114

Letting April 26, 2019

Notice to Bidders, Specifications and Proposal



Contract No. 61F70 DUPAGE County Section 18-00106-00-RS (Addison) Route FAU 1380 (Collins Ave&fullerton Ave) Project 9ACN-091 () District 1 Construction Funds

Printed by authority of the State of Illinois)



NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 10:00 a.m. April 26, 2019 at which time the bids will be publicly opened from the iCX SecureVault.
- 2. DESCRIPTION OF WORK. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 61F70 DUPAGE County Section 18-00106-00-RS (Addison) Project 9ACN-091 () Route FAU 1380 (Collins Ave&fullerton Ave) District 1 Construction Funds

Resurface Collins Avenue from Swift Road to Rohwling Road, and resurface Fullerton Avenue from Rohwling Road to Addison Road in the village of Addison.

- **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

Omer Osman, Acting Secretary

CONTRACT 61F70

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2019

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 4-1-16) (Revised 1-1-19)

SUPPLEMENTAL SPECIFICATIONS

Std. Spe	ec. Sec.	Page No.
106	Control of Materials	1
107	Legal Regulations and Responsibility to Public	2
403	Bituminous Surface Treatment (Class A-1, A-2, A-3)	3
404	Micro-Surfacing and Slurry Sealing	4
405	Cape Seal	
406	Hot-Mix Asphalt Binder and Surface Course	25
420	Portland Cement Concrete Pavement	26
424	Portland Cement Concrete Sidewalk	28
442	Pavement Patching	
502	Excavation for Structures	30
503	Concrete Structures	32
504	Precast Concrete Structures	35
542	Pipe Culverts	
586	Sand Backfill for Vaulted Abutments	37
602	Catch Basin, Manhole, Inlet, Drainage Structure, and Valve Vault Construction, Adjustment, and	
	Reconstruction	39
630	Steel Plate Beam Guardrail	40
631	Traffic Barrier Terminals	
670	Engineer's Field Office and Laboratory	44
701	Work Zone Traffic Control and Protection	45
704	Temporary Concrete Barrier	46
780	Pavement Striping	
781	Raised Reflective Pavement Markers	49
888	Pedestrian Push-Button	
1001	Cement	51
1003	Fine Aggregates	
1004	Coarse Aggregates	53
1006	Metals	
1020	Portland Cement Concrete	58
1043	Adjusting Rings	
1050	Poured Joint Sealers	
1069	Pole and Tower	64
1077	Post and Foundation	
1096	Pavement Markers	66
1101	General Equipment	
1102	Hot-Mix Asphalt Equipment	68
1103	Portland Cement Concrete Equipment	70
1105	Pavement Marking Equipment	72
1106	Work Zone Traffic Control Devices	74

RECURRING SPECIAL PROVISIONS

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

<u>CHEC</u>	K SH	IEET #	PAGE NO.
1	Х	Additional State Requirements for Federal-Aid Construction Contracts	75
2	Х	Subletting of Contracts (Federal-Aid Contracts)	
3	Х	EEO	
4		Specific EEO Responsibilities Non Federal-Aid Contracts	89
5		Required Provisions - State Contracts	94
6		Asbestos Bearing Pad Removal	100
7		Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	
8		Temporary Stream Crossings and In-Stream Work Pads	102
9		Construction Layout Stakes Except for Bridges	103
10	Х	Construction Layout Stakes	106
11		Use of Geotextile Fabric for Railroad Crossing	109
12		Subsealing of Concrete Pavements	111
13		Hot-Mix Asphalt Surface Correction	
14	Х	Pavement and Shoulder Resurfacing	
15		Patching with Hot-Mix Asphalt Overlay Removal	
16		Polymer Concrete	
17		PVĆ Pipeliner	
18		Bicycle Racks	123
19		Temporary Portable Bridge Traffic Signals	125
20		Work Zone Public Information Signs	
21		Nighttime Inspection of Roadway Lighting	128
22		English Substitution of Metric Bolts	
23		Calcium Chloride Accelerator for Portland Cement Concrete	
24		Quality Control of Concrete Mixtures at the Plant	131
25	Х	Quality Control/Quality Assurance of Concrete Mixtures	
26		Digital Terrain Modeling for Earthwork Calculations	
27		Reserved	
28		Preventive Maintenance – Bituminous Surface Treatment (A-1)	
29		Reserved	
30		Reserved	
31		Reserved	
32		Temporary Raised Pavement Markers	
33		Restoring Bridge Approach Pavements Using High-Density Foam	
34		Portland Cement Concrete Inlay or Overlay	
35		Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	

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:

CHECK	SHEET	<u>#</u> <u>P</u>	AGE NO.
LRS1		Reserved	179
LRS2		Furnished Excavation	
LRS3	Х	Work Zone Traffic Control Surveillance	181
LRS4		Flaggers in Work Zones	182
LRS5		Contract Claims	183
LRS6		Bidding Requirements and Conditions for Contract Proposals	184
LRS7		Bidding Requirements and Conditions for Material Proposals	190
LRS8		Reserved	
LRS9		Bituminous Surface Treatments	197
LRS10)	Reserved	
LRS11	1	Employment Practices	
LRS12	2	Wages of Employees on Public Works	201
LRS13	3	Selection of Labor	
LRS14	1	Paving Brick and Concrete Paver Pavements and Sidewalks	
LRS15	5	Partial Payments	207
LRS16	6	Protests on Local Lettings	
LRS17	7	Substance Abuse Prevention Program	209
LRS18	3	Multigrade Cold Mix Asphalt	210

INDEX

TOPIC	PAGE
Special Provisions	
LOCATION OF IMPROVEMENT	1
DESCRIPTION OF IMPROVEMENT	1
AVAILABLE REPORTS	2
ABUTTING PROPERTY ACCESS	
CONCRETE WASHOUT FACILITY	
CONNECTIONS TO EXISTING PIPES	4
CURB AND GUTTER TRANSITION	4
CURB REMOVAL AND REPLACEMENT	
CURB REMOVAL AND REPLACEMENT ADJACENT PATCHING	4
EARTH EXCAVATION	5
HOT-MIX ASPHALT BEING PLACED	5
PROTECTION AND RESTORATION OF PROPERTY	5
PUBLIC CONVENIENCE AND SAFETY	6
SAW CUTTING	6
SIGNS	7
STORM SEWER	7
SURVEY CONTROL POINTS	
TEMPORARY TOILETS	9
UTILITY CASTINGS	9
UTILITY FRAMES GRATES AND LIDS	10
UTILITY TRENCHES	10
WATER FOR THE SITE	10
CURB REMOVAL AND REPLACEMENT	10
DETECTABLE WARNINGS	
DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY	ζ
GRINDING, RESURFACING, & PATCHING OPERATIONS)	
DIAMOND GRINDING CONCRETE PAVEMENT	
DRAINAGE AND UTILITY STRUCTURES TO BE ADJUSTED	
DRAINAGE AND UTILITY STRUCTURES TO BE RECONSTRUCTED	
DRILL AND GROUT DOWEL BARS AND TIE BARS	
CLEANING DRAINAGE SYSTEM;	19
DRAINAGE STRUCTURES TO BE CLEANED	
DRIVEWAY PAVEMENT REMOVAL	
DUST CONTROL, SPECIAL	
ENGINEER'S FIELD OFFICE, TYPE A (MODIFIED)	
EXPLORATION TRENCH, SPECIAL	
FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	
INLET FILTERS	
PERIMETER EROSION BARRIER, ROLLED EXCELSIOR	
PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT	
PORTLAND CEMENT CONCRETE SIDEWALK	
PRECONSTRUCTION VIDEO TAPING	

PROTECTIVE COAT	27
REBUILD EXISTING HANDHOLE	
RECESSED REFLECTIVE PAVEMENT MARKERS	
REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES	29
STORM SEWERS, WATER MAIN QUALITY PIPE	
TEMPORARY PAVEMENT (VARIABLE DEPTH)	
TREE PROTECTION AND PRESERVATION	
VALVE BOXES TO BE ADJUSTED (SPECIAL)	
IDOT District One Specifications	
ADJUSTMENTS AND RECONSTRUCTIONS (D-1)	17
AGGREGATE SUBGRADE IMPROVEMENT (D-1)	
AGGREGATE SUBGRADE INIT ROVEMENT (D-1)	
COARSE AGGREGATE FOR BACKFILL, TRENCH BACKFILL AND BEDDI	
(D-1)	
DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (D-1)	55 54
FRICTION AGGREGATE (D-1)	
GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1)	
HMA MIXTURE DESIGN REQUIREMENTS (D-1)	
MAINTENANCE OF ROADWAYS (D-1)	
RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHING	
(D-1)	
STATUS OF UTILITIES (D-1)	
TEMPORARY INFORMATION SIGNING (D-1)	
TRAFFIC CONTROL PLAN	
	00
IDOT Training Program Graduate on-the-job Training Special Provision	88
Local Roads Special Provisions	90
LR 107-4	
CC&P RR/CN Requirements for Work Near CN RR	91
Railroad Right of Entry (ROE)	
ROE Application	
Soils	98
LPC-663 Uncontaminated Soil Certification	

BDE SPECIAL PROVISIONS

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

	<u>File</u> lame	<u>Pg.</u>		Special Provision Title	Effective	<u>Revised</u>
<u>-</u>	80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
	80274			Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
	80192			Automated Flagger Assistance Device	Jan. 1, 2008	• •
	80173	114	Х	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
	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
	80404			Coarse Aggregate Quality for Micro-Surfacing and Cape Seals	Jan. 1, 2019	
*	80384	116	Х	Compensable Delay Costs	June 2, 2017	April 1, 2019
	80198			Completion Date (via calendar days)	April 1, 2008	
	80199			Completion Date (via calendar days) Plus Working Days	April 1, 2008	L.L. 4 0040
	80293			Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	July 1, 2016
	80311			Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
	80277			Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
	80261	120	Х	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
	80387			Contrast Preformed Plastic Pavement Marking	Nov. 1, 2017	
*	80029	123	Х	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
	80402	133	Х	Disposal Fees	Nov. 1, 2018	
	80378			Dowel Bar Inserter	Jan. 1, 2017	Jan. 1, 2018
	80405			Elastomeric Bearings	Jan. 1, 2019	
	80388	135	Х	Equipment Parking and Storage	Nov. 1, 2017	
	80229			Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
	80304	400	V	Grooving for Recessed Pavement Markings	Nov. 1, 2012	Nov. 1, 2017
	80246	136	X	Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	Aug. 1, 2018
	80398	138	Х	Hot-Mix Asphalt – Longitudinal Joint Sealant	Aug. 1, 2018	Jan. 1, 2019
	80406			Hot-Mix Asphalt – Mixture Design Verification and Production (Modified for I-FIT Projects)	Jan. 1, 2019	
	80399	142	Х	Hot-Mix Asphalt – Oscillatory Roller	Aug. 1, 2018	Nov. 1, 2018
	80347			Hot-Mix Asphalt – Pay for Performance Using Percent	Nov. 1, 2014	Aug. 1, 2018
				Within Limits – Jobsite Sampling		
	80383			Hot-Mix Asphalt – Quality Control for Performance	April 1, 2017	Jan. 1, 2019
	80376	144	Х	Hot-Mix Asphalt – Tack Coat	Nov. 1, 2016	
	80392	145	Х	Lights on Barricades	Jan. 1, 2018	
-	80336			Longitudinal Joint and Crack Patching	April 1, 2014	April 1, 2016
*	80411	4 4 7	V	Luminaires, LED	April 1, 2019	Max 4, 0040
*	80393	147	X	Manholes, Valve Vaults, and Flat Slab Tops	Jan. 1, 2018	Mar. 1, 2019
	80400			Mast Arm Assembly and Pole	Aug. 1, 2018	Aug 1 0014
	80045			Material Transfer Device	June 15, 1999	Aug. 1, 2014
	80394 80165			Metal Flared End Section for Pipe Culverts	Jan. 1, 2018	April 1, 2018
				Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
	80349 80371			Pavement Marking Blackout Tape Pavement Marking Removal	Nov. 1, 2014 July 1, 2016	April 1, 2016
	80390	149	Х	Payments to Subcontractors	Nov. 2, 2017	
	80389	150	X	Portland Cement Concrete	Nov. 1, 2017	
	80359	100		Portland Cement Concrete Bridge Deck Curing	April 1, 2017	Nov. 1, 2017
	50000		<u> </u>		7.011,2010	100. 1, 2017

,	<u>File</u> Name	<u>Pg.</u>	Special Provision Title	<u>Effective</u>	<u>Revised</u>
-	80300		Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
	80328	151	X Progress Payments	Nov. 2, 2013	I ² , ² ²
	34261		Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
	80157	152	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. 1, 2019
	80407		X Removal and Disposal of Regulated Substances	Jan. 1, 2019	
	80395		Sloped Metal End Section for Pipe Culverts	Jan. 1, 2018	
	80340		Speed Display Trailer	April 2, 2014	Jan. 1, 2017
	80127		Steel Cost Adjustment	April 2, 2014	Aug. 1, 2017
	80408		Steel Plate Beam Guardrail Manufacturing	Jan. 1, 2019	
	80397	154	X Subcontractor and DBE Payment Reporting	April 2, 2018	
*	80391	155	X Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
	80317		Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016
	80298		Temporary Pavement Marking	April 1, 2012	April 1, 2017
	20338	156	X Training Special Provision	Oct. 15, 1975	
	80403		Traffic Barrier Terminal, Type 1 Special	Nov. 1, 2018	
	80409	159	X Traffic Control Devices – Cones	Jan. 1, 2019	
	80410		Traffic Spotters	Jan. 1, 2019	
	80318		Traversable Pipe Grate for Concrete End Sections	Jan. 1, 2013	Jan. 1, 2018
	80288	160	X Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
	80302	162	X Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
	80071	163	X Working Days	Jan. 1, 2002	

The following special provisions are in the 2019 Supplemental Specifications and Recurring Special Provisions.

<u>File</u>	Special Provision Title	<u>New Location(s)</u>	Effective	<u>Revised</u>
<u>Name</u>				
80382	Adjusting Frames and Grates	Articles 602.02(s) and (t), 1043.04, and 1043.05	April 1, 2017	
80366	Butt Joints	Article 406.08(c)	July 1, 2016	
80386	Calcium Aluminate Cement for Class PP-5 Concrete Patching	Article 1001.01(e)	Nov. 1, 2017	
80396	Class A and B Patching	Articles 442.06(a)(1) and (2)	Jan. 1, 2018	Nov. 1, 2018
80377	Portable Changeable Message Signs	Articles 701.20(h) and 1106.02(i)	Nov. 1, 2016	April 1, 2017
80385	Portland Cement Concrete Sidewalk	Article 424.12	Aug. 1, 2017	

The following special provision has been deleted from use.

File	Special Provision Title	Effective	Revised
<u>Name</u> 80401	Portland Cement Concrete Pavement Connector for Bridge Approach Slab	Aug. 1, 2018	

STATE OF ILLINOIS SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted April 1, 2016, (herein after referred to as the "Standard Specifications"), the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," and the "Manual of Test Procedures of Materials," in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included here in, and the 'Standard Specifications for Water and Sewer Main Construction in Illinois" latest edition which apply to and govern the proposed improvement designated as FAU Route 1380 (Collins Ave /Fullerton Avenue) Swift Road to Addison Road Resurfacing Improvements, Section Number 18-00106-00-RS, Project Number 9ACN(091), Job Number C-91-228-18 in the Village of Addison, DuPage County and in case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and govern.

Contract No.: 61F70

LOCATION OF IMPROVEMENT

This improvement is located along Collins Ave and Fullerton Avenue from Swift Road to Addison Road in the Village of Addison, DuPage County, Illinois. The total gross length of the improvements is 14,446.0 feet (2.74 miles), and the total net length of the improvements is 13,997.3 feet (2.65 miles).

DESCRIPTION OF IMPROVEMENT

The work consists of pavement milling, concrete diamond grinding, HMA pavements, pavement patching, utility structure adjustments or reconstruction, pavement marking, temporary traffic control, landscaping, earth excavation, curb and gutter removal and replacement, PCC sidewalks, and erosion control measures. This will require mobilization, traffic control and protection and all incidental and collateral work necessary to complete the project as shown in the plans and described herein.

AVAILABLE REPORTS

No project specific reports were prepared

When applicable, the following checked reports and record information is available for Bidders' reference upon request:

	Record structural plans
	Preliminary Site Investigation (PSI)
\boxtimes	Preliminary Environmental Site Assessment (PESA)
	Soils/Geotechnical Report
	Boring Logs
\boxtimes	Pavement Cores
	Location Drainage Study (LDS)
	Hydraulic Report
	Noise Analysis
\bowtie	Other: LPC-663 Uncontaminated Soil Certification

Those seeking these reports should request access from:

Kai Liu, P.E. Village of Addison Engineering Department One Friendship Plaza Addison, IL 60101 630.693.7535 kliu@addison-il.org

or they can be downloaded at

https://civiltechftp.exavault.com/share/view/1cifp-iyvf2uy

ABUTTING PROPERTY ACCESS

The Contractor shall deliver letters to businesses as prepared by the Village of Addison.

The Contractor shall stage work accordingly to minimize interruptions.

The Contractor shall provide access to abutting properties at all times during the construction, except for periods of short interruption. The Contractor shall notify the property owner no less than 24 hours in advance of the short interruption of access and/or services and shall notify the owner of the time and duration of the interruption. The cost to provide access shall be paid for and included in the items for TEMPORARY ACCESS as directed by the Engineer.

CONCRETE WASHOUT FACILITY

Description. The Contractor shall take sufficient precautions to prevent pollution of streams, lakes, reservoirs, and wetlands with fuels, oils, bitumens, calcium chloride, or other harmful materials according to Article 107.23 of the "Standard Specifications".

General. To prevent pollution by residual concrete and/or the byproduct of washing out the concrete trucks, concrete washout facilities shall be constructed and maintained. The concrete washout shall be constructed, maintained, and removed according to this special provision and details included in these plans. Concrete washout facilities shall be required regardless of the need for NPDES permitting. On projects requiring NPDES permitting, concrete washout facilities shall also be addressed in the Storm Water Pollution Prevention Plan.

The concrete washout facility shall be constructed on the job site according to details included in these plans. The Contractor may elect to use a pre-fabricated portable concrete washout structure. The Contractor shall submit a plan for the concrete washout facility, to the Engineer for approval, a minimum of 10 calendar days before the first concrete pour. The working concrete washout facility shall be in place before any delivery of concrete to the site. The Contractor shall limit all concrete washout activities to the designated area.

The concrete washout facility shall be located no closer than 50 feet from any environmentally sensitive areas, such as water bodies, wetlands, and/or other areas indicated on the plans. Adequate signage shall be placed at the washout facility and elsewhere as necessary to clearly indicate the location of the concrete washout facility to the operators of concrete trucks.

The concrete washout facility shall be adequately sized to fully contain the concrete washout needs of the project. The contents of the concrete washout facility shall not exceed 75% of the facility capacity. Once the 75% capacity is reached, concrete placement shall be discontinued until the facility is cleaned out. Hardened concrete shall be removed and properly disposed of outside the right-of-way. Slurry shall be allowed to evaporate, or shall be removed and properly disposed of outside the right-of-way. The Contractor shall immediately replace damaged basin liners or other washout facility components to prevent leakage of concrete waste from the

washout facility. Concrete washout facilities shall be inspected by the Contractor after each use. Any and all spills shall be reported to the Engineer and cleaned up immediately. The Contractor shall remove the concrete washout facility when it is no longer needed.

Basis of Payment. The cost of all materials required and all labor necessary to comply with the above will not be paid for separately, but shall be considered as included in the cost of MOBILIZATION, and no additional compensation will be allowed.

CONNECTIONS TO EXISTING PIPES

Non-shear couplings shall be used for connections of new pipe to existing pipe and where dissimilar pipe and joint materials are encountered. Couplings shall be a minimum of 12 inches long for connection on larger pipes. No stainless steel shear rings will be allowed. The cost of all materials required, and all labor necessary to comply with the above provisions, including providing non-shear couplings for dissimilar pipes, will not be paid for separately, but shall be considered as included in the cost of the associated storm sewer items, and no additional compensation will be allowed.

CURB AND GUTTER TRANSITION

The transition from the proposed curb and gutter section to a flat or depressed section (where there is no connection to existing curb and gutter) shall be accomplished in approximately five feet. The cost of all materials required and all labor necessary to comply with the above provisions will not be paid for separately, but shall be considered as included in the cost of the associated curb and gutter items, and no additional compensation will be allowed.

CURB REMOVAL AND REPLACEMENT

Removal and replacement of type B curb and combination concrete curb and gutter shall be paid for as "CURB REMOVAL AND REPLACEMENT".

CURB REMOVAL AND REPLACEMENT ADJACENT PATCHING

The Contractor shall saw cut pavement and curb & gutter to separate the existing material to be removed by means of an approved saw to a depth as shown on the plans or as directed by the Engineer. If necessary, pavement patching adjacent to curb removal and replacement shall include the installation of a full depth concrete pour to fill any void areas between the new curb and first saw cut to remove existing curb. Should it be necessary, a second saw cut shall be made to provide a clean sharp butt joint over the entire lengths of new curb. The patch and curb will not be a monolithic pour.

Additional excavation for curb must be removed and not stockpiled behind the curb in the parkway. Any additional restoration beyond 18 inches will not be paid for separately but included in the cost for curb removal and replacement.

The cost of all materials required and all labor necessary to comply with the above provisions will not be paid for separately, but shall be considered as included in the cost of the associated curb and gutter items, and no additional compensation will be allowed.

EARTH EXCAVATION

Earth excavation shall not be paid for separately but shall be considered incidental to the cost of the proposed items requiring the excavation. If excavated soil is determined to be contaminated and needs to be disposed at a permitted landfill facility, it shall be disposed of and paid for in accordance with the special provision for REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES.

HOT-MIX ASPHALT BEING PLACED

Prior to placing hot-mix asphalt concrete mix adjacent to existing pavement to remain, the exposed edge shall be cleaned of loose material to the satisfaction of the Engineer. This work will not be paid for separately, but shall be included in the cost of the hot-mix asphalt concrete being placed.

PROTECTION AND RESTORATION OF PROPERTY

The Contractor shall protect and restore property according to Article 107.20 of the "Standard Specifications" and the following:

The Contractor shall adhere to limits of restoration shown. Areas outside these limits that are damaged or disturbed by the Contractor, shall be restored by the Contractor. No additional compensation will be allowed.

The contractor shall pay special attention to article 201.01(a) of the standard specifications. Removal of all obstructions in the right-of-way, that are not included in a specific removal item, shall be considered clearing and will not be measured for payment. this shall include, but not limited to, fences, walls, foundations, buildings, accumulations of rubbish of whatever nature, old type III barricades, old water heaters, old CMP pipe, rubber tires, concrete blocks, utility anchors, metal parts, abandoned wooden power poles, gates, and all vegetation, trees, shrubs, etc. less than 6" in diameter.

Sprinkler systems and electrical conduits: Extra care shall be exercised when operating equipment around sprinkler systems and electrical conduit.

PUBLIC CONVENIENCE AND SAFETY

The Contractor shall limit public inconveniences safety conflicts according to Article 107.09 of the "Standard Specifications" and the following:

Keeping Roads Open to Traffic: All roads shall remain open to traffic. The Contractor may close one (through traffic) lane because of construction only between the hours of 9:00 AM and 3:00 PM. The Contractor shall maintain one-way traffic during these restricted hours on two lane highways with the use of signs and flaggers as shown on the applicable Traffic Control Standard. On multi-lane highways the Contractor shall maintain at least one (through traffic) lane in each direction with the use of signs, barricades, and arrow boards as shown on the Traffic Control Standards. All lanes of traffic will be maintained between 3:00 PM and 9:00 AM and when no construction activities are being carried out.

The restricted lane closure time may be adjusted by the Resident Engineer. The Contractor shall provide a start and end time and a procedure plan 48 hours prior to the lane(s) to be closed. The Resident Engineer will notify the Contractor 24 hours in advance with the decision.

If the Contractor fails to provide notification or disregards the decision by the Resident Engineer the Traffic Control Deficiency Charge will be applied as stated in the Standard Specifications Art. 105.03 (b).

Safety and Convenience: The Contractor shall maintain entrances along the proposed improvement. Interference with traffic movements and inconvenience to owners of abutting property and the public shall be kept to a minimum. Any delays or inconveniences caused by the Contractor, by complying with these requirements shall be considered included in the cost of the applicable traffic control pay items and no additional compensation will be allowed.

Contractors shall plan their work so that there will be no open holes in the pavement and that all barricades will be removed from the roadway during non-working hours, except where required for public safety.

SAW CUTTING

The Contractor shall saw cut pavement, curb and gutter, driveways, sidewalk, and patches to separate the existing material to be removed by means of an approved concrete saw to a depth as shown on the plans or as directed by the Engineer. All saw cutting for removal items shall include rinsing with water to remove residual concrete or asphalt slurry immediately after saw cutting. This work shall be included in the cost of the item being removed.

The Contractor shall be required to saw vertical cuts so as to form clean vertical joints. Should the Contractor deface any edge, a new sawed joint shall be provided and any additional work, including removal and replacement, shall be done at the Contractor's expense.

The cost of all materials required and all labor necessary to comply with the above provisions will not be paid for separately, but shall be considered as included in the cost of the items being removed, and no additional compensation will be allowed.

SIGNS

The Contractor will be required to relocate or remove and replace signs that interfere with his/her construction operations, and to temporarily reset all such signs during construction operations. This work will be included in the cost of the associated traffic control and protection items.

Any signs which are damaged beyond repair during construction operations shall be replaced in kind by the Contractor to the satisfaction of the Engineer at no additional cost to the contract.

STORM SEWER

The Contractor shall maintain flows through sewer systems at all times. The existing structures shall be inspected before construction starts. As directed by the Engineer, any accumulation of material in the structure due to construction operations shall be removed by the Contractor at his expense. The cost of all materials required and all labor necessary to comply with the above provisions will not be paid for separately, but shall be considered as included in the cost of mobilization, and no additional compensation will be allowed.

The Contractor shall furnish all labor, equipment and material necessary for dewatering trench excavations as well as shoring trench walls during utility operations. This work will not be paid for separately but shall be included in the cost of utility installations.

The contractor shall confirm all existing storm sewer pipe sizes and inverts prior to ordering structures. Any modification of structures due to the failure of the contractor to perform this task shall be at the contractor's expense and may lead to the rejection of the structure in the field.

The Contractor shall saw cut and remove pavement, curb and gutter, driveways, sidewalk, and patches to separate the existing material to be removed by means of an approved concrete saw to a depth as shown on the plans or as directed by the Engineer. The additional saw cutting and removal required will be considered as included in the cost of the storm sewer.

The cost of connecting existing storm sewer to proposed structures shall be included in the unit cost of the proposed structure. Additional pipe required to complete the connections will be paid for at the contract unit price for STORM SEWER of the type, size and class required.

The cost of connecting proposed storm sewer to existing structures shall be included in the unit cost of the proposed storm sewer. Additional pipe required to complete the connections will be paid for at the contract unit price for STORM SEWER of the type, size and class required.

At locations where the proposed storm sewer crosses over utilities, a 4" Styrofoam cushion shall be placed under the storm sewer when directed to do so by the Engineer. This work shall be included in the unit price for STORM SEWER of the type, size and class specified.

All joints in concrete sewer pipe shall be sealed with rubber gaskets, preformed joint sealants, or external sealing bands. No mastic joint sealer will be allowed.

The ends of existing drainage lines which are not to be incorporated into the proposed improvement (as determined by the Engineer) shall be sealed with bricks and Portland cement mortar or mechanical end caps to the satisfaction of the Engineer. The cost of all materials required and all labor necessary to comply with the above provisions will not be paid for separately, but shall be considered as included in the unit bid prices of drainage items being removed.

Frame elevations given on the plans are only to assist the Contractor in determining the approximate overall height of the structure. The adjustment of frames on all new structures to the final elevations shall be included in the cost of the new structures.

The Contractor shall be aware that at times the Engineer may require a change in storm sewer elevation due to a utility line or other obstruction. The additional excavation or sheeting required will be considered as included in the cost of the storm sewer.

HMA Class D Patching to be scheduled within 5 days of completing storm sewer pipe at each location. Work includes additional saw cutting 1 foot below storm sewer trench, removal of existing pavement, and trench backfill material. HMA material to be binder N70 to match full thickness of existing pavement.

SURVEY CONTROL POINTS

The Contractor shall furnish the Engineer with the materials required to establish survey control points according to Article 105.09 of the "Standard Specifications" and the following:

Paint: The Contractor shall furnish, at their expense, white, pink or purple pavement marking paint in aerosol cans, for use by the Engineer. The paint shall last up to 6 months; be non-freezing, be functional to 14°F; and be fully operational in an inverted position.

The Contractor and subcontractors shall only use white, pink or purple colors for their own markings. At no time will the Contractor use any of the J.U.L.I.E. utility colors listed in Article 107.31 of the "Standard Specifications".

Hubs: The Contractor shall furnish, at their expense, hubs for use by the Engineer according to the following:

- 1. Shall be $1\frac{3}{8}$ " x $\frac{7}{8}$ " x 18" (actual dimension).
- 2. Shall be furnished in securely banded (on each end) bundles of 25 pieces.
- 3. The material shall be kiln dried Douglas fir, oak or maple and surfaced on the 2 larger sides and without splits, pitch pockets, wane, knots or decayed wood.
- 4. The tapered end on each hub shall be pencil point tapered.

Lath: The Contractor shall furnish lath for use by the Engineer according to the following:

- 1. Shall be $1\frac{1}{8}$ x $\frac{1}{2}$ x 48" (actual dimension).
- 2. Shall be furnished in securely banded (on each end) bundles of 50 pieces.
- 3. The material shall be kiln dried Douglas fir, oak or maple and surfaced on the 2 larger sides and without splits, pitch pockets, wane, knots or decayed wood.
- 4. The tapered end may be saw-cut tapered or pencil tapered.

In addition to the requirements of the special provision for construction layout stakes (Illinois Department of Transportation Check Sheet #10), the Contractor shall reestablish, monument, and tie all control points used to complete the work as specified including all PI's, PC's, PT's, and POT's. The type of monumentation used will be PK nails, iron pipes, RR spikes or as approved by the Engineer.

The cost of this work shall be included in the cost of CONSTRUCTION LAYOUT, and no additional compensation will be allowed.

TEMPORARY TOILETS

The Contractor shall provide temporary toilet facilities in accordance with Article 107.08 for the use of all Contractors' personnel employed on the work site, and shall maintain same in proper sanitary condition. At completion, the facilities shall be removed and the premises left clean. The Engineer shall approve the location of the temporary toilets. The cost of this work shall be included in the cost of MOBILIZATION.

UTILITY CASTINGS

All frames with closed lids to be furnished as part of this contract for construction, adjustment or reconstruction of any manholes, catch basin, inlet, valve vault, or meter vault shall have cast into the lid one of the following words: all lids to be used on storm sewer structures shall bear the word "STORM". All lids to be used on sanitary sewer structures shall bear the word "SANITARY". All lids to be used on water system structures shall bear the word "WATER". All open grates shall include the wording "DUMP NO WASTE, DRAINS TO WATERWAYS". This work shall be considered included in the cost of the structure being constructed, adjusted or

reconstructed. The cost of all materials required and all labor necessary to comply with the above provisions will not be paid for separately, but shall be considered as included in the cost of the associated frame and grate items, and no additional compensation will be allowed.

UTILITY FRAMES GRATES AND LIDS

All existing frames, grates, and lids that are being removed shall remain the property of the Village of Addison. The Contractor shall deliver all removed frames, grates and lids to the public works facility located at 1491 W. Jeffrey Drive, Addison, or as directed by the Engineer. The cost of all materials required and all labor necessary to comply with the above provisions will not be paid for separately, but shall be considered as included in the cost of the associated structure adjustment, reconstruct or special adjust pay items, and no additional compensation will be allowed.

UTILITY TRENCHES

HMA or concrete pavement crossings removed due to storm sewer, water main, sanitary sewer, or culvert work shall not be left in gravel overnight. This includes the main roads, side streets, private entrances, commercial entrances and parking areas. Temporary HMA pavement at a depth of 2 inches minimum may be used in lieu of immediate pavement replacement. Compliance with the above provision shall not be measured for payment.

WATER FOR THE SITE

Should the Contractor desire to obtain water for construction purposes from the local area, the Contractor will be responsible for making arrangements through the local agency. The local agency will instruct the Contractor where a potable water supply from a hydrant near the work site is located. Contractor to designate responsible person to operate Fire Hydrant. The agency shall meter the potable water used by the Contractor and the Contractor will be charged for the water used at the agency rates. The Contractor is responsible for the transportation of the water to the site where needed. The cost of all materials required and all labor necessary to comply with the above provisions will not be paid for separately, but shall be considered as included in the cost of "MOBILIZATION".

CURB REMOVAL AND REPLACEMENT

Description: This work shall consist of removal, replacement of the curb or combination concrete curb and gutter as shown on the plans.

General: This work shall be performed in accordance with Section 440 and Section 606 of the "Standard Specifications", Standard Drawing 606001, Design Standard Drawing BD-24, and as specified herein.

When the existing, adjacent pavement is full depth asphalt, a maximum 6 inch width of the pavement shall be removed to allow for forming of the curb and gutter. This void shall be replaced with concrete, poured monolithically with the adjacent curb and gutter. The top of the concrete within the void shall be placed at the elevation of the bottom of the resurfacing thickness. The cost of the saw cutting to remove the pavement, the pavement removal, and the replacement with concrete shall be included in the cost of CURB REMOVAL AND REPLACEMENT.

Method of Measurement: This work will be measured for payment per foot of constructed curb or curb and gutter.

Basis of Payment: This work will be paid for at the contract unit price per foot for CURB REMOVAL AND REPLACEMENT regardless of the size or type of curb or curb and gutter to be replaced, which price shall include all labor, equipment and materials necessary to complete the work. Earthwork and sub base work associated with curb or curb and gutter removal and replacement shall not be paid for separately but shall be included in the unit cost of the CURB REMOVAL AND REPLACEMENT.

DETECTABLE WARNINGS

Description: This work shall consist of the construction of Detectable Warnings at the locations shown on the plans in accordance with Section 424 of the Standard Specifications except as noted herein.

Detectable warnings shall be precast panels. Stamped concrete will not be allowed. The color of the detectable warning surface shall be brick red. Detectable warnings shall be as manufactured by Detectable Warning Systems, Inc (EZ Set Polymer Concrete Panel), Armor Tile (Cast in Place systems), or TufTile (Cast Iron Wet Set).

The detectable warning panels shall be installed according to the manufacturer's recommendations. The panels shall be placed into sidewalk meeting the requirements listed in the special provision "Portland Cement Concrete Sidewalk, 5".

Method of Measurement: Measurement for detectable warnings shall be per square foot.

Basis of Payment: Payment for DETECTABLE WARNINGS will be made at the contract unit price per square foot. Payment shall be full compensation for all materials, labor, excavation, Portland cement concrete sidewalk, aggregate base, equipment and incidentals to complete the item as shown on the plans and as specified.

DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, & PATCHING OPERATIONS)

The following Traffic Signal Special Provisions and the "District 1 Standard Traffic Signal Design Details" supplement the requirements of the State of Illinois "Standard Specifications for Road and Bridge Construction" Sections 810, 886, 1079 and 1088.

The intent of this Special Provision is to prescribe the materials and construction methods commonly used to replace traffic signal detector loops and replace magnetic signal detectors with detector loops during roadway resurfacing, grinding and patching operations. Loop detector replacement will not require the transfer of traffic signal maintenance from the District Electrical Maintenance Contractor to this contract's electrical contractor. Replacement of magnetic detector will require wiring revisions inside the control cabinet and therefore the transfer of maintenance will be required. All material furnished shall be new. The locations and the details of all installations shall be as indicated on the Plans or as directed by the Engineer.

The work to be provided under this contract consists of furnishing and installing all traffic signal work as specified on the Plans and as specified herein in a manner acceptable and approved by the Engineer.

Notification of Intent to Work.

Contracts such as pavement grinding or patching which result in the destruction of traffic signal detection require a notification of intent to work and an inspection. A minimum of seven (7) working days prior to the detection removal, the Contractor shall notify the:

- Traffic Signal Maintenance and Operations Engineer at (847)705-4424
- IDOT Electrical Maintenance Contractor at (773) 287-7600

at which time arrangements will be made to adjust the traffic controller timing to compensate for the absence of detection.

Failure to provide proper notification may require the District's Electrical Maintenance Contractor to be called to investigate complaints of inadequate traffic signal timing. All costs associated with these expenses will be paid for by the Contractor at no additional expense to the Department according to Section 109 of the "Standard Specifications."

Acceptance of Material.

The Contractor shall provide:

- 1. All material approval requests shall be submitted a minimum of seven (7) days prior to the delivery of equipment to the job site, or within 30 consecutive calendar days after the contract is awarded, or within 15 consecutive calendar days after the preconstruction meeting, whichever is first.
- 2. Four (4) copies of a letter listing the vendor's name and model numbers of the proposed equipment shall be supplied. The letter will be reviewed by the Traffic Design Engineer to determine whether the equipment to be used is approved. The letters will be stamped as approved or not approved accordingly and returned to the Contractor.
- 3. One (1) copy of material catalog cuts.
- 4. The contract number, permit number or intersection location must be on each sheet of the letter and material catalog cuts as required in items 2 and 3.

Inspection of Construction.

When the road is open to traffic, except as otherwise provided in Section 801 and 850 of the Standard Specifications, the Contractor must request a turn-on and inspection of the completed detector loop installation at each separate location. This request must be made to the Traffic Signal Maintenance and Operations Engineer at (847)705-4424 a minimum of seven (7) working days prior to the time of the requested inspection.

Acceptance of the traffic signal equipment by the Department shall be based upon inspection results at the traffic signal "turn on." If approved, traffic signal acceptance shall be verbal at the "turn on" inspection followed by written correspondence from the Engineer. If this work is not completed in time, the Department reserves the right to have the work completed by others at the Contractor's expense.

All cost of work and materials required to comply with the above requirements shall be included in the pay item bid price, under which the subject materials and signal equipment are paid, and no additional compensation will be allowed. Materials and signal equipment not complying with the above requirements will be subject to removal and disposal at the Contractor's expense.

Restoration of Work Area.

Restoration of the traffic signal work area due to the detector loop installation and/or replacement shall be included in the cost of this item. All roadway surfaces such as shoulders, medians, sidewalks, pavement shall be replaced as shown in the plans or in kind. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded.

Removal, Disposal and Salvage of Existing Traffic Signal Equipment.

The removal, disposal, and salvage of existing traffic signal equipment shall be included in the cost of this item. All material and equipment removed shall become the property of the Contractor and disposed of by the Contractor outside the State's right-of-way. No additional compensation shall be provided to the Contractor for removal, disposal or salvage expense for the work in this contract.

DETECTOR LOOP REPLACEMENT.

This work shall consist of replacing existing detector loops which are destroyed during grinding, resurfacing, or patching operations.

If damage to the detector loop is unavoidable, replacement of the existing detection system will be necessary. This work shall be completed by an approved Electrical Contractor as directed by the Engineer.

Replacement of the loops shall be accomplished in the following manner: The Engineer shall mark the location of the replacement loops. The Traffic Signal Maintenance and Operations Engineer shall be called to approve loop locations prior to the cutting of the pavement. The Contractor may reuse the existing coilable non-metallic conduit (CNC) located between the existing handhole and the pavement if it hasn't been damaged. CNC meeting the requirements of NEC Article 353 shall be used for detector loop raceways to the handholes. All burrs shall be removed from the edges of the existing conduit which could cause damage to the new detector loop during installation. If the existing conduit is damaged beyond repair, if it cannot be located, or if additional conduits are required for each proposed loop; the Contractor shall be required to drill through the existing pavement into the appropriate handhole, and install 1" (25 mm) CNC. This work and the required materials shall not be paid for separately but shall be included in the pay item Detector Loop Replacement. Once suitable CNC raceways is established, the loop may be cut, installed, sealed and spliced to the twisted-shielded lead-in cable in the handhole.

All loops installed in new asphalt pavement shall be installed in the binder course and not in the surface course. The edge of pavement or the curb shall be cut with a 1/4" (6.3 mm) deep x 4" (100 mm) saw-cut to mark location of each loop lead-in.

A minimum of seven (7) working days prior to the Contractor cutting loops, the Contractor shall have the proposed loop locations marked and contact the Traffic Signal Maintenance and Operations Engineer (847)705-4424 to inspect and approve the layout.

Loop detectors shall be installed according to the requirements of the "District 1 Standard Traffic Signal Design Details." Saw-cuts from the loop to the edge of pavement shall be made perpendicular to the edge of pavement when possible in order to minimize the length of the saw-cut unless directed otherwise by the Engineer or as shown on the plan.

The detector loop cable insulation shall be labeled with the cable specifications.

Each loop detector lead-in wire shall be labeled in the handhole using a water proof tag, from an approved vendor, secured to each wire with nylon ties. The lead-in wire, including all necessary connections for proper operation, from the edge of pavement to the handhole, shall be included in the detector loop pay item.

Loop sealant shall be a two-component thixotropic chemically cured polyurethane. The sealant shall be installed 1/8" (3 mm) below the pavement surface. If installed above the surface the excess shall be removed immediately.

Round loop(s) 6 ft (1.8 m) diameter may be substituted for 6 ft (1.8 m) by 6 ft (1.8 m) square loop(s) and shall be paid for as 24 feet (7.2 m) of detector loop.

Resistance to ground shall be a minimum of 100 mega-ohms under any conditions of weather or moisture. Inductance shall be more than 50 and less than 700 microhenries. Quality readings shall be more than 5.

Heat shrink splices shall be used according to the "District 1 Standard Traffic Signal Design Details."

Detector loop replacement shall be measured along the sawed slot in the pavement containing the loop cable up to the edge of pavement, rather than the actual length of the wire in the slot. Drilling handholes, sawing the pavement, furnishing and installing CNC to the appropriate handhole, cable splicing to provide a fully operable detector loop, testing and all trench and backfill shall be included in this item.

Basis of Payment.

Detector Loop Replacement shall be paid for at the contract unit price per foot (meter) of DETECTOR LOOP REPLACEMENT.

DIAMOND GRINDING CONCRETE PAVEMENT

Description: This work involves grinding an existing PCC pavement surface using a diamond grinder. Grinding and texturing shall be performed at the locations shown in the contract documents.

Equipment: Grinding operations will utilize diamond blades mounted on a shelf machine designed for grinding and texturing pavement. The equipment shall be such that it will not cause strain or damage to the underlying surface of the pavement. Grinding equipment that causes ravels, aggregate fractures, spalls, or disturbance to the transverse or longitudinal joints will not be permitted. Vacuuming equipment for removal of residue and excess water shall be used. The equipment will have a positive means of extracting the slurry material from the pavement and for preventing dust from escaping into the air.

General: Pavement surface repair (diamond grinding) shall consist of grinding and texturing the entire surface of the pavement in a longitudinal direction. The area ground shall not be left slick or polished. Substantially the entire surface area of the pavement shall be ground and textured until the pavement surface on both sides of the transverse joints and all cracks are in the same plane and meet the smoothness required. In each lane, at least 95 percent of the area in each 100 foot section shall have a newly ground surface. Except at joints and cracks, grinding shall not exceed ¹/₂ inch in depth. The ground surface shall be of uniform texture.

Grinding shall be discontinued when there is danger of water freezing.

Reflective pavement Markers (RPM) are to be removed prior to the grinding operation. New RPM will be installed after completion of the grinding. Pay items have been included for removal and installation of RPM.

For multiple passes, the equipment shall be carefully controlled to minimize the overlap. Overlaps shall not exceed approximately 1 inch.

When more than one grinding machine is used in the same travel lane, the blade segment thickness, blade spacings, and diameter shall be similar so that the texture of the ground surface is uniform across the lane.

Grinding shall result in a parallel corduroy type texturing consisting of grooves between 2 millimeters and 3 millimeters wide. The distance between grooves shall be between 2 millimeters and 3 millimeters. The peaks of the ridge shall average approximately 2 millimeters higher than the bottom of the grooves. The finished texture shall be uniform. The transverse slope of the pavement shall be uniform to a degree that no depressions or misalignment of slope greater than 3 millimeters in 3 meters exists when tested with a 3 meter straightedge. Straightedge requirements do not apply across longitudinal joints or outside ground areas. Adequate cross slope drainage must result after grinding so that no ponding of water exists. When included as part of the contract; pavement patching (including pavement replacement for drainage and utilities), curb and gutter removal and replacement, median removal and replacement, structure adjustments, dowel retrofit, pavement widening and removal of raised reflective pavement markers shall all be done prior to diamond grinding. Joint sealing, reinstallation of raised reflective pavement markers, replacement of survey markers or monuments and permanent pavement striping must be done after diamond grinding. The Engineer will direct the timing of work for detector loop installation.

A straight-edge requirement may be used to control bumps and/or rides in the pavement surface. The transverse slope of the pavement shall be uniform to a degree that there shall be no depressions or misalignment of slope greater than 1/8 inch between passes of the cutting head when tested by stringline or straight-edge placed perpendicular to the centerline. Transverse joints and random cracks shall be visually inspected to insure that adjacent surfaces are in the same plane. Engineer shall be present for testing.

Removal of all slurry or residue resulting from the grinding operations shall be continuous and shall not be deposited on the slab or shoulder. Pavement and paved shoulders must be left in a clean condition.

Disposal of grinding residue shall meet the following requirements:

- 1. At no time will the grinding residue be allowed to enter a closed drainage system. The Contractor is responsible for providing suitable means to restrict the infiltration of the grinding residue into the closed drain system at no additional cost.
- 2. The Contractor will be responsible for hauling the grinding residue to a suitable location at no additional cost
- 3. Residue shall not be permitted to flow across lanes occupied by public traffic.

The Contractor shall obtain approval of the spreading/disposal method from the Engineer prior to beginning the grinding operation.

Short-Term Pavement Markings shall be installed on the pavement immediately after permanent markings have been ground away. This is required on a daily basis when diamond grinding operations occur. Short-term pavement markings shall be installed according to Section 703 of the Standard Specifications for Road and Bridge Construction.

Method of Measurement: DIAMOND GRINDING AND GROOVING (ROADWAY SECTION) will be measured by area in square yards. Pay areas will include the final textured surface area. Minor areas of untextured pavement will be included in the measurement. Minor areas shall total no more than 5 percent of the designated area to be textured.

The work of collection, hauling and spreading of the grinding residue is included in the contract unit price for DIAMOND GRINDING AND GROOVING (ROADWAY SECTION). Payment for additional passes or regrinding to meet ride quality requirements will not be paid for separately.

Basis of Payment: This work will be paid for at the contract unit price per square yard of DIAMOND GRINDING AND GROOVING (ROADWAY SECTION), which price shall include all labor, equipment and materials necessary to complete the work as described herein.

DRAINAGE AND UTILITY STRUCTURES TO BE ADJUSTED

Description: This work shall consist of adjusting existing structures with new frames and grates or frame and lids at the direction of the Engineer.

General: This work shall be performed in accordance with the Section 602 of the "Standard Specifications". In addition, all structures to be adjusted should have a chimney seal installed. All sanitary manholes shall have exterior chimney seals and have no more than three adjustment rings for a total of 12 inches.

New frames and grates will be installed on adjusted or reconstructed structures. Drainage structures located in the edge of pavement/ curb line will be Frames and Grates Type 11, Type 23 or Type 24 as determined by curb width and at the direction of the engineer. All other adjusted or reconstructed structures will have Frames and Lids, Type 1 installed with an open or closed lid as required.

All existing frames, grates, and lids that are being removed shall remain the property of The Village of Addison. The Contractor shall deliver all removed frames, grates and lids to the public works facility located at 1491 W. Jeffrey Drive, Addison, or as directed by the Engineer.

Adjusting rings shall not be backfilled with aggregate but with Portland cement concrete. The width of the excavation must be a minimum of 6 inches wider than adjusting rings.

All mortar on exposed surfaces shall have a brushed finish.

Method of Measurement: This work will be measured for payment as each structure to be adjusted. New frames and grates or frames and lids will be included in the cost of this work.

Basis of Payment: This work will be paid for at the contract unit price each for DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED regardless of the structure type and diameter. The unit price shall include all labor, equipment and materials necessary to complete the work.

DRAINAGE AND UTILITY STRUCTURES TO BE RECONSTRUCTED

Description: This work shall consist of reconstructing existing structures with new frames and grates or frame and lids at the direction of the Engineer.

General: This work shall be performed in accordance with the Section 602 of the "Standard Specifications". Where necessary and as directed by the Engineer, the cone or flat slab top shall be removed and barrel sections added or removed to adjust the overall height of the structure. The cone or flat slab top shall then be replaced on the structure and adjusting rings used to perform the final vertical adjustment of the casting. If the cone or slab top is damaged during this operation, the Contractor shall install a new cone or flat slab top at no additional cost to the contract. The Engineer shall be the sole judge as to whether a new cone or flat slab top is required. The cost of furnishing the casting required shall be included in the original structure cost.

New frames and grates will be installed on adjusted or reconstructed structures. Drainage structures located in the edge of pavement/ curb line will be Frames and Grates Type 11, Type 23 or Type 24 as determined by curb width and at the direction of the engineer. All other adjusted or reconstructed structures will have Frames and Lids, Type 1 installed with an open or closed lid as required.

All existing frames, grates, and lids that are being removed shall remain the property of The Village of Addison. The Contractor shall deliver all removed frames, grates and lids to the public works facility located at 1491 W. Jeffrey Drive, Addison, or as directed by the Engineer.

Adjusting rings shall not be backfilled with aggregate but with portland cement concrete. The width of the excavation must be a minimum of 6 inches wider than adjusting rings.

All mortar on exposed surfaces shall have a brushed finish.

Method of Measurement: This work will be measured for payment as each structure to be adjusted. New frames and grates or frames and lids will be included in the cost of this work.

Basis of Payment: This work will be paid for at the contract unit price each for DRAINAGE & UTILITY STRUCTURES TO BE RECONSTRUCTED regardless of the structure type and diameter. The unit price shall include all labor, equipment and materials necessary to complete the work.

DRILL AND GROUT DOWEL BARS AND TIE BARS

Description. Work under this item shall be performed in accordance with sections 442, 420, and 1000 of the Standard Specifications, except as herein modified.

This work shall consist of furnishing and installing 18" long, 1-1/2" diameter epoxy coated dowel bars, No. 4 epoxy coated dowel bars, and 24" and 30" long, No. 6 epoxy coated tie bars in existing Portland Cement Concrete (PCC) bases, new PCC Curbs and Gutters adjacent to PCC pavement, new PCC sleeper slabs, new PCC Bases, and at locations shown on the Plans or as designated by the Engineer.

Materials shall meet the requirements of Article 1006.06 of the Standard Specifications for Dowel Rods and Article 1024.01 of the Standard Specifications for Nonshrink Grout or one of the approved chemical adhesives as listed by the Bureau of Materials and Physical Research. Epoxy adhesives shall not be allowed.

Bars shall be located on 24" centers or as indicated on the plans. Individual bar locations shall be shifted at least 5-inches away from existing cracks, joints and unsound concrete. Holes for dowel bars shall be drilled with suitable equipment for this purpose to the depth shown and to a diameter large enough to allow grouting around the dowel bar or tie bar. The dowel bars or tie bar shall be secured in the drilled holes with nonshrink grout. The grout shall be allowed to cure before the concrete for new curb and gutters and bases are poured.

Basis of Payment. This work will be not be paid for separately but instead shall be considered as incidental to cost of COMBINATION CONCRETE CURB AND GUTTER and CLASS B PATCHES of the type and thickness indicated on the plans.

<u>CLEANING DRAINAGE SYSTEM;</u> <u>DRAINAGE STRUCTURES TO BE CLEANED</u>

Description. This work shall consist of cleaning drainage structures of all types and sizes as designated on the plans or as directed by the Engineer.

Materials. Equipment for cleaning pipe lines includes hoses, rodding machines, balls, hydraulic cleaners, root cutters, small clam shell buckets, steel porcupines, pumps, or other suitable and approved means. Water used for cleaning and flushing pipes shall be fresh and free of oils, acid, salt, alkali, organic matter, or any other deleterious substances. The Contractor shall provide all water for the cleaning operation.

Methods. The Contractor shall be responsible for the proper operation of the drainage system during the cleaning operations. The safe control of flows shall be accomplished by the Contractor such as to preclude an injury to persons or property due to flooding. The Contractor shall clean and flush those drain lines designated on the plans or as designated by the Engineer by use of pressure hoses, suction pumps, and/or any other methods required to perform this work. A suitable weir or dam shall be constructed in the nearest downstream manhole or catch basin in such a manner that debris material will be trapped. Under no circumstances shall such material be passed on from one section to the next.

Use Hydraulic Cement to repair pipe inlet joints.

No additional cost for additional rodding or jetting for heavy cleaning.

Each manhole or catch basin shall be cleaned independently of other portions of the drainage system, and shall be cleaned to the satisfaction of the Engineer.

The contractor shall maintain flows through sewer systems at all times. The existing structures shall be inspected before construction starts. As directed by the Engineer, any accumulation of material in the structure due to construction operations shall be removed by the contractor at his expense.

Any loose mortar shall be removed from the pipe inlet joints. New mortar shall be applied as required.

Inspection to include televising before and after cleaning. Two copies of the videos shall be provided to the Engineer in DVD format, which price shall be included in the cost of cleaning.

Method of Measurement. DRAINAGE STRUCTURES TO BE CLEANED will be measured per each for such drainages structures actually cleaned, regardless of type or size, in accordance with the plans and/or as directed by the Engineer. CLEANING DRAINAGE SYSTEM will be measured in linear feet from center-to-center of drainage structures for all pipe lines actually cleaned, regardless of the sizes of pipe and the amount of jetting required to clean the pipe, in accordance with the plans and/or as directed by the Engineer.

Basis of Payment. DRAINAGE STRUCTURES TO BE CLEANED will be paid for at the contract unit price per each for such drainages structures actually cleaned, regardless of type or size, in accordance with the plans and/or as directed by the Engineer. CLEANING DRAINAGE SYSTEM will be paid for at the contract unit price per foot for all pipe lines actually cleaned, regardless of the sizes of pipe, in accordance with the plans and/or as directed by the Engineer.

DRIVEWAY PAVEMENT REMOVAL

Description: This work shall be done in accordance with Section 440 of the "Standard Specifications" and includes all driveway pavement types including Aggregate, Hot-Mix Asphalt Surfaced, and/or Portland Cement Concrete.

Include any additional excavation to remove existing aggregate base, existing subgrade, and widening to match proposed driveway tapers at curb.

Basis of Payment: This work will be measured and paid for at the contract unit price per square yard for DRIVEWAY PAVEMENT REMOVAL.

DUST CONTROL, SPECIAL

Description: This work shall consist of applying a dust retardant to the project roadways at the request of the Engineer.

General: This work shall be done in accordance with Article 107.36 of the "Standard Specifications" except as modified herein.

The Contractor may use any dust retardant he/she so chooses as long as the specified dust retardant has been approved by the Engineer. Should the Contractor choose to use dust retardant to aid in the prosecution of his/her work, the product used must be approved by the Engineer. If applied at the discretion of the Contractor, no additional compensation shall be allowed.

The dust retardant shall consist of a non-toxic, non-hazardous, and non-flammable material.

Method of Measurement: This work will be measured for payment per gallon used for dust control.

To ensure prompt response to the Resident Engineer's request for DUST CONTROL, SPECIAL the Contractor shall apply the Dust Control/Retardant within 4 hours of the Engineer's request. If the Contractor fails to comply with the Engineer's request, the Engineer will impose a deduction of \$100 per hour beginning 4 hours after the Engineer's initial request. The hourly deduction shall end with the Engineer's acceptance of the field conditions.

Basis of Payment: This work will be paid for at the contract unit price gallon for DUST CONTROL, SPECIAL. The unit price shall include all labor, equipment and materials necessary to complete the work

ENGINEER'S FIELD OFFICE, TYPE A (MODIFIED)

Description: This work shall consist of furnishing and maintaining in good condition, for the exclusive use of the Engineer, a weatherproof building at a location approved by the Engineer.

General: The field office shall meet the requirements of Article 670.02 of the "Standard Specifications", and the following:

The field office and the required equipment, supplies and services shall meet the approval of the Engineer.

The copy machine on site shall be capable of scanning to pdf.

An electric pencil sharpener shall be included in the field office equipment.

A hand sanitizer shall be included in the restroom facilities.

Penalty: Failure by the Contractor to meet the specified occupancy date for the field office shall be grounds for assessment of a penalty of \$100 per day for each calendar day thereafter that such facility remains incomplete in any respect. Failure by the Contractor to equip, heat, cool, power, supply or clean the field office shall be grounds for assessment of a penalty of \$100 per day for each calendar day that the field office remains incomplete after receipt of written notification

from the Engineer. Such penalty shall be deducted from monies due or to become due the Contractor under the Contract.

Basis of Payment: This item will be paid for at the contract unit price per calendar month for ENGINEER'S FIELD OFFICE, TYPE A (MODIFIED). The unit price shall include all supplies, equipment, materials and labor required to furnish and maintain the field office.

EXPLORATION TRENCH, SPECIAL

Description: This work shall be performed according to Article 611.03 and Section 213 of the Standard Specifications except as modified herein. This item shall consist of excavating a trench at the locations directed by the Engineer for the purpose of locating existing TILE LINES, GAS LINES, and other UTILITIES within the construction limits of the proposed improvement.

General: The trench shall be deep enough to expose the utility, and the width of the trench shall be sufficient to allow proper investigation to determine if the utility needs to be replaced.

The exploration trench shall be backfilled with aggregate trench backfill at the direction of the Engineer meeting the requirements of the Standard Specifications. This shall be paid for at the contract unit price for trench backfill.

Method of Measurement: This work will be measured for payment in feet. An estimated length of exploration trench has been shown in the summary of quantities to establish a unit price only, and payment shall be based on the actual length of trench explored without a change in unit price because of adjustment in plan quantities.

Basis of Payment: This work shall be paid for at the contract unit price per foot (regardless of depth) for EXPLORATION TRENCH, SPECIAL, and no extra compensation will be allowed for any delays, inconveniences or damage sustained by the Contractor in performing the work.

FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)

Description: This work shall consist of adjusting existing structures with new frames and grates or frame and lids at the direction of the Engineer.

General: This work shall be performed in accordance with the Bureau of Design Standard for Frames and Lids Adjustment with Milling (BD-8) and Section 602 of the Standard Specifications.

New frames and grates will be installed on adjusted or reconstructed structures. Drainage structures located in the edge of pavement/ curb line will be Frames and Grates Type 3, Type 11, Type 23 or Type 24 as determined by curb width and at the direction of the engineer. All other

adjusted or reconstructed structures will have Frames and Lids, Type 1 installed with an open or closed lid as required.

Adjusting rings shall not be backfilled with aggregate but with portland cement concrete. The width of the excavation must be a minimum of 6 inches wider than adjusting rings.

All mortar on exposed surfaces shall have a brushed finish.

All existing frames, grates, and lids that are being removed shall remain the property of The Village of Addison. The Contractor shall deliver all removed frames, grates and lids to the public works facility located at 1491 W. Jeffrey Drive, Addison, or as directed by the Engineer.

Method of Measurement: This work will be measured for payment as each structure to be adjusted. New frames and grates or frames and lids will be included in the cost of this work.

Basis of Payment: This work shall be paid for at the contract unit price per each for FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) which price shall include all labor, equipment, and materials necessary to perform said work.

INLET FILTERS

Description: This work shall consist of furnishing, constructing, maintaining, removing, and disposing of inlet filters as part of the project's temporary erosion control system.

General: The work shall be performed according to Section 280 of the "Standard Specifications", and the following:

During the construction operation when any loose material is deposited in the flow line of ditches, gutters or drainage structures so the natural flow of water is obstructed, the material shall be removed at the close of each working day.

Maintenance includes weekly monitoring the filter baskets and disposing debris when filter baskets are no greater than ³/₄ filled.

Inspections after every rain event of $\frac{1}{4}$ inch or greater.

Respond to Engineers written request within 24 hours or liquidated damages for erosion control deficiency according to article 105.03(a).

At the conclusion of the construction operations all drainage structures shall be free from all dirt and debris. This work will not be paid for separately but shall be considered included in the unit cost of INLET FILTERS. **Method of Measurement:** This work will be measured for payment as individual items and the unit of measurement will be each regardless of the size or type of inlet being protected.

Basis of Payment: This work will be paid for at the contract unit price per each for INLET FILTERS. The unit price shall include all work and materials necessary to properly install the inlet protection, maintain the inlet protection throughout the project, and to remove and dispose of the used materials at the completion of the project.

PERIMETER EROSION BARRIER, ROLLED EXCELSIOR

Description: This work shall consist of constructing, maintaining, removing and disposing of a rolled excelsior perimeter erosion barrier as part of the project's temporary erosion control system as directed by the Engineer.

General: The work shall be performed according to Section 280 of the "Standard Specifications" and the following:

The perimeter erosion barrier shall be limited to rolled excelsior. The purpose is to prevent the eroded soil from being transported off the construction site by water runoff. All removed materials shall be disposed of outside the right-of-way according to Article 202.03 of the "Standard Specifications".

Materials: The rolled excelsior shall consist of a polypropylene multi-filament woven netting sealed with metal clips or knotted at the ends. The filler material shall be 70% bark-free hardwood mulch ground at 1.5" and 30% bark-free hardwood mulch ground fine. The density shall be a minimum of 3.3 pounds per cubic foot based on a moisture content of 18% at manufacturing. The netting material shall retain 89% of its strength after 500 hours of exposure to sunlight. The maximum opening in the netting shall not exceed 1x1 mm in a tubular knit design.

Construction: The rolled excelsior shall be installed according to the manufacturer's specifications at locations determined by the Engineer, such as for additional inlet protection, perimeter control, or ditch checks.

Maintenance: The Contractor shall inspect all rolled excelsior logs immediately after each rainfall and at least daily during prolonged rainfall. The Contractor shall immediately correct any deficiencies.

The Contractor shall also make a daily review of the location of rolled excelsior logs in areas where construction activities have altered the natural contour and drainage runoff to ensure that the rolled excelsior logs are properly located for effectiveness. Where deficiencies exist as determined by the Engineer, additional rolled excelsior logs shall be installed as directed by the Engineer.

Removing sediment deposits or adding additional rolled excelsior as requested by the Engineer will not be paid for separately but included in the cost for maintenance for Perimeter Erosion Barrier, Rolled Excelsior.

Damaged or otherwise ineffective rolled excelsior logs shall be repaired or replaced promptly.

Sediment deposits shall either be removed when the deposit reaches half the height of the rolled excelsior log or a second rolled excelsior log shall be installed as directed by the Engineer.

The rolled excelsior log shall remain in place until the Engineer directs it to be removed. After the rolled excelsior log removal, the Contractor shall remove and dispose of any excess sediment accumulations, dress the area to give it a pleasing appearance, and cover with vegetation all bare areas according to the contract requirements.

The removed rolled excelsior logs may be used at other locations provided the netting and other material requirements continue to be met to the satisfaction of the Engineer. During the construction operation when any loose material is deposited in the flow line of ditches, gutters or drainage structures so the natural flow of water is obstructed, the material shall be removed at the close of each working day.

Respond to Engineers written request within 24 hours or liquidated damages for erosion control deficiency according to article 105.03(a).

At the conclusion of the construction operations all drainage structures shall be free from all dirt and debris. This work will not be paid for separately but shall be considered included in the unit cost of PERIMETER EROSION BARRIER, ROLLED EXCELSIOR.

Method of Measurement: This work will be measured for payment in place in feet.

Basis of Payment: This work will be paid for at the contract unit price per foot for PERIMETER EROSION BARRIER, ROLLED EXCELSIOR. The unit price shall include all work and materials necessary to properly install the barrier, maintain the rolled excelsior perimeter erosion barrier throughout the project, and to remove and dispose of the used materials at the completion of the project.

PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT

Description: This work shall be done in accordance with Section 423 of the Standard Specifications and the Details provided in the Plans, except as modified herein.

This item shall include the construction of a 4-inch thick Aggregate Base Course, Type B in accordance with Section 351 of the Standard Specifications. Replacement shall be constructed to match the existing pavement removed. Match existing PCC pavement thickness or 8" thickness, whichever is greater, and shall include a 6"x 6" No. 6 wire mesh fabric. Change in additional

thickness shall not be paid for separately but shall be included in the cost of PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT 8 INCH.

Driveway to be placed within 3 working days, or less, after placing concrete for curb and gutter and/or sidewalk.

Max pay of 108% for aggregate base course type B per ton shall be applied based on average measured depth for 4 inches.

Basis of Payment: This work shall be paid for at the contract unit price per square yard for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT of the thickness specified and AGGREGATE BASE COURSE, TYPE B as specified at the contract unit price per ton. Payment shall be full compensation for all materials, labor, and incidentals to complete the item as shown on the plans and as specified

PORTLAND CEMENT CONCRETE SIDEWALK

Description: This item shall include the construction of a 3-inch thick Aggregate Base Course, Type B in accordance with Section 424 of the Standard Specifications and the Detail provided in the Plans, except as modified herein.

The concrete sidewalk shall be constructed a minimum 5 inches thick. This work shall also include three No. 5 (5/9") reinforcing bars, 10 feet in length, at all new trench crossing locations.

At locations where the sidewalk crosses driveways, the thickness of concrete shall be increased to match existing driveway thickness, but no less than 6 inches.

No slab shall be longer than 5 feet and the sidewalk shall be constructed to the width shown on the Plans unless directed otherwise by the Engineer."

Transverse expansion joints ³/₄-inch thick shall be placed at intervals of not more than 30 feet in the sidewalk.

Basis of Payment: This work shall be paid for at the contract unit price per square foot for PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, which price shall include all required expansion joints and reinforcement, special texturing, and variable height edge treatment at sidewalk ramps and thickening sidewalk or adding wire fabric at driveway crossings.

The 3-inch Aggregate Base Course, Type B will be measured in Tons and paid for separately as AGGREGATE BASE COURSE, TYPE B.

PRECONSTRUCTION VIDEO TAPING

Description: This work shall consist of videotaping the project site prior to commencing construction activities in order to provide a basis to determine whether visible damage occurred during construction.

General: The work shall include videotaping on all streets within the project limits. The videotaping shall encompass the entire area between the right-of-way lines. Prior to videotaping the contractor shall coordinate with the Engineer to insure that any areas of special emphasis are noted and sufficiently covered during the videotaping process.

The videotaping shall consist of a minimum of two passes. The videotaping shall be performed at a traversing speed not to exceed 50 feet per minute.

The recording shall include an audio track. The accompanying narrative shall also include address information.

The Contractor shall provide one copy of the recording in DVD format to the Engineer. The recording shall be of suitable photographic clarity to serve as a basis for establishing whether visible damage occurred during construction. The Contractor may not begin construction activities until the Engineer has approved the recording.

Basis of Payment: This work will be paid for at the contract lump sum price for PRECONSTRUCTION VIDEO TAPING. The contract lump sum price shall be payment in full for all materials, labor and equipment required to perform the videotaping as described herein.

PROTECTIVE COAT

Description: This work shall conform to the requirements of Articles 420.18 and 1023.01 of the "Standard Specifications", except that the protective coat shall be applied in all cases regardless of the calendar date limitations contained in Article 420.18. The protective coating shall be applied to the exposed surfaces of the Portland cement concrete pavement, concrete sidewalk, and concrete curb and gutter. Portland cement concrete curing shall be limited to methods specified in Article 1020.13 (a) [1], [2] and [3].

Basis of Payment: Work will be measured and paid for at the contract unit price per square yard for PROTECTIVE COAT.

REBUILD EXISTING HANDHOLE

Effective: January 1, 2002 Revised: July 1, 2015 895.04TS

This item shall consist of rebuilding and bringing to grade a handhole at a location shown on the plans or as directed by the Engineer. The work shall consist of removing the handhole frame and cover and the walls of the handhole to a depth of eight (8) inches below the finished grade.

Upon completion of the above work, four (4) holes, four (4) inches in depth and one half (1/2) inch in diameter, shall be drilled into the remaining concrete; one hole centered on each of the four handhole walls. Four (4) #3 steel dowels, eight (8) inches in length, shall be furnished and shall be installed in the drilled holes with a masonry epoxy.

All concrete debris shall be disposed of outside the right-of-way.

The area adjacent to each side of the handhole shall be excavated to allow forming. All steel hooks, handhole frame, cover, and concrete shall be provided to construct a rebuilt handhole according to applicable portions of Section 814 of the Standard Specification and as modified in 814.01TS HANDHOLES Special Provision. The existing frame and cover shall be replaced if it was damaged during removal or as determined by the Engineer.

Basis of Payment.

This work shall be paid for at the contract unit price each for REBUILD EXISTING HANDHOLE, which price shall be payment in full for all labor, materials, and equipment necessary to complete the work described above and as indicated on the drawings.

RECESSED REFLECTIVE PAVEMENT MARKERS

Description: This work shall consist of furnishing and setting reflective pavement markers in a recessed groove in the pavement. The recessed pavement markers shall be used to supplement other pavement markings, similar to the use of Raised Reflective Pavement Markers.

Materials: The epoxy used shall be as recommended by the pavement marker manufacturer.

Installation: The spacing and orientation of the pavement markers shall be as shown on the plans and/or as directed by the Engineer. A recessed groove shall be cut in the pavement 5.25" wide and 0.9" deep on a 15.5" diameter. A 3.5' long groove shall taper from 0" (normal pavement) to 0.3" depth (full-recessed) before and after the groove. For 1-way markers heading uphill, uphill grind taper may be omitted.

The recessed area shall be cleaned free of all loose material, and be dry before the placement of the pavement marker. All excess material resulting from the construction of the recessed area shall be completely removed from the surface of the roadway by means of a vacuum sweeper truck. The pavement marker shall be cemented with epoxy in the center of the 1.0" deep recessed groove.

Inspection: The recessed reflective pavement marker shall be inspected following installation, but no later than November 30 of the year installed. Following a winter performance period (December 1 - May 31), a final inspection will be made and corrective action (if required) taken according to the requirements of Article 781.04 of the Standard Specifications. During the inspection a straight edge shall be placed across the recess to check that the top of the marker is below the pavement.

Method of Measurement: This work will be measured as each RECESSED REFLECTIVE PAVEMENT MARKER that is placed.

Basis of Payment: This work will be paid for at the contract unit price each for RECESSED REFLECTIVE PAVEMENT MARKER. Payment shall be made according to the inspection and bonding requirements in Article 781.04 of the Standard Specifications. The unit price shall include all costs for cutting the grooves into the pavement. The unit price shall also include all equipment, materials and labor required to install the recessed reflective pavement markers.

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

Description. This work shall consist of the removal and disposal of regulated substances according to Section 669 of the Standard Specifications as revised below.

Contract Specific Sites. The excavated soil and groundwater within the areas listed below shall be managed as either "uncontaminated soil", hazardous waste, special waste or non-special waste. For stationing, the lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit, whichever is less.

Site 1: Collins Avenue

• Station 11+74 to Station 20+00 full width. Soil boring had PNA levels above the MACs and material characterized by this boring is considered A-5 soil and should be disposed of off-site as non-special waste.

Site 8: Fullerton Avenue

• Station 46+00 to Station 56+00 full width. Soil had soil pH of 9.06, which is outside the acceptable range for CCDD disposal. Material at this location is considered B-1 soil and is eligible for re-use on site or can be disposed off-site as uncontaminated soil except at CCDD or USFO facilities.

Site 15: Fullerton Avenue

• Station 108+00 to Station 127+00 full width. Soil boring had PNA levels above the MACs and material characterized by this boring is considered A-5 soil and should be disposed of off-site as non-special waste.

Revise Section 669 of the Standard Specifications to read:

"SECTION 669. REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

669.01 Description. This work shall consist of the transportation and proper disposal of contaminated soil and groundwater. 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.

669.02 Equipment. The Contractor shall notify the Engineer of the delivery of all excavation, storage, and transportation equipment to a work area location. The equipment shall comply with OSHA and American Petroleum Institute (API) guidelines and shall be furnished in a clean condition. Clean condition means the equipment does not contain any residual material classified as a non-special waste, non-hazardous special waste, or hazardous waste. Residual materials include, but are not limited to, petroleum products, chemical products, sludges, or any other material present in or on equipment.

Before beginning any associated soil or groundwater management activity, the Contractor shall provide the Engineer with the opportunity to visually inspect and approve the equipment. If the equipment contains any contaminated residual material, decontamination shall be performed on the equipment as appropriate to the regulated substance and degree of contamination present according to OSHA and API guidelines. All cleaning fluids used shall be treated as the contaminant unless laboratory testing proves otherwise.

669.03 Pre-construction Submittals. Prior to beginning this work, or working in areas with regulated substances, the Contractor shall submit a Regulated Substance Pre-Construction Plan (RSPCP) to the Engineer for review and approval using form BDE 2730. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.

As part of the RSPCP, the qualifications of Contractor(s) or firm(s) performing the following work shall be listed.

(a) On-Site Monitoring. Qualification for on-site monitoring of regulated substance work and on-site monitoring of UST removal requires either pre-qualification in Hazardous Waste by the Department or demonstration of acceptable project experience in remediation and special waste operations for contaminated sites in accordance with applicable Federal, State, or local regulatory requirements.

Qualification for each individual performing on-site monitoring requires a minimum of one-year of experience in similar activities as those required for the project.

(b) Underground Storage Tank. Qualification for underground storage tank (UST) work requires licensing and certification with the Office of the State Fire Marshall (OSFM) and

possession of all permits required to perform the work. A copy of the permit shall be provided to the Engineer prior to tank removal.

The qualified Contractor(s) or firm(s) shall also document it does not have any current or former ties with any of the properties contained within, adjoining, or potentially affecting the work.

The Engineer will require up to 30 calendar days for review of the RSPCP. The review may involve rejection or revision and resubmittal; in which case, an additional 30 days will be required for each subsequent review. Work shall not commence until the RSPCP has been approved by the Engineer. After approval, the RSPCP shall be revised as necessary to reflect changed conditions in the field.

CONSTRUCTION REQUIREMENTS

669.04 Contaminated Soil and/or Groundwater Monitoring. Prior to beginning excavation, the Contractor shall mark the limits of removal for approval by the Engineer. Once excavation begins, the work and work area involving regulated substances shall be monitored by qualified personnel. The qualified personnel shall be on-site continuously during excavation and loading of material containing regulated substances. The qualified personnel shall be equipped with either a photoionization detector (PID) (minimum 10.6eV lamp), or a flame ionization detector (FID), and other equipment, as appropriate, to monitor for potential contaminants associated with volatile organic compounds (VOCs) or semi-volatile organic compounds (SVOCs). The PID or FID meter shall be calibrated on-site and background level readings taken and recorded daily, and as field and weather conditions change. 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. PID or FID readings may be used as the basis of increasing the limits of removal with the approval of the Engineer but shall in no case be used to decrease the limits.

The qualified personnel shall document field activities using form BDE 2732 (Regulated Substances Monitoring Daily Record) including the name(s) of personnel conducting the monitoring, weather conditions, PID or FID calibration records, a list of equipment used on-site, a narrative of activities completed, photo log sheets, manifests and landfill tickets, monitoring results, how regulated substances were managed and other pertinent information.

Samples will be collected in accordance with the RSPCP. Samples shall be analyzed for the contaminants of concern (COCs), including pH, based on the property's land use history, the encountered abnormality and/or the parameters listed in the maximum allowable concentration (MAC) for chemical constituents in uncontaminated soil established pursuant to Subpart F of 35 III. Adm. Code 1100.605. The analytical results shall serve to document the level of contamination.

Samples shall be grab samples (not combined with other locations). The samples shall be taken with decontaminated or 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, collection location and depth, and any other relevant observations.

The laboratory shall use analytical methods which are able to meet 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; "Methods for the Determination of Organic Compounds in Drinking Water", EPA, EMSL, EPA-600/4-88/039; and "Methods for the Determination of Organic Compounds in Drinking Water, Supplement III", EPA 600/R-95/131, August 1995. 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.

669.05 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. 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 clean construction and demolition debris (CCDD) facility or an uncontaminated soil fill operation (USFO) 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 USFO 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 USFO 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 669.05(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 off-site as "uncontaminated soil" according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO for any of the following reasons.
 - (1) The pH of the soil is less than 6.25 or greater than 9.0.
 - (2) The soil exhibited PID or FID readings in excess of background levels.
- (c) Soil Analytical Results Exceed Most Stringent MAC but Do Not Exceed Tiered Approach to Corrective Action Objectives (TACO) Residential. When the soil analytical results indicate that detected levels exceed the most stringent MAC but do not exceed TACO Tier 1 Soil Remediation Objectives for Residential Properties pursuant to 35 IAC 742 Appendix B Table A, the excavated soil can be utilized within the right-of-way or managed and disposed off-site as "uncontaminated soil" according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO.
- (d) 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. The groundwater shall be containerized and trucked to an off-site treatment facility or may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority. Groundwater discharged to a sewer shall be pre-treated to remove particulates and measured with a calibrated flow meter to comply with applicable discharge limits. A copy of the permit shall be provided to the Engineer prior to discharging groundwater to the sewer.

All groundwater encountered within 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.

The Contractor shall use due care when transferring contaminated material from the area of origin to the transporter. Should releases of contaminated material to the environment occur (i.e., spillage onto the ground, etc.), the Contractor shall clean-up spilled material and place in the appropriate storage containers as previously specified. Clean-up shall include, but not be limited to, sampling beneath the material staging area to determine complete removal of the spilled material.

The Contractor shall be responsible for transporting and disposing all material classified as a non-special waste, special waste, or hazardous waste from the job site to an appropriately permitted landfill facility. The transporter and the vehicles used for transportation shall comply with all federal, state, and local rules and regulations governing the transportation of non-special waste, special waste, or hazardous waste.

All equipment used by the Contractor to haul contaminated material to the landfill facility shall be lined with a 6 mil (150 micron) polyethylene liner and securely covered during transportation. The Contractor shall obtain all documentation including any permits and/or licenses required to transport the contaminated material to the disposal facility.

The Contractor shall provide engineered barriers, when required, and shall include materials sufficient to completely line excavation surfaces, including sloped surfaces, bottoms, and sidewall faces, within the areas designated for protection.

The Engineer shall coordinate with the Contractor on the completion of all documentation. The Contractor shall make all arrangements for collection and analysis of landfill acceptance testing. The Contractor shall coordinate for waste disposal approval with the disposal facility. After the Contractor completes these activities and upon receipt of authorization from the Engineer, the Contractor shall initiate the disposal process.

The Contractor shall provide the Engineer with all transport-related documentation within two days of transport or receipt of said document(s). The Engineer shall maintain the file for all such documentation. For management of special or hazardous waste, the Contractor shall provide the Engineer with documentation the Contractor (or subcontractor, if a subcontractor is used for transportation) is operating with a valid Illinois special waste transporter permit at least two weeks before transporting the first load of contaminated material.

The Contractor shall schedule and arrange the transport and disposal of each load of contaminated material produced. The Contractor shall make all transport and disposal arrangements so no contaminated material remains within the project area at the close of business each day. Exceptions to this specification require prior approval from the Engineer within 24 hours of close of business. The Contractor shall be responsible for all other pre-disposal/transport preparations necessary daily to accomplish management activities.

Any waste generated as a special or hazardous waste from a non-fixed facility shall be manifested off-site using the Department's county generator number. An authorized representative of the Department shall sign all manifests for the disposal of the contaminated material and confirm the Contractor's transported volume. Any waste generated as a non-special waste may be managed off-site without a manifest, a special waste transporter, or a generator number.

The Contractor shall select a landfill mandated by definition of the contaminant within the State of Illinois. The Department will review and approve or reject the facility proposed by the Contractor to use as a landfill. The Contractor shall verify whether the selected disposal facility is compliant with those applicable standards as mandated by definition of the contaminant and whether the disposal facility is presently, has previously been, or has never been, on the United States Environmental Protection Agency (U.S. EPA) National Priorities List or the Resource Conservation and Recovery Act (RCRA) List of Violating Facilities. The Contractor shall be responsible for coordinating permits with the IEPA. The use of a Contractor selected landfill shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth.

669.06 Non-Special Waste Certification. An authorized representative of the Department shall sign and date all non-special waste certifications. The Contractor shall be responsible for providing the Engineer with the required information that will allow the Engineer to certify the waste is not a special waste.

- (a) Definition. A waste is considered a non-special waste as long as it is not:
 - (1) a potentially infectious medical waste;
 - (2) a hazardous waste as defined in 35 IAC 721;
 - (3) an industrial process waste or pollution control waste that contains liquids, as determined using the paint filter test set forth in subdivision (3)(A) of subsection (m) of 35 IAC 811.107;
 - (4) a regulated asbestos-containing waste material, as defined under the National Emission Standards for Hazardous Air Pollutants in 40 CFR 61.141;
 - (5) a material containing polychlorinated biphenyls (PCB's) regulated pursuant to 40 CFR Part 761;

- (6) a material subject to the waste analysis and recordkeeping requirements of 35 IAC 728.107 under land disposal restrictions of 35 IAC 728;
- (7) a waste material generated by processing recyclable metals by shredding and required to be managed as a special waste under Section 22.29 of the Environmental Protection Act; or
- (8) an empty portable device or container in which a special or hazardous waste has been stored, transported, treated, disposed of, or otherwise handled.
- (b) Certification Information. All information used to determine the waste is not a special waste shall be attached to the certification. The information shall include but not be limited to:
 - (1) the means by which the generator has determined the waste is not a hazardous waste;
 - (2) the means by which the generator has determined the waste is not a liquid;
 - (3) if the waste undergoes testing, the analytic results obtained from testing, signed and dated by the person responsible for completing the analysis;
 - (4) if the waste does not undergo testing, an explanation as to why no testing is needed;
 - (5) a description of the process generating the waste; and
 - (6) relevant material safety data sheets.

669.07 Temporary Staging. The Contractor shall excavate and dispose of all waste material as mandated by the contaminants without temporary staging. If circumstances require temporary staging, he/she shall request in writing, approval from the Engineer.

When approved, the Contractor shall prepare a secure location within the project area capable of housing containerized waste materials. The Contractor shall contain all waste material in leak-proof storage containers such as lined roll-off boxes or 55 gal (208 L) drums, or stored in bulk fashion on storage pads. The design and construction of such storage pad(s) for bulk materials shall be subject to approval by the Engineer. The Contractor shall place the staged storage containers on an all-weather gravel-packed, asphalt, or concrete surface. The Contractor shall maintain a clearance both above and beside the storage units to provide maneuverability during loading and unloading. The Contractor shall provide any assistance or equipment requested by the Engineer for authorized personnel to inspect and/or sample contents of each storage container. All containers and their contents shall remain intact and undisturbed by unauthorized persons until the manner of disposal is determined. The Contractor shall keep the storage containers covered, except when access is requested by authorized personnel of the Department. The Engineer shall authorize any additional material added to the contents of any storage container before being filled.

The Contractor shall ensure the staging area is enclosed (by a fence or other structure) to ensure direct access to the area is restricted, and he/she shall procure and place all required regulatory identification signs applicable to an area containing the waste material. The Contractor shall be responsible for all activities associated with the storage containers including, but not limited to, the procurement, transport, and labeling of the containers. The Contractor shall clearly mark all containers in permanent marker or paint with the date of waste generation, location and/or area of waste generation, and type of waste (e.g., decontamination water, contaminated clothing, etc.). The Contractor shall place these identifying markings on an exterior side surface of the container. The Contractor shall separately containerize each contaminated medium, i.e. contaminated clothing is placed in a separate container from decontamination water. Containers used to store liquids shall not be filled in excess of 80 percent of the rated capacity. The Contractor shall not use a storage container if visual inspection of the container reveals the presence of free liquids or other substances that could classify the material as a hazardous waste in the container.

The Department will not be responsible for any additional costs incurred, if mismanagement of the staging area, storage containers, or their contents by the Contractor results in excess cost expenditure for disposal or other material management requirements.

669.08 Underground Storage Tank Removal. For the purposes of this section, an underground storage tank (UST) includes the underground storage tank, piping, electrical controls, pump island, vent pipes and appurtenances.

Prior to removing an UST, the Engineer shall determine whether the Department is considered an "owner" or "operator" of the UST as defined by the UST regulations (41 III. Adm. Code Part 176). Ownership of the UST refers to the Department's owning title to the UST during storage, use or dispensing of regulated substances. The Department may be considered an "operator" of the UST if it has control of, or has responsibility for, the daily operation of the UST. The Department may however voluntarily undertake actions to remove an UST from the ground without being deemed an "operator" of the UST.

In the event the Department is deemed not to be the "owner" or "operator" of the UST, the OSFM removal permit shall reflect who was the past "owner" or "operator" of the UST. If the "owner" or "operator" cannot be determined from past UST registration documents from OSFM, then the OSFM removal permit will state the "owner" or "operator" of the UST is the Department. The Department's Office of Chief Counsel (OCC) will review all UST removal permits prior to submitting any removal permit to the OSFM. If the Department is not the "owner" or "operator" of the UST then it will not register the UST or pay any registration fee.

The Contractor shall be responsible for obtaining all permits required for removing the UST, notification to the OSFM, using an OSFM certified tank contractor, removal and disposal of the UST and its contents, and preparation and submittal of the OSFM Site Assessment Report in accordance with 41 Ill. Adm. Code Part 176.330.

The Contractor shall contact the Engineer and the OSFM's office at least 72 hours prior to removal to confirm the OSFM inspector's presence during the UST removal. Removal, transport, and disposal of the UST shall be according to the applicable portions of the latest revision of the "American Petroleum Institute (API) Recommended Practice 1604".

The Contractor shall collect and analyze tank content (sludge) for disposal purposes. The Contractor shall remove as much of the regulated substance from the UST system as necessary to prevent further release into the environment. All contents within the tank shall be removed, transported and disposed of, or recycled. The tank shall be removed and rendered empty according to IEPA definition.

The Contractor shall collect soil samples from the bottom and sidewalls of the excavated area in accordance with 35 Ill. Adm. Code Part 734.210(h) after the required backfill has been removed during the initial response action, to determine the level of contamination remaining in the ground, regardless if a release is confirmed or not by the OSFM on-site inspector.

In the event the UST is designated a leaking underground storage tank (LUST) by the OSFM's inspector, or confirmation by analytical results, the Contractor shall notify the Engineer and the DESU. Upon confirmation of a release of contaminants from the UST and notifications to the Engineer and DESU, the Contractor shall report the release to the Illinois Emergency Management Agency (IEMA) (e.g., by telephone or electronic mail) and provide them with whatever information is available ("owner" or "operator" shall be stated as the past registered "owner" or "operator", or the IDOT District in which the UST is located and the DESU Manager);

The Contractor shall perform the following initial response actions if a release is indicated by the OSFM inspector:

- (a) Take immediate action to prevent any further release of the regulated substance to the environment, which may include removing, at the Engineer's discretion, and disposing of up to 4 ft (1.2 m) of the contaminated material, as measured from the outside dimension of the tank
- (b) Identify and mitigate fire, explosion and vapor hazards;
- (c) Visually inspect any above ground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils and groundwater; and
- (d) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors and free product that have migrated from the UST excavation zone and entered into subsurface structures (such as sewers or basements).

The UST excavation shall be backfilled according to applicable portions of Sections 205, 208, and 550 with a material that will compact and develop stability. The material shall be approved prior to placement. All uncontaminated concrete and soil removed during tank extraction may be used to backfill the excavation, at the discretion of the Engineer.

After backfilling the excavation, the site shall be graded and cleaned.

669.09 Regulated Substance Final Construction Report. Not later than 90 days after completing this work, the Contractor shall submit a Regulated Substance Final Construction Report (RSFCR) to the Engineer using form BDE 2733 and required attachments. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.

669.10 Method of Measurement. Non-special waste, special waste, and hazardous waste soil will be measured for payment according to Article 202.07(b) when performing earth excavation, Article 502.12(b) when excavating for structures, or by computing the volume of the trench using the maximum trench width permitted and the actual depth of the trench.

Groundwater containerized and transported off-site for management, storage, and disposal will be measured for payment in gallons (liters).

Backfill plugs will be measured in cubic yards (cubic meters) in place, except the quantity for which payment will be made shall not exceed the volume of the trench, as computed by using the maximum width of trench permitted by the Specifications and the actual depth of the trench, with a deduction for the volume of the pipe.

Engineered Barriers will be measured for payment in square yards (square meters).

669.11 Basis of Payment. The work of preparing, submitting and administering a Regulated Substances Pre-Construction Plan will be paid for at the contract lump sum price for REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN.

On-site monitoring of regulated substances, including completion of form BDE 2732 for each day of work, will be paid for at the contract unit price per calendar day, or fraction thereof, for ON-SITE MONITORING OF REGULATED SUBSTANCES.

The installation of engineered barriers will be paid for at the contract unit price per square yard (square meter) for ENGINEERED BARRIER.

The work of removing a UST, soil excavation, soil and content sampling, and the excavated soil, UST content, and UST disposal will be paid for at the contract unit price per each for UNDERGROUND STORAGE TANK REMOVAL.

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.

The transportation and disposal of groundwater from an excavation determined to be contaminated will be paid for at the contract unit price per gallon (liter) for SPECIAL WASTE GROUNDWATER DISPOSAL or HAZARDOUS WASTE GROUNDWATER DISPOSAL. When groundwater is discharged to a sanitary or combined sewer by permit, the cost will be paid for according to Article 109.05.

Backfill plugs will be paid for at the contract unit price per cubic yard (cubic meter) for BACKFILL PLUGS.

Payment for temporary staging, if required, will be paid for according to Article 109.04.

Payment for accumulated stormwater removal and disposal will be according to Article 109.04. Payment will only be allowed if appropriate stormwater and erosion control methods were used.

Payment for decontamination, labor, material, and equipment for monitoring areas beyond the specified areas, with the Engineer's prior written approval, will be according to Article 109.04.

The sampling and testing associated with this work will be paid for as follows.

- (a) BETX Soil/Groundwater Analysis. When the contaminants of concern are gasoline only, soil or groundwater samples shall be analyzed for benzene, ethylbenzene, toluene, and xylenes (BETX). The analysis will be paid for at the contract unit price per each for BETX SOIL ANALYSIS and/or BETX GROUNDWATER ANALYSIS using EPA Method 8021B.
- (b) BETX-PNAS Soil/Groundwater Analysis. When the contaminants of concern are middle distillate and heavy ends, soil or groundwater samples shall be analyzed for BETX and polynuclear aromatics (PNAS). The analysis will be paid for at the contract unit price per each for BETX-PNAS SOIL ANALYSIS and/or BETX-PNAS GROUNDWATER ANALYSIS using EPA Method 8021B for BETX and EPA Method 8310 for PNAs.
- (c) Priority Pollutants Soil Analysis. When the contaminants of concern are used oils, soil samples shall be analyzed for priority pollutant VOCs, priority pollutants SVOCs, and priority pollutants metals. The analysis will be paid for at the contract unit price per each for PRIORITY POLLUTANTS SOIL ANALYSIS using EPA Method 8260B for VOCs, EPA Method 8270C for SVOCs, and using an ICP instrument and EPA Methods 6010B and 7471A for metals.
- (d) Priority Pollutant Groundwater Analysis. When the contaminants of concern are used oils, non-petroleum material, or unknowns, groundwater samples shall be analyzed for priority pollutant VOCs, priority pollutants SVOCs, and priority pollutants metals. The analysis will be paid for at the contract unit price per each for PRIORITY POLLUTANTS GROUNDWATER ANALYSIS using EPA Method 8260B for VOCs, EPA Method 8270C for SVOCs, and EPA Methods 6010B and 7470A for metals.

- (e) Target Compound List (TCL) Soil Analysis. When the contaminants of concern are unknowns or non-petroleum material, soil samples shall be analyzed for priority pollutant VOCs, priority pollutants SVOCS, priority pollutants metals, pesticides, and Resource Conservation and Recovery Act (RCRA) metals by the toxicity characteristic leaching procedure (TCLP). The analysis will be paid for at the contract unit price per each for TCL SOIL ANALYSIS using EPA Method 8260B for VOCs, EPA Method 8270C for SVOCs, EPA Method 8081 for pesticides, and ICP instrument and EPA Methods 6010B, 7471A, 1311 (extraction), 6010B, and 7470A for metals.
- (f) Soil Disposal Analysis. When the waste material for disposal requires sampling for disposal acceptance, the samples shall be analyzed for TCLP VOCs, SVOCs, RCRA metals, pH, ignitability, and paint filter test. The analysis will be paid for at the contract unit price per each for SOIL DISPOSAL ANALYSIS using EPA Methods 1311 (extraction), 8260B for VOCs, 8270C for SVOCs, 6010B and 7470A for RCRA metals, 9045C for pH, 1030 for ignitability, and 9095A for paint filter.

The work of preparing, submitting and administering a Regulated Substances Final Construction Report will be paid for at the contract lump sum price REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT."

STORM SEWERS, WATER MAIN QUALITY PIPE

Description: This work shall consist of constructing storm sewer at the direction of the Engineer in areas where the minimum horizontal separation from water main and/or water service lines cannot be maintained. The separation requirements are defined in the <u>Standard</u> <u>Specifications for Water & Sewer Main Construction in Illinois</u>.

Materials: The storm sewer materials shall be limited to the following:

- Concrete Pressure Pipe: The concrete pressure pipe shall meet the requirements of the latest AWWA Standards C300, C301, and C303. The structural design of pre-stressed concrete cylinder pipe shall be according to the latest addition of AWWA Standard C304.
- Ductile Iron Pipe: The ductile iron pipe shall meet the requirements of ANSI A 21.51 (AWWA C151). The class or thickness design shall be according to ANSI A 21.50 (AWWA C150). The ductile iron pipe shall be seal coated and/or cement lined according to ANSI A 21.4 (AWWA C104). The ductile iron pipe shall have mechanical or rubber (slip seal or push on) joints.
- Plastic Pipe: The plastic pipe may be composed of Polyvinyl Chloride (PVC) or Polyethylene (PE) pipe. The PVC or PE material shall meet the requirements of NSF (National Sanitation Foundation) standard 14 and the

AWWA Standard	Material (Material Code)	Dimension Ratio Maximum	
C900	PVC	25	
C905	PVC	26	
	PE (PE 3048)	17	
C906	PE (PE 2406)	12.5	
	PE (PE 3406)	13.5	
ASTM D 1785	PVC (PVC 1120) PVC (PVC 1220)	26	
ASTM D 2241	PVC (PVC 1120) PVC (PVC 1220)	26	

AWWA or ASTM designated standard shown in the following table. The dimension ratio shall be less than the maximum value shown in the table below:

- ASTM D 1785 and ASTM D 2241 PVC pipe shall be rated at 160 psi or greater at 73.4°F.
- Additional guidance is available in the <u>Standard Specifications for</u> <u>Water & Sewer Construction in Illinois</u>.
- Steel Pipe: The steel water pipe shall meet the requirements of the latest AWWA Standard C200. The structural design shall be according to the latest edition of C200 and AWWA Manual M-11 shall serve as the standard of practice for design and installation.

General: The work shall be performed according to Section 550 of the "Standard Specifications" and 35 Illinois Administrative Code 653.119, which requires the storm sewer to be pressure tested (for storm sewers where 10' horizontal separation from water main is not met) to the maximum expected surcharge pressure before backfilling.

For this project the maximum expected surcharge pressure is 68 psi.

Method of Measurement: Storm Sewers, Water Main Quality Pipe will be measured for payment in place in feet. The measurement shall be according to Article 550.09 of the "Standard Specifications".

Basis of Payment: This work will be paid for at the contract unit price per foot for STORM SEWER (WATER MAIN REQUIREMENTS) of the diameter specified regardless of type. The unit price shall include all equipment, materials and labor necessary to complete the work as specified. The cost of pressure testing the storm sewer included in the unit price for STORM SEWER (WATER MAIN REQUIREMENTS).

TEMPORARY PAVEMENT (VARIABLE DEPTH)

Description. This work shall consist of constructing temporary ramps to eliminate vertical pavement drop-offs during construction staging as shown on the plans or as directed by the Engineer.

General. The work shall be performed according to Section 406 of the "Standard Specifications" and shall be constructed at the direction of Engineer between binder and surface courses as necessary.

Temporary ramps shall be asphalt and provisions in section 406.08(a) of the "Standard Specifications" shall apply.

Basis of Payment. This work will be paid for at the contract unit price per ton for TEMPORARY PAVEMENT (VARIABLE DEPTH), which price shall include all equipment, materials and labor required to install and remove temporary ramps.

TREE PROTECTION AND PRESERVATION

Description: This work shall consist of establishing "tree protection zones" around the trees in the vicinity of construction that are designated to be preserved.

General: Every effort shall be made by the Contractor when working near trees and shrubs to preserve same from harm. No trees or shrubs shall be removed unless directed by the Engineer or the Village. The Contractor shall be responsible for damage to or loss of any tree or shrub not specifically designated to be removed.

Wherever trees which are not permitted to be removed interfere with normal excavation procedures, the following shall govern. No machine excavation shall be made within a distance of three tree trunk diameters or 12 inches (whichever is greater) of any tree, and no roots over 2 inches in diameter shall be cut unless, in the opinion of the Engineer, it is impossible to complete the work without cutting. Excavation closer than three trunk diameters or 12 inches (whichever is greater) from any tree shall be made by hand, and the tree shall be tunneled where necessary as determined by the Engineer.

Damage to tree limbs shall be held to a minimum. Shrubs and tree limbs shall be tied back wherever necessary to prevent their loss or damage. Wherever damage by construction equipment to limbs and branches is unavoidable, they shall be pruned before starting work and sealed in accordance with best forestry practice.

When directed by the Engineer, the Contractor shall provide plank wrappers wired in place to protect tree trunks from being damaged by trench machinery, tractors or trucks. Protective planking shall be removed as soon as practical after the work in the vicinity has been completed.

In removing spoil banks from around trees, hand work will be required as necessary to prevent damage to the trunks by construction machinery.

Trees and Shrubs: Extra care shall be exercised when operating equipment around trees or shrubs. Injured branches or roots shall be pruned in a manner satisfactory to the Engineer and shall be painted where the cut was made. Roots exposed during excavating operations shall be neatly pruned and covered with topsoil. This work shall be done as soon as possible and shall be considered as included in the cost of the contract, and no additional compensation will be allowed. Temporary fence to be paid for separately.

Construction:

- 1. The Contractor shall erect a temporary fence around all trees within the construction area to establish a "tree protection zone" before any work begins or any material is delivered to the jobsite. No work is to be performed (other than root pruning), materials stored, or vehicles driven or parked within the "tree protection zone" at any time during the course of construction.
- 2. The exact location and establishment of the "tree protection zone" fence shall be approved by the Engineer prior to setting the fence. The fence shall be 48 inches high, plastic poly-type or any other type of highly visible barrier in an open-weave type pattern with large openings. The type, color and pattern of the fence shall be approved by the Engineer prior to erection. This fence shall be properly maintained in an upright manner and shall remain up until final restoration, unless the Engineer directs removal otherwise. Tree fence shall be supported using T-Post style fence posts with a maximum of 8' spacing. T-posts must be at least six feet in length, two feet of which must be set in the ground. The fence shall be attached to posts and secured with a minimum of three nylon locking ties per post. **Utilizing re-bar as a fence post will not be permitted.**
- 3. The fence shall be installed parallel to the curb and between the curb and sidewalk unless otherwise directed by the Engineer. Fence shall be erected on a minimum of three sides with the fourth sidewalk side being optional. Fence shall be installed at the drip-line of the tree or as listed in the following guidelines:
 - a. Establish the diameter of the tree at a point four and a half feet above the ground, (referred to as diameter breast height or DBH)
 - i.. Trees with diameters 10 inches and under require root zone protection a minimum of five feet in all directions from the center of the tree.
 - ii. Trees 10 to 19 inches in diameter shall have a minimum root zone protection of 10 feet in all directions from the center of the tree.
 - iii. Trees greater than 19 inches in diameter shall have a minimum root zone protection of 15 feet in all directions from the center of the tree.

- 4. Parking or maneuvering of machinery, stockpiling of materials or any other use will not be allowed upon unpaved areas within 3 m (10 ft) of the root protection zone of trees or plants designated to be protected.
- 5. Construction area is defined as all areas within 20 feet each side of water or sewer main location.
- 6. All work within the "tree protection zone" shall have the Engineer's prior approval. All slopes and other areas not re-graded should be avoided so that unnecessary damage is not done to the existing turf, tree root system or ground cover.
- 7. The grade within the "tree protection zone" shall not be changed unless approved by the Engineer prior to making said changes or performing the work.

Basis of Payment: Temporary fence will be paid for at the contract unit price per foot for TEMPORARY FENCE, which price shall include furnishing, installing, maintaining, and removing. Tree pruning will be paid for at the contract unit price per each for TREE PRUNING (1 TO 10 INCH DIAMETER) and/or TREE PRUNING (OVER 10 INCH DIAMETER), which price shall include labor, materials, and equipment. Root pruning will be paid for at the contract unit price per each for the contract unit price per each for TREE ROOT PRUNING, which price shall include labor, materials, and equipment.

VALVE BOXES TO BE ADJUSTED (SPECIAL)

Description: This work shall consist of the adjusting valve boxes to the milled pavement grade and the final surface grade as shown in the plans or as directed by the Engineer according to the Section 602 of the Standard Specifications, with the following modifications.

General: If the Contractor is unable to adjust the valve box to final grade, the Contractor shall remove the existing valve box and install a new valve box similar in material and size. The Contractor shall make sure the new valve box will be able to fit over the existing water valve and have the ability to adjust to the final grade.

Adjustment of valve boxes located within the pavement in the resurfacing section of the project shall also follow and be according to the District One Detail BD-8 "Details for Frames and Lids Adjustment with Milling".

Method of Measurement: This work shall be measured per each valve box adjusted. If the valve box is unable to be adjusted, removing the existing valve box and installing a new valve box will shall be considered included in the cost of this item. The disposal of existing valve boxes will not be measured for payment but shall be considered as included in the cost of this item. The adjustment down to the milled surface elevation and the adjustment up to the final surface elevation shall not be measured separately.

Basis of Payment: This work will be paid for at the contract unit price per each for VALVE BOXES TO BE ADJUSTED (SPECIAL) which price shall include all labor, equipment, and materials necessary to perform said work.

ADJUSTMENTS AND RECONSTRUCTIONS (D-1)

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."

AGGREGATE SUBGRADE IMPROVEMENT (D-1)

Effective: February 22, 2012 Revised: April 1, 2016

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	
(b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2 and 3)	

Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradation CS 01 but shall not exceed 40 percent by weight 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 $1 \frac{1}{2}$ in (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradation CS 01 is used in lower lifts. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders. The final product shall not contain more than 40 percent by weight of RAP.

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. The calibration for the mechanical feeders shall have an accuracy of ± 2.0 percent of the actual quantity of material delivered.

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 gradation CS 01 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 $1 \frac{1}{2}$ 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:

" **1004.07 Coarse Aggregate for Aggregate Subgrade Improvement.** The aggregate shall be according to Article 1004.01 and the following.

- (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. The top 12 inches of the aggregate subgrade improvement shall be 3 inches of capping material and 9 inches of crushed gravel, crushed stone or crushed concrete. In applications where greater than 36 inches of subgrade material is required, rounded gravel, meeting the CS01 gradation, may be used beginning at a depth of 12 inches below the bottom of pavement.
- (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials. Non-mechanically blended RAP may be allowed up to a maximum of 5.0 percent.
- (c) Gradation.
 - (1) The coarse aggregate gradation for total subgrade thicknesses of 12 in. (300 mm) or greater shall be CS 01.

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

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

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

AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS (D-1)

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

Revise Article 402.10 of the Standard Specifications to read:

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

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

- (a) Private Entrance. The minimum width shall be 12 ft (3.6 m). The minimum compacted thickness shall be 6 in. (150 mm). The maximum grade shall be eight percent, except as required to match the existing grade.
- (b) Commercial Entrance. The minimum width shall be 24 ft (7.2 m). The minimum compacted thickness shall be 9 in. (230 mm). The maximum grade shall be six percent, except as required to match the existing grade.
- (c) Road. The minimum width shall be 24 ft (7.2 m). The minimum compacted thickness shall be 9 in. (230 mm). The grade and elevation shall be the same as the removed pavement, except as required to meet the grade of any new pavement constructed.

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

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

Add the following to Article 402.12 of the Standard Specifications:

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

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

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

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."

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

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

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

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

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

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:

- (j) Temporary Rubber Ramps (Note 2)

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

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)"

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

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	Height of casting $\pm 1/4$ in. (6 mm)
edge	
Thickness at	1/4 in. (6 mm) max.
outside edge	
Width, measured	8 1/2 in. (215 mm) min
from inside opening	
to outside edge	

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."

FRICTION AGGREGATE (D-1)

Effective: January 1, 2011 Revised: April 29, 2016

Revise Article 1004.03(a) of the Standard Specifications to read:

"1004.03 Coarse Aggregate for Hot-Mix Asphalt (HMA). The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate for HMA shall be according to the following table.

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	Allowed Alone or in Combination ^{5/} :
		Gravel
		Crushed Gravel
		Carbonate Crushed Stone Crystalline Crushed Stone
		Crushed Sandstone
		Crushed Slag (ACBF)
		Crushed Steel Slag
		Crushed Concrete
HMA	Stabilized Subbase	Allowed Alone or in Combination ^{5/} :
Low ESAL	or Shoulders	Gravel
		Crushed Gravel
		Carbonate Crushed Stone
		Crystalline Crushed Stone Crushed Sandstone
		Crushed Slag (ACBF)
		Crushed Steel Slag ^{1/}
		Crushed Concrete
HMA	Binder	Allowed Alone or in Combination ^{5/6/} :
High ESAL Low ESAL	IL-19.0	Crushed Gravel
LOW ESAL	or IL-19.0L	Carbonate Crushed Stone ^{2/}
	SMA Binder	Crystalline Crushed Stone
		Crushed Sandstone
		Crushed Slag (ACBF) Crushed Concrete ^{3/}

Use	Mixture	Aggregates Allowed	
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	Allowed Alone or in C Crushed Gravel Carbonate Crushed Stat Limestone) ^{2/} Crystalline Crushed Stat Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/} Other Combinations A Up to 25% Limestone 50% Limestone	one (other than
HMA High ESAL	E Surface IL-9.5 SMA Ndesign 80 Surface	Allowed Alone or in C Crystalline Crushed St Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.	Combination ^{5/6/} :
		Other Combinations A Up to	<u>llowed:</u> With

Use	Mixture	Aggregates Allowed		
		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 ^{2/} or Crushed Concrete ^{3/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag	
HMA	F Surface IL-9.5	Allowed Alone or in Combination ^{5/6/} :		
High ESAL	SMA Ndesign 80 Surface	Crystalline Crushed S Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.		
		Other Combinations A	Allowed:	
		Up to	With	
		50% Crushed Gravel ^{2/} , 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 (limestone) and/or crushed gravel 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."
- 6/ Combining different types of aggregate will not be permitted in SMA Ndesign 80."

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

Effective: June 26, 2006 Revised: April 1, 2016

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 5)1031"

Add the following note to 1030.02 of the Standard Specifications:

Note 5. 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.

HMA MIXTURE DESIGN REQUIREMENTS (D-1)

Effective: January 1, 2013 Revised: January 1, 2018

1) Design Composition and Volumetric Requirements

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-	1 1/2 (38)	
9.5L		
SMA-12.5	2 (50)	
IL-19.0, IL-19.0L	2 1/4 (57)"	

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

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

1/ CA 16 or CA 13 may be blended with the gradations listed.

2/ The coarse aggregates used shall be capable of being combined with stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.

3/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve.

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

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

Revise the last paragraph of Article 1102.01 (a) (5) of the Standard Specifications to read:

"IL-4.75 and Stone Matrix Asphalt (SMA) mixtures which contain aggregate having absorptions greater than or equal to 2.0 percent, or which contain steal slag sand, shall have minimum surge bin storage plus haul time of 1.5 hours."

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	
(b) Fine Aggregate	
(c) RAP Material	
(d) Mineral Filler	
(e) Hydrated Lime	
(f) Slaked Quicklime (Note 1)	
(g) Performance Graded Asphalt Binder (Note 2)	
(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:

High ESAL, MIXTURE COMPOSITION (% PASSING) 1/										
Sieve Size			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	325/	34 %	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) High ESAL Mixtures. The Job Mix Formula (JMF) shall fall within the following limits.

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 μ m) sieve shall be \leq 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.

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

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

	VOLUMETRIC REQUIREMENTS				
	High ESAL				
	Voids in the Mineral Aggregate				
		(VMA),			
		% minimum			
Ndesign			IL-4.75 ^{1/}	(VFA),	
_	IL-19.0	%			
50		$65-78^{2/}$			
70	13.5	65 - 75			
90	15.5	15.0		03 - 75	

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

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

"(3) SMA Mixtures.

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

- 1/ Maximum draindown shall be 0.3 percent. The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30 °F.
- 2/ Applies when specific gravity of coarse aggregate is ≥ 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.

Add to the end of Article 1030.05 (d) (2) a. of the Standard Specifications:

"During production, the Contractor shall test SMA mixtures for draindown according to AASHTO T305 at a frequency of 1 per day of production."

Delete last sentence of the second paragraph of Article 1102.01(a) (4) b. 2.

Add to the end of Article 1102.01 (a) (4) b. 2.:

"As an option, collected dust (baghouse) may be used in lieu of manufactured mineral filler according to the following:

- (a.) Sufficient collected dust (baghouse) is available for production of the SMA mix for the entire project.
- (b.) A mix design was prepared based on collected dust (baghouse).

2) Design Verification and Production

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

"(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.

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	

Illinois Modified AASHTO T 324 Requirements ^{1/}

- 1/ When produced at temperatures of $275 \pm 5 \,^{\circ}\text{F} (135 \pm 3 \,^{\circ}\text{C})$ or less, loose Warm Mix Asphalt shall be oven aged at $270 \pm 5 \,^{\circ}\text{F} (132 \pm 3 \,^{\circ}\text{C})$ 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)."

<u>Production Testing</u>. Revise first paragraph of 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 at the beginning of

each construction year according to the Manual of Test Procedures for Materials "Hot Mix Asphalt Test Strip Procedures". At the request of the Producer, the Engineer may waive the test strip if previous construction during the current construction year has demonstrated the constructability of the mix using Department test results."

Add the following after the sixth paragraph in Article 1030.06 (a) of the Standard Specifications:

"The Hamburg Wheel test shall also be conducted on all HMA mixtures from a sample taken 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. 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"

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 fourth paragraph of Article 406.14 of the Standard Specifications with the following:

"Stone matrix asphalt will be paid for at the contract unit price per ton (metric ton) for POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified; and POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified."

MAINTENANCE OF ROADWAYS (D-1)

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

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

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

RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (D-1)

Effective: November 1, 2012 Revise: January 1, 2018

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 Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Central Bureau of Materials 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, 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, HMA (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 in. (75 mm) 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, 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 HMA (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.
 - 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 Central Bureau of Materials 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 test results shall be according to the following.

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

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

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

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

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

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the ITP, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)" or Illinois Modified AASHTO T-164-11, Test Method A.

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

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

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

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

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

The Engineer will notify the Contractor of observed deficiencies.

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

Test Parameter	Acceptable Limits of Precision		
% Passing: ^{1/}	FRAP	RAS	
1/2 in.	5.0%		
No. 4	5.0%		
No. 8	3.0%	4.0%	
No. 30	2.0%	4.0%	
No. 200	2.2%	4.0%	
Asphalt Binder Content	0.3%	3.0%	
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 homogeneous, 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, HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
 - (2) RAP from HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
 - (3) RAP from Class I, 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 laboratory prequalified by the Department for the specified testing. The consultant laboratory 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 Central Bureau of Materials Aggregate Lab for MicroDeval Testing, according to ITP 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 the 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 percent 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.

HMA Mixtures ^{1/2/4/}	Maximum % ABR			
Ndesign	Binder/Leveling	Surface	Polymer	
	Binder		Polymer Modified ^{3/}	
30L	50	40	30	
50	40	35	30	
70	40	30	30	
90	40	30	30	
4.75 mm N-50			40	
SMA N-80			30	

Max Asphalt Binder Replacement for FRAP with RAS Combination

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the percent asphalt binder replacement shall not exceed 50 % of the total asphalt binder in the mixture.
- 2/ When the binder replacement exceeds 15 % 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 % 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 %, the required virgin asphalt binder grade shall be PG64-28.
- 3/ When the ABR for SMA or IL-4.75 is 15 % 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/ When FRAP or RAS is used alone, the maximum percent asphalt binder replacement designated on the table shall be reduced by 10 %.

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.

The RAP, FRAP and RAS stone specific gravities (G_{sb}) shall be according to the "Determination of Aggregate Bulk (Dry) Specific Gravity (G_{sb}) or Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)" procedure in the Department's Manual of Test Procedures for Materials.

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 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 (0.1 metric 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 Wedge Shoulders, Type B. 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 shall be according to the current Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- (b) Gradation. The RAP material shall meet the gradation requirements for CA 6 according to Article 1004.01(c), except the requirements for the minus No. 200 (75 μm) sieve shall not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation."

STATUS OF UTILITIES (D-1)

Effective: June 1, 2016

Utility companies and/or municipal owners located within the construction limits of this project have provided the following information in regard to their facilities and the proposed improvements. The tables below contain a description of specific conflicts to be resolved and/or facilities which will require some action on the part of the Department's contractor to proceed with work. Each table entry includes an identification of the action necessary and, if applicable, the estimated duration required for the resolution.

UTILTIES TO BE ADJUSTED

Conflicts noted below have been identified by following the suggested staging plan included in the contract. The company has been notified of all conflicts and will be required to obtain the necessary permits to complete their work; in some instances resolution will be a function of the construction staging. The responsible agency must relocate or complete new installations as noted in the action column; this work has been deemed necessary to be complete for the Department's contractor to then work in the stage under which the item has been listed.

STAGE / LOCATION	ТҮРЕ	DESCRIPTION	OWNER	ACTION
Fullerton Avenue, 32+78, 25' LT	Telephone Manhole	EX manhole is located within roadway.	AT&T	Adjusted down before milling (1 day. Adjusted up after milling (1 day).
Fullerton Avenue, 104+13, 32' RT	Telephone Manhole	EX manhole is located within roadway.	AT&T	Adjusted down before milling (1 day. Adjusted up after milling (1 day).
Fullerton Avenue, 104+15, 21' RT	Telephone Manhole	EX manhole is located within roadway.	AT&T	Adjusted down before milling (1 day. Adjusted up after milling (1 day).
Fullerton Avenue, 107+26, 22' RT	Telephone Manhole	EX manhole is located within roadway.	AT&T	Adjusted down before milling (1 day. Adjusted up after milling (1 day).
Fullerton Avenue, 107+30, 24' RT	Telephone Manhole	EX manhole is located within roadway.	AT&T	Adjusted down before milling (1 day. Adjusted up after milling (1 day).

Pre-Stage

Fullerton Avenue, 107+30, 47' LT	Telephone Manhole	EX manhole is located within roadway.	AT&T	Adjusted down before milling (1 day. Adjusted up after milling (1 day).
Fullerton Avenue, 107+30, 56' LT	Telephone Manhole	EX manhole is located within roadway.	AT&T	Adjusted down before milling (1 day. Adjusted up after milling (1 day).

Pre-Stage: ____2_ Days Total Installation

The following contact information is what was used during the preparation of the plans as provided by the Agency/Company responsible for resolution of the conflict.

Agency/Company Responsible to Resolve Conflict	Name of contact	Address	Phone	E-mail Address
AT&T	Janet Ahern	1000 Commerce Drive Oak Brook, IL 60523	(630) 573-5450	Ja1763@att.com
Comcast	Martha Gieras	688 Industrial Drive Elmhurst, IL 60126	(224) 229-5862	Martha_Gieras@ cable.comcast.com
Commonwealth Edison Company	Christian Mukania	1 Lincoln Centre, Suite 600 Oakbrook Terrace, IL 60181	(339) 440-6254	Eric.Jostes@ ComEd.com
DuPage Water Commission	Ken Niles	600 Butterfield Road Elmhurst, IL 60126	(630) 834-0100	Niles@dpwc.org
MCI	Dean Boyers	2400 North Glenville Richardson, TX 75082	(972) 729-6322	Dean.Boyers@ verizon.org

Nicor Gas	Bruce Koppang	1844 Ferry Road Naperville, IL 60563	(630) 388-3046	BKoppan@ southernco.com
Vinakom Communications	Dicky Patel	-	(847) 592-5782	Dicky.Patel@ Vinakom.com

UTILITIES TO BE WATCHED AND PROTECTED

The areas of concern noted below have been identified by following the suggested staging plan included for the contract. The information provided is not a comprehensive list of all remaining utilities, but those which during coordination were identified as ones which might require the Department's contractor to take into consideration when making the determination of the means and methods that would be required to construct the proposed improvement. In some instances the contractor will be responsible to notify the owner in advance of the work to take place so necessary staffing on the owners part can be secured.

STAGE / LOCATION	ТҮРЕ	DESCRIPTION	OWNER	ACTION
Fullerton Avenue, 52+46, 31' LT	10" Watermain	EX watermain crosses PR storm sewer.	Village of Addison	TO BE PROTECTED
Fullerton Avenue, 69+34, 31' LT	8" Watermain	EX watermain crosses PR storm sewer.	Village of Addison	TO BE PROTECTED
Fullerton Avenue, 127+67, 38' RT	6" Watermain	EX watermain crosses PR storm sewer.	Village of Addison	TO BE PROTECTED
Fullerton Avenue, 127+72, 43' RT	4" Gas Line	EX gas line crosses PR storm sewer.	Nicor	TO BE PROTECTED

Fullerton Avenue, 132+27, 30' RT	4" Gas Line	EX gas line crosses PR storm sewer.	Nicor	TO BE PROTECTED
Fullerton Avenue, 132+34, 39' RT	6" Watermain	EX watermain crosses PR storm sewer.	Village of Addison	TO BE PROTECTED

The above represents the best information available to the Department and is included for the convenience of the bidder. The days required for conflict resolution should be taken into account in the bid as this information has also been factored into the timeline identified for the project when setting the completion date. The applicable portions of the Standard Specifications for Road and Bridge Construction shall apply.

Estimated duration of time provided in the action column for the first conflicts identified will begin on the date of the executed contract regardless of the status of the utility relocations. The responsible agencies will be working toward resolving subsequent conflicts in conjunction with contractor activities in the number of days noted.

The estimated relocation dates must be part of the progress schedule submitted by the contractor. A utility kickoff meeting will be scheduled between the Department, the Department's contractor and the utility companies. The Department's contractor is responsible for contacting J.U.L.I.E. prior to any and all excavation work.

TEMPORARY INFORMATION SIGNING (D-1)

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>	Article/Section
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)	1090.02

- Note 1. The Contractor may use 5/8 inch (16 mm) instead of 3/4 inch (19 mm) thick plywood.
- Note 2. Type A sheeting can be used on the plywood base.
- Note 3. All sign faces shall be Type A except all orange signs shall meet the requirements of Article 1106.01.
- Note 4. The overlay panels shall be 0.08 inch (2 mm) thick.

GENERAL CONSTRUCTION REQUIRMENTS

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 701.14 and Article 720.04. The signs shall be 7 ft (2.1 m) above the near edge of the pavement and shall be a minimum of 2 ft (600 mm) beyond the edge of the paved shoulder. A minimum of two (2) posts shall be used.

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

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 (square meters) edge to edge (horizontally and vertically).

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

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

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 at least 72 hours in advance of beginning work.

STANDARDS:

701101-05	OFF-RD OPERATIONS, MULTILANE, 15' TO 24" AWAY FROM
	PAVEMENT EDGE

- 701106-02 OFF-RD OPERATION, MULTILANE, MORE THAN 15' AWAY
- 701427-05 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS <= 40 MPH
- 701601-09 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 701606-10 URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701611-01 URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701701-10 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701801-06 SIDEWALK, CORNER OR CROSSWALK CLOSURE
- 701901-08 TRAFFIC CONTROL DEVICES

DISTRICT DETAILS:

- TC-10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
- TC-13 TYPICAL PAVEMENT MARKINGS
- TC-16 TEMPORARY PAVEMENT MARKING AND SYMBOLS FOR TRAFFIC STAGING
- TC-22 ARTERIAL ROAD INFORMATION SIGN
- TC-26 DRIVEWAY ENTRANCE SIGNING

SPECIAL PROVISIONS:

- LRS #3 Work Zone Traffic Control Surveillance
- BDE 80388 #23 Equipment Parking and Storage
- BDE 80392 #33 Lights on Barricades
- BDE 80298 #59 Temporary Pavement Marking
- BDE 80409 #62 Traffic Control Devices Cones

FAU Rte 1380 Collins Ave/Fullerton Ave Section 18-00106-00-RS Contract No: 61F70 DuPage County

Public Convenience and Safety Maintenance of Roadways Temporary Information Signing

IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION

Effective: August 1, 2012 Revised: February 2, 2017

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

IDOT funds, and various Illinois community colleges operate, pre-apprenticeship training programs throughout the State to provide training and skill-improvement opportunities to promote the increased employment of minority groups, disadvantaged persons and women in all aspects of the highway construction industry. The intent of this IDOT Pre-Apprenticeship Training Program Graduate (TPG) special provision (Special Provision) is to place these certified program graduates on the project site for this Contract in order to provide the graduates with meaningful on-the-job training. Pursuant to this Special Provision, the Contractor must make every reasonable effort to recruit and employ certified TPG trainees to the extent such individuals are available within a practicable distance of the project site.

Specifically, participation of the Contractor or its subcontractor in the Program entitles the participant to reimbursement for graduates' hourly wages at \$15.00 per hour per utilized TPG trainee, subject to the terms of this Special Provision. Reimbursement payment will be made even though the Contractor or subcontractor may also receive additional training program funds from other non-IDOT sources for other non-TPG trainees on the Contract, provided such other source does not specifically prohibit the Contractor or subcontractor from receiving reimbursement from another entity through another program, such as IDOT through the TPG program. With regard to any IDOT funded construction training program other than TPG, however, additional reimbursement for other IDOT programs will not be made beyond the TPG Program described in this Special Provision when the TPG Program is utilized.

No payment will be made to the Contractor if the Contractor or subcontractor fails to provide the required on-site training to TPG trainees, as solely determined by IDOT. A TPG trainee must begin training on the project as soon as the start of work that utilizes the relevant trade skill and the TPG trainee must remain on the project site through completion of the Contract, so long as training opportunities continue to exist in the relevant work classification. Should a TPG trainee's employment end in advance of the completion of the Contract, the Contractor must promptly notify the IDOT District EEO Officer for the Contract that the TPG's involvement in the Contract has ended. The Contractor must supply a written report for the reason the TPG trainee involvement terminated, the hours completed by the TPG trainee on 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 separated TPG trainee.

Finally, the Contractor must maintain all records it creates as a result of participation in the Program on the Contract, and furnish periodic written reports to the IDOT District EEO Officer that document its contractual performance under and compliance with this Special Provision. Finally, through participation in the Program and reimbursement of wages, the Contractor is not relieved of, and IDOT has not waived, the requirements of any federal or state labor or employment law applicable to TPG workers, including compliance with the Illinois Prevailing Wage Act.

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 each utilized certified TPG Program trainee (TRAINEES TRAINING PROGRAM GRADUATE). The estimated total number of hours, unit price, and total price must be included in the schedule of prices for the Contract submitted by Contractor prior to beginning work. The initial number of TPG trainees for which the incentive is available for this contract is __1_.

The Department has contracted with several educational institutions to provide screening, tutoring and pre-training to individuals interested in working as a TPG trainee in various areas of common construction trade work. Only individuals who have successfully completed a Pre-Apprenticeship Training Program at these IDOT approved institutions are eligible to be TPG trainees. To obtain a list of institutions that can connect the Contractor with eligible TPG trainees, the Contractor may contact: HCCTP TPG Program Coordinator, Office of Business and Workforce Diversity (IDOT OBWD), Room 319, Illinois Department of Transportation, 2300 S. Dirksen Parkway, Springfield, Illinois 62764. Prior to commencing construction with the utilization of a TPG trainee, the Contractor must submit documentation to the IDOT District EEO Officer for the Contract that provides the names and contact information of the TPG trainee(s) to be trained in each selected work classification, proof that that the TPG trainee(s) has successfully completed a Pre-Apprenticeship Training Program, proof that the TPG is in an Apprenticeship Training Program approved by the U.S. Department of Labor Bureau of Apprenticeship Training, and the start date for training in each of the applicable work classifications.

To receive payment, the Contractor must provide training opportunities aimed at developing a full journeyworker in the type of trade or job classification involved. During the course of performance of the Contract, the Contractor may seek approval from the IDOT District EEO Officer to employ additional eligible TPG trainees. In the event the Contractor subcontracts a portion of the contracted work, it must determine how many, if any, of the TPGs will be trained by the subcontractor. Though a subcontractor may conduct training, the Contractor retains the responsibility for meeting all requirements imposed by this Special Provision. The Contractor must also include this Special Provision in any subcontract where payment for contracted work performed by a TPG trainee will be passed on to a subcontractor.

Training through the Program is intended to move TPGs toward journeyman status, which is the primary objective of this Special Provision. Accordingly, the Contractor must make every effort to enroll TPG trainees by recruitment through the Program participant educational institutions to the extent eligible TPGs are available within a reasonable geographic area of the project. The Contractor is responsible for demonstrating, through documentation, the recruitment efforts it has undertaken prior to the determination by IDOT whether the Contractor is in compliance with this Special Provision, and therefore, entitled to the Training Program Graduate reimbursement of \$15.00 per hour.

Notwithstanding the on-the-job training requirement of this TPG Special Provision, some minimal off-site training is permissible as long as the offsite training is an integral part of the work of the contract, and does not compromise or conflict with the required on-site training that is central to the purpose of the Program. No individual may be employed as a TPG trainee in any work classification in which he/she has previously successfully completed a training program leading to journeyman status in any trade, or in which he/she has worked at a journeyman level or higher.

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

SPECIAL PROVISION FOR INSURANCE

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

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

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

Village of Addison

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

RAILROAD RIGHT OF ENTRY

This section includes the CC&P/CN Special Provisions and requirements for working near, over, or under the railroad.

In addition to railroad protective liability insurance, any contractors working the CC&P/CN right of way will need to apply for a right-of-entry permit and pay the \$1000 fee. The prime contractor would apply for this permit and all subcontractors and subconsultants will be covered under the prime's policy and permit. This is only required in instances where the contract will require work on the CN right of way.

Method of Measurement. There will be no separate measurement or payment for fulfilling the requirements described herein, and all costs, direct or indirect, shall be included in the prices for other items.

Manager Public Works Paul Chojenski 17641 Ashland Avenue Homewood, IL 60430

T 708.332.3557 **F** 708.332.3514 Email: Paul.Chojenski@cn.ca

Right of Entry (ROE) License Agreement Information

Railroad Company requires <u>everyone</u> (contractor, consultants, etc.) working on Railroad Company property to have a Right-of-Entry (ROE) License Agreement. No work may occur on Railroad Company property nor will flagging protection be provided until ROE License Agreement has been fully executed by both parties and returned.

Follow these steps to obtain a ROE:

- 1. Applicant will **Email** this completed application to paul.chojenski@cn.ca
- 2. Applicant will **mail** a check for the application fee \$1000.00* to the address listed at the end of this document
- 3. Applicant will **Email** a COI (Certificate of Insurance) meeting the requirements outlined in the Insurance requirements section of this document
- 4. Once steps 1-3 are completed, the Railroad Company will begin processing the ROE application
- 5. If approved, the Applicant will receive an electronic copy of the ROE agreement by email
- 6. Applicant will have the ROE agreement executed by Applicant's VP or president of Applicant's company
- 7. Applicant will return a **HARD COPY** of the partially executed ROE agreement by mail to the Railroad Company address listed at the end of this document
- 8. The Railroad Company will return a fully executed digital copy of the ROE License Agreement by email for the Applicants records.

Please use this form and return by email to submit application request for a Right of Entry agreement.

Contact name and Email address -

Name of Applicant/contractor and email address -

Street Address –

City, State, Zip -

Telephone -

Detailed Purpose for ROE -

Start and Completion Date of ROE -

Public Agency's Project No. -

Public Agency Easement No. (if known) -

Location of project -

Subdivision and Milepost -

FRA/AAR/DOT Crossing No. and Name – (Nearest to jobsite)

If unable to locate this number at jobsite, please use following links to obtain: http://safetydata.fra.dot.gov/officeofsafety/publicsite/crossing/xinggryloc.aspx

In Illinois http://www.icc.illinois.gov/railroad/advanced.aspx? Please attach an aerial snapshot and a Google Earth kmz file to help identify specific location.

FAQ

What time frame can I expect to begin work and have flagging protection for my work?

A **Right of Entry License Agreement usually takes 4 to 6 weeks to obtain**. Once you have a fully executed ROE agreement, you will receive a flagging request form. This flagging request form along with prepayment for flagging fees will need to be *mailed to the physical address listed on the flagging request form*. Once this flagging request form is received, it is usually about **10 days until a flagger can be scheduled**. These are normal time frames. **Time frames can vary substantially** based on many factors. Expedited time frames may be able to be requested at an additional fee.

A brief summary of time frame for each step toward obtaining flagging protection...

- 1. Right of Entry License Agreement usually takes **4 to 6 weeks to obtain**.
- 2. Send in flagging check and flagging request form...about 1 week
- 3. Once this flagging request form is received, it is usually about **10 days** until a flagger can be scheduled

What are the insurance requirements?

Railroad Company allows outside parties to come onto Railroad Company property to perform work, such as survey or inspection work, installation of pipelines and wirelines, and other work for projects necessitating the occupancy of Railroad Company. Before commencing work, and until the license of allowing such occupancy ends or is terminated, outside parties shall provide and maintain the following insurance in form and amount with companies satisfactory to and as approved by Railroad Company.

- 1. Minimum insurance required of outside party:
 - A. Statutory Workers Compensation and Employer's Liability Insurance.
 - B. Automobile Liability Insurance in an amount not less than \$1,000,000 combined single limit.
 - C. Commercial General Liability Insurance (Occurrence Form) in an amount not less than \$5,000,000 per occurrence, with an aggregate limit of not less than \$10,000,000. The policy must name Railroad Company and its Parents as additional insureds in the following form:

Chicago, Central & Pacific Railroad Company and its Parents Attn: Paul Chojenski 17641 South Ashland Avenue Homewood, IL 60430 (708) 332-3557 (office) Paul.Chojenski@cn.ca

The policy must remove any provisions excluding coverage for injury, loss or damage arising out of or resulting from doing business or undertaking construction or demolition on, near, or adjacent to railroad track or facilities using endorsement CG 2417 10 01 or equivalent approved by Railroad Company. D. When outside party is required by Railroad Company or Governing Authority to purchase Railroad Protective Liability Insurance to cover work on, near or adjacent to railroad track or facilities, and outside party is not being hired for this project by Railroad Company, outside party must procure Railroad Protective Liability Insurance in the following form;

This coverage shall be written on an Occurrence Form with limits of not less than \$5,000,000 per occurrence for Bodily Injury, Personal Injury and Physical Damage to Property, with an aggregate limit of not less than \$10,000,000. The policy must name:

Chicago, Central & Pacific Railroad Company and its Parents Attn: Paul Chojenski 17641 South Ashland Avenue Homewood, IL 60430 (708) 332-3557 (office) Paul.Chojenski@cn.ca

Ε. In the event the privileges provided herein to Applicant involve any work that could result in the discharge, spillage, disposal, release or escape of any Hazardous Material or petroleum product onto the Railroad Company's property, Applicant shall purchase and maintain in effect at all times during the term of this License a Contractor's Pollution Liability policy in an amount not less than two million dollars (\$2,000,000) combined single limit (and with a deductible not to exceed \$50,000) insuring Railroad against any and all damages, costs, liabilities and expenses resulting from on- or off-site bodily injury (including death to any person), on or offsite loss, damage or destruction of property (including that belonging to the parties hereto), and on-or off-site cleanup costs (including expenses incurred in the investigation, removal, remediation, neutralization, or immobilization of contaminated soils, surface water, groundwater or any other contamination) growing out of or incidental to any discharge, spillage, disposal, release, or escape of any Hazardous Material or petroleum product arising therefrom. For purposes of this Agreement, the term "Hazardous Material" shall include, without limit, any flammable explosives, radioactive materials, hazardous materials, hazardous wastes, hazardous or toxic substances, or related materials defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. §§ 9601, et seq.), the Hazardous Material Transportation Act, as amended (49 U.S.C. §§ 1801, et seq.), the Resource Conservation and Recovery Act, as amended (42 U.S.C. §§ 6901 et seq.), the Toxic Substances Control Act, as amended (15 U.S.C. §§ 2601, et seq.), similar laws or ordinances enacted by any state, county or municipality in which the Property is located, or in the regulations adopted and publications promulgated pursuant to any of the above, as such laws or regulations now exist or may exist in the future.

Applicant is required to advise Railroad Company by thirty (30) day advance written notice when any work to be performed under this License may require Pollution Liability Insurance pursuant to the previous paragraph.

- F. All policies described above must include description of operations, Railroad Company milepost, highway or street name, city and state of location, project number, and Railroad Company contact person on the certificate.
- 2. Before commencing work, outside party shall deliver to Railroad Company a certificate of insurance evidencing the foregoing coverages and, if requested by Railroad Company, true and complete copies of the policies described above. If the policy is being issued in conjunction with, or as a result of, a city, county or state contract, the policy should be initially submitted to the respective city, county or state agency that will review it first and then forward it to Railroad Company.
- 3. Common Policy Provisions. Each policy described in paragraph 1, parts A through E above, must include the following provisions:
 - A. Each policy shall include a waiver by the insurer of any right of subrogation against any recovery by or on behalf of any insured.
 - B. Each policy shall provide for not less than thirty (30) days prior written notice to Railroad Company at the address listed above of cancellation of or any material change in that policy.

- 4. It is understood and agreed that the foregoing insurance coverage requirements, and outside party's compliance with those requirements, is not intended to, and shall not, relieve outside party from, or serve to limit, outside party's liability and indemnity obligations under the provisions herein.
- 5. Railroad Company shall have the right, from time to time, to revise the amount or form of insurance coverage required as circumstances or changing economic conditions may require. Railroad Company shall give outside party written notice of any such requested change at least thirty (30) days before the date of expiration of the then-existing policy or policies, outside party agrees to, and shall, thereupon provide Railroad Company with such revised policy or policies.
- 6. Insurance required of SUBCONTRACTOR:
 - A. If a SUBCONTRACTOR is to be employed by outside party to perform work on Railroad Company under or by the permission for occupancy granted to outside party by Railroad Company, before commencing work, the SUBCONTRACTOR shall provide and thereafter maintain all of the insurance described in paragraph 1, parts A through E, above, in the same forms and amounts as provided for above and subject to the other terms and conditions provided for in paragraphs 2 through 4 above.
 - B. In the alternative, before the SUBCONTRACTOR commences work for outside party on Railroad Company, outside party may provide and thereafter maintain all of the insurance described in paragraph 1, parts A through E, above, in the same forms and amounts as provided for above and subject to the other terms and conditions provided for in paragraphs 2 through 5 above, provided that all such insurance names SUBCONTRACTOR as an additional insured and all such insurance provides coverage to all additional insureds, including Railroad Company, for any liability arising out of work performed by all other additional insureds, including SUBCONTRACTOR.

Is safety training required?

Prior to any entry onto Railroad Company's property, the employees and/or subcontractors of a Contractor, Grantee, Licensee, or Permittee shall determine by the guidelines hereinafter provided and by the work to be performed the level of safety training to be required.

All employees and/or subcontractors of a Contractor, Grantee, Licensee, or Permittee not hired by Railroad Company that will work on CN property are required to have minimum <u>www.contractororientation.com</u>.

a. EXCEPTION: Railroad Company has exempted those it classifies as "Delivery Persons" from this training. This will include contractors such as UPS, FedEx, trucking companies, etc. who merely access the property to supply materials or equipment.

All employees and/or subcontractors of a Contractor, Grantee, Licensee, or Permittee hired by Railroad Company which will work on Railroad Company property are required to have minimum CN Safety and Security Awareness training, in addition to undergoing a background check. This training and background check must be obtained through the eRailSafe.com website. If not done before, the contractor must contact e-RailSafe at 855-383-7434 to be issued either a vendor number or issued instructions on obtaining a non –railroad contractor vendor number prior to accessing the noted website. Minimum information required of a Contractor, Grantee, Licensee, or Permittee and/or their subcontractor when contacting e-RailSafe is Name, Address, Telephone, Contact Person for State Projects, DOT Contract Number, and the AAR/DOT Number. This training is good for a period of two years.

- a. EXCEPTION: Railroad Company has exempted those employees of contractors providing paving services at a road crossing under construction or repair from this requirement.
- b. EXCEPTION: Railroad Company has exempted those it classifies as "Delivery Persons" from this training. This will include contractors such as UPS, FedEx, trucking companies, etc. who merely access the property to supply materials or equipment.

All employees and/or subcontractors of a Contractor, Grantee, Licensee, or Permittee hired by Railroad Company, whose duties include and who are engaged in the inspection, construction, maintenance, or repair of railroad track, bridges, roadway, signal and communication systems, roadway facilities, or roadway machinery that will work foul of or have the potential to foul a live track are considered Roadway Workers under FRA regulations and CN Policy. They must complete the On-Track Safety Training course approved by Railroad Company and provided by R.R. Safety – AMR, P.O. Box 75, Lomira, WI 53048, telephone (920) 517-1677, email rrsafetytraining@yahoo.com. This training must be repeated at least once each calendar year.

- a. EXCEPTION: Railroad Company has exempted those employees of contractors providing paving services at a road crossing under construction or repair from this requirement.
- b. EXCEPTION: Railroad Company has exempted those it classifies as "Delivery Persons" from this training. This will include contractors such as UPS, FedEx, trucking companies, etc. who merely access the property to supply materials or equipment.
- c. All the employees and/or subcontractors of a Contractor, Grantee, Licensee, or Permittee who will operate on-track machinery or those who will provide protection for other employees and/or subcontractors of a Contractor, Grantee, Licensee, or Permittee must also be trained on CN US Operating Rules pertaining to their duties. They must take and pass the required examination. This training is good for a period of two years.
- d. "Potential to foul a live track" is considered, at a minimum, to be working within twenty-five (25) feet of the track; or as otherwise to be determined by CN Design & Construction Department.

The employees, subcontractors, and/or agents of the Licensee and/or its contractor shall qualify for, and make available for inspection to Railroad Company's employees or other authorized personnel at all times while on Railroad Company property, a photo identification issued by <u>www.e-railsafe.com</u>, along with at least one other government-issued form of identification. Licensee and/or their contractor shall bear all costs of compliance with the requirements of this Section. Railroad Company reserves the right to bar any of employees or agents of a Contractor, Grantee, Licensee, or Permittee and/or their contractor from Railroad Company's property at any time for any reason.

What are the costs and address to mail documents and ROE application fee check?

Application Fee Information:

Cost is \$1000.00* for application *Fee may be increased for special handling, expedited handling, or multiple reviews.

Check Payable To:	Chicago, Central & Pacific Railroad Company
Mail To:	Chicago, Central & Pacific Railroad Company Attn: Paul Chojenski 17641 South Ashland Ave Homewood, IL 60430

Mailing Address Information:

Mail To:	Chicago, Central & Pacific Railroad Company			
	Attn: Paul Chojenski			
	17641 South Ashland Ave			
	Homewood, IL 60430			

Flagging Protection Rates:

Basic daily rate –	= \$1,300.00 per day Monday thru Friday regular business hours Includes 8 standard rate hours and 2 OT hours to set flags
Overtime rate –	= \$150.00 per hour hours in excess of 8 hours or outside of regular business hours
Weekend or holiday rate -	= \$1,500.00 per day \$150.00 per hour with a 10 hour minimum

Email the completed first page above to: <u>Paul.Chojenski@cn.ca</u>

Revised 11-07-2016



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 III. Adm. Code 1100, as

amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 III. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: Collins Ave/Fullerton A	ve Resurfacing Impro	ovements Office Phone	Number, if available: 630-693-7535
Physical Site Location (address, incldu			
Collins Ave/Fullerton Ave from Swift R	oad to Addison Road	l	
City: Addison	State: IL	Zip Code: 60101	
County: DuPage		Township: Addison	(40N)
Lat/Long of approximate center of site	in decimal degrees (I	DD.ddddd) to five decima	al places (e.g., 40.67890, -90.12345):
Latitude: <u>41.91917</u> Longit	ude: - <u>88.01627</u>		
(Decimal Degrees)	(-Decimal De	grees)	
Identify how the lat/long data were d	etermined:		
🗌 GPS 🛛 🔀 Map Interpolation	Photo Interpolat	ion 🗌 Survey 🔲	Other
IEPA Site Number(s), if assigned:	BOL:	BOW:	BOA:
II. Owner/Operator Informatio	n for Source Site	`	
Site Owner		•	Site Operator
Name: Village of Addison - Pe	ublic Works Dept	_ Name:	
Street Address: <u>1 friendship Plaza</u>		Street Address:	
PO Box:		PO Box:	
City: Addison	State: IL	_ City:	State:
Zip Code: 60101 Pho	ne: 630-693-7535	Zip Code:	Phone:
Contact: Kai T. Liu, P.E., CFM		_ Contact:	
Email, if available: kliu@addison-il.org		Email, if available:	

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). This form has been approved by the Forms LPC 663 Rev. 8/2012 Management Center.

Project Name: Collins Ave/Fullerton Ave Resurfacing Improvement

Latitude: <u>41.91917</u> Longitude: -88.01627

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

 A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 III. Adm. Code 1100.610(a)]:

A PESA was completed in October 2018, which identified 44 PIPs. Excavation associated with utility improvements was planned at 12 of these locations. A total of 16 soil borings were completed to investigate conditions along the Project Corridor, including at locations where excavation is planned near PIPs. See attached narrative for further details.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 III. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 III. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

Areas characterized by SB-1 and SB-15 had levels of PNAs above the MAC values and SB-8 had soil pH outside the acceptable range. Material excavated from these locations is ineligible for CCDD disposal. All other areas investigated achieve the MACs and had soil pH within the acceptable range for CCDD disposal. See attached narrative for further details.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I. Jeremy J. Reynolds, P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 III. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

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))

Company Name:	Huff & Huff, Inc.				
Street Address:	915 Harger Road, Suite 330				
City:	Oak Brook	State: IL	Zip Code	60523	
Phone:	630-684-9100				OFESSIO
Jeremy J. Reynolds, P.G. Printed Name: Licensed Professional E Licensed Professional G		<u> 2 28</u>	Date:	-ICE NOED	JEREMY J. REYNOLDS 196-001170 P.E. or L.P.G. Seal



Uncontaminated Soil Certification

by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD

or Uncontaminated Soil Fill Operation.

LPC-663

Owner: Village of Addison, IL

Project Name: Collins Avenue/Fullerton Avenue Resurfacing Improvements

III. Basis for Certification and Attachments

Explain the basis upon which you are certifying that the soil from this site is uncontaminated soil.

This form pertains to soils excavated during utility improvements as part of the Collins Avenue/Fullerton Avenue resurfacing improvements. The Project Corridor extends from Swift Road to Addison Road, a total length of approximately 2.75 miles, in Addison, DuPage County, Illinois. Proposed improvements include hot-mix asphalt (HMA) surface removal to a depth of 4 inches, roadway patching to a maximum depth of 14 inches, curb removal and replacement, median removal, sidewalk and driveway removal and replacement, drainage structure improvements, and storm sewer replacements. Soil is only expected to be excavated for disposal where drainage structure improvements and storm sewer replacements are planned.

A map depicting the Project Area location, identified sites, and sample locations is included in **Attachment A**, analytical results are included in Attachment B, a Preliminary Environmental Site Assessment (PESA) for the project was completed and is included in Attachment C, and excerpted project plans marked up to identify excavation areas and soil boring locations is included in Attachment D. The PESA included in Attachment C includes an environmental database, historic aerials, and site photographs. Excerpts from the PESA discussing identified PIPs and a review of historic aerials is included below.

Historic Aerials

Per the 2016 PESA, aerial photographs of the project area were provided by Environmental Risk Information Services (ERIS). The earliest photograph available is dated 1939. Photographs from 1946, 1952, 1955, 1962, 1972, 1978, 1988, 1998, 2006, 2007, 2009, 2010, 2011, 2012, 2014, 2015, and 2017 were also reviewed. A general discussion of the aerials is provided below:

- **1939** The area is primarily undeveloped/agricultural with occasional farm residences present. Fullerton Avenue/Collins Avenue is present east of Rohlwing Road as are other major roads in the area, such as IL 53 and Addison Road. The CN Railroad is present to the south of the Project Corridor.
- **1946** Fullerton Avenue/Collins Avenue is not present west of Rohlwing Road along its present alignment.
- **1952** Additional residential development is present near the eastern limits of the Project Corridor. Additional buildings and runways are present to the north of the Fullerton Avenue/Collins Avenue and between Swift Road and Rohlwing Road. Additional research indicated that this was Mitchell Field, a small, historic airport.
- **1955** Additional residential development is present near the eastern limits of the Project Corridor.



- **1962** Additional residential development is present along the eastern portion of the Project Corridor and in the surrounding area. A few larger buildings are present along the south side of the eastern portion of the Project Corridor and land disturbance is visible to the north of the eastern portion of the Project Corridor.
- **1972** Additional large buildings are present along the western and eastern portions of the Project Corridor. The railroad spur that crosses the western portion of the Project Corridor is also visible.
- **1978** Additional large buildings are present primarily along the western and central portions of the Project Corridor. Mitchell Field is no longer present.
- **1988** Additional development, consisting primarily of larger commercial/industrial structures, is present throughout the Project Corridor. I-355 is no present and crosses the Project Corridor between Swift Road and Rohlwing Road.
- **1998** Additional large buildings are present primarily along the western and central portions of the Project Corridor.
- **2006** Additional large buildings are present primarily along the central portion of the Project Corridor.
- 2007, 2009, 2010, 2011, 2012, 2014, 2015, and 2017 No significant changes are visible in aerial photographs reviewed after 2006.

Records Search

Per the 2018 PESA, a total of 44 PIPS were identified along the Project Corridor. Excavations are planned near 12 of these locations. All PIPS are listed in the table below, but only the 12 locations with planned improvements are discussed in detail. For a discussion of all sites along the Project Corridor, please refer to the full PESA in Attachment C.

Site Name	Figure 5-1 Site ID	Address	Reason(s)	Excavation Planned?
CN Railroad	1	NA	Railroad	YES
Iron Mountain/ Kehe Food Distributors Inc.	2	333 Swift Road	SPILLS	No
Ari Industries, Inc.	3	381 Ari Court	RCRA, Tier 2	No
Railroad Spur	4	NA	Railroad	YES
West & Sons	5	1821 W. Fullerton Ave	RCRA	No
Vanport Warehousing, Inc.	6	350 S. Rohlwing Rd	SPILLS, SPILLS2	YES
Presta Robertino, Caputo's Warehouse	7	1811 W. Fullerton Ave	LUST, UST, SPILLS	YES
Former Nike Base C72	10	Rte 53 and Fullerton Ave	UST	YES
Krack Corporation/ Porter Pipe and Supply	11	401 S. Rohlwing Rd	Eng, Inst, SRP, RCRA	YES
Environmental Recycling	13	1750 W. Fullerton Ave	Recycling Operation	YES
WW Grainger	14	1545 W. Fullerton Ave	RCRA	No
Assembled Circuits Inc, Herbert Hinz, Syn- Tech Ltd, The Jeff Diver Group, HINZ Management	15	1550 W. Fullerton Ave	RCRA, LUST, SPILLS, UST	No



Site Name	Figure 5-1 Site ID	Address	Reason(s)	Excavation Planned?
Homestar Insurance, 1515 Fullerton Bldg, Gary Gurvey, Berger Transfer and Storage, Gurvey Wechsler, Unknown, Game Plan, Inc.	16	1515 W. Fullerton Ave	LUST, SPILLS, SPILLS2, UST, RCRA	No
ZMC Inc., Spectra Metal Sales Inc.	17	1540 W. Fullerton Ave	LUST, RCRA, SPILLS, UST	No
Brink, Inc., United Rent-a-Fence	18	1500 W. Fullerton Ave	LUST, SPILLS, UST	No
United Parcel Service/ US Army Corps of Engineers	19	Lombard & Fullerton	LUST, SPILLS	No
Syn Tech Ltd	20	1433 W. Fullerton Ave	RCRA	No
Yellow Freight Lines, Fleetwood Industrial Supply	24	1410 W. Fullerton Ave	SPILLS	No
Roadway Package System, UPS	26	1404 W. Fullerton Ave	LUST, RCRA, SPILLS, UST	No
Famous Industries Inc.	27	1405 W. Fullerton Ave	SRP, Inst, Eng	No
Ashton Plating Co, Quik Impressions	28	1345 W. Fullerton Ave	RCRA, Inst, SRP, Plating Operation	No
Mauser Corp	29	1350 W. Fullerton Ave	RCRA, Tier 2	YES
AC Transmission	30	1215 W. Fullerton Ave	Auto Service	No
Charles Equipment Co	31	1140 W. Fullerton Ave	RCRA	YES
Kellys Scraping and Rppr Svc	32	1130 W. Fullerton Ave	RCRA	YES
Cary Co, Silgan Containers Mfg Corp, OMG Fidelity, Evonik Corp @ Cary Warehouse, The Cary Company, Mibius Inc	33	1195 W. Fullerton Ave	RCRA, Tier 2, TSCA	No
Circuit Sys Inc., Clydes Donuts	34	1120 W. Fullerton Ave	ERNS, Hist Milts, RCRA, Tier 2	No
A C Auto Repair Inc, Blondas Automotive Service	35	1100 W. Fullerton Ave	RCRA, Auto Repair	No
CJT Koolcarb Inc, XL Auto Group	36	1040 W. Fullerton Ave	RCRA	No
Quality Fabricators	37	1035 W. Fullerton Ave	RCRA	YES
Gerber Auto	46	401 Grace Street	RCRA, Auto Repair	No
7-Eleven, Mobil	47	800 W. Fullerton Ave	RCRA, UST, gas station	No
Unknown, JMS Imaging Products, Professional Transmissions, Land Owner South of Impacted Party	49	739 W. Fullerton Ave	ERNS, RCRA, SPILLS	No
Epic Equipment	51	711 W. Fullerton Ave	RCRA	No
International Printing, Zone Motors Chicago	53	525-527 W. Fullerton	RCRA	No
Brinks Inc.	54	500 W. Fullerton Ave	SPILLS	YES
Comfab Technologies Inc., Flowserve Innomag Sealless Pumps	55	409 S. Vista St	Eng, Inst, SRP	
Addison Park District	57	414 W. Fullerton Ave	LUST, UST, SPILLS	No
RCF Properties, Life Storage	60	426 Westgate St	UST, SPILLS, LUST	No

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Site Name	Figure 5-1 Site ID	Address	Reason(s)	Excavation Planned?
Datalizer Slide Charts Inc.	61	501 Westgate St	UST	No
Precision Service Mtr Inc	62	121 W. Fullerton Ave	RCRA, Auto Repair	No
Addison Auto Body, Qual Tech Circuits Inc., Schmitts Collision Crafters, El Chino Auto Repair, Anthony's Collision Center, Pinnacle Motorwerks, Max O&A Inc, Salazar's Auto	63	101-109 W. Fullerton Ave	RCRA, Auto Repair	No
Unknown, Selective Plating Inc, Mardol Inc., Perfect Plastic Printing Co, Magic Home Improvement Inc., Stradas Autobody, AllFlow Services, W. Tesmer and Associates Inc., CD Tools Machining Inc., Anchor Products Co., Americas Best, Batteries Unlimited, AAC Auto Clinic, Ages Resale Shop, Next Level, Addison Auto Interiors, New View Construction Inc.	65	27-31 W. Fullerton Ave	SPILLS2, RCRA	No
Shell Oil Co	67	415 S. Addison Rd	RCRA, SPILLS, UST, LUST	No

CN Railroad (Site ID 1)

The CN Railroad is present adjacent to the south of the western limits of the Project Corridor. This railroad was present prior to 1939. Railroads have historically used pesticides and herbicides for vegetative and pest control. Railroad ties were also historically treated with chemicals such as creosote and metals. Based upon the proximity to the Project Corridor and potential for historic chemical use, **this site is considered a PIP.**

Railroad Spur (Site ID 4)

Railroad spurs from the CN Railroad cross the Project Corridor to the east of I-355 and between IL-53and Lombard Road. These railroad spurs have been present since at least 1972. Railroads have historically used pesticides and herbicides for vegetative and pest control. Railroad ties were also historically treated with chemicals such as creosote and metals. Based upon the proximity to the Project Corridor and potential for historic chemical use, **this site is considered a PIP.**

350 S.Rohlwing Road (Site ID 6)

The site at 350 S. Rohlwing Road is located adjacent to the north of the Project Corridor. This site was identified as Vanport Warehousing Inc. during site reconnaissance and appeared in the SPILLS and SPILLS2 databases. A SPILLS incident was reported on February 7, 2017 involving the release of approximately 100 gallons of diesel fuel from a truck's saddle tank. A SPILLS2 incident was also reported on February 7, 2017. Based on the presence of a release and proximity to the Project Corridor, **this site is considered a PIP**.

1811 W. Fullerton Avenue (Site ID 7)

The site at 1811 W. Fullerton Avenue is located adjacent to the south of the Project Corridor. This site was identified as Presta Robertino and Caputo's warehouse and appeared in the LUST, UST and SPILLS RCRA databases. A LUST incident was reported on April 28, 2009 involving the release of gasoline and diesel fuel. This incident received a No Further



Remediation (NFR) letter without restrictions on July 16, 2009. A SPILLS incident was also reported on April 28, 2009 involving the release of gasoline and diesel fuel from USTs. The following USTs were listed for the site:

- One 8,000-gallon diesel fuel UST (removed)
- One 8,000-gallon gasoline UST (removed)
- One 4,000-gallon gasoline UST (currently in use)
- One 6,000-gallon diesel fuel UST (currently in use)

Based upon the presence of USTs, historic release, and proximity to the Project Corridor, this site is considered a PIP.

W. Fullerton Avenue and IL Route 53 (Site ID 10)

The site at Fullerton Avenue and IL Route 53 is located in close proximity and potentially historically adjacent to the Project Corridor. This site was listed as Former Nike Base C72 and a remnant of the site was identified during site reconnaissance as Nike Park, located approximately 1000 feet north of Fullerton (East of IL 53), and appeared in the UST database. One 3,000-gallon UST (installed in 1902, removed) was listed for this site. In addition, the former Nike Bases are also associated with solvent impacts. Since the original footprint of the Nike Base facility is unknown and based on the historic presence of a UST and potential impacts for solvents, **this site is considered a PIP**.

401 S. Rohlwing Road (Site ID 11)

The site at 401 S. Rohlwing Road is located adjacent to the south of the Project Corridor. This site was identified as Porter Pipe and Supply during site reconnaissance and as Krack Corporation in the RCRA, SRP, Inst, and Eng databases. The site was enrolled in the SRP program on June 17, 2009 and received a NFR letter on September 15, 2011. The NFR letter listed industrial/commercial use restriction and worker caution as institutional controls and concrete barrier and asphalt barrier as engineered barriers. The site was listed as a RCRA non-generator of spent solvents. Based upon the presence in the SRP database and potential chemical use or storage on site, **this site is considered a PIP**.

1750 W. Fullerton Ave (Site ID 13)

The site at 1750 W. Fullerton Avenue is located adjacent to the north of the Project Corridor. This site was not listed in any environmental databases; however, this site was identified as Environmental Recycling during site reconnaissance. Aerial photographs depict outside storage of materials and material spreading off of the east side of the property. Based upon housekeeping practices associated with the recycling operation, **this site is considered a PIP**.

1350 W. Fullerton Ave (Site ID 29)

The site at 1350 W. Fullerton Avenue is located adjacent to the north of the Project Corridor. This site was identified as Mauser Corp in the RCRA and Tier 2 databases. This site was listed as a conditionally exempt small quantity RCRA generator of tetrachloroethylene and ignitable waste. The site was listed in the Tier 2 database due to the presence of polyethylene and highly refined mineral oil. Due to chemical use and storage on site, **this site is considered a PIP**.

1140 W. Fullerton Ave (Site ID 31)

The site at 1140 W. Fullerton Avenue is located adjacent to the north of the Project Corridor. This site was identified as Charles Equipment Co and appeared in the RCRA database. The site was listed as small quantity RCRA generator of ignitable waste. Based on the potential chemical use and storage, **this site is considered a PIP**.

1130 W. Fullerton Ave (Site ID 32)

The site at 1130 W. Fullerton Avenue is located adjacent to the north of the Project Corridor. This site was identified as Kellys Scraping and Rppr Svc and appeared in the RCRA database. The site was listed as conditionally exempt small quantity RCRA generator of ignitable waste. Based on the potential chemical use and storage, **this site is considered a PIP**.



December 28, 2018 CCDD LPC-663 Form Collins Avenue/Fullerton Avenue Resurfacing Improvements - Addison, DuPage County, Illinois Page 6

1035 W. Fullerton Ave (Site ID 37)

The site at 1035 W. Fullerton Avenue is located adjacent to the south of the Project Corridor. This site was identified as Quality Fabricators and appeared in the RCRA database. This site was listed as a small quantity RCRA generator of ignitable waste. Based on the potential chemical use and storage, **this site is considered a PIP.**

500 W. Fullerton Ave (Site ID 54)

The site at 500 W. Fullerton Avenue is located north of the Project Corridor. This site was identified as Brinks and appeared in the SPILLS database. A SPILLS incident was reported on December 7, 1989 involving the release diesel fuel from a UST. Based upon the presence of a release, this site is considered a PIP.

Analytical Summary

In order to assess impacts to the Project Corridor soils from the identified PIPs in areas where excavation is planned, and to determine CCDD suitability of soils for pH, 16 soil borings were advanced via hand auger within the Project Area to depths of 3 feet bgs, except at SB-10 which was advanced to 5 feet bgs. Soils were screened using a PID meter and representative soil samples were collected. All PID readings were 0.0 and are summarized in the following table.

Sample ID	Depth, ft	PID, ppm	Sample ID	Depth, ft	PID, ppm
SB-1	0-1	0.0	SB-11	0-1	0.0
	1-3	0.0		1-3	0.0
SB-2	0-1	0.0	SB-12	0-1	0.0
	1-3	0.0		1-3	0.0
SB-3	0-1	0.0	SB-13	0-1	0.0
	1-3	0.0		1-3	0.0
SB-4	0-1	0.0	SB-14	0-1	0.0
	1-3	0.0		1-3	0.0
SB-5	0-1	0.0	SB-15	0-1	0.0
	1-3	0.0		1-3	0.0
SB-6	0-1	0.0	SB-16	0-1	0.0
	1-3	0.0		1-3	0.0
SB-7	0-1	0.0			
	1-3	0.0			
SB-8	0-1	0.0			
	1-3	0.0			
SB-9	0-1	0.0			
	1-3	0.0			
SB-10	0-1	0.0			
	1-3	0.0			
	3-5	0.0			

Bold indicates sample submitted for analytical testing PID (10.6 eV) background reading measured at 0.0 ppm

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VOCs (and subset BTEX)

Based upon the identified PIPS, 11 soil samples were analyzed for VOCs or benzene, toluene, ethylbenzene, and xylenes (BTEX), a subset of VOCs. All VOC and BTEX results were non-detect

SVOCs (and subset PNAs)

Ten soil samples were analyzed for SVOCs or PNAs, a subset of SVOCs. PNA compounds were detected in nine of the ten samples, as displayed in the table on the following page. Based on the PNA results, material characterized by SB-1 and SB-15 are ineligible for CCDD disposal, as each boring had results above the MACs. All other areas investigated for PNAs had results that achieve the MACs.

Total RCRA Metals

Three soil samples were analyzed for total RCRA metals and one soil sample was analyzed for total lead. Lead, arsenic, barium, chromium, and silver were detected in each sample, while cadmium, selenium, and mercury were detected above the reporting limits. Metal results are displayed on the table below.

Sample ID	Maximum Allowable Concentration	SB-1	SB-2	SB-5	SB-8
Sample Depth	Within an MSA County	1-3'	1-3	1-3'	1-3'
Constituent			mg/kg		
Arsenic	13.0	9.7	6.6		6.6
Barium	1,500	84.1	74.4		32.7
Cadmium	5.2	< 0.5	< 0.5		< 0.5
Chromium	21	18.7	17		11.9
Lead	107	33.9	21.5	19.2	23.8
Mercury	0.89	< 0.05	< 0.05		< 0.05
Selenium	1.3	<1.0	<1.0		<1.0
Silver	4.4	0.4	0.4		0.3

Bold = Constituent detected above its reporting limit

Bold/Shaded = Constituent detected above its applicable MAC

--- Constituent for which sample was not analyzed

Note: Table only includes samples analyzed for metals

Pesticides

Two soil samples were analyzed for pesticides The pesticide results were below detection limits and achieve the MACs.

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December 28, 2018 CCDD LPC-663 Form Collins Avenue/Fullerton Avenue Resurfacing Improvements - Addison, DuPage County, Illinois

Page 1

Sample ID	Maximum Allowable Concentration Within a	SB-1	SB-2	SB-3	SB-4	SB-5	SB-8	SB-10	SB-11	SB-12	SB-15
Sample Depth	Populated Area in a MSA Excluding Chicago	1-3' `	1-3'	1-3'	. 1-3'	1-3'	1-3'	3-5'	1-3'	1-3'	1-3'
Constituent			mg/kg-	J6							
Acenaphthene	570	0.257	<0.05	<0.05	<0.05	<0.05	<0.33	<0.33	<0.05	<0.05	0.191
Acenaphthylene	85	0.374	<0.05	<0.05	<0.05	<0.05	<0.33	<0.33	<0.05	<0.05	0.606
Anthracene	12,000	1.23	<0.05	<0.05	0.073	<0.05	<0.33	<0.33	<0.05	<0.05	1.26
Benzo(a)anthracene	1.8	3.09	0.0337	0.062	0.315	<0.0087	<0.33	<0.33	0.200	0.051	3.270
Benzo(a)pyrene	2.1	2.84	0.030	0.060	0.402	<0.015	0.095	0.131	0.200	0.054	2.640
Benzo(b)fluoranthene	2.1	2.68	0.027	0.050	0.364	<0.011	<0.33	<0.33	0.220	0.058	2.660
Benzo(k)fluoranthene	6	2.27	0.036	0.065	0.328	<0.011	<0.33	<0.33	0.163	0.043	2.140
Benzo(ghi)perylene	2300	1.93	<0.05	<0.05	0.384	<0.05	<0.33	<0.33	0.153	<0.05	1.490
Chrysene	88	2.99	<0.05	0.061	0.34	<0.05	<0.33	<0.33	0.202	0.054	2.950
Dibenzo(a,h)anthracene	0.420	0.501	<0.02	<0.02	0.079	<0.02	<0.33	<0.33	0.036	<0.02	0.501
Fluoranthene	3100	8.380	0.056	0.108	0.667	<0.05	<0.33	<0.33	0.347	0.107	5.110
Fluorene	560	0.376	<0.05	<0.05	<0.05	<0.05	<0.33	<0.33	<0.05	<0.05	0.350
Indeno(1,2,3-cd)pyrene	1.6	2.02	<0.029	0.048	0.346	<0.029	<0.33	<0.33	0.157	0.048	1.63
Naphthalene	1.8	0.033	<0.025	<0.025	<0.025	<0.025	<0.33	<0.33	<0.025	<0.025	0.041
Phenanthrene	210	4.19	<0.05	<0.05	0.364	<0.05	<0.33	<0.33	0.141	<0.05	3.28
Pyrene	2300	7.72	0.053	0.101	0.643	<0.05	<0.33	<0.33	0.308	0.092	4.61
Bold = Constituent detected above its reporting limit	l above its reporting lin	mit									
Bold/Shaded											

Note: Table only includes samples analyzed for SVOCs/PNAs



<u>Soil pH</u>

Fourteen samples were submitted for soil pH analysis and are considered representative of the entire Project Corridor. The pH results ranged from 7.82 to 9.06. One soil boring, SB-8, had soil pH results outside the acceptable range of 6.25 to 9.0 for CCDD disposal. Therefore, soils SB-8 are excluded from CCDD disposal, but may be reused on site. All other areas achieve the soil pH requirement for CCDD disposal.

CCDD Determination

A PESA for the Project Corridor identified a total of 44 PIPs along the Project Corridor. Based on the project plans included in Appendix D, it was determined that excavation would occur adjacent to 12 of these PIPs. A total of 16 soil borings were conducted along the Project Corridor. All excavation areas achieved the MACs, with the following exceptions:

- SB-1 had PNA levels above the MACs and material characterized by this boring is considered A-5 soil and should be disposed of off-site as non-special waste (Station 11+74 to Station 20+00).
- SB-8 had soil pH of 9.06, which is outside the acceptable range for CCDD disposal. Material at this location is considered B-1 soil and is eligible for re-use on site or can be disposed off-site as uncontaminated soil except at CCDD or USFO facilities (Station 46+00 to Station 56+00).
- SB-15 had PNA levels above the MACs and material characterized by this boring is considered A-5 soil and should be disposed of off-site as non-special waste (Station 108+00 to 127+00).

Should conditions within the Project Area change, such as unusual staining, odors, or if loads become rejected, additional analytical assessment may be required for final disposition of spoils from this Project Area. If you have any questions regarding this matter, please contact us at 630-684-9100



ATTACHMENT A









BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)

Effective: November 2, 2006 Revised: August 1, 2017

Description. Bituminous material cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The bidder shall indicate with their bid whether or not this special provision will be part of the contract.

The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and preventative maintenance type surface treatments that are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, joint filling/sealing, or extra work paid for at a lump sum price or by force account.

Method of Adjustment. Bituminous materials cost adjustments will be computed as follows.

 $CA = (BPI_P - BPI_L) \times (%AC_V / 100) \times Q$

Where: CA = Cost Adjustment, \$.

- BPI₽ = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).
- BPI = Bituminous Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/ton (\$/metric ton).
- $%AC_V$ = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC_{V} will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% ACv and undiluted emulsified asphalt will be considered to be 65% AC_V.
- Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: Q, tons = A x D x (G_{mb} x 46.8) / 2000. For HMA mixtures measured in square meters: Q, metric tons = A x D x (G_{mb} x 1) / 1000. When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different G_{mb} and % AC_V.

For bituminous materials measured in gallons:	Q, tons = V x 8.33 lb/gal x SG / 2000
For bituminous materials measured in liters:	Q, metric tons = $V \times 1.0 \text{ kg/L} \times \text{SG} / 1000$

Where: A

- = Area of the HMA mixture, sq yd (sq m). D
 - = Depth of the HMA mixture, in. (mm).
- = Average bulk specific gravity of the mixture, from the approved mix design. G_{mb}

- V = Volume of the bituminous material, gal (L).
- SG = Specific Gravity of bituminous material as shown on the bill of lading.

<u>Basis of Payment</u>. Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the BPI_L and BPI_P in excess of five percent, as calculated by:

Percent Difference = {(BPI_L - BPI_P) \div BPI_L} × 100

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the work placed during the month are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

COMPENSABLE DELAY COSTS (BDE)

Effective: June 2, 2017 Revised: April 1, 2019

Revise Article 107.40(b) of the Standard Specifications to read:

- "(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows.
 - (1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.
 - (2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.
 - (3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days."

Revise Article 107.40(c) of the Standard Specifications to read:

- "(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.
 - (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.

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

(2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the

Contractor's yard or another job and the cost to re-mobilize, whichever is less. Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

(3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven calendar days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

Payment for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be determined according to Article 109.13."

Revise Article 108.04(b) of the Standard Specifications to read:

- "(b) No working day will be charged under the following conditions.
 - (1) When adverse weather prevents work on the controlling item.
 - (2) When job conditions due to recent weather prevent work on the controlling item.
 - (3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.
 - (4) When delays caused by utility or railroad adjustments prevent work on the controlling item.
 - (5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.
 - (6) When any condition over which the Contractor has no control prevents work on the controlling item."

Revise Article 109.09(f) of the Standard Specifications to read:

"(f) Basis of Payment. After resolution of a claim in favor of the Contractor, any adjustment in time required for the work will be made according to Section 108. Any adjustment in the costs to be paid will be made for direct labor, direct materials, direct equipment, direct jobsite overhead, direct offsite overhead, and other direct costs allowed by the resolution. Adjustments in costs will not be made for interest charges, loss of anticipated profit, undocumented loss of efficiency, home office overhead and unabsorbed overhead other than as allowed by Article 109.13, lost opportunity, preparation of claim expenses and other consequential indirect costs regardless of method of calculation.

The above Basis of Payment is an essential element of the contract and the claim cost recovery of the Contractor shall be so limited."

Add the following to Section 109 of the Standard Specifications.

"**109.13 Payment for Contract Delay.** Compensation for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be allowed when such costs result from a delay meeting the criteria in the following table.

Contract Type	Cause of Delay	Length of Delay
Working Days	Article 108.04(b)(3) or Article 108.04(b)(4)	No working days have been charged for two consecutive weeks.
Completion Date	Article 108.08(b)(1) or Article 108.08(b)(7)	The Contractor has been granted a minimum two week extension of contract time, according to Article 108.08.

Payment for each of the various costs will be according to the following.

- (a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.
- (b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.
 - (1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

Original Contract Amount	Supervisory and Administrative Personnel
Up to \$5,000,000	One Project Superintendent
Over \$ 5,000,000 - up to \$25,000,000	One Project Manager, One Project Superintendent or Engineer, and One Clerk
Over \$25,000,000 - up to \$50,000,000	One Project Manager, One Project Superintendent, One Engineer, and

	One Clerk
0 050 000 000	One Project Manager, Two Project Superintendents,
Over \$50,000,000	One Engineer, and One Clerk

- (2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.
- (c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid for according to Article 109.04.

When an extended traffic control adjustment is paid under this provision, an adjusted unit price as provided for in Article 701.20(a) for increase or decrease in the value of work by more than ten percent will not be paid.

Upon payment for a contract delay under this provision, the Contractor shall assign subrogation rights to the Department for the Department's efforts of recovery from any other party for monies paid by the Department as a result of any claim under this provision. The Contractor shall fully cooperate with the Department in its efforts to recover from another party any money paid to the Contractor for delay damages under this provision."

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* (<u>http://www.epa.gov/cleandiesel/verification/verif-list.htm</u>), or verified by the California Air Resources Board (CARB) (<u>http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm</u>); 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.

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000 Revised: March 2, 2019

<u>FEDERAL OBLIGATION</u>. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory.

<u>STATE OBLIGATION</u>. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

<u>CONTRACTOR ASSURANCE</u>. The Contractor makes the following assurance and agrees to include the assurance in each subcontract 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.

<u>OVERALL GOAL SET FOR THE DEPARTMENT</u>. 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.

<u>CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR</u>. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined 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, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 13.00 % 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 enough DBE participation has been obtained to meet the goal or,
- (b) The bidder documents a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

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

http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprisecertification/il-ucp-directory/index.

<u>BIDDING PROCEDURES</u>. Compliance with this Special Provision is a material bidding requirement and failure of the bidder to comply will render the bid not responsive.

The bidder shall submit a DBE Utilization Plan (form SBE 2026), and a DBE Participation Statement (form SBE 2025) for each DBE company proposed for the performance of work to achieve the contract goal, with the bid. If the Utilization Plan indicates the contract goal will not be met, documentation of good faith efforts shall also be submitted. 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. The required forms and documentation must be submitted as a single .pdf file using the "Integrated Contractor Exchange (iCX)" application within the Department's "EBids System".

The Department will not accept a Utilization Plan if it does not meet the bidding procedures set forth herein and the bid will be declared not responsive. In the event the bid is declared not responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty and may deny authorization to bid the project if re-advertised for bids.

<u>GOOD FAITH EFFORT PROCEDURES</u>. The contract will not be awarded until the Utilization Plan is approved. All information submitted by the bidder must be complete, accurate and adequately document enough DBE participation has been obtained or document the 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 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. This means 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 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 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 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 the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided it is otherwise eligible for award. If the Department determines 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 will also include a statement of reasons for the adverse determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period to cure the deficiency.

(c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "DOT.DBE.UP@illinois.gov" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. 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 reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person 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 reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.

- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the 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 owneroperator. 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 DBE regular dealer or DBE manufacturer.

<u>CONTRACT COMPLIANCE</u>. 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 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 be come the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

- (a) <u>NO AMENDMENT</u>. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be emailed to the Department at <u>DOT.DBE.UP@illinois.gov</u>.
- (b) <u>CHANGES TO WORK</u>. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, a new Request for Approval of Subcontractor will not be required. However, the Contractor must document efforts to assure the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (c) <u>SUBCONTRACT</u>. The Contractor must provide copies of DBE subcontracts to the Department upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
- (d) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractorinitiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
 - (1) 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) The DBE is aware 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) 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) <u>TERMINATION AND REPLACEMENT PROCEDURES</u>. 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) of this part. 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 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 Contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the 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 1200 or applicable state law.

- (6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor 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 subcontractor 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 Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can selfperform the work for which the DBE contractor was engaged or so that the 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 will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) <u>FINAL PAYMENT</u>. 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 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident 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 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) <u>ENFORCEMENT</u>. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be

made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

(h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor 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. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

DISPOSAL FEES (BDE)

Effective: November 1, 2018

Replace Articles 109.04(b)(5) - 109.04(b)(8) of the Standard Specifications with the following:

- "(5) Disposal Fees. When the extra work performed includes paying for disposal fees at a clean construction and demolition debris facility, an uncontaminated soil fill operation or a landfill, the Contractor shall receive, as administrative costs, an amount equal to five percent of the first \$10,000 and one percent of any amount over \$10,000 of the total approved costs of such fees.
- (6) Miscellaneous. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.
- (7) Statements. No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer with itemized statements of the cost of such force account work. Statements shall be accompanied and supported by invoices for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from his/her stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

Itemized statements at the cost of force account work shall be detailed as follows.

- a. Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman. Payrolls shall be submitted to substantiate actual wages paid if so requested by the Engineer.
- b. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
- c. Quantities of materials, prices and extensions.
- d. Transportation of materials.
- e. Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.
- (8) Work Performed by an Approved Subcontractor. When extra work is performed by an approved subcontractor, the Contractor shall receive, as administrative costs, an amount equal to five percent of the total approved costs of such work with the minimum payment being \$100.

(9) All statements of the cost of force account work shall be furnished to the Engineer not later than 60 days after receipt of the Central Bureau of Construction form "Extra Work Daily Report". If the statement is not received within the specified time frame, all demands for payment for the extra work are waived and the Department is released from any and all such demands. It is the responsibility of the Contractor to ensure that all statements are received within the specified time regardless of the manner or method of delivery."

EQUIPMENT PARKING AND STORAGE (BDE)

Effective: November 1, 2017

Replace the first paragraph of Article 701.11 of the Standard Specifications with the following.

"**701.11 Equipment Parking and Storage.** During working hours, all vehicles and/or nonoperating equipment which are parked, two hours or less, shall be parked at least 8 ft (2.5 m) from the open traffic lane. For other periods of time during working and for all nonworking hours, all vehicles, materials, and equipment shall be parked or stored as follows.

- (a) When the project has adequate right-of-way, vehicles, materials, and equipment shall be located a minimum of 30 ft (9 m) from the pavement.
- (b) When adequate right-of-way does not exist, vehicles, materials, and equipment shall be located a minimum of 15 ft (4.5 m) from the edge of any pavement open to traffic.
- (c) Behind temporary concrete barrier, vehicles, materials, and equipment shall be located a minimum of 24 in. (600 mm) behind free standing barrier or a minimum of 6 in. (150 mm) behind barrier that is either pinned or restrained according to Article 704.04. The 24 in. or 6 in. measurement shall be from the base of the non-traffic side of the barrier.
- (d) Behind other man-made or natural barriers meeting the approval of the Engineer."

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010 Revised: August 1, 2018

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

<u>Quality Control/Quality Assurance (QC/QA)</u>. Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. Confined Edge. Each confined edge density shall be represented by a oneminute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) apart longitudinally along the unconfined pavement edge and centered at the random density test location.

When a longitudinal joint sealant (LJS) is applied, longitudinal joint density testing will not be required on the joint(s) sealed."

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	Unconfined Edge Joint Density
		edges)	Minimum
IL-4.75	Ndesign = 50	93.0 - 97.4% 1/	91.0%
IL-9.5	Ndesign = 90	92.0 - 96.0%	90.0%
IL-9.5,IL-9.5L	Ndesign < 90	92.5 - 97.4%	90.0%
IL-19.0	Ndesign = 90	93.0 - 96.0%	90.0%
IL-19.0, IL-19.0L	Ndesign < 90	93.0 ^{2/} – 97.4%	90.0%

1	SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%"
	SIVIA	$NUESIGIT = 50 \times 60$	95.5 - 97.4%	91.0%

HOT-MIX ASPHALT – LONGITUDINAL JOINT SEALANT (BDE)

Effective: August 1, 2018 Revised: January 1, 2019

Add the following to Article 406.02 of the Standard Specifications.

"(d) Longitudinal Joint Sealant (LJS)1032"

Add the following to Article 406.03 of the Standard Specifications.

- "(k) Longitudinal Joint Sealant (LJS) Pressure Distributor (Note 2)
- (I) Longitudinal Joint Sealant (LJS) Melter Kettle (Note 3)

Note 2. When a pressure distributor is used to apply the LJS, the distributor shall be equipped with a heating and recirculating system along with a functioning auger agitating system or vertical shaft mixer in the hauling tank to prevent localized overheating. The distributor shall be equipped with a guide or laser system to aid in proper placement of the LJS application.

Note 3. When a melter kettle is used to transport and apply the LJS, the melter kettle shall be an oil jacketed double-boiler with agitating and recirculating systems. Material from the kettle may be dispensed through a pressure feed wand with an applicator shoe or through a pressure feed wand into a hand-operated thermal push cart."

Revise Article 406.06(g)(2) of the Standard Specifications to read:

"(2) Longitudinal Joints. Unless prohibited by stage construction, any HMA lift shall be complete before construction of the subsequent lift. The longitudinal joint in all lifts shall be at the centerline of the pavement if the roadway comprises two lanes in width, or at lane width if the roadway is more than two lanes in width.

When stage construction prohibits the total completion of a particular lift, the longitudinal joint in one lift shall be offset from the longitudinal joint in the preceding lift by not less than 3 in. (75 mm). The longitudinal joint in the surface course shall be at the centerline of the pavement if the roadway comprises two lanes in width, or at lane width if the roadway is more than two lanes in width.

A notched wedge longitudinal joint shall be used between successive passes of HMA binder course that has a difference in elevation of greater than 2 in. (50 mm) between lanes on pavement that is open to traffic.

The notched wedge longitudinal joint shall consist of a 1 to 1 1/2 in. (25 to 38 mm) vertical notch at the lane line, a 9 to 12 in. (230 to 300 mm) wide uniform taper sloped toward and extending into the open lane, and a second 1 to 1 1/2 in. (25 to 38 mm) vertical notch at the outside edge.

The notched wedge longitudinal joint shall be formed by the strike off device on the paver. The wedge shall then be compacted by the joint roller.

Tack coat shall be applied to the entire surface of the notched wedge joint immediately prior to placing the adjacent lift of binder. The material shall be uniformly applied at a rate of 0.05 to 0.1 gal/sq yd (0.2 to 0.5 L/sq m).

When the use of LJS is specified, it shall be applied for the lift(s) of paving as shown on the plans. The surface to which the LJS is applied shall be dry and cleaned of all dust, debris, and any substances that will prevent the LJS from adhering. Cleaning shall be accomplished by means of a sweeper/vacuum truck, power broom, air compressor or by hand. The LJS may be placed before or after the tack or prime coat. When placed after the tack or prime coat, the tack or prime shall be fully cured prior to placement of the LJS.

The LJS shall be centered ± 2 in. (± 50 mm) under the joint of the next HMA lift to be constructed.

LJS Application Table			
Overlay Thickness in. (mm)	LJS Width in. (mm)	Application Rate ^{1/} lb/ft (kg/m)	
	HMA Mixture	s	
3/4 (19) 1 (25) 1 1/4 (32)	18 (450) 18 (450) 18 (450)	0.88 (1.31) 1.15 (1.71) 1.31 (1.95)	
1 1/2 (38)	18 (450)	1.47 (2.19)	
1 3/4 (44) 2 (50)	18 (450) 18 (450)	1.63 (2.43) 1.80 (2.68)	
2 1/4 (60) 2 1/2 (63)	18 (450) 18 (450)	1.96 (2.92) 2.12 (3.16)	
2 3/4 (70)	18 (450)	2.29 (3.41)	
3 (75) 3 1/4 (83)	18 (450) 18 (450)	2.45 (3.65) 2.61 (3.89)	
3 1/2 (90)	18 (450)	2.78 (4.14)	
3 3/4 (95) 4 (100)	18 (450) 18 (450)	2.94 (4.38) 3.10 (4.62)	
SMA Mixtures			
1 1/2 (38)	18 (450)	1.26 (1.88)	
1 3/4 (44)	18 (450)	1.38 (2.06)	

The width and minimum application rate of LJS shall be according to the following table.

2 (50)	18 (450)	1.51 (2.25)

1/ The application rate has a surface demand for liquid included within it. The thickness of the LJS may taper from the center of the application to a lesser thickness on the edge of the application, provided the correct width and application rate are maintained.

The Contractor shall furnish to the Engineer a bill of lading for each tanker supplying material to the project. The application rate of LJS shall be verified within the first 1000 ft (300 m) of the day's scheduled application length and every 12,000 ft (3600 m) the remainder of the day. For projects less than 3000 ft (900 m), the rate shall be verified once. A suitable paper or pan shall be placed at a random location in the path of the LJS. After application of the LJS, the paper or pan shall be picked up, weighed, and the application rate calculated. The tolerance between the application rate shown in the LJS Application Table and the calculated rate shall be \pm 15 percent. The Contractor shall replace the LJS in the area where the sample was taken.

A 1 qt (1 L) sample shall be taken from the pressure distributor or melting kettle at the jobsite once for each contract and sent to the Central Bureau of Materials.

The LJS shall be applied in a single pass with a pressure distributor, melter kettle, or hand applied from a roll for HMA lifts up to 2 in. (50 mm) in thickness. The LJS shall be applied in two passes for HMA lifts between 2 and 4 in. (50 and 100 mm) in thickness. At the time of installation, the pavement surface temperature and the ambient temperature shall be a minimum of 40 °F (4 °C) and rising.

The LJS shall be applied at a width of not less than or greater than 1 1/2 in. (38 mm) of the width specified. If the LJS flows more than 2 in. (50 mm) from the initial placement width, LJS placement shall stop and remedial action shall be taken.

When starting another run of LJS placement, suitable release paper shall be placed over the previous application of LJS to prevent doubling up of thickness of LJS.

The LJS shall be suitable for construction traffic to drive on without pickup or tracking of the LJS within 30 minutes of placement. If pickup or tracking occurs, LJS placement shall stop and damaged areas shall be repaired.

Prior to paving, the Contractor shall ensure the paver end plate and grade control device is adequately raised above the finished height of the LJS.

The LJS shall not flush to the final surface of the HMA pavement."

Add the following paragraph after the second paragraph of Article 406.13(b) of the Standard Specifications.

"Application of longitudinal joint sealant (LJS) will be measured for payment in place in feet (meters)."

Add the following paragraph after the first paragraph of Article 406.14 of the Standard Specifications.

"Longitudinal joint sealant will be paid for at the contract unit price per foot (meter) for LONGITUDINAL JOINT SEALANT."

Add the following to Section 1032 of the Standard Specifications.

"1032.12 Longitudinal Joint Sealant (LJS). Longitudinal joint sealant (LJS) will be accepted according to the current Bureau of Materials and Physical Research Policy Memorandum, "Performance Graded Asphalt Binder Acceptance Procedure" with the following exceptions: Article 3.1.9 and 3.4.1.4 of the policy memorandum will be excluded. The bituminous material used for the LJS shall be according to the following table. Elastomers shall be added to a base asphalt and shall be either a styrene-butadiene diblock or triblock copolymer without oil extension, or a styrene-butadiene rubber. Air blown asphalt, acid modification, or other modifiers will not be allowed. LJS in the form of pre-formed rollout banding may also be used.

Test	Test Requirement	Test Method
Dynamic shear @ 88°C (unaged), G*/sin δ, kPa	1.00 min.	AASHTO T 315
Creep stiffness @ -18°C (unaged), Stiffness (S), MPa m-value	300 max. 0.300 min.	AASHTO T 313
Ash, %	1.0 - 4.0	AASHTO T 111
Elastic Recovery, 100 mm elongation, cut immediately, 25°C, %	70 min.	ASTM D 6084 (Procedure A)
Separation of Polymer, Difference in °C of the softening point (ring and ball)	3 max.	ITP Separation of Polymer from Asphalt Binder"

HOT-MIX ASPHALT – OSCILLATORY ROLLER (BDE)

Effective: August 1, 2018 Revised: November 1, 2018

Add the following to Article 406.03 of the Standard Specifications:

Revise Table 1 and Note 3/ of Table 1 in Article 406.07(a) of the Standard Specifications to read:

"TABLE 1 - MINIMUM ROLLER REQUIREMENTS FOR HMA				
	Breakdown Roller (one of the following)	Intermediate Roller	Final Roller (one or more of the following)	Density Requirement
Level Binder: (When the density requirements of Article 406.05(c) do not apply.)	P ^{3/}		V _S , P ^{3/} , T _B , T _F , 3W, O _T	To the satisfaction of the Engineer.
Binder and Surface ^{1/} Level Binder ^{1/} : (When the density requirements of Article 406.05(c) apply.)	V _D , P ^{3/} , T _B , 3W, O _T , O _B	Р ^{3/} , О _Т , О _В	V _S , Т _в , Т _{ғ,} О _т	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
IL-4.75 and SMA 4/ 5/	$T_{B,}$ 3W, O_{T}		T_F , 3W, O_T	
Bridge Decks 2/	Тв		T _F	As specified in Articles 582.05 and 582.06.

3/ A vibratory roller (V_D) or oscillatory roller (O_T or O_B) may be used in lieu of the pneumatictired roller on mixtures containing polymer modified asphalt binder."

Add the following to EQUIPMENT DEFINITION in Article 406.07(a) contained in the Errata of the Supplemental Specifications:

- "O_T Oscillatory roller, tangential impact mode. Maximum speed is 3.0 mph (4.8 km/h) or 264 ft/min (80 m/min).
- O_B Oscillatory roller, tangential and vertical impact mode, operated at a speed to produce not less than 10 vertical impacts/ft (30 impacts/m)."

Add the following to Article 1101.01 of the Standard Specifications:

- "(h) Oscillatory Roller. The oscillatory roller shall be self-propelled and provide a smooth operation when starting, stopping, or reversing directions. The oscillatory roller shall be able to operate in a mode that will provide tangential impact force with or without vertical impact force by using at least one drum. The oscillatory roller shall be equipped with water tanks and sprinkling devices, or other approved methods, which shall be used to wet the drums to prevent material pickup. The drum(s) amplitude and frequency of the tangential and vertical impact force shall be approximately the same in each direction and meet the following requirements:
 - (1) The minimum diameter of the drum(s) shall be 42 in. (1070 mm)48 in. (1200 mm);
 - (2) The minimum length of the drum(s) shall be 57 in. (1480 mm)66 in. (1650 mm);
 - (3) The minimum unit static force on the drum(s) shall be 125 lb/in. (22 N/m); and
 - (4) The minimum force on the oscillatory drum shall be 18,000 lb (80 kN)."; and
 - (5) Self-adjusting eccentrics, and reversible eccentrics on non-driven drum(s)."

HOT-MIX ASPHALT – TACK COAT (BDE)

Effective: November 1, 2016

Revise Article 1032.06(a) of the Standard Specifications to read:

"(a) Anionic Emulsified Asphalt. Anionic emulsified asphalts shall be according to AASHTO M 140. SS-1h emulsions used as a tack coat shall have the cement mixing test waived."

LIGHTS ON BARRICADES (BDE)

Effective: January 1, 2018

Revise Article 701.16 of the Standard Specifications to read:

***701.16 Lights.** Lights shall be used on devices as required in the plans, the traffic control plan, and the following table.

Circumstance	Lights Required
Daylight operations	None
First two warning signs on each approach to the work involving a nighttime lane closure and "ROUGH GROOVED SURFACE" (W8-I107) signs	Flashing mono-directional lights
Devices delineating isolated obstacles, excavations, or hazards at night (Does not apply to patching)	Flashing bi-directional lights
Devices delineating obstacles, excavations, or hazards exceeding 100 ft (30 m) in length at night (Does not apply to widening)	Steady burn bi-directional lights
Channelizing devices for nighttime lane closures on two-lane roads	None
Channelizing devices for nighttime lane closures on multi-lane roads	None
Channelizing devices for nighttime lane closures on multi-lane roads separating opposing directions of traffic	None
Channelizing devices for nighttime along lane shifts on multilane roads	Steady burn mono-directional lights
Channelizing devices for night time along lane shifts on two lane roads	Steady burn bi-directional lights
Devices in nighttime lane closure tapers on Standards 701316 and 701321	Steady burn bi-directional lights
Devices in nighttime lane closure tapers	Steady burn mono-directional lights
Devices delineating a widening trench	None
Devices delineating patches at night on roadways with an ADT less than 25,000	None
Devices delineating patches at night on roadways with an ADT of 25,000 or more	None

Batteries for the lights shall be replaced on a group basis at such times as may be specified by the Engineer."

Delete the fourth sentence of the first paragraph of Article 701.17(c)(2) of the Standard Specifications.

Revise the first paragraph of Article 603.07 of the Standard Specifications to read:

"603.07 Protection Under Traffic. After the casting has been adjusted and Class SI concrete has been placed, the work shall be protected by a barricade for at least 72 hours."

MANHOLES, VALVE VAULTS, AND FLAT SLAB TOPS (BDE)

Effective: January 1, 2018 Revised: March 1, 2019

<u>Description</u>. In addition to those manufactured according to the current standards included in this contract, manholes, valve vaults, and flat slab tops manufactured prior to March 1, 2019, according to the previous Highway Standards listed below will be accepted on this contract:

Product	Pr	evious Standar	ds
Precast Manhole Type A, 4' (1.22 m) Diameter	602401-05	602401-04	602401-03
Precast Manhole Type A, 5' (1.52 m) Diameter	602402-01	602402	602401-03
Precast Manhole Type A, 6' (1.83 m) Diameter	602406-09	602406-08	602406-07
Precast Manhole Type A, 7' (2.13 m) Diameter	602411-07	602411-06	602411-05
Precast Manhole Type A, 8' (2.44 m) Diameter	602416-07	602416-06	602416-05
Precast Manhole Type A, 9' (2.74 m) Diameter	602421-07	602421-06	602421-05
Precast Manhole Type A, 10' (3.05 m) Diameter	602426-01	602426	
Precast Valve Vault Type A, 4' (1.22 m) Diameter	602501-04	602501-03	602501-02
Precast Valve Vault Type A, 5' (1.52 m) Diameter	602506-01	602506	602501-02
Precast Reinforced Concrete Flat Slab Top	602601-05	602601-04	

The following revisions to the Standard Specifications shall apply to manholes, valve vaults, and flat slab tops manufactured according to the current standards included in this contract:

Revise Article 602.02(g) of the Standard Specifications to read:

"(g) Structural Steel (Note 4) 1006.04

Note 4. All components of the manhole joint splice shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable."

Add the following to Article 602.02 of the Standard Specifications:

"(s) Anchor Bolts and Rods (Note 5) 1006.09

Note 5. The threaded rods for the manhole joint splice shall be according to the requirements of ASTM F 1554, Grade 55, (Grade 380)."

Revise the second paragraph of Article 1042.10 of the Standard Specifications to read:

"Catch basin Types A, B, C, and D; Manhole Type A; Inlet Types A and B; Drainage Structures Types 1, 2, 3, 4, 5, and 6; Valve Vault Type A; and reinforced concrete flat slab top (Highway Standard 602601) shall be manufactured according to AASHTO M 199 (M 199M), except the minimum wall thickness shall be as shown on the plans. Additionally, catch basins, inlets, and drainage structures shall have a minimum concrete compressive strength of 4500 psi

(31,000 kPa) at 28 days and manholes, valve vaults, and reinforced concrete flat slab tops shall have a minimum concrete compressive strength of 5000 psi (34,500 kPa) at 28 days."

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: November 2, 2017

Add the following to the end of the fourth paragraph of Article 109.11 of the Standard Specifications:

"If reasonable cause is asserted, written notice shall be provided to the applicable subcontractor and/or material supplier and the Engineer within five days of the Contractor receiving payment. The written notice shall identify the contract number, the subcontract or material purchase agreement, a detailed reason for refusal, the value of payment being withheld, and the specific remedial actions required of the subcontractor and/or material supplier so that payment can be made."

PORTLAND CEMENT CONCRETE (BDE)

Effective: November 1, 2017

Revise the Air Content % of Class PP Concrete in Table 1 Classes of Concrete and Mix Design Criteria in Article 1020.04 of the Standard Specifications to read:

"TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA		
Class of Conc.	Use	Air Content %
PP	Pavement Patching Bridge Deck Patching (10)	
	PP-1	
	PP-2	
	PP-3 PP-4	4.0 - 8.0"
	PP-5	

Revise Note (4) at the end of Table 1 Classes of Concrete and Mix Design Criteria in Article 1020.04 of the Standard Specifications to read:

"(4) For all classes of concrete, the maximum slump may be increased to 7 in (175 mm) when a high range water-reducing admixture is used. For Class SC, the maximum slump may be increased to 8 in. (200 mm). For Class PS, the maximum slump may be increased to 8 1/2 in. (215 mm) if the high range water-reducing admixture is the polycarboxylate type."

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."

RAILROAD PROTECTIVE LIABILITY INSURANCE (5 AND 10) (BDE)

Effective: January 1, 2006

<u>Description</u>. 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
Chicago, Central, and Pacific Railroad Co. 17641 South Ashland Ave. Homewood, IL 60430	Avg Daily Passenger: 0 Max Speed: 10 mph	Avg Daily Freight: 0 Max Speed: 10 mph
DOT/AAR No.: 289874E RR Division: Chicago	RR Mile Post: 24.99 RR Sub-Division: Freep	port
For Freight/Passenger Information Conta For Insurance Information Contact: R	act: Paul Chojenski ob Glass	Phone: (708) 332-3557 Phone: (708) 332-6673
Chicago, Central, and Pacific Railroad Co. 17641 South Ashland Ave. Homewood, IL 60430	Avg Daily Passenger: 0 Max Speed: 10 mph	Avg Daily Freight: 0 Max Speed: 10 mph
DOT/AAR No.: 840409X RR Division: Midwest	RR Mile Post: 24.99 RR Sub-Division: Free	port
For Freight/Passenger Information Conta For Insurance Information Contact:	act: Paul Chojenski Rob Glass	Phone: (708) 332-3557 Phone: (708) 332-6673

<u>Approval of Insurance</u>. 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.

<u>Basis of Payment</u>. 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.

SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

"**109.14 Subcontractor and Disadvantaged Business Enterprise Payment Reporting.** The Contractor shall report all payments made to the following parties:

- (a) first tier subcontractors;
- (b) lower tier subcontractors affecting disadvantaged business enterprise (DBE) goal credit;
- (c) material suppliers or trucking firms that are part of the Contractor's submitted DBE utilization plan.

The report shall be made through the Department's on-line subcontractor payment reporting system within 21 days of making the payment."

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: November 2, 2017 Revised: April 1, 2019

Replace the second paragraph of Article 109.12 of the Standard Specifications with the following:

"This mobilization payment shall be made at least seven days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

Value of Subcontract Reported on Form BC 260A	Mobilization Percentage
Less than \$10,000	25%
\$10,000 to less than \$20,000	20%
\$20,000 to less than \$40,000	18%
\$40,000 to less than \$60,000	16%
\$60,000 to less than \$80,000	14%
\$80,000 to less than \$100,000	12%
\$100,000 to less than \$250,000	10%
\$250,000 to less than \$500,000	9%
\$500,000 to \$750,000	8%
Over \$750,000	7%"

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 gualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather then clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

<u>METHOD OF MEASUREMENT</u> The unit of measurement is in hours.

<u>BASIS OF PAYMENT</u> This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

TRAFFIC CONTROL DEVICES - CONES (BDE)

Effective: January 1, 2019

Revise Article 701.15(a) of the Standard Specifications to read:

"(a) Cones. Cones are used to channelize traffic. Cones used to channelize traffic at night shall be reflectorized; however, cones shall not be used in nighttime lane closure tapers or nighttime lane shifts."

Revise Article 1106.02(b) of the Standard Specifications to read:

"(b) Cones. Cones shall be predominantly orange. Cones used at night that are 28 to 36 in. (700 to 900 mm) in height shall have two white circumferential stripes. If non-reflective spaces are left between the stripes, the spaces shall be no more than 2 in. (50mm) in width. Cones used at night that are taller than 36 in. (900 mm) shall have a minimum of two white and two fluorescent orange alternating, circumferential stripes with the top stripe being fluorescent orange. If non-reflective spaces are left between the stripes, the spaces shall be no more than 3 in. (75 mm) in width.

The minimum weights for the various cone heights shall be 4 lb for 18 in. (2 kg for 450 mm), 7 lb for 28 in. (3 kg for 700 mm), and 10 lb for 36 in. (5 kg for 900 mm) with a minimum of 60 percent of the total weight in the base. Cones taller than 36 in. shall be weighted per the manufacturer's specifications such that they are not moved by wind or passing traffic."

WARM MIX ASPHALT (BDE)

Effective: January 1, 2012 Revised: April 1, 2016

<u>Description</u>. This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

"1102.01 Hot-Mix Asphalt Plant. The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, "Approval of Hot-Mix Asphalt Plants and Equipment". Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements."

Add the following to Article 1102.01(a) of the Standard Specifications.

- "(11) Equipment for Warm Mix Technologies.
 - a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ± 2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

"(e) Warm Mix Technologies.

- (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
- (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C). WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012 Revised: April 2, 2015

The Contractor shall submit a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors)
 that are used for DBE goal credit.

The report shall be submitted to the Engineer on Department form "SBE 723" within ten business days following the reporting period. The reporting period shall be Monday through Sunday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within ⁷⁵ working days.

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:

 The number and work hours of minority and nonminority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391.

The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-thejob 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 federallyassisted 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, fringe 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.

* * * * *

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.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

Contract Provision - Cargo Preference Requirements

In accordance with Title 46 CFR § 381.7 (b), the contractor agrees-

"(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract."

Provisions (1) and (2) apply to materials or equipment that are acquired solely for the project. The two provisions do not apply to goods or materials that come into inventories independent of the project, such as shipments of Portland cement, asphalt cement, or aggregates, when industry suppliers and contractors use these materials to replenish existing inventories.

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.