density Polyethylene Hose: Use pipe specifically intended for use as a flexible swing joint, such as Funny Pipe or Swing Joint. Color: Black.

Use spiral barb fittings supplied by the same manufacturer as the hose.

Assemblies calling for threaded pipe connections shall use PVC Schedule 80 nipples and PVC Schedule 40 threaded fittings.

Use only Teflon-type tape on plastic threads.

Grounding:

Not included in contract. Assumed installed with existing irrigation system.

Electric Control Valves:

Shall match the existing irrigation system.

It is preferred that all valves shall be of globe or globe/angle configuration with a female pipe thread inlet and outlet connections. Diaphragm assembly shall be sonically welded to form a solid-piece component. The diaphragm shall be of rubber construction to retain flexibility and provide maximum sealing throughout its area.

Preferred electric valves shall be 1" & 1.5" Hunter PGV Globe series electric valve series, RainBird PGA 1" & 1.5" or Toro 252 1" & 1.5". The valve shall have a manual flow control with a hand-operated, rising-type flow control stem with control wheel/handle and an internal manual bleed assembly. Size per plan.

All parts shall be serviceable without removing valve from line. Valve may be installed at any angle without affecting valve operation.

22" solenoid lead wires shall be attached to a 24 VAC solenoid with waterproof molded coil capable of being removed by turning coil. Valve shall be held normally closed by internal water pressure with manual bleed screw.

The legend and flow arrow shall be applied at all valve locations. Valve numbering shall be located so as to be conspicuous and legible. The controller and valve numbering can be engraved in black on a yellow plastic tag. The tag size shall be standard size of 2.25" x 2.66".

Heads, Spray, Swing Joints:

Shall match the existing irrigation system.

Preferred spray head sprinklers are 12" RainBird 1812 PRS-SAM Series OR Hunter PROS-12-CV OR Toro 570Z-12PCOM for spray heads in planting areas and 4" RainBird 1804 PRS-SAM Series OR Hunter PROS-04-PRS30-CV OR Toro 570Z-4P PRX COM for spray heads in turf areas. Sprinkler shall be mounted flush with final finish grade.

Retraction shall be achieved by a heavy-duty stainless steel retraction spring. Sprinkler shall have a riser seal and a wiper. Sprinkler housing shall be of high impact molded plastic. Sprinkler shall have a large strainer so as to prevent nozzle clogging. Sprinkler shall be constructed such that it is serviceable from top in that drive assembly, screen, and all internal components are accessible throughout top of sprinkler without disturbing case installation. The sprinkler shall have a built-in pressure regulation device to regulate nozzle pressure regardless of the inlet pressure. The sprinkler shall have a drain check valve for up to 10 feet of elevation change.

Type and location of nozzles shall be Rain Bird XPCN Nozzles, MPR or Toro MPR Plus. Nozzles vary.

Solvent Weld Fittings:

Solvent weld PVC fittings shall be Schedule 40, ASTM D-2466 and ASTM D-1784. PVC Schedule-40 fittings shall be produced from PVC Type 1, Cell Classification 1245B. All solvents and cements shall be that recommended by the fittings manufacturer.

S-80 PVC fittings may be used and may be threaded or solvent weld. S-80 TOE Nipples with S-80 couplings for plastic to metal connections. (S-80 nipples cut in half will not be allowed)

Gate Valves:

Shall match the existing irrigation system.

Preferred: Isolation valves 3" and smaller shall be bronze gate valves. The gate valve shall be 200lb rated WOG non-shock, solid disc, non-rising stem with threaded ends. Valves shall have a bronze cross handle. Valve sizes shall be as shown on plan. Connections to the piping shall be made with a S-80 TOE nipple and a S-80 Coupling.

Control Wiring: Shall match the existing irrigation system.

Where new wire is needed, it is preferred to use American Wire Gage #14 AWG standard direct burial wire. All signal wire shall include a solid copper conductor and polyethylene (PE) or PVC insulation. It shall be rated for 600 volts. All common wires shall be #14 AWG direct bury.

Color: Wire color shall be continuous over its entire length.

Splices: Use 3M DBY, 3M DBR connectors with waterproof sealant. Wire connector to be of plastic construction.

Wire markers: pre-numbered or labeled with indelible non-fading ink, made of permanent, non-fading material.

All wiring to be installed following existing local and state codes.

Valve Boxes: Shall match the existing irrigation system.

Acceptable manufacturers include Armor, Carson or RainBird and shall be rectangular, 12" /w 6" extension or 6" and 10" round and have "T" lid tops.

If a new valve box is needed, it shall be of a size that provides adequate space for valve repairs. For decoder systems, one valve per 12" rectangular box, for 24v systems, a maximum of 2 electric valves per 12" rectangular valve box. A 10" round valve box may be used for isolation valves, quick couplers and wire drops only.

The valve box cover shall have the component markings engraved or heat stamped into the cover. Use the following symbols for corresponding components in the valve box.

GV – for Gate Valves
EV – for Electric Valves
WS – for Wire Splice
EW – for Extra Wire Drop
GR - for Grounding

The final valve numbering shall also be branded into the tops with electric valves.

The lids and boxes will be green.

Controller / Back Flow Enclosures / Meter Enclosures:
Not included in contract. Assumed installed with existing irrigation system.

Other Components:

Tools and Extra Equipment:

The Contractor is to provide to the Owner, two (2) sets of tools to repair and work on all equipment specified in this irrigation section.

The Contractor is to provide the Owner with two (2) sprinkler heads of each type used, (1) electric valve of each size used.

The Contractor shall provide to the Owner, one (1) 4' wrench for the gate valve.

Other Materials:

Provide imported fill material as required to complete this work at the Contractor's cost. Provide other materials or equipment shown on the drawings or installation details, which are part of the irrigation system, although such items may not have been referenced in these specifications.

Construction:

Inspection and Reviews:

Site Inspections: The bidder acknowledges that he has examined the site, plans and specifications, and the submission of a proposal shall be considered evidence that examination has been made.

Verify construction site conditions and note irregularities affecting work of this section. It shall be the contracting installer's responsibility to report to the Owner's authorized representative any deviations between drawings, specifications and the site. Failure to do so before the installing of equipment and resulting in replacing and/or relocation of equipment shall be done at the Contractor's expense.

Examine final grades and installation conditions. Do not start irrigation system work until unsatisfactory conditions are corrected.

Beginning work of this section implies acceptance of existing conditions.

Utility Locations: The exact location of all existing utilities and structures and underground utilities are not indicated on the drawings; their locations shall be determined by the Contractor, and he shall conduct his work so as to prevent interruption of service or damage to them.

Arrange for and coordinate with local authorities the location of all underground utilities. Repair any underground utilities damaged during construction. Make repairs at no additional cost above the contract price.

The Contractor shall protect existing structures and utility services and be responsible for their replacement if damaged by him.

Excavation, Trenching and Backfilling:

Excavating shall be considered unclassified and shall include all materials encountered, except materials that cannot be excavated by normal mechanical means.

Excavate to permit the pipes to be laid at the intended elevations and to permit work space for installing connections and fittings.

Minimum cover (distance from top of pipe or control wire to finish grade):

12-inch over mainline pipe.

6-inch over control wire, follow local and state requirements if they dictate a deeper bury depth.

12-inch over lateral pipe to sprinklers with PE piping.

PVC mainlines or PVC, PE lateral pipes 2 1/2" and smaller may be pulled into the soil using a vibratory plow device specifically manufactured for pipe pulling, if in the opinion of the Engineer that conditions are suitable. Minimum burial depths equals minimum cover listed above provided soil moisture content and other conditions are suitable to allow for full depth of the right to determine suitability or conditions.

Backfill only after lines have been reviewed and tested.

Excavated material is generally satisfactory for backfill. Backfill shall be free from rubbish, vegetable matter, and stones larger than 2 inches in maximum dimension. Remove material not suitable for backfill. Backfill placed next to pipe shall be free of sharp objects, which may damage the pipe.

Backfill unsleeved pipe by depositing the backfill material equally on both sides of the pipe in 6-inch layers and compacting each layer to 95% Standard Proctor Density, ASTM D698-78. Use of water for compaction, "puddling," will not be permitted.

Enclose pipe and wiring beneath roadways, walks, curbs, etc., in sleeves. Minimum compaction of backfill for sleeves shall be 95% Standard Proctor Density. ASTM D698-78. Use of water for compaction around sleeve, "puddling," will not be permitted.

Dress backfilled areas to original grade. Incorporate excess backfill into existing site grades.

Where utilities conflict with irrigation trenching and pipe work, contact the Engineer for trench depth adjustments.

Provide approved fine grained earth fill or sand to point 4" above the top of pipe where soil conditions are rocky or otherwise objectionable.

Excavate trenches and install piping and backfill during the same working day. Do not leave open trenches or partially-filled trenches open overnight.

The Contractor will be responsible for all finish and fine grading of trenches, disturbed areas around sprinklers heads, electric valves and any other excavated or disturbed areas by the Contractor. Contractor will also be responsible for all trench settling throughout the project during the one-year warranty period. If settling occurs, the contractor will repair and bring back to originally set grade.

When additional backfill material is needed to replace the unsuitable materials, it will be the Contractor's responsibility and expense to supply such material. It will also be the Contractor's responsibility to dispose of the unsuitable material.

Assembling pipe and Fittings:

General: Keep pipe free from dirt and pipe scale. Cut pipe ends square and debur. Clean pipe ends. Keep ends of assembled pipe capped. Removed caps only when necessary to continue assembly.

All mainline and continuously pressurized pipe is to be installed using open trenches. Lateral pipe may be installed by "Plowing" if soil conditions permit, and soils do not contain gravel, rock, construction debris, or other potential damaging material.

Trenches may be curved to change direction or avoid obstructions within the limits of the curvature of the pipe.

Mainline and Fittings: Use only strap-type friction wrenches for threaded plastic pipe.

PVC Solvent Weld Pipe: Use a primer and solvent cement. Join pipe in a manner recommended by the manufacturer and in accordance with accepted industry practices.

Cure for 30 minutes before handling and 24 hours before allowing water in pipe. Snake pipe from side to side within the trench.

Fittings: The uses of cross type fittings are not permitted.

Lateral Pipe and Fittings: Use only strap-type friction wrenches for threaded plastic pipe.

PVC Pipe: Join pipe in the manner recommended by manufacturer and in accordance with accepted industry practice. Snake pipe from side to side within the trench.

Installation of Sprinkler and Irrigation Components:

Remote Control Valve (RCV) Assembly: Flush mainline before installation of RCV assembly.

Install where indicated on the drawing. Wire connectors and waterproof sealant shall be used to connect control wires to remote control valve wire. Install connectors and sealant per the manufacturer's recommendations.

Install only one RCV to a valve box. Locate valve box at least 12 inches from and align with nearby walls and edges of paved areas. Group RCV assemblies together where practical. Arrange grouped valve boxes in rectangular patterns. Allow at least 12 inches between valve boxes.

Adjust RCV to regulate the downstream operating pressure. Attach ID tag with controller station number to control wiring.

Sprinkler Assembly: Flush lateral pipe before installing sprinkler assembly. Install per the installation details at locations shown on the drawings.

Locate rotor sprinklers 6 inches from adjacent walls, fences or edges of paved areas. Locate spray sprinklers 3 inches from adjacent walls, fences or edges of paved areas. Install sprinklers perpendicular to the finish grade.

Supply appropriate nozzle or adjust arc of coverage of each sprinkler for best performance. Adjust the

radius of throw of each sprinkler for best performance.

Installation of Control System Components:

Irrigation Controller Unit: The location of the controller unit as depicted on the drawings is approximate. The Engineer will determine the exact site location during sprinkler layout review.

Attach wire markers to the ends of control wires inside the controller unit housing. Label wires with the identification numbers (see drawings) of the remote control valve to which the control wire is connected. Connect control wires to the corresponding controller terminal.

Control Wire: For 24 v systems, bundle control wires where two or more are in the same trench. Bundle with pipe wrapping tape at 15-foot intervals.

Control wiring may be chiseled into the soil using a vibratory plow device specifically manufactured for pipe pulling and wire installation. Appropriate chisel must be used so that wire is fed into a chute on the chisel, and wire is not subject to pulling tension. Minimum burial depth must equal minimum cover previously listed.

Provide a 24-inch excess length of wire in an 8-inch diameter loop at each 90-degree change of direction, at both ends of sleeves and at 100-foot intervals along continuous runs of wiring. Do not tie wiring loop.

Coil 24-inch length of wire within each remote control valve box.

For 24 v systems, install common ground wire and one control wire for each remote control valve. Multiple valves on a single control wire are not permitted.

If a control wire must be spliced, make splice with wire connectors and waterproof sealant, installed per the manufacturer's instructions. Locate splice in a valve box that contains an irrigation valve assembly, or in a separate 10-inch round valve box.

Use same procedure for connection to valves as for in-line splices.

Protect wire not installed with PVC mainline pipe with a continuous run of warning tape placed in the backfill six inches above the wiring.

Installation of Other Components:

Tools and Spare Parts: Prior to the review at completion of construction, supply to the owner operating keys, servicing tools, spare parts, test equipment and any other items indicated in general notes on the drawings.

Other Materials: Install other materials or equipment shown on the drawings or installation details which are part of the irrigation system, even though such items may not have been referenced in these specifications.

Balancing and Adjusting:

The Contractor will be responsible for the balancing and adjustments of the various components of the system so the overall operation of the system is the most efficient. Including, but not limited to, the synchronization of the controllers, valves and sprinkler adjustments. Coordinate controller setup with the Engineer.

Requirements for Substantial Completion:

Cleaning Equipment and Premises: Thoroughly clean all parts of the piping, valves and equipment. Remove all construction debris, excess materials and equipment.

Operating and Maintenance Manuals: Contractor shall furnish to Owner, two operating manuals for furnished equipment. Information sheets shall be bound in standard three-ring binders labeled to show Contractor's name, address, regular business phone number, emergency phone number and date.

Operating manuals shall be submitted prior to completion of work to allow time for review. Manual shall contain following information:

List (keyed with identification numbers used) each item of equipment which requires service, giving the name of the item, model number, manufacturer's name and address, and providing the name, address and phone number of the nearest representative of authorized service organization.

Cut sheets to be included for the following, but not limited to: electric valves, isolation valves, swing joints, valve boxes, controllers and sprinkler heads.

A copy of the shop drawing if changes in the design are required.

A complete operating and maintenance manual, parts list, wiring diagrams, lubrication requirements, and service instructions for each major item.

Complete control diagrams with description of all operation sequences and control devices.

Properly executed registrations and registered manufacturer's warranties.

After completion of work and when Owner has had sufficient time to examine operating manuals and become somewhat familiar with operation of equipment, a meeting will be arranged by the Contractor with the Owner for purpose of instructing Owner in proper maintenance of system and to answer questions he/she may have regarding its operation. Prior to this meeting, contractor shall have programmed a base program for all stations and run times.

It will be the responsibility of the Irrigation Contractor to provide a reliable communication system (i.e.: Two way radios or remote radio control activation system) for Substantial Completion, final acceptance and all periodic site visits. Once the controllers are operational, the contractor will be required to have a tablet devise on site to operate the system. This tablet is to be accessible to the designer for any walk troughs that are scheduled.

Acceptance:

Instruct the Engineer and Owner's designated personnel in the operation of the system, including adjustment of sprinklers, controller(s), valves, pump controls and moisture sensing controls, etc.... Once contractor has trained the Engineer and Owner, the system is fully operational and has completed the punch list, the project will be accepted. A written acceptance and date will be provided, which will begin the warranty and maintenance periods.

Hydrostatic Testing:

Notify the Engineer three days in advance of testing.

Pipelines jointed with rubber gaskets or threaded connections may be subjected to a pressure test at any time after partial completion of backfill. Pipelines jointed with solvent-welded PVC joints shall be allowed to cure at least 24 hours before testing.

Subsections of mainline pipe may be tested independently, subject to the review of the Engineer.

Furnish clean, clear water, pumps, labor, fittings, and equipment necessary to conduct test or retests.

Cap riser of mainline components for volumetric pressure tests. Backfill to prevent pipe from moving under pressure. Expose coupling and fitting. Purge all air from the pipeline before test.

Subject mainline pipe to the anticipated operating pressure for two hours. Maintain constant pressure. Test complete system under full line pressure. Pressure must be maintained with less than 2lbs loss in the system for 4 hours. If the system does not hold pressure, repair leaks and retest system until the system maintains pressure.

All necessary testing equipment shall be furnished by the Contractor. Cement or caulking to seal leaks is prohibited.

Activate each remote control valve in sequence from controller. Replace defective remote control valve, solenoid, wiring, or appurtenance to correct operational deficiencies.

Replace, adjust, or move water emission devices to correct operational or coverage deficiencies.

Repeat test(s) until each lateral passes all tests. Repeat tests, replace components, and correct deficiencies at no additional cost to the owner.

Guarantee / warranty and Replacement:

It shall be the Contractor's responsibility to ensure and guarantee satisfactory operation of the entire system and the workmanship and restoration of the area. The entire system shall be guaranteed to be complete and perfect in every detail on the date it's accepted.

Minor maintenance and adjustment shall be by the Owner.

Make repairs within seven (7) days of notification from the Engineer.

Contract documents govern replacements identically as with new work. Make replacements at no additional cost to the contract price.

Guarantee/warranty applies to originally installed materials, equipment, and replacements made during the guarantee/warranty period.

Demonstration, Winterization and Spring Start-up:

Coordinate the winterization and start-up with the Engineer and Owner's landscape maintenance personal.

Contractor shall winterize the system the first year as part of this contract, and will provide written instructions to the Owner for future service and maintenance.

Return to the site within ten (10) days of spring start-up and demonstrate to the Owner the proper procedures for the system start-up, operation and proper maintenance. Repair any damage caused in improper winterization at no additional cost to the owner.

After completion, testing and acceptance of the system, the Contractor will instruct the Engineer and Owner's personnel in the operation and maintenance of the system.

Measurement: The contract unit price for irrigation system shall be measured per square yard of complete, retrofitted, and tested irrigation system.

Basis of Payment: This work shall be paid for at the contract unit price per square yard for IRRIGATION SYSTEM including all labor, material, equipment, and services necessary for retrofitting the existing landscape irrigation systems in a serviceable, fully operational manner, including, but not limited to, excavation, backfilling, sprinkler heads, solenoid control valves, isolation valves, valve boxes, automatic controls, system testing, owner personnel training, piping, equipment identification, plumbing permits, inspection fees, valve tags, charts, supports, sleeves, fittings, valves, and accessories.

GENERAL ELECTRICAL REQUIREMENTS

Effective: January 1, 2012

Add the following to Article 801 of the Standard Specifications:

"Maintenance transfer and Preconstruction Inspection:

General. Before performing any excavation, removal, or installation work (electrical or otherwise) at the site, the Contractor shall request a maintenance transfer and preconstruction site inspection, to be held in the presence of the Engineer and a representative of the party or parties responsible for maintenance of any lighting and/or traffic control systems which may be affected by the work. The request for the maintenance transfer and preconstruction inspection shall be made no less than seven (7) calendar days prior to the desired inspection date. The maintenance transfer and preconstruction inspection shall:

Establish the procedures for formal transfer of maintenance responsibility required for the construction period.

Establish the approximate location and operating condition of lighting and/or traffic control systems which may be affected by the work

Marking of Existing Cable Systems. The party responsible for maintenance of any existing lighting and/or traffic control systems at the project site will, at the Contractor's request, mark and/or stake, once per location, all underground cable routes owned or maintained by the State. A project may involve multiple "locations" where separated electrical systems are involved (i.e. different controllers). The markings shall be taken to have a horizontal tolerance of at least 304.8 mm (one (1) foot) to either side.. The request for the cable locations and marking shall be made at the same time the request for the maintenance transfer and preconstruction inspection is made. The Contractor shall exercise extreme caution where existing buried cable runs are involved. The markings of existing systems are made strictly for assistance to the Contractor and this does not relieve the Contractor of responsibility for the repair or replacement of any cable run damaged in the course of his work, as specified elsewhere herein. Note that the contractor shall be entitled to only one request for location marking of existing systems and that multiple requests may only be honored at the contractor's expense. No locates will be made after maintenance is transferred, unless it is at the contractor's expense.

Condition of Existing Systems. The Contractor shall conduct an inventory of all existing electrical system equipment within the project limits, which may be affected by the work, making note of any parts which are found broken or missing, defective or malfunctioning. Megger and load readings shall be taken for all existing circuits which will remain in place or be modified. If a circuit is to be taken out in its entirety, then readings do not have to be taken. The inventory and test data shall be reviewed with and approved by the Engineer and a record of the inventory shall be submitted to the Engineer for the record. Without such a record, all systems transferred to the Contractor for maintenance during construction shall be returned at the end of construction in complete, fully operating condition."

Add the following to the 1st paragraph of Article 801.05(a) of the Standard Specifications:

"Items from multiple disciplines shall not be combined on a single submittal and transmittal. Items for lighting, signals, surveillance and CCTV must be in separate submittals since they may be reviewed by various personnel in various locations."

Revise the second sentence of the 5th paragraph of Article 801.05(a) of the Standard Specifications to read:

"The Engineer will stamp the submittals indicating their status as 'Approved', 'Approved

as Noted', 'Disapproved', or 'Information Only'.

Revise the 6th paragraph of Article 801.05(a) of the Standard Specifications to read:

"Resubmittals. All submitted items reviewed and marked 'Approved as Noted', or 'Disapproved' are to be resubmitted in their entirety with a disposition of previous comments to verify contract compliance at no additional cost to the state unless otherwise indicated within the submittal comments."

Revise Article 801.11(a) of the Standard Specifications to read:

"Lighting Operation and Maintenance Responsibility. The scope of work shall include the assumption of responsibility for the continuing operation and maintenance the of existing, proposed, temporary, sign and navigation lighting, or other lighting systems and all appurtenances affected by the work as specified elsewhere herein. Maintenance of lighting systems is specified elsewhere and will be paid for separately

Energy and Demand Charges. The payment of basic energy and demand charges by the electric utility for existing lighting which remains in service will continue as a responsibility of the Owner, unless otherwise indicated. Unless otherwise indicated or required by the Engineer duplicate lighting systems (such as temporary lighting and proposed new lighting) shall not be operated simultaneously at the Owner's expense and lighting systems shall not be kept in operation during long daytime periods at the Owner's expense. Upon written authorization from the Engineer to place a proposed new lighting system in service, whether the system has passed final acceptance or not, (such as to allow temporary lighting to be removed), the Owner will accept responsibility for energy and demand charges for such lighting, effective the date of authorization. All other energy and demand payments to the utility shall be the responsibility of the Contractor until final acceptance."

Add the following to Section 801 of the Standard Specifications:

"Lighting Cable Identification. Each wire installed shall be identified with its complete circuit number at each termination, splice, junction box or other location where the wire is accessible."

"Lighting Cable Fuse Installation. Standard fuse holders shall be used on non-frangible (non-breakaway) light pole installations and quick-disconnect fuse holders shall be used on frangible (breakaway) light pole installations. Wires shall be carefully stripped only as far as needed for connection to the device. Over-stripping shall be avoided. An oxide inhibiting lubricant shall be applied to the wire for minimum connection resistance before the terminals are crimped-on. Crimping shall be performed in accordance with the fuse holder manufacturer's recommendations. The exposed metal connecting portion of the assembly shall be taped with two half-lapped wraps of electrical tape and then covered by the specified insulating boot. The fuse holder shall be installed such that the fuse side is connected to the pole wire (load side) and the receptacle side of the holder is connected to the line side."

Revise the 2nd paragraph of Article 801.16 of the Standard Specifications to read:

"When the work is complete, and seven days before the request for a final inspection, the full-size set of contract drawings. Stamped "RECORD DRAWINGS", shall be submitted to the Engineer for review and approval and shall be stamped with the date and the signature of the Contractor's supervising Engineer or electrician. The record drawings shall be submitted in PDF format on

CDROM as well as hardcopy for review and approval. In addition to the record drawings, copies of the final catalog cuts which have been Approved or Approved as Noted shall be submitted in PDF format along with the record drawings. The PDF files shall clearly indicate either by filename or PDF table of contents the respective pay item number. Specific part or model numbers of items which have been selected shall be clearly visible.”

Add the following to Article 801.16 of the Standard Specifications:

“In addition to the specified record drawings, the Contactor shall record GPS coordinates of the following electrical components being installed, modified or being affected in other ways by this contract:

- Last light pole on each circuit
- Handholes
- Conduit roadway crossings
- Controllers
- Control Buildings
- Structures with electrical connections, i.e. DMS, lighted signs.
- Electric Service locations
- CCTV Camera installations
- Fiber Optic Splice Locations

Datum to be used shall be North American 1983.

Data shall be provided electronically and in print form. The electronic format shall be compatible with MS Excel. Latitude and Longitude shall be in decimal degrees with a minimum of 6 decimal places. Each coordinate shall have the following information:

1. Description of item
2. Designation or approximate station if the item is undesignated
3. Latitude
4. Longitude

Examples:

Equipment Description	Equipment Designation	Latitude	Longitude
CCTV Camera pole	ST42	41.5804 93	-87.793378
FO mainline splice handhole	HHL-ST31	41.5585 32	-87.792571
Handhole	HH at STA 234+35	41.7655 32	-87.543571
Electric Service	Elec Srv	41.6022 48	-87.794053
Conduit crossing	SB IL83 to EB I290 ramp SIDE A	41.5845 93	-87.793378
Conduit crossing	SB IL83 to EB I290 ramp SIDE B	41.5846 00	-87.793432
Light Pole	DA03	41.5585 32	-87.792571
Lighting Controller	X	41.6518 48	-87.762053
Sign Structure	FGD	41.5804 93	-87.793378
Video Collection Point	VCP-IK	41.5585	-87.789771

		32	
Fiber splice connection	Toll Plaza34	41.6069	
		28	-87.794053

Prior to the collection of data, the contractor shall provide a sample data collection of at least six data points of known locations to be reviewed and verified by the Engineer to be accurate within 100 feet. Upon verification, data collection can begin. Data collection can be made as construction progresses, or can be collected after all items are installed. If the data is unacceptable the contractor shall make corrections to the data collection equipment and or process and submit the data for review and approval as specified.

Accuracy. Data collected is to be mapping grade. A handheld mapping grade GPS device shall be used for the data collection. The receiver shall support differential correction and data shall have a minimum 5 meter accuracy after post processing.

GPS receivers integrated into cellular communication devices, recreational and automotive GPS devices are not acceptable.

The GPS shall be the product of an established major GPS manufacturer having been in the business for a minimum of 6 years."

ELECTRIC SERVICE INSTALLATION

Effective: January 1, 2012

Description. This item shall consist of all material and labor required to extend, connect or modify the electric services, as indicated or specified, which is over and above the work performed by the utility. Unless otherwise indicated, the cost for the utility work, if any, will be reimbursed to the Contractor separately under ELECTRIC UTILITY SERVICE CONNECTION. This item may apply to the work at more than one service location and each will be paid separately.

Materials. Materials shall be in accordance with the Standard Specifications.

CONSTRUCTION REQUIREMENTS

General. The Contractor shall ascertain the work being provided by the electric utility and shall provide all additional material and work not included by other contract pay items required to complete the electric service work in complete compliance with the requirements of the utility.

No additional compensation will be allowed for work required for the electric service, even though not explicitly shown on the Drawings or specified herein

Method Of Measurement. Electric Service Installation shall be counted, each.

Basis Of Payment. This work will be paid for at the contract unit price each for **ELECTRIC SERVICE INSTALLATION** which shall be payment in full for the work specified herein.

ELECTRIC UTILITY SERVICE CONNECTION (COMED)

Effective: January 1, 2012

Description. This item shall consist of payment for work performed by ComEd in providing or modifying electric service as indicated. **THIS MAY INVOLVE WORK AT MORE THAN ONE ELECTRIC SERVICE.** For summary of the Electrical Service Drop Locations see the schedule contained elsewhere herein.

CONSTRUCTION REQUIREMENTS

General. It shall be the Contractor's responsibility to contact ComEd. The Contractor shall coordinate his work fully with the ComEd both as to the work required and the timing of the installation. No additional compensation will be granted under this or any other item for extra work caused by failure to meet this requirement. Please contact ComEd, New Business Center Call Center, at 866 NEW ELECTRIC (1-866-639-3532) to begin the service connection process. The Call Center Representatives will create a work order for the service connection. The representative will ask the requestor for information specific to the request. The representative will assign the request based upon the location of project.

The Contractor should make particular note of the need for the earliest attention to arrangements with ComEd for service. In the event of delay by ComEd, no extension of time will be considered applicable for the delay unless the Contractor can produce written evidence of a request for electric service within 30 days of execution.

Method Of Payment. The Contractor will be reimbursed to the exact amount of money as billed by ComEd for its services. Work provided by the Contractor for electric service will be paid separately as described under ELECTRIC SERVICE INSTALLATION. No extra compensation shall be paid to the Contractor for any incidental materials and labor required to fulfill the requirements as shown on the plans and specified herein.

For bidding purposes, this item shall be estimated as \$5,000.00

Basis Of Payment. This work will be paid for at the contract lump sum price for ELECTRIC UTILITY SERVICE CONNECTION which shall be reimbursement in full for electric utility service charges.

WIRE AND CABLE

Effective: January 1, 2012

Add the following to the first paragraph of Article 1066.02(a):

"The cable shall be rated at a minimum of 90°C dry and 75°C wet and shall be suitable for installation in wet and dry locations, and shall be resistant to oils and chemicals."

Revise the Aerial Electric Cable Properties table of Article 1066.03(a)(3) to read:

Aerial Electric Cable Properties

Phase Conductor		Messenger wire			
Size AWG	Stranding	Average Insulation Thickness		Minimum Size AWG	Stranding
		mm	mils		
6	7	1.1	(45)	6	6/1
4	7	1.1	(45)	4	6/1
2	7	1.1	(45)	2	6/1
1/0	19	1.5	(60)	1/0	6/1
2/0	19	1.5	(60)	2/0	6/1
3/0	19	1.5	(60)	3/0	6/1
4/0	19	1.5	(60)	4/0	6/1

Add the following to Article 1066.03(b) of the Standard Specifications:

"Cable sized No. 2 AWG and smaller shall be U.L. listed Type RHH/RHW and may be Type

RHH/RHW/USE. Cable sized larger than No. 2 AWG shall be U.L. listed Type RHH/RHW/USE.”

Revise Article 1066.04 to read:

“Aerial Cable Assembly. The aerial cable shall be an assembly of insulated aluminum conductors according to Section 1066.02 and 1066.03. Unless otherwise indicated, the cable assembly shall be composed of three insulated conductors and a steel reinforced bare aluminum conductor (ACSR) to be used as the ground conductor. Unless otherwise indicated, the code word designation of this cable assembly is “Palomino”. The steel reinforced aluminum conductor shall conform to ASTM B-232. The cable shall be assembled according to ANSI/ICEA S-76-474.”

Revise the second paragraph of Article 1066.05 to read:

“The tape shall have reinforced metallic detection capabilities consisting of a woven reinforced polyethylene tape with a metallic core or backing.”

LUMINAIRE

Effective: January 1, 2012

Add the following to first paragraph of Article 1067(c) of the Standard Specifications:

“The reflector shall not be altered by paint or other opaque coatings which would cover or coat the reflecting surface. Control of the light distribution by any method other than the reflecting material and the aforementioned clear protective coating that will alter the reflective properties of the reflecting surface is unacceptable”

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

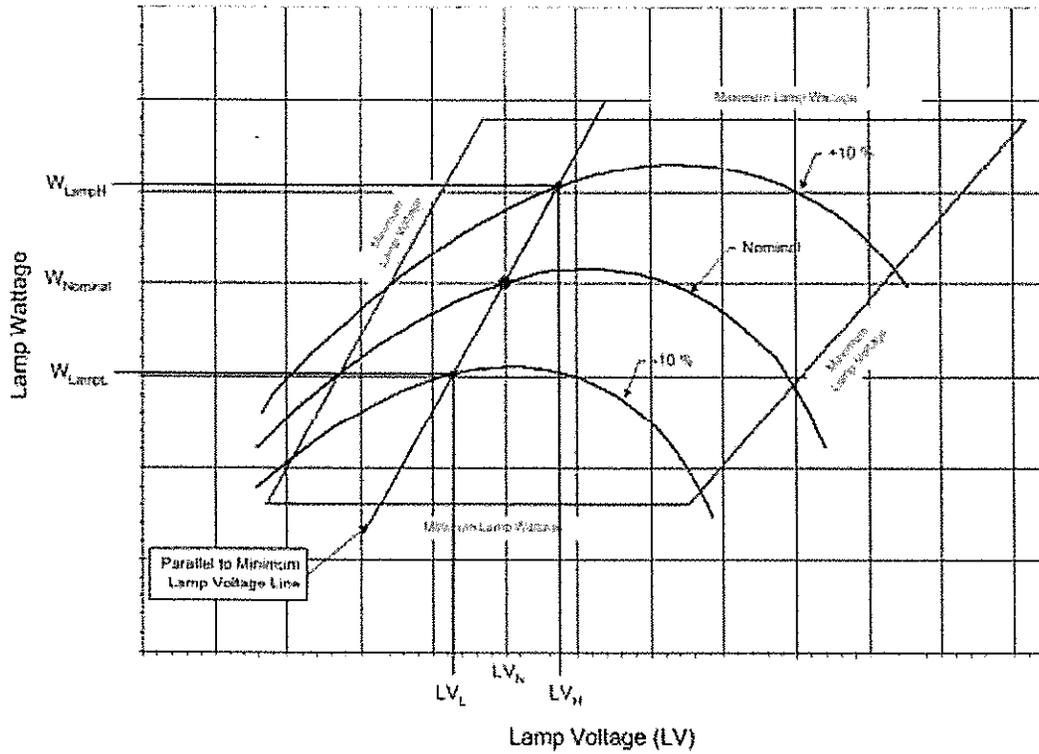
“The ballast shall be a High Pressure Sodium, high power factor, constant wattage auto-regulator, lead type (CWA) for operation on a nominal 240 volt system.”

Revise Article 1067(f)(1) of the Standard Specifications to read:

“The high pressure sodium, auto-regulator, lead type (CWA) ballast shall be designed to ANSI Standards and shall be designed and rated for operation on a nominal 240 volt system. The ballast shall provide positive lamp ignition at the input voltage of 216 volts. It shall operate the lamp over a range of input voltages from 216 to 264 volts without damage to the ballast. It shall provide lamp operation within lamp specifications for rated lamp life at input design voltage range. Operating characteristics shall produce output regulation not exceeding the following values:

Nominal Ballast Wattage	Maximum Ballast Regulation
750	25%
400	26%
310	26%
250	26%
150	24%
70	18%

For this measure, regulation shall be defined as the ratio of the lamp watt difference between the upper and lower operating curves to the nominal lamp watts; with the lamp watt difference taken within the ANSI trapezoid at the nominal lamp operating voltage point parallel to the minimum lamp volt line:



$$\text{Ballast Regulation} = \frac{W_{LampH} - W_{LampL}}{W_{LampN}} \times 100$$

where:

W_{LampH} = lamp watts at +10% line voltage when Lamp voltage = LV_H

W_{LampL} = lamp watts at - 10% line voltage when lamp voltage = LV_L

W_{LampN} = lamp watts at nominal lamp operating voltage = LV_N

Wattage	Nominal Lamp Voltage, LV_N	LV_L	LV_H
750	120v	115v	125v
400	100v	95v	105v
310	100v	95v	105v
250	100v	95v	105v
150	55v	50v	60v
70	52v	47v	57v

Ballast losses, based on cold bench tests, shall not exceed the following values:

Nominal	Maximum
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Ballast Wattage	Ballast Losses
750	15%
400	20%
310	21%
250	24%
150	26%
70	34%

Ballast losses shall be calculated based on input watts and lamp watts at nominal system voltage as indicated in the following equation:

$$\text{Ballast Losses} = \frac{W_{Line} - W_{Lamp}}{W_{Lamp}} \times 100$$

where:

W_{line} = line watts at nominal system voltage

W_{lamp} = lamp watts at nominal system voltage

Ballast output to lamp. At nominal system voltage and nominal lamp voltage, the ballast shall deliver lamp wattage with the variation specified in the following table.

Nominal Ballast Wattage	Output to lamp variation
750	± 7.5%
400	± 7.5%
310	± 7.5%
250	± 7.5%
150	± 7.5%
70	± 7.5%

Example: For a 400w luminaire, the ballast shall deliver 400 watts ±7.5% at a lamp voltage of 100v for the nominal system voltage of 240v which is the range of 370w to 430w.

Ballast output over lamp life. Over the life of the lamp the ballast shall produce average output wattage of the nominal lamp rating as specified in the following table. Lamp wattage readings shall be taken at 5-volt increments throughout the ballast trapezoid. Reading shall begin at the lamp voltage (L_v) specified in the table and continue at 5 volt increments until the right side of the trapezoid is reached. The lamp wattage values shall then be averaged and shall be within the specified value of the nominal ballast rating. Submittal documents shall include a tabulation of the lamp wattage vs. lamp voltage readings.

Nominal Ballast Wattage	LV Readings begin at	Maximum Wattage Variation
750	110v	± 7.5%
400	90v	± 7.5%
310	90v	± 7.5%
250	90v	± 7.5%
150	50v	± 7.5%
70	45v	± 7.5%

Example: For a 400w luminaire, the averaged lamp wattage reading shall not exceed the range of ±7.5% which is 370w to 430w"

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

"Independent Testing. Independent testing of luminaires shall be required whenever the pay item quantity of luminaires of a given pay item, as indicated on the plans, is 50 or more. For each luminaire type to be so tested, one luminaire plus one luminaire for each 50 luminaires shall be tested. Example: A plan pay item quantity of 75 luminaires for a specific pay item would dictate that 2 be tested; 135 luminaires would dictate that three be tested." If the luminaire performance table is missing from the contract documents, the luminaire(s) shall be tested and the test results shall be evaluated against the manufacturer's data as provided in the approved material submittal. The test luminaire(s) results shall be equal to or better than the published data. If the test results indicated performance not meeting the published data, the test luminaire will be designated as failed and corrective action as described herein shall be performed.

The Contractor shall be responsible for all costs associated with the specified testing, including but not limited to shipping, travel and lodging costs as well as the costs of the tests themselves, all as part of the bid unit price for this item. Travel, lodging and other associated costs for travel by the Engineer shall be direct-billed to or shall be pre-paid by the Contractor, requiring no direct reimbursement to the Engineer or the independent witness, as applicable"

The Contractor shall select one of the following options for the required testing with the Engineer's approval:

a. Engineer Factory Selection for Independent Lab: The Contractor may select this option if the luminaire manufacturing facility is within the state of Illinois. The Contractor shall propose an independent test laboratory for approval by the Engineer. The selected luminaires shall be marked by the Engineer and shipped to the independent laboratory for tests.

b. Engineer Witness of Independent Lab Test: The Contractor may select this option if the independent testing laboratory is within the state of Illinois. The Engineer shall select, from the project luminaires at the manufacturer's facility or at the Contractor's storage facility, luminaires for testing by the independent laboratory.

c. Independent Witness of Manufacturer Testing: The independent witness shall select from the project luminaires at the manufacturers facility or at the Contractor's storage facility, the luminaires for testing. The Contractor shall propose a qualified independent agent, familiar with the luminaire requirements and test procedures, for approval by the Engineer, to witness the required tests as performed by the luminaire manufacturer.

The independent witness shall as a minimum meet the following requirements:

- ▶ Have been involved with roadway lighting design for at least 15 years.
- ▶ Not have been the employee of a luminaire or ballast manufacturer within the last 5 years.
- ▶ Not associated in any way (plan preparation, construction or supply) with the particular project being tested.
- ▶ Be a member of IESNA in good standing.
- ▶ Provide a list of professional references.

This list is not an all inclusive list and the Engineer will make the final determination as to the acceptability of the proposed independent witness.

d. Engineer Factory Selection and Witness of Manufacturer Testing: The Contractor may select this option if the luminaire manufacturing facility is within the state of Illinois. At the Manufacturer's facility, the Engineer shall select the luminaires to be tested and shall be present during the testing process. The Contractor shall schedule travel by the Engineer to and from the Manufacturer's laboratory to witness the performance of the required tests.

Should any of the tested luminaires fail to satisfy the specifications and perform according to approved

submittal information, the luminaire shall be unacceptable and be replaced by alternate equipment meeting the specifications with the submittal and testing process repeated in their entirety; or corrections made to achieve required performance. In the case of corrections, the Contractor shall advise the Engineer of corrections made and shall request a repeat of the specified testing and, if the corrections are deemed reasonable by the Engineer, the testing process shall be repeated. The number of luminaires to be tested shall be the same quantity as originally tested; i.e. if three luminaires were tested originally, one, two or three failed, another three must be tested after corrective action is taken.

Revise Article 1067.06(a)(1) of the Standard Specifications to read:

"The lamps shall be of the clear type and shall have a color of 1900° to 2200° Kelvin."

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

IDOT DISTRICT 1 LUMINAIRE PERFORMANCE TABLE

Given Conditions		
Roadway Data	Pavement Width	28 (ft)
	Number of Lanes	2
	I.E.S. Surface Classification	
	Q-Zero Value	
Light Pole Data	Mounting Height	10'-0"/16'-0"
	Mast Arm Length	0 (ft)
	Pole Set-Back From Edge of Pavement	4 (ft)
Luminaire Data	Lamp Type	LED
	Lamp Lumens	n/a
	I.E.S. Vertical Distribution	Medium
	I.E.S. Control Of Distribution	Cutoff
	I.E.S. Lateral Distribution	Type I
	Total Light Loss Factor	0.75
Layout Data	Spacing	150 (ft)
	Configuration	Both sides – staggered
	Luminaire Overhang over edge of pavement	0 (ft)

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

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

Luminance	Average Luminance, L_{AVE}	0.6 Cd/m ²
	Uniformity Ratio, L_{AVE}/L_{MIN}	4.0 (Max)
	Uniformity Ratio, L_{MAX}/L_{MIN}	8.0 (Max)
	Veiling Luminance Ratio, L_V/L_{AVE}	0.4 (Max)

Description: This work shall consist of furnishing and installing complete luminaires, with drivers, LED arrays, splices, fuses, fuse holders, and wiring in accordance with the applicable portions of Sections 821, 1065, 1066 and 1067 of the Standard Specifications, manufacturer's specifications, and the details in the plans.

Luminaires shall operate on 240VAC. Luminaires shall be water-tight with 90 mph winds. Manufacturer/Contractor shall guarantee that no water will build up in the assemblies and provide a 5-year warrantee for field service and factory modifications as necessary to correct water problems if such should develop.

Roadway luminaires shall be LED with 4000K temperature. Nominal fixture input power shall be 170W. Distribution shall be cut-off type III. Roadway luminaire manufacturer shall be GE (model ERS4- _X_X) or American Electric Lighting (model ATB2).

Each piece of the luminaire shall be coated with custom color powder coat to match natural aluminum. The entire surface of the coating for each piece shall be tested according to ASTM standards.

Basis of Payment: Luminaires are included in the cost of LIGHTING UNIT COMPLETE - TY.1 or LIGHTING UNIT COMPLETE - TY.2.

LUMINAIRE, LED, RECESSED MOUNT, 11.2 WATT

Description. This work shall consist of providing all labor, materials, and equipment necessary to furnish and install recessed light fixture assemblies and electrical conduit and wiring in the bridge parapets at the locations indicated on the plans. All work shall be according to Section 821 of the Standard Specifications except as indicated herein, as shown on the plans, and as directed by the Engineer.

Materials.

Recessed Wall Luminaire Assembly:

Description: Recessed LED Luminaire for wall mounting
Manufacturer: BEGA-US
Catalog No: 2384 LED
Lamps: LED; 11.2 Watt
Mounting: Wall mounted (see comments) & Directed Light.
Finish: Silver (but color choice shall be verified with Owner prior to ordering assembly).
Comments: For installation in wall consisting of concrete with a masonry façade (no air gap).

All light fixtures to be UL listed.

Contractor to provide remote transformer for all low voltage fixture types unless provided with an integral transformer.

Other products will be considered by the Engineer if the Contractor demonstrates that they meet the listed requirements.

Construction Requirements. Contractor shall confirm exact fixture placement and lengths for linear type fixtures based on field measurements. Contractor to provide all necessary parts and accessories to ensure proper installation and a fully functioning lighting system based on the intent as shown on the plans.

Method of Measurement. The furnishing and installation of the light fixture assemblies shall be measured for payment in place per each including all mounting hardware and all other incidental items necessary to complete this work.

Basis of Payment. This work will be paid for at the contract unit price per each for LUMINAIRE, LED, RECESSED MOUNT, 11.2 WATT. The price shall be full compensation for furnishing all materials, for all preparation and for all labor, equipment, tools and incidentals necessary to complete this item.

REMOVAL OF EXISTING SIGNAL AND APPURTENANCES

Add the following to Article 895.05 of the Standard Specifications:

"The traffic signal equipment which is to be removed and is to become the property of the Contractor shall be disposed of outside the right-of-way at the Contractor's expense."

Method of Measurement: The contract unit price for REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT shall include, but is not limited to, the removal of existing signal heads, base mounted poles or posts, embedded poles or posts, concrete foundations, conduit, and cable, underground or aerial. Any signs mounted to the pole or post being removed shall be considered included in the contract unit price. REMOVE EXISTING HANDHOLE shall include the breakdown of the concrete surrounding the handhole and the complete removal of the frame and lid.

Basis of Payment: This work will be paid for at the contract unit price per each for REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT or REMOVE EXISTING HANDHOLE which price shall be payment in full for all labor, equipment, and materials necessary to complete the work specified herein.

CLEARING AND GRUBBING

Description: This work shall consist of clearing and grubbing existing woody plant material less than 6 inches in diameter. The work shall be completed in accordance with Section 201 of the Standard Specifications except as specified herein, as shown on the plans, and as directed by the Engineer.

Construction Requirements: This work shall be performed in accordance with the Standard Specifications.

Method of Measurement: The contract unit price for clearing and grubbing shall include removal and disposal of all woody plant material less than 6" in diameter per the standard specifications for the areas as indicated on the plans, including all materials, labor, or equipment required to complete this work.

Basis of Payment: This work shall be paid for at the contract unit price per lump sum for CLEARING AND GRUBBING, and no additional compensation will be allowed.

TOPSOIL FURNISH AND PLACE

Description: This work shall consist of furnishing, transporting, preparing, conditioning, and placing topsoil imported from offsite sources. The work shall be completed in accordance with Section 211 of the Standard Specifications except as specified herein, as shown on the plans, and as directed by the Owner's Representative.

Materials: Topsoil shall be provided in accordance with Article 1081.05 of the Standard Specifications with the exception that the minimum organic content shall be 4 percent.

Import topsoil from offsite sources. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep; do not obtain from agricultural land, bogs or marshes.

Amend topsoil for all shrub and perennial beds with Soil Conditioner to meet the requirements specified herein.

Construction Requirements: This work shall be performed in accordance with Articles 211.04 and 211.05 of the Standard Specifications except as modified herein.

Place topsoil and complete finish grading to meet grades as shown on the plans. Place topsoil to a depth of [6] inches in all seed and sod areas. Place topsoil to a depth of [18] inches in all planting bed areas. Amend topsoil in all planting bed areas with soil conditioner to meet the requirements specified herein.

Method of Measurement: The contract unit price for topsoil furnish and place 6", shall include importing

and placing topsoil to a depth of 6 inches in all seed and sod areas to meet finish grades, including all materials, labor, or equipment required to complete this work.

The contract unit price for topsoil furnish and place 18", shall include importing and placing topsoil to a depth of 18 inches in all planting bed areas to meet finish grades, including all materials, labor, or equipment required to complete this work.

The contract unit price for soil conditioner shall include amending topsoil for all planting beds including all materials, labor, or equipment required to complete this work.

Basis of Payment: This work shall be paid for at the contract unit price per square yard for TOPSOIL FURNISH AND PLACE 6" and TOPSOIL FURNISH AND PLACE 18", and no additional compensation will be allowed.

PLANTING PERENNIAL PLANTS

Description: This work shall consist of furnishing, transporting, and planting perennial plants in accordance with Section 254 of the Standard Specifications except as specified herein, as shown on the plans, and as directed by the Owner's Representative. The work shall include preparing the planting area, planting, watering, weeding, replacement of plants when required, and maintaining perennial areas including all materials, labor, and equipment required to complete this work.

Materials: Provide perennial plants and accessories in accordance with Article 1081.02 of the Standard Specifications except as modified herein.

Provide container grown perennial plants for ornamental planting areas as indicated on the plans of the quality, size, genus, species, and variety as shown on the plans in compliance with the "American Standard for Nursery Stock" latest edition.

Construction Requirements: This work shall be performed in accordance with Section 254 of the Standard Specifications except as modified herein.

Layout of Planting: The Contractor shall place the marking flags and outline each area for mass or solid planting. The Engineer will contact the Roadside Development Unit at (847) 705-4171 prior to planting to verify the layout. Allow a minimum of seven (7) working days prior to installation for approval.

Planting Procedures: Disposal of sod and debris (rock, stones, concrete, bottles, plastic bags, etc.) shall be removed from the perennial planting bed as specified in Article 202.03.

When planting perennials in bed areas shown on the plans or as directed by the Engineer, the following work shall be performed:

1. Topsoil Furnish and Place, 18" shall be placed to all planting beds to a minimum depth of 18-inches.
2. Soil Conditioner shall be applied within the planting beds to a depth of 6-inch and then tilled into the soil to a depth of 12-inches to amend the existing topsoil.
3. Pre-emergent Herbicide shall be used in the perennial beds prior to the placement of mulch. See specification for Weed Control, Pre-emergent Herbicide.

Mulching: Within 24 hours, the entire perennial plant bed shall be mulched to a depth of with 2 inches (75 mm) maximum of fine grade mulch. Mulch shall be six-month old, well-rotted, shredded, native hardwood bark mulch, not larger than 4 inches in length and ½ inches in width, free of wood chips and sawdust. A mulch sample shall be submitted to the Engineer for approval 72 hours prior to placing.

Period of Establishment: Period of Establishment for the various types of perennial plants shall be as follows.

Perennial plants must undergo a 30-day period of establishment. Additional watering shall be performed at least twice a week for four weeks following installation. Water shall be applied at the rate of 2 gallons per square foot. Should excess moisture prevail, the Engineer may delete any or all of the additional watering cycles. In severe weather, the Engineer may require additional watering.

A spray nozzle that does not damage small plants must be used when watering perennial plants. Water shall be applied at the base of the plant to keep as much water as possible off plant leaves. Watering of plants in beds shall be applied in such a manner that all plant holes are uniformly saturated without allowing water to flow beyond the periphery of the bed.

During the period of establishment, weeds and grass growth shall be removed from within the mulched perennial beds. This weeding shall be performed once a week during the 30 day period of establishment. The Contractor will not be relieved in any way from the responsibility for unsatisfactory plants due to the extent of weeding.

The weeding may be performed in any manner approved by the Engineer provided the weed and grass growth, including their roots and stems, are removed from the area specified. Mulch disturbed by the weeding operation shall be replaced to its original condition. All debris that results from this operation must be removed from the right-of-way and disposed of at the end of each day in accordance with Article 202.03.

At the end of the Period of Establishment, the Contractor will be permitted to replace any unacceptable plants and shall thoroughly weed all the beds.

Plant perennial plants equally spaced throughout ornamental planting areas as shown on the plans.

Method of Measurement: This work will be measured for payment in units of 100 perennial plants of the type and size specified. Measurement for payment of this work will not be performed until at the end of the 30 day establishment period for the replacement planting. Only plants that are in place and alive at the time of measurement will be measured for payment, except that if fewer than 25 percent of the plants are acceptable, a quantity equal to 25 percent of the number of units of plants originally planted will be considered measured for payment.

Perennial Plant Care will be measured for payment in square yards.

Topsoil Furnish and Place, 18" will be measured for payment as specified in TOPSOIL FURNISH AND PLACE, 18".

Soil Conditioner will be measured for payment as specified in SOIL CONDITIONER.

Pre-emergent Herbicide will be measured for payment as specified in WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE.

Basis of Payment: This work shall be paid for at the contract unit price per unit (one unit equals 100 plants) for PERENNIAL PLANTS, ORNAMENTAL TYPE, GALLON POT, and no additional compensation will be allowed. Refer to material list on planting plans for individual perennial plant species.

Pre-emergent Herbicide will be paid for as specified in WEED CONTROL, PRE-EMERGENT HERBICIDE.

TOPSOIL FURNISH AND PLACE, 18" will be paid for as specified in TOPSOIL FURNISH AND PLACE, 18".

Soil Conditioner will be paid for as specified in SOIL CONDITIONER.

Payment for Shredded Mulch shall be included in contract unit price of the perennial plant pay item.

PLANTING WOODY PLANTS

Add the following to Construction Requirements:

Delete the third sentence of Article 253.07 and substitute the following:

The Contractor shall be responsible for all plant layout. The layout must be performed by qualified personnel. The planting locations must be laid out as shown in the landscape plan. This will require the use of an engineer's scale to determine some dimensions. Tree locations within each planting area shall be marked with a different color stake/flag and labeled to denote the different tree species. Shrub beds limits must be painted. The Engineer will contact the Roadside Development Unit at (847) 705-4171 to approve the layout prior to installation. Allow a minimum of seven working (7) days prior to installation for approval.

Delete the first paragraph of Article 253.15 Plant Care and substitute the following:

The Contractor is responsible for plant care until receipt of the "Final Acceptance of Landscape Work" memorandum from the Bureau of Maintenance. The Contractor shall properly care for all plants including weeding, watering, adjusting of braces, repair of water saucers, or other work which is necessary to maintain the health, vigor, and satisfactory appearance of the plantings. This may require pruning, cultivating, tightening and repairing supports, repair of wrapping, and furnishing and applying sprays as necessary to keep the plants free of insects and disease. The Contractor shall provide plant care a minimum of every two weeks, or within 3 days following notification by the Engineer. All requirements for plant care shall be considered as included in the cost of the contract.

Delete the first paragraph of Article 253.15 Plant Care (a) and substitute the following:

During plant care watering shall be performed at least every two weeks beginning in May until receipt of the "Final Acceptance of Landscape Work" memorandum from the Bureau of Maintenance. The contractor shall apply a minimum of 35 gallons of water per tree, 25 gallons per large shrub, and 15 gallons per small shrub. The Engineer may direct the Contractor to adjust the watering rate and frequency depending upon weather conditions.

Revise Basis of Payment as follows:

Basis of Payment: This work will be paid for at the contract unit price per each for TREES and SHRUBS of the species, root type, and plant size specified. Payment will be made according to the following schedule.

(a) Initial Payment. Upon completion of planting, mulch covering, wrapping, and bracing, 90 percent of the pay item(s) will be paid.

(b) Final Payment. Upon inspection and acceptance of the plant material, or upon execution of a third party bond, the remaining ten percent of the pay item(s) will be paid." Revise the first paragraph of Article 1081.01 of the Standard Specifications to read:

The placement of Pre-emergent Herbicide shall be paid for at the contract unit price for WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE.

WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE

Description: This work shall consist of spreading a pre-emergent granular herbicide in planting areas as shown on the plans or as directed by the Engineer. This item will be used in mulched plant beds and mulch rings.

Materials: The pre-emergent granular herbicide (Snapshot 2.5 TG or equivalent) shall contain the chemicals Trifluralin 2% active ingredient and Isoxaben with 0.5% active ingredient. The herbicide label

shall be submitted to the Engineer for approval at least seventy-two (72) hours prior to application.

Method: The pre-emergent granular herbicide shall be used in accordance with the manufacturer's directions on the package. The granules are to be applied prior to mulching.

Apply the granular herbicide using a drop or rotary-type designed to apply granular herbicide or insecticides. Calibrate application equipment to use according to manufacturer's directions. Check frequently to be sure equipment is working properly and distributing granules uniformly. Do not use spreaders that apply material in narrow concentrated bands. Avoid skips or overlaps as poor weed control or crop injury may occur. More uniform application may be achieved by spreading half of the required amount of product over the area and then applying the remaining half in swaths at right angles to the first. Apply the granular herbicide at the rate of 100 lbs/acre (112 kg/ha) or 2.3 lbs/1000 sq. ft. (11.2 kg/1000 sq. meters).

Method of Measurement: Pre-emergent granular herbicide will be measured in place in Pounds (Kilograms) of Pre-emergent Granular Herbicide applied. Areas treated after mulch placement shall not be measured for payment.

Basis of Payment: This work will be paid for at the contract unit price per pound (kilogram) of WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE which price shall include all materials, equipment, and labor necessary to complete the work as specified.

SUPPLEMENTAL WATERING

Scope: This work will include watering turf, trees, shrubs, vines and perennial plants at the rates specified and as directed by the Engineer.

Schedule: Watering will only begin after the successful completion of all period of establishment requirements and will continue through the construction year growing season as directed by the Engineer.

Watering must be completed in a timely manner. When the Engineer directs the Contractor to do supplemental watering, the Contractor must begin the watering operation within 24 hours of notice. A minimum of 10 units of water per day must be applied until the work is complete. Damage to plant material that is a result of the Contractor's failure to water in a timely way must be repaired or replaced at the Contractor's expense.

Source of Water: The Contractor shall notify the Engineer of the source of water used and provide written certification that the water does not contain chemicals harmful to plant growth.

Rate of Application: The normal rates of application for watering are as follows. The Engineer will adjust these rates as needed depending upon weather conditions.

Perennial Plants: 2 gallons per square foot
Trees: 35 gallons per tree
Shrubs: 25 gallons per large shrub
15 gallons per small shrub

Method of Application: A spray nozzle that does not damage small plants must be used when watering perennial plants or turf. Water shall be applied at the base of the plant to keep as much water as possible off plant leaves. An open hose may be used to water trees, shrubs, and vines if mulch and soil are not displaced by watering. Water shall trickle slowly into soil and completely soak the root zone. The Contractor must supply metering equipment as needed to assure the specified application rate of water.

Method of Measurement: Supplemental watering will be measured in units of 1000 gallons (3,785 liters) of water applied as directed.

Basis of Payment: This work will be paid for at the contract unit price per unit of SUPPLEMENTAL

WATERING, measured as specified. Payment will include the cost of all water, equipment and labor needed to complete the work specified herein and to the satisfaction of the Engineer.

TRENCH DRAIN

Description: This work shall consist of a trench drain at the locations show in the plans.

Trench drain shall be constructed according to details provided in the plans, the applicable portions of Section 550 of the Standard Specifications, the manufacturers specifications, and as described herein.

The trench grate shall be constructed with solid spacer bars made from structural steel suitably welded to form the open slot and shall be hot-dip galvanized to meet the provisions of AASHTO M 111. The slot width shall be 1-3/4 inches with spacer bars of 3/16 inch solid web spacers.

The encasement concrete shall be poured according to the details provided in the plans to allow for the preformed drain channel to have a 0.6% or steeper grade toward the storm sewer pipe. The preformed drain channel shall be on site prior to pouring the encasement to ensure that the profiles match.

Method of Measurement: This work will be measured for payment per each unit installed.

Basis of Payment: This work will be paid for at the contract unit price per each TRENCH DRAIN installed which will include all labor, materials, and equipment necessary to construct the TRENCH DRAIN as detailed in the plans.

The storm sewer pipe shall be paid for as specified in STORM SEWERS.

LIMESTONE MASONRY VENEER

Description: This work shall consist of furnishing, transporting, and placing limestone masonry veneer as specified herein, as shown on the plans, and as directed by the Owner's Representative. Work shall include all mortar, finishing, and cleanup necessary for placement of limestone masonry veneer.

The wall components as shown on the plans, such as [concrete masonry units, precast, anchors, brick, mortar, metal cap, flashing, weep holes, etc., will also be included in the cost of the limestone masonry veneer.

Submittals: Submit product samples representing the size, shape, and color of each unit type along with Manufacturer's product data to the Engineer for approval prior to construction. Provide product cut sheets and data for anchors and weep-hole material as well.

Delivery Storage and Handling:

Masonry

- A. Masonry units, when delivered to the site, shall be thoroughly cured and shall be dry. When stored on the site, they shall not be in contact with the ground, shall be kept clean, and shall be covered with waterproof cover.

Cold Weather Requirements:

- B. All masonry units delivered to use in freezing weather shall be fully protected by a weather-tight covering to prevent accumulation of ice on the units. Loose board covering will not be permitted.
- C. Cold Weather Protection:

1. Remove any ice or snow formed on masonry bed by carefully applying heat until top surface is dry to the touch.
2. Remove all masonry determined to be frozen or damaged by freezing conditions.
3. Perform the following construction procedure while the work is progressing. When air temperature is from 40°F (4°C) to 32°F (0°C), heat sand or mixing water to produce mortar temperature between 40°F (4°C) and 120°F (49°C):
 - a. When air temperature is from 32°F (0°C) to 25°F (-4°C) heat sand or water to produce mortar temperature between 40°F (4°C) and 120°F (49°C); maintain temperature of mortar on boards above freezing.
 - b. When air temperature is from 25°F (-4°C) to 20°F (-7°C) heat sand and mixing water to produce mortar temperatures between 40°F (4°C) and 120°F (49°C); maintain temperature of mortar on boards above freezing; use salamanders or other heat sources on both sides of walls under construction; use wind breaks when wind is in excess of 15 mph.
 - c. When air temperature is from 20°F (-7°C) and below, heat sand and mixing water to produce mortar temperatures between 40°F (4°C) and 120°F (49°C); provide enclosures and auxiliary heat to maintain air temperature above 32°F (0°C); do not lay units which have a surface temperature of 20°F (-7°C).
4. Perform the following protections for completed masonry and masonry not being worked on:
 - a. When the mean daily air temperature is from 40°F (4°C) to 32°F (0°C), protect masonry from rain or snow for at least 24 hours by covering with weather-restrictive membrane.
 - b. When the mean daily air temperature is from 32°F (0°C) to 25°F (-4°C), completely cover masonry with weather-restrictive membrane for at least 24 hours.
 - c. When the mean daily air temperature is from 25°F (-4°C) to 20°F (-7°C), completely cover masonry with insulating blankets or similar protection for at least 24 hours.
 - d. When mean daily temperature is 20°F (-7°C) and below, maintain masonry temperature above 32°F (0°C) for 24 hours using enclosures, blankets, and supplementary heat.

Materials:

Concrete Core

Concrete shall be in accordance with Article 1042.15 of the Standard Specifications and to meet the requirements specified herein. Provide concrete per dimensions as shown on the plans.

Concrete Masonry Units (CMU)

Concrete masonry units (CMU) shall be in accordance with Article 1042.15 of the Standard Specifications. Provide hollow, load bearing, normal weight concrete block units per dimensions as shown on the plans. Concrete Masonry Units shall conform to the requirements of ASTM designation C90.

Masonry Cavity wall reinforcement shall be truss type with adjustable eye wire joint reinforcement. Wire shall be 9 ga. and hot dipped galvanized having a minimum 1.50 ounce/square foot zinc coating in accordance with ASTM A 153 Class B. Maximum spacing of tabs shall be 24 inches. Prefabricated corners shall be used to form continuous reinforcement around corners.

Limestone Masonry Veneer

Masonry veneer shall be limestone and brick to meet the requirements specified herein. Stone masonry veneer shall be sound, natural limestone, lannon veneer, standard grey blend, splitface, rockface, and bedface, 2 inch to 9 inch variable height, thin (nominal 1 ½ inch depth) and full (4 inch depth) at locations indicated on plans, and random length to match stone on Highland Metra

Station Shelter. Stone shall be standard grade, free of cracks, seams, or starts, which may impair structural integrity.

The following products are preapproved: Brookfield Blend provided by Halquist Stone Company, Sussex, WI, 800-255-8811; or Autumn Sky provided by Fischer Stone, Freeport, IL, 815-233-3232.

Brick

Brick shall be sound and selected from manufacturer standard products to match color and style of brick from the Highland Metra Station Shelter.

Accessories

Provide Type S mortar suitable for exterior concrete masonry unit work and submit manufacturer's product data to Owner's Representative for approval prior to construction. Submit mortar manufacturer's product data to Owner's Representative for approval prior to ordering. Owner's Representative to select mortar color from manufacturer's full range of color options.

Provide dovetail slot veneer anchors, or other veneer anchors as appropriate for attachment to cast in place concrete and precast concrete elements.

Provide corrugated-metal veneer anchors, not less than 0.030-inch- thick by 7/8-inch- wide hot-dip galvanized steel sheet with corrugations having a wavelength of 0.3 to 0.5 inch and an amplitude of 0.06 to 0.10 inch of equal as recommended by stone fabricator and approved by the Owner's Representative.

Other products will be considered if the Contractor demonstrates that they meet the listed requirements as approved by the Engineer.

Construction Requirements: Sort stone before it is placed to remove stone that does not comply with requirements relating to aesthetic effects, physical properties, or fabrication or that is otherwise unsuitable for intended use. Arrange stones with color and size variations uniformly dispersed for an evenly blended appearance. Perform necessary field cutting and trimming as stone is set.

Arrange stones in pattern as shown on the plans with random course heights, random lengths, and uniform joint widths. Maintain uniform joint widths except for variations due to different stone sizes and where minor variations are required to maintain bond alignment if any. Maintain joints at not less than 3/8 inch at narrowest points or more than 5/8 inch at widest points.

Place weep holes where moisture may accumulate, including at base of cavity walls and above shelf angles. Use wicking material to form weep holes. Turn wicking down at lip of foundation to be as inconspicuous as possible. Space weep holes 24 inches on center.

Variation from Plumb: For vertical lines and surfaces, do not exceed 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch in 40 feet or more. For external corners, expansion joints, control joints, and other conspicuous lines, do not exceed 1/4 inch in 20 feet or 1/2 inch in 40 feet or more.

Variation from Level: For bed joints, do not exceed 1/4 inch in 20 feet or 1/2 inch in 40 feet or more.

Support limestone veneer with an aluminum lintel attached to the concrete structure with 1/2 inch expansion bolts 12 inches on center minimum in location shown on plans.

Per the approved submittals, anchor CMU to cast-in-place concrete with the dovetail anchors 16" on center. Anchor stone masonry veneer to unit masonry with corrugated metal veneer anchors. Embed anchors in unit masonry mortar joints or grouted cells for distance at least one-half of unit masonry thickness.

Provide 1 inch minimum cavity between stone masonry and concrete masonry units. Keep cavity free of mortar droppings and debris. Place mortar spots in cavity at veneer anchors to maintain spacing. Slope

beds toward cavity to minimize mortar protrusions into cavity.

Rake joints to depth of approximately 3/8 inch deep to uniform depths with square bottoms and clean sides unless otherwise shown on the plans.

Clean stone masonry veneer as work progresses. Remove mortar fins and smears before tooling joints.

After mortar is thoroughly set and cured, clean stone masonry by removing large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels. Further clean by bucket and brush hand-cleaning method using job-mixed detergent solution unless otherwise approved by Owner's Representative.

Measurement: The contract unit price for limestone masonry veneer shall include mortar, reinforcement, finishing, cleanup, materials, labor, and equipment required to complete this work.

Basis of Payment: This work shall be paid for at the contract unit price per square foot for LIMESTONE MASONRY VENEER, and no additional compensation will be allowed.

BRICK PAVEMENT REMOVAL AND REPLACEMENT

Description: This work consists of the saw-cutting (if required), removal and disposal of existing brick driveway pavers and construction of Brick Pavers on a prepared subgrade in accordance with applicable articles of Sections 351, 423 and 440 of the Standard Specifications and as detailed in the plans.

It shall be the Contractor's responsibility to notify residents and the Village when access to their driveways will be temporarily closed due to construction. The Contractor shall distribute notices provided by the Village, to residents. Every effort shall be made to accommodate access to these properties (i.e., knock on doors when driveway is about to be closed). The contractor shall not be allowed to close a Driveway for more than 48 hours under any circumstance.

Materials: Materials to be included and placed for the Brick Driveway Pavers shall consist of the following:

Four inches (4") of Aggregate Base Course, Type B (CA-6) may be required for the replacement of driveways. The Engineer shall make the decision if new brick driveway pavement can be placed on existing subbase material or if the aggregate base course will be required. The labor, equipment and material necessary for the placement of the aggregate base course will not be paid for separately and will be covered under the BRICK PAVEMENT REMOVAL AND REPLACEMENT pay item. Brick Pavers of like type, color, size, and specification matching the existing driveway brick pavers shall be approved by Engineer prior to installation.

The Contractor shall be responsible for providing temporary aggregate, Type B, CA-6, Crushed in the excavated driveway areas to the satisfaction of the Engineer from the time when the driveway pavement is removed and replaced. This work shall be included in the cost of BRICK PAVEMENT REMOVAL AND REPLACEMENT.

Method of Measurement: This work will be measured in place per square foot prior to removal of the pavement.

Basis of Payment: This work will be paid for at the contract unit price per SQUARE FOOT for of BRICK PAVEMENT REMOVAL AND REPLACEMENT, which price shall include all of the above.

SOIL CONDITIONER

Description: This work shall consist of preparation of the planting areas to receive soil amendments, including placement and incorporation of an approved soil conditioner and an approved soil amendment into the landscape planting beds.

General Requirements: The soil conditioner shall consist of ground southern yellow pine bark, composted rice hulls, organic compost, approved nutrient additives and supplements. The Contractor shall submit a 5 pound bag sample to the Engineer for approval prior to the delivery and installation of this material.

Preparation: The soil conditioner installation shall only begin after all removals, including vegetation removals, are completed. Clean planting areas of all trash and debris before placement of the approved soil conditioner.

Remove and legally dispose of all removals and debris offsite in accordance with Article 202.03. In planting areas, remove existing turf or vegetation to a depth of 1 inch. Prepare soil surface by gently loosening the top 6 inches of the existing topsoil.

Construction Requirements: Apply a 6 inch deep layer of soil conditioner within the planting areas. The Engineer will verify that the proper soil conditioner depth has been applied. After verification of proper depth, the Contractor shall completely incorporate the soil conditioner into the loosened Topsoil, Furnish and Place, Special by tilling.

Rake smooth and finish grade all planted areas. This work shall be considered included in the cost of SOIL CONDITIONER. Grading shall be to a tolerance of +/- 0.10 foot of the design grades. Any grade disturbed by any other operations shall be restored to the finish grade and raked smooth at no additional cost.

All debris litter, tire tracks, and unintended materials shall be removed, swept, or washed off of all landscape, adjacent walls and surfaces, curbs, gutters, and pavement on a daily basis, to the approval and directive of the engineer.

Method of Measurement: The contract unit price for Soil Conditioner will be measured in square yards. It will include providing soil conditioner to a 6 inch depth for all planting beds including all materials, labor, or equipment required to complete this work.

Basis of Payment: This work shall be paid for at the contract unit price per square yard for SOIL CONDITIONER and no additional compensation will be allowed. All turf and vegetation removal required for installation of SOIL CONDITIONER is considered included in this item.

CURED-IN-PLACE PIPE LINER **PART 1 - GENERAL**

REFERENCED STANDARDS

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 543	Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents
ASTM D 618	Standard Practices for Conditioning Plastics for Testing
ASTM D 638	Standard Test Method for Tensile Properties of Plastics
ASTM D 790	Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
ASTM F 1216-07	Standard Practice for Rehabilitation of Existing Pipelines and Conduits By the Inversion and Curing of a Resin-Impregnated Tube

These specifications include requirements for materials, transportation, equipment and labor necessary to rehabilitate deteriorated sections of sewer listed in the contract documents by means of cured-in-place

pipe (CIPP) liner.

The Contractor shall furnish all material, labor and special equipment required to accomplish the work in accordance with these specifications. The installation shall affect the complete interior relining of the existing sanitary sewer piping and shall result in a smooth, hard, strong and chemically inert interior finish, and closely following the contours of the existing piping. The Contractor shall provide a completed system with mainline sewer and all active lateral connections in operational condition.

Contractor Experience

The Contractor for the cured-in-place rehabilitation of sewers must have installed at least 200,000 linear feet of the proposed product and shall provide a list of projects including location and contact. All workers performing work on the cured-in-place rehabilitation of sewer must be certified by the cured-in-place rehabilitation system supplier as qualified to perform work with the proposed product. The Contractor shall be licensed by the liner process manufacturer.

Water Use

Potable water to be used for pipe lining and cleaning processes may be obtained from the Village fire hydrants, at the Contractor's expense. Hydrant use must be coordinated with and approved by the Village public works director. The Contractor shall provide all piping, hoses, valves, or connections necessary to complete the work.

Submittals

After the award of the Project contract, the Contractor shall submit the following information for review and approval:

- A. Manufacturer's published literature and published data for the proposed cured-in-place liner system.
- B. The cured-in-place rehabilitation system supplier's letter of certification for each worker who will perform cured-in-place rehabilitation work.
- C. Independent test report showing that the physical properties of the proposed CIPP system meet the requirements of these specifications and the requirements published in the manufacturer's literature.
- D. The manufacturer's certification that the proposed CIPP system for the project meets the requirements of these specifications and will meet or exceed the physical properties given in the manufacturer's published literature submitted as required by Part A of this subsection.
- E. Documentation of Contractor's experience. This shall include references for all jobs within the last two (2) years that were either completed or under construction using the proposed rehabilitation method. References for a minimum of 10 jobs shall be provided. Information provided shall include a description of the job, the location of the job, the value of the job, the Client (i.e. County, City, Authority, etc.), and the contact for the job including name, title, address, and phone number.
- F. Documentation of Product experience. This shall include references for jobs completed with the proposed cured-in-place rehabilitation method. The jobs submitted shall show that at least 200,000 linear feet of the product has been installed by the Contractor or other Contractors. The documentation shall include at least 10 jobs which have been completed, preferably within the last 2 years. Information provided for each job shall include a description of the job, the location of the job, the value of the job, the Client (i.e. County, City, Authority, etc.), and the contact for the job including name, title, address, and phone number.
- G. References for the project superintendent documenting experience as required by these

specifications.

PART 2 - PRODUCTS

Accuracy of the Plans

To the greatest practical extent, the plans accurately depict the details of the work, including the locations and numbers of all manholes, etc. However, the Contractor shall determine the locations of all structures and verify all dimensions, including lengths between manholes, by field measurement. The Contractor shall also be aware that minor variations in pipe diameter and circumference will occur, that it is not intended that such minor variations be indicated on the plans and that such variations will not be considered as grounds for additional claims for compensation.

All materials and equipment used in the lining and in the insertion process shall be of their best respective kinds.

The liner shall generally consist of polyester, vinyl ester, or epoxy thermosetting resin, impregnated flexible polyester felt or fiberglass fiber. The liner shall fit tightly to the internal circumference of the existing pipe, and a membrane integrally bonded to the internal circumference of the felt, thus forming a smooth, chemically inert internal flow surface. The membrane shall be a minimum of 0.3 mm +5% and shall not be considered to impart any structural strength of the liner.

Liner Pipe Thickness Design shall be in accordance with Appendix XI of ASTM F1216. The existing pipe *shall not* be considered as providing any structural support to the liner pipe. In the liner thickness calculations, the minimum ovality of the host pipe shall be 5 percent, the enhancement factor (K) shall not be greater than 7.0, the minimum safety factor shall be 2.0, and the flexural modulus of elasticity shall be reduced 50% to account for long term effects and used in the design equation E_L . In cases where ovality exceeds 10%, or where pipes are egg or oval shaped, alternative methods of design may be considered by the engineer.

No liner shall be installed until it has been approved for installation.

No liner will be approved for installation until liner thickness calculations have been submitted and reviewed by the design engineer for conformance with the specifications and installation requirements.

Common Design Parameters: Design inputs generally considered to be the same from site to site for a particular project are provided in Table-1.

Safety Factor	2.0
Soil Modulus ⁽¹⁾	700 psi
Soil Density ⁽²⁾	120 pcf

Notes - Table -1:

1. In the absence of the site-specific information, the Village assumes a soil modulus of 700 psi.
2. In the absence of site-specific information, assume a soil density of 120 lb/ft³.

Site Specific Parameters: The information listed in Table-2 is specific to each manhole to manhole run of pipe. The Contractor shall use for design the information provided by the Village and information the Contractor collects during site visits for each manhole to manhole run.

Table -2 Site-Specific Design Parameters	
Ovality	Notes 1, 2
Ground Water Depth Above Invert	Notes 1, 3
Soil Depth Above Crown	Note 1
Live Load	Notes 1, 4
Design Condition (Fully Deteriorated)	Notes 1, 5
CIPP Thickness	Notes 1, 6, 7

Notes - Table -2:

1. Design thickness and complete site-specific design, in accordance with ASTM F-1216 (Appendix XI), shall be submitted.
2. The Contractor shall estimate the ovality by viewing the video inspection footage. If video inspection is not available, the Contractor shall assume an ovality of 3%. In cases where the ovality exceeds 10%, the Contractor may consider employing alternative design methods to determine the pipe thickness.
3. In the absence of accurate water table information or high water elevation observed during the site visit (stream, ponds, etc.), the Contractor shall assume a seasonal high groundwater elevation of 2 feet below the ground surface.
4. CIPP is subjected to traffic live loads as calculated by AASHTO Standard Specifications for Highway Bridges, HS-20-44 Highway Loading.
5. The Contractor shall assume the pipe segments are fully deteriorated.
6. Thickness specified (designed by the Contractor) is the final, in-ground thickness required. Measured sample thickness will not include polyurethane or polyethylene coatings, any layer of the tube not frilly and verifiably impregnated with resin, or any portion of the tube not deemed by the engineer to be a structural component of the composite.
7. The Contractor must consider any factors necessary to ensure the final, cured-in-place pipe thickness is not less than specified (designed by the Contractor and approved by the engineer) above. These factors include any stress applied to the material during transportation, handling, installation and cure; the host pipe's material type, condition, and configuration; weather (including ambient temperature conditions); and any other factors which are reasonably expected to be found in existing combined or sanitary sewer systems.

Product-Specific Design Parameters: Certain design inputs vary by manufacturer, processes design, or installation technique. These variables are listed in Table -3 with explanatory notes.

Table -3 Minimum Product-Specific Design Parameters	
Enhancement Factor, $K^{(1)}$	$K = 7$
Initial Flexural Strength (ASTM D 790) ⁽²⁾	$O_s = 4500$ psi
Initial Flexural Modulus of Elasticity (ASTM D 790) ⁽²⁾	$E_s = 250,000$ psi
Retention of Properties to Account for Long-Term Effects ⁽³⁾	50%
Long-Term Flexural Modulus of Elasticity ⁽³⁾	$E_L = 150,000$ psi

Notes - Table -3:

1. Enhancement factor (K) is the additional buckling or load resistance of the rehabilitation product due to the restraining action of the host pipe. The tighter the fit of the product within the host pipe, the greater the value of K. Third party testing of external hydrostatic loading capacity of restrained pipe samples shall be conducted to verify the enhancement factor, K. The minimum values provided are based on the "Long-Term" Structural Behavior of Pipeline Rehabilitation Systems," Trenchless Technology Center, 1994.
2. Initial values are defined in ASTM D 790. The engineer may, at any time prior to installation, direct the Contractor to make cured samples (according to ASTM F-1216) and test them in accordance with the listed ASTM standards to verify initial values of physical properties. In such tests the Contractor's samples must achieve a 95% pass-rate.
3. The initial flexural modulus is multiplied by the creep factor (or percentage retention) to obtain the long-term values used for design. Long-term values shall be verified by long-term external pressure testing of circular lengths of the pipe material by third-party labs prior to bid. It is understood that the material's modulus of elasticity will not change over time; however, by convention the modulus is reduced for design purposes for all plastic pipe sections to account for the reduced ability of plastic pipe to carry loads due to the changes in pipe geometry resulting from the effects of creep over time.

Flow Capacity: Maintenance of flow capacity of existing pipes is essential. Rehabilitated pipe shall have minimum of no change in capacity. An increase in flow capacity following rehabilitation is preferred, and in no case shall the flow capacity of rehabilitated pipes be reduced.

Verify that installed thickness of the CIPP is within minus 4 percent and plus 10 percent of the specified thickness and shall not include thickness of polyurethane inner liner. The Contractor shall hire an independent testing laboratory for the purpose of taking samples to determine the installed liner thickness. The results of the liner thickness measurements shall be submitted to the Village and engineer. Samples shall be taken from each liner thickness at each liner insertion. The costs for thickness testing shall be included in the bid price for rehabilitation.

Resin Content: The resin content of the liner shall be 10-15% by volume greater than the volume of felt in the liner bag. The resin used shall not contain fillers, except those required for viscosity control, fire retardance, or as required to obtain the necessary pot life. Thixotropic agents which will not interfere with visual inspection may be added for viscosity control. Dye shall be added to resins to improve visual inspection of the cured liner. The types and quantities of dyes added shall have prior approval from the resin manufacturer.

Liner Sizing: The liner shall be fabricated to a size that when installed will neatly fit the internal circumference of the pipe to be lined. Allowance for longitudinal and circumferential stretching of the liner during installation shall be made by the Contractor, according to the manufacturer's recommendations.

Length: The length of the liner shall be that which is deemed necessary by the Contractor to effectively carry out the insertion and seal the liner at the inlet and outlet of the manhole. When cured, the hardened liner shall extend from end to end of the sewer segment being lined in a continuous tight fitting watertight pipe-within-a-pipe. Individual inversion runs may be made over one or more manhole to manhole sections as determined.

Manufacture Information

- A. The Contractor shall deliver the uncured resin impregnated liner bag to the site. The bag may not

be impregnated at the site. The liner bag shall be impregnated with resin not more than 24 hours before the proposed time of installation and stored out of direct sunlight at a temperature of less than 39 degrees F. The Contractor shall provide all appropriate transport, handling and protection equipment including refrigerated, or otherwise suitably cooled, transport equipment.

- B. All fabricating and Contractor testing shall be carried out under cover and no materials shall be exposed to the weather until they are ready to be inserted. All materials should be protected from the weather and exposure to ultra-violet light as practicable during the manufacture and installation process.
- C. Each liner shall be accompanied by suitable documentation indicating time and date of manufacture, felt thickness, number of layers, length of liner, resin types, resin content, catalyst, relevant batch numbers, etc.

PART 3 – EXECUTION

Inspections

- A. Prior to preparing bids, the Contractor shall review piping to be rehabilitated in place. Video inspection of all piping to be lined is available prior to bid.
- B. Prior to beginning insertion of the liner bag, the Contractor shall inspect the cleaned line by use of closed-circuit TV cameras, and shall confirm to his satisfaction that the lines are adequately cleaned. Insertion of the bag by the Contractor shall serve as evidence of his acceptance of the condition of the piping and the suitability of the liner insertion within the host pipe. Failure of the liner system due to inadequately cleaned host pipes shall be repaired by the Contractor at no additional cost.
- C. During the process of manufacture and impregnation, the Village shall have the reasonable opportunity to examine all operations where the manufacture and impregnation (when applicable) of the liner is being carried out. The Contractor shall give appropriate prior notice in order that the Village inspector may be on hand to observe the various processes.
- D. No work shall be performed by the Contractor except in the presence of the Village inspection personnel, unless otherwise approved. The Contractor shall coordinate his work schedule and give timely prior notice regarding his intentions to perform any and/or all parts of the work, in order that the Village inspector may be on hand. Any work performed in the absence of the Village inspector is subject to removal and replacement at the Contractor's expense.
- E. Upon substantial completion of the work the Contractor shall, in the presence of the Village inspector, inspect the line using closed-circuit television equipment. The video tape thus produced shall be accompanied by a simultaneously produced, narrated sound tape. The sound narration shall draw attention to all recognizable defects, imperfections, etc., and the location along the length of the piping shall be accurately noted. Also, the locations and all pertinent details regarding the entrance of service laterals into the main trunk sewer shall be accurately noted on the audio of the video recording.

Preparatory Procedures

- A. Notification of Residents: Prior to starting Work, it is the responsibility of the Contractor to notify' all residents that could be affected by the lining process. This notification shall consist of written information and verbal communication that outlines the CIPP process and timing of the project.
- B. The Contractor shall be responsible for the construction layout at the beginning of the project. The Contractor shall take all precautions to protect all stakes, hubs, control points, etc. If the stakes, hubs, control points, etc. are disturbed during construction, the Contractor shall re-stake

at his expense. The Contractor is responsible for the accuracy of the re-staking.

- C. The actual sizes, lengths and materials of the pipes to be relined shall be as shown on the Plans and adjusted as necessary upon field verification by the Contractor. The liner diameter, length and wall thickness shall be appropriate for each designated location. The Contractor shall verify the actual sewer lengths and diameters in the field prior to cutting the liner to length and sizing the diameter.
- D. Cleaning: Cleaning of sewer lines and manholes shall be performed prior to performing the CIPP liner installation and cost of cleaning shall be included in unit bid price.
- E. TV Inspection: Pre-Inspection of sewer lines (DVD TV recording) is available and shall be utilized for bid preparation.
- F. Flow Control: When required for acceptable completion of an insertion process, the Contractor shall provide for adequate flow control including but not limited to required pumping and bypassing. Contractor shall provide pumping equipment and bypass lines of adequate size and capacity to handle bypass flows. Bypass pumping shall be coordinated with the owner.
- G. Obstruction Removal: The line shall be cleared of obstructions such as solids, dropped joints, intruding service connections or collapsed pipe that may prevent liner installation. If inspection reveals an obstruction that cannot be removed by conventional remote sewer equipment, then a point repair excavation shall be made to remove or repair the obstruction. NOTE: Point repairs shall be made only after cleaning methods were performed and shall be approved in advance by the engineer. Such point repairs shall be reimbursed as additional work.
- H. Root Removal: Roots shall be removed in the designated sections where root intrusion is a problem. Special attention should be used during the cleaning operation to assure almost complete removal of roots from the joints. Procedures may include the use of mechanical equipment such as rodding machines, bucket machines and winches using root cutters and porcupines, and equipment such as high-velocity jet cleaners.
- I. Material Removal and Disposal: Contractor shall be responsible for material removal and disposal.

Lining Procedures

- A. Conduct operations in accordance with applicable OSHA standards, including those safety requirements involving work on an elevated platform and entry into a confined space. Make suitable precautions to eliminate hazards to personnel near construction activities when pressurized air is being used.
- B. In the event of insertion being delayed after impregnation by unexpected site conditions-but-prior to the start of the insertion process, the Contractor shall store at his own cost, the liner, for a further period of at least 48 hours, below 39 degrees F for use when conditions allow.
- C. The liner shall be inverted into the pipeline from a suitable platform located above the manhole. The free open end of the liner bag shall be firmly secured to the platform and the folded liner passed down a suitably reinforced column to a shute or bend leading to the opening of the pipe to be lined. Clean water at ambient temperature shall be supplied to the platform at a rate sufficient to cause controlled installation of the liner into the pipeline.
- D. Liner inversion rate shall not exceed 32 feet per minute and the tail of the liner or the tail tag rope shall be suitably restrained to prevent liner run away, if applicable.
- E. The Contractor shall supply a suitable heat source and recirculation equipment capable of

delivering required curing temperature to the far end of the liner to quickly and uniformly raise the water temperature in the entire liner, once inverted in the pipeline, above the temperature required to commence the exothermic reaction of the resin as determined by the catalyst system employed.

- F. The heat source shall be fitted with suitable monitors to gauge the temperature of the incoming and outgoing water supply to determine when uniform temperature is achieved throughout the length of the liner. Another such gage shall be placed between the impregnated tube and the pipe invert at the termination to determine the temperatures during cure.
- G. Initial cure will occur during temperature heat-up and shall be completed when exposed portions of the new pipe appear to be hard and sound and the remote temperature sensor indicates that the temperature is of a magnitude to realize an exotherm or cure in the resin. After initial cure is reached, the temperature shall be raised to the post-cure temperature recommended by the resin manufacturer. The post-cure temperature shall be held for a period as recommended by the resin manufacturer, during which time the recirculation of the water and cycling of the boiler to maintain the temperature shall continue. The curing of the CIPP must take into account the existing pipe material, the resin system, and ground conditions (temperature, moisture level, and thermal conductivity of soil).
- H. Maintain a curing log of CIPP temperatures at the upstream and downstream manholes during the curing process to document that proper temperatures and cure times have been achieved.
- I. Cool hardened liner to temperature below 100 degrees F before relieving static head in inversion standpipe. Cool down by introduction of cool water into inversion standpipe to replace water being drained from downstream end. Care shall be taken in release of static head so that vacuum will not be developed that could damage newly installed liner.
- J. Invert through Manholes. The invert shall be continuous and smooth through all manholes. If a liner is installed through a manhole, the bottom portion of the liner shall remain and the bench of the manhole shall be grouted and shaped as necessary to support the liner. If the liner terminates on either side of a manhole, the invert shall be built up to remove any flow restrictions and to form a continuous invert-through the manhole. The cost of this work shall be included in the unit price bid for the liner.
- K. The finished pipelining shall be continuous over the entire length of an insertion run between two manholes or structures and be as free as commercially practicable from visual defects such as foreign inclusions, dry spots, air bubbles, pinholes, dimples and delamination. The lining shall be impervious and free of any leakage from the pipe to the surrounding ground or from the ground to the inside of the lined pipe.
- L. The inner surface shall be free of cracks and crazing with smooth finish and with an average of not over two pits per 12 inch square, providing the pits are less than 0.12 inch in diameter and not over 0.04 inch deep and are covered with sufficient resin to avoid exposure of the inner fabric.

Sealing at Manholes

- A. Form a tight seal between the CIPP and the host pipe at the pipe penetration. Do not leave any annular gaps. Seal the annular space with a ¼-inch-diameter activated Oakum band soaked in chemical sealant. Seal any annular spaces greater than 1/2-inch with manhole wall repair material. Finish off the seal with a non-shrink grout or cementitious liner material placed around the pipe opening from inside the manhole in a band at least 4 inches wide. Complete the sealing procedure for each liner segment immediately after the liner is cured to produce a watertight seal.

Service Connections

- A. The exact location and number of service connections shall be determined from TV tapes and/or

in the field. It shall be the Contractor's responsibility to accurately field locate all existing service connections whether in service or not. Immediately following the liner installation and curing, the Contractor shall cut a relief hole at each service connection. The relief hole shall be 85% of the diameter of the service connection.

- B. The Contractor shall reinstate and reconnect all service connections which have been determined as live connections to the liner pipe; unless connection is deemed to be inactive or storm connection not to be reinstated. The Contractor shall be responsible for restoring/correcting, without any delay, all missed or faulty reconnections, as well as for any damage caused to property for not reconnecting the services soon enough or for not giving notice to the Village. All services which are reconnected to the rehabilitated liner shall be shown on the "As Built Drawings" with the exact distance from the nearest upstream/downstream manhole.

Defective Work

Any defects which, in the judgment of the engineer, will affect the integrity or strength of the lining shall be repaired or the liner replaced at the Contractor's expense.

Testing

- A. The Contractor shall collect a coupon sample from each pipe diameter as described below. The Contractor shall stamp or mark the test pieces with the date of manufacture and batch number. These samples shall be paid for under the Pay Item for sanitary sewer rehabilitation, for the respective diameter sizes.
- B. Tests shall be made on specimens of resin, catalyst and felt as supplied or pieces of cured liner cut from waste areas when possible. Otherwise, the specimens shall be cut from a piece of cured liner representative of the material inserted and prepared and cured in a similar technique to the process employed. In all cases, the average testing results, of the number of specimens, shall be used to determine conformance with the detailed requirements.
- C. The test specimen shall be conditioned in accordance with procedure 'A' of ASTM Designation D618, Standard Methods for Conditioning Plastics and Electrical Materials for Testing.
- D. The test specimen shall be prepared and physical properties tested in accordance with ASTM F1216. The properties shall meet or exceed the values identified in ASTM F1216.
- E. The Contractor shall in preparation for insertion of the liner bag, and in placing of stops within the terminal manholes of an insertion run, allow sufficient length to facilitate the cuffing out of one (1) full size cured liner section, for each thickness of liner installed, from the waste portion at the end of an insertion run.

Final Acceptance

- A. Upon completion and before acceptance, the Contractor shall re-inspect the rehabilitated pipeline by the use of closed-circuit TV cameras and shall submit 2 color DVD's of the rehabilitated pipeline to the engineer and Village for approval/acceptance of the work

Final Cleanup

Upon completion of rehabilitation work and testing, clean and restore project area affected by the Work.

Method of Measurement: CIPP shall be measured in place and the length measured in feet along the installed centerline of the rehabilitated pipe section.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for CURED-IN-PLACE-PIPE LINER, of the diameter specified; and shall include all cost including those referenced above and

not limited to mobilization, traffic control, pipe cleaning, televising, dewatering, all required bypass pumping, internal removal of protruding service taps, internal reinstatement of lateral connections, and acceptance testing.

BRICK SIDEWALK REMOVAL

Description: This work shall consist of the removal of existing decorative brick sidewalk at the locations noted in the plans. Brick sidewalk pavers shall not be kept on-site but disposed of off-site prior to the end of work that day.

Method of Measurement: This work shall be measured for payment per square foot of BRICK SIDEWALK REMOVAL.

Basis of Payment: This work shall be paid for at the contact unit price for square foot of BRICK SIDEWALK REMOVAL.

BOLLARD REMOVAL

Description: This work shall consist of the complete removal of all bollards and any associated foundations regardless of material type. Work shall include providing all labor, equipment, and disposal of materials.

Prior to removing the existing bollard, the size and material type should be noted to ensure continuity with existing bollards.

Method of Measurement: This work shall be measured for payment per each bollard removed.

Basis of Payment: This work shall be paid for at the contact unit price for each BOLLARD REMOVAL.

SEEDING, CLASS 5 (MODIFIED)

This work shall consist of Seeding Class 5 (Modified) in areas as shown in the plans or a directed by the Engineer.

All work, materials, and equipment shall conform to Sections 250 and 1081 of the Standard Specifications except as modified herein.

The Class 5 (Modified) seed mixture shall be supplied in a separate bag from the three mixture components: Temporary Cover, Permanent Grasses, and Forbs. All native species will be local genotype and will be from a radius of 100 miles from DuPage County. The Class 5 (Modified) seed mix shall be supplied with the appropriate inoculants. Fertilizer is not required.

Article 250.07 Seeding Mixtures – Delete sentence 4. Add the following to Table 1 – Seeding Mixtures:

<u>CLASS – TYPE</u>	<u>SEEDS</u>	<u>BULK LBS/ACRE</u>
5 (Modified) Forbs:		5.50
	Aster novae (Sky Blue Aster)	0.20
	Baptisia australis (False Indigo)	0.75
	Baptisia leucophaea (Cream Wild Indigo)	0.45
	Coreopsis lanceolata (Lanceleaf Coreopsis)	0.45
	Dalea purpurea (Purple Prairie Clover)	0.35

Desmodium canadense (Showy Tick Trefoil)	0.30
Echinacea purpurea (Purple Coneflower)	0.75
Eryngium yuccifolium (Rattlesnake Master)	0.30
Liatris aspera (Rough Blazing Star)	0.65
Monarda fistulosa (Wild Bergamot)	0.55
Rudbeckia hirta (Black-eyed Susan)	0.75

Notes:

1. The seeding time for this work shall be November 15 to March 15. Seeding done outside of this time frame will not be measured for payment.
2. The Engineer must witness the delivery of seed with original labels attached in the field. Provide to the Engineer the seed labels from the bags in which the seed is delivered in.
3. Each bag shall be labeled. The label shall bear the dealer's guarantee of mixture and year grown, purity and germination, and date of test. Purity and germination tests no older than six months of the date of sowing must be submitted to verify all bulk seed required to achieve LB PLS specified.
4. No seed shall be sown until the purity testing has been completed for seeds to be used and shows the seed meets the noxious weed requirements.
5. Seed, which has become wet, moldy, or otherwise damaged will not be acceptable. Prior to application, the Engineer must approve seed mix in the bags.
6. No seed shall be sown during high winds or when the ground is not in proper condition for seeding.
7. The seedbed shall be prepared and approved by the Engineer prior to seeding. The Contractor shall delineate the perimeter of the seedbed with wooden lathe. The wooden lathe shall remain in place.
8. Temporary cover seed shall be kept separate from the Native Grass seed mixture. It shall be mixed on site under the direction of the Engineer.
9. The Spring Oats shall be thoroughly mixed with the Native Grass seed and seeded first using a mechanical seeder that applies the seed uniformly at a depth of ¼ inch. Second, the Forb seed shall be thoroughly mixed with 2 bushels of moistened horticultural grade vermiculite per acre and uniformly seeded at a depth of 1/8 inch. The seedbed shall be immediately mulched as specified.
10. Supplemental Watering: During periods exceeding 26 degree C (80 degree F) or subnormal rainfall (less than 1" of rainfall per week) supplemental watering may be required. Supplemental watering shall be performed when directed by the Engineer. Water shall be applied at the rate 1" of rain per 7 days or as specified by the Engineer within 24-hour notice.
11. The Contractor shall have on hand enough equipment to completely water all seeded areas in two days at the watering rate specified above. The Engineer will make periodic checks of the Contractor's watering equipment to determine its adequacy and operating condition.
12. All watering described shall be done with a spray application. An open-end hose will not be acceptable. The method of watering shall meet the approval of the Engineer.

If specified Plateau herbicide tolerant designed seed material is unavailable, the Engineer shall approve the substitutes. All substitutions shall also be tolerant to (Ammonium salt of imazapic (+/-)-2-[4,5-dihydro-4-menthyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-methyl-3-pyridinecarboxylic acid (Plateau Herbicide). Adjustments will be made at no cost to the contract. Approval of substitutes shall in no way waive any requirements of the contract.

Article 250.09 – Add Seeding, Class 5 (Modified).

Seeding, Class 5 (Modified) horticultural grade vermiculite will not be measured for payment.

Article 250.10 – Add Seeding, Class 5 (Modified).

Supplemental watering will be measured for payment as specified in Special Provision for SUPPLEMENTAL WATERING.

EROSION CONTROL BLANKET (SPECIAL)

This Special Provision revises Section 251 of the Standard Specifications for Road and Bridge Construction to eliminate the use of Excelsior Blanket for Erosion Control Blanket. This work shall consist of furnishing, transporting, and placing 100 % biodegradable erosion control blanket over seeded areas as detailed on the plans, according to Section 251 except as modified herein.

Delete Article 1081.10(a) Excelsior Blanket.

Delete the first paragraph of Article 1081.10 (b) Knitted Straw Mat and substitute the following:

Knitted Straw Mat: Knitted straw mat shall be a machine-produced mat of 100% clean, weed free agricultural straw. The blanket shall be of consistent thickness with the straw evenly distributed over the entire area of the blanket. The blanket shall be covered on top and bottom sides with a 100% biodegradable woven natural organic fiber netting such as North American Green S150BN or equal. No plastic netting will be allowed. The top netting shall consist of machine directional strands formed from two intertwined yarns with cross directional strands interwoven through the twisted machine stands to form an approximate 0.50 x 1.0 (1.27 x 2.54 cm) mesh. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with degradable thread. The blanket shall be manufactured with a colored thread stitched along both outer edges (approximately 2-5 inches (5-12.5cm) from the edge) as an overlap guide for adjacent mats.

Short-term photodegradable erosion control blanket will not be allowed.

Delete Article 1081.10(d) Wire Staples.

Add the following to Article 1081.10 (e) Wood Stakes:

Biodegradable plastic stakes will be allowed. The biodegradable plastic anchor shall be approximately 6 in (15.24 cm) in length. No metal wire stakes will be allowed.

Method of Measurement: EROSION CONTROL BLANKET (SPECIAL) shall be measured per square yard of blanket installed.

Basis of Payment: This work shall be paid for at the contract unit price per square yard of EROSION CONTROL BLANKET (SPECIAL) installed.

AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS

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.
- (a) 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.
- (b) 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 course 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).

Partial payment of the each amount bid for temporary access, of the type specified, will be paid according to the following schedule:

- (a) Upon construction of the temporary access, sixty percent of the contract unit price per each, of the type constructed, will be paid.
- (b) Subject to the approval of the Engineer for the adequate maintenance and removal of the temporary access, the remaining forty percent of the pay item will be paid upon the permanent removal of the temporary access.”

STAINING CONCRETE STRUCTURES

Description: This work shall consist of preparing and applying concrete stain to form liner textured surfaces. The work shall be completed in accordance with Section 587 of the Standard Specifications except as specified herein, as shown on the plans, and as directed by the Owner’s Representative.

Stain shall be applied on all exposed wall surfaces for cast-in-place concrete structures as shown on the plans.

Manufacturer Requirements: Manufacturer of coloring system to have a minimum of five (5) years of experience creating formed concrete surfaces to match shapes, surface textures, and colors. Manufacturers of form liner textured surface have been pre-approved to provide textured surface form liners and stain. Other manufacturer’s products will be considered, provided sufficient information is submitted 30-days prior to use to allow the Owner’s Representative to determine that the products

proposed are equivalent to those named. All manufacturers of form liners shall adhere to the provisions listed herein and in the plans.

Contractor Qualifications: The concrete stain applicator shall have a minimum of five (5) years demonstrated experience in applying stains to simulate rock. The Contractor shall submit evidence of appropriate experience, job listings, and project photographs from previous work.

Submittals: Submit manufacturer's literature, certificates and color samples of concrete stain to the Owner's Representative for review and approval prior to mockup.

Mockup: After concrete work on mockup is completed and cured for a minimum of 28 days, and after surface is determined to be acceptable for coloring, apply color stain system.

1. Apply the concrete stain to the front face of the mock-up wall located on the jobsite. Stain shall be of type and color which will be used on actual walls. Application procedures and absorption rates shall be as hereinafter specified, unless otherwise recommended by the manufacturer in writing to achieve color uniformity.
2. General application to actual surfaces on the retaining wall shall not proceed until jobsite mockup has been approved in writing by the Owner's Representative.
3. The approved mockup shall serve as a standard of comparison with respect to color and overall appearance.

Materials: Deliver materials in original and sealed containers, clearly marked with the manufacturer's name, brand name, type of material, batch number, and date of manufacture.

The stain applicator shall be the manufacturer or manufacturer's authorized representative.

Store concrete stain materials in an area where temperatures will not be less than 50°F (10°C) or more than 100°F (38°C) and in accordance with OSHA and local Fire Code Requirements.

Concrete Stain: Special penetrating stain mix as provided by the form liner manufacturer. Form liner to have three colors to simulate the appearance of natural limestone masonry. Submit manufacturer's standard colors for selection by the Owner's Representative prior to completing mock-up. The Owner's Representative will make the final color selections after viewing the completed mock-up.

Stain shall create a surface finish that is breathable (allowing water vapor transmission), and that resists deterioration from water, acid, alkali, fungi, sunlight or weathering. Stain mix shall be a water borne, low V.O.C. material, less than 1.5 lbs./gal, and shall meet requirements for weathering resistance of 2000 hours accelerated exposure.

Construction Requirements: The concrete staining work described herein shall be performed after the grading is finished. Clean surface prior to application of stain materials to assure that surface is free of latency, dirt, dust, grease, efflorescence, paint, or other foreign material, following manufacturer's instructions for surface preparation. Do not sandblast. Preferred method to remove latency is pressure washing with water, minimum 3000 psi (a rate of three to four gallons per minute), using fan nozzle perpendicular to and at a distance of one or two feet from surface. Completed surface shall be free of blemishes, discoloration, surface voids and unnatural form marks.

Surfaces to receive stain shall be structurally sound, clean, dry, fully cured, and free from dust, curing agents or form release agents, efflorescence, scale, or other foreign materials. Methods and materials used for cleaning of substrate shall be as recommended by the manufacturer of the water-repellent stain. Concrete shall be at least 30 days old prior to concrete stain application. Curing agents must be removed a minimum of 14 days prior to coating to allow the concrete to dry out.

The stain shall be thoroughly mixed in accordance with the manufacturer's directions using an air-driven or other explosion-proof power mixer. Mix all containers thoroughly prior to application. Do not thin the material.

Materials shall be applied at the rate as recommended by the manufacturer. Absorption rates could be increased or decreased depending upon surface texture and porosity of the substrate so as to achieve even staining.

Temperature and relative humidity conditions during time of concrete stain application shall be per manufacturer's application instructions. Do not apply materials under rainy conditions or within three (3) days after surfaces become wet from rainfall or other moisture. Do not apply when weather is foggy or overcast. Take precaution to ensure that workmen and work areas are adequately protected from fire and health hazards resulting from handling, mixing and application of materials. Furnish all the necessary equipment to complete the work. Provide drop cloths and other forms of protection necessary to protect all adjoining work and surfaces to render them completely free of overspray and splash from the concrete stain work. Any surfaces, which have been damaged or splattered, shall be cleaned, restored, or replaced to the satisfaction of the Owner's Representative. Avoid staining the "mortar joints" by providing suitable protection over the joints during the staining process. Sequencing: Schedule color stain application with earthwork and back-filling of any wall areas making sure that all simulated stone texture is colored to the minimum distance below grade. Delay adjacent plantings until color application is completed. Coordinate work to permit coloring applications without interference from other trades.

Where exposed soil or pavement is adjacent which may spatter dirt or soil from rainfall, or where surface may be subject to over-spray from other processes, provide temporary cover of completed work.

Method of Measurement: The contract unit price for STAINING CONCRETE STRUCTURES shall include submittals, mock-ups, preparation, and all work necessary for application of stain including all materials, labor, and equipment required to complete this work.

Basis of Payment: This work shall be paid for at the contract unit price per square foot for STAINING CONCRETE STRUCTURES and no additional compensation will be allowed.

TEMPORARY TRAFFIC SIGNAL INSTALLATION (SPECIAL)

Description: This work shall be performed according to Sections 701, 862, and 890 of the Standard Specifications, and as modified herein. Temporary portable traffic signals shall be utilized with microwave detectors installed instead of induction loop detectors. Temporary portable traffic signals shall not be permitted for use between November and March.

The temporary portable traffic signals shall be trailer mounted units. The trailer-mounted units shall be set up securely and level. Each unit shall be self-contained and consists of two signals heads.

The use of generators to power the temporary traffic signals shall not be permitted during non-working hours.

Materials: The controller shall provide actuated operation for the number of phases required with full menu driven format for ease of data entry. The controller shall show all the times operating simultaneously.

The long all red intervals for the traffic signal controller shall be adjustable up to 250 seconds in one-second increments.

An extended uninterruptible power supply (UPS) shall be required for the traffic signal cabinet with controller.

The microwave detector shall be motion and presence sensor that provides vehicle detection that is not affected by temperature, humidity, color or background variations and shall meet the approval of the Engineer. It shall be capable of tracking multiple moving and stationary vehicles. The microwave detectors shall be designed to detect moving vehicles at a maximum range of 300 feet (90 m). The microwave detector shall have the ability to accurately discriminate between vehicles arriving and

departing. The Contractor shall supply the type of lead-in cable recommended by the manufacturer for their microwave detector.

The temporary traffic signals shall meet the physical and operational requirements of conventional traffic signals as specified in Part IV and other applicable portions of the current version of the Manual on Uniform Traffic Control Devices (MUTCD) and the Illinois MUTCD. The signal system shall be designed to continuously operate over an ambient temperature range between -30°F (-34°C) and 120°F (48°C). When not being utilized to inform and direct traffic, portable signals shall be treated as non-operating equipment according to Article 701.11.

Construction Requirements: The contractor shall mount a metal arm to each near right signal post (an arm for a light fixture is acceptable). The arm shall be reasonably stationary to prevent false calls on the microwave sensor. The final mounting height of the microwave detector shall be 17.5 feet (5.33m) plus or minus 0.5 feet (0.15m). The microwave detector shall be horizontally positioned somewhere between the center of the driving lane and 2 feet (0.6 m) from the edge of the driving lane. The microwave detector shall be aimed to a 6 foot (1.8m) height at the stop bar at the center of the driving lane.

The microwave detector voltage shall be the highest allowed by the manufacturer.

At the time of inspection and programming of the controller, one of the Contractor's employees or representatives at the inspection shall be capable of doing all cabinet wiring or controller programming necessary to accomplish the type of operation desired or to modify the cabinet for any unusual conditions.

The UPS shall be installed adjacent to the controller cabinet according to the applicable portions of Article 862.04 and mounted according to Article 701.18(b)(2)d.

No vehicle, trailer, or other large object may be parked between the microwave detector and 500 feet (150m) in the direction of approaching traffic.

The Contractor shall be required to restore all disturbed areas upon removal of the temporary traffic signals.

Method of Measurement: This work shall be measured per each location (intersection) where temporary traffic signals area installed.

Basis of Payment: This work shall be paid for at the contract unit price per each TEMPORARY TRAFFIC SIGNAL INSTALLATION (SPECIAL). This work shall include all costs for the modifications required for traffic staging, microwave vehicle sensors, any adjustment to the microwave vehicle sensors, all material and labor required, the installation and complete removal of the temporary traffic signal, and the restoration of any disturbed areas outside of the designated project limits.

ORNAMENTAL FENCE (SPECIAL)

Description: This work shall consist of fabricating, furnishing, transporting, and placing guard rail as specified herein, as shown on the plans, and as directed by the Owner's Representative. Work shall include preparation of shop drawings, fabrication, placement, all anchoring hardware, mortar, caulk, and all materials, labor, and equipment required to complete this work.

Materials: Guard rail shall be a 48 inch height pre-fabricated product. The following product is preapproved: Echelon II, Majestic, 3-rail panels, 6' panel length, industrial ornamental aluminum fence as manufactured by Ameristar, Tulsa, OK, 800-321-8724

All guard rail finish components shall be cleaned, etched phosphotized and electrostatically powder-coated with TGIC polyester powder coatings; color, black.

Other products will be considered if the Contractor demonstrates that they meet the manufacturer's listed requirements as approved by the Engineer.

Prior to fabrication, prepare and submit shop drawings based on field measurements.

Construction Requirements: Layout complete fence line. Locate and mark post positions. Space line posts equally and at spacing per pre-fabricated standard fence sections, maximum 6'-0" on center spacing. Drill post holes into firm, undisturbed, or compacted earth. Hole diameter: Minimum 4 times the post diameter. Hole depth: Minimum 3" deeper than the post setting depth. Post depth: Minimum of 42" depth. Remove excavated post hole soil from the site. Place foundation concrete and tamp for consolidation. Align each post both vertically and laterally. Hold in position during concrete placement and finishing operation. Trowel finish tops of footings, and slope to direct water away from posts.

Assemble and attach the ornamental fence based on the manufacturer's recommendations for this application.

For sloping areas, cant fence sections so vertical members are aligned plumb with grade. Review layout with Owner's Representative prior to final installation.

Method of Measurement: The contract unit price for Ornamental Fence (Special) shall include preparation of shop drawings, fabricating, furnishing, transporting, and placing the bridge guard rail including all materials, labor, and equipment required to complete this work.

Basis of Payment: This work shall be paid for at the contract unit price per linear foot for ORNAMENTAL FENCE (SPECIAL), and no additional compensation will be allowed.

BRIDGE FENCE RAILING (SPECIAL)
PARAPET RAILING, SPECIAL

Description: This work shall consist of fabricating, furnishing, transporting, painting, and placing bridge fence railing (special) and parapet railing (special) as specified herein, as shown on the plans, and as directed by the Owner's Representative. Work shall include preparation of shop drawings, fabrication, placement, all anchoring hardware, mortar, caulk, painting and cleanup necessary for construction of the ornamental metal fence.

Submittals: Prior to fabrication, prepare and submit shop drawings for all railings based on field measurements. Shop drawing submittals shall include individual descriptions, dimensions and materials for the railing. Include details showing typical cross sections, elevations, corners, steps, connections, and any other special conditions.

Submit manufacturer's literature, certificates and color samples of finish material to the Owner's Representative for review and approval prior to fabrication.

Materials: All materials to be schedule 40 aluminum tube unless otherwise indicated on the plans. Custom-fabricate fencing to the dimensions indicated on the plans.

Finish: Color, Black, Finish as approved by Owner's Representative.

Grout: K-3 Epoxy Grout, manufactured by Gantrex, (800) 242-6873 or equal as approved by Owner's Representative.

Fabrication: Prior to fabrication, prepare and submit shop drawings based on field measurements. Fabricate ornamental metal fencing based on the approved shop drawings. All connections to be welded unless otherwise indicated on the plans.

Following fabrication, clean and apply finish as follows:

Surface Preparation:

Clean surfaces according to SSPC-SP 5/NACE No. 1, "White Metal Blast Cleaning."

After cleaning, apply a conversion coating suited to the organic coating to be applied over it.

Powder Coating:

2-coat finish consisting of epoxy primer and TGIC polyester topcoat, with a minimum total dry film thickness of not less than 8 mils.

Construction Requirements: Set railings accurately in location, alignment, and elevation as shown on the plans. Set posts plumb within a tolerance of 1/16 inch in 3 feet. Align rails so parallel with bridge parapet wall. Pickets to align with posts and be plumb within a tolerance of 1/16 in 3 feet.

Anchor posts to concrete mechanically with fasteners appropriately sized to secure in place.

Anchor railing ends with round flanges, connected to railing ends and attached to railing with appropriately sized anchors and bolts.

Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop painting.

Method of Measurement: The contract unit price for Bridge Fence Railing (Special) and Parapet Railing (Special) shall include preparation of shop drawings, fabricating, furnishing, transporting, painting, placing and attaching the fencing including all materials, labor, and equipment required to complete this work.

Basis of Payment: This work shall be paid for at the contract unit price per foot for BRIDGE FENCE RAILING (SPECIAL), and PARAPET RAILING, SPECIAL and no additional compensation will be allowed.

BOLLARDS

Description: This work shall consist of furnishing and installing BOLLARDS as shown in the plans.

Method of Measurement: This work shall be measured for payment per each bollard installed.

Basis of Payment: This work shall be paid for at the contact unit price for BOLLARDS which shall include all labor, materials, and equipment necessary to fabricate and furnish the bollard. Bollard foundations shall not be paid for separately but shall be considered included in the cost of the BOLLARDS.

BUILDING REMOVAL NO. 1

Description: This work shall consist of the total removal of a timber frame ranch home built on a full basement, disconnection of all utilities, filling in foundations, removal of all debris, grading, and restoration of site. There are also established herein certain limitations and requirements regulating the contractor's methods of operation which are specifically intended to secure the results desired by the Village and to function as minimum acceptable safety measures to be employed by the contractor at all times. At any time during the performance of this contract, the Village may require in addition, and shall be empowered to enforce, such other measures as may be reasonably necessary for the protection of the public, the contractor's workmen, streets, public and private utilities, or other properties.

METHOD OF WORK:

- A. The Method of Demolition and Site Clearance and of selection and disposal of salvaged materials will be at the contractor's option, subject to full compliance with all local, State, and Federal laws, and with these specifications and contract documents. The method employed must be such as to avoid hazards to person and property, and interference with the use of adjacent buildings or interruption of free passage to and from such buildings. Care must also be taken to prevent the spread of dust and flying particles. Contractor will be required to present original receipts from a

permitted landfill for all demolition material removed from the site.

- B. Work by Contractor's Own Forces. All site work and demolition of all buildings listed in the bid form shall be performed by the contractor's own forces or, upon prior approval by the Village, by an approved subcontractor. No substantial part of any such building shall be sold to a person or firm under any form of agreement whatsoever which requires or permits such person or firm to dismantle or demolish such building or substantial portion thereof. Exception to this requirement may be historically significant or hazardous equipment and fixture allowed at the discretion of the Engineer in the case of specialized, intricate or hazardous equipment or fixtures. The Village reserves the right to limit the amount of work that this contractor may sublet or the number of subcontracts, which she/he may negotiate under this contract.
- C. Progress of work must be in accordance with a reasonable and approved progress schedule filed by the contractor with the Village. If the Contractor fails to file and secure approval of such progress schedule, the Village reserves the right to establish a reasonable progress schedule that the contractor will be required to follow. If at any time during the life of this contract it is found that the contractor's progress is less than that called for by the established progress schedule, either on the whole or on any time of this contract, the Village, may require the contractor to increase her/his forces and equipment, or to work overtime labor, or both, to whatever extent directed, until such time as her/his progress is in a balance with the progress schedule, all without additional compensation. Cleanup operations shall closely follow demolition of buildings, so that not more than three residential or more than two buildings of other types shall be in a state of partial demolition at any given time. At the discretion of the Engineer, this requirement may be applied separately to each completely equipped and full-manned crew that the contractor provides. Where hand wrecking is employed, it may, at the discretion of the inspector, proceed on additional buildings provided that materials intended for salvage are neatly and safely segregated and all waste and debris outside of foundation lines of the building is cleaned up and removed from the site daily.
- D. Prior to bidding any demolition work under this contract the contractor shall:
 - (1) Visit the site and familiarize themselves with building types and existing conditions.
 - (2) Any conditions identified at the time of site visit including but may not be limited to: asbestos, fuel tanks, wells, septic tanks, etc. shall be included in the lump sum unit price, any and all, such removal shall conform to Federal, State, and Local Laws and Regulations.
 - (3) Contractor is solely responsible for job site safety.
- E. The Contractor is prohibited from using any part or area of land or parcels outside of the actual contract site or sites for her/his operations, for storage of material or equipment, or for disposal of waste or for any other purposes without consent of the Village. Disposition of rubble, salvaged and waste materials, debris and trash from within the contract area shall be strictly in accordance with these specifications. Public streets, alleys, or other thoroughfares anywhere in the Village, used by the contractor in carrying out this contract, shall at all times be kept free of litter attributable to her/him, and her/his trucks or other vehicles shall be so loaded and equipped as to prevent leakage, blowing off, or other escape of any portion of material being hauled. Any cost incurred by the Village in cleaning up such litter will be charged to the Contractor and shall be deducted from funds due or to become due her/him under this contract.
- F. The contractor shall furnish and erect all barricades, covers and other temporary structures and night warning lights necessary for the proper and safe conduct of the work and shall remove all such temporary structures upon the completion of work under this contract, all without additional compensation therefore.

DEMOLITION AND SITE CLEARANCE WITHIN PARCELS

- A. The removal of any dwelling from the site in a whole or substantially whole condition is prohibited.

- B. An asbestos study must be performed by an IDPH Licensed Asbestos Inspector. If the demolition contractor and/or the asbestos contractor consider the structure to be demolished to not be structurally sound they must prove this through a structural engineer report.

If asbestos is identified in the study, it must be removed by an IDPH Licensed Asbestos Abatement Contractor.

A 10 day notification must be submitted to the IEPA prior to demolition.

Pay the requisite fee to the IEPA.

Provide documentation to the Village showing previous steps have been completed prior to initiating demolition activities. Copies of the asbestos study, 10 day notification form, and a copy of the US Postal Service mail receipt.

Once the demolition is complete, all necessary receipts, waste shipment records pertaining to this demolition must be submitted to the County to ensure proper disposal and prior to receiving final payment. All waste must be disposed in a Subtitle D Landfill. The County reserves the right to inspect the demolition activities at any time and verify that waste disposal or recycling receipts pertain to this demolition.

The contractor is subject to National Emission Standards for Hazardous Air Pollutants (NESHAPS). There are NO exceptions. The contractor must follow any and all applicable federal, state and local regulations. This may include, but not be limited to OSHA, Illinois Department of Public Health, IEPA and USEPA regulations, which includes NESHAPS.

- C. Salvageable Materials, as determined by the Contractor, shall be kept in orderly segregation as the work progresses and all waste material shall be promptly and properly disposed of. All lumber containing nails shall be kept in compact piles. Littering of the site with such materials will not be permitted.
- D. Structural parts of buildings, such as columns, beams and joists, supporting the floor of any level shall be left in place until the walls, flooring and partitions of that level are completely removed, beginning at the top and working downward. Exception to this requirement will be made in the case of wood frame buildings of non-rigid frame masonry or concrete buildings if the Contractor elects to use an approved alternate procedure for progressive or simultaneous wrecking of all parts of the building, provided the type and location of the building and the Contractor's proposed method are all such that danger to the contractor's personnel, the public or to adjacent property will not be increased thereby. No wall or part thereof shall be permitted to fall outwardly from any building except through chutes or by other controlled means or methods that will insure safety and minimize dust, noise and/or other nuisance. Outside chimneys or outside portion of chimneys shall be razed in advance of general demolition of each building. Any portion of a chimney inside a building shall be demolished as soon as it becomes unsupported by reason of removal of other parts of the building. Any part of a building whether structural, collateral or accessory, which has become unstable through removal of other parts, shall be removed as soon as practicable and no such unstable part shall be left free-standing or inadequately braced against all reasonably possible cause of collapse at the end of any day's work.
- E. Building foundation walls, including cross-walls, partitions, columns, piers, areaways, stairways, chimneys, porches, steps and platforms, fuel storage supports, coal chutes, service or access wells, interior or exterior dock walls and floor, machinery and equipment foundations and all similar structures and parts shall be demolished to at least one foot (1') below final grade and removed from the site. All such walls, structures and parts exposed on the interior of building, shall be further removed to basement floor level. Floor over tunnels occurring under foundation shall be broken out and the tunnels shall then be treated in the same manner as specified for foundation. Fills of earth, sand, gravel, crushed rock, cinders or similar materials under docks or floors elevated above outside ground level shall not be removed from the site but shall be cleared of all interior cross walls, piers, columns, equipment foundations, etc., down to the level of the

outside ground, and left in such condition that fill materials will not be readily washed out onto public sidewalks or thoroughfares, or used as fill materials in nearby basements as directed by the Engineer.

- F. Final grade, when referred to in these specifications, means approximate existing elevation of the ground surrounding a basement.
- G. Concrete or brick floors of basements, or of areaways, stairwells or depressed structures, occurring more than one foot below final grade need not be removed. Concrete slabs over basements or crawl spaces shall be broken up and removed from the site. Prior to placing of any fill or debris or other materials, basement floors shall be broken through at all low points that could collect water and not less than ten (10) square feet of floor at each point shall be broken through and not less than five (5) percent of the floor area removed from drainage.
- H. Concrete slabs on ground, including floors of basement-less buildings, entrance slabs, patios, garage or shed floors, and similar exterior slabs whether of concrete, masonry, rock or stone shall be removed. All hazardous open pits and recesses shall be filled with thoroughly tamped damp earth or mortar, wherever is required to completely eliminate the hazard. Sewers, stacks, or other sanitary ducts extending to or through the floors and slabs shall be sealed as provided in Paragraph V. below.
- I. Paved driveways and sidewalks, including that portion of driveway or approach outside the property lines and including walks and steps leading to the property from the public sidewalk, shall be broken up and completely removed.
- J. Retaining walls on the perimeter of parcels will not, in general, be required to be removed. All other retaining walls and curbs extending eight inches (8") or more above adjacent ground or final grade shall be removed to ground level. Where retaining walls or curbs are required to be removed, the embankment shall be graded down to slope of not greater than 30 degrees with horizontal, or as nearly 30 degrees as proximity to streets, alleys, or other structures will permit. The Contractor's attention is called to the fact that in some instances compliance with this paragraph may necessitate removal of basement walls to a greater depth than would otherwise be required. For purposes of this contract, building foundation walls which are needed for support or protection of adjacent sidewalks or other buildings, will be considered as retaining walls and shall not be taken down as generally required in Paragraph D.
- K. Boulders or stones over four inch (4") size lying within the parcels or in the adjacent public area ordinarily known as "parking" shall be removed.
- L. Additional site concrete and masonry rubble, rock, stone, or broken asphalt shall be removed from the site.
- M. All materials or objects of metal of any kind, including metal lath, shall be removed from the site. Reinforcing bars, mesh, railing, poles or metal inserts of any kind, protruding from concrete or masonry above the final grade or adjacent ground, shall be cut off as short as possible and removed from the site and the remaining stubs shall be battered into a condition and position so as not to constitute a hazard to foot traffic or mowing operations.
- N. Fences, guard rails, bumpers, signs, clothes lines, and similar facilities shall be completely removed from the site, except that fences on the apparent boundary between a contract parcel and an improved non-contract parcel shall not be removed unless specifically called for. Wood or metal posts for support facilities covered by this paragraph shall be completely removed or cut off flush with the ground with no remaining sharp or hazardous edges or projections. All attachments and accessories thereto shall be removed.
- O. Wood timbering, beams, sills, columns, piers, shores, or bracing, occurring above ground, exposed in basements or protruding from the exterior ground surface shall be removed and

disposed of. Tables, benches, cabinets, shelving, and all other wooden articles in whatsoever condition, salvageable or not, shall be removed from basements or other areas required to be filled.

- P. Trees, bushes, and vegetation. Dead or damaged trees shall be cut off flush with the ground and disposed of. Limbs or trunks of trees found on the ground shall be hauled from the site. Trees eight inches (8") or less in diameter and within five feet (5') of any building shall be cut off at the ground and removed. Trees of any diameter whose stability after borrow operations or basement filling is questionable shall be cut down sufficiently to be safe from toppling due to wind or their own weight. Trees seriously damaged by the contractor shall, if ordered, be properly trimmed or cut down flush with the ground and disposed of without additional cost to the Village. Other trees need not be removed, but the contractor may be required to trim in a neat manner, portions of tree that in the opinion of the Engineer may interfere with safe prosecution of the work. All bushes, shrubs, and similar vegetation on the site shall be cut off flush with the ground removed. Cost of tree and large vegetation removal shall be considered incidental to contract.
- Q. Building materials of non-combustible or slow-burning nature not suitable for use as debris fill shall be removed from site. This includes but is not limited to wood, most fiber wallboards, asbestos, acoustical ceilings, insulating sheathing and subflooring, roofing and insulation materials of granulated, roll, or batt type.
- R. Additional fill material for basements, when ordered placed by the Engineer, shall be hauled in from off the site. It may consist of rock, sand, soils or other materials the contractor may select subject to the approval of the Inspector.
- S. Filling of small excavations remaining after the removal of small structures is required and shall be to adjacent ground level, using tamped earth borrowed as necessary on the site as directed by the technician.
- T. Smoothing and grading of the site will be required only to the extent necessary to permit easy mowing of the entire site with field type mowing machinery. Except as specifically mentioned herein, no major changing of grades is required.
- U. Sanitary sewers, septic systems, wells, drains, and similar facilities serving each building shall be capped and sealed to the satisfaction of an inspector from the DuPage County Health Department before the general demolition of that building is begun. Partial removal of sufficient portions of a structure shall be performed where necessary to permit sealing of a well or sanitary or drainage systems in advance of general demolition of that structure, except where such local removal would create hazard to safety. Soil pipe and stacks shall be cut off neatly and shall be plugged with a suitable material that will enable the solid placing of not less than eight inches (8") of good, well-tamped mortar in the open end of the pipe. If open sewer pipe of clay, asbestos, or fiber are unearthed or exposed, it shall be plugged in the manner specified for soil pipes. The exposed end of any piping forming a part of a sanitary system shall not be left in such a condition or position that it might subsequently be broken below the cap or plug. The contractor shall install such fill or earth or concrete as is necessary to protect such piping against future loosening or breakage. All wells shall be filled and sealed in conformance with Federal, State and local laws and regulations.
- V. Outdoor toilets shall be pumped out by a licensed septic contractor; the pit shall be completely filled with uncontaminated soil and thoroughly compacted in accordance with DuPage County Health Department and State of Illinois Regulations. The toilet building shall be demolished and removed from the site.
- W. Disposal of trash and waste building materials shall be at a point outside of the project. The Contractor at locations provided by her/him shall dispose of all material; in no case shall discarded materials be left in piles on the site. The manner of disposal of such materials shall be subject to the approval of the technician and shall conform to all Federal, State and local laws.

The contractor shall obtain the file with the technician receipts from permitted sanitary landfill for all debris removed from the site. Burning of any materials on site is strictly prohibited.

- X. All known fuel tanks, above or below ground, or tanks which have been used for storage of gasoline, kerosene, benzene, oils or similar volatile materials shall be carefully removed and disposed of in a safe manner and in accordance with State and Federal Law and Regulations. All other tanks or receptacles shall be pumped out or emptied in a safe manner and then shall be flushed out immediately with water, carbon dioxide or nitrogen gas until they are gas-free when checked with an "explosimeter", (as manufactured by Mine Safety Appliance Company), or another equally efficient instrument, before work of removal is begun. Competent personnel shall do checking with the "explosimeter" in the presence of the Inspector. The time, place and manner of disposal will be subject to the approval of the Engineer and State and Federal Law and Regulations.
- Y. The public right-of-way adjacent to any demolition site under this contract shall at all times be kept free of materials or debris resulting from the contractor's operations. During the winter season the Contractor shall also, during the life of this contract, keep all public sidewalks adjacent to the contract site free from snow and ice.

REMOVAL OF DEBRIS, CLEANING, ETC. - All rubbish and debris found on the demolition area at the start of the work as well as that resulting from the demolition activities, or deposited on the site by others during the duration of the contract, shall be removed and disposed of in an Illinois Environmental Protection Agency permitted landfill. Upon completion of the work, the contractor shall remove all temporary construction, equipment, salvaged materials, trash and debris of all kinds, leaving the entire project area in a neat condition.

PARTY WALLS - Where two or more buildings are connected by a party wall and one building is to be demolished, the Contractor shall be responsible for any movement or deviation of said wall, and shall take the necessary precautions or protect the wall from movement or deviation at her/his own expense. Party walls of greater height than the remaining structure shall be brought down to the height of said structure and made watertight.

All openings, except pipe and duct chases in the remaining portion of the party wall shall be closed with brick, mortar or other material similar to that in the party wall. Any loose material shall be removed from the party wall and its surface left in a reasonably smooth, patched and sound condition. Returns on party walls shall not project more than twelve inches (12") and shall be cut off and dressed in a reasonably smooth and plumb condition.

The Contractor shall be liable for any damage caused by loose material falling from the party wall or deviation thereof.

The foregoing shall also include party walls found during the progress of the work and not indicated in the plans or specifications, said work to be done at the Contractor's expense.

TRAP DOORS, GRATINGS, ETC. - The Contractor shall remove all coal hole covers, trap doors, sidewalk lights, gratings, and similar appurtenances that occur in the public sidewalk adjacent to the buildings to be removed. The openings left in the sidewalks thereby shall be filled to within four inches (4") of the top of the adjoining sidewalk and covered with not less than four inches (4") of compacted gravel or granulated cinder fill graded and pitched to the elevation of the adjacent sidewalks. Frames for the aforesaid appurtenances shall be removed from the sidewalk area if the conditions of such frames are detrimental to the public safety. The Contractor shall not remove, damage or disturb the vaults or other appurtenances of private utilities.

BUILDING UTILITY SERVICES - The Contractor shall disconnect any and all sewers, water service laterals, wells, and septic tanks presently serving property by making the disconnection at the water main or by filling and sealing the well/septic as required by DuPage County Health Department and State Law and Regulations. This disconnection or filling and sealing shall be completed before demolition of the

structure. The Contractor shall comply with all Federal, State and local laws, regulations, and ordinances regulating excavations in public right-of-ways.

The contractor shall be responsible for all utility termination(s). Related fees for said termination(s) shall be included in the building removal lump sum price. Utility termination(s) must be conducted by the responsible utility entity.

Method of Measurement: This work will be measured for payment on a lump sum basis for BUILDING REMOVAL NO.1.

Basis of Payment: This work will be paid for on a lump sum basis for BUILDING REMOVAL NO. 1. This work shall include complete removal of the structure and any other structure on located on the parcel, such as garages or sheds, disconnection of all utilities, filling in foundations, removal of all debris, grading, tree and shrub removal, and restoration of site

TEMPORARY INFORMATION SIGNING

Effective: November 13, 1996

Revised: January 2, 2007

Description: 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:

	<u>Item</u>	<u>Article/Section</u>
a.)	Sign Base (Notes 1 & 2)	1090
b.)	Sign Face (Note 3)	1091
c.)	Sign Legends	1092
d.)	Sign Supports	1093
e.)	Overlay Panels (Note 4)	1090.01

Note 1. The Contractor may use 16mm (5/8 inch) instead of 19mm (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 1084.02(b).

Note 4. The overlay panels shall be 2mm (0.08 inch) thick.

General Construction Requirements

Installation: 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 702.05 and Article 720.04. The signs shall be 2.1m (7') above the near edge of the pavement and shall be a minimum of 600mm (2') beyond the edge of the paved shoulder. A minimum of 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.

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.

Method of Measurement: This work shall be measured for payment in square feet 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.

Basis of Payment: This work shall be paid for at the contract unit price per square feet for TEMPORARY INFORMATION SIGNING, which price shall be full compensation for all labor, equipment and materials required for performing the work as herein specified.

TEMPORARY PAVEMENT

Effective: March 1, 2003

Revised: April 10, 2008

Description: This work shall consist of constructing a temporary pavement at the locations shown on the plans or as directed by the engineer.

The contractor shall use either Portland cement concrete according to Sections 353 and 354 of the Standard Specifications or HMA according to Sections 355, 356, 406 of the Standard Specifications, and other applicable HMA special provisions as contained herein. The HMA mixtures to be used shall be specified in the plans. The thickness of the Temporary Pavement shall be as described in the plans. The contractor shall have the option of constructing either material type if both Portland cement concrete and HMA are shown in the plans.

Articles 355.08 and 406.11 of the Standard Specifications shall not apply.

The removal of the Temporary Pavement, if required, shall conform to Section 440 of the Standard Specification.

Method of Measurement: TEMPORARY PAVEMENT will be measured in place and the area computed in square yards (square meters).

Basis of Payment: This work will be paid for at the contract unit price per square yard for TEMPORARY PAVEMENT.

Removal of temporary pavement will be paid for at the contract unit price per square yard for PAVEMENT REMOVAL.

PEDESTRIAN ACTIVATED CROSSWALK WARNING SYSTEM

Description: This work shall be performed in accordance with the applicable portions of Sections 702, 801, and 806 of the Standard Specifications insofar as applicable, and the latest edition of the MUTCD except as modified herein. This work consists of furnishing and installing a photovoltaic (solar) powered Rectangular Rapid Flashing Beacon (RRFB) system complete in place.

Solar Electric System Design: The solar electric system shall be designed to act as a standalone power source for the system. It shall be designed for a flashing output for 25 seconds with a duty cycle of 50 calls per day at the location shown in the plans in the month with the lowest solar radiation. Loading shall be calculated based on the maximum power consumption of each individual component. If a manufacturer provides a range of power consumption for an item, the largest possible value of the load shall be used for design purposes. The projected days of autonomy shall be no less than 5 days. The projected battery state-of-charge (SOC) shall be no less than 85% throughout the year. The minimum acceptable array to load ratio shall be 1.1 in the month with the lowest solar radiation.

System deratings shall be accounted for in the design to cover any losses from module output mismatch

loss, dirt/dust accumulation losses and wiring losses.

Solar Electric Modules and Mounting Structures: The module cells shall feature an antireflective coating and a low iron glass covering. Cells shall be encapsulated to protect them from the environment. Each module shall feature a weather tight junction box for connecting the array output cable to the module terminals. Modules shall feature a minimum manufacturer's warranty of 15 years for power output. All modules shall feature an anodized aluminum frame for mechanical support. Modules shall be from an established manufacturer/supplier with at least a 15 year history of production.

Solar modules shall be securely mounted to a suitable top of pole or side of pole mount structure that has been specifically designed to hold solar modules. All hardware used to install the modules to the mounts and the mount to the pole and all security hardware shall be stainless steel. Any specialty tools required for the security hardware shall be furnished to the City. Mounts shall be powder coated or hot dip galvanized steel. Mill finished or powder coated aluminum mounts are considered acceptable alternates for smaller solar arrays (40W or less).

Solar/Flasher Controls: The system shall feature an integrated control unit. The controller shall be a solid-state unit capable of managing battery charging and load/flasher control in a single unit. Charge control/flasher circuitry built from multiple components will not be allowed.

The charge control portion shall be designed such that it draws low power to minimize the parasitic load on the system. The unit shall use an ambient temperature sensor to adjust the charge termination point thus prolonging battery life (temperature compensated charging).

The charge circuit shall also employ a pulse-width-modulation algorithm for charging the batteries and be a solid-state series switch type configuration.

Load/flasher control shall be accomplished using a low-voltage-disconnect (LVD) circuit to disconnect power to the flasher control circuit when battery voltage falls to a low state-of-charge (typically 20%). The flasher circuitry shall be all solid-state and provide two complimentary drive outputs. When flashing, the unit shall have an output duty cycle of 50% per circuit and shall be capable of 50-60 flashes per minute for each lamp. On board short circuit protection shall be provided.

An 8-position terminal block with all positions labeled for ease of maintenance shall be included. Manual switches shall be provided to select the lamp activation source as either manual On or control from an external source. A status LED for charging and LVD shall be included on the face of the controller. The controller shall include an integral heat sink.

Spread Spectrum Radio Link: The crosswalk flasher units shall be linked to each other using a spread spectrum radio link (900-930Mhz operating frequency). The radio shall have an output of no less than 4-milliwatt and shall not require a license for operation. The radio shall operate from a nominal 12VDC source and include a status LED lamp to indicate power on. The radio shall also include transmit-receive status LED lamps to show message traffic between units.

The radio shall use a Frequency Hopping Spread Spectrum (FHSS) radio protocol. The minimum antenna configuration shall be an omni directional whip with a stainless steel mounting bracket. A data cable between the radio and the logic control unit shall be included. In the event that multiple systems are collocated, the radio hop sequence shall be field adjustable with programming software, straight data cable and a laptop computer. Changing hop sequences between collocated systems shall ensure that all can function without cross interference.

Additionally the radio shall be capable of using up to two additional levels of encryption including DT address settings to further encrypt data transfer.

Logic Control Unit: The system shall be equipped with a logic control device consisting of a PLC type device. The logic control device shall include input status indicators consisting of LED lamps. The device shall also include status Indicators consisting of LED lamps showing run, power and error status indicators. The control device shall include a data cable to allow connection between its communications port and the radio. The logic device shall have a minimum of 4 dry contact output relays with a minimum output rating of .5A.

The software for the logic control device shall allow the user to adjust the run time of the flashers from a minimum run time of 10 seconds to a maximum of 80 seconds. A set of toggle switches on the electronics panel shall allow the user to set the time. Toggle switches in the ON position shall be indicated by an input status LED lamp. A TEST button shall also be included with the time selection switches to allow each flasher unit to be tested individually.

The software shall include a communications fault routine that causes the lamps to flash intermittently in the event that the radios lose link with each other. The controller shall also have an input dedicated to monitoring the battery. The logic devices shall be configured as a master-slave system using a MODBUS protocol for operation.

PED Push Button: The PED push button shall be a vandal resistant unit. It shall have minimal travel and include both a visible and audible feedback to indicate when the button is pressed.

Visible feedback shall be a high intensity LED built into the unit and the audible feedback shall be a piezo beeper. The button assembly shall include a minimum of a 5"x 7" adjustable push button station assembly with an international crossing sign mounted on it showing the direction of travel desired.

System Batteries: The system shall come equipped with the number and type of batteries required for loading. The battery type shall be a sealed-maintenance free valve-regulated design. The battery shall use an Absorbed Glass Mat (AGM) to suspend the electrolyte making it immobile. Alternately the battery may be a gel type that employs a thixotropic gel to immobilize the electrolyte. Acceptable battery sizes shall be group U1, 22, 24, 27 and group 31.

Capacity of the batteries at 25°C shall be 36Ah to 115Ah, respectively, at the C/100 rate depending on battery size. Batteries shall use a copolymer polypropylene case and cover. Non-removable pressure regulated flame arresting safety valves shall be standard. Rated operating temperature shall be from -40°C to 72°C. Batteries shall also feature a low self-discharge rate of approximately 1 % per month at 25°C.

System Enclosure: The system shall include a single pre-wired enclosure for ease of installation. The unit shall be an aluminum enclosure with a minimum material thickness of 0.125". The cabinet shall have a mill finish. Mounts shall be included as part of the enclosure and shall be suitable for mounting to a 4.5" outer diameter pole. The enclosure shall also be capable of accepting band style mounts if needed. The enclosure shall feature a minimum of one police lock with key. The keyhole for the lock shall have a cover attached to the door with a rivet. The door shall be attached to the unit using a continuous stainless steel hinge that is riveted to the door and the enclosure body. The hinges shall be installed such that the rivets are not exposed when the door is closed. An integral rigid door stop shall be included in the unit so that the door can be fixed in the open position. The door shall cover the entire front side of the cabinet and be constructed of a single piece of aluminum. It shall have a neoprene gasket around the entire edge of the door and have three screened louvered vents on each side of each compartment. The louver screening shall be aluminum for longevity. An integral rain lip shall also be provided at the top of the main cabinet body to minimize entry of rain. An adjustable latch striker shall be included in the side of the main cabinet body to allow the user to adjust the pressure between the door gasket and the body of the cabinet.

The battery compartment shall have a minimum of ½" of styrofoam sheeting around the battery to minimize heat transfer between the battery and the wall of the enclosure. The name of the system manufacturer shall be stamped on the inside of the enclosure door along with a phone number for troubleshooting assistance.

System Wiring: All systems shall feature a color coded wiring harness for both the lamps and the solar array output. The lamp harness shall consist of a wiring assembly suitable for use with a two lamp system to be installed on a 15' pole. The harness shall be color coded for ease of connection to the lamps. A seven pin keyed locking connector shall be included in the harness to allow the lamps to be disconnected from the control electronics. An integral fuse assembly shall be included in the lamp positive wire of the harness. All connections shall be terminated with a crimped spade terminal for easy installation. Wire for the harness shall be TEW or MTW.

The solar array output harness shall consist of a jacketed pair of conductors suitable for the solar array output current. The jacket shall be a UV resistant PVC or XLP material. Spade terminals shall be included

for ease of installation.

Systems using solar arrays over 225-watts shall include supplemental harnesses for any additional electronics needed for power control. Supplemental harness assemblies shall also be keyed to prevent confusion in the connector orientation.

RRFB LED Lamp Assemblies: The RRFB assembly shall be constructed on an aluminum frame with a minimum cross section of 2x4" and a width of 24" facing traffic. The lamp assembly shall contain 2 2x5" lamps. All lamps shall operate from a nominal 12VDC supply and employ high intensity LED elements. All lamp elements used in the RRFB beacon kits shall comply with SAE J845 and J1889. The frame shall have a black finish on the faces that feature RRFB lamps and non-lamp faces shall be mill finished aluminum. Assemblies featuring pedestrian confirmation lamps on the end cap shall use a high bright LED lamp assembly with a minimum of at least 1 high intensity lamp. The end caps shall be recessed a minimum of 0.75" from the end of the frame to act as a protective shroud for the end cap lamp(s). Standard units shall include a saddle style mount for a pole of 4.5" O.D. and shall be adaptable to round pole mounts as small as 3" O.D. The RRFB lamp assembly shall have two lamps on the front and rear face of the RRFB frame facing traffic, and dual pedestrian end cap lamps

All units shall include a color-coded wiring harness to connect into the main harness coming from the system enclosure. The RRFB side of the harness shall be terminated in a keyed connector with six male pins. Hardware to install the RRFB shall be stainless steel.

Posts: Posts shall be UL classified and designed to current AASHTO standards for 90 mph wind, 3 second gusts, and minimum 50 year life with all attached components and shall arrive at the job site in a black powder coat finish with a matching shroud or aluminum nut covers and ground connector. Post length shall be in accordance with the MUTCD for proper RRFB and sign mounting height and the manufacturer's recommendations.

Foundations: 24" diameter concrete foundations shall be constructed in accordance with the lighting foundation detail in the plans.

Signs: Each post shall have a pedestrian crossing sign (W11-2, 30" x 30") and a diagonal arrow plaque (W16-7L or W16-7R, 24" x 12") mounted on both sides of the post facing traffic.

Warranty: The entire installation shall come with a three year warranty including labor, equipment and materials, unless otherwise specified longer in this special provision. The warranty period will begin on the date of Final Acceptance of the work. Contractor shall provide the Village with a hard copy of the warranty.

Documentation: Each system shall come with a complete installation and user's guide. Minimum information to be covered shall be as follows:

1. Description of all the system components and their basic function.
2. Installation of a typical system including sections specifically covering pole installation, all aspects of installation of the solar power system and LED lamp installation.
3. Troubleshooting and maintenance of the system.
4. Complete appendices on all of the components used in the system
5. Quick start timer programming instructions.
6. Complete drawings or illustrations throughout to support and clarify the text.
7. Phone/FAX numbers for technical support of the system.

Method of Measurement: This work will be measured for payment for each sign assembly installed.

Basis of Payment: This work will be paid for at the contract unit price per each for PEDESTRIAN ACTIVATED CROSSWALK WARNING SYSTEM, which price shall include all labor, equipment, materials, and incidental expenses necessary to furnish the components, signs, posts, foundations hardware, cables, connectors, and brackets necessary for installation of each sign assembly.

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

Revise Article 669.01 of the Standard Specifications to read:

“669.01 Description. This work shall consist of the transportation and proper disposal of contaminated soil and water. This work shall also consist of the removal, transportation, and proper disposal of underground storage tanks (UST), their content and associated underground piping to the point where the piping is above the ground, including determining the content types and estimated quantities.”

Revise Article 669.08 of the Standard Specifications to read:

“669.08 Contaminated Soil and/or Groundwater Monitoring. The Contractor shall hire a qualified environmental firm to monitor the area containing the regulated substances. The affected area shall be monitored with a photoionization detector (PID) utilizing a lamp of 10.6eV or greater or a flame ionization detector (FID). Any field screen reading on the PID or FID in excess of background levels indicates the potential presence of contaminated material requiring handling as a non-special waste, special waste, or hazardous waste. No excavated soils can be taken to a clean construction and demolition debris (CCDD) facility or an uncontaminated soil fill operation with detectable PID or FID meter readings. The PID or FID meter shall be calibrated on-site and background level readings taken and recorded daily. All testing shall be done by a qualified engineer/technician. Such testing and monitoring shall be included in the work. The Contractor shall identify the exact limits of removal of non-special waste, special waste, or hazardous waste. All limits shall be approved by the Engineer prior to excavation. The Contractor shall take all necessary precautions.

Based upon PID or FID readings indicating contamination, a soil or groundwater sample shall be taken from the same location and submitted to an approved laboratory. Soil or groundwater samples shall be analyzed for the contaminants of concern, including pH, based on the property's land use history or the parameters listed in the maximum allowable concentration (MAC) for chemical constituents in uncontaminated soil established pursuant to Subpart F of 35 Illinois Administrative Code 1100.605. The analytical results shall serve to document the level of soil contamination. Soil and groundwater samples may be required at the discretion of the Engineer to verify the level of soil and groundwater contamination.

Samples shall be grab samples (not combined with other locations). The samples shall be taken with disposable instruments. The samples shall be placed in sealed containers and transported in an insulated container to the laboratory. The container shall maintain a temperature of 39 °F (4 °C). All samples shall be clearly labeled. The labels shall indicate the sample number, date sampled, location and elevation, and any other observations.

The laboratory shall use a detectable concentration which is equal to the lowest appropriate practical quantitation limits (PQL) or estimated quantitation limit (EQL) specified in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", EPA Publication No. SW-846 and "Methods for the Determination of Organic Compounds in Drinking Water", EPA, EMSL, EPA-600/4-88/039. For parameters where the specified cleanup objective is below the acceptable detection limit (ADL), the ADL shall serve as the cleanup objective. For other parameters the ADL shall be equal to or below the specified cleanup objective.”

Replace the first two paragraphs of Article 669.09 of the Standard Specifications with the following:

“669.09 Contaminated Soil and/or Groundwater Management and Disposal. The management and disposal of contaminated soil and/or groundwater shall be according to the following:

- (a) Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels exceed the most stringent maximum allowable concentration (MAC) for chemical constituents in uncontaminated soil established pursuant to Subpart F of 35 Illinois Administrative Code 1100.605, the soil shall be managed as follows:
- (1) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC but they are still considered within area background levels by the Engineer, the excavated soil can be utilized within the construction limits as fill, when suitable. Such soil excavated for storm sewers can be placed back into the excavated trench as backfill, when suitable, unless trench backfill is specified. If the soils cannot be utilized within the construction limits, they shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.
 - (2) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as “uncontaminated soil” at a CCDD facility or an uncontaminated soil fill operation within an MSA County provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
 - (3) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as “uncontaminated soil” at a CCDD facility or an uncontaminated soil fill operation within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
 - (4) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as “uncontaminated soil” at a CCDD facility or an uncontaminated soil fill operation within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
 - (5) When the Engineer determines soil cannot be managed according to Articles 669.09(a)(1) through (a)(4) above, the soil shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.
- (b) Soil Analytical Results Do Not Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels do not exceed the most stringent MAC, the excavated soil can be utilized within the construction limits or managed and disposed of off-site as “uncontaminated soil” according to Article 202.03. However the excavated soil cannot be taken to a CCDD facility or an uncontaminated soil fill operation for the following reason.
- (1) The pH of the soil is less than 6.25 or greater than 9.0.
 - (2) The soil exhibited elevated photoionization detector (PID) utilizing a lamp of 10.6eV or greater or a flame ionization detector (FID) readings.
- (c) Groundwater. When groundwater analytical results indicate the detected levels are above Appendix B, Table E of 35 Illinois Administrative Code 742, the most stringent Tier 1 Groundwater Remediation Objectives for Groundwater Component of the Groundwater Ingestion Route for Class 1 groundwater, the groundwater shall be managed off-site as a special waste.

All groundwater encountered within lateral trenches may be managed within the trench and

allowed to infiltrate back into the ground. If the groundwater cannot be managed within the trench it must be removed as a special or hazardous waste. The Contractor is prohibited from managing groundwater within the trench by discharging it through any existing or new storm sewer. The Contractor shall install backfill plugs within the area of groundwater contamination.

One backfill plug shall be placed down gradient to the area of groundwater contamination. Backfill plugs shall be installed at intervals not to exceed 50 ft (15 m). Backfill plugs are to be 4 ft (1.2 m) long, measured parallel to the trench, full trench width and depth. Backfill plugs shall not have any fine aggregate bedding or backfill, but shall be entirely cohesive soil or any class of concrete. The Contractor shall provide test data that the material has a permeability of less than 10^{-7} cm/sec according to ASTM D 5084, Method A or per another test method approved by the Engineer.”

Revise Article 669.14 of the Standard Specifications to read:

“669.14 Final Environmental Construction Report. At the end of the project, the Contractor will prepare and submit three copies of the Environmental Construction Report on the activities conducted during the life of the project. The technical report shall include all pertinent information regarding the project including, but not limited to:

- (a) Measures taken to identify, monitor, handle, and dispose of soil or groundwater containing regulated substances, to prevent further migration of regulated substances, and to protect workers,
- (b) Cost of identifying, monitoring, handling, and disposing of soil or groundwater containing regulated substances, the cost of preventing further migration of regulated substances, and the cost for worker protection from the regulated substances. All cost should be in the format of the contract pay items listed in the contract plans (identified by the preliminary environmental site investigation (PESA) site number),
- (c) Plan sheets showing the areas containing the regulated substances,
- (d) Field sampling and testing results used to identify the nature and extent of the regulated substances,
- (e) Waste manifests (identified by the preliminary environmental site investigation (PESA) site number) for special or hazardous waste disposal, and
- (f) Landfill tickets (identified by the preliminary environmental site investigation (PESA) site number) for non-special waste disposal.”

Revise the second paragraph of Article 669.16 of the Standard Specifications to read:

“The transportation and disposal of soil and other materials from an excavation determined to be contaminated will be paid for at the contract unit price per cubic yard (cubic meter) for NON-SPECIAL WASTE DISPOSAL, SPECIAL WASTE DISPOSAL, or HAZARDOUS WASTE DISPOSAL.”

Qualifications. The term environmental firm shall mean an environmental firm with at least five (5) documented leaking underground storage tank (LUST) cleanups or that is pre-qualified in hazardous waste by the Department. Documentation includes but not limited to verifying remediation and special waste operations for sites contaminated with gasoline, diesel, or waste oil in accordance with all Federal, State, or local regulatory requirements and shall be provided to the Engineer for approval. The environmental firm selected shall not be a former or current consultant or have any ties with any of the properties contained within and/or adjacent to this construction project.

General. This Special Provision will likely require the Contractor to subcontract for the execution of certain activities.

All contaminated materials shall be managed as either "uncontaminated soil", non-special waste or special waste. This work shall include monitoring and potential sampling, analytical testing, and management of a material contaminated by regulated substances. The Environmental Firm shall continuously monitor all soil excavation for worker protection and soil contamination. Soil samples or analysis without the approval of the Engineer will be at no additional cost to the Department. The lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit whichever is less.

The Contractor shall manage any excavated soils and sediment within the following areas:

- Station 4102+00 to Station 4106+00 (Hillgrove Avenue) 0 to 50 feet LT
This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Lead.
- Station 10007+00 to Station 10011+00 (Oak Street) 33 feet RT to 33 feet LT
This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09.

BRICK PAVER CROSSWALKS

This work shall consist of constructing BRICK PAVER CROSSWALKS as detailed in the plans and described herein.

MATERIALS

A. Brick Pavers

1. Acceptable Manufacturer:
 - a. Paveloc – (e.g. Holland)
 - b. Unilock – (e.g. Hollandstone)
 - c. Belden Brick Company – (e.g. City Line)
2. Color
 - a. Color shall be selected by Village from a catalog of colors provided by the manufacturer.
3. Traffic Type, application and exposure
 - d. Weather Class SX
 - e. Application PX
 - f. Traffic Type I
4. Laying Pattern
 - 90° Herringbone pattern.

B. Tack Coat

1. Tack coat shall be a 2% neoprene modified asphalt applied at a rate recommended by the manufacturer.

C. Setting Bed

1. Setting bed shall be a blend of 93% (by weight) sand (Grade FA-1) and 7% Asphalt Cement, ASTM D3381, viscosity grade PG 58-22 or PG 64-22.

D. Concrete Underlayment

1. 6 inch concrete underlayment shall be constructed the same as P.C.C. pavement and as shown on the plans except that slabs shall be wet cured, no curing compound shall be used. Reinforcing shall be as shown on the plans.

E. Concrete Band

1. A 1 foot wide concrete band shall be poured monolithically with the concrete underlayment to secure the brick pavers in place. This band shall be constructed has shown on the plans.

F. Extra Materials

1. An additional quantity of the brick pavers equal to 10% of the amount used of each color shall be delivered to a location near the jobsite as directed by the Engineer. This extra material shall be properly secured on a pallet or in another appropriate container. This additional quantity is included in the Engineer's quantity totals.

SUBMITTALS

- A. General: Submit each item in this Article.
- B. Product data for the following:
 1. Brick Pavers
 2. Bituminous Setting Materials
- C. Samples for verification in full-size units of each type of unit paver indicated; in sets for each color, texture, and pattern specified, showing the full range of variations expected in these characteristics.
- D. Qualification data for forms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

QUALITY ASSURANCE

- A. Installer Qualifications: Installer shall be experienced and have completed unit paver installations similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.
- B. Single-Source Responsibility: Obtain each color, type, and variety of unit pavers, joint materials, and setting materials from a single source with resources to provide products and materials of consistent quality in appearance and physical properties without delaying the work.
- C. Mockup: Prior to installing unit pavers, construct mockups for each form and pattern of unit pavers required to verify selections made under sample submittals and to demonstrate aesthetic effects as well as qualities of material and execution. Build mockups to comply with the following requirements, using materials indicated for final unit work.
 1. Locate mockups on-site in the location and of the size indicated or, if not indicated, as directed by Engineer.
 2. Notify Engineer one week in advance of the dates and times when mockups will be constructed.
 3. Demonstrate the proposed range of aesthetic effects and workmanship.
 4. Obtain Engineer's acceptance of mockups before start of work.

5. Retain and Maintain mockups during construction in an undisturbed condition as a standard for judging the completed work.
 - a. When directed, demolish and remove mockups from project site.

DELIVERY, STORAGE AND HANDLING

- A. Protect unit pavers and aggregate during storage and construction against soilage or contamination from earth and other materials.
 1. Wrap pavers in plastic or use other packaging materials that will prevent rust marks from steel strapping.
- B. Protect asphalt cement and other bituminous materials from moisture and heat. Keep containers tightly closed and away from open flames.

PROJECT CONDITIONS

- A. Cold-Weather Protection: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit paver work damaged by frost or freezing.
- B. Weather Limitations for Bituminous Setting Bed: Comply with the following requirements:
 1. Apply asphalt primer coat when ambient temperature is above 50 deg. F (10 deg. C) and when temperature has not been below 35 deg. F (2 deg. C) for 12 hours immediately prior to application. Do not apply when base is wet or contains an excess of moisture.
 2. Install bituminous setting bed only when atmospheric temperature is above 40 deg. F (4 deg. C) and when base is dry.

INSTALLATION

- A. Examination
 1. Examine surfaces indicated to receive paving, with Installer present for compliance with requirements for installation tolerances and other conditions affecting performance of unit pavers. Do not proceed with installation until unsatisfactory conditions have been corrected.
- B. Preparation
 1. Vacuum clean concrete substrates to remove dirt, dust, debris, and loose particles.
 2. Remove substances from concrete substrates that could impair mortar bond, including curing and sealing compounds, form oil, and laitance.
- C. Installation, General
 1. Do not use unit pavers with chips, cracks, voids, discolorations, and other defects that might be visible or cause staining in finished work.
 2. Mix pavers from several pallets or cubes as they are placed to produce uniform blend of colors and textures.
 3. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable.
 4. Joint Pattern: Match field-constructed mockup.
 5. Tolerances: Do not exceed 1/32 inch (0.8 mm) unit-to-unit offset from flush (lippage) not 1/8 inch in 10 feet (3 mm in 3 m) from level, or indicated slope, for finished surface of paving.
 6. Spaces between pavers shall be 1/16 inch minimum and 1/8 inch maximum.

D. Setting-Bed Applications

1. Apply tack coat to concrete slab or binder course.
2. Setting bed material shall be delivered at a minimum temperature of 300° F.
3. Prepare for setting-bedplacement by locating ¾ inch (19 mm) deep control bars approximately 11 feet (3.3 m) apart and parallel to one another, to serve as guides for striking board. Adjust bars to subgrades required for accurate setting of paving units to finished grades indicated.
4. Place bituminous setting bed where indicated, in panels, by spreading bituminous material between control bars. Strike bed smooth, firm, even, and not less than ¾ inch (19 mm) thick using a 12 foot (3.7 m) long, 1 ½ by 5 ½ inch (38 by 140 mm) board. Add fresh bituminous material to low, porous spots after each pass of striking board. After each panel is completed, advance first control bar to next position in readiness for striking adjacent panels. Carefully fill depressions that remain after removing depth control bars.
 - a. Roll setting bed with power roller to a nominal depth of ¾ inch (19 mm) while still hot. Adjust thickness as necessary to allow accurate setting of unit pavers to finished grades indicated.
 - b. Apply neoprene-modified asphalt adhesive to cold setting bed by squeegeeing or troweling. If troweled on, use trowel with serrations not exceeding 1/16 inch (1.6 mm). Do not proceed with setting of paving units until adhesive is dry to the touch.
5. Place pavers carefully by hand in straight courses, maintaining accurate alignment and uniform top surface. Protect newly laid pavers with plywood panels on which workers stand. Advance protective panels as work progresses but maintain protection in areas subject to continued movement of materials and equipment to avoid creating depressions or disrupting alignment of pavers. If additional leveling of paving is required, and before treating joints, roll with power roller.
6. Joint Treatment: Place unit pavers with hand-tight joints. Fill joints with sand by sweeping sand over paved surface until joints are filled. Consolidate sand with several passes of a vibrating plate and repeat filling and vibrating if necessary. Follow by fogging lightly with water.

E. Repair, Cleaning, and Protection

1. Remove and replace unit pavers that are loose, chipped, broken, stained, or otherwise damaged or if units do not match adjoining units as intended. Provide new units to match adjoining units and install in same manner as original units, with same joint treatment to eliminate evidence of replacement.
2. Provide final protection and maintain conditions in a manner acceptable to Installer that ensures that unit paver work is without damage or deterioration at the time of Substantial Completion.

Method of Measurement: BRICK PAVER CROSSWALK shall be measured in place in square foot of crosswalk installed. The concrete paver band shall be included in the measurement and will not be paid for separately.

Basis of Payment: This work will be paid for at the contract unit price per square foot for BRICK PAVER CROSSWALKS. This unit price shall include the pavers, tack coat, setting bed, concrete underlayment, epoxy coated reinforcement bars, concrete band, and all labor, materials and equipment required to construct the BRICK PAVER CROSSWALKS as shown in the plans and specified herein. This price shall be considered payment in full for this work.

RELOCATE BOLLARDS

This work shall consist of the removal and relocation of existing ground mounted collapsible bollards located at the Hospital emergency vehicle entrance. The bollards are to be removed with care from the existing concrete sidewalk and stored off site. Should the existing bollard be damaged in any way during removal, the bollard must be replaced in kind at no additional cost.

Upon completion of the new entrance, the bollards shall be bolted directly into the pavement utilizing new galvanized anchor bolts according to the locations shown on the plans.

Method of Measurement: RELOCATE BOLLARDS shall be measured in place in per each bollard removed and relocated. The removal and storage of the bollard during construction shall be considered included in the cost of the item.

Basis of Payment: This work will be paid for at the contract unit price per each for RELOCATE BOLLARDS. This unit price shall include all hardware, equipment, labor, and materials necessary.

LIGHTING UNIT COMPLETE

This work shall consist of furnishing and installing 60 watt and 120 watt LED luminaires as manufactured by Spring City on 10' and 16' decorative poles, respectively, as manufactured by Valmont Industries, Inc.

LIGHTING UNIT COMPLETE – TY. F1 shall consist of post mounting the 60 watt luminaire (Catalog No. ALMEDM-LE060/EVX/X2 (EDGEWATER LED)) at 10' on a Valmont street light pole, Catalog # HN17AS10049604B. The pole shall have a two piece decorative Huntington base as manufactured by Valmont. The luminaires shall have a black powder coat finish to match the light pole and decorative base.

LIGHTING UNIT COMPLETE – TY. F2 shall consist of post mounting the 120 watt luminaire (Catalog No. ALMEDM-LE120/EVX/X2 (EDGEWATER LED)) at 16' on a Valmont street light pole, Catalog # HN17AS10049604B. The pole shall have a two piece decorative Huntington base as manufactured by Valmont. The luminaires shall have a black powder coat finish to match the light pole and decorative base.

Steel Shaft:

The Pole shaft conforms to ASTM A595 Grade A or A572 Grade 55 with a constant linear taper of 0.14 in/ft. The tapered shafts are cold rolled over a precision hardened steel mandrel to form the desired 16 sharp flute shape. The flutes are uniform and equally spaced throughout the process. The termination of the flutes is no greater than 1.50" radii transition into the round section of the shaft. The results of this fluting process are flutes with architecturally pleasing radiused terminations and crisp uniform flutes. Flutes start and stop to ensure anchor base connection fit a smooth round diameter and provides mounting of side-mount luminaire arm assemblies. Flute start and stop locations should be specified to accommodate the decorative base connection point. The anchor base (base plate) conforms to ASTM A36. The Anchor bolts shall conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an "L" bend on one end and are galvanized a minimum of 12" on the threaded end. The bolt circle shall be 10" – 13" with a 17" outside diameter base plate. The anchor bolts shall be 3/4"x 17" and shall conform to AASHTO 2013 standards.

Finish – The steel poles and arms shall be galvanized and powder coated using Valmont's V-PROTM Protection System.

POWDER COATING

General - The specified powder coat finish consists of a Progressive Epoxy Technology (PET) primer with Polyester Urethane, TGIC (Triglycidyl Isocyanurate) Polyester or Super Durable Powder1 top coat.

Prime Coat - All exterior surfaces are coated with a PET primer powder to a minimum dry film thickness (DFT) of 3.0 mils, with the bottom 8' of the pole shaft having a minimum dry film thickness (DFT) of 5.0 mils. The prime coat must be energy absorptive, chip resistant and capable of achieving a rating of 10A under testing per ASTM Procedure D3170 which is based on the SAE J400 test. The PET powder is electrostatically applied and partially cured in a gas fired convection oven.

Top Coat - The primed surface is coated with Polyester Urethane, TGIC (Triglycidyl Isocyanurate)

Polyester or Super Durable Powder top coat to a minimum dry film thickness (DFT) of 3.0 mils. The top coat powder is electrostatically applied and cured in a gas fired convection oven. Thermosetting powder resin provides both intercoat as well as substrate adhesion that meets 5A or 5B classifications of ASTM D3359.

Packaging - Prior to shipment, small poles are wrapped in a protective polypropylene woven material, laminated to 3/32" microfoam. Larger poles are protected at dunnage points on the truck or trailer.

Luminaire

The Edgewater Style Luminaire shall be Spring City Electrical Manufacturing Company. Luminaire housings shall be of cast aluminum ANSI 356 per ASTM B26-95. The luminaire shall be octagonal in shape and assembled by mechanically fastening the dome to the driver housing. The decorative dome casting, shall utilize the COOLCAST Technology. The decorative roof casting shall utilize the COOLCAST Technology and must provide over 400 square inches of casting to outside air. Please refer to Spring City Drawing No. S102617. The luminaire shall have a ten year warranty and shall allow for simple LED upgrades if needed.

Electrical System:

Each luminaire to be furnished with (1) internally mounted 60 or 120-watt driver for operation at 120, 208, 240, 277 volt. The drivers shall produce a constant current at 350 mA. The LED light engine shall consist of (108) Cree XTE 1-watt LED's. The driver assembly shall be removed and installed using (3) stainless steel fasteners.

Optical System:

The luminaire shall use high output, high brightness XTE LED's manufacture by Cree.

The LEDs shall be mounted on printed aluminum circuit boards with a thermal interface material to maximize heat transfer to the heat sink surface. The junction temperature shall remain under 75 degrees Celsius assuming a 25 degree ambient temperature.

The LED circuit board shall utilize a conformal coating to protect the electrical system. The LED life rating data shall be determined in accordance with Illuminating Engineering Society of North America (IESNA) Lumen Maintenance (LM)-80-08.

The LED Light engine shall produce a 4000K-color temperature, and maintain a junction temperature below 75 degree Celsius to ensure lumen maintenance of 70% at no less than 75,000 hours. TM-21 results shall be provided at the owner's request.

The optical section of the luminaire shall consist of a six-piece clear Acrylic lens and (2) 54-cavity injection molded CROSSFIRE Optical System utilizing free form refractive optics.

The globe ring shall nest into the optical housing by an integrally cast aluminum hinge. The ring shall be secured using (1) stainless steel wire latch. The luminaire's optical assembly shall be attached to the globe ring using (4) 11 gauge formed stainless steel wire.

The distribution of the luminaire shall be Type III per ANSI/IESNA RP-8-00, with the LED light engines mounted on the vertical cast pads in the roof. The CROSSFIRE Optics shall be positioned so the maximum vertical angle falls between 62.5 degrees and 67.5 degrees. The maximum horizontal angles shall fall between 65 degrees and 75 degrees to ensure proper roadway illumination. The photometric results must be performed to LM-79 requirements by a DOE recognized and approved testing facility.

Method of Measurement: LIGHTING UNIT COMPLETE of the type specified shall be measured in place per each complete lighting unit installed.

Basis of Payment: This item will be paid for at the contract unit price per each for LIGHTING UNIT COMPLETE of the type specified. This unit price shall include all hardware, equipment, labor, and

materials necessary for the proposed light and foundation.

ARCHITECTURAL CAP, METAL

Description: This work shall consist of fabricating, furnishing, transporting, painting, and placing architectural cap, metal as specified herein, as shown on the plans, and as directed by the Owner's Representative. Work shall include preparation of shop drawings, fabrication, placement, all anchoring hardware, mortar, caulk, painting and cleanup necessary for construction of the ornamental metal fence.

Submittals: Prior to fabrication, prepare and submit shop drawings for all caps based on field measurements. Shop drawing submittals shall include individual descriptions, dimensions and materials for the architectural metal, cap. Include details showing typical cross sections, elevations, corners, connections, and any other special conditions.

Submit manufacturer's literature, certificates and color samples of finish material to the Owner's Representative for review and approval prior to fabrication.

Materials: All cap framework materials to be schedule 40 aluminum tube unless otherwise indicated on the plans. Cap roof to be constructed of stand-alone aluminum metal panels matching the look and finish of the Highland Station Shelters. Provide hip and ridge caps and drip edges.

Finish: Finish and color to match roof finish of Highland Metra Station Shelter (brown), as selected by the Owner's Representative from the fabricator's full range of color options.

Grout: K-3 Epoxy Grout, manufactured by Gantrex, (800) 242-6873 or equal as approved by Owner's Representative.

Fabrication: Prior to fabrication, prepare and submit shop drawings based on field measurements. Fabricate architectural cap, metal based on the approved shop drawings including frame, roof panels, ridge and hip caps, and drip edges. All connections to be welded or mechanical fixed, unless otherwise indicated on the plans and approved shop drawings.

Following fabrication, clean and apply finish as follows:

Surface Preparation:

Clean surfaces according to SSPC-SP 5/NACE No. 1, "White Metal Blast Cleaning."

After cleaning, apply a conversion coating suited to the organic coating to be applied over it.

Powder Coating:

2-coat finish consisting of epoxy primer and TGIC polyester topcoat, with a minimum total dry film thickness of not less than 8 mils.

Construction Requirements: Dimensions to be as shown on the plans and approved shop drawings.

Set caps accurately in location, alignment, and elevation as shown on the plans. Set plumb within a tolerance of 1/16 inch in 3 feet.

Anchor architectural metal caps to concrete core and stone veneer mechanically with fasteners appropriately sized to secure in place.

Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop painting.

Method of Measurement: The contract unit price for Architectural Cap, Metal shall include preparation of shop drawings, fabricating, furnishing, transporting, painting, placing and attaching the fencing including

all materials, labor, and equipment required to complete this work.

Basis of Payment: This work shall be paid for at the contract unit price per each for ARCHITECTURAL CAP, METAL and no additional compensation will be allowed.

ARCHITECTURAL CAP, CONCRETE

Description: This work shall consist of fabricating, furnishing, transporting, and placing precast architectural concrete as specified herein, as shown on the plans, and as directed by the Owner's Representative. Work shall include preparation of shop drawings, fabrication, placement, mortar, anchoring, caulk, and cleanup necessary for construction of precast architectural concrete.

Materials: Precast architectural concrete shall be 5,000 PSI concrete with 6%-8% air entrainment, limestone type finish as indicated in plans. Color to be buff, as selected from manufacturer's standard colors to be approved by Owner's Representative prior to fabrication. Dimensions are to be as shown on the plans.

Provide Type S mortar suitable for exterior precast architectural concrete work. Submit mortar manufacturer's product data to Owner's Representative for approval prior to ordering. Owner's Representative to select mortar color from manufacturer's full range of color options.

Provide metal flashing suitable for precast to keep moisture from penetrating the concrete core. Flashing shall be constructed of stainless steel per dimensions as shown on the plans.

Provide caulk and backer rod suitable for exterior precast architectural concrete work. Submit manufacturer's product data to Owner's Representative for approval prior to ordering. Owner's Representative to select caulk color from manufacturer's full range of color options.

Provide stainless steel attachment anchors as recommended by the fabricator or as shown on the plans.

Fabrication: Prior to fabrication, prepare and submit shop drawings for each type of precast architectural concrete based on field measurements. Fabricator is to be a qualified company that assumes responsibility for engineering precast architectural concrete units to comply with the required performance requirements.

Fabricate precast architectural concrete units straight and true to size and shape as shown on the plans.

Provide reinforcement to resist handling, transportation, and erection stresses and cast-in anchorage hardware as required for applications as shown on the plans.

Place concrete in a continuous operation to prevent seams or planes of weakness from forming in precast concrete units. Thoroughly consolidate placed concrete by internal and external vibration without dislocating or damaging reinforcement and built-in items, and minimize pour lines, honeycombing, or entrapped air on surfaces.

Cure concrete by moisture retention without heat, or by accelerated heat curing using low-pressure live steam, or radiant heat and moisture. Cure units until compressive strength is high enough to ensure that stripping does not have an effect on performance or appearance of final product.

Construction Requirements: Erect precast architectural concrete level, plumb, and square within specified allowable tolerances. Provide temporary supports and bracing as required to maintain position, stability, and alignment as units are being permanently connected. Maintain horizontal and vertical joint alignment and uniform joint width as erection progresses. Unless otherwise indicated, provide for uniform joint widths of 3/4 inch.

Connect precast architectural concrete units in position by grouting or as otherwise indicated on shop

drawings. Remove temporary shims, wedges, and spacers as soon as practical after connecting and grouting are completed.

Grout connections where required or indicated. Retain grout in place until hard enough to support itself. Pack spaces with stiff grout material, tamping until voids are completely filled. Place grout to finish smooth, level, and plumb with adjacent concrete surfaces. Keep grouted joints damp for not less than 24 hours after initial set. Promptly remove grout material from exposed surfaces before it affects finishes or hardens.

Install backer rod and caulk joints as shown on plans.

Measurement: The contract unit price for precast architectural concrete shall include preparation of shop drawings, fabrication, placement, mortar, anchoring, caulk, cleanup, and all other materials, labor, and equipment required to complete this work.

Basis of Payment: This work shall be paid for at the contract unit price per each for ARCHITECTURAL CAP, CONCRETE, and no additional compensation will be allowed.

ARTICULATED BLOCK REVETMENT MAT (SPECIAL)

This work shall consist of furnishing and placing articulated block revetment mat in accordance with all applicable articles of Section 285 of the Standard Specifications except that the mat configuration, mat color and backfill material and color shall be as specified on the plans and shall include a sample submittal for approval by the Owner and the Engineer. If no color is specified, then a brownish-red shall be used for the sample submittal.

The backfill material shall be included in the unit price for ARTICULATED BLOCK REVETMENT MAT, (SPECIAL).

Basis of Payment: This work will be paid for at the contract unit price per square yards for ARTICULATED BLOCK REVETMENT MAT, (SPECIAL) regardless of type, which price shall include all excavation and backfilling. Removal of unsuitable materials, if encountered, will be addressed per 109.04 if in excess of the plan listed quantities.

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 journeyworker 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.

**ROADWAY GEOTECHNICAL REPORT
OAK STREET ROADWAY RECONSTRUCTION
STATION 10004+25 to STATION 10015+45
FAU 2999, SECTION 10-00089-00-BR
HINSDALE, DuPAGE COUNTY, ILLINOIS**

for

HR Green, Inc.

420 North Front Street, Suite 100

McHenry, IL 60050

(815) 759-8316

submitted by

Wang Engineering, Inc.

1145 North Main Street

Lombard, IL 60148

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October 10, 2014

Technical Report Documentation Page

1. Title and Subtitle Roadway Geotechnical Report, Oak Street Roadway Reconstruction Station 10004+25 to Station 10015+45		2. Report Date October 10, 2014
		3. Report Type <input type="checkbox"/> SGR <input checked="" type="checkbox"/> RGR <input checked="" type="checkbox"/> Draft <input type="checkbox"/> Final <input type="checkbox"/> Revised
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6. PTB / Item No. NA	7. Existing Structure Number(s) NA	8. Proposed Structure Number(s) NA
9. Prepared by Wang Engineering, Inc. 1145 N Main Street Lombard, IL 60148	Contributor(s) Author: Cornelia Marin Project Manager: Mickey Snider, P.E. QA/QC: Corina Farez, PE, PG	Contact Phone Number (630) 953-9928 x 1027 MSnider@wangeng.com
10. Prepared for HR Green, Inc. 420 N Front Str, Ste 100 McHenry, IL 60050	Project Manager Robert Davies, P.E., S.E.	Contact Phone Number (815) 759-8316
11. Abstract		
<p>In association with the reconstruction of the Oak Street Bridge over the BNSF Railroad, a series of roadway improvements are proposed. Oak Street will be reconstructed from Station 10004+25 to Station 10015+45 with a maximum grade increase adjacent to the bridge of about 8 feet; Chicago Avenue will be reconstructed from Station 2005+00 to Station 2008+90; Hillgrove Avenue will be widened to accommodate parking and reconstructed to include a cul-de-sac from Station 4100+04 to Station 4106+00; and the emergency entrance ramp to Adventist Hospital west of Oak Street will be raised by about 6 feet to meet the proposed grade change along the north Oak Street Bridge approach.</p> <p>The subgrade soils include about 6 feet of medium stiff to very stiff clay loam fill immediately beneath an average of 7 inches of asphalt pavement. The fill overlies stiff to hard silty clay to silty clay loam diamicton that extends to the termination depths of the subgrade soil borings. These subgrade soils will provide a good working platform for construction. We recommend designing the roadway pavement for an average SSR value of POOR or an IBR value of 3.</p> <p>Off the roadway, the borings encountered up to 7 inches of topsoil, which should be stripped away prior to placement of fill or embankment. Where new embankment fill is to be placed over existing roadways, the existing asphalt pavement should be removed or broken into pieces no larger than 3-feet by 3-feet in accordance with IDOT policy.</p> <p>Temporary drainage ditches should be constructed to maintained positive drainage during construction. We do not anticipate long-term settlement under the new embankment loads; the proposed slopes will be stable.</p> <p>The proposed exposed subgrade should be proofrolled. Areas identified as unstable during the course of construction should include a removal of up to 12 inches of material and replacement with aggregate in accordance with the IDOT District One Special Provision for <i>Aggregate Subgrade Improvement</i>.</p>		
12. Path to archived file		
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TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	GEOLOGIC SETTING.....	2
2.1	PHYSIOGRAPHY	2
2.2	SURFICIAL COVER	2
2.3	BEDROCK.....	3
2.4	CLIMATE DATA.....	3
3.0	METHODS OF INVESTIGATION	5
3.1	SUBSURFACE INVESTIGATION	5
3.2	LABORATORY TESTING.....	6
4.0	RESULTS OF FIELD AND LABORATORY INVESTIGATIONS.....	6
4.1	SURFACE CONDITIONS	6
4.2	SOIL CONDITIONS	7
4.3	GROUNDWATER CONDITIONS.....	7
5.0	ENGINEERING ANALYSIS AND RECOMMENDATIONS	7
5.1	SITE PREPARATION AND TREATMENT	8
5.2	SUBGRADE SUPPORT RATING	9
5.3	ROADWAY DRAINAGE	9
5.4	EMBANKMENT SETTLEMENT AND STABILITY	9
6.0	CONSTRUCTION CONSIDERATIONS.....	9
6.1	EXCAVATION AND DEWATERING	9
6.2	FILLING AND BACKFILLING.....	10
6.3	EARTHWORK OPERATIONS.....	10
7.0	QUALIFICATIONS	10
	REFERENCES	12
	EXHIBITS	
	1. Site Location Map	
	2. Site and Regional Geology	
	3. IDH Textural Classification Chart	
	4. Subgrade Support Rating Chart	

APPENDIX A

Boring Logs

APPENDIX B

IDOT BMPR 507A and 508A Forms

APPENDIX C

Laboratory and Field Test Results

APPENDIX D

Soil Boring Location Plans and Soil Profiles

**ROADWAY GEOTECHNICAL REPORT
OAK STREET ROADWAY RECONSTRUCTION
STATION 10004+25 TO STATION 10015+45
FAU 2999, SECTION 10-00089-00-BR
HINSDALE, DuPAGE COUNTY, ILLINOIS
FOR
HR GREEN, INC.**

1.0 INTRODUCTION

This report presents the results of our geotechnical subsurface investigation, laboratory testing, and engineering analyses and evaluations for the reconstruction of roadways associated with the replacement of the Oak Street Bridge over the Burlington Northern and Santa Fe (BNSF) Railroad in Hinsdale, DuPage County, Illinois. A *Site Location Map* is presented as Exhibit 1.

Roadway design drawings provided by HR Green, Inc. indicate the roadway improvements will involve the widening, reconstruction, and/or resurfacing of the following roadways:

- Oak Street will be reconstructed from Station 10004+25.00 to Station 10015+45.00;
- Chicago Avenue will be reconstructed from Station 2005+00.00 to Station 2008+90.00;
- Hillgrove Avenue will be resurfaced from Station 4100+04.00 to Station 8003+87.36 and a cul-de-sac will be constructed at the existing intersection with Oak Street; and
- The emergency vehicle ramp and sidewalks leading to Adventist Hospital will be reconstructed due to the proposed grade changes along Oak Street.

Along Oak Street, the existing profile grade will be kept to within about a foot between the beginning of the improvement at Station 10004+25 to Station 10006+50. The roadway grade will then be raised up to a maximum of 8 feet at the south bridge approach. The grade change at the north bridge approach is a maximum of about 6 feet, wherein the grade slopes back to the existing by Station 10011+80. The emergency vehicle entrance to the hospital intersects Oak Street at Station 10010+25 and will require a grade increase to the west of 4 feet along the roadway and 6 feet along the adjoining sidewalk. Along Chicago Avenue, to the south of the bridge, the maximum grade change is about 2 to 3 feet immediately east of the intersection. The existing grade along Hillgrove Avenue, which runs as a

frontage to the rail line, will be kept; however, the intersection with Oak Street will be eliminated and a cul-de-sac will be constructed approximately 100 feet east of the intersection.

The purpose of the investigation was to characterize the site soil and groundwater conditions and provide geotechnical analyses and recommendations for the design and construction of the proposed embankments and pavements.

2.0 SITE AND REGIONAL GEOLOGY

The project area is located in the Village of Hinsdale, DuPage County, Illinois. On the USGS *Hinsdale Quadrangle 7.5 Minute Series* map, the site is located in the SE $\frac{1}{4}$ of Section 1 and NE $\frac{1}{4}$ of Section 12, Tier 38 N, Range 11 E of the Third Principal Meridian.

The following review of the published geologic data, with emphasis on factors that might influence the design and construction of the proposed engineering works, is meant to place the project area within a geological framework and confirm the dependability and consistency of the subsurface investigation results. For the study of the regional geological framework, Wang considered the eastern Illinois area in general and DuPage County in particular. Exhibit 2 presents the *Site and Regional Geology*.

2.1 Physiography

Southeastern DuPage County is part of the Wheaton Morainal Country within the Till Plains Physiographic Section (Leighton et al. 1948). This section is characterized by morainic topography with elongated hills, mounds, basins, sags and valleys as a result of numerous advances and retreats of ice sheets (Willman and Linebach 1970). The project site is located at the west limit of the north to south trending lowland intermorainic section between Clarendon and Tinley Moraines, on the Clarendon inner end moraine slope. Oak Street runs along an elongated north south trending mound ridge and the railroad cuts transversely through it. The Salt Creek Valley drainageway crosses the Tinley Moraine approximately one mile north of the project site. The site elevations vary from as low as 675 feet to the crown of the bridge at just over 700 feet.

2.2 Surficial Cover

The surficial cover is mainly the result of Wisconsin-age glacial activity (Hansel and Johnson, 1996). The glacial deposits were emplaced during pulsating advances and retreats of an icesheet lobe responsible for the formation of end moraines and associated low-relief till and lake plains. Many

kames are scattered throughout the lowland between the two moraines. The drift consists of silty clayey diamicton associated with the Wadsworth Formation, intercalated with lenses and layers of sorted sands and gravels outwash deposits of the Henry Formation overlying thick deposits of loamy diamictons the Lemont Formation. Multiple advances and retreats of the ice front account for the layers in the moraine (Hansel and Johnson 1996). The drift thickness along the project alignment is approximately 60 feet (Bretz 1939, Willman 1971)

2.3 Bedrock

The surficial cover rests unconformably on top of Silurian-age dolostone. In the project area the bedrock was encountered at elevations varying between 630 to 634 feet, or 59 to 64 feet below ground surface (bgs). No underground mines are known in the area.

Our subsurface investigation results fit into the local geologic context. The soil borings reveal the native sediments consist of silty clay diamicton of Wadsworth Formation, interbeds of sand to gravelly sand of Henry Formation, underlain by silty loam and silty clay loam diamicton of Lemont Formation. Structure borings drilled for the bridge over BNSF Railroad encountered dolostone bedrock.

2.4 Climate Data

The subsurface investigation was performed in May 2014. To assess the possible effects of temperature and precipitation on water table data and soil moisture, the climatic conditions for the investigation period and three months prior to the start of the investigation are summarized graphically in Figures 1 and 2. The precipitation and temperature data for the investigation period are compared against thirty-year monthly data (1981 to 2010) in box-and-whiskers format to show deviations from average climate conditions during the current investigation. Local climatologic data were obtained from the O'Hare Station (NCDC 2014).

Figure 1: Monthly Precipitation Data

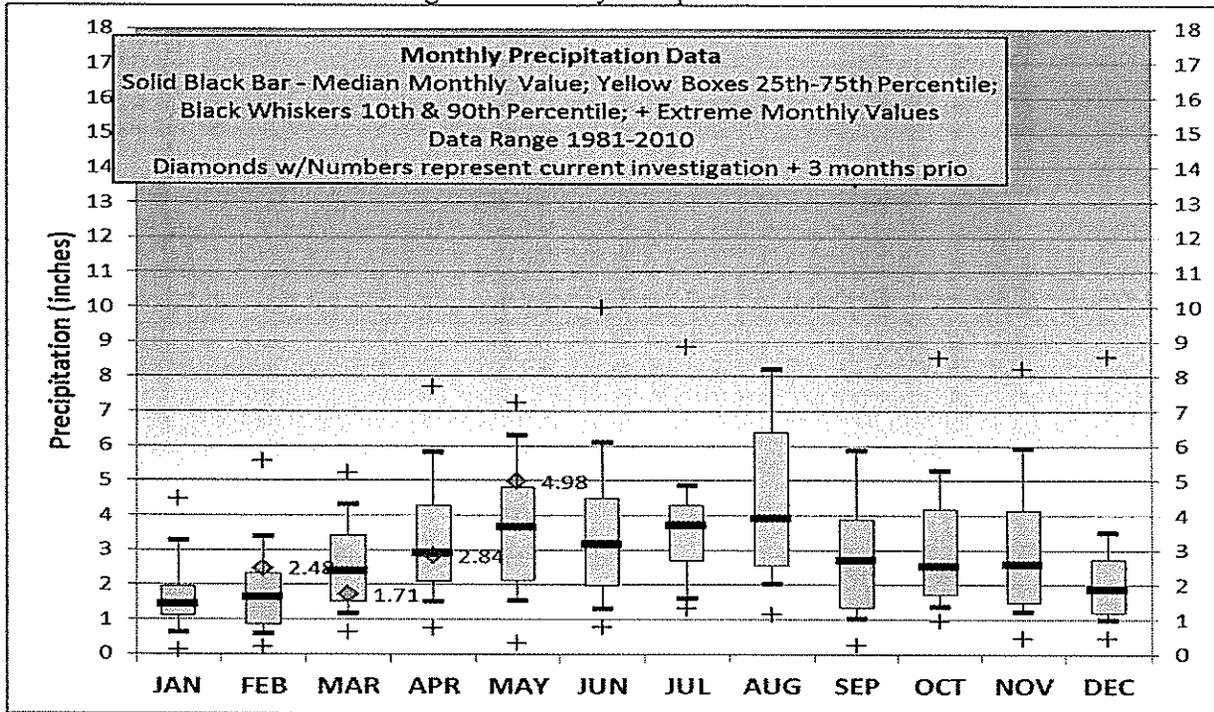
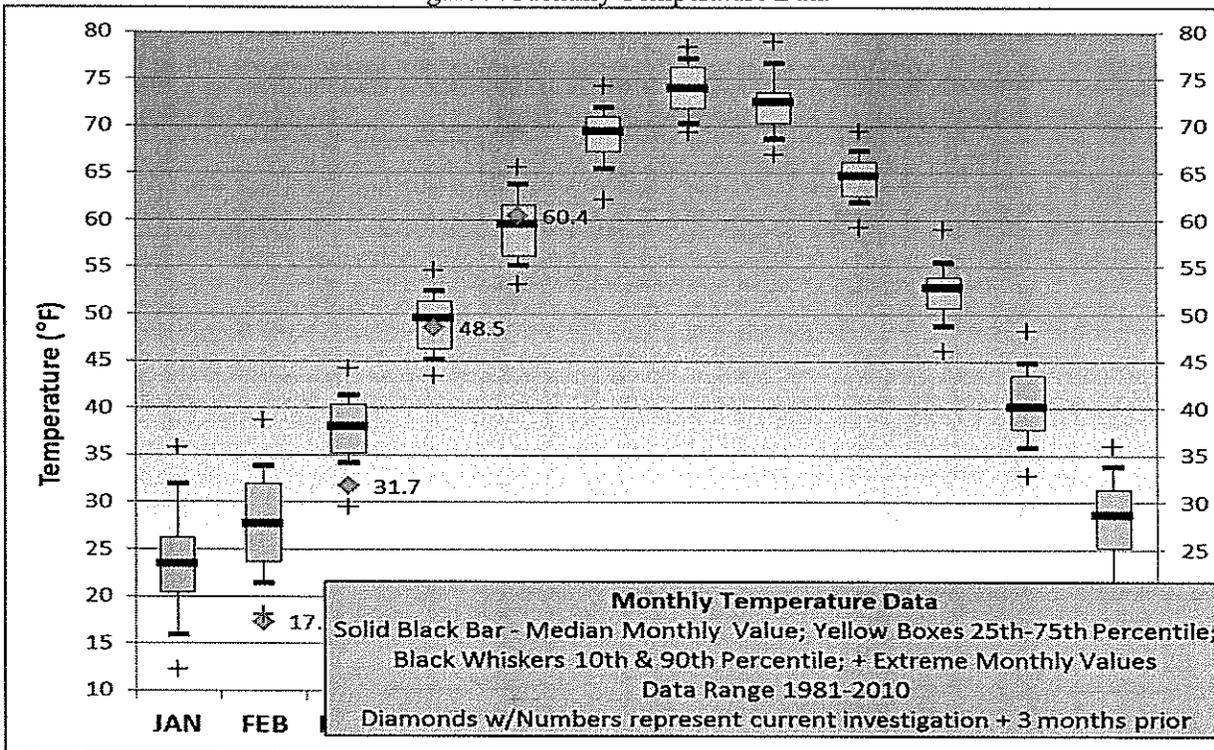


Figure 2: Monthly Temperature Data



The deviations from the historical 30-year climate data show a relatively wet period with average temperatures during the investigation period. Precipitations were below median prior to the beginning of the investigation. No significant effects on moisture content and water table data were identified during the course of the investigation.

3.0 METHODS OF INVESTIGATION

3.1 Subsurface Investigation

The subsurface investigation includes six soil borings, designated as RB-01 through RB-06, drilled by Wang in May, 2014 and three structure borings, designated as BB-01, BB-4A, and RWB-01, drilled in 2012. The roadway borings were drilled from elevations of 465 to 495 feet to depths of 10 to 12 feet bgs. The structure borings were drilled to depths of 35 to 74 feet bgs. A summary of the boring designations, existing ground surface elevations, and boring termination depths is presented in Table 1. Northing, easting, and elevation coordinates were surveyed by Wang with a mapping-grade GPS unit. Stations and offsets were obtained from design drawings provided by HR Green. The boring locations are shown in the *Boring Logs* (Appendix A) and in the *Soil Boring Location Plans and Soil Profiles* (Appendix D).

Table 1: Boring Investigation Summary

Alignment	Alignment Stations	Reference Borings	Surface Elevations (feet)	Boring Depths (feet)
Oak Street	10004+25 to	RB-01, RB-02, RB-03, RB-06,	681.8 to	9.5 to
	10015+45	BB-01, BB-4A, and RWB-01	694.8	74.0
Chicago Avenue	2005+00 to 2008+90	RB-06	681.8	11
Hillgrove Avenue	4100+04 to 4106+00	RB-04 and RB-05	664.9 to 687.9	11 to 12

Truck- and ATV-mounted drilling rigs, equipped with hollow stem augers, were used to advance and maintain an open borehole. Soil sampling was performed according to AASHTO T 206, "Penetration Test and Split Barrel Sampling of Soils." Access restrictions required Boring RB-01 to

be advanced with a hand-operated, pneumatically-advanced Geoprobe sampling system. The soils were continuously sampled to the termination depth in the roadway borings and at 2.5-foot intervals in the structure borings. Samples collected from each interval were placed in sealed jars for further examination and laboratory testing.

Field boring logs, prepared and maintained by a Wang geologist, include lithological descriptions, visual-manual soil classifications (IDH Soil Classification System), results of Rimac and pocket penetrometer unconfined compressive strength tests, and results of Standard Penetration Tests (SPT), recorded as blows per 6 inches of penetration.

Groundwater observations were made in each boring during and at the completion of drilling operations. The borings were backfilled with bentonite after completion, and the pavement was restored to its original condition.

3.2 Laboratory Testing

The soil samples were tested in the laboratory for moisture content (AASHTO T-265). Atterberg limits (AASHTO T 89/T 90) and particle size (AASHTO T 88) analyses were performed to classify selected samples. Field visual descriptions of the soil samples were verified in the laboratory. The soils were classified according to the IDH Soil Classification System and an *IDH Classification Chart* for the roadway subgrade soils is attached as Exhibit 3. Laboratory test results are shown in the *Boring Logs* (Appendix A), in IDOT Forms BMPR 507A and 508A (Appendix B), and in the *Laboratory Test Results* (Appendix C).

4.0 RESULTS OF FIELD AND LABORATORY INVESTIGATIONS

Detailed descriptions of the soil conditions encountered during the subsurface investigation are presented in the attached boring logs (Appendix A) and in the *Soil Boring Location Plans and Soil Profiles* (Appendix D). Please note that strata contact lines represent approximate boundaries between soil types. The actual transition between soil types in the field may be gradual in horizontal and vertical directions.

4.1 Surface Conditions

The existing pavement structure along Oak Street includes of 3 to 7 inches of asphalt pavement. Boring RB-06 along Chicago Avenue revealed 8 inches of asphalt pavement and Borings RB-04 and RB-05

along Hillgrove Avenue encountered 8 to 9.5 inches of asphalt. The asphalt pavement is placed over aggregate base or directly on the cohesive subgrade. Borings RB-01 and RWB-01 were drilled off the roadway and encountered 5 to 7 inches of black silty clay loam to clay loam topsoil.

4.2 Soil Conditions

Beneath topsoil or pavement, within the top ten feet, borings revealed in descending order, the following general lithologic succession: 1) man-made ground; and 2) stiff to hard silty clay to silty clay loam;

1) *Man-made ground (fill)*

Beneath the surface condition, the borings encountered up to 5.5 feet of medium stiff to very stiff, brown clay loam to silty clay loam fill. The fill has unconfined compressive strength (Q_u) values of 0.5 to 3.5 tsf and moisture content values of 16 to 29%. Laboratory index testing on a sample from this layer shows a liquid limit (L_L) value of 30% and a plastic limit (P_L) value of 17%.

2) *Stiff to hard silty clay and silty clay loam*

At elevations of 663 to 694 feet, depending on the location along the alignment, the borings advanced through stiff to hard, brown and gray silty clay and silty clay loam diamicton. This material has Q_u values of 1.5 to more than 4.5 tsf and moisture content values of 14 to 24%. Laboratory index tests show a L_L value of 39% and a P_L value of 19%. Interbedded granular deposits of loose to medium dense, loam, sand, and gravelly sand were identified within the silty clay and silty clay loam.

4.3 Groundwater Conditions

Groundwater was encountered while drilling only in Borings BB-4A at an elevation of 676 feet (18.0 feet bgs) associated with loose, gravelly sand. Groundwater was measured at the end of drilling at an elevation of 664 feet (30.0 feet bgs). For the purposed of the roadway work, the groundwater is deep seated and will not be a factor in the design or construction.

5.0 ENGINEERING ANALYSIS AND RECOMMENDATIONS

Based on roadway design drawings provided by HR Green, the existing roadways will improved by various reconstructions and/or resurfacings on each side of the Oak Street Bridge over BNSF Railroad. The proposed improvements include the following:

- Oak Street will be reconstructed between Stations 10004+25.00 and 10015+45.00 along the existing alignment. The profile grade will be adjusted by a maximum of about 8 feet;
- Chicago Avenue will be reconstructed between Stations 2005+00.00 to 2008+90.00 along the existing alignment at within 1 or 2 feet of the existing profile grade;
- Hillgrove Avenue will be reconstructed between Stations 4100+04.00 and 4106+00.00 along the existing alignment. The new roadway will be widened to accommodate parking on both sides and the intersection with Oak Street will be closed by the construction of a cul-de-sac;
- The emergency vehicle ramp and associated sidewalk will be reconstructed and between Stations 21+50.00 and 22+50.00 to meet Oak Street at the higher proposed profile grade;

5.1 Site Preparation and Treatment

Vegetation and surface topsoil should be cleared and stripped from roadway construction areas and where embankment fills are to be placed. In the areas where embankment fill will be placed over existing asphalt pavement, the pavement should either be completely removed or broken into pieces no greater than 3 feet by 3 feet to allow water to penetrate. The pavement removal should be conforming to the requirements of IDOT Section 205.03(b) (2012). The average thickness of asphalt pavement encountered is 7 inches.

In general, the subgrade foundation soils are characterized by clayey soils with Q_u values greater than 1.0 tsf, moisture content less than 25%, and L_L less than 50%; these soil conditions will create a stable working platform during construction. We did not identify subgrade soils that would require treatment or remediation; however, the stability of the exposed subgrade should be observed for any unsuitable and unstable soils immediately after excavation of overlying material to determine if remedial treatment is necessary. It is recommended that the exposed subgrade be proofrolled and observed the amount of deflection and rutting taking place under the wheels of heavy construction equipment. A minimum of four passes should be made over the entire subgrade areas in both directions with heavy equipment, such as a fully loaded dump truck. In confined areas and in areas where a dump truck or a roller cannot be used effectively, proofrolling/compaction may be performed with hand-operated heavy vibratory equipment with enough number of passes so that unstable subgrade section can be detected. The exposed subgrade soft areas should be tested and evaluated with a static or dynamic cone penetrometer. All unstable areas should be treated in accordance with the IDOT *Subgrade Stability Manual*. If remedial treatment is deemed necessary, we recommend removing up to 12 inches of subgrade soil and replacing with material in accordance the IDOT Special Provision for *Aggregate Subgrade Improvement*.

5.2 Subgrade Support Rating

Laboratory testing on the subgrade soils shows a Subgrade Support Rating (SSR) of POOR to FAIR (Exhibit 4). Due to the unknown nature of the fill materials along the length of the project, an SSR rating of POOR should be used project-wide. The pavement could also be designed based on an IBR of 3, as per IDOT correlation to the A-6 soil classification (IDOT, 1999).

5.3 Roadway Drainage

The proposed subgrade soils and pavements should have proper surface grading to remove water accumulations and prevent the pooling of water. The subgrade soils will exhibit poor drainage conditions. The static groundwater level is deep-seated and the subgrade soils are not considered frost susceptible.

5.4 Embankment Settlement and Stability

Potentially deformable soils were not encountered during the subsurface investigation. The proposed fill sections adjacent to the new bridge will not undergo excessive long-term settlement. In addition, the proposed side slopes will be stable. We recommend protecting the slopes to prevent erosion due to precipitation and storm water runoff. A layer of topsoil should be provided on the slopes and seeded as soon as possible following construction.

6.0 CONSTRUCTION CONSIDERATIONS

6.1 Excavation, Dewatering, and Utilities

Any temporary excavations should be analyzed for stability if they have depths of more than 4 feet or slopes steeper than 1:1.5 (V:H). Excavations should be performed in accordance with local, state, and federal regulations. The potential effect of ground movements upon nearby roadways and utilities should also be taken into consideration.

The Contractor should ensure proper surface grading to prevent the pooling of run-off into open excavations. Any water allowed to enter excavations should immediately be removed via sump pump. The final depth of removal should be determined in the field at the time of construction. DCP testing by the Engineer prior to excavation may aid in determining the thickness of the required removal.

Being a residential area, several utilities may be identified along the side of the roadway. The

existing utilities should be considered by the Contractor prior to construction.

6.2 Filling and Backfilling

Fill used as embankment material should be structural fill. Pre-approved, compacted, cohesive or granular soil conforming to Section 204, *Borrow and Furnished Excavation* would be acceptable as structural fill (IDOT 2012). The fill material should be free of organic matter and debris and should be placed in lifts and compacted in accordance to Section 205, *Embankment*. The existing material excavated from the proposed undercuts may be reused elsewhere as embankment material if it has a maximum dry density greater than 90 pcf according to AASHTO T 99 and an organic content less than 10%.

6.3 Earthwork Operations

The required earthwork can be accomplished with conventional construction equipment. Precautions should be taken by the Contractor to prevent water erosion of the exposed subgrade. A compacted subgrade will minimize water runoff erosion. Silt and fine sands are sensitive to mechanical disturbance, such as traffic and construction crew, which will cause deterioration of exposed subgrade soils. Earthwork procedures should include provisions to minimize soil disturbance and exposure.

Earth moving operations should be scheduled not to coincide with excessive cold or wet weather (early spring, late fall or winter). Wet sand exposed to cold weather should be protected from freezing. Any soil allowed to freeze or soften due to the standing water should be removed from the subgrade. Wet weather can cause problems with subgrade compaction when the water contents exceed optimum.

It is recommended that an experienced geotechnical engineer be retained to inspect the exposed subgrade, monitor earthwork operations, and provide material inspection services during the construction phase of this project.

7.0 QUALIFICATIONS

The analysis and recommendations submitted in this report are based upon the data obtained from the borings drilled at the locations shown on the boring logs and in Appendix D. This report does not reflect any variations that may occur between the borings or elsewhere on the site, variations whose nature and extent may not become evident until the course of construction. In the event that

any changes in the design and/or location of the roadway realignment and reconstruction are planned, we should be timely informed so that our recommendations can be adjusted accordingly.

It has been a pleasure to assist HR Green, Inc. and the Village of Hinsdale on this project. Please call if there are any questions, or if we can be of further service.

Respectfully Submitted,

WANG ENGINEERING, INC.

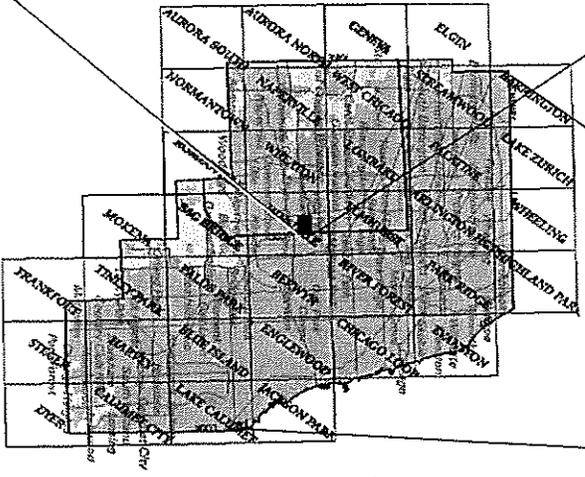
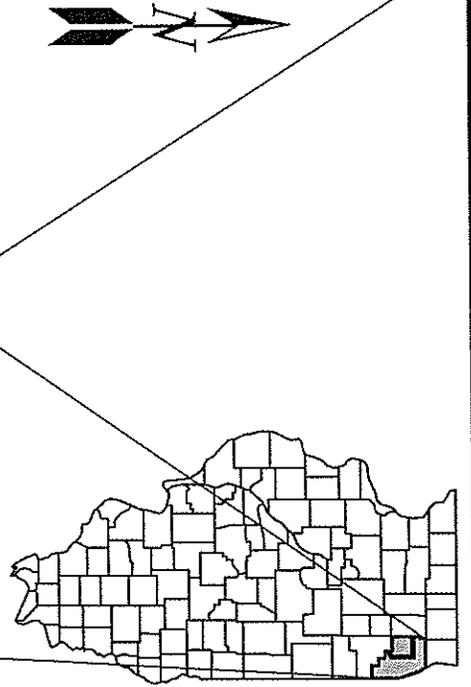
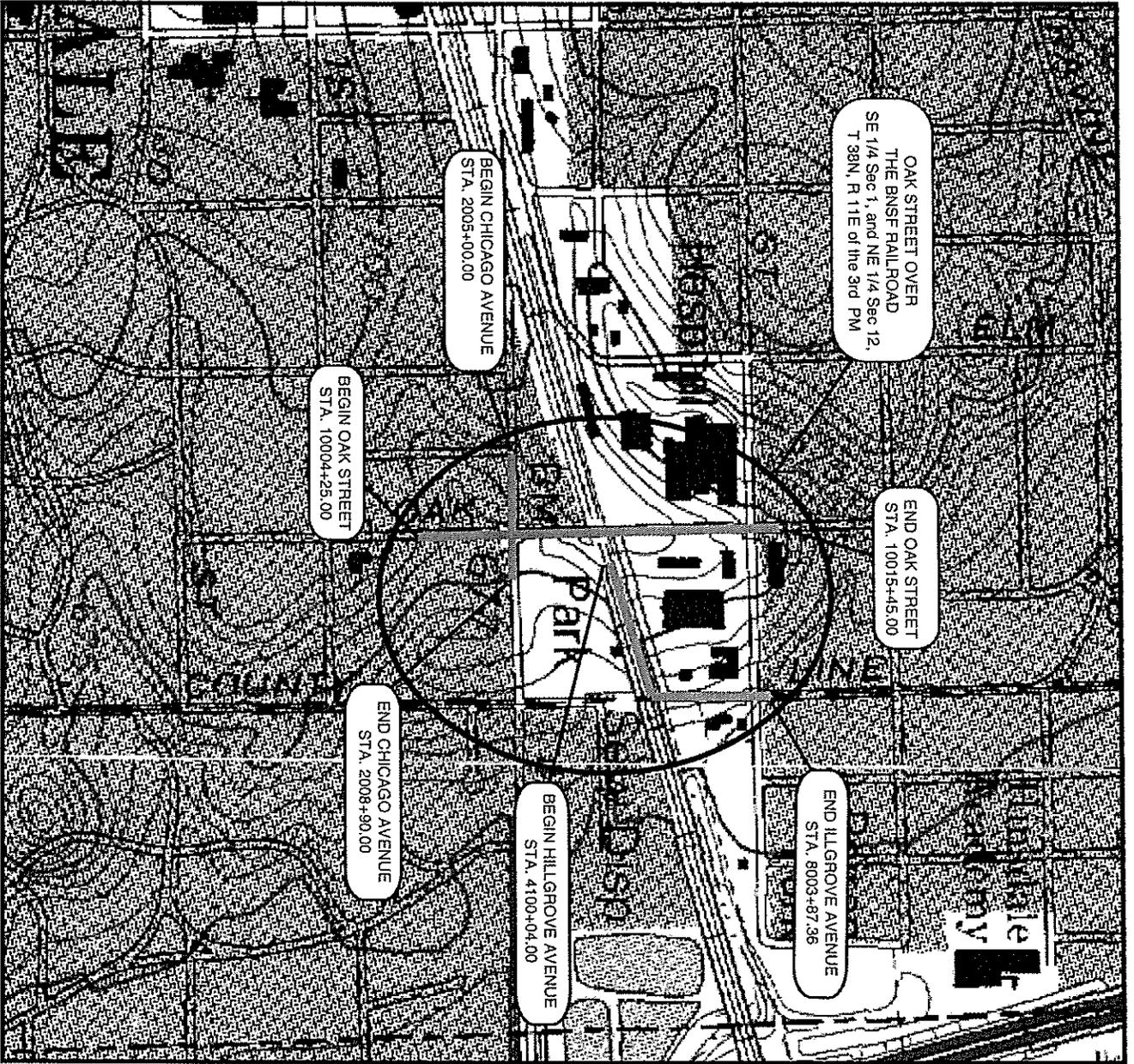
Mickey L. Snider, P.E.
Senior Geotechnical Engineer

Corina T. Farez, P.G., P.E.
Vice President

REFERENCES

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- WILLMAN, H.B., 1971, Summary of the Geology of the Chicago Area, ISGS Circular C460: Urbana, Illinois State Geological Survey, p. 77.

EXHIBITS



SITE LOCATION MAP - OAK STREET ROADWAY RECONSTRUCTION
 HINSDALE, DUPAGE COUNTY, ILLINOIS

Scale: see graphic

EXHIBIT 1

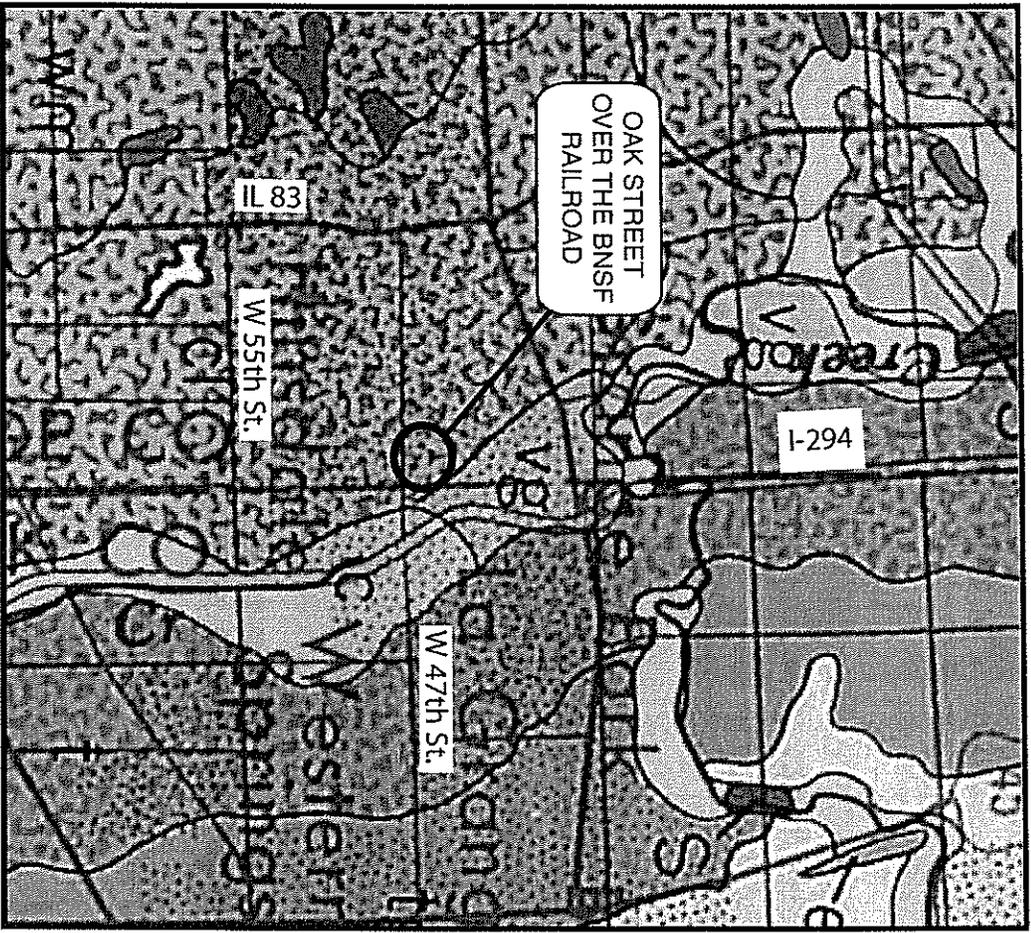
DRAWN BY: B. KO
 CHECKED BY: C. MAHER



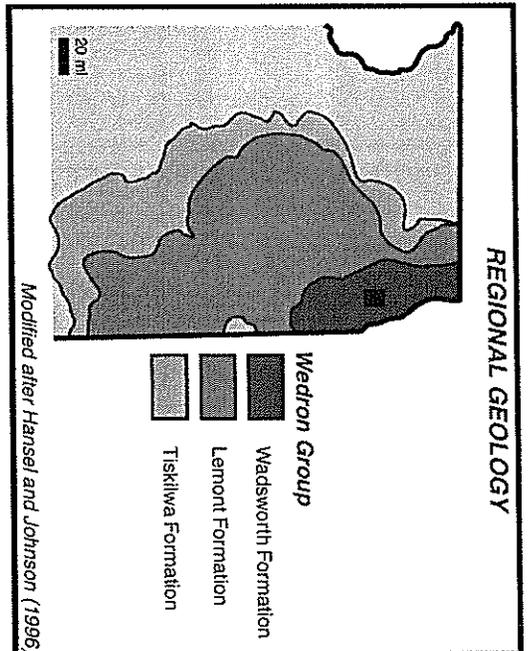
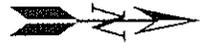
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FOR HR GREEN, INC.

811-02-01



Modified after Willman (1971)



Modified after Hansel and Johnson (1996)

LEGEND

Postglacial Cover

- C** **Calhoka Alluvium**
Deposits in floodplains and channels of modern rivers and streams; mostly poorly sorted silt and sand containing local deposits of sandy gravel.
- PA** **Grayfalka Peat**
Peat, muck, and locally peat, dominantly organic deposits with interbedded silt and clay in places; mostly in glacial lake basins, locally in lake basins of major rivers.

Glacial Cover

Mason Group

- HF** **Henry Formation**
Sand and gravel, generally well sorted and evenly bedded. Glacial outwash deposits.
- WF** **Wasco facies**
Sand and gravel, unevenly sorted, irregularly bedded, with various grain size, glacial ice-contact deposits in kames, eskers, and kame terraces.

Wedron Group

- W** **Wedron Formation**
Mostly gray clayey and silty clayey till, low pebble content, with local lenses of silt and sand.
- TM** **Tinley Moraine**
- GT** **Tinley Groundmoraine**
- V** **Valparaiso undifferentiated**
Mostly gray pabbly silty clayey till; contains local lenses of silt laminae and sand.
- VG** **Valparaiso groundmoraine**

Modified after Willman (1971)

SITE AND REGIONAL GEOLOGY: OAK STREET ROADWAY RECONSTRUCTION, HINSDALE, DUPAGE COUNTY, ILLINOIS

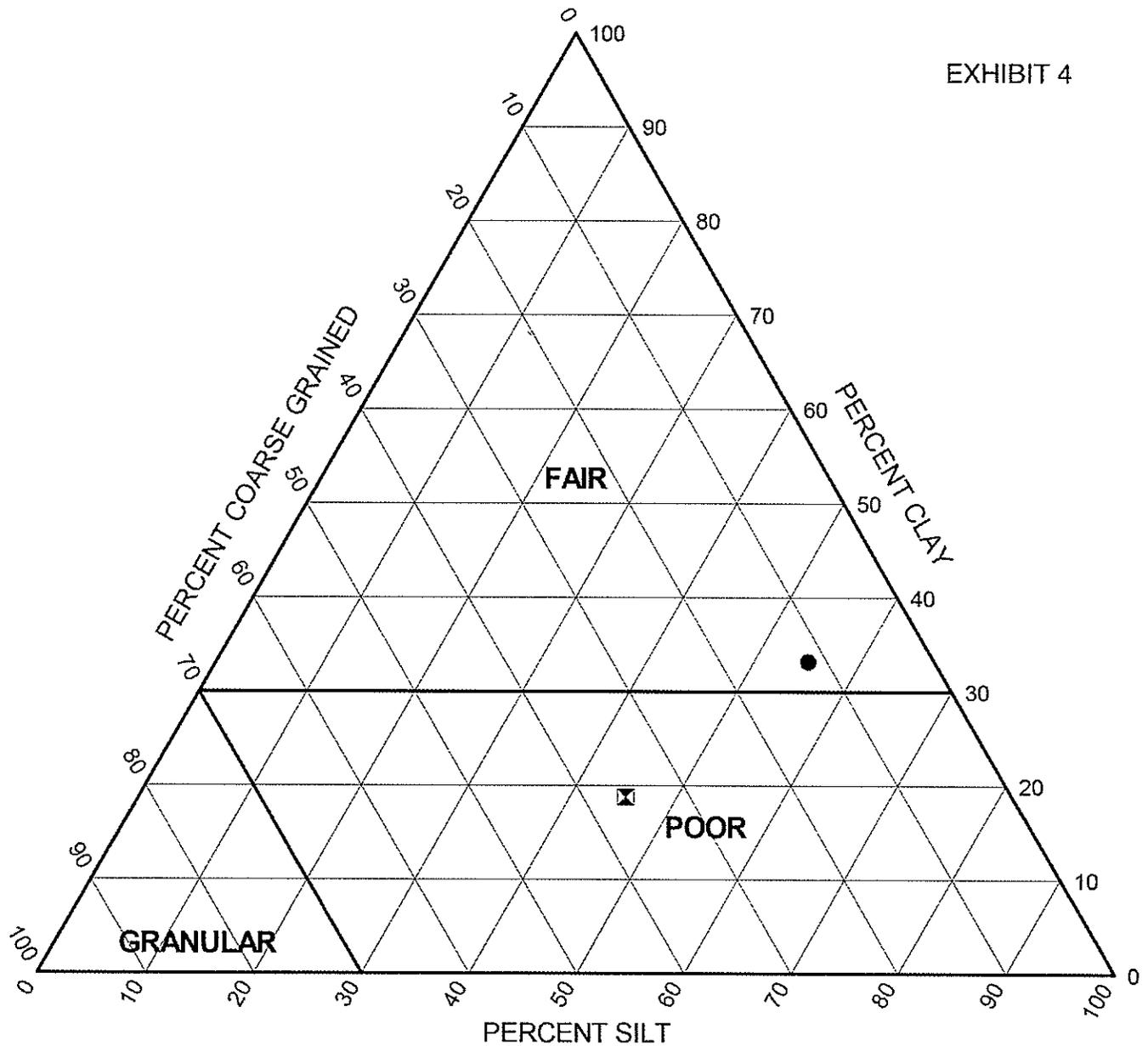
SCALE: GRAPHICAL

EXHIBIT 2

DRAWN BY: C. Mahn
CHECKED BY: Landis

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FOR HR GREEN, INC | 811-02-01



	Sample	Depth (ft)	Coarse (%)	Silt (%)	Clay (%)	Classification		
						IL DOT	AASHTO	RATING
●	RB-01#1	0.0	11.8	55.0	33.2	Silty Clay	A-6 (18)	FAIR
⊠	RB-03#1	1.0	35.9	45.2	18.8	Silty Clay Loam	A-6 (6)	POOR

WEI SSR 8110201.GPJ WANGENG.GDT 9/18/14



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Subgrade Support Rating Chart

Project: Oak Street over the BNSF Railroad Phase II
 Location: Hinsdale, Illinois
 Number: 811-02-01

APPENDIX A



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Client
 Project
 Location

BORING LOG BB-01

WEI Job No.: 373-19-01

Clark Dietz, Inc.
 Oak Street Bridge Replacement
 Hinsdale, DuPage Co., IL

Datum: NAV88
 Elevation: 692.70 ft
 North: 1871657.75 ft
 East: 1096944.74 ft
 Station: 10008+16.0
 Offset: 7.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	692.43	13-inch thick ASPHALT															
	691.8	--PAVEMENT-- 8-inch thick CRUSHED STONE --AGGREGATE BASE--			1	2 3 3	0.50 P	21						11	11 6 7	1.50 P	11
		Medium stiff, brown and gray CLAY LOAM, trace gravel --FILL--	5		2	1 3 4	0.82 B	24				30		12	2 3 4	1.31 B	15
	687.2	Very stiff to hard, SILTY CLAY LOAM, trace gravel			3	6 10 13	5.74 B	16		660.7	Medium dense to dense, gray SANDY LOAM to SAND, little to some gravel and cobbles						
			10		4	5 8 8	3.44 B	20				35		13	8 12 8	NP	11
					5	5 7 9	4.18 B	17									
			15		6	5 5 6	2.05 B	16			--ROCK FRAGMENTS-- --Moisture Content NA--	40		14	12 21 14	NP	
					7	5 7 8	3.69 B	16			--HARD DRILLING--						
	674.7	Medium dense, brown SANDY LOAM, little gravel			8	4 6 6	NP	13				45		15	13 17 11	NP	9
	672.2	Stiff, gray SILTY LOAM, little to some gravel, possible cobbles			9	8 9 8	1.48 B	11		645.7	Dense, gray SILTY LOAM, little gravel						
		--HARD DRILLING--	25		10	7 13 12	1.25 P	12				50		16	7 18 28	NP	9

GENERAL NOTES

WATER LEVEL DATA

Begin Drilling **03-01-2012** Complete Drilling **03-01-2012**
 Drilling Contractor **Wang Testing Services** Drill Rig **D-50 ATV**
 Driller **K&K** Logger **F. Bozga** Checked by **M. Snider**
 Drilling Method **3.25 IDA HSA; Boring backfilled upon completion**

While Drilling **DRY**
 At Completion of Drilling **MUD**
 Time After Drilling **NA**
 Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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Client
 Project
 Location

BORING LOG BB-01

WEI Job No.: 373-19-01

Clark Dietz, Inc.
 Oak Street Bridge Replacement
 Hinsdale, DuPage Co., IL

Datum: NAV88
 Elevation: 692.70 ft
 North: 1871657.75 ft
 East: 1096944.74 ft
 Station: 10008+16.0
 Offset: 7.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	641.2	Very dense, brown GRAVELLY SAND	55		17	48 40 42	NP	7									
	636.2	Weathered dolostone fragments -WEATHERED BEDROCK- -HARD DRILLING-															
	633.7	RUN #1 - 59' to 64' Strong, very poor rock quality, light brownish to light gray, vuggy, thinly banded, moderately to slightly weathered, very intensely to intensely fractured, cherty DOLOSTONE RECOVERY = 100% RQD = 0%	60		18	60/3	NP										
		RUN #2 - 64' to 69' Strong, poor rock quality, light gray, thinly banded, fresh, intensely fractured, cherty DOLOSTONE RECOVERY = 100% RQD = 33%	65		2												
	623.7	Boring terminated at 69.00 ft	70														
			75														

GENERAL NOTES

WATER LEVEL DATA

Begin Drilling **03-01-2012** Complete Drilling **03-01-2012**
 Drilling Contractor **Wang Testing Services** Drill Rig **D-50 ATV**
 Driller **K&K** Logger **F. Bozga** Checked by **M. Snider**
 Drilling Method **3.25 IDA HSA; Boring backfilled upon completion**

White Drilling **DRY**
 At Completion of Drilling **MUD**
 Time After Drilling **NA**
 Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG RB-01

WEI Job No.: 811-02-01

Client **HR Green, Inc.**
 Project **Oak Street over the BNSF Railroad Phase II**
 Location **Hinsdale, Illinois**

Datum: NGVD
 Elevation: 687.02 ft
 North: 1872229.51 ft
 East: 1096911.53 ft
 Station: 10013+88.62
 Offset: 2.33 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	
	686.4	7-inch thick, black SILTY CLAY LOAM --TOPSOIL-- Very stiff to hard, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel --L _L (%)=39, P _L (%)=19-- --%Gravel=0.6-- --%Sand=11.2-- --%Silt=55.0-- --%Clay=33.2-- --A-6 (18)--			1	P U S H	2.50 P	20										
					2	P U S H	3.25 P	18										
					3	P U S H	4.50 P	16										
					4	P U S H	4.50 P	17										
					5	P U S H	4.50 P	17										
	677.5	--AUGER REFUSAL-- Boring terminated at 9.50 ft																

GENERAL NOTES

WATER LEVEL DATA

Begin Drilling **05-12-2014** Complete Drilling **05-12-2014**
 Drilling Contractor **Wang Testing Services** Drill Rig **Geoprobe HA**
 Driller **C&F** Logger **F. Bozga** Checked by **C. Marin**
 Drilling Method **1" IDA Pneumatic Geoprobe LB Sampler**

While Drilling **DRY**
 At Completion of Drilling **DRY**
 Time After Drilling **NA**
 Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENG INC 8110201.GPJ WANGENG.GDT 9/18/14



BORING LOG RB-02

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WEI Job No.: 811-02-01

Client **HR Green, Inc.**
 Project **Oak Street over the BNSF Railroad Phase II**
 Location **Hinsdale, Illinois**

Datum: NGVD
 Elevation: 694.76 ft
 North: 1871938.48 ft
 East: 1096929.97 ft
 Station: 10010+97.08
 Offset: 4.38 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	694.3	6-inch thick, ASPHALT --PAVEMENT--															
	693.8	Very stiff, brown CLAY LOAM, some gravel --FILL--															
		Very stiff to hard, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel			1	3 4 5 5	3.28 B	16									
					2	5 9 13 11	2.54 B	16									
					3	4 7 9 14	7.71 B	17									
					4	8 7 7 8	4.26 S	15									
					5	6 6 9 10	2.95 B	15									
	683.8	Boring terminated at 11.00 ft															

GENERAL NOTES

WATER LEVEL DATA

Begin Drilling **05-01-2014** Complete Drilling **05-01-2014**
 Drilling Contractor **Wang Testing Services** Drill Rig **B-57 TMR**
 Driller **K&K** Logger **D. Kolpacki** Checked by **C. Marin**
 Drilling Method **3.25 IDA HSA; Boring backfilled upon completion**

White Drilling ∇ **DRY**
 At Completion of Drilling ∇ **DRY**
 Time After Drilling **NA**
 Depth to Water ∇ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG RB-03

WEI Job No.: 811-02-01

Client: **HR Green, Inc.**
 Project: **Oak Street over the BNSF Railroad Phase II**
 Location: **Hinsdale, Illinois**

Datum: NGVD
 Elevation: 683.24 ft
 North: 1871519.57 ft
 East: 1096935.43 ft
 Station: 10006+78.30
 Offset: 7.02 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	682.7	6-inch thick, ASPHALT --PAVEMENT--															
		Stiff, brown SILTY CLAY LOAM, to CLAY LOAM, trace gravel --FILL-- --L ₁ (%)=30, P _L (%)=17-- --%Gravel=9.6-- --%Sand=26.3-- --%Silt=45.2-- --%Clay=18.8-- --A-6 (6)--			1	4 4 5 5	1.50 P	20									
	680.5	Very stiff, brown SILTY CLAY, trace gravel			2	5 9 6 6	2.50 P	17									
					3	3 5 5 7	2.21 B	19									
					4	2 4 6 6	2.05 B	18									
					5	3 5 8 16	2.05 B	16									
	672.2	Boring terminated at 11.00 ft															

GENERAL NOTES

WATER LEVEL DATA

Begin Drilling **05-01-2014** Complete Drilling **05-01-2014**
 Drilling Contractor **Wang Testing Services** Drill Rig **B-57 TMR**
 Driller **K&K** Logger **D. Kolpacki** Checked by **C. Marin**
 Drilling Method **3.25 IDA HSA; Boring backfilled upon completion**

White Drilling **DRY**
 At Completion of Drilling **DRY**
 Time After Drilling **NA**
 Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG RB-05

WEI Job No.: 811-02-01

Client **HR Green, Inc.**
 Project **Oak Street over the BNSF Railroad Phase II**
 Location **Hinsdale, Illinois**

Datum: NGVD
 Elevation: 664.91 ft
 North: 1871975.34 ft
 East: 1097500.26 ft
 Station: 4104+99.80
 Offset: 8.36 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	664.1	9.5-inch thick, ASPHALT --PAVEMENT--															
	662.9	14.5-inch thick, CRUSHED STONE --AGGREGATE BASE--															
		Stiff to very stiff, brown SILTY CLAY, little gravel			1	2	1.50	21									
					2	2	P										
					3	2											
			5		2	3	2.54	24									
	659.3	Loose, brown LOAM, little gravel --moist--			3	4	B										
					3	3	NP	17									
					5	5											
	657.1	Very stiff to hard, brown SILTY CLAY, trace gravel			4	7	4.59	18									
					4	9	B										
			10		5	9	2.21	17									
					5	9	B										
					12	12											
	652.9	Boring terminated at 12.00 ft															

GENERAL NOTES

WATER LEVEL DATA

Begin Drilling **05-01-2014** Complete Drilling **05-01-2014**
 Drilling Contractor **Wang Testing Services** Drill Rig **B-57 TMR**
 Driller **K&K** Logger **D. Kolpacki** Checked by **C. Marin**
 Drilling Method **3.25 IDA HSA; Boring backfilled upon completion**

While Drilling ∇ **DRY**
 At Completion of Drilling ∇ **DRY**
 Time After Drilling **NA**
 Depth to Water ∇ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG RB-06

WEI Job No.: 811-02-01

Client **HR Green, Inc.**
 Project **Oak Street over the BNSF Railroad Phase II**
 Location **Hinsdale, Illinois**

Datum: NGVD
 Elevation: 681.76 ft
 North: 1871383.86 ft
 East: 1096871.10 ft
 Station: 2006+28.45
 Offset: 8.61 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	681.1	8-inch thick, ASPHALT --PAVEMENT--															
	680.8	4-inch thick, brown CRUSHED STONE --BASE COURSE--															
	679.2	Very stiff, gray SILTY CLAY LOAM, trace gravel --FILL--			1	2	2.00	22									
	678.5	Dark brown SILTY LOAM --BURIED TOPSOIL--				2											
		Very stiff to hard, brown SILTY CLAY, trace gravel			2	4	2.25	21									
						6											
						8											
						5											
						8	6.72	18									
						8											
						12											
						6											
						6	6.31	19									
						10											
						13											
						5											
						8	4.26	22									
						10											
						14											
	670.8	Boring terminated at 11.00 ft															

GENERAL NOTES

WATER LEVEL DATA

Begin Drilling **05-01-2014** Complete Drilling **05-01-2014**
 Drilling Contractor **Wang Testing Services** Drill Rig **B-57 TMR**
 Driller **K&K** Logger **D. Kolpacki** Checked by **C. Marin**
 Drilling Method **3.25 IDA HSA; Boring backfilled upon completion**

While Drilling ∇ **DRY**
 At Completion of Drilling ∇ **DRY**
 Time After Drilling **NA**
 Depth to Water ∇ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG BB-4A

WEI Job No.: 373-19-01

Client
 Project
 Location

Clark Dietz, Inc.
 Oak Street Bridge Replacement
 Hinsdale, DuPage Co., IL

Datum: NAV88
 Elevation: 693.82 ft
 North: 1871806.19 ft
 East: 1096947.71 ft
 Station: 10009+64.2
 Offset: 16.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	642.3	Dense to very dense, SANDY GRAVEL															
			55	X	17	42 29 14	NP	8									
			60	X	18	23 22 50/2	NP	11									
	629.8	RUN #1 - 64' to 74' Strong, poor rock quality, light gray and white, fresh, intensely fractured, occasionally vuggy, cherty DOLOSTONE RECOVERY = 97.5% RQD = 12.5%	65														
			70														
	619.8	Boring terminated at 74.00 ft	75														

GENERAL NOTES

WATER LEVEL DATA

Begin Drilling **03-05-2012** Complete Drilling **03-05-2012**
 Drilling Contractor **Wang Testing Services** Drill Rig **D-50 ATV**
 Driller **K&K** Logger **F. Bozga** Checked by **M. Snider**
 Drilling Method **3.25 IDA HSA; Boring backfilled upon completion**

While Drilling ∇ **18.00 ft**
 At Completion of Drilling ∇ **30.00 ft**
 Time After Drilling **NA**
 Depth to Water ∇ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



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BORING LOG RWB-01

WEI Job No.: 373-19-01

Client
 Project
 Location

Clark Dietz, Inc.
 Oak Street Bridge Replacement
 Hinsdale, DuPage Co., IL

Datum: NAV88
 Elevation: 687.15 ft
 North: 1871594.70 ft
 East: 1096961.87 ft
 Station: 10007+52.3
 Offset: 22.4 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	686.75	75-inch thick, black CLAY LOAM --TOPSOIL--															
		Medium stiff to very stiff, brown CLAY LOAM			1	2 3 5	0.50 P	28						11	9 10 14	1.25 P	12
		--FILL--			2	2 4 5	3.53 B	22				30		12	5 5 7	0.74 B	14
	681.6	Very stiff, brown SILTY CLAY LOAM, trace gravel			3	6 6 8	3.53 B	18						13	5 12 10	1.23 B	12
					4	3 3 7	2.71 B	19		652.1		35					
					5	6 10 11	3.53 B	16			Boring terminated at 35.00 ft						
					6	5 10 10	2.54 B	14				40					
	671.6	--HARD DRILLING--			7	10 10 11	NP	10									
		Medium dense, gray SILTY LOAM, trace gravel			8	3 5 8	1.48 B	12				45					
	669.1	Stiff, gray SILTY LOAM, trace to little gravel			9	5 6 8	1.48 B	11									
		--L _L = 20%, P _L = 14% --% Gravel = 14.4%-- --% Sand = 23.5%-- --% Silt = 47.2%-- --% Clay = 14.9%--			10	3 5 6	1.56 B	12				50					

GENERAL NOTES

WATER LEVEL DATA

Begin Drilling **03-02-2012** Complete Drilling **03-02-2012**
 Drilling Contractor **Wang Testing Services** Drill Rig **D-50 ATV**
 Driller **K&K** Logger **F. Bozga** Checked by **M. Snider**
 Drilling Method **3.25 IDA HSA; Boring backfilled upon completion**

While Drilling **DRY**
 At Completion of Drilling **DRY**
 Time After Drilling **NA**
 Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

APPENDIX B



**Summary Report on Pavement,
Base and Subbase Design**

State Job Number: NA Project: Oak St over BNSF Railroad Route: Oak Street

Section: NA City or County: DuPage County Date: 9/17/2014

ADT: NA Year: NA Design Period: NA Class Highway: _____

Passenger Cars Per Day: NA Trucks S.U. Per Day: NA Trucks M.U. Per Day: NA

Pavement Structure: NA

Type Surface Course: NA Thickness: _____

Type Base Course: NA Thickness: _____

Type Subbase Material: NA Thickness: _____

Sta. to Sta.	10004+25.00 to 10015+45.00	+ to +	+ to +	+ to +
*Sta. of Test	10013+88.62			
*Drainage Class	POOR			
*Ave. Frost Penetration	42			
Illinois Textural Classification	Silty Clay			
Classification and Group Index (AASHTO M 145)	A-6 (18)			
*Percent Silt (AASHTO T 88)	55.0			
*Illinois Bearing Ratio (%)				
Std. Dry Density (IL Mod. AASHTO T 99)				
Optimum Moisture (IL Mod AASHTO T 99)				

* Indicates worst condition within the above station limits.

Remarks: _____

SOIL TEST DATA

ROUTE
Oak Street over the BNSF Railroad

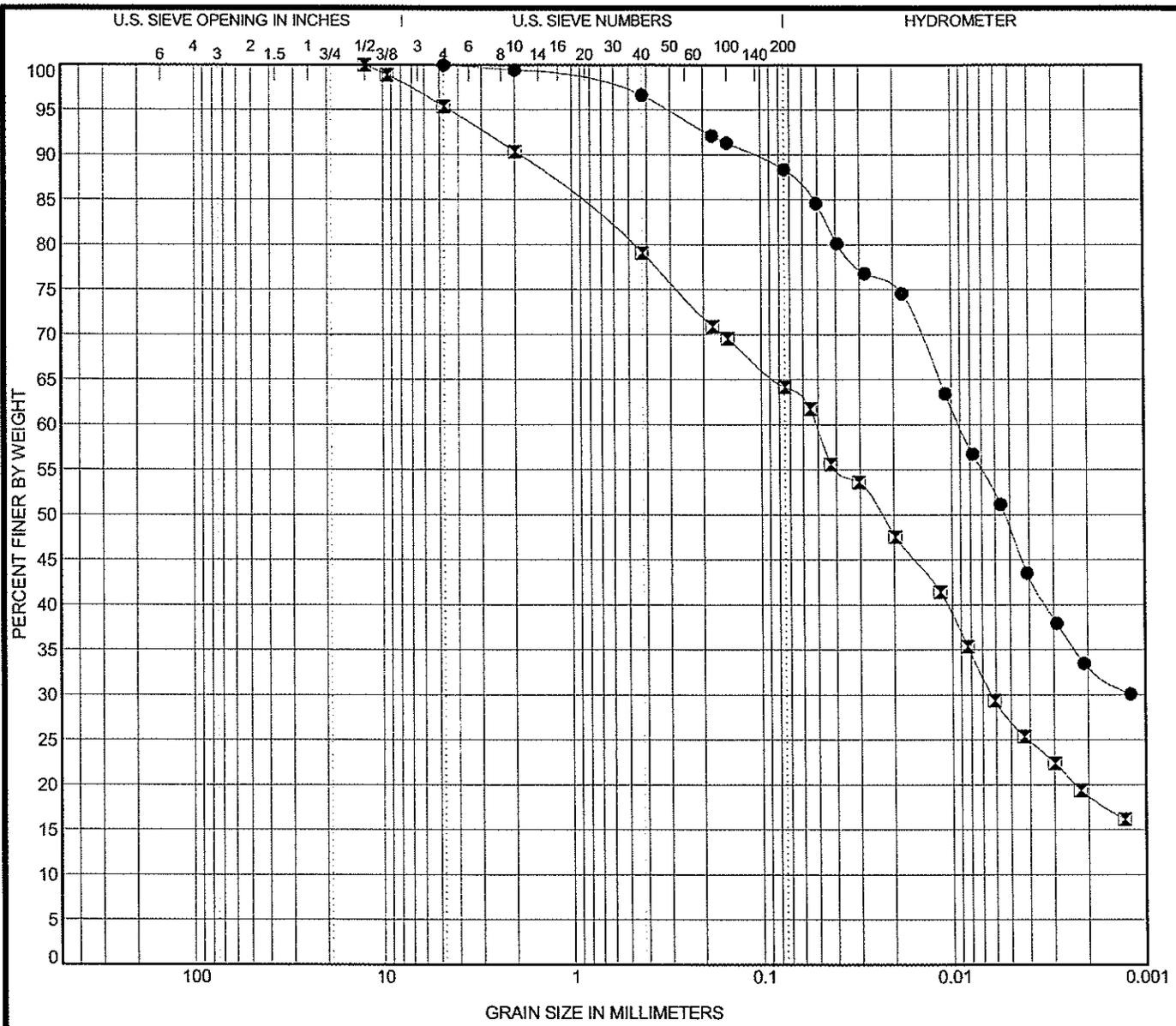
PROJECT
NA

SECTION
Oak Street (Station 10004+25.00 to Station 10015+45.00)

COUNTY
DuPage

Lab. No.	RB-01 No.1	RB-03 No.1
Station (ft)	10013+88.62	10006+78.30
Offset (ft)	2.33 LT	7.02 LT
Depth (ft)	0	1
AASHTO M 145		
Classification and Group Index	A-6 (18)	A-6 (6)
Illinois Textural Classification (Illinois Method)	Silty Clay	Silty Clay Loam
Gradation--Passing 1" Sieve %		
--" 3/4" Sieve %		
--" 1/2" Sieve %		
--" No. 4 Sieve %	100.0	95.4
--" No. 10 Sieve %	99.4	90.4
--" No. 40 Sieve %	96.7	79.1
--" No. 100 Sieve %	91.3	69.6
--" No. 200 Sieve %	88.2	64.1
Sand % (AASHTO T 88)	11.2	26.3
Silt % (AASHTO T 88)	55.0	45.2
Clay % (AASHTO T 88)	33.2	18.8
Liquid Limit % (AASHTO T 89)	39	30
Plasticity Index % (AASHTO T 90)	20	13
IBR % (Illinois Method)		
Standard Dry Density % (AASHTO T 99)		
Optimum Moisture % (AASHTO T 99)		
Subgrade Support Rating	FAIR	POOR
In situ Moisture % (AASHTO T 99)	20	20

APPENDIX C



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification	IDH Classification	LL	PL	PI	Cc	Cu
● RB-01#1 0.0 ft	Silty Clay	39	19	20		
☒ RB-03#1 1.0 ft	Silty Clay Loam	30	17	13		

Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● RB-01#1 0.0 ft	4.75	0.009			0.6	11.2	55.0	33.2
☒ RB-03#1 1.0 ft	12.5	0.051	0.006		9.6	26.3	45.2	18.8

WEI GRAIN SIZE IDH 8110201.GPJ US LAB.GDT 9/18/14



Wang Engineering
 1145 N Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

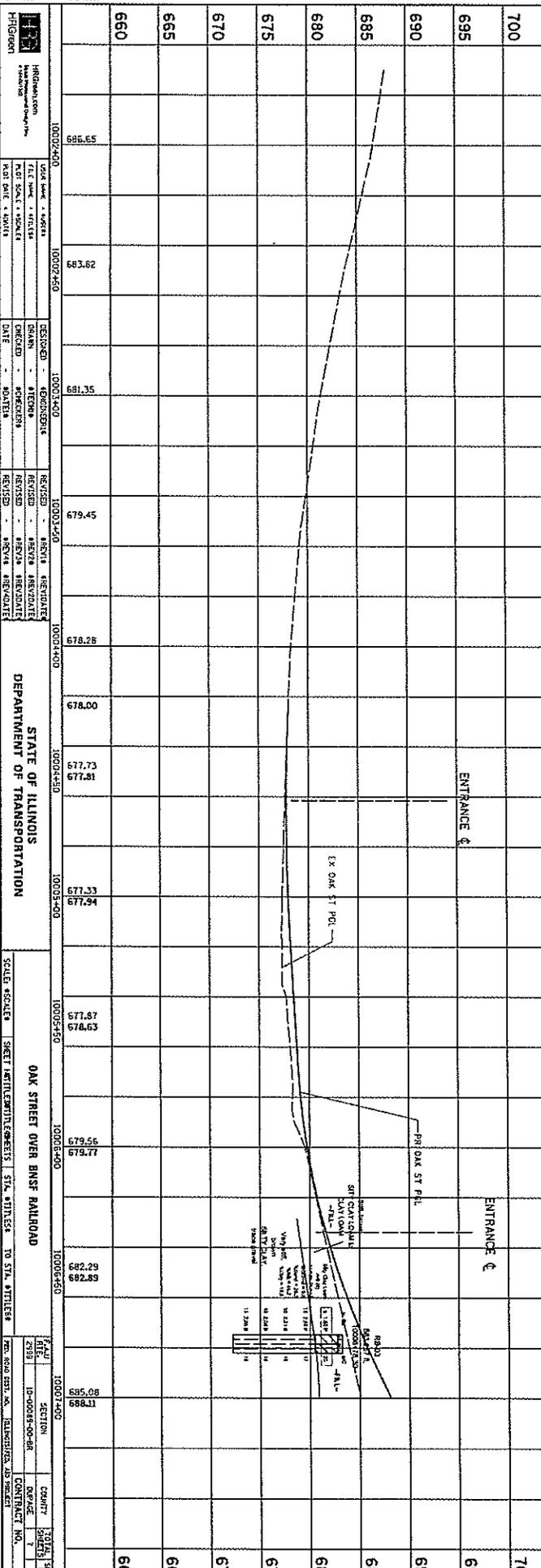
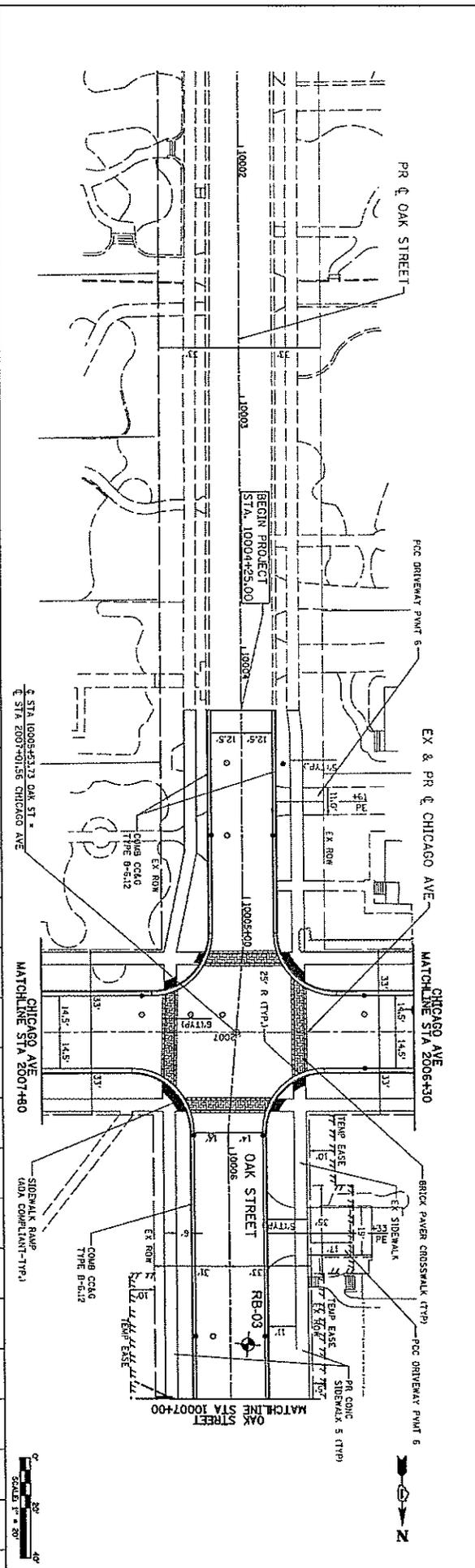
GRAIN SIZE DISTRIBUTION
 Project: Oak Street over the BNSF Railroad Phase II
 Location: Hinsdale, Illinois
 Number: 811-02-01

APPENDIX D

PL. AN.	DATE	BY
DATE	DATE	DATE

PROFILE	DATE	BY
DATE	DATE	DATE

PROJECT CONTACT	PROJECT CONTACT
CLIENT	CLIENT
DATE PLOTTED	DATE PLOTTED
FILE NAME	FILE NAME
FILE NUMBER	FILE NUMBER
FILE DATE	FILE DATE
FILE TIME	FILE TIME
FILE USER	FILE USER
FILE TABLE	FILE TABLE



1000+2+00	686.65
1000+2+50	683.62
1000+3+00	681.35
1000+3+50	679.45
1000+4+00	678.28
1000+4+50	678.00
1000+5+00	677.73
1000+5+50	677.81
1000+6+00	677.53
1000+6+50	677.94
1000+7+00	677.67
1000+7+50	676.63
1000+8+00	679.56
1000+8+50	679.77
1000+9+00	682.29
1000+9+50	682.89
1001+0+00	680.59
1001+0+50	678.99

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OAK STREET OVER BNSF RAILROAD
SCALE: VERTICALLY AS SHOWN TO STATIONING
SCALE: HORIZONTALLY AS SHOWN TO STATIONING

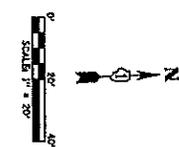
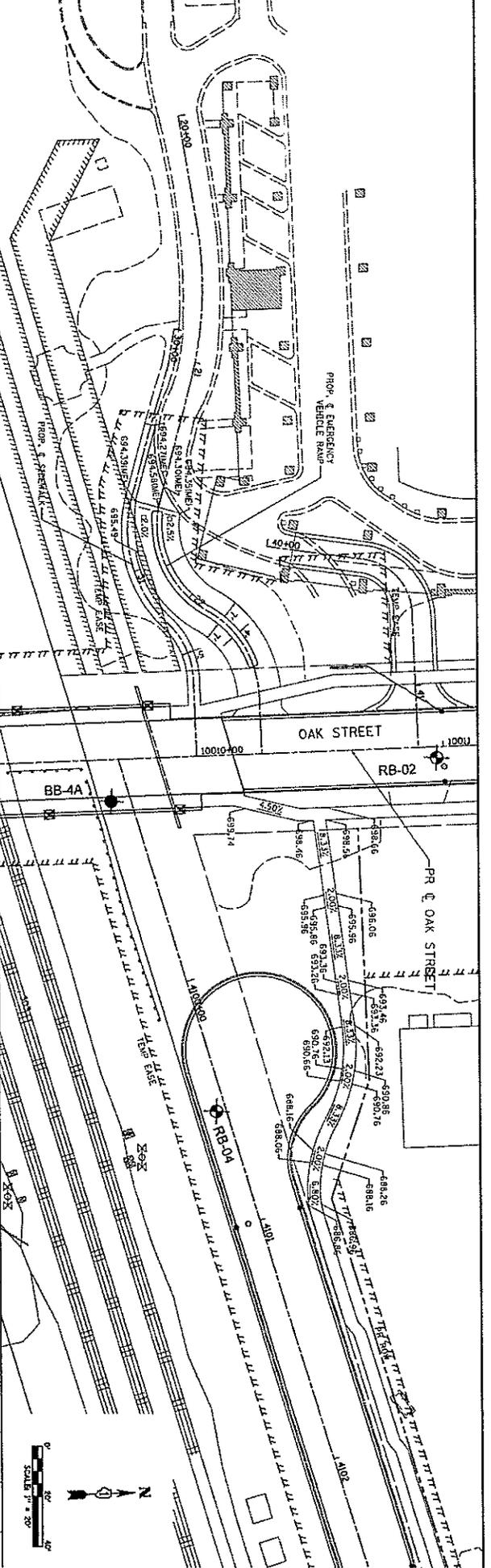
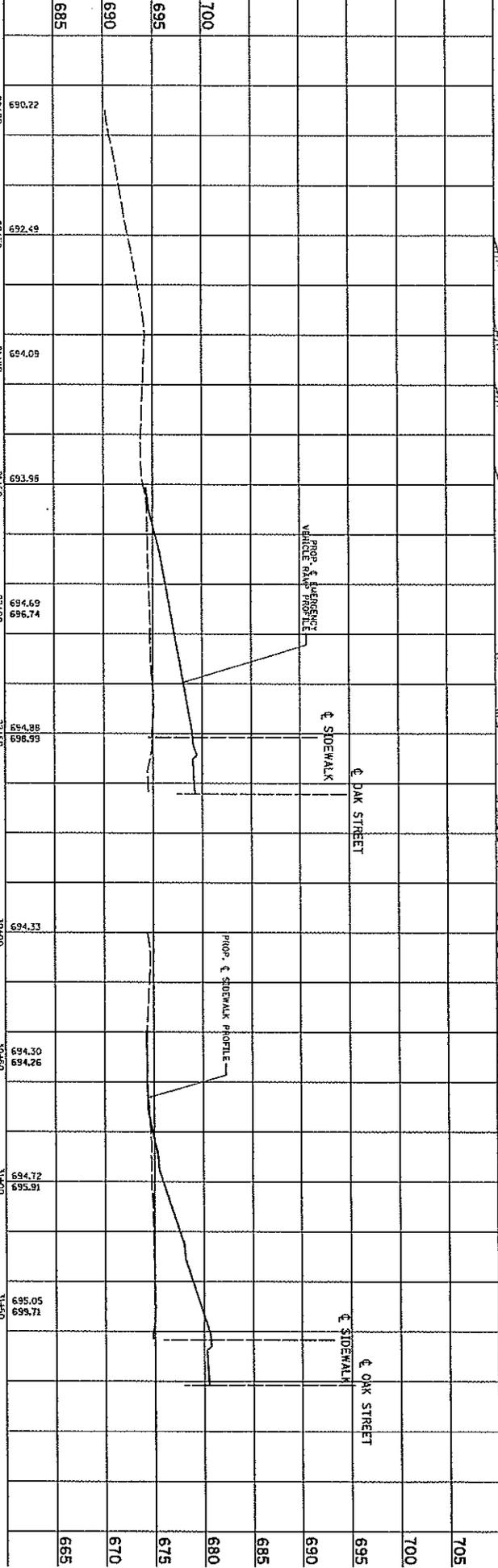
DATE	SECTION	COUNTY

PROJECT CONTACT: **UNIVERSITY CONTRACTS**
 CLIENT: **UNIVERSITY**
 DATE PLOTTED: **10/15/2013**
 FILE NAME: **10-0003-00-03**
 PLOT DEVICE: **HP7, 1000**
 PLOT TABLE: **HP7, 1000**

PROFILE	DATE	BY	APP
PLAN			
SECTION			
DATE			
BY			
APP			

PLAN	DATE	BY	APP
SECTION			
DATE			
BY			
APP			

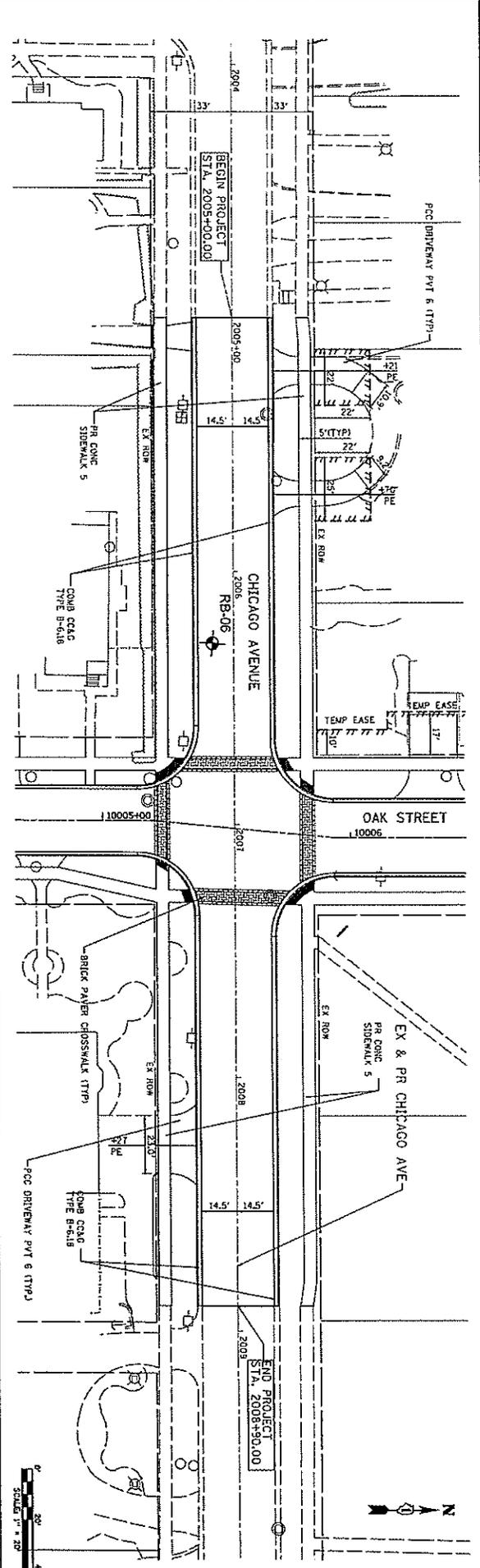
REVISION	DATE	BY	APP	DESCRIPTION
1	10/15/2013	UNIVERSITY	UNIVERSITY	ISSUE FOR PERMIT
2	10/15/2013	UNIVERSITY	UNIVERSITY	REVISED PER CITY COMMENTS
3	10/15/2013	UNIVERSITY	UNIVERSITY	REVISED PER CITY COMMENTS
4	10/15/2013	UNIVERSITY	UNIVERSITY	REVISED PER CITY COMMENTS
5	10/15/2013	UNIVERSITY	UNIVERSITY	REVISED PER CITY COMMENTS
6	10/15/2013	UNIVERSITY	UNIVERSITY	REVISED PER CITY COMMENTS
7	10/15/2013	UNIVERSITY	UNIVERSITY	REVISED PER CITY COMMENTS
8	10/15/2013	UNIVERSITY	UNIVERSITY	REVISED PER CITY COMMENTS
9	10/15/2013	UNIVERSITY	UNIVERSITY	REVISED PER CITY COMMENTS
10	10/15/2013	UNIVERSITY	UNIVERSITY	REVISED PER CITY COMMENTS



PLAN	DATE	BY	CHECK
NO.	DATE	NAME	NAME
NO.	DATE	NAME	NAME
NO.	DATE	NAME	NAME

PROFILE	DATE	BY	CHECK
NO.	DATE	NAME	NAME
NO.	DATE	NAME	NAME
NO.	DATE	NAME	NAME

PROJECT CONTACT: [Name]
 CLIENT: [Name]
 DATE PLOTTED: [Date]
 PLOT SCALE: [Scale]
 PLOT SHEETS: [Count]
 SHEET NO.: [Number]



695	688.75	688.13	687.22	687.22	685.66	685.39	684.26	682.96	680.49	680.26	678.06	678.73	675.63	671.38	673.74	675.26	672.64	673.02	671.89	671.68	670.97	
690																						
685																						
680																						
675																						
670																						
665																						
660																						
655																						

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

OAK STREET OVER BNSF RAILROAD

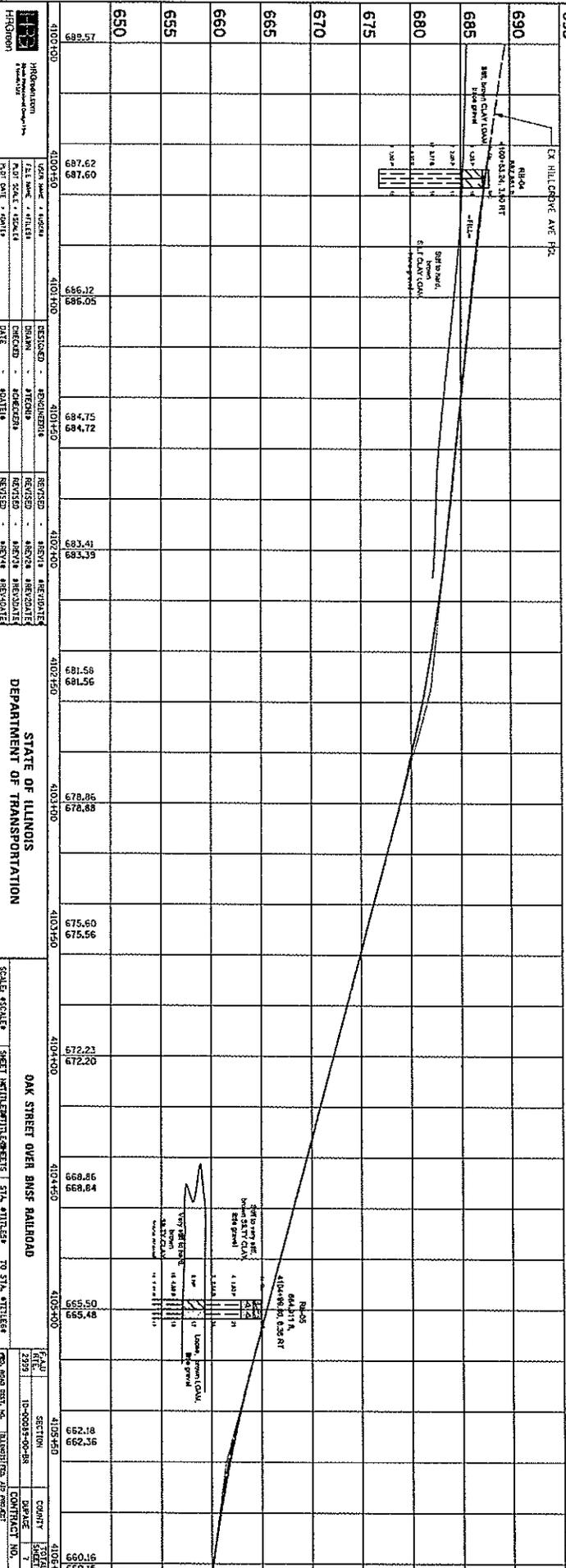
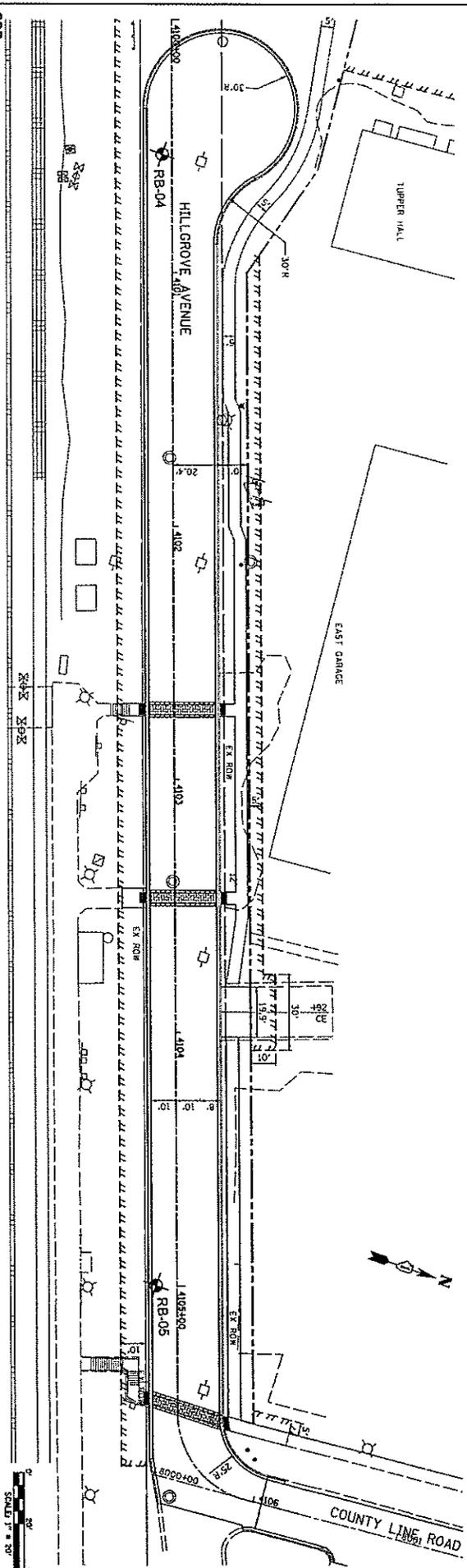
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 SHEET: [Number]
 TOTAL SHEETS: [Count]



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5	10/1/00
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10	10/1/00

PROFILE	DATE
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2	10/1/00
3	10/1/00
4	10/1/00
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10	10/1/00

PROJECT CONTACT	AGENTS
CLIENT	66154 STONEY
DATE PLOTTED	10/1/00
PLOT NAME	10/1/00
PLOT NUMBER	10/1/00
PLOT SCALE	10/1/00
PLOT DATE	10/1/00
PLOT TIME	10/1/00



4100+00	689.57	687.62	687.60	686.22	686.05	684.75	684.72	683.41	683.39	681.56	681.56	678.86	678.86	675.60	675.56	672.21	672.20	668.86	668.84	665.50	665.50	662.18	662.18	660.16	660.16	
4100+150																										
4101+00																										
4101+50																										
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4108+00																										
4108+50																										

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OAK STREET OVER BNSF RAILROAD
SCALE: 1" = 20'
SHEET 10 OF 10



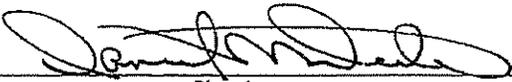
Route F.A.U. 2999
Section 10-00089-00-BR
County DuPage

Marked Rte. Oak Street
Project No. BRM-9003 (699)
Contract No. C-91-756-10

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.

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.

Daniel Deeter
Print Name
Village Engineer
Title
Village of Hinsdale
Agency


Signature
01-15-15
Date

I. Site Description:

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

The project includes the demolition and reconstruction of the existing Oak Street bridge over the BNSF Railroad, as well as the reconstruction of 1,120 linear feet of Oak Street from a point 135 feet south of Chicago Street to 40 feet north of Walnut Avenue. Additional roadway reconstruction will take place on Chicago Street approximately 200 feet east and west of Oak Street, on Hillgrove Avenue from Oak Street to County Line Road, and on County Line Road from Hillgrove Avenue to 40 feet south of Walnut Avenue. The work will take place within the Village of Hinsdale. (LAT: 41.805 LONG: 87.920)

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

The project improvements include the construction of a new 2-lane bridge on Oak Street over the BNSF Railroad. Associated work includes the earth excavation, erosion control, subbase granular material, aggregate subgrade improvements, portland cement concrete (PCC) pavement, combination concrete curb and gutter, water main removal and replacement, storm sewer removal and replacement, sanitary sewer lining, hot-mix asphalt driveways, PCC sidewalk, retaining wall and other miscellaneous items.

C. Provide the estimated duration of this project:

Summer 2015 - Spring 2016

D. The total area of the construction site is estimated to be 4.23 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 4.23 acres.

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

Drainage design for this project did not include calculation of the runoff coefficient. The existing drainage pattern is to be maintained.

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

NAME	SLOPE %	EROSION FACTOR "K"	RISK OF EROSION
SILTY CLAY			

SILTY CLAY LOAM			
-----------------	--	--	--

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

N/A

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

All potentially erosive areas will be sodded upon completion of earth disturbing activities.

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):

1. Installation of temporary erosion control measures including perimeter silt fencing as shown on the erosion control plans.
2. Isolated tree removal as shown on the plans. Trees to remain will be protected against damage.
3. Excavation and embankment will be completed along the job site to grade the proposed roadway, and ditches.
4. Temporarily seed erodible bare earth on a bi-weekly basis to minimize the amount of erodible surface area within
5. Construct storm sewers, manholes, and inlets.
6. Construct new concrete bridge structure.
7. Install inlet and pipe protection and temporary seeding and erosion control blankets
8. Construct pavement subbase and surface course.
9. Fine grading, landscaping and other miscellaneous items in pavement area
10. Remove all temporary erosion control measures and install permanent erosion control and stabilization measures.

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:

Village of Hinsdale and the Flagg Creek Water Reclamation District

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

Village of Hinsdale

M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the receiving waters can be found on the erosion and sediment control plans:

Flagg Creek; Des Plaines River

N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.

N/A

O. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:

- Floodplain
- Wetland Riparian
- Threatened and Endangered Species
- Historic Preservation
- 303(d) Listed receiving waters for suspended solids, turbidity, or siltation
- Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation
- Applicable Federal, Tribal, State or Local Programs
- Other

1. 303(d) Listed receiving waters (fill out this section if checked above):*

N/A

- a. The name(s) of the listed water body, and identification of all pollutants causing impairment:

N/A

- b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

N/A

- c. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:

N/A

- d. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

N/A

2. TMDL (fill out this section if checked above)

- a. The name(s) of the listed water body:

N/A

- b. Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:

N/A

- c. If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:

N/A

P. The following pollutants of concern will be associated with this construction project:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Soil Sediment | <input checked="" type="checkbox"/> Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) |
| <input checked="" type="checkbox"/> Concrete | <input checked="" type="checkbox"/> Antifreeze / Coolants |
| <input checked="" type="checkbox"/> Concrete Truck Waste | <input checked="" type="checkbox"/> Waste water from cleaning construction equipment |
| <input checked="" type="checkbox"/> Concrete Curing Compounds | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Solid Waste Debris | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Paints | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Solvents | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Fertilizers / Pesticides | <input type="checkbox"/> 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:

- | | |
|---|--|
| <input type="checkbox"/> Preservation of Mature Vegetation | <input checked="" type="checkbox"/> Erosion Control Blanket / Mulching |
| <input type="checkbox"/> Vegetated Buffer Strips | <input checked="" type="checkbox"/> Sodding |
| <input type="checkbox"/> Protection of Trees | <input type="checkbox"/> Geotextiles |
| <input checked="" type="checkbox"/> Temporary Erosion Control Seeding | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Temporary Turf (Seeding, Class 7) | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Temporary Mulching | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Permanent Seeding | <input type="checkbox"/> Other (specify) |

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

Temporary Erosion Control Seeding - This item will be applied to all disturbed areas not to be paved within 7 days to minimize the amount of exposed surface areas.

Erosion Control Blankets/Mulching - Erosion Control Blanket will be installed over all slopes and areas where temporary erosion control seeding is being placed to prevent dispersal of seeds and allow seeds to germinate.

Sodding - Permanent sodding will be placed upon completion of the project per IDOT specifications.

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

Temporary erosion control measures will be removed and areas final stabilized as directed by the engineer. The cost of this removal shall be included in the unit bid price for various temporary erosion control pay items. Permanent measures within roadway right of way will be maintained by the Village of Hinsdale. Permanent measures placed within temporary easements will be maintained by the parcel owner, as agreed to during easement negotiations.

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:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Perimeter Erosion Barrier | <input type="checkbox"/> Rock Outlet Protection |
| <input type="checkbox"/> Temporary Ditch Check | <input type="checkbox"/> Riprap |
| <input checked="" type="checkbox"/> Storm Drain Inlet Protection | <input type="checkbox"/> Gabions |
| <input type="checkbox"/> Sediment Trap | <input type="checkbox"/> Slope Mattress |
| <input type="checkbox"/> Temporary Pipe Slope Drain | <input type="checkbox"/> Retaining Walls |
| <input type="checkbox"/> Temporary Sediment Basin | <input type="checkbox"/> Slope Walls |
| <input type="checkbox"/> Temporary Stream Crossing | <input type="checkbox"/> Concrete Revetment Mats |

- | | |
|--|--|
| <input type="checkbox"/> Stabilized Construction Exits | <input type="checkbox"/> Level Spreaders |
| <input type="checkbox"/> Turf Reinforcement Mats | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Permanent Check Dams | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Permanent Sediment Basin | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Aggregate Ditch | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Paved Ditch | <input type="checkbox"/> Other (specify) |

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

Perimeter erosion barrier will be installed prior to any grubbing or earth moving activities as per the plans.

Temporary erosion control seeding shall be applied at a rate of 100 lbs/acre

Erosion Control Blanket will be placed over the temporary seeding upon completion of the seeding to prevent dispersal of seeding due to high winds or other means.

Inlet protection will be installed upon completion of the particular drainage items.

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

Temporary erosion control measures including perimeter erosion barrier and erosion control seeding will be removed and the area permanently stabilized as per the plans. Permanent control measures include sodding which will be maintained until final stabilization has been achieved and will be maintained in the future by the Village of Hinsdale.

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.

N/A

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.

- 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:

Restrictor plates will be installed within manholes prior to connection to existing collection main lines

- 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:

The approved procedures and requirements are specified in the sediment and erosion control plans.

- 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.

1. 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.

Seeding - All disturbed areas will be temporarily seeded on a weekly basis to minimize the amount of erodible surface within the contract limits.

Perimeter Erosion Barrier - Sediment will be removed if the integrity of the fencing is in jeopardy. Any fence that has been knocked down will be repaired immediately.

Inlet Protection/Filters - Sediment will be removed if the integrity of the inlet protection is in jeopardy. Any inlet protection filters which fail will be replaced immediately.

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:

N/A

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.



Contractor Certification Statement

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.

Route _____	Marked Rte. _____
Section _____	Project No. _____
County _____	Contract No. _____

This certification statement is a part of SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the Permit No. ILR 10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

In addition, I have read and understand all of the information and requirements stated in SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

- Contractor
- Sub-Contractor

_____	_____
Print Name	Signature
_____	_____
Title	Date
_____	_____
Name of Firm	Telephone
_____	_____
Street Address	City/State/ZIP

Items which this Contractor/subcontractor will be responsible for as required in Section II.G. of SWPPP:



Illinois Environmental Protection Agency

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

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: Village of Hinsdale
Mailing Address: 19 E. Chicago Avenue Phone: 630-789-7000
City: Hinsdale State: IL Zip: 60521 Fax: _____
Contact Person: Daniel Deeter E-mail: ddeeter@villageofhinsdale.org
Owner Type (select one) City

CONTRACTOR INFORMATION

MS4 Community: Yes No

Contractor Name: _____
Mailing Address: _____ Phone: _____
City: _____ State: _____ Zip: _____ Fax: _____

CONSTRUCTION SITE INFORMATION

Select One: New Change of information for: ILR10 _____
Project Name: Oak Street Bridge Replacement County: DuPage
Street Address: _____ City: Hinsdale IL Zip: 60521
Latitude: 41 48 17.999 Longitude: 87 55 12
(Deg) (Min) (Sec) (Deg) (Min) (Sec) Section Township Range
Approximate Construction Start Date May 1, 2015 Approximate Construction End Date Apr 15, 2016

Total size of construction site in acres: 4.23 acres
If less than 1 acre, is the site part of a larger common plan of development?
 Yes No

Fee Schedule for Construction Sites:
Less than 5 acres - \$250
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)
Location of SWPPP for viewing: Address: _____ City: _____
SWPPP contact information: Inspector qualifications: _____
Contact Name: _____
Phone: _____ Fax: _____ E-mail: _____
Project inspector, if different from above Inspector qualifications: _____
Inspector's Name: _____
Phone: _____ Fax: _____ E-mail: _____

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 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:

The demolition and reconstruction of the existing Oak Street bridge over the BNSF Railroad, as well as the reconstruction of 1,120 linear feet of Oak Street from a point 135 feet south of Chicago Avenue to 40 feet north of Walnut Avenue. Additional roadway reconstruction will take place on Chicago Avenue approximately 200 feet east and west of Oak Street, on Hillgrove Avenue from Oak Street to County Line Road, and on County Line Road from Hillgrove Avenue to 40 feet south of Walnut Avenue. The work will take place within the Village of Hinsdale.

HISTORIC PRESERVATION AND ENDANGERED SPECIES COMPLIANCE

Has the project been submitted to the following state agencies to satisfy applicable requirements for compliance with Illinois law on:

Historic Preservation Agency Yes No

Endangered Species Yes No

RECEIVING WATER INFORMATION

Does your storm water discharge directly to: Waters of the State or Storm Sewer

Owner of storm sewer system: Village of Hinsdale

Name of closest receiving water body to which you discharge: Flagg Creek

Mail completed form to: Illinois Environmental Protection Agency
 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

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

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this 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. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

 Owner Signature:

 Date:

 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.

BNSF RAILWAY COMPANY



GUIDELINES FOR PREPARATION OF
BRIDGE DEMOLITION & REMOVAL PLAN
OVER THE BNSF RAILWAY

OFFICE OF DIRECTOR BRIDGE ENGINEERING
KANSAS CITY, KANSAS
August 21, 2008

INDEX

	ITEM	PAGE
I.	General	1
II.	Bridge Removal Plan	2
III.	Procedure	4
IV.	Track Protection	5
V.	Cranes	6
VI.	Cutting Torches	7
VII.	Utilities	8
VIII.	Hazardous Material	8
	Appendix	9

I. GENERAL

A. The Contractor's work shall in no way impede the train operations.

1. The words "demolition" and "removal" will be used interchangeably in this Guideline.
2. The term "Railroad" refers to the Railroad's Engineers or designated representative.

B. Safety takes precedence over productivity. The Contractor shall be responsible for planning and executing all procedures necessary to remove the structure in a safe, predictable manner.

1. All employees of the Contractor and Subcontractors must be Safety Trained. Refer to <http://www.railroadsafetytraining.com>

C. The Contractor shall develop a demolition plan ONLY AFTER CONSULTING WITH THE RAILROAD TO GET AN ESTIMATE OF THE RANGE OF TRACK WINDOWS THAT MIGHT NORMALLY BE AVAILABLE FOR THE JOB SITE.

1. A Track Window is the elapsed time between approaching trains.
2. An estimate of the availability of Track Windows can be used by the Contractor to design a demolition plan. The estimated Track Window is a guideline and not to be considered as a guarantee for available working time.
3. A Track Window is highly variable, depending on the location. Low speed - low train density tracks have predictable Track Windows. The opposite is true for high density- high speed main tracks. The Railroad can furnish a range of Track Windows that might be expected at a specific location under normal train traffic conditions.
4. Plan the demolition procedures based upon the smallest ESTIMATED Track Window. Do not assume the longest Track Window will be available on any given day. Do not assume the same Track Windows will be available from one day to the next.

D. The Railroad's tracks and property shall be protected at all times.

1. Removal procedures shall take into account SEVER WEATHER CONDITIONS, including high winds, heavy rains and snowfall accumulation.
2. The contractor shall ensure that all areas adjacent to active tracks shall remain free from hazards.
 - a) Trainmen must have an unobstructed walkway available parallel to all active tracks.
 - b) All open excavations shall be protected with fencing.
 - c) Do not store materials or equipment within 25 feet of the centerline of an active track.
3. Protect the project area from vandalism.
 - a) Do not leave debris where vandals could place it on the tracks to drop it onto the tracks from an overhead structure.

Guidelines for Preparation of Bridge Demolition and Removal Plan over the BNSF Railway

- b) Secure all heavy equipment from potential movement by vandals.
- c) Do not store flammable materials on railroad right of way. Remove combustible waste materials daily. Do not store fuel or other flammable liquids on railroad right of way.

E. All demolition materials and scrap shall be disposed of outside the Railroad right-of-way at no expense to the railroad. At the conclusion of the project, the area must be left in a clean and graded condition to the exclusive satisfaction of the Railroad.

F. No work is allowed within 25 feet of the nearest track unless protected by a Railroad Flagman. When trains approach the work site, all demolition activity within 50 feet of the track shall stop until the entire length of the train has passed the work site.

G. The staged demolition of any portion of a structure over or adjacent to operational tracks will not jeopardize the stability of other parts of the structure awaiting demolition.

- 1. Where multiple tracks are involved, the demolition plan should be engineered as much as practical such that no more than one track is rendered impassable at any given moment.

H. No blasting will be permitted on Railroad's right-of-way.

II. BRIDGE REMOVAL PLAN

A. The Contractor shall submit a detailed Bridge Removal Plan to the Railroad. The Bridge Removal Plan shall encompass the following:

- 1) Provide a scale drawing showing the plan view, elevation and location of the structure and locations of any access roads needed on railroad right of way to access the job site. The as-built drawings may be used for the submittal provided the removal steps are clearly marked and legible.
- 2) Indicate the position of all railroad tracks below the bridge. Identify each track as mainline, siding, spur, etc. Identify locations where temporary crossings will be installed to cross equipment over each track.
- 3) List in sequential order, all procedures necessary to remove the bridge in a safe and controlled manner. Include step by step details of each sequence and the elapsed time required to execute the sequence. The removal plan must specify which, if any, sequences will render a track impassable to trains during execution of the sequence. If more than one track is adjacent to the work area, specify which tracks will be impassable during execution of each sequence.
- 4) Include text, drawings or photos to communicate the types of equipment that will be utilized. Include diagrams showing the position of the equipment in relation to the tracks. Where cranes are to be used, furnish the lifting capacities of the crane at the anticipated radius and the weights of components to be removed.

Guidelines for Preparation of Bridge Demolition and Removal Plan over the BNSF Railway

- 5) For every sequence, specify the minimum horizontal clearance from centerline of track and the minimum vertical clearance above top of rail for equipment, falsework, rubble shields and temporary supports. If a crane is to be utilized, include clearances for the backswing radius of the crane counterweight and the position of the outriggers. (Refer to the attached frame protection diagram for the minimum allowable vertical and horizontal clearances.)
- 6) If the removal plan includes concrete demolition, include the details of rubble control such as maximum anticipated size of rubble, drop distance, shield size and shield position.
- 7) The Bridge Removal Plan will indicate locations and types of temporary supports, shoring, cables or bracing required. Refer to current standard drawing 106613 "General Shoring Requirements" "Guidelines for Design and Construction of Falsework for Structures" and "Guidelines for Design and Construction of Shoring Adjacent to Active Railroad Tracks", and the appropriate Federal, State and local regulations and building codes.
- 8) If any temporary supports interfere with the natural drainage along the Railroad right-of-way, a temporary drainage diversion plan shall be included in the Bridge Removal Plan. The drainage plan shall route all surface water away from the railroad tracks.
 - a) Do not block drainage in side ditches with debris.
 - b) Do not place footing blocks in drainage ditches.
 - c) Surface runoff must be diverted away from the footing block excavations to avoid saturation of the underlying supporting soils.
- 9) The Demolition Plan shall include details, limits, and locations of protective shields or other measures designed to protect the rails, ties and ballast from falling debris. Include details of catchment apparatus necessary to protect the tracks from rolling debris that may fall onto side slopes. Include the design load for the shields for both the maximum static load and the maximum anticipated impact loads from falling debris. Specify the type of equipment that will be utilized to remove the debris and shields from operational tracks.
- 10) Protection of the track ballast section must be provided to avoid contamination of the rock with fine dust and mud produced during demolition activities. Filter fabric or some other effective means of prevent ballast contamination should be incorporated into the Demolition Plan.
- 11) All overhead and underground utilities in the area affected by removal of the bridge shall be located on the drawings, including any fiber optic, railroad signal, and communication lines.
- 11) Indicate the limits of demolition of substructures, including depths and dimensions of excavations that might be necessary to demolish buried footings.
- 12) The Demolition Plan should include details of planned on-site fire suppression.

B. The Contractor shall submit to the Railroad: three (3) complete sets of the Bridge Removal Plan for review and comments.

Guidelines for Preparation of Bridge Demolition and Removal Plan over the BNSF Railway

1. The Plan shall be sealed by a Civil or Structural Engineer registered in the state where the proposed demolition will take place.
2. A minimum of four (4) weeks shall be expected for the Railroad's review after the complete submittal is received.
3. No removal operations will be permitted over the Railroad right of way until the submitted material has been reviewed and approved.

C. Approval and/or comments furnished by the Railroad in the course of review of the Contractor's Removal Plan will not relieve the Contractor of the ultimate responsibility for the safe and secure demolition of the structure.

III. PROCEDURE

A. The Bridge Removal Plan must be executed such that stability is continuously maintained for the standing portions of the structure over all tracks.

- 1) All members of the structure being demolished must be continuously supported to resist high winds, including wind buffets and suction forces generated by high speed trains.

B. Prior to proceeding with bridge removal, the sealing Civil or Structural Engineer, or his authorized representative, shall inspect all components of the temporary support shoring, including temporary bracing and protective coverings, insuring conformity with the working drawings.

- 1) The sealing Engineer shall certify in writing to the Railroad that the work is in conformance with the drawings and that the materials and workmanship are satisfactory.
- 2) A copy of this certification shall be available at the job site at all times.

C. Well in advance of planned work, coordinate the removal schedule with the Railroad.

- 1) No work is allowed within 25 feet of the nearest active track unless protected by a Railroad Flagman.
- 2) All the removal work within 25 feet of the nearest active track shall be performed during the Track Windows granted by the Railroad Flagman.
- 3) When trains pass the work site, all demolition activity within 50 feet of the track shall stop until the entire length of the train has passed the work site.

D. All substructures shall be removed to at least 3 feet below the final finished grade or at least 3 feet below base of rail whichever is lower, unless otherwise specified by the Railroad.

E. All debris and refuse shall be removed from the railroad right of way by the Contractor. The premises shall be left in a neat and presentable condition to the exclusive satisfaction of the Railroad. Soils contaminated by fuel spills, hydraulic oil leaks, etc. will be removed from railroad right of way and replaced to the exclusive satisfaction of the Railroad.

F. The work progress shall be reviewed and logged by the Contractor's Engineer. Should an unplanned event occur, the Contractor shall inform the Railroad and submit a procedure to correct or remedy the occurrence.

G. Beam removal and all other demolition procedures shall take place as much as practicable with equipment positioned above the track. In the rare case that beams require removal from below the structure, the following steps shall be taken before beams are allowed to straddle the tracks:

- 1) Certain territories with high density train traffic, especially where multiple main tracks are affected, may not grant Track Windows on all tracks simultaneously. Beam removal from the underside of structures may not be possible unless the procedure can be accomplished in very short Track Windows or be engineered such that only one track is affected.
- 2) The work shall be scheduled well in advance with the Railroad's Service Unit Superintendent subject to the Railroad's operational requirements for continuous train operations. The beam removal plan must be engineered to minimize the Track Window time.
- 3) The rails, ties and ballast shall be protected. No equipment will be crossed over or placed on the tracks unless pre-approved by the Railroad.
- 4) The beams shall be blocked to prevent the beams from coming into contact with the rails. Blocking shall not be placed on the rails or ties.
- 5) Upon approach of a train, the beams and all personnel and equipment will be moved a position to provide a minimum of 15 feet horizontal clearance and 21 ft. vertical clearance from the nearest rail. Care must be exercised to insure that crane booms are rotated to a position parallel with the track.

IV. TRACK PROTECTION

A. The track protective cover shall be constructed before beginning bridge removal work and may be supported by falsework or members of the existing structure. See the attached "Track Shield Detail and Frame Protection Detail" for additional requirements. The following are examples of protective covers that may be acceptable:

- 1) A decking supported by the bridge or a suspended cover from the bridge above the track clearance envelope.
- 2) A track shield cover over the tracks per the attached detail.

Guidelines for Preparation of Bridge Demolition and Removal Plan over the BNSF Railway

- 3) A framed cover outside the track clearance envelope.
- 4) A catcher box or loader bucket under decking and parapets overhanging the exterior girders.
- 5) Protection of the track ballast section must be provided to avoid contamination of the rock with fine dust and mud produced during demolition activities. Filter fabric or some other effective means of prevent ballast contamination should be incorporated into the Demolition Plan.

B. Construction equipment shall not be crossed over or placed on the tracks unless the rails, ties and ballast are protected against damage.

- 1) Track protection is required for all equipment including rubber tired equipment.
- 2) A list of equipment to be crossed over or positioned on the tracks along with the intended method of protection shall be submitted to the railroad for approval prior to use at the job site.

C. Temporary haul road crossings shall be either Timbers or Precast Concrete Panels. The type of crossing shall be determined by the Railroad.

- 1) Solid timbers or ballast with timber headers shall be used between multiple tracks.
- 2) If the job site is accessible to the public, all temporary haul road crossings shall be protected with barricades or locked gates when the Contractor is not actively working at the site.
- 3) Installation and removal of temporary track crossings for equipment shall be scheduled well in advance with the Railroad.

V. CRANES

A. When cranes are operated over or adjacent to the tracks the following is required:

- 1) The Contractor shall verify that the foundations and soil conditions under the crane and crane outriggers can support the loads induced by the crane under an assumed maximum capacity lift. The size and material type of crane mats shall be rigid and of sufficient capacity to safely distribute the crane loads.
- 2) Front end loaders and backhoes cannot be used in place of a crane to lift materials over the tracks. These types of equipment do not have the necessary safety features built into the machines to circumvent overloading and tipping. Only cranes with the rated capacity to handle the loads may be used.
- 3) Additional track protection may be required for a crane when crossing over the track. The protection methods shall be submitted to the Railroad for review and comment well in advance of intended use.

Guidelines for Preparation of Bridge Demolition and Removal Plan over the BNSF Railway

6) Cranes and other equipment utilizing outriggers shall not place outriggers on the tracks or ballast.

7) Cranes or crane booms shall not be positioned within the track clearance envelope without Railroad Flagman protection. Cranes operating from a position farther than 25 ft. from the nearest track will need a Railroad Flagman present if the boom length is such that it could fall onto a track.

8) During passage of a train, the Crane Operator must stop all movements. Crane Operators shall remain in the cab with motor at idle with the load lines, boom, rotation and travel controls locked and stationary until the full length of the train has passed the job site.

VI. CUTTING TORCHES

A. When a cutting torch or welding equipment is used in the demolition process, the following steps shall be taken:

- 1) Fire suppression equipment is required on-site.
- 2) Do not use a torch over, between, or adjacent to the tracks unless a steel plate protective cover is used to shield against sparks and slag coming into contact with timber ties. Care shall be taken to make certain the use of a steel plate does not come in contact with the rails. See "Track Shield Details" for other requirements. Details of the shield shall be submitted to the Railroad for approval.
- 3) Wet the ties below the steel plate and wet other timbers and flammable demolition debris located near cutting areas.
- 4) Monitor the work site for at least three hours after cutting has ceased to detect a smoldering fire.

B. Extensive overhead cutting may require more robust fire suppression equipment and precautions than what would normally be required for routine cuts.

- 1) On days when extensive torch cutting is planned, the Contractor shall have a larger water supply on hand or take other measures as needed to effectively suppress fires.
- 2) Overhead torch cutting and welding must cease upon approach and passage of a train.
- 3) Extensive torch cutting shall not take place during high winds.
- 4) Contractor will clear vegetation and other combustible debris from the surrounding work areas prior to engaging in extensive torch cutting.

VII. UTILITIES

A. The demolition operations shall be planned such that the utility lines are operating safely at all times. The utility lines shall be protected if affected by demolition operations. All the work associated with utility lines should be coordinated by the contractor with the respective utility companies.

VIII. HAZARDOUS MATERIALS

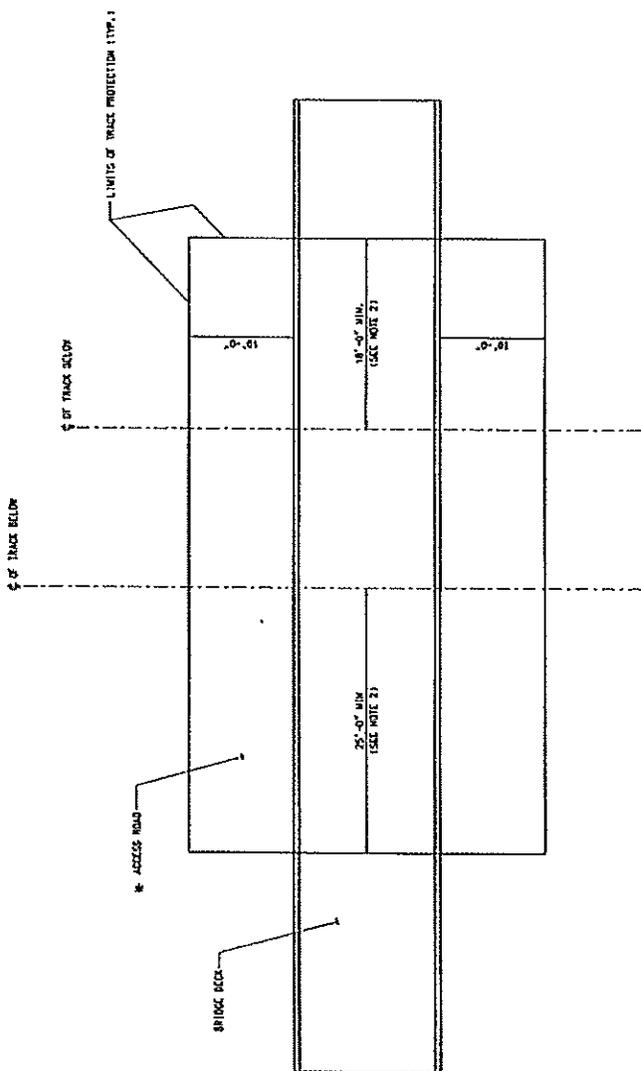
A. If any hazardous materials are discovered, provide material protection as specified in local hazardous material codes and immediately contact the Railroad.

- 1) If pipelines are attached to the structure, pipes must be purged of flammable or hazardous materials prior to beginning demolition.
- 2) Fuel spills, hydraulic fluid releases, equipment oil leaks or any other release of contaminants must be reported to the Railroad. Contaminated soils must be removed and replaced to the satisfaction of the Railroad.

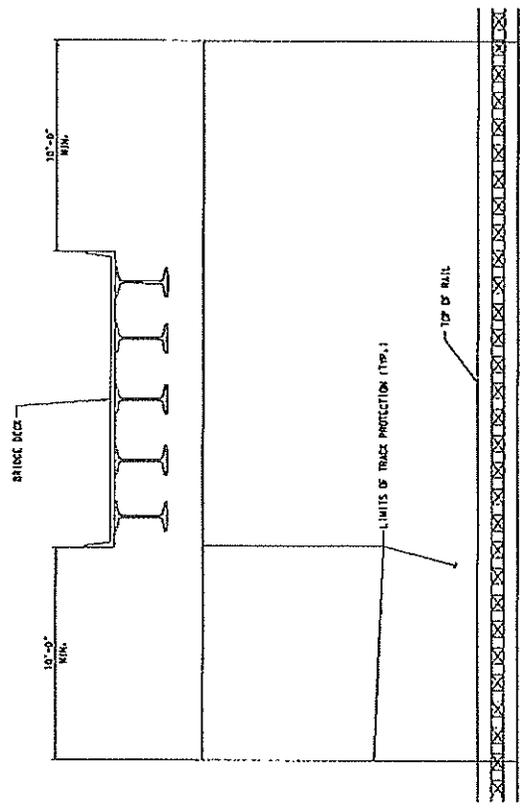
APPENDIX -- BNSF-UP Demolition Drawings

- Demolition Frame Protection Details (Sheets 1 of 3 & 2 of 3)
- Demolition Track Shield Details (Sheet 3 of 3)

- NOTES:**
1. SEE GENERAL NOTES ON BRIDGE ELEVATION SHEET.
 2. STANDARD LIMITS OF PROTECTION ARE SHOWN FOR MIN.
 3. LIMITS OF PROTECTION FOR BRIDGE DECK: SEE BRIDGE ELEVATION SHEET.
 4. MINIMUM LIMITS OF PROTECTION.



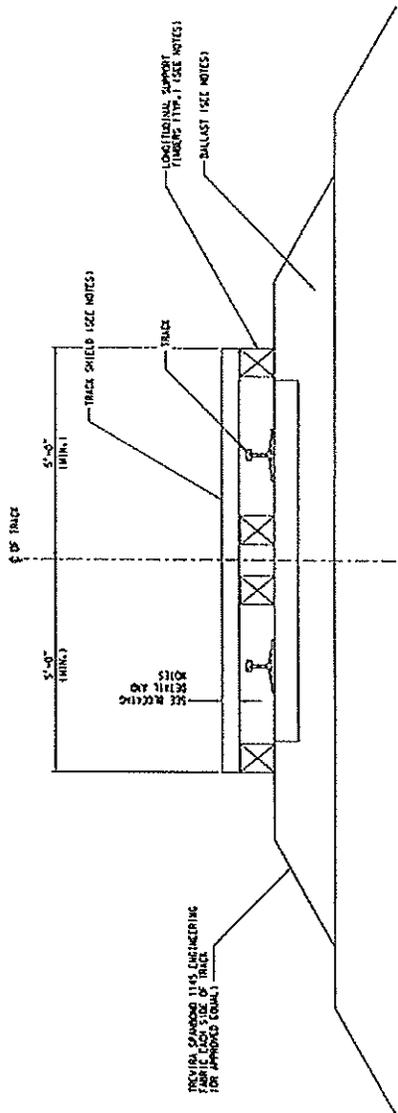
BRIDGE PLAN
STANDARD LIMITS OF PROTECTION FOR FRAME PROTECTION



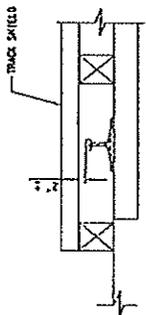
BRIDGE DECK CROSS SECTION
STANDARD LIMITS OF PROTECTION

BNSF
RAILWAY
DEMOLITION FRAME
PROTECTION DETAILS
DATE: DECEMBER 17, 2007
SHEET 2 OF 3

* IF NO ACCESS ROAD, USE MIN. DIMENSION FROM OTHER SIDE



**TRACK SHIELD DETAIL
FOR DEBRIS FALLING FROM BRIDGE DECK REMOVAL
(WHEN TRACK TIME WINDOW IS AVAILABLE)**



BLOCKING DETAIL

NOTES:

1. A FLAG MAN IS REQUIRED AT ALL TIMES DURING THE USE OF A TRACK SHIELD.
2. THE TRACK SHIELD SHALL BE DESIGNED BY THE CONTRACTOR AND SHALL BE OF SUFFICIENT STRENGTH TO WITHSTAND THE WEIGHT OF THE SHIELD AND THE WEIGHT OF DEBRIS FALLING INTO THE RAILROAD TRACK. ADDITIONAL WEIGHTS AND MATERIALS SHALL BE PROVIDED AS NECESSARY TO PREVENT FINE MATERIALS OR DEBRIS FROM SLIPPING DOWN FROM THE TRACKS.
3. THE SHIELD SHALL BE PREFABRICATED AND FURNISHED WITH LIFTING HOLES TO FACILITATE REMOVAL.
4. THE SHIELD SHALL BE OF SUFFICIENT STRENGTH TO SPAN BETWEEN ITS SUPPORTS WITHOUT BEARING UPON THE RAILS AND TO WITHSTAND BRIPPING RAILS.
5. BEFORE REMOVAL, THE SHIELD SHALL BE CLEANED OF ALL DEBRIS AND FINE MATERIAL. COARSE MATERIAL SHALL LINE THE BALLAST BEDDING TO PREVENT CONTAMINATION.
6. THE TRACK SHIELD SHALL EXTEND AT LEAST 20 FEET BEYOND THE LIMITS OF DEMOLITION TRANSDVERSE TO THE EDGE OF THE BRIDGE.

7. LONGITUDINAL SUPPORT TIMBERS FOR THE SHIELD SHALL NOT EXTEND ABOVE THE TOP OF RAIL WHEN THE SHIELD IS REMOVED. SCORING FROM THE TOP OF RAIL TO THE BOTTOM OF THE SHIELD MAY BE ATTACHED TO THE SHIELD. REMAINING TIMBERS SHALL BE UNCHOCKED.
8. FOR TRAIN PASSAGE, THE RAILBED SHALL BE REWORKED TO A MINIMUM OF 8'-5" FROM THE NEAREST RAIL AND TO AN ELEVATION NO HIGHER THAN THE TOP OF RAIL.
9. AT THE END OF THE DAY, THE RAILBED SHALL BE REWORKED COMPLETELY TO A MINIMUM OF 10'-0" FROM THE NEAREST RAIL AND TO AN ELEVATION NO HIGHER THAN THE TOP OF RAIL. COARSE DEBRIS SHALL BE USED TO PREVENT BALLAST CONTAMINATION OF FINE MATERIALS.
10. CASE SHALL BE TAKEN TO NOT PLACE METAL ACROSS THE TRACK RAILS. RAILROAD COMMUNICATION ARE SENT THROUGH THE RAILS AND WILL BE INTERRUPTED BY A SHORT BETWEEN RAILS.
11. DETAILS SHOWN APPLY FOR TIMBER TIES. SPECIAL DETAILS ARE REQUIRED FOR CONCRETE TIES.

BRIDGE AGREEMENT**LAW DEPARTMENT APPROVED**BNSF File No. _____
OAK STREET WAGON BRIDGE

This Agreement ("**Agreement**"), is executed to be effective as of this 14th day of July, 2009 ("**Effective Date**"), by and between BNSF RAILWAY COMPANY, a Delaware corporation ("**BNSF**"), and the **VILLAGE OF HINSDALE**, a political subdivision of the State of Illinois ("**Agency**").

RECITALS:

WHEREAS, BNSF owns and operates a line of railroad in and through the Village of Hinsdale, DuPage County, State of Illinois;

WHEREAS, BNSF currently has an ownership interest in a wagon bridge located at DOT 079 520F, Milepost 16.44, Line Segment 71, known as the Oak Street Wagon Bridge ("Structure") depicted on attached Exhibit A; and

WHEREAS, BNSF desires to convey the Structure to Agency and Agency desires to purchase the Structure from BNSF; and

WHEREAS, Agency agrees to maintain the Structure in accordance with all applicable laws and regulations.

NOW, THEREFORE, in consideration of the mutual covenants and agreements of the parties contained herein, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I – SCOPE OF WORK

1. The term "**Project**" as used herein includes any and all work related to the maintenance of the Structure.

ARTICLE II – BNSF OBLIGATIONS

1. In consideration of the faithful performance of the Agency's covenants contained herein, BNSF will grant to Agency, its successors and assigns, for the sum of ten (10.00) dollars and such other good and valuable consideration, an easement (hereinafter called, the "Easement") to enter upon and use that portion of BNSF's right-of-way as is necessary to use and maintain the Structure, substantially in the form of Exhibit B attached to this Agreement.

2. BNSF agrees to and does hereby waive and claims of ownership in and to the Structure and shall, by quitclaim deed or bill of sale and at no cost to the Agency, transfer all of its rights, titles, or interests in the Structure to the Agency.

3. BNSF will furnish all flagging services required for the Project, at the sole cost and expense of the Agency, and necessary for the safety of BNSF's property and the operation of its trains during the Project as set forth in further detail on Exhibit C.

4. Pursuant to the Inspection Report performed by CTE on August 24, 2008 the Structure is in compliance with all Illinois Department of Transportation regulations, a copy of which is attached as Exhibit D.

5. BNSF agrees that this Agreement is contingent on the Agency obtaining funding for the replacement of the Structure. If the Agency is unable to obtain full funding for the replacement, the Agency may, in its sole discretion, at any time within 10 years of the date of execution of this Agreement, terminate this Agreement with 10 days written notice to BNSF. If the Agency exercises this right within the specified time period by written notice to BNSF, title to the Structure and all easements associated therewith shall revert to BNSF.

ARTICLE III – AGENCY'S OBLIGATIONS

In consideration of the covenants of BNSF set forth herein and the faithful performance thereof, Agency agrees as follows:

1. Agency's work in connection with the Project must be performed by Agency or Agency's contractor in a good and workmanlike manner that will not endanger or interfere with the safe and timely operations of BNSF and its facilities.
2. In order to prevent damage to BNSF trains and property, Agency or Agency's contractor(s) must notify BNSF's Roadmaster at least seven (7) calendar days prior to requesting a BNSF flagman in accordance with the requirements of Exhibit C attached hereto. Additionally, Agency or Agency's contractor(s) will notify BNSF's Manager of Public Projects ten (10) calendar days prior to commencing work on BNSF property or near BNSF tracks.
3. Agency must include the following provisions in any contract with its contractor(s) performing work on said Project:
 - (a) The Contractor is placed on notice that fiber optic, communication and other cable lines and systems (collectively, the "Lines") owned by various telecommunications companies may be buried on BNSF's property or right-of-way. The contractor will be responsible for contacting BNSF's Engineering Representative Patricia Casler and/or the telecommunications companies and notifying them of any work that may damage these Lines or facilities and/or interfere with their service. The contractor must also mark all Lines in the field in order to verify their locations. The contractor must also use all reasonable methods when working in the BNSF right-of-way or on BNSF property to determine if any other Lines (fiber optic, cable, communication or otherwise) may exist.
 - (b) Failure to mark or identify these Lines will be sufficient cause for BNSF's Engineering Representative Patricia Casler to stop the work at no cost to the Agency or BNSF until these items are completed.
 - (c) In addition to the liability terms contained elsewhere in this Agreement, the contractor hereby indemnifies, defends and holds harmless BNSF for, from and against all cost, liability, and expense whatsoever (including, without limitation, attorney's fees and court costs and expenses) arising out of or in any way contributed to by any act or omission of Contractor, its subcontractors, agents and/or employees that cause or in any way or degree contribute to (1) any damage to or destruction of any Lines by Contractor, and/or its subcontractors, agents and/or employees, on BNSF's property or within BNSF's right-of-way, (2) any injury to or death of any person employed by or on behalf of any telecommunications company, and/or its contractor, agents and/or employees, on BNSF's property or within BNSF's right-of-way, and/or (3) any claim or cause of action for alleged loss of profits or revenue by, or loss of service by a customer or user of such telecommunication company(ies). **TO THE EXTENT PERMITTED BY LAW, THE LIABILITY ASSUMED BY CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DAMAGE,**

DESTRUCTION, INJURY, DEATH, CAUSE OF ACTION OR CLAIM WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF BNSF, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE INTENTIONAL MISCONDUCT OR GROSS NEGLIGENCE OF BNSF. Ok smd

- (d) The Contractor will be responsible for the rearrangement of any facilities or Lines determined to interfere with the work. The Contractor must cooperate fully with any telecommunications company(ies) in performing such rearrangements.
- (e) All work performed within the limits of BNSF's right-of-way must be performed in a good and workmanlike manner.
- (f) Changes or modifications during maintenance that affect safety or BNSF operations will be subject to BNSF's approval;
- (g) No work will be commenced within BNSF's right-of-way until each of the prime contractors employed in connection with said work must have (i) executed and delivered to BNSF a letter agreement in the form of Exhibit C-1 and complied with the terms of Exhibit C, and (ii) delivered to and secured BNSF's approval of the required insurance; and
- (g) If it is in Agency's best interest, Agency may direct that the maintenance be done by day labor under the direction and control of Agency, or if at any time, in the opinion of Agency, the contractor has failed to prosecute with diligence the work specified in and by the terms of said contract, Agency may terminate its contract with the contractor and take control over the work and proceed to complete the same by day labor or by employing another contractor(s) provided; however, that any contractor(s) replacing the original contractor(s) must comply with the obligations in favor of BNSF set forth above and, provided further, that if such maintenance is performed by day labor, Agency will, at its expense, procure and maintain on behalf of BNSF the insurance required by Exhibit C-1.
- (h) BNSF has the right at any time to revise or change the work windows, due to train operations or service obligations. BNSF will not be responsible for any additional costs and expenses resulting from a change in work windows. Additional costs and expenses resulting from a change in work windows shall be accounted for in the contractor's expenses for the Project.

4. Agency may, at Agency's sole expense, alter or reconstruct the Structure or the highway components of the Structure if necessary or desirable, provided, however, that any such alteration or reconstruction will require obtaining BNSF's prior written consent and the execution of a supplement to this Agreement or the completion of a separate agreement.

5. **TO THE FULLEST EXTENT PERMITTED BY LAW, AGENCY HEREBY RELEASES, INDEMNIFIES, DEFEND AND HOLDS HARMLESS BNSF, ITS AFFILIATED COMPANIES, PARTNERS, SUCCESSORS, ASSIGNS, LEGAL REPRESENTATIVES, OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES AND AGENTS FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LIABILITIES, FINES, PENALTIES, COSTS, DAMAGES, LOSSES, LIENS, CAUSES OF ACTION, SUITS, DEMANDS, JUDGMENTS AND EXPENSES (INCLUDING, WITHOUT LIMITATION, COURT COSTS AND ATTORNEYS' FEES) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON (INCLUDING, WITHOUT LIMITATION, THE EMPLOYEES OF THE PARTIES HERETO) OR ENTITY DIRECTLY OR INDIRECTLY ARISING OUT OF, RESULTING FROM OR RELATED TO (IN WHOLE OR IN PART) (I) THE USE, OCCUPANCY OR PRESENCE OF AGENCY, ITS CONTRACTORS, SUBCONTRACTORS, EMPLOYEES OR AGENTS IN, ON, OR ABOUT THE STRUCTURE , (II) THE PERFORMANCE, OR FAILURE TO PERFORM BY THE AGENCY, ITS CONTRACTORS, SUBCONTRACTORS, EMPLOYEES, OR AGENTS, ITS WORK OR ANY OBLIGATION UNDER THIS AGREEMENT, (III) THE SOLE OR CONTRIBUTING ACTS OR OMISSIONS OF AGENCY, ITS CONTRACTORS, SUBCONTRACTORS, EMPLOYEES, OR AGENTS IN, ON, OR ABOUT THE**

STRUCTURE , (IV) AGENCY'S OCCUPATION AND USE OF BNSF'S PROPERTY OR RIGHT-OF-WAY, INCLUDING, WITHOUT LIMITATION, MAINTENANCE OF THE STRUCTURE BY AGENCY, OR (V) AN ACT OR OMISSION OF AGENCY OR ITS OFFICERS, AGENTS, INVITEES, EMPLOYEES OR CONTRACTORS OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR ANYONE THEY CONTROL OR EXERCISE CONTROL OVER. THE LIABILITY ASSUMED BY AGENCY WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DAMAGE, DESTRUCTION, INJURY OR DEATH WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF BNSF, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE INTENTIONAL MISCONDUCT OR GROSS NEGLIGENCE OF BNSF.

6. BNSF will have the right to stop maintenance work on the Structure if any of the following events take place: (i) Agency (or any of its contractors) performs the work in a manner contrary to any plans and specifications approved by BNSF; (ii) Agency (or any of its contractors), in BNSF's opinion, prosecutes the Project in a manner which is hazardous to BNSF property, facilities or the safe and expeditious movement of railroad traffic; or (iii) the insurance described in the attached Exhibit C-1 is canceled during the course of the Project. The work stoppage will continue until all necessary actions are taken by the Agency or its contractors to rectify the situation to the satisfaction of BNSF's Division Engineer or until additional insurance has been delivered to and accepted by BNSF. Any such work stoppage under this provision will not give rise to any liability on the part of BNSF. BNSF's right to stop the work is in addition to any other rights BNSF may have including, but not limited to, actions or suits for damages or lost profits.

7. Agency must review the operations of all Agency contractors to assure compliance with any plans and specifications approved by BNSF, the terms of this Agreement and all safety requirements of the BNSF railroad. If BNSF determines that proper review is not being performed by Agency personnel, BNSF has the right to stop work (within or adjacent to its operating right-of-way). Work will not proceed until Agency corrects the situation to BNSF's reasonable satisfaction.

8. Agency must reimburse BNSF in full for the actual costs of all work performed by BNSF under this Agreement, including without limitation any flagging performed by BNSF.

9. The parties mutually agree that no maintenance of the Structure once completed, will be permitted during the fourth quarter of each calendar year. Emergency work will be permitted only upon prior notification to BNSF's Network Operations Center (telephone number: 800-832-5452). The parties hereto mutually understand and agree that trains cannot be subjected to delay during this time period.

10. Agency will own and maintain, at its sole cost and expense, the Structure, the highway approaches, and appurtenances thereto, lighting, drainage and any access roadways. If BNSF discovers that maintenance is necessary in order to avoid conflicts with train operations, BNSF shall so notify the Agency which shall perform such maintenance. In the event such maintenance involves emergency repairs, BNSF may perform such emergency repairs, and shall notify Agency of such repairs at BNSF's earliest opportunity. Agency shall fully reimburse BNSF for the costs of maintenance and repairs performed by BNSF pursuant to this section.

11. Agency must, at Agency's sole cost and expense, keep the Structure free from graffiti.

12. Agency must provide BNSF with any and all necessary permits and maintain roadway traffic controls, at no cost to BNSF, whenever requested by BNSF to allow BNSF to inspect the Structure or to make emergency repairs thereto.

13. It is expressly understood by Agency and BNSF that any right to install utilities will be governed by a separate permit or license agreement between the parties hereto.

14. Agency must keep the Structure and surrounding areas clean and free from birds, pigeons, scavengers, vermin, creatures and other animals.

15. BNSF may, at its expense, make future changes or additions to the railroad components of the Structure if necessary or desirable, in BNSF's sole discretion, including, without limitation the following: (i) the right to raise or lower the grade or change the alignment of its tracks, (ii) the right to lay additional track or tracks, or (iii) the right to build other facilities in connection with the operation of its railroad. Such changes or additions must not change or alter the highway components of the Structure.

16. Should Agency wish to have non-invasive engineering done for such replacement structure and such work will require access to BNSF property, such contract(s) will require such surveyors or engineering firms to execute BNSF's form C-1 and provide the required insurance prior to the start of such work on BNSF property.

17. The covenants and provisions of this Agreement are binding upon and inure to the benefit of the successors and assigns of the parties hereto. Notwithstanding the preceding sentence, neither party hereto may assign any of its rights or obligations hereunder without the prior written consent of the other party.

18. Neither termination nor expiration of this Agreement will release either party from any liability or obligation under this Agreement, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or expiration.

19. To the maximum extent possible, each provision of this Agreement will be interpreted in such a manner as to be effective and valid under applicable law. If any provision of this Agreement is prohibited by, or held to be invalid under, applicable law, such provision will be ineffective solely to the extent of such prohibition or invalidity and the remainder of the provision will be enforceable.

20. This Agreement (including exhibits and other documents, manuals, etc. incorporated herein) is the full and complete agreement between BNSF and Agency with respect to the subject matter herein and supersedes any and all other prior agreements between the parties hereto.

21. Any notice provided for herein or concerning this Agreement must be in writing and will be deemed sufficiently given when sent by certified mail, return receipt requested, to the parties at the following addresses:

BNSF Railway Company:

BNSF's Manager of Public Projects

547 W. JACKSON BLDG #1509

Agency :

CHICAGO, IL 60661

Agency:

VILLAGE OF HINSDALE

DAVID COOK, VILLAGE MGR

19 E. CHICAGO AVE

HINSDALE 60521

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and attested by its duly qualified and authorized officials as of the day and year first above written.

BNSF RAILWAY COMPANY

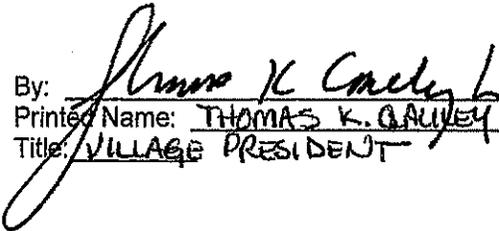
By: 
Printed Name: PATRICIA J. CASLER
Title: DIRECTOR, SUBURBAN SERVICES

WITNESS:

Christine M. Burton

AGENCY

VILLAGE OF HINSDALE

By: 
Printed Name: THOMAS K. GALLEGHY JR
Title: VILLAGE PRESIDENT

WITNESS:

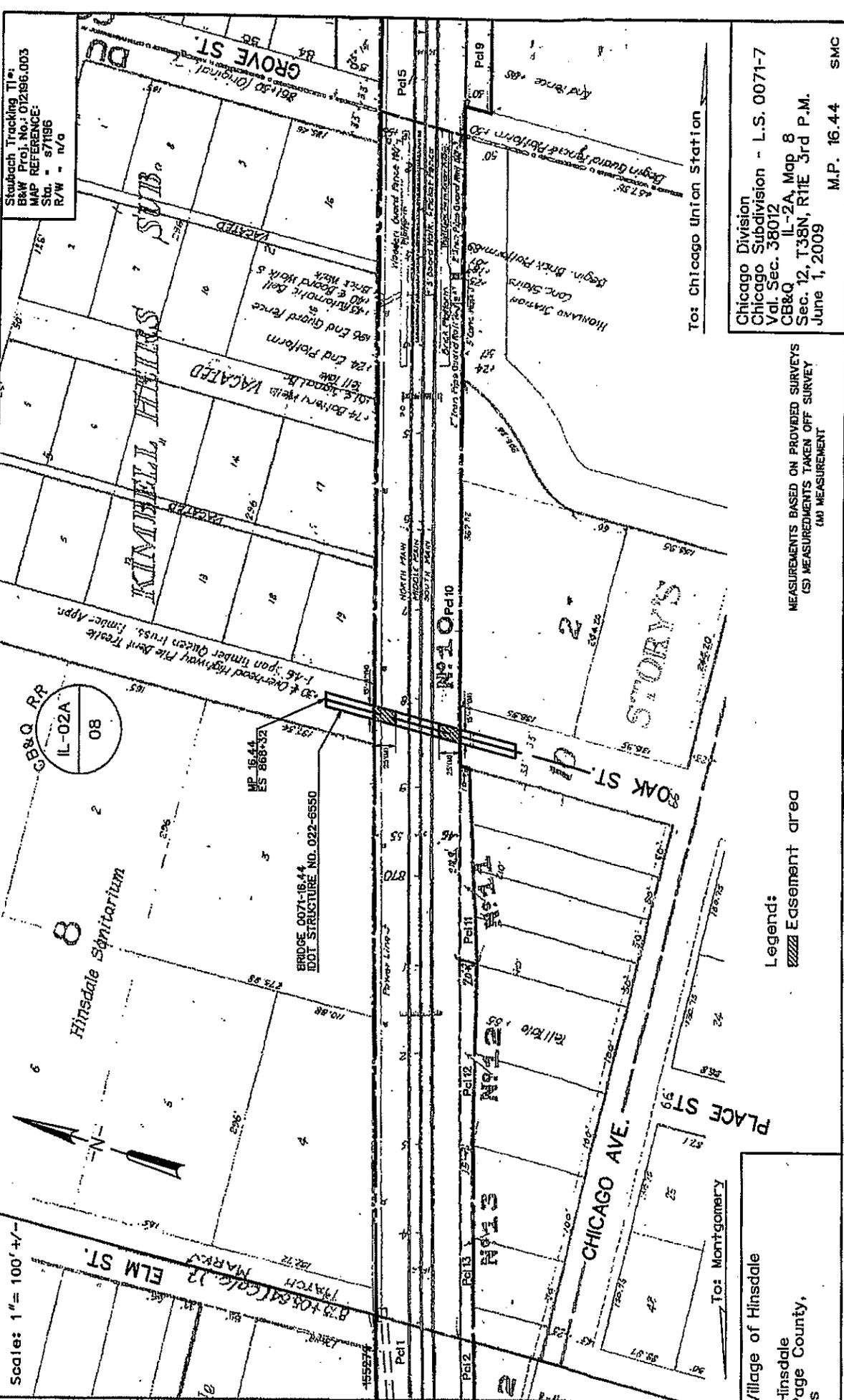
Christine M. Burton

Law Department Approved

Exhibit A

EXHIBIT "A"

Staubach Tracking II
 BAW Proj. No. 012196.003
 MAP REFERENCE:
 S/W - s7186
 R/W - 10/0



Scale: 1" = 100' +/-

This map used by BNSF RAILWAY COMPANY in the ordinary course of business, but it is subject to quiet and should be used only with the expressed understanding that the BNSF make no representations whatsoever about the quality, accuracy, errors or omissions relating to this map.

Chicago Division
 Chicago Subdivision - L.S. 0071-7
 Vol. Sec. 38012
 CB&Q IL-2A, Map 8
 Sec. 12, T38N, R1E 3rd P.M.
 June 1, 2009
 M.P. 16.44 SMC

MEASUREMENTS BASED ON PROVIDED SURVEYS
 (S) MEASUREMENTS TAKEN OFF SURVEY
 (AM) MEASUREMENT

Legend:
 Easement area

To: Village of Hinsdale
 At: Hinsdale
 Du Page County,
 Illinois

To: Chicago Union Station

DRAWING NO. 3-46633

Exhibit B

**EASEMENT AGREEMENT
FOR WAGON BRIDGE**
Attachment to C&M Agreement

THIS EASEMENT AGREEMENT FOR WAGON BRIDGE ("Easement Agreement") is made and entered into as of the 14th day of July 2009, ("Effective Date"), by and between **BNSF RAILWAY COMPANY**, a Delaware corporation ("**Grantor**"), and **VILLAGE OF HINSDALE**, a political subdivision of the State of Illinois ("**Grantee**").

A. Grantor owns or controls certain real property situated at or near the vicinity of Hinsdale, County of Du Page, State of Illinois, at Mile Post 16.44, as described or depicted on **Exhibit "A"** dated June 1, 2009 attached hereto and made a part hereof (the "**Premises**").

B. Grantor and Grantee have entered into that certain Construction and Maintenance Agreement dated as of July 14, 2009 concerning improvements on or near the Premises (the "**C&M Agreement**").

C. Grantee has requested that Grantor grant to Grantee an easement over the Premises for the Easement Purpose (as defined below).

D. Grantor has agreed to grant Grantee such easement, subject to the terms and conditions set forth in this Easement Agreement.

NOW, THEREFORE, for and in consideration of the foregoing recitals which are incorporated herein, the mutual promises contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

Section 1 Granting of Easement.

1.1 **Easement Purpose.** The "**Easement Purpose**" shall be for the purposes set forth in the C&M Agreement. Any improvements to be constructed in connection with the Easement Purpose are referred to herein as "**Improvements**" and shall be constructed, located, configured and maintained by Grantee in strict accordance with the terms of this Easement Agreement and the C&M Agreement.

1.2 **Grant.** Grantor does hereby grant unto Grantee a non-exclusive easement ("**Easement**") over the Premises for the Easement Purpose and for no other purpose. The Easement is granted subject to any and all restrictions, covenants, easements, licenses, permits, leases and other encumbrances of whatsoever nature whether or not of record, if any, relating to the Premises and subject to all with all applicable federal, state and local laws, regulations, ordinances, restrictions, covenants and court or administrative decisions and orders, including Environmental Laws (defined below) and zoning laws (collectively, "**Laws**"). Grantee may not make any alterations or improvements or perform any maintenance or repair activities within the Premises except in accordance with the terms and conditions of the C&M Agreement.

1.3 **Reservations by Grantor.** Grantor excepts and reserves the right, to be exercised by Grantor and any other parties who may obtain written permission or authority from Grantor:

- (a) to install, construct, maintain, renew, repair, replace, use, operate, change, modify and relocate any existing pipe, power, communication, cable, or utility lines and

appurtenances and other facilities or structures of like character (collectively, "Lines") upon, over, under or across the Premises;

- (b) to install, construct, maintain, renew, repair, replace, use, operate, change, modify and relocate any tracks or additional facilities or structures upon, over, under or across the Premises; and
- (c) to use the Premises in any manner as the Grantor in its sole discretion deems appropriate, provided Grantor uses all commercially reasonable efforts to avoid material interference with the use of the Premises by Grantee for the Easement Purpose.

Section 2 **Term of Easement.** The term of the Easement, unless sooner terminated under provisions of this Easement Agreement, shall be perpetual. Grantor and Grantee agree that this Agreement is contingent on Grantee obtaining funding for the replacement of the Bridge. If the Grantee is unable to obtain full funding for the replacement, Grantee may, in its sole discretion, at any time within 10 years of the date of execution of this Agreement, terminate this Agreement with 10 days written notice to Grantor. If Grantee exercises this right within the specified time period by written notice to Grantor, title to the Structure and all easements associated therewith shall be extinguished and revert to Grantor.

Section 3 **No Warranty of Any Conditions of the Premises.** Grantee acknowledges that Grantor has made no representation whatsoever to Grantee concerning the state or condition of the Premises, or any personal property located thereon, or the nature or extent of Grantor's ownership interest in the Premises. Grantee has not relied on any statement or declaration of Grantor, oral or in writing, as an inducement to entering into this Easement Agreement, other than as set forth herein. GRANTOR HEREBY DISCLAIMS ANY REPRESENTATION OR WARRANTY, WHETHER EXPRESS OR IMPLIED, AS TO THE DESIGN OR CONDITION OF ANY PROPERTY PRESENT ON OR CONSTITUTING THE PREMISES, ITS MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, THE QUALITY OF THE MATERIAL OR WORKMANSHIP OF ANY SUCH PROPERTY, OR THE CONFORMITY OF ANY SUCH PROPERTY TO ITS INTENDED USES. GRANTOR SHALL NOT BE RESPONSIBLE TO GRANTEE OR ANY OF GRANTEE'S CONTRACTORS FOR ANY DAMAGES RELATING TO THE DESIGN, CONDITION, QUALITY, SAFETY, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY PROPERTY PRESENT ON OR CONSTITUTING THE PREMISES, OR THE CONFORMITY OF ANY SUCH PROPERTY TO ITS INTENDED USES. GRANTEE ACCEPTS ALL RIGHTS GRANTED UNDER THIS EASEMENT AGREEMENT IN THE PREMISES IN AN "AS IS, WHERE IS" AND "WITH ALL FAULTS" CONDITION, AND SUBJECT TO ALL LIMITATIONS ON GRANTOR'S RIGHTS, INTERESTS AND TITLE TO THE PREMISES. Grantee has inspected or will inspect the Premises, and enters upon Grantor's rail corridor and property with knowledge of its physical condition and the danger inherent in Grantor's rail operations on or near the Premises. Grantee acknowledges that this Easement Agreement does not contain any implied warranties that Grantee or Grantee's Contractors (as hereinafter defined) can successfully construct or operate the Improvements.

Section 4 **Nature of Grantor's Interest in the Premises.** GRANTOR DOES NOT WARRANT ITS TITLE TO THE PREMISES NOR UNDERTAKE TO DEFEND GRANTEE IN THE PEACEABLE POSSESSION OR USE THEREOF. NO COVENANT OF QUIET ENJOYMENT IS MADE. In case of the eviction of Grantee by anyone owning or claiming title to or any interest in the Premises, or by the abandonment by Grantor of the affected rail corridor, Grantor shall not be liable to refund Grantee any compensation paid hereunder.

Section 5 **Improvements.** Grantee shall take, in a timely manner, all actions necessary and proper to the lawful establishment, construction, operation, and maintenance of the Improvements, including such actions as may be necessary to obtain any required permits, approvals or authorizations from applicable governmental authorities. Any and all cuts and fills, excavations or embankments necessary in the construction, maintenance, or future alteration of the Improvements shall be made and maintained in such manner, form and extent as will provide adequate drainage of and from the adjoining lands and premises of the Grantor; and wherever any such fill or embankment shall or may obstruct the natural and pre-existing drainage from such lands and premises of the Grantor, the Grantee shall construct and maintain such culverts or drains as may be requisite to preserve such natural and pre-existing drainage, and shall also wherever necessary, construct extensions of existing drains, culverts or ditches through or along the premises of the Grantor, such extensions to be of adequate sectional dimensions to preserve the present flowage of drainage or other waters, and of materials and

workmanship equally as good as those now existing. In the event any construction, repair, maintenance, work or other use of the Premises by Grantee will affect any Lines, fences, buildings, improvements or other facilities (collectively, "**Other Improvements**"), Grantee will be responsible at Grantee's sole risk to locate and make any adjustments necessary to such Other Improvements. Grantee must contact the owner(s) of the Other Improvements notifying them of any work that may damage these Other Improvements and/or interfere with their service and obtain the owner's written approval prior to so affecting the Other Improvements. Grantee must mark all Other Improvements on the Plans and Specifications and mark such Other Improvements in the field in order to verify their locations. Grantee must also use all reasonable methods when working on or near Grantor property to determine if any Other Improvements (fiber optic, cable, communication or otherwise) may exist. The Grantee agrees to keep the above-described premises free and clear from combustible materials and to cut and remove or cause to be cut and removed at its sole expense all weeds and vegetation on said premises, said work of cutting and removal to be done at such times and with such frequency as to comply with Grantee and local laws and regulations and abate any and all hazard of fire.

Section 6 **Taxes and Recording Fees.** Grantee shall pay when due any taxes, assessments or other charges (collectively, "**Taxes**") levied or assessed upon the Improvements by any governmental or quasi-governmental body or any Taxes levied or assessed against Grantor or the Premises that are attributable to the Improvements. Grantee agrees to purchase, affix and cancel any and all documentary stamps in the amount prescribed by statute, and to pay any and all required transfer taxes, excise taxes and any and all fees incidental to recordation of the Memorandum of Easement. In the event of Grantee's failure to do so, if Grantor shall become obligated to do so, Grantee shall be liable for all costs, expenses and judgments to or against Grantor, including all of Grantor's legal fees and expenses.

Section 7 **Environmental.**

7.1 **Compliance with Environmental Laws.** Grantee shall strictly comply with all federal, state and local environmental Laws in its use of the Premises, including, but not limited to, the Resource Conservation and Recovery Act, as amended (RCRA), the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Toxic Substances Control Act (collectively referred to as the "**Environmental Laws**"). Grantee shall not maintain a "treatment," "storage," "transfer" or "disposal" facility, or "underground storage tank," as those terms are defined by Environmental Laws, on the Premises. Grantee shall not handle, transport, release or suffer the release of "hazardous waste" or "hazardous substances", as "hazardous waste" and "hazardous substances" may now or in the future be defined by any Environmental Laws.

7.2 **Notice of Release.** Grantee shall give Grantor immediate notice to Grantor's Resource Operations Center at (800) 832-5452 of any release of hazardous substances on or from the Premises, violation of Environmental Laws, or inspection or inquiry by governmental authorities charged with enforcing Environmental Laws with respect to Grantee's use of the Premises. Grantee shall use its best efforts to promptly respond to any release on or from the Premises. Grantee also shall give Grantor immediate notice of all measures undertaken on behalf of Grantee to investigate, remediate, respond to or otherwise cure such release or violation.

7.3 **Remediation of Release.** In the event that Grantor has notice from Grantee or otherwise of a release or violation of Environmental Laws which occurred or may occur during the term of this Easement Agreement, Grantor may require Grantee, at Grantee's sole risk and expense, to take timely measures to investigate, remediate, respond to or otherwise cure such release or violation affecting the Premises. If during the construction or subsequent maintenance of the Improvements, soils or other materials considered to be environmentally contaminated are exposed, Grantee will remove and safely dispose of said contaminated soils. Determination of soils contamination and applicable disposal procedures thereof, will be made only by an agency having the capacity and authority to make such a determination.

7.4 **Preventative Measures.** Grantee shall promptly report to Grantor in writing any conditions or activities upon the Premises known to Grantee which create a risk of harm to persons, property or the environment and shall take whatever action is necessary to prevent injury to persons or property arising out of such conditions or activities; provided, however, that Grantee's reporting to Grantor shall not relieve Grantee of

any obligation whatsoever imposed on it by this Easement Agreement. Grantee shall promptly respond to Grantor's request for information regarding said conditions or activities.

7.5 Evidence of Compliance. Grantee agrees periodically to furnish Grantor with proof satisfactory to Grantor that Grantee is in compliance with this **Section 7**. Should Grantee not comply fully with the above-stated obligations of this **Section 7**, notwithstanding anything contained in any other provision hereof, Grantor may, at its option, terminate this Easement Agreement by serving five (5) days' notice of termination upon Grantee. Upon termination, Grantee shall remove the Improvements and restore the Premises as provided in **Section 9**.

Section 8 **Default and Termination.**

8.1 Grantor's Performance Rights. If at any time Grantee, or Grantee's Contractors, fails to properly perform its obligations under this Easement Agreement, Grantor, in its sole discretion, may: (i) seek specific performance of the unperformed obligations, or (ii) at Grantee's sole cost, may arrange for the performance of such work as Grantor deems necessary for the safety of its rail operations, activities and property, or to avoid or remove any interference with the activities or property of Grantor, or anyone or anything present on the rail corridor or property with the authority or permission of Grantor. Grantee shall promptly reimburse Grantor for all costs of work performed on Grantee's behalf upon receipt of an invoice for such costs. Grantor's failure to perform any obligations of Grantee or Grantee's Contractors shall not alter the liability allocation set forth in this Easement Agreement.

8.2 Abandonment. Grantor may, at its option, terminate this Easement Agreement by serving five (5) days' notice in writing upon Grantee if Grantee should abandon or cease to use the Premises for the Easement Purpose. Any waiver by Grantor of any default or defaults shall not constitute a waiver of the right to terminate this Easement Agreement for any subsequent default or defaults, nor shall any such waiver in any way affect Grantor's ability to enforce any section of this Easement Agreement.

8.3 Effect of Termination or Expiration. Neither termination nor expiration will release Grantee from any liability or obligation under this Easement, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or expiration, or, if later, the date the Premises are restored as required by **Section 9**.

8.4 Non-exclusive Remedies. The remedies set forth in this **Section 8** shall be in addition to, and not in limitation of, any other remedies that Grantor may have under the C&M Agreement, at law or in equity.

Section 9 **Surrender of Premises.**

9.1 Removal of Improvements and Restoration. Upon termination of this Easement Agreement, whether by abandonment of the Easement or by the exercise of Grantor's termination rights hereunder, Grantee shall, at its sole cost and expense, immediately perform the following:

- (a) remove all or such portion of Grantee's Improvements and all appurtenances thereto from the Premises, as Grantor directs at Grantor's sole discretion;
- (b) repair and restore any damage to the Premises arising from, growing out of, or connected with Grantee's use of the Premises;
- (c) remedy any unsafe conditions on the Premises created or aggravated by Grantee; and
- (d) leave the Premises in the condition which existed as of the Effective Date.

9.2 Limited License for Entry. If this Easement Agreement is terminated, Grantor may direct Grantee to undertake one or more of the actions set forth above, at Grantee's sole cost, in which case Grantee

shall have a limited license to enter upon the Premises to the extent necessary to undertake the actions directed by Grantor. The terms of this limited license include all of Grantee's obligations under this Easement Agreement. Termination will not release Grantee from any liability or obligation under this Easement Agreement, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination, or, if later, the date when Grantee's Improvements are removed and the Premises are restored to the condition that existed as of the Effective Date. If Grantee fails to surrender the Premises to Grantor upon any termination of the Easement, all liabilities and obligations of Grantee hereunder shall continue in effect until the Premises are surrendered.

Section 10 Liens. Grantee shall promptly pay and discharge any and all liens arising out of any construction, alterations or repairs done, suffered or permitted to be done by Grantee on the Premises or attributable to Taxes that are the responsibility of Grantee pursuant to **Section 6**. Grantor is hereby authorized to post any notices or take any other action upon or with respect to the Premises that is or may be permitted by Law to prevent the attachment of any such liens to any portion of the Premises; provided, however, that failure of Grantor to take any such action shall not relieve Grantee of any obligation or liability under this **Section 10** or any other section of this Easement Agreement.

Section 11 Tax Exchange. Grantor reserves the right to assign this Easement Agreement to Apex Property & Track Exchange, Inc. ("**Apex**"). Apex is a qualified intermediary within the meaning of Section 1031 of the Internal Revenue Code of 1986, as amended, and Treas. Reg. § 1.1031(k)-1(g), for the purpose of completing a tax-deferred exchange under said Section 1031. Grantor shall bear all expenses associated with the use of Apex, or necessary to qualify this transaction as a tax-deferred exchange, and, except as otherwise provided herein, shall protect, reimburse, indemnify and hold harmless Grantee from and against any and all reasonable and necessary additional costs, expenses, including, attorneys fees, and liabilities which Grantee may incur as a result of Grantor's use of Apex or the qualification of this transaction as a tax-deferred transaction pursuant to Section 1031. Grantee shall cooperate with Grantor with respect to this tax-deferred exchange, and upon Grantor's request, shall execute such documents as may be required to effect this tax-deferred exchange.

Section 12 Notices. Any notice required or permitted to be given hereunder by one party to the other shall be delivered in the manner set forth in the C&M Agreement. Notices to Grantor under this Easement shall be delivered to the following address: BNSF Railway Company, Real Estate Department, 2500 Lou Menk Drive, Ft. Worth, TX 76131, Attn: Permits, or such other address as Grantor may from time to time direct by notice to Grantee.

Section 13 Recordation. It is understood and agreed that this Easement Agreement shall not be in recordable form and shall not be placed on public record and any such recording shall be a breach of this Easement Agreement. Grantor and Grantee shall execute a Memorandum of Easement in the form attached hereto as **Exhibit "B"** (the "**Memorandum of Easement**") subject to changes required, if any, to conform such form to local recording requirements. As of the Effective Date, a legal description of the Premises is not available. Grantee and Grantor shall work together in good faith to establish the legal description for the Premises. Once Grantor and Grantee have approved the legal description, Grantor and Grantee shall execute a Memorandum of Easement in the form attached hereto as **Exhibit "B"** (the "**Memorandum of Easement**"). The Memorandum of Easement shall be recorded in the real estate records in the county where the Premises are located. If a Memorandum of Easement is not executed by the parties and recorded as described above within 90 days of the Effective Date, Grantor shall have the right to terminate this Easement Agreement upon notice to Grantee.

Section 14 Miscellaneous.

14.1 All questions concerning the interpretation or application of provisions of this Easement Agreement shall be decided according to the substantive Laws of the State of Texas without regard to conflicts of law provisions.

14.2 In the event that Grantee consists of two or more parties, all the covenants and agreements of

Grantee herein contained shall be the joint and several covenants and agreements of such parties. This instrument and all of the terms, covenants and provisions hereof shall inure to the benefit of and be binding upon each of the parties hereto and their respective legal representatives, successors and assigns and shall run with and be binding upon the Premises.

14.3 If any action at law or in equity is necessary to enforce or interpret the terms of this Easement Agreement, the prevailing party or parties shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party or parties may be entitled.

14.4 If any provision of this Easement Agreement is held to be illegal, invalid or unenforceable under present or future Laws, such provision will be fully severable and this Easement Agreement will be construed and enforced as if such illegal, invalid or unenforceable provision is not a part hereof, and the remaining provisions hereof will remain in full force and effect. In lieu of any illegal, invalid or unenforceable provision herein, there will be added automatically as a part of this Easement Agreement a provision as similar in its terms to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

14.5 This Easement Agreement is the full and complete agreement between Grantor and Grantee with respect to all matters relating to Grantee's use of the Premises, and supersedes any and all other agreements between the parties hereto relating to Grantee's use of the Premises as described herein. However, nothing herein is intended to terminate any surviving obligation of Grantee or Grantee's obligation to defend and hold Grantor harmless in any prior written agreement between the parties.

14.6 Time is of the essence for the performance of this Easement Agreement.

14.7 The terms of the C&M Agreement are incorporated herein as if fully set forth in this instrument which terms shall be in full force and effect for purposes of this Easement even if the C&M Agreement is, for whatever reason, no longer in effect.

Witness the execution of this Easement Agreement as of the date first set forth above.

GRANTOR:

BNSF RAILWAY COMPANY, a Delaware corporation

By: _____
Name: _____
Title: _____

GRANTEE:

VILLAGE OF HINSDALE,
a political subdivision of the State of Illinois

By: Thomas K. Cauley Jr
Name: THOMAS K. CAULEY JR
Title: VILLAGE PRESIDENT

Law Department Approved

EXHIBIT "A"

Premises

EXHIBIT "B"Memorandum of Easement

THIS MEMORANDUM OF EASEMENT is hereby executed this 14th day of July, 2009, by and between **BNSF RAILWAY COMPANY**, a Delaware corporation ("**Grantor**"), whose address for purposes of this instrument is 2500 Lou Menk Drive, Fort Worth, Texas 76131, and **VILLAGE OF HINSDALE**, a political subdivision of the State of Illinois ("**Grantee**"), whose address for purposes of this instrument is 19 East Chicago Avenue, Hinsdale, IL 60521-3489, which terms "Grantor" and "Grantee" shall include, wherever the context permits or requires, singular or plural, and the heirs, legal representatives, successors and assigns of the respective parties:

WITNESSETH:

WHEREAS, Grantor owns or controls certain real property situated in Du Page County, Illinois as described on Exhibit "A" attached hereto and incorporated herein by reference (the "**Premises**");

WHEREAS, Grantor and Grantee entered into an Easement Agreement, dated July 14, 2009 (the "**Easement Agreement**") which set forth, among other things, the terms of an easement granted by Grantor to Grantee over and across the Premises (the "**Easement**"); and

WHEREAS, Grantor and Grantee desire to memorialize the terms and conditions of the Easement Agreement of record.

For valuable consideration the receipt and sufficiency of which are hereby acknowledged, Grantor does grant unto Grantee and Grantee does hereby accept from Grantor the Easement over and across the Premises.

The term of the Easement, unless sooner terminated under provisions of the Easement Agreement, shall be perpetual. Provisions regulating the use and purposes to which the Easement shall be limited, are set forth in detail in the Easement Agreement and Grantor and Grantee agree to abide by the terms of the Easement Agreement.

All the terms, conditions, provisions and covenants of the Easement Agreement are incorporated herein by this reference for all purposes as though written out at length herein, and both the Easement Agreement and this Memorandum of Easement shall be deemed to constitute a single instrument or document. This Memorandum of Easement is not intended to amend, modify, supplement, or supersede any of the provisions of the Easement Agreement and, to the extent there may be any conflict or inconsistency between the Easement Agreement or this Memorandum of Easement, the Easement Agreement shall control.

Exhibit "B"

Law Department Approved

IN WITNESS WHEREOF, Grantor and Grantee have executed this Memorandum of Easement to as of the date and year first above written.

GRANTOR:

BNSF RAILWAY COMPANY,
a Delaware corporation

By: _____
Name: _____
Title: _____

STATE OF TEXAS

§
§
§

COUNTY OF TARRANT

This instrument was acknowledged before me on the _____ day of _____, 2009, by _____ (name) as _____ (title) of **BNSF RAILWAY COMPANY**, a Delaware corporation.

Notary Public

(Seal)

My appointment expires: _____

GRANTEE:

VILLAGE OF HINSDALE,
a political subdivision of the State of Illinois

By: *Thomas K. Cauley Jr*
Name: THOMAS K. CAULEY JR
Title: VILLAGE PRESIDENT

STATE OF ILLINOIS §
COUNTY OF COOK + DEPAUL §

This instrument was acknowledged before me on the 14th day of July, 2009, by CHRISTINE BRUTON (name) as DEPUTY VILLAGE CLERK (title) of VILLAGE OF HINSDALE, a MUNICIPALITY.

Christine M. Bruton
Notary Public



Exhibit C

EXHIBIT "C"
CONTRACTOR REQUIREMENTS

1.01 General

- **1.01.01** The Contractor must cooperate with **BNSF RAILWAY COMPANY**, hereinafter referred to as "Railway" where work is over or under on or adjacent to Railway property and/or right-of-way, hereafter referred to as "Railway Property", during the construction of _____.
- **1.01.02** The Contractor must execute and deliver to the Railway duplicate copies of the Exhibit "C-1" Agreement, in the form attached hereto, obligating the Contractor to provide and maintain in full force and effect the insurance called for under Section 3 of said Exhibit "C-1".
- **1.01.03** The Contractor must plan, schedule and conduct all work activities so as not to interfere with the movement of any trains on Railway Property.
- **1.01.04** The Contractor's right to enter Railway's Property is subject to the absolute right of Railway to cause the Contractor's work on Railway's Property to cease if, in the opinion of Railway, Contractor's activities create a hazard to Railway's Property, employees, and/or operations.
- **1.01.05** The Contractor is responsible for determining and complying with all Federal, State and Local Governmental laws and regulations, including, but not limited to environmental laws and regulations (including but not limited to the Resource Conservation and Recovery Act, as amended; the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, CERCLA), and health and safety laws and regulations. The Contractor hereby indemnifies, defends and holds harmless Railway for, from and against all fines or penalties imposed or assessed by Federal, State and Local Governmental Agencies against the Railway which arise out of Contractor's work under this Agreement.
- **1.01.06** The Contractor must notify the (Agency) at _____ and Railway's Manager Public Projects, telephone number () _____ at least thirty (30) calendar days before commencing any work on Railway Property. Contractors notification to Railway, must refer to Railroad's file _____.
- **1.01.07** For any falsework above any tracks or any excavations located, whichever is greater, within twenty-five (25) feet of the nearest track or intersecting a slope from the plane of the top of rail on a 1 ½ horizontal to 1 vertical slope beginning at eleven (11) feet from centerline of the nearest track, both measured perpendicular to center line of track, the Contractor must furnish the Railway five sets of working drawings showing details of construction affecting Railway Property and tracks. The working drawing must include the proposed method of installation and removal of falsework, shoring or cribbing, not included in the contract plans and two sets of structural calculations of any falsework, shoring or cribbing. All calculations must take into consideration railway surcharge loading and must be designed to meet American Railway Engineering and Maintenance-of-Way Association (previously known as American Railway Engineering Association) Coopers E-80 live loading standard. All drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. The Contractor must not begin work until notified by the Railway that plans have been approved. The Contractor will be required to use lifting devices such as, cranes and/or winches to place or to remove any falsework over Railway's tracks. In no case will the Contractor be relieved of responsibility for results obtained by the implementation of said approved plans.

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- **1.01.08** Subject to the movement of Railway's trains, Railway will cooperate with the Contractor such that the work may be handled and performed in an efficient manner. The Contractor will have no claim whatsoever for any type of damages or for extra or additional compensation in the event his work is delayed by the Railway.

1.02 Contractor Safety Orientation

- **1.02.01** No employee of the Contractor, its subcontractors, agents or invitees may enter Railway Property without first having completed Railway's Engineering Contractor Safety Orientation, found on the web site www.contractororientation.com. The Contractor must ensure that each of its employees, subcontractors, agents or invitees completes Railway's Engineering Contractor Safety Orientation through internet sessions before any work is performed on the Project. Additionally, the Contractor must ensure that each and every one of its employees, subcontractors, agents or invitees possesses a card certifying completion of the Railway Contractor Safety Orientation before entering Railway Property. The Contractor is responsible for the cost of the Railway Contractor Safety Orientation. The Contractor must renew the Railway Contractor Safety Orientation annually. Further clarification can be found on the web site or from the Railway's Representative.

1.03 Railway Requirements

- **1.03.01** The Contractor must take protective measures as are necessary to keep railway facilities, including track ballast, free of sand, debris, and other foreign objects and materials resulting from his operations. Any damage to railway facilities resulting from Contractor's operations will be repaired or replaced by Railway and the cost of such repairs or replacement must be paid for by the Agency.
- **1.03.02** The Contractor must notify the Railway's Division Superintendent _____ at (_____) _____ and provide blasting plans to the Railway for review seven (7) calendar days prior to conducting any blasting operations adjacent to or on Railway's Property.
- **1.03.03** The Contractor must abide by the following temporary clearances during construction:
 - 15' Horizontally from centerline of nearest track
 - 21'-6" Vertically above top of rail
 - 27'-0" Vertically above top of rail for electric wires carrying less than 750 volts
 - 28'-0" Vertically above top of rail for electric wires carrying 750 volts to 15,000 volts
 - 30'-0" Vertically above top of rail for electric wires carrying 15,000 volts to 20,000 volts
 - 34'-0" Vertically above top of rail for electric wires carrying more than 20,000 volts
- **1.03.04** Upon completion of construction, the following clearances shall be maintained:
 - 25' Horizontally from centerline of nearest track
 - 23'-3 1/2" Vertically above top of rail
- **1.03.05** Any infringement within State statutory clearances due to the Contractor's operations must be submitted to the Railway and to the (Agency) _____ and must not be undertaken until approved in writing by the Railway, and until the (Agency) _____ has obtained any necessary authorization from the State Regulatory Authority for the infringement. No extra compensation will be allowed in the event the Contractor's work is delayed pending Railway approval, and/or the State Regulatory Authority's approval.
- **1.03.06** In the case of impaired vertical clearance above top of rail, Railway will have the option of installing tell-tales or other protective devices Railway deems necessary for protection of Railway operations. The cost of tell-tales or protective devices will be borne by the Agency.
- **1.03.07** The details of construction affecting the Railway's Property and tracks not included in the contract plans must be submitted to the Railway by (Agency) _____ for approval before work is undertaken and this work must not be undertaken until approved by the Railway.

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- **1.03.08** At other than public road crossings, the Contractor must not move any equipment or materials across Railway's tracks until permission has been obtained from the Railway. The Contractor must obtain a "Temporary Private Crossing Agreement" from the Railway prior to moving his equipment or materials across the Railway's tracks. The temporary crossing must be gated and locked at all times when not required for use by the Contractor. The temporary crossing for use of the Contractor will be at the expense of the Contractor.
- **1.03.09** Discharge, release or spill on the Railway Property of any hazardous substances, oil, petroleum, constituents, pollutants, contaminants, or any hazardous waste is prohibited and Contractor must immediately notify the Railway's Resource Operations Center at 1(800) 832-5452, of any discharge, release or spills in excess of a reportable quantity. Contractor must not allow Railway Property to become a treatment, storage or transfer facility as those terms are defined in the Resource Conservation and Recovery Act or any state analogue.
- **1.03.10** The Contractor upon completion of the work covered by this contract, must promptly remove from the Railway's Property all of Contractor's tools, equipment, implements and other materials, whether brought upon said property by said Contractor or any Subcontractor, employee or agent of Contractor or of any Subcontractor, and must cause Railway's Property to be left in a condition acceptable to the Railway's representative.

1.04 Contractor Roadway Worker on Track Safety Program and Safety Action Plan

- **1.04.01** Each Contractor that will perform work within 25 feet of the centerline of a track must develop and implement a Roadway Worker Protection/On Track Safety Program and work with Railway Project Representative to develop an on track safety strategy as described in the guidelines listed in the on track safety portion of the Safety Orientation. This Program must provide Roadway Worker protection/on track training for all employees of the Contractor, its subcontractors, agents or invitees. This training is reinforced at the job site through job safety briefings. Additionally, each Contractor must develop and implement the Safety Action Plan, as provided for on the web site www.contractororientation.com, which will be made available to Railway prior to commencement of any work on Railway Property. During the performance of work, the Contractor must audit its work activities. The Contractor must designate an on-site Project Supervisor who will serve as the contact person for the Railway and who will maintain a copy of the Safety Action Plan, safety audits, and Material Safety Datasheets (MSDS), at the job site.

1.05 Protection of Railway Facilities and Railway Flagger Services:

- **1.05.01** The Contractor must give Railway's Roadmaster (telephone _____) a minimum of thirty (30) calendar days advance notice when flagging services will be required so that the Roadmaster can make appropriate arrangements (i.e., bulletin the flagger's position). If flagging services are scheduled in advance by the Contractor and it is subsequently determined by the parties hereto that such services are no longer necessary, the Contractor must give the Roadmaster five (5) working days advance notice so that appropriate arrangements can be made to abolish the position pursuant to union requirements.
- **1.05.02** Unless determined otherwise by Railway's Project Representative, Railway flagger and protective services and devices will be required and furnished when Contractor's work activities are located over, under and/or within twenty-five (25) feet measured horizontally from centerline of the nearest track and when cranes or similar equipment positioned beyond 25-feet from the track centerline could foul the track in the event of tip over or other catastrophic occurrence, but not limited thereto for the following conditions:
 - **1.05.02a** When in the opinion of the Railway's Representative it is necessary to safeguard Railway's Property, employees, trains, engines and facilities.
 - **1.05.02b** When any excavation is performed below the bottom of tie elevation, if, in the opinion of Railway's representative, track or other Railway facilities may be subject to movement or settlement.
 - **1.05.02c** When work in any way interferes with the safe operation of trains at timetable speeds.

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- **1.05.02d** When any hazard is presented to Railway track, communications, signal, electrical, or other facilities either due to persons, material, equipment or blasting in the vicinity.
- **1.05.02e** Special permission must be obtained from the Railway before moving heavy or cumbersome objects or equipment which might result in making the track impassable.
- **1.05.03** Flagging services will be performed by qualified Railway flaggers.
- **1.05.03a** Flagging crew generally consists of one employee. However, additional personnel may be required to protect Railway Property and operations, if deemed necessary by the Railways Representative.
- **1.05.03b** Each time a flagger is called, the minimum period for billing will be the eight (8) hour basic day.
- **1.05.03c** The cost of flagger services provided by the Railway, when deemed necessary by the Railway's representative, will be borne by the (Agency). The estimated cost for one (1) flagger is \$600.00 for an eight (8) hour basic day with time and one-half or double time for overtime, rest days and holidays. The estimated cost for each flagger includes vacation allowance, paid holidays, Railway and unemployment insurance, public liability and property damage insurance, health and welfare benefits, transportation, meals, lodging and supervision. Negotiations for Railway labor or collective bargaining agreements and rate changes authorized by appropriate Federal authorities may increase actual or estimated flagging rates. The flagging rate in effect at the time of performance by the Contractor hereunder will be used to calculate the actual costs of flagging pursuant to this paragraph.
- **1.05.03d** The average train traffic on this route is _____ freight trains per 24-hour period at a timetable speed _____ MPH and _____ passenger trains at a timetable speed of _____ MPH.

1.06 Contractor General Safety Requirements

- **1.06.01** Work in the proximity of railway track(s) is potentially hazardous where movement of trains and equipment can occur at any time and in any direction. All work performed by contractors within 25 feet of any track must be in compliance with FRA Roadway Worker Protection Regulations.
- **1.06.02** Before beginning any task on Railway Property, a thorough job safety briefing must be conducted with all personnel involved with the task and repeated when the personnel or task changes. If the task is within 25 feet of any track, the job briefing must include the Railway's flagger, as applicable, and include the procedures the Contractor will use to protect its employees, subcontractors, agents or invitees from moving any equipment adjacent to or across any Railway track(s).
- **1.06.03** Workers must not work within 25 feet of the centerline of any track without an on track safety strategy approved by the Railway's Project Representative. When authority is provided, every contractor employee must know: (1) who the Railway flagger is, and how to contact the flagger, (2) limits of the authority, (3) the method of communication to stop and resume work, and (4) location of the designated places of safety. Persons or equipment entering flag/work limits that were not previously job briefed, must notify the flagger immediately, and be given a job briefing when working within 25 feet of the center line of track.
- **1.06.04** When Contractor employees are required to work on the Railway Property after normal working hours or on weekends, the Railroad's representative in charge of the project must be notified. A minimum of two employees must be present at all times.
- **1.06.05** Any employees, agents or invitees of Contractor or its subcontractors under suspicion of being under the influence of drugs or alcohol, or in the possession of same, will be removed from the Railway's Property and subsequently released to the custody of a representative of Contractor management. Future access to the Railway's Property by that employee will be denied.

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- **1.06.06** Any damage to Railway Property, or any hazard noticed on passing trains must be reported immediately to the Railway's representative in charge of the project. Any vehicle or machine which may come in contact with track, signal equipment, or structure (bridge) and could result in a train derailment must be reported immediately to the Railway representative in charge of the project and to the Railway's Resource Operations Center at 1(800) 832-5452. Local emergency numbers are to be obtained from the Railway representative in charge of the project prior to the start of any work and must be posted at the job site.
- **1.06.07** For safety reasons, all persons are prohibited from having pocket knives, firearms or other deadly weapons in their possession while working on Railway's Property.
- **1.06.08** All personnel protective equipment (PPE) used on Railway Property must meet applicable OSHA and ANSI specifications. Current Railway personnel protective equipment requirements are listed on the web site, www.contractororientation.com, however, a partial list of the requirements include: a) safety glasses with permanently affixed side shields (no yellow lenses); b) hard hats c) safety shoe with: hardened toes, above-the-ankle lace-up and a defined heel; and d) high visibility retro-reflective work wear. The Railroad's representative in charge of the project is to be contacted regarding local specifications for meeting requirements relating to hi-visibility work wear. Hearing protection, fall protection, gloves, and respirators must be worn as required by State and Federal regulations. **(NOTE – Should there be a discrepancy between the information contained on the web site and the information in this paragraph, the web site will govern.)**
- **1.06.09** The Contractor must not pile or store any materials, machinery or equipment closer than 25'-0" to the center line of the nearest Railway track. Materials, machinery or equipment must not be stored or left within 250 feet of any highway/rail at-grade crossings, where storage of the same will interfere with the sight distances of motorists approaching the crossing. Prior to beginning work, the Contractor must establish a storage area with concurrence of the Railroad's representative.
- **1.06.10** Machines or vehicles must not be left unattended with the engine running. Parked machines or equipment must be in gear with brakes set and if equipped with blade, pan or bucket, they must be lowered to the ground. All machinery and equipment left unattended on Railway's Property must be left inoperable and secured against movement. (See internet Engineering Contractor Safety Orientation program for more detailed specifications)
- **1.06.11** Workers must not create and leave any conditions at the work site that would interfere with water drainage. Any work performed over water must meet all Federal, State and Local regulations.
- **1.06.12** All power line wires must be considered dangerous and of high voltage unless informed to the contrary by proper authority. For all power lines the minimum clearance between the lines and any part of the equipment or load must be; 200 KV or below - 15 feet; 200 to 350 KV - 20 feet; 350 to 500 KV - 25 feet; 500 to 750 KV - 35 feet; and 750 to 1000 KV - 45 feet. If capacity of the line is not known, a minimum clearance of 45 feet must be maintained. A person must be designated to observe clearance of the equipment and give a timely warning for all operations where it is difficult for an operator to maintain the desired clearance by visual means.

1.07 Excavation

- **1.07.01** Before excavating, the Contractor must determine whether any underground pipe lines, electric wires, or cables, including fiber optic cable systems are present and located within the Project work area. The Contractor must determine whether excavation on Railway's Property could cause damage to buried cables resulting in delay to Railway traffic and disruption of service to users. Delays and disruptions to service may cause business interruptions involving loss of revenue and profits. Before commencing excavation, the Contractor must contact BNSF's Field Engineering Representative (_____). All underground and overhead wires will be considered HIGH VOLTAGE and dangerous until verified with the company having ownership of the line. It is the Contractor's responsibility to notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating.

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- **1.07.02** The Contractor must cease all work and notify the Railway immediately before continuing excavation in the area if obstructions are encountered which do not appear on drawings. If the obstruction is a utility and the owner of the utility can be identified, then the Contractor must also notify the owner immediately. If there is any doubt about the location of underground cables or lines of any kind, no work must be performed until the exact location has been determined. There will be no exceptions to these instructions.
- **1.07.03** All excavations must be conducted in compliance with applicable OSHA regulations and, regardless of depth, must be shored where there is any danger to tracks, structures or personnel.
- **1.07.04** Any excavations, holes or trenches on the Railway's Property must be covered, guarded and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas must be secured and left in a condition that will ensure that Railway employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations must be back filled as soon as possible.

1.08 Hazardous Waste, Substances and Material Reporting

- **1.08.01** If Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including but not limited to any non-containerized commodity or material, on or adjacent to Railway's Property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this Agreement, Contractor must immediately: (a) notify the Railway's Resource Operations Center at 1(800) 832-5452, of such discovery; (b) take safeguards necessary to protect its employees, subcontractors, agents and/or third parties; and (c) exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release.

1.09 Personal Injury Reporting

- **1.09.01** The Railway is required to report certain injuries as a part of compliance with Federal Railroad Administration (FRA) reporting requirements. Any personal injury sustained by an employee of the Contractor, subcontractor or Contractor's invitees while on the Railway's Property must be reported immediately (by phone mail if unable to contact in person) to the Railway's representative in charge of the project. The Non-Employee Personal Injury Data Collection Form contained herein is to be completed and sent by Fax to the Railway at 1(817) 352-7595 and to the Railway's Project Representative no later than the close of shift on the date of the injury.

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NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION

INFORMATION REQUIRED TO BE COLLECTED PURSUANT TO FEDERAL REGULATION. IT SHOULD BE USED FOR COMPLIANCE WITH FEDERAL REGULATIONS ONLY AND IS NOT INTENDED TO PRESUME ACCEPTANCE OF RESPONSIBILITY OR LIABILITY.

1. Accident City/St _____
County: _____
(if non-Railway location)
2. Date: _____ Time: _____
3. Temperature: _____
4. Weather _____
5. Social Security # _____
6. Name (last, first, mi) _____
7. Address: Street: _____ City: _____ St. _____ Zip: _____
8. Date of Birth: _____ and/or Age _____ Gender: _____
(if available)
9. (a) Injury: _____ (b) Body Part: _____
(i.e. (a) Laceration (b) Hand)
11. Description of Accident (To include location, action, result, etc.): _____
12. Treatment:
 - ? First Aid Only
 - ? Required Medical Treatment
 - ? Other Medical Treatment
13. Dr. Name _____ 30. Date: _____
14. Dr. Address:
Street: _____ City: _____ St: _____ Zip: _____
15. Hospital Name: _____
16. Hospital Address:
Street: _____ City: _____ St: _____ Zip: _____
17. Diagnosis: _____

**FAX TO
RAILWAY AT (817) 352-7595
AND COPY TO
RAILWAY ROADMASTER FAX**

OVERPASS EXHIBIT "C-1"

**Agreement
Between
BNSF RAILWAY COMPANY
and the
CONTRACTOR**

BNSF RAILWAY COMPANY
Attention: Manager Public Projects

Railway File: _____
Agency Project: _____

Gentlemen:

The undersigned (hereinafter called, the "Contractor"), has entered into a contract (the "Contract") dated _____, 200_, [***Drafter's Note: Insert the date of the contract between the Agency and the Contractor here **] with _____ [***Drafter's Note: insert the name of the Agency here**] for the performance of certain work in connection with the following project:

_____. Performance of such work will necessarily require contractor to enter BNSF RAILWAY COMPANY ("Railway") right of way and property ("Railway Property"). The Contract provides that no work will be commenced within Railway Property until the Contractor employed in connection with said work for _____ [insert Agency name here] (i) executes and delivers to Railway an Agreement in the form hereof, and (ii) provides insurance of the coverage and limits specified in such Agreement and Section 3 herein. If this Agreement is executed by a party who is not the Owner, General Partner, President or Vice President of Contractor, Contractor must furnish evidence to Railway certifying that the signatory is empowered to execute this Agreement on behalf of Contractor.

Accordingly, in consideration of Railway granting permission to Contractor to enter upon Railway Property and as an inducement for such entry, Contractor, effective on the date of the Contract, has agreed and does hereby agree with Railway as follows:

Section 1. RELEASE OF LIABILITY AND INDEMNITY

Contractor hereby waives, releases, indemnifies, defends and holds harmless Railway for all judgments, awards, claims, demands, and expenses (including attorneys' fees), for injury or death to all persons, including Railway's and Contractor's officers and employees, and for loss and damage to property belonging to any person, arising in any manner from Contractor's or any of Contractor's subcontractors' acts or omissions or any work performed on or about Railway's property or right-of-way. **THE LIABILITY ASSUMED BY CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DESTRUCTION, DAMAGE, DEATH, OR INJURY WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF RAILWAY, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE INTENTIONAL MISCONDUCT OR GROSS NEGLIGENCE OF RAILWAY**

THE INDEMNIFICATION OBLIGATION ASSUMED BY CONTRACTOR INCLUDES ANY CLAIMS, SUITS OR JUDGMENTS BROUGHT AGAINST RAILWAY UNDER THE FEDERAL EMPLOYEE'S LIABILITY ACT, INCLUDING CLAIMS FOR STRICT LIABILITY UNDER THE SAFETY APPLIANCE ACT OR THE BOILER INSPECTION ACT, WHENEVER SO CLAIMED.

Contractor further agrees, at its expense, in the name and on behalf of Railway, that it will adjust and settle all claims made against Railway, and will, at Railway's discretion, appear and defend any suits or actions of law or in equity brought against Railway on any claim or cause of action arising or growing out of or in any manner connected with any liability assumed by Contractor under this Agreement for which Railway is liable or is alleged to

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be liable. Railway will give notice to Contractor, in writing, of the receipt or dependency of such claims and thereupon Contractor must proceed to adjust and handle to a conclusion such claims, and in the event of a suit being brought against Railway, Railway may forward summons and complaint or other process in connection therewith to Contractor, and Contractor, at Railway's discretion, must defend, adjust, or settle such suits and protect, indemnify, and save harmless Railway from and against all damages, judgments, decrees, attorney's fees, costs, and expenses growing out of or resulting from or incident to any such claims or suits.

It is mutually understood and agreed that the assumption of liabilities and indemnification provided for in this Agreement survive any termination of this Agreement.

Section 2. TERM

This Agreement is effective from the date of the Contract until (i) the completion of the project set forth herein, and (ii) full and complete payment to Railway of any and all sums or other amounts owing and due hereunder.

Section 3. INSURANCE

Contractor must, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

A. Commercial General Liability insurance. This insurance must contain broad form contractual liability with a combined single limit of a minimum of \$5,000,000 each occurrence and an aggregate limit of at least \$10,000,000. Coverage must be purchased on a post 1998 ISO occurrence form or equivalent and include coverage for, but not limit to the following:

- ◆ Bodily Injury and Property Damage
- ◆ Personal Injury and Advertising Injury
- ◆ Fire legal liability
- ◆ Products and completed operations

This policy must also contain the following endorsements, which must be indicated on the certificate of insurance:

- ◆ It is agreed that any workers' compensation exclusion does not apply to *Railroad* payments related to the Federal Employers Liability Act or a *Railroad* Wage Continuation Program or similar programs and any payments made are deemed not to be either payments made or obligations assumed under any Workers Compensation, disability benefits, or unemployment compensation law or similar law.
- ◆ The definition of insured contract must be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- ◆ Any exclusions related to the explosion, collapse and underground hazards must be removed.

No other endorsements limiting coverage as respects obligations under this Agreement may be included on the policy.

B. Business Automobile Insurance. This insurance must contain a combined single limit of at least \$1,000,000 per occurrence, and include coverage for, but not limited to the following:

- ◆ Bodily injury and property damage
- ◆ Any and all vehicles owned, used or hired

C. Workers Compensation and Employers Liability insurance including coverage for, but not limited to:

- ◆ _____'s statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.

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- ◆ Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.

D. Railroad Protective Liability insurance naming only the *Railroad* as the Insured with coverage of at least \$5,000,000 per occurrence and \$10,000,000 in the aggregate. The policy Must be issued on a standard ISO form CG 00 35 10 93 and include the following:

- ◆ Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
- ◆ Endorsed to include the Limited Seepage and Pollution Endorsement.
- ◆ Endorsed to remove any exclusion for punitive damages.
- ◆ No other endorsements restricting coverage may be added.
- ◆ The original policy must be provided to the *Railroad* prior to performing any work or services under this Agreement

Other Requirements:

All policies (applying to coverage listed above) must not contain an exclusion for punitive damages and certificates of insurance must reflect that no exclusion exists.

Contractor agrees to waive its right of recovery against *Railroad* for all claims and suits against *Railroad*. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against *Railroad* for all claims and suits. The certificate of insurance must reflect the waiver of subrogation endorsement. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against *Railroad* for loss of its owned or leased property or property under contractor's care, custody or control.

Contractor's insurance policies through policy endorsement, must include wording which states that the policy is primary and non-contributing with respect to any insurance carried by *Railroad*. The certificate of insurance must reflect that the above wording is included in evidenced policies.

All policy(ies) required above (excluding Workers Compensation and if applicable, Railroad Protective) must include a severability of interest endorsement and *Railroad* must be named as an additional insured with respect to work performed under this agreement. Severability of interest and naming *Railroad* as additional insured must be indicated on the certificate of insurance.

Contractor is not allowed to self-insure without the prior written consent of *Railroad*. If granted by *Railroad*, any deductible, self-insured retention or other financial responsibility for claims must be covered directly by contractor in lieu of insurance. Any and all *Railroad* liabilities that would otherwise, in accordance with the provisions of this *Agreement*, be covered by contractor's insurance will be covered as if contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Prior to commencing the Work, contractor must furnish to *Railroad* an acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments and referencing the contract audit/folder number if available. The policy(ies) must contain a provision that obligates the insurance company(ies) issuing such policy(ies) to notify *Railroad* in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. This cancellation provision must be indicated on the certificate of insurance. Upon request from *Railroad*, a certified duplicate original of any required policy must be furnished. Contractor should send the certificate(s) to the following address:

BNSF RISK MANAGEMENT
2500 Lou Menk Drive AOB-1
Fort Worth, TX 76131-2828
Fax: 817-352-7207

Any insurance policy must be written by a reputable insurance company acceptable to *Railroad* or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provide.

Contractor represents that this *Agreement* has been thoroughly reviewed by contractor's insurance agent(s)/broker(s), who have been instructed by contractor to procure the insurance coverage required by this *Agreement*. Allocated Loss Expense must be in addition to all policy limits for coverages referenced above.

Not more frequently than once every five years, *Railroad* may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by contractor, contractor must require that the subcontractor provide and maintain the insurance coverages set forth herein, naming *Railroad* as an additional insured, and requiring that the subcontractor release, defend and indemnify *Railroad* to the same extent and under the same terms and conditions as contractor is required to release, defend and indemnify *Railroad* herein.

Failure to provide evidence as required by this section will entitle, but not require, *Railroad* to terminate this *Agreement* immediately. Acceptance of a certificate that does not comply with this section will not operate as a waiver of contractor's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by contractor will not be deemed to release or diminish the liability of contractor including, without limitation, liability under the indemnity provisions of this *Agreement*. Damages recoverable by *Railroad* will not be limited by the amount of the required insurance coverage.

For purposes of this section, *Railroad* means "Burlington Northern Santa Fe Corporation", "BNSF RAILWAY COMPANY" and the subsidiaries, successors, assigns and affiliates of each.

Section 4. EXHIBIT "C" CONTRACTOR REQUIREMENTS

The Contractor must observe and comply with the provisions, obligations, requirements and limitations contained in the Contract and the Contractor Requirements set forth on Exhibit "C" attached to the Contract and this Agreement, including, but not be limited to, payment of all costs incurred for any damages to Railway roadbed, tracks, and/or appurtenances thereto, resulting from use, occupancy, or presence of its employees, representatives, or agents or subcontractors on or about the construction site.

Section 5. TRAIN DELAY

Contractor is responsible for and hereby indemnifies and holds harmless Railway (including its affiliated railway companies, and its tenants) for, from and against all damages arising from any unscheduled delay to a freight or passenger train which affects Railway's ability to fully utilize its equipment and to meet customer service and contract obligations. Contractor will be billed, as further provided below, for the economic losses arising from loss of use of equipment, contractual loss of incentive pay and bonuses and contractual penalties resulting from train delays, whether caused by Contractor, or subcontractors, or by the Railway performing work under this Agreement. Railway agrees that it will not perform any act to unnecessarily cause train delay.

For loss of use of equipment, Contractor will be billed the current freight train hour rate per train as determined from Railway's records. Any disruption to train traffic may cause delays to multiple trains at the same time for the same period.

Additionally, the parties acknowledge that passenger, U.S. mail trains and certain other grain, intermodal, coal and freight trains operate under incentive/penalty contracts between Railway and its customer(s). Under these arrangements, if Railway does not meet its contract service commitments, Railway may suffer loss of performance or incentive pay and/or be subject to penalty payments. Contractor is responsible for any train performance and incentive penalties or other contractual economic losses actually incurred by Railway which are attributable to a train delay caused by Contractor or its subcontractors.

The contractual relationship between Railway and its customers is proprietary and confidential. In the event of a train delay covered by this Agreement, Railway will share information

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relevant to any train delay to the extent consistent with Railway confidentiality obligations. Damages for train delay for certain trains may be as high as \$50,000.00 per incident.

Contractor and its subcontractors must give Railway's representative (____) _____ weeks advance notice of the times and dates for proposed work windows. Railway and Contractor will establish mutually agreeable work windows for the project. Railway has the right at any time to revise or change the work windows due to train operations or service obligations. Railway will not be responsible for any additional costs or expenses resulting from a change in work windows. Additional costs or expenses resulting from a change in work windows shall be accounted for in Contractor's expenses for the project.

Contractor and subcontractors must plan, schedule, coordinate and conduct all Contractor's work so as to not cause any delays to any trains.

Kindly acknowledge receipt of this letter by signing and returning to the Railway two original copies of this letter, which, upon execution by Railway, will constitute an Agreement between us.

(Contractor)

BNSF Railway Company

By: _____
Printed Name: _____
Title: _____

By: _____
Name: _____
Manager Public Projects

Contact Person: _____
Address _____

Accepted and effective this ____ day of 20__.

City: _____ State: _____ Zip: _____
Fax: _____
Phone: _____
E-mail: _____

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

SPECIAL PROVISION
FOR
INSURANCE (LR 107-4)

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:

Village of Hinsdale

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

CONCRETE GUTTER, CURB, MEDIAN, AND PAVED DITCH (BDE)

Effective: April 1, 2014

Revised: August 1, 2014

Add the following to Article 606.02 of the Standard Specifications:

"(i) Polyurethane Joint Sealant1050.04"

Revise the fifth paragraph of Article 606.07 of the Standard Specifications to read:

"Transverse contraction and longitudinal construction joints shall be sealed according to Article 420.12, except transverse joints in concrete curb and gutter shall be sealed with polysulfide or polyurethane joint sealant."

Add the following to Section 1050 of the Standard Specifications:

"1050.04 Polyurethane Joint Sealant. The joint sealant shall be a polyurethane sealant, Type S, Grade NS, Class 25 or better, Use T (T₁ or T₂), according to ASTM C 920."

80334

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.

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

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

- a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (<http://www.epa.gov/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

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.

80261

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 (DBE)

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.

CONTRACTOR ASSURANCE. 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 26.00% 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.

DBE LOCATOR REFERENCES. 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.

BIDDING PROCEDURES. 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) NO AMENDMENT. 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) CHANGES TO WORK. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, then a new Request for Approval of Subcontractor shall not be

required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

(c) SUBCONTRACT. 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) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:

(1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award;
or

(2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or

(3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a 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) RECONSIDERATION. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance

to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

80029

FRICITION 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	<u>Allowed Alone or in Combination</u> ^{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	<u>Allowed Alone or in Combination</u> ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete		
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	<u>Allowed Alone or in Combination</u> ^{5/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/}		
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-9.5 or IL-9.5L SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination</u> ^{5/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}		
HMA High ESAL	D Surface and Leveling Binder IL-9.5 SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination</u> ^{5/} : Crushed Gravel Carbonate Crushed Stone (other than Limestone) ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}		
		<u>Other Combinations Allowed:</u>		
		<table border="1"> <tr> <td><i>Up to...</i></td> <td><i>With...</i></td> </tr> <tr> <td>25% Limestone</td> <td>Dolomite</td> </tr> </table>	<i>Up to...</i>	<i>With...</i>
<i>Up to...</i>	<i>With...</i>			
25% Limestone	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 SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> ^{5/} :	
		Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete ^{3/} No Limestone.	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
		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 High ESAL	F Surface IL-9.5 SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> ^{5/} :	
		Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.	
		<u>Other Combinations Allowed:</u>	

Use	Mixture	Aggregates Allowed	
		<i>Up to...</i>	<i>With...</i>
		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."

80265

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010

Revised: April 1, 2012

Description. 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 one-minute 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%”

80246

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 1101.19
- “(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, Non-Milled Concrete & Tined Concrete	0.05 (0.244)
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.

Item	Article/Section
(a) Packaged Rapid Hardening Mortar or Concrete	1018”

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.”

80348

LRFD STORM SEWER BURIAL TABLES (BDE)

Effective: November 1, 2013

Revised: November 1, 2014

Revise Article 550.02 of the Standard Specifications to read as follows:

"Item	Article Section
(a) Clay Sewer Pipe	1040.02
(b) Extra Strength Clay Pipe	1040.02
(c) Concrete Sewer, Storm Drain, and Culvert Pipe	1042
(d) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	1042
(e) Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe (Note 1)	1042
(f) Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe (Note 1)	1042
(g) Polyvinyl Chloride (PVC) Pipe	1040.03
(h) Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior	1040.03
(i) Corrugated Polypropylene (CPP) Pipe with Smooth Interior	1040.07
(j) Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete Pipe	1056
(k) Mastic Joint Sealer for Pipe	1055
(l) External Sealing Band	1057
(m) Fine Aggregate (Note 2)	1003.04
(n) Coarse Aggregate (Note 3)	1004.05
(o) Reinforcement Bars and Welded Wire Fabric	1006.10
(p) Handling Hole Plugs	1042.16
(q) Polyethylene (PE) Pipe with a Smooth Interior	1040.04
(r) Corrugated Polyethylene (PE) Pipe with a Smooth Interior	1040.04

Note 1. The class of elliptical and arch pipe used for various storm sewer sizes and heights of fill shall conform to the requirements for circular pipe.

Note 2. The fine aggregate shall be moist.

Note 3. The coarse aggregate shall be wet."

Revise the table for permitted materials in Article 550.03 of the Standard Specifications as follows:

"Class	Materials
A	Rigid Pipes: Clay Sewer Pipe Extra Strength Clay Pipe Concrete Sewer, Storm Drain, and Culvert Pipe 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
B	Rigid Pipes: Clay Sewer Pipe Extra Strength Clay Pipe Concrete Sewer, Storm Drain, and Culvert Pipe 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: Polyvinyl Chloride (PVC) Pipe Corrugated Polyvinyl Chloride Pipe (PVC) with a Smooth Interior Polyethylene (PE) Pipe with a Smooth Interior Corrugated Polyethylene (PE) Pipe with a Smooth Interior Corrugated Polypropylene (CPP) Pipe with a Smooth Interior"

Replace the storm sewers tables in Article 550.03 of the Standard Specifications with the following:

STORM SEWERS
KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

Nominal Diameter in.	Type 1											Type 2										
	Fill Height: 3' and less With 1' minimum cover											Fill Height: Greater than 3' not exceeding 10'										
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP						
10	NA	3	X	X	X	X	X	NA	NA	1	*X	X	X	X	NA							
12	IV	NA	X	X	X	X	X	II	II	1	*X	X	X	X	X							
15	IV	NA	NA	X	X	NA	X	II	II	1	*X	X	X	NA	X							
18	IV	NA	NA	X	X	X	X	II	II	2	X	X	X	X	X							
21	III	NA	NA	X	X	NA	X	II	II	2	X	X	X	NA	NA							
24	III	NA	NA	X	X	X	X	II	II	2	X	X	X	X	X							
27	III	NA	NA	NA	NA	NA	NA	II	II	3	X	NA	NA	NA	NA							
30	IV	NA	NA	NA	X	X	X	II	II	NA	X	X	NA	X	X							
33	III	NA	NA	NA	NA	NA	NA	II	II	NA	X	NA	NA	NA	NA							
36	III	NA	NA	NA	X	X	X	II	II	NA	X	X	X	X	X							
42	II	NA	NA	X	X	X	X	II	II	NA	X	X	NA	X	NA							
48	II	NA	NA	X	X	X	X	II	II	NA	X	X	NA	NA	NA							
54	II	NA	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	X							
60	II	NA	NA	NA	NA	NA	X	II	II	NA	NA	NA	NA	NA	NA							
66	II	NA	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA							
72	II	NA	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA							
78	II	NA	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA							
84	II	NA	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA							
90	II	NA	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA							
96	II	NA	NA	NA	NA	NA	NA	III	III	NA	NA	NA	NA	NA	NA							
102	II	NA	NA	NA	NA	NA	NA	III	III	NA	NA	NA	NA	NA	NA							
108	II	NA	NA	NA	NA	NA	NA	III	III	NA	NA	NA	NA	NA	NA							

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
CSP Concrete Sewer, Storm drain, and Culvert Pipe
PVC Polyvinyl Chloride Pipe
CPVC Corrugated Polyvinyl Chloride Pipe
ESCP Extra Strength Clay Pipe
PE Polyethylene Pipe with a Smooth Interior
CPE Corrugated Polyethylene Pipe with a Smooth Interior
CPP Corrugated Polypropylene pipe with a Smooth Interior
X This material may be used for the given pipe diameter and fill height.
NA This material is Not Acceptable for the given pipe diameter and fill height.
* May also use Standard Strength Clay Pipe

STORM SEWERS (Metric)
KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

Nominal Diameter In.	Type 1													Type 2												
	Fill Height: 1 m and less With 300 mm minimum cover													Fill Height: Greater than 1 m not exceeding 3 m												
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP		
250	NA	3	X	X	X	X	NA	NA	1	*X	X	X	X	X	NA	NA	1	*X	X	X	X	X	NA			
300	IV	NA	X	X	X	X	II	II	1	*X	X	X	X	NA	X	X	1	*X	X	X	X	X	NA			
375	IV	NA	NA	NA	X	NA	II	II	1	*X	X	X	X	NA	X	II	1	*X	X	X	X	X	NA			
450	IV	NA	NA	NA	X	X	II	II	2	X	X	X	X	NA	X	II	2	X	X	X	X	NA	X			
525	III	NA	NA	NA	X	X	II	II	2	X	X	X	X	NA	X	II	2	X	X	X	X	NA	X			
600	III	NA	NA	NA	X	X	II	II	2	X	X	X	X	NA	X	II	2	X	X	X	X	NA	X			
675	III	NA	NA	NA	NA	NA	II	II	3	X	NA	NA	NA	NA	NA	II	3	X	X	NA	NA	NA	NA			
750	IV	NA	NA	NA	X	X	II	II	3	X	X	NA	NA	NA	NA	II	3	X	X	NA	NA	NA	NA			
825	III	NA	NA	NA	NA	NA	II	II	NA	X	NA	NA	NA	NA	NA	II	NA	X	NA	NA	NA	NA	NA			
900	III	NA	NA	NA	X	X	II	II	NA	X	X	X	X	NA	X	II	NA	X	X	NA	NA	NA	NA			
1050	II	NA	NA	X	X	NA	II	II	NA	X	X	X	NA	X	II	NA	NA	X	X	NA	NA	NA	NA			
1200	II	NA	NA	X	X	NA	II	II	NA	X	X	X	NA	X	II	NA	NA	X	X	NA	NA	NA	NA			
1350	II	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA			
1500	II	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA			
1650	II	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA			
1800	II	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA			
1950	II	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA			
2100	II	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA			
2250	II	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA			
2400	II	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA			
2550	II	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA			
2700	II	NA	NA	NA	NA	NA	II	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA			

- RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
- CSP Concrete Sewer, Storm drain, and Culvert Pipe
- PVC Polyvinyl Chloride Pipe
- CPVC Corrugated Polyvinyl Chloride Pipe
- ESCP Extra Strength Clay Pipe
- PE Polyethylene Pipe with a Smooth Interior
- CPE Corrugated Polyethylene Pipe with a Smooth Interior
- CPP Corrugated Polypropylene pipe with a Smooth Interior
- X This material may be used for the given pipe diameter and fill height.
- NA This material is Not Acceptable for the given pipe diameter and fill height.
- * May also use Standard Strength Clay Pipe

STORM SEWERS
KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

Nominal Diameter In.	Type 3											Type 4										
	Fill Height: Greater than 10' not exceeding 15'											Fill Height: Greater than 15' not exceeding 20'										
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPP							
10	NA	2	X	X	X	X	X	NA	NA	X	X	X	X	X	NA							
12	III	2	X	X	X	X	NA	X	IV	NA	X	X	X	X	NA							
15	III	3	X	X	X	NA	X	X	IV	NA	X	X	X	NA	X							
18	III	NA	X	X	X	X	NA	X	IV	NA	X	X	X	NA	X							
21	III	NA	X	X	X	NA	NA	X	IV	NA	X	X	X	NA	NA							
24	III	NA	X	X	X	X	NA	NA	IV	NA	X	X	X	NA	NA							
27	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA							
30	III	NA	NA	NA	X	X	NA	X	IV	NA	NA	NA	NA	NA	NA							
33	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA							
36	III	NA	NA	NA	X	X	NA	NA	IV	NA	X	X	X	NA	NA							
42	III	NA	NA	NA	X	X	NA	NA	IV	NA	X	X	NA	NA	NA							
48	III	NA	NA	NA	X	X	NA	NA	IV	NA	X	X	NA	NA	NA							
54	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA							
60	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA							
66	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA							
72	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA							
78	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA							
84	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA							
90	III	NA	NA	NA	NA	NA	NA	NA	1680	NA	NA	NA	NA	NA	NA							
96	III	NA	NA	NA	NA	NA	NA	NA	1690	NA	NA	NA	NA	NA	NA							
102	III	NA	NA	NA	NA	NA	NA	NA	1700	NA	NA	NA	NA	NA	NA							
108	1360	NA	NA	NA	NA	NA	NA	NA	1710	NA	NA	NA	NA	NA	NA							

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
 CSP Concrete Sewer, Storm drain, and Culvert Pipe
 PVC Polyvinyl Chloride Pipe
 CPVC Corrugated Polyvinyl Chloride Pipe
 ESCP Extra Strength Clay Pipe
 PE Polyethylene Pipe with a Smooth Interior
 CPE Corrugated Polyethylene Pipe with a Smooth Interior
 CPP Corrugated Polypropylene pipe with a Smooth Interior
 X This material may be used for the given pipe diameter and fill height.
 NA This material is Not Acceptable for the given pipe diameter and fill height.
 * May also use Standard Strength Clay Pipe
 Note RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a 0.01 in crack.

STORM SEWERS (metric)
KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

Nominal Diameter in.	Type 3										Type 4									
	Fill Height: Greater than 3 m not exceeding 4.5 m										Fill Height: Greater than 4.5 m not exceeding 6 m									
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPP					
250	NA	2	X	X	X	X	NA	NA	3	X	X	X	X	NA	NA					
300	III	2	X	X	X	NA	IV	IV	NA	NA	X	X	NA	NA	X					
375	III	3	X	X	X	NA	IV	IV	NA	NA	X	X	NA	NA	X					
450	III	NA	X	X	X	NA	IV	IV	NA	NA	X	X	X	NA	NA					
525	III	NA	X	X	X	NA	IV	IV	NA	NA	X	X	X	NA	NA					
600	III	NA	X	X	X	NA	IV	IV	NA	NA	X	X	X	NA	NA					
675	III	NA	NA	NA	NA	NA	IV	IV	NA	NA	NA	NA	NA	NA	NA					
750	III	NA	NA	X	X	NA	IV	IV	NA	NA	X	X	X	NA	NA					
825	III	NA	NA	NA	NA	NA	IV	IV	NA	NA	NA	NA	NA	NA	NA					
900	III	NA	NA	X	X	NA	IV	IV	NA	NA	X	X	X	NA	NA					
1050	III	NA	NA	X	X	NA	IV	IV	NA	NA	X	X	X	NA	NA					
1200	III	NA	NA	X	X	NA	IV	IV	NA	NA	X	X	X	NA	NA					
1350	III	NA	NA	NA	NA	NA	IV	IV	NA	NA	NA	NA	NA	NA	NA					
1500	III	NA	NA	NA	NA	NA	IV	IV	NA	NA	NA	NA	NA	NA	NA					
1650	III	NA	NA	NA	NA	NA	IV	IV	NA	NA	NA	NA	NA	NA	NA					
1800	III	NA	NA	NA	NA	NA	IV	IV	NA	NA	NA	NA	NA	NA	NA					
1950	III	NA	NA	NA	NA	NA	IV	IV	NA	NA	NA	NA	NA	NA	NA					
2100	III	NA	NA	NA	NA	NA	IV	IV	NA	NA	NA	NA	NA	NA	NA					
2250	III	NA	NA	NA	NA	NA	80	80	NA	NA	NA	NA	NA	NA	NA					
2400	III	NA	NA	NA	NA	NA	80	80	NA	NA	NA	NA	NA	NA	NA					
2550	III	NA	NA	NA	NA	NA	80	80	NA	NA	NA	NA	NA	NA	NA					
2700	70	NA	NA	NA	NA	NA	80	80	NA	NA	NA	NA	NA	NA	NA					

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
 CSP Concrete Sewer, Storm drain, and Culvert Pipe
 PVC Polyvinyl Chloride Pipe
 CPVC Corrugated Polyvinyl Chloride Pipe
 ESCP Extra Strength Clay Pipe
 PE Polyethylene Pipe with a Smooth Interior
 CPE Corrugated Polyethylene Pipe with a Smooth Interior
 CPP Corrugated Polypropylene pipe with a Smooth Interior
 X This material is Not Acceptable for the given pipe diameter and fill height.
 NA May also use Standard Strength Clay Pipe
 Note RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the metric D-load to produce a 25.4 micro-meter crack.

**STORM SEWERS
KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE**

Nominal Diameter in.	Type 5			Type 6			Type 7	
	Fill Height: Greater than 20' not exceeding 25'	Fill Height: Greater than 25' not exceeding 30'	Fill Height: Greater than 30' not exceeding 35'	RCCP	PVC	CPVC	RCCP	CPVC
10	NA	X	X	NA	X	X	NA	X
12	IV	X	X	V	X	X	V	X
15	IV	X	X	V	X	X	V	X
18	IV	X	X	V	X	X	V	X
21	IV	X	X	V	X	X	V	X
24	IV	X	X	V	X	X	V	X
27	IV	NA	NA	V	NA	NA	V	NA
30	IV	X	X	V	X	X	V	X
33	IV	NA	NA	V	NA	NA	V	NA
36	IV	X	X	V	X	X	V	X
42	IV	X	NA	V	X	NA	V	NA
48	IV	X	NA	V	X	NA	V	NA
54	IV	NA	NA	V	NA	NA	V	NA
60	IV	NA	NA	V	NA	NA	V	NA
66	IV	NA	NA	V	NA	NA	V	NA
72	V	NA	NA	V	NA	NA	V	NA
78	2020	NA	NA	2370	NA	NA	2730	NA
84	2020	NA	NA	2380	NA	NA	2740	NA
90	2030	NA	NA	2390	NA	NA	2750	NA
96	2040	NA	NA	2400	NA	NA	2760	NA
102	2050	NA	NA	2410	NA	NA	2760	NA
108	2060	NA	NA	2410	NA	NA	2770	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
PVC Polyvinyl Chloride Pipe
CPVC Corrugated Polyvinyl Chloride Pipe
ESCP Extra Strength Clay Pipe
X This material may be used for the given pipe diameter and fill height.
NA This material is Not Acceptable for the given pipe diameter and fill height.
Note RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a 0.01 in crack.

STORM SEWERS (metric)
KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

Nominal Diameter In.	Type 5			Type 6			Type 7	
	Fill Height: Greater than 20' not exceeding 25'			Fill Height: Greater than 25' not exceeding 30'			Fill Height: Greater than 30' not exceeding 35'	
	RCCP	PVC	CPVC	RCCP	PVC	CPVC	RCCP	CPVC
250	NA	X	X	NA	X	X	NA	X
300	IV	X	X	V	X	X	V	X
375	IV	X	X	V	X	X	V	X
450	IV	X	X	V	X	X	V	X
525	IV	X	X	V	X	X	V	X
600	IV	X	X	V	X	X	V	X
675	IV	NA	NA	V	NA	NA	V	NA
750	IV	X	X	V	X	X	V	X
825	IV	NA	NA	V	NA	NA	V	NA
900	IV	X	X	V	X	X	V	X
1050	IV	X	X	V	X	NA	V	NA
1200	IV	X	NA	V	X	NA	V	NA
1350	IV	NA	NA	V	NA	NA	V	NA
1500	IV	NA	NA	V	NA	NA	V	NA
1650	IV	NA	NA	V	NA	NA	V	NA
1800	V	NA	NA	V	NA	NA	V	NA
1950	100	NA	NA	110	NA	NA	130	NA
2100	100	NA	NA	110	NA	NA	130	NA
2250	100	NA	NA	110	NA	NA	130	NA
2400	100	NA	NA	120	NA	NA	130	NA
2550	100	NA	NA	120	NA	NA	130	NA
2700	100	NA	NA	120	NA	NA	130	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
PVC Polyvinyl Chloride Pipe
CPVC Corrugated Polyvinyl Chloride Pipe
ESCP Extra Strength Clay Pipe
X This material may be used for the given pipe diameter and fill height.
NA This material is Not Acceptable for the given pipe diameter and fill height.
Note RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the metric D-load to produce a 25.4 micro-meter crack.

Revise the sixth paragraph of Article 550.06 of the Standard Specifications to read:

“PVC, PE and CPP pipes shall be joined according to the manufacturer’s specifications.”

Revise the first and second paragraphs of Article 550.08 of the Standard Specifications to read:

“550.08 Deflection Testing for Storm Sewers. All PVC, PE, and CPP storm sewers 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 storm sewers with diameters 24 in. (600 mm) or smaller, a mandrel drag shall be used for deflection testing. For PVC, PE, and CPP storm sewers with diameters over 24 in. (600 mm), deflection measurements other than by a mandrel shall be used.”

Revise the fifth paragraph of Article 550.08 to read as follows.

“The outside diameter of the mandrel shall be 95 percent of the base inside diameter. For all PVC pipe the base inside diameter shall be defined using ASTM D 3034 methodology. For all PE and CPP pipe, the base inside diameter shall be defined as the average inside diameter based on the minimum and maximum tolerances specified in the corresponding ASTM or AASHTO material specifications.”

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 AASHTO 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.”

80325

MECHANICAL SIDE TIE BAR INSERTER (BDE)

Effective: August 1, 2014

Revised: January 1, 2015

Add the following to Article 420.03 of the Standard Specifications:

“(k) Mechanical Side Tie Bar Inserters 1103.18”

Revise Article 420.05(b) of the Standard Specifications to read:

“(b) Longitudinal Construction Joint. The tie bars shall be installed using one of the following methods.

- (1) Preformed or Drilled Holes. The tie bars shall be installed with an approved nonshrink grout or chemical adhesive providing a minimum pull-out strength as follows.

Bar Size	Minimum Pull-Out Strength
No. 6 (No. 19)	11,000 lb (49 kN)
No. 8 (No. 25)	19,750 lb (88 kN)

Holes shall be blown clean and dry prior to placing the grout or adhesive. If compressed air is used, the pneumatic tool lubricator shall be bypassed and a filter installed on the discharge valve to keep water and oil out of the lines. The installation shall be with methods and tools conforming to the grout or adhesive manufacturer’s recommendations.

The Contractor shall load test five percent of the first 500 tie bars installed. No further installation will be allowed until the initial five percent testing has been completed and approval to continue installation has been given by the Engineer. Testing will be required for 0.5 percent of the bars installed after the initial 500. For each bar that fails to pass the minimum requirements, two more bars selected by the Engineer shall be tested. Each bar that fails to meet the minimum load requirement shall be reinstalled and retested. The equipment and method used for testing shall meet the requirements of ASTM E 488. All tests shall be performed within 72 hours of installation. The tie bars shall be installed and approved before concrete is placed in the adjacent lane.”

- (2) Inserted. The tie bars shall be installed with the use of a mechanical side tie bar inserter. The inserter shall insert the tie bars with vibration while still within the extrusion process, after the concrete has been struck off and consolidated without deformation of the slab. The inserter shall remain stationary relative to the pavement when inserting tie bars, while the formless paver continues to move in the direction of paving.

A void greater than 1/8 in. (3 mm) at any location around the tie bar shall require immediate adjustment of the paving operation. A void greater than 1/2 in. (13 mm) shall be repaired with a nonshrink grout or chemical adhesive after the concrete has hardened. If at the end of the day of paving more than 20 percent of the tie bars show a void larger than 1/8 in. (3 mm) at any point around the bar, the use of the side tie bar inserter shall be discontinued.

(3) Formed in Place. The tie bar shall be formed in place as shown on the plans.

The sealant reservoir shall be formed either by sawing after the concrete has set according to Article 420.05(a) or by hand tools when the concrete is in a plastic state.”

Add the following to Section 1103 of the Standard Specifications:

“1103.18 Mechanical Side Bar Inserters. The mechanical side tie bar inserter shall be self-contained and supported on the formless paver with the ability to move independently from the formless paver. The insertion apparatus shall vibrate within a frequency of 2000 to 6000 vpm. A vibrating reed tachometer, hand type, shall be provided according to Article 1103.12.”

80342

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.”

80254

PRECAST CONCRETE HANDHOLE (BDE)

Effective: August 1, 2014

Revise the third paragraph of Article 814.03 of the Standard Specifications to read:

“Handholes shall be constructed as shown on the plans and shall be cast-in-place, composite concrete, or precast units. Heavy duty handholes shall be either cast-in-place or precast units.”

Add the following to Article 814.03 of the Standard Specifications:

“(c) Precast Concrete. Precast concrete handholes shall be fabricated according to Article 1042.17. Where a handhole is contiguous to a sidewalk, preformed joint filler of 1/2 inch (13 mm) thickness shall be placed between the handhole and the sidewalk.”

Add the following to Section 1042 of the Standard Specifications:

“**1042.17 Precast Concrete Handholes.** Precast concrete handholes shall be according to Articles 1042.03(a)(c)(d)(e).”

80343

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.”

80328

RAILROAD PROTECTIVE LIABILITY INSURANCE (5 and 10) (BDE)

Effective: January 1, 2006

Description. Railroad Protective Liability and Property Damage Liability Insurance shall be carried according to Article 107.11 of the Standard Specifications, except the limits shall be a minimum of \$5,000,000 combined single limit per occurrence for bodily injury liability and property damage liability with an aggregate limit of \$10,000,000 over the life of the policy. A separate policy is required for each railroad unless otherwise noted.

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
BNSF RAILWAY COMPANY 2650 Lou Menk Drive Fort Worth, TX 76131-2830	95 @ 30 MPH	45 @ 25 MPH
DOT/AAR No.: 079 520F RR Division: Chicago	RR Mile Post: 16.44 RR Sub-Division: First	
For Freight/Passenger Information Contact: Ms. Pat Casler For Insurance Information Contact: Rosa Martinez, Marsh Co.		Phone: 312-850-5680 Phone: 214-303-8519

DOT/AAR No.:	RR Mile Post:	
RR Division:	RR Sub-Division:	
For Freight/Passenger Information Contact:		Phone:
For Insurance Information Contact:		Phone:

Approval of Insurance. The original and one certified copy of each required policy shall be submitted to the following address for approval:

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

The Contractor will be advised when the Department has received approval of the insurance from the railroad(s). Before any work begins on railroad right-of-way, the Contractor shall submit to the Engineer evidence that the required insurance has been approved by the railroad(s). The Contractor shall also provide the Engineer with the expiration date of each required policy.

Basis of Payment. Providing Railroad Protective Liability and Property Damage Liability Insurance will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

80157

RETROREFLECTIVE SHEETING FOR HIGHWAY SIGNS (BDE)

Effective: November 1, 2014

Revise the first sentence of the first paragraph of Article 1091.03(a)(3) of the Standard Specifications to read:

“When tested according to ASTM E 810, with averaging, the sheeting shall have a minimum coefficient of retroreflection as show in the following tables.”

Replace the Tables for Type AA sheeting, Type AP sheeting, Type AZ sheeting and Type ZZ sheeting in Article 1091.03(a)(3) with the following.

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

Type AA (Average of 0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FO
0.2	-4	800	600	120	80	40	200
0.2	+30	400	300	60	35	20	100
0.5	-4	200	150	30	20	10	75
0.5	+30	100	75	15	10	5	35

Type AA (45 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	Yellow	FO
0.2	-4	500	165
0.2	+30	115	40
0.5	-4	140	65
0.5	+30	60	30

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

Type AP (Average of 0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	Brown	FO
0.2	-4	500	380	75	55	35	25	150
0.2	+30	180	135	30	20	15	10	55
0.5	-4	300	225	50	30	20	15	90
0.5	+30	90	70	15	10	7.5	5	30

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

Type AZ (Average of 0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY
0.2	-4	375	280	75	45	25	300	230
0.2	+30	235	170	40	25	15	190	150
0.5	-4	245	180	50	30	20	200	155
0.5	+30	135	100	25	15	10	100	75
1.0	-4	50	37.5	8.5	5	2	45	25
1.0	+30	22.5	20	5	3	1	25	12.5

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

Type ZZ (Average of 0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY	FO
0.2	-4	570	425	90	60	30	460	340	170
0.2	+30	190	140	35	20	10	150	110	65
0.5	-4	400	300	60	40	20	320	240	120
0.5	+30	130	95	20	15	7	100	80	45
1.0	-4	115	90	17	12	5	95	70	35
1.0	+30	45	35	7	5	2	35	25	15

80350

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 on 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 $\pm 1/4$ 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.”

80327

SIDEWALK, CORNER, OR CROSSWALK CLOSURE (BDE)

Effective: January 1, 2015

| Revised: April 1, 2015

Revise the first sentence of Article 1106.02(m) of the Supplemental Specifications to read:

“The top and bottom panels shall have alternating white and orange stripes sloping 45 degrees on both sides.”

80354

STEEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)

Effective: April 2, 2004

Revised: April 1, 2009

Description. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form or failure to indicate contract number, company name, and sign and date the form shall make this contract exempt of steel cost adjustments for all items of steel. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment.

Types of Steel Products. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

- Metal Piling (excluding temporary sheet piling)
- Structural Steel
- Reinforcing Steel

Other steel materials such as dowel bars, tie bars, mesh reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), and frames and grates will be subject to a steel cost adjustment when the pay items they are used in has a contract value of \$10,000 or greater.

Documentation. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

$$SCA = Q \times D$$

Where: SCA = steel cost adjustment, in dollars
Q = quantity of steel incorporated into the work, in lb (kg)
D = price factor, in dollars per lb (kg)

$$D = MPI_M - MPI_L$$

Where: MPI_M = The Materials Cost Index for steel as published by the Engineering News-Record for the month the steel is shipped from the mill. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

MPI_L = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the MPI_M will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

Basis of Payment. Steel cost adjustments may be positive or negative but will only be made when there is a difference between the MPI_L and MPI_M in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(MPI_L - MPI_M) \div MPI_L\} \times 100$$

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the items of work are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Attachment

Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling) Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness) Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness) Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness) Other piling	23 lb/ft (34 kg/m) 32 lb/ft (48 kg/m) 37 lb/ft (55 kg/m) See plans
Structural Steel	See plans for weights (masses)
Reinforcing Steel	See plans for weights (masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Mesh Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail Steel Plate Beam Guardrail, Type A w/steel posts Steel Plate Beam Guardrail, Type B w/steel posts Steel Plate Beam Guardrail, Types A and B w/wood posts Steel Plate Beam Guardrail, Type 2 Steel Plate Beam Guardrail, Type 6 Traffic Barrier Terminal, Type 1 Special (Tangent) Traffic Barrier Terminal, Type 1 Special (Flared)	20 lb/ft (30 kg/m) 30 lb/ft (45 kg/m) 8 lb/ft (12 kg/m) 305 lb (140 kg) each 1260 lb (570 kg) each 730 lb (330 kg) each 410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms Traffic Signal Post Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 - 12 m) Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 - 16.5 m) Light Pole w/Mast Arm, 30 - 50 ft (9 - 15.2 m) Light Pole w/Mast Arm, 55 - 60 ft (16.5 - 18 m) Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m) Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m) Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)	11 lb/ft (16 kg/m) 14 lb/ft (21 kg/m) 21 lb/ft (31 kg/m) 13 lb/ft (19 kg/m) 19 lb/ft (28 kg/m) 31 lb/ft (46 kg/m) 65 lb/ft (97 kg/m) 80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence) Steel Railing, Type SM Steel Railing, Type S-1 Steel Railing, Type T-1 Steel Bridge Rail	64 lb/ft (95 kg/m) 39 lb/ft (58 kg/m) 53 lb/ft (79 kg/m) 52 lb/ft (77 kg/m)
Frames and Grates Frame Lids and Grates	250 lb (115 kg) 150 lb (70 kg)

Return With Bid

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**OPTION FOR
STEEL COST ADJUSTMENT**

The bidder shall submit this completed form with his/her bid. Failure to submit the form or properly complete contract number, company name, and sign and date the form shall make this contract exempt of steel cost adjustments for all items of steel. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment. After award, this form, when submitted shall become part of the contract.

Contract No.: _____

Company Name: _____

Contractor's Option:

Is your company opting to include this special provision as part of the contract plans for the following items of work?

- | | | |
|--|-----|--------------------------|
| Metal Piling | Yes | <input type="checkbox"/> |
| Structural Steel | Yes | <input type="checkbox"/> |
| Reinforcing Steel | Yes | <input type="checkbox"/> |
| Dowel Bars, Tie Bars and Mesh Reinforcement | Yes | <input type="checkbox"/> |
| Guardrail | Yes | <input type="checkbox"/> |
| Steel Traffic Signal and Light Poles, Towers and Mast Arms | Yes | <input type="checkbox"/> |
| Metal Railings (excluding wire fence) | Yes | <input type="checkbox"/> |
| Frames and Grates | Yes | <input type="checkbox"/> |

Signature: _____ Date: _____

80127

TRAINING SPECIAL PROVISIONS (BDE)

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 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 than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

METHOD OF MEASUREMENT The unit of measurement is in hours.

BASIS OF PAYMENT This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

20338

WARM MIX ASPHALT (BDE)

Effective: January 1, 2012
Revised: November 1, 2014

Description. 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.

80288

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

The Contractor shall provide 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 on the jobsite; or used for the delivery and/or removal of equipment/material to and from the jobsite. The jobsite shall also include offsite locations, such as plant sites or storage sites, when those locations are used solely for this contract.

The report shall be submitted on the form provided by the Department within ten business days following the reporting period. The reporting period shall be Monday through Sunday for each week reportable trucking activities occur. The report shall be submitted to the Engineer and a copy shall be provided to the district EEO Officer.

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.

80302

TEMPORARY SHEET PILING

Effective: September 2, 1994

Revised: January 31, 2012

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

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

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

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

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

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

the finished grade or as directed by the Engineer. Removed sheet piling shall become the property of the Contractor.

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

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

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

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

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

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

PIPE UNDERDRAINS FOR STRUCTURES

Effective: May 17, 2000

Revised: January 22, 2010

Description. 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.

Construction Requirements. 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.

Basis of Payment. 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.....	1003.04
(b) Coarse Aggregates	1004.05

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.

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REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. 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 on-the-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 non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; 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.

b. (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 from the Wage and Hour Division Web site at <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.

* * * * *

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.