120

Letting March 6, 2020

Notice to Bidders, Specifications and Proposal



Contract No. 61G27
DUPAGE County
Section 19-00082-00-RS (Woodridge)
Route FAU 2593 (Woodward Avenue)
Project ZR18-517 ()
District 1 Construction Funds

Prepared by

Checked by

Illinois Department of Transportation

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. March 6, 2020 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. 61G27 DUPAGE County Section 19-00082-00-RS (Woodridge) Project ZR18-517 () Route FAU 2593 (Woodward Avenue) District 1 Construction Funds

Resurfacing Woodward Avenue from 75th Street to the north village limits of Woodridge.

- 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

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2020

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 1-1-20)

SUPPLEMENTAL SPECIFICATIONS

Std. Spe	ec. Sec.	Page No.
106	Control of Materials	1
107	Legal Regulations and Responsibility to Public	2
109	Measurement and Payment	3
205	Embankment	4
403	Bituminous Surface Treatment (Class A-1, A-2, A-3)	5
404	Micro-Surfacing and Slurry Sealing	6
405	Cape Seal	
406	Hot-Mix Asphalt Binder and Surface Course	27
420	Portland Cement Concrete Pavement	28
424	Portland Cement Concrete Sidewalk	30
442	Pavement Patching	
502	Excavation for Structures	
503	Concrete Structures	
504	Precast Concrete Structures	38
506	Cleaning and Painting New Steel Structures	39
522	Retaining Walls	
542	Pipe Culverts	
586	Sand Backfill for Vaulted Abutments	
602	Catch Basin, Manhole, Inlet, Drainage Structure, and Valve Vault Construction, Adjustment, ar	
	Reconstruction	
603	Adjusting Frames and Grates of Drainage and Utility Structures	45
630	Steel Plate Beam Guardrail	
631	Traffic Barrier Terminals	49
670	Engineer's Field Office and Laboratory	
701	Work Zone Traffic Control and Protection	51
704	Temporary Concrete Barrier	53
780	Pavement Striping	55
781	Raised Reflective Pavement Markers	56
888	Pedestrian Push-Button	
1001	Cement	58
1003	Fine Aggregates	
1004	Coarse Aggregates	60
1006	Metals	
1020	Portland Cement Concrete	65
1043	Adjusting Rings	67
1050	Poured Joint Sealers	
1069	Pole and Tower	
1077	Post and Foundation	72
1096	Pavement Markers	
1101	General Equipment	
1102	Hot-Mix Asphalt Equipment	
1103	Portland Cement Concrete Equipment	
1105	Pavement Marking Equipment	
1106	Work Zone Traffic Control Devices	81

RECURRING SPECIAL PROVISIONS

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

CHEC	CK SH	IEET#	<u>PAGE NO</u>
1	Χ	Additional State Requirements for Federal-Aid Construction Contracts	83
2	Χ	Subletting of Contracts (Federal-Aid Contracts)	86
3	Χ	EEO	
4		Specific EEO Responsibilities Non Federal-Aid Contracts	97
5		Required Provisions - State Contracts	102
6		Asbestos Bearing Pad Removal	
7		Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	
8		Temporary Stream Crossings and In-Stream Work Pads	
9		Construction Layout Stakes Except for Bridges	
10		Construction Layout Stakes	
11		Use of Geotextile Fabric for Railroad Crossing	
12		Subsealing of Concrete Pavements	
13		Hot-Mix Asphalt Surface Correction	
14	Χ	Pavement and Shoulder Resurfacing	125
15		Patching with Hot-Mix Asphalt Overlay Removal	
16		Polymer Concrete	
17		PVC Pipeliner	
18		Bicycle Racks	
19		Temporary Portable Bridge Traffic Signals	
20		Work Zone Public Information Signs	
21		Nighttime Inspection of Roadway Lighting	
22		English Substitution of Metric Bolts	
23		Calcium Chloride Accelerator for Portland Cement Concrete	138
24		Quality Control of Concrete Mixtures at the Plant	
25	Х	Quality Control/Quality Assurance of Concrete Mixtures	
26	^	Digital Terrain Modeling for Earthwork Calculations	163
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	
36		Longitudinal Joint and Crack Patching	
		Editationi idi odi it alla diadi i atolilia	

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 SH	IEE1	Γ#	PAGE NO
LRS1		Reserved	189
LRS2		Furnished Excavation	190
LRS3	Χ	Work Zone Traffic Control Surveillance	191
LRS4		Flaggers in Work Zones	
LRS5		Contract Claims	
LRS6		Bidding Requirements and Conditions for Contract Proposals	194
LRS7		Bidding Requirements and Conditions for Material Proposals	200
LRS8		Reserved	
LRS9		Bituminous Surface Treatments	207
LRS10		Reserved	208
LRS11		Employment Practices	209
LRS12		Wages of Employees on Public Works	211
LRS13		Selection of Labor	
LRS14		Paving Brick and Concrete Paver Pavements and Sidewalks	214
LRS15		Partial Payments	217
LRS16		Protests on Local Lettings	218
LRS17		Substance Abuse Prevention Program	219
LRS18		Multigrade Cold Mix Asphalt	

STATE OF ILLINOIS SPECIAL PROVISIONS WOODWARD AVENUE RESURFACING

TABLE OF CONTENTS

PROJECT LOCATION	1
PROJECT DESCRIPTION	1
MAINTENANCE OF ROADWAYS	1
TRAFFIC CONTROL PLAN	2
ADJUSTMENTS AND RECONSTRUCTIONS	2
PUBLIC CONVENIENCE AND SAFETY (DIST 1)	3
TEMPORARY INFORMATION SIGNING	4
DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (DISTRICT 1)	5
FRICTION AGGREGATE (D-1)	6
GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1)	9
HOT-MIX ASPHALT BINDER AND SURFACE COURSE (D-1)	11
RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (D-1)	21
AGGREGATE SUBGRADE IMPROVEMENT (D-1)	31
STATUS OF UTILITIES (D-1)	34
CONSTRUCTION LAYOUT SPECIAL FOR RESURFACING WITH ADA AND STAND ALO ADA (D-1)	
AVAILABLE REPORTS	
DIRT ON PAVEMENT OR STRUCTURES	
TREE ROOT PRUNING	
SODDING, SALT TOLERANT	
CLASS D PATCHES	
WATER SUPPLY/USAGE	
CONSTRUCTION OPERATIONS	
REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES	
SECTION 602, 603 AND 604 – ADJUSTING FRAMES AND GRATES OF DRAINAGE AND)
UTILITY STRUCTURES AND FRAMES, GRATES, AND MEDIAN INLETS	41
SANITARY MANHOLES TO BE ADJUSTED, SPECIAL	41
TACTILE/DETECTABLE WARNING SURFACE	42
DRIVEWAY REMOVAL AND REPLACEMENT	
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	
FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	
CONCRETE CURB, TYPE B (SPECIAL)	
HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3"	
HOT-MIX ASPHALT DRIVEWAY PAVEMENT REMOVAL	
DRAINAGE & UTILITY STRUCTURES TO BE RECONSTRUCTED (SPECIAL)	
DRAINAGE STRUCTURES TO BE CLEANED	46
DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, & PATCHING OPERATIONS)	47

STATE OF ILLINOIS SPECIAL PROVISIONS WOODWARD AVENUE RESURFACING

LR 107-4 INSURANCE	51
LPC CCDD CERTIFICATION	52

BDE SPECIAL PROVISIONS

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

	<u>File</u> Name	<u>Pg.</u>		Special Provision Title	Effective	Revised
	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			Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
*	80246			Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	, , , , , , , , , , , , , , , , , , ,
	80241			Bridge Demolition Debris	July 1, 2009	
	50261			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	50481			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	50491			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	50531			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
*	80425			Cape Seal	Jan. 1, 2020	
	80384	68	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	
	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	72	Х	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
	80387			Contrast Preformed Plastic Pavement Marking	Nov. 1, 2017	
	80029	75	Х	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
	80402	85	Х	Disposal Fees	Nov. 1, 2018	
	80378			Dowel Bar Inserter	Jan. 1, 2017	Jan. 1, 2018
	80405			Elastomeric Bearings	Jan. 1, 2019	
*	80421			Electric Service Installation	Jan. 1, 2020	
	80415	87	Х	Emulsified Asphalts	Aug. 1, 2019	
*	80423			Engineer's Field Office Laboratory	Jan. 1, 2020	
	80388	90	Х	Equipment Parking and Storage	Nov. 1, 2017	
	80229			Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
	80417			Geotechnical Fabric for Pipe Underdrains and French Drains	Nov. 1, 2019	
	80420			Geotextile Retaining Walls	Nov. 1, 2019	
	80304			Grooving for Recessed Pavement Markings	Nov. 1, 2012	Nov. 1, 2017
*	80422			High Tension Cable Median Barrier Reflectors	Jan. 1, 2020	
	80416			Hot-Mix Asphalt – Binder and Surface Course	July 2, 2019	Nov. 1, 2019
*	80398	91	X	Hot-Mix Asphalt – Longitudinal Joint Sealant	Aug. 1, 2018	Nov. 1, 2019
•	80406			Hot-Mix Asphalt – Mixture Design Verification and Production (Modified for I-FIT Data Collection)	Jan. 1, 2019	Jan. 2, 2020
	80347			Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	July 2, 2019
	80383			Hot-Mix Asphalt – Quality Control for Performance	April 1, 2017	July 2, 2019
	80411			Luminaires, LED	April 1, 2019	
	80393			Manholes, Valve Vaults, and Flat Slab Tops	Jan. 1, 2018	Mar. 1, 2019
	80045			Material Transfer Device	June 15, 1999	Aug. 1, 2014
4	80418			Mechanically Stabilized Earth Retaining Walls	Nov. 1, 2019	
	80424			Micro-Surfacing and Slurry Sealing	Jan. 1, 2020	lan 1 0010
	80165			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
	80412			Obstruction Warning Luminaires, LED	Aug. 1, 2019	April 4 0040
	80349			Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
	80371	O.F		Pavement Marking Removal	July 1, 2016	
	80389	95	X	Portland Cement Concrete	Nov. 1, 2017	
	80359			Portland Cement Concrete Bridge Deck Curing	April 1, 2015	Nov. 1, 2019

	<u>File</u> Name	<u>Pg.</u>		Special Provision Title	Effective	Revised
	80300			Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
	80328	96	Х	Progress Payments	Nov. 2, 2013	,, _ · · ·
	34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
	80157			Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	,
*	80306			Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 2, 2020
*	80407	97	Х	Removal and Disposal of Regulated Substances	Jan. 1, 2019	Jan. 1, 2020
	80419			Silt Fence, Ground Stabilization and Riprap Filter Fabric	Nov. 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	
	80413			Structural Timber	Aug. 1, 2019	
	80397	108	Χ	Subcontractor and DBE Payment Reporting	April 2, 2018	
	80391	109	Χ	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
	80317			Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	Aug. 1, 2019
	80298			Temporary Pavement Marking	April 1, 2012	April 1, 2017
	80403			Traffic Barrier Terminal, Type 1 Special	Nov. 1, 2018	
	80409	110	Χ	Traffic Control Devices – Cones	Jan. 1, 2019	
*	80410			Traffic Spotters	Jan. 1, 2019	
	20338			Training Special Provisions	Oct. 15, 1975	
	80318			Traversable Pipe Grate for Concrete End Sections	Jan. 1, 2013	Jan. 1, 2018
	80288	111	Χ	Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
	80302	113	Χ	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
	80414			Wood Fence Sight Screen	Aug. 1, 2019	
	80071	114	Χ	Working Days	Jan. 1, 2002	

The following special provisions are in the 2020 Supplemental Specifications and Recurring Special Provisions.

<u>File</u>	Special Provision Title	New Location(s)	Effective	Revised
<u>Name</u>				
80404	Coarse Aggregate Quality for	Article 1004.01(b)	Jan. 1, 2019	
	Micro-Surfacing and Cape Seals			
80392	Lights on Barricades	Articles 701.16, 701.17(c)(2)	Jan. 1, 2018	
		& 603.07		
80336	Longitudinal Joint and Crack Patching	Check Sheet #36	April 1, 2014	April 1, 2016
80400	Mast Arm Assembly and Pole	Article 1077.03(b)	Aug. 1, 2018	•
80394	Metal Flared End Section for Pipe Culverts	Articles 542.07(c) and 542.11	Jan. 1, 2018	April 1, 2018
80390	Payments to Subcontractors	Article 109.11	Nov. 2, 2017	April 1, 2017

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. <u>61G27</u>

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", Adopted April 1, 2016, (herein after called "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 of bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of, Woodward Avenue Resurfacing Project, in the Village of Woodridge, DuPage County; Section Number: 19-00082-00-RS and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

CONTRACT NO. 61G27

PROJECT LOCATION

The project is located in DuPage County, Illinois in the Village of Woodridge. The project extends along Woodward Avenue from the southern termini of 75th Street to the northern termini of the Village limits. The gross and net length of the project is 5,385 feet (1.02 miles).

PROJECT DESCRIPTION

The work consists of existing roadway resurfacing, HMA surface placement, mobilization, traffic control, pavement markings, detector loop replacement, sidewalk ramp upgrades, construction layout, as well as all incidental and collateral work necessary to complete the project as shown on the plans and described herein.

MAINTENANCE OF ROADWAYS

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

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

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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

TRAFFIC CONTROL PLAN

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

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

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

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

<u>STANDARDS:</u> 701006-05, 701101-04, 701301-04, 701311-03, 701427-05, 701501-06, 701602-10, 701606-10, 701701-10, 701801-06, 701901-08

DETAILS:

- Traffic Control and Protection for Side Roads, Intersections, and Driveways (TC-10)
- District One Typical Pavement Markings (TC 13)
- Pavement Marking Letters and Symbols for Traffic Staging (TC-16)
- Arterial Road Information Sign (TC-22)

SPECIAL PROVISIONS:

- Maintenance of Roadways
- Work Zone Traffic Control Surveillance (LRS 3)
- Public Convenience And Safety
- Traffic Control Devices Cones (BDE)
- Equipment Parking and Storage (BDE)
- Temporary Information Signing

ADJUSTMENTS AND RECONSTRUCTIONS

Effective: March 15, 2011

Revise the first paragraph of Article 602.04 to read:

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

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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

"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."

PUBLIC CONVENIENCE AND SAFETY (DIST 1)

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

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

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

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

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

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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. <u>61G27</u>

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

TEMPORARY INFORMATION SIGNING

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

Description.

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

Materials.

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

	<u>ltem</u>	<u>Article/Section</u>
a.)	Sign Base (Notes 1 & 2)	1090
b.)	Sign Face (Note 3)	1091
c.)	Sign Legends	1092
d.)	Sign Supports	1093
e.)	Overlay Panels (Note 4)	1090.02

- 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.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

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.

DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (DISTRICT 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).

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

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

Revise Article 603.07 of the Standard Specifications to read:

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

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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

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

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

Placement shall be according to the manufacturer's specifications.

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

FRICTION AGGREGATE (D-1)

Effective: January 1, 2011 Revised: November 1, 2019

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

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. <u>61G27</u>

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 Low ESAL	Stabilized Subbase or Shoulders	Allowed Alone or in Combination ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	Allowed Alone or in Combination ^{5/6/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/}
HMA High ESAL Low ESAL	C Surface and Binder IL-9.5 or IL-9.5L SMA Ndesign 50 Surface	Allowed Alone or in Combination ^{5/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. <u>61G27</u>

Use	Mixture	Aggregates Allowed			
HMA High ESAL	D Surface and Binder IL-9.5 SMA Ndesign 50 Surface	Allowed Alone or in Combination ^{5/} : Crushed Gravel Carbonate Crushed Stone (other than Limestone) ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}			
		Other Combinations A	llowed:		
		Up to	With		
		25% Limestone	Dolomite		
		50% Limestone	Any Mixture D aggregate other than Dolomite		
		75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone		
HMA High ESAL	E Surface IL-9.5	Allowed Alone or in Co	ombination ^{5/6/} :		
	SMA Ndesign 80 Surface	Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.			
		Other Combinations A	llowed:		
		Up to With			
		50% Dolomite ^{2/} Any Mixture E aggregate 75% Dolomite ^{2/} Crushed Sandste Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crush Stone			

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. <u>61G27</u>

Use	Mixture	Aggregates Allowed		
		75% Crushed Gravel ^{2/} or Crushed Concrete ^{3/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag	
HMA High ESAL	F Surface IL-9.5	Allowed Alone or in Combination 5/6/:		
	SMA Ndesign 80 Surface	Crystalline Crushed Stone 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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

meet the requirements of Article 1032.05(a). Compatible polymers may be added during production. The GTR modified asphalt binder shall meet the requirements of the following table.

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

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

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

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

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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

"(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.

HOT-MIX ASPHALT BINDER AND SURFACE COURSE (D-1)

Effective: November 1, 2019 Revised: February 1, 2020

<u>Description</u>. This work shall consist of constructing a hot-mix asphalt (HMA) binder and/or surface course on a prepared base. Work shall be according to Sections 406 and 1030 of the Standard Specifications, except as modified herein.

Materials. Revise Article 1004.03(c) to read:

" (c) Gradation. The coarse aggregate gradations shall be as listed in the following table.

Use	Size/Application	Gradation No.
Class A-1, A-2, & A-3	3/8 in. (10 mm) Seal	CA 16 or CA 20
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & A-3	Cover Coat	CA 14
	IL-19.0;	CA 11 ^{1/}
	Stabilized Subbase IL-19.0	
LINAA LII LEGAL	SMA 12.5 ^{2/}	CA 13 ^{4/} , CA 14, or CA 16
HMA High ESAL	SMA 9.5 ^{2/}	CA 13 ^{3/4/} or CA 16 ^{3/}
	IL-9.5	CA 16
	IL-9.5FG	CA 16
LIMAA Low FCAL	IL-19.0L	CA 11 ^{1/}
HMA Low ESAL	IL-9.5L	CA 16

- 1/ CA 16 or CA 13 may be blended with the CA 11.
- 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.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

- 3/ The specified coarse aggregate gradations may be blended.
- 4/ 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."

HMA Nomenclature. Revise the "High ESAL" portion of the table in Article 1030.01 to read:

"High ESAL		IL-19.0, IL-9.5, IL-9.5FG,
	Binder Courses	IL-4.75, SMA 12.5,
		Stabilized Subbase IL-19.0
	Surface Courses	IL-9.5, IL-9.5FG,
		SMA 12.5, SMA 9.5"

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

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

	Item	Article/Section
(a)	Coarse Aggregate	1004.03
(b)	Fine Aggregate	1003.03
(c)	RAP Material	1031
(d)	Mineral Filler	1011
(e)	Hydrated Lime	1012.01
(f)	Slaked Quicklime (Note 1)	
(g)	Performance Graded Asphalt Binder (Note 2)	1032
(h)	Fibers (Note 3)	
(i)	Warm Mix Asphalt (WMA) Technologies (Note 4)	

- Note 1. Slaked quicklime shall be according to ASTM C 5.
- Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be a 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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. <u>61G27</u>

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 Department's Qualified Producer List, "Technologies for the Production of Warm Mix Asphalt (WMA)"."

<u>Mixture Design</u>. Revise Article 1030.04(a)(1) of the Standard Specifications and the Supplemental Specifications to read:

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. <u>61G27</u>

	High ESA	L, MIX	TURE C	ОМРО	SITION	I (% PA	SSING)	1/		
Sieve		IL-19.0 mm				SMA 9.5	IL-9.5mm		IL-4.75 mm	
Size	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 ^{4/}	16	32 ^{4/}	34 ^{5/}	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/}
#635 (20 μm)			≤ :	3.0	≤ :	3.0				
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.
- 3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.
- 4/ 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.
- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

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, for IL-4.75 it shall be 3.5 percent and for Stabilized Subbase it shall be 3.0 percent at the design number of gyrations. The voids in the mineral aggregate (VMA) and voids filled with asphalt binder (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 th	Voids Filled with Asphalt Binder (VFA),					
Ndesign	IL-19.0; Stabilized Subbase IL- 19.0	IL-4.75 ^{1/}	%				
50		18.5	65 – 78 ^{2/}				
70	13.5	65 - 75					
90	13.3	15.0		05-75			

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

Revise the table in Article 1030.04(b)(3) to read:

"VOLUMETRIC REQUIREMENTS, SMA 12.5 $^{1/}$ and SMA 9.5 $^{1/}$							
Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %				
80 4/	3.5	17.0 ^{2/} 16.0 ^{3/}	75 - 83				

- 1/ Maximum draindown shall be 0.3 percent. The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30 °F.
- 2/ Applies when specific gravity of coarse aggregate is \geq 2.760.
- 3/ Applies when specific gravity of coarse aggregate is < 2.760.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

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."

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."

Quality Control/Quality Assurance (QC/QA). Revise the third paragraph of Article 1030.05(d)(3) to read:

" If the Contractor and Engineer agree the nuclear density test method is not appropriate for the mixture, cores shall be taken at random locations determined according to the QC/QA document "Determination of Random Density Test Site Locations". Core densities shall be determined using the Illinois Modified AASHTO T 166 or T 275 procedure."

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

- "Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement). Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.
- a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) apart longitudinally along the unconfined pavement edge and centered at the random density test location.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

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

Revise the second table in Article 1030.05(d)(4) and its notes to read:

"DENSITY CONTROL LIMITS						
Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density, minimum			
IL-4.75	Ndesign = 50	93.0 – 97.4 % 1/	91.0%			
IL-9.5FG	Ndesign = 50 - 90	93.0 – 97.4 %	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%			
SMA	Ndesign = 80	93.5 – 97.4 %	91.0%			

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

Equipment. 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 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);
 - (2) The minimum length of the drum(s) shall be 57 in. (1480 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)."

Construction Requirements.

Add the following to Article 406.03 of the Standard Specifications:

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

Revise the third paragraph of Article 406.05(a) to read:

" All depressions of 1 in. (25 mm) or more in the surface of the existing pavement shall be filled with binder. At locations where heavy disintegration and deep spalling exists, the area shall be cleaned of all loose and unsound material, tacked, and filled with binder (hand method)."

Revise Article 406.05(c) to read.

" (c) Binder (Hand Method). Binder placed other than with a finishing machine will be designated as binder (hand method) and shall be compacted with a roller to the satisfaction of the Engineer. Hand tamping will be permitted when approved by the Engineer."

Revise the special conditions for mixture IL-4.75 in Article 406.06(b)(2)e. to read:

" e. The mixture shall be overlaid within 5 days of being placed."

Revise Article 406.06(d) to read:

" (d) Lift Thickness. The minimum compacted lift thickness for HMA binder and surface courses shall be as follows.

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MINIMUM COMPACTED LIFT THICKNESS		
Mixture Composition	Thickness, in. (mm)	
IL-4.75	3/4 (19) - over HMA surfaces 1/	
	1 (25) - over PCC surfaces 1/	
IL-9.5FG	1 1/4 (32)	
IL-9.5, IL-9.5L	1 1/2 (38)	
SMA 9.5	1 3/4 (45)	
SMA 12.5	2 (51)	
IL-19.0, IL-19.0L	2 1/4 (57)	

1/ The maximum compacted lift thickness for mixture IL-4.75 shall be 1 1/4 in. (32 mm)."

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	Intermediate	Final Roller	Density

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

	(one of the following)	Roller	(one or more of the following)	Requirement
Binder and Surface ^{1/}	V_D , P $^{3/}$, T_B , $3W$, O_T , O_B	P ^{3/} , O _T , O _B	V_S , T_B , $T_{F_s}O_T$	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
IL-4.75 and SMA 4/5/	T_{B_r} 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 pneumatic-tired 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)."

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).

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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

specimens to the Department for verification. If the mix fails again, the mix design will be rejected.

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

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

Illinois Modified AASHTO T 324 Requirements 1/

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

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

Note: For SMA Designs (N-80) the maximum rut depth is 6.0 mm at 20,000 repetitions. For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000 repetitions.

(2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 60 psi (415 kPa) for non-polymer modified performance graded (PG) asphalt binder and 80 psi (550 kPa) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 200 psi (1380 kPa)."

<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:

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

"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} ."

<u>Basis of Payment</u>. Replace the second through the fifth paragraphs of Article 406.14 with the following:

"HMA binder and surface courses will be paid for at the contract unit price per ton (metric ton) for MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS; HOT-MIX ASPHALT BINDER COURSE (HAND METHOD), of the Ndesign specified; HOT-MIX ASPHALT SURFACE COURSE, of the mixture composition, and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE (HAND METHOD), of the Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, of the mixture composition, friction aggregate, and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, of the mixture composition, friction aggregate, and Ndesign specified."

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

Effective: November 1, 2012 Revise: November 1, 2019

Revise Section 1031 of the Standard Specifications to read:

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

"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 mixture composition of the mix design.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

- (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.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. <u>61G27</u>

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

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

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

- (b) RAS Testing. RAS shall be sampled and tested during stockpiling according to 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.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

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 %	
G _{mm}	± 0.03 ^{1/}	

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

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

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

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the 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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

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.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

(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.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

- (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 listed below for a given N Design.

Maximum Asphalt Binder Replacement (ABR) for FRAP with RAS Combination

HMA Mixtures	Maximum % ABR		
Ndesign	Binder ^{5/}	Surface 5/	Polymer Modified 3/
30L	50	40	30
50	40	35	30
70	40	30	30
90	40	30	30
SMA			30
IL-4.75			40

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

- 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 %.
- 5/ When the mix has Illinois Flexibility Index Test (I-FIT) requirements, the maximum percent asphalt binder replacement designated on the table may be increased by 5%.

1031.07 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing 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}) of 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.

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 and agglomerated 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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

of the mixture containing FRAP or RAS and conduct an investigation that may require a new mix design.

- (a) FRAP. The coarse aggregate in all FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.
- (b) 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.
- (c) 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.
 - 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.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

- 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).
 - e. RAS and FRAP weight to the nearest pound (kilogram).
 - f. Virgin asphalt binder weight to the nearest pound (kilogram).
 - g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

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

1031.09 RAP in Aggregate Surface Course and Aggregate Wedge Shoulders, Type B. The use of RAP 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 μ m) sieve shall not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation."

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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

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

303.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.07
(b) Reclaimed Asphalt Pavement (RAP) (Notes 1. 2	

- 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 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 \pm 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 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.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

- **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				
	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				
	200 mm	150 mm	100 mm	50 mm	4.75 mm
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20

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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

STATUS OF UTILITIES (D-1)

Effective: June 1, 2016 Revised: January 1, 2020

Utility companies and/or municipal owners located within the construction limits of this project have provided the following information regarding 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.

UTILITIES TO BE ADJUSTED

No conflicts to be resolved.

The following contact information is what was used during the preparation of the plans as provided by the owner of the facility.

Agency/Company Responsible to Resolve Conflict	Name of contact	Phone	E-mail address
AT&T	Kari Martin	630-573-5757	Km2618@att.com
ComEd	Quinanda Candler	630-396-8221	quinandacandler@usicllc.com
Comcast	Martha Gieras	224-22-5862	Martha_gieras@comcast.com
DuPage DOT	William Eidson	630-407-6900	William.eidson@dupageco.org
DuPage Public Works	Donna Sandt	630-964-7503	Donna.sandt@dupageco.org
DuPage Water	Ken Niles	630-516-1932	niles@dpwc.org
Village of Downers Grove	John Welch	630-434-5494	jwelch@downers.us
Nicor	Bruce Koppang	630-388-3046	bkoppan@southernco.com
G4S	Doug Gones	630-346-2826	Douglas.gones@usa.g4s.com
Village of Woodridge	Bob Meyers	630-719-4752	rmyers@vil.woodridge.il.us

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 considered 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 above for the first conflicts identified will begin on the date of the executed contract regardless of the status of the utility relocations. The responsible

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

agencies will be working toward resolving subsequent conflicts in conjunction with contractor activities in the number of days noted.

The estimated relocation duration 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 when necessary. The Department's contractor is responsible for contacting J.U.L.I.E. prior to all excavation work.

CONSTRUCTION LAYOUT SPECIAL FOR RESURFACING WITH ADA AND STAND ALONE ADA (D-1)

Effective: January 1, 2017 Revised: April 17, 2017

<u>Description.</u> This work shall consist of furnishing and placing construction layout stakes for the construction of ADA Ramps shown in the plans. The Contractor shall furnish and place stakes marking the locations and elevations of points indicated in the plans for ADA Ramp Construction.

The Contractor shall locate all reference points as shown on the plans and listed herein. Any additional control points required will be identified in the field by the Contractor and all field notes will be kept in the office of the Resident Engineer.

The Contractor shall provide field forces, equipment, and material to set all additional stakes for this project, which are needed to establish offset stakes, reference points, and any other horizontal and vertical controls necessary to secure a correct layout for the work.

Layout stakes shall be set to assure conformance to the ADA Ramp design shown on the plans and shall meet the approval of the Engineer.

The Contractor shall be responsible for having the finished work conform to the lines, grades, elevations, and dimensions called for in the plans. Any inspection or checking of the Contractor's layout by the Engineer and the acceptance of all or any part of it shall not relieve the Contractor of his/her responsibility to secure the proper dimensions, grades, and elevations of the work. The Contractor shall exercise care in the preservation of stakes and bench marks and shall have them reset when any are damaged, lost, displaced, removed or otherwise obliterated.

Responsibility of the Department.

The Department will make random checks of the Contractor's staking to determine if the work is in conformance with the plans. When the Contractor's work will tie into work that is being or will be done by others, checks will be made to determine if the work is in conformance with the proposed overall grade and horizontal alignment.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

Where the Contractor, in setting construction stakes, discovers discrepancies, the Department will check to determine their nature and make whatever revisions are necessary to the plans. Any additional restaking required by the Engineer will be the responsibility of the Contractor. The additional restaking done by the Contractor will be paid for according to Article 109.04 of the Standard Specifications.

The Department will be responsible for the accuracy of the initial reference points shown in the plans.

It is not the responsibility of the Department, except as provided herein, to check the correctness of the Contractor's stakes. Any apparent errors will be immediately called to the Contractor's attention and the Contractor will be required to make the necessary correction before the stakes are used for construction purposes. The Contractor shall provide the Engineer a copy of any field notes and layout diagrams produced during the course of the project.

Responsibility of the Contractor.

The Contractor shall establish from the given survey points and contract plan information, all the control points or reference points necessary to layout the ADA Ramp elements. The Contractor shall furnish and place the layout stakes. The Contractor shall notify the Engineer when the stakes are complete and available for review and approval by the Engineer at least 3 working days in advance of the actual construction.

Field notes shall be kept in standard survey field notebooks and those books shall become the property of the Department at the completion of the project. All notes shall be neat, orderly, and in accepted form.

<u>Measurement and Payment.</u> This work will be paid for at the contract lump sum price for CONSTRUCTION LAYOUT (SPECIAL).

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□ 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
36

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

	Preliminary Site Investigation (PSI)
\boxtimes	Preliminary Environmental Site Assessment (PESA)
\boxtimes	Soils/Geotechnical Report
	Boring Logs
	Pavement Cores
	Location Drainage Study (LDS)
	Hydraulic Report
	Noise Analysis
\boxtimes	Other: LPC-663 CCDD Certification (Included herein)

For those seeking information about the project can request it from:

Kevin VanDeWoestyne, P.E., Project Manager Thomas Engineering Group, LLC kevinv@thomas-engineering.com 847-815-9500

DIRT ON PAVEMENT OR STRUCTURES

Add the following after the first paragraph of Article 107.15 of the Standard Specifications:

"All areas other than pavement shall be cleaned up as directed by the ENGINEER. The CONTRACTOR shall remove all refuse and unused material of any type and clean all areas disrupted from work. This shall include, but not limited to, restoring surface drainage in earthen areas to ensure acceptable surface water runoff.

Failure to comply within 24 hours after receipt of a written or email request from the ENGINEER, shall result in deduction in the contract amount for reimbursement to the DEPARTMENT to complete this work."

TREE ROOT PRUNING

Add the following after the first paragraph of Article 201.06 of the Standard Specifications:

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. <u>61G27</u>

"A copy of a letter of qualification shall be provided to the Engineer for inspection."

Add the following after the second paragraph of Article 201.06 of the Standard Specifications:

"All cut roots exposed shall be cleared from the site and disposed of without any additional compensation for the work."

SODDING, SALT TOLERANT

Work shall be in accordance with Section 252 of the Standard Specifications, except that the sod shall be rolled to promote better soil contact prior to watering.

Add the following after the first paragraph of Article 252.01 of the Standard Specifications.

"All areas in that portion of the parkway adjacent to curb replacement sections, sidewalk replacement sections, sanitary or storm sewer replacement, or water main installations disturbed during construction shall be restored."

Method of Measurement and Basis of Payment. This work shall be paid for as Sodding, Salt Tolerant per square yard. Topsoil shall be paid for separately as Topsoil Furnish and Place, 4".

CLASS D PATCHES

Work shall be in accordance to Section 442 of the Standard Specifications except for:

The cost of full-depth machine sawing shall be included in the unit price of this item and no additional compensation will be given for this work.

Revise the fourth paragraph of Article 442.05 of the Standard Specification to read:

"The unit cost of this item shall include the disposal of materials resulting from the removal of the existing pavement and unsuitable and unstable materials.

WATER SUPPLY/USAGE

The independent use of private water spigots is strictly prohibited. The Contractor shall be responsible for obtaining water from an approved source (fire hydrant with meter attached located in at the Public Works Maintenance Yard). It is the Contractor's responsibility to obtain water at this location and complete required paperwork for tracking water usage. There is no cost to the contractor for water used as part of this Village Project.

CONSTRUCTION OPERATIONS

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

Construction operations shall be confined to those restrictions found in the village ordinance. These time restrictions shall not apply to maintenance or operation of safety and traffic control devices such as barricades, signs, and lighting or to construction of an emergency nature.

All trench openings and other construction openings extending below the pavement subgrade shall be fenced off with an adequately supported four-foot high snow fence around the entire opening at all times when actual construction is not in progress at the opening location. In addition, any opening left overnight will require lighted barricades and proper signing to adequately warn all motorist and pedestrians.

The contractor shall schedule and conduct his operations so that the closure time of existing driveways is kept to a minimum. All homeowners shall be given a minimum of 24 hours and business owners 48 hours written notice period to initial removal of their driveway. The Contractor shall make every effort to keep driveways open including temporary grading and placement of gravel.

The Contractor shall, where required by the Engineer, provide immediate access to driveways and intersecting streets.

At no time will the Contractor allow to stock pile or leave materials on any street overnight. The Contractor shall provide, to residents and motorist, advance notice of parking restrictions. This shall be accomplished with signs and/or barricades as directed by the Engineer.

The Contractor shall not close any street or private driveway without the consent of the Engineer and the proper notification of the affected resident(s).

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

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

<u>Contract Specific Sites.</u> 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. This work shall include monitoring and potential sampling, analytical testing, and management of a material contaminated by regulated substances. The Environmental Firm shall continuously monitor all soil excavation for worker protection and soil contamination. Soil samples or analysis without the approval of the Engineer will be at no additional cost to the Department. For stationing, the lateral distance is measured from the centerline and the farthest distance is the offset distance or construction limit, whichever is less.

Huff & Huff, Inc., a subsidiary of GZA, Inc. (H&H), provided services in support of a Form LPC-663 for the Woodward Avenue Resurfacing Project. Four (4) Potentially Impacted Properties (PIPs) were identified near the Project Area. Due to the presence of PIPs, this LPC-663 Form is considered appropriate for assessing Project Area soils for CCDD suitability. Hand augers were advanced at fourteen (14) locations within the Project Area on May 24, 2019 in close proximity

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

to the PIPs, as well as select areas along the Project Area for assessment of soil pH, for CCDD suitability of spoils requiring off-site disposal. Soils were screened in the field using a photoionization detector (PID). Eight (8) representative soil samples were submitted for analysis of the following contaminants of concern associated with the identified PIPs: benzene, toluene, ethylbenzene, total xylene (BTEX) and methyl-tert-butyl ether (MTBE); volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); and total RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). Eleven (11) soil samples were submitted for laboratory analysis of soil pH to assess CCDD suitability.

SB-3 and SB-7 (0-1 feet bgs, or until bottom of excavation): SB-3 (0-1) and SB-7 (0-1) exceeded the MACs for pH. The area is defined as from the midpoint between boring SB-2 and SB-3, located approximately 150 feet north of the intersection with 75th street, and extends approximately 1,000 feet north to the midpoint between SB-7 and SB-8, located at the midpoint of the intersection with Parking Lot Road. The exclusion zone also extends from the eastern extent of the Project Area to the centerline of Woodward Avenue.

The Contractor shall manage any excavated soils and sediment within the following areas:

Station 11+50 to Station 21+50, RT - Village ROW

All excavation planned between Station 11+50 to Station 21+50, 0 to 51 feet RT (Village ROW) – These soils are considered to be 669.05 (b)(1) soils.

<u>Method of Measurement</u>. The volume of debris removed will be measured for payment in cubic yards. Actual field conditions may vary. The actual extent of debris removal shall be determined by the Engineer. The volume of debris removed will be measured for payment in cubic yards adjusted for voids, as determined by the Engineer, once the material is loaded and is ready to be hauled off site.

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

When the waste material for disposal requires sampling for landfill 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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

SECTION 602, 603 AND 604 – ADJUSTING FRAMES AND GRATES OF DRAINAGE AND UTILITY STRUCTURES AND FRAMES, GRATES, AND MEDIAN INLETS

Article 603.02 and 604.02, add the following:

Materials. All frames and lids to be furnished for construction, adjustment or reconstruction of any manhole, catch basin, inlet, valve vault or meter vault shall have cast into the lid "VILLAGE OF WOODRIDGE" and "STORM", "SANITARY", or "WATER" of the type specified.

SANITARY MANHOLES TO BE ADJUSTED, SPECIAL

Description. Sanitary Manholes to be adjusted with milling shall meet the specifications of Section 602 of the Standard Specifications for Road and Bridge Construction and District Detail BD-08: Details for Frames and Lids Adjustment with Milling, with the following revisions:

Construction Requirements. Following pavement milling, the existing pavement adjacent to and for a distance not exceeding 12 inches outside the base of the casting to be adjusted shall be neatly saw cut and broken sufficiently to permit its removal. Special caution should be exercised with brick-constructed manholes. Any damages to the manhole structure, during the adjustments, shall be repaired to its original condition with no compensation to the contractor. The structure shall be adjusted to the finished pavement elevation and the space around the casting shall be filled with Class SI concrete, which shall be cured for a period of 72 hours. The placement of binder course shall then be performed. The broken pavement and aggregate from these areas shall be disposed of by the CONTRACTOR according to Article 202.03.

Materials. External Manhole Chimney Seals shall be installed at all Sanitary Manholes to be Adjusted. Chimney seals shall consists of a rubber sleeve, compression band and extension skirt. Rubber sleeve shall be high grade rubber compound conforming to ASTM C293 with a hardness of 45 plus or minus 5. Compression bands shall be 16 gauge Type 304 stainless steel with a minimum width of 1 inch. Extension skirt shall be fiberglass reinforced PVC, impervious to tear and puncture, with a minimum weight of 12 ounces per square yard. External manhole chimney seals shall be as manufactured by Canusa, Infishield. The cost and installation of the External Manhole Chimney Seal shall be incidental to the sanitary manhole adjustment.

Method of Measurement and Basis of Payment. This work will be paid for at the contract unit price per each for SANITARY MANHOLES TO BE ADJUSTED, SPECIAL, which price will include all excavation, labor, materials, and equipment, including External Manhole Chimney Seal. In the case that the existing frame and lid is discovered in deficient condition, the casting shall be replaced at the contract unit price per each for NEW FRAME AND LID, TYPE 1, CLOSED LID. The actual need for replacement will be determined in the field at the time of construction by the ENGINEER.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

TACTILE/DETECTABLE WARNING SURFACE

Description. Detectable warnings shall meet the specifications of Article 424.09 of the Standard Specifications for Road and Bridge Construction with the following revisions and additions:

Materials. Detectable warnings shall consist of a surface of truncated domes meeting the requirements of the Accessibility Guidelines (ADAAG) and shall be Cast In Place Tactile / Detectable Warning Surface Tiles. The color of the detectable warnings shall be Federal Standard color 30166 in order to meet ADAAG requirements.

Method of Measurement and Basis of Payment. Detectable warnings will be paid for at the contract unit price per square foot for TACTILE/DETECTABLE WARNING SURFACE.

DRIVEWAY REMOVAL AND REPLACEMENT

Description. This work consists of furnishing equipment, labor, tools and materials necessary for the removal, satisfactory disposal, and replacement of portions of concrete driveways in accordance with the applicable requirements of Sections 420 and 440 of the Standard Specifications for Road and Bridge Construction except as follows:

This work shall include all sawcutting, removal, and disposal of the existing concrete driveway to the limits shown in the plans or as directed by the Engineer. New driveway pavement shall consist of 6" Portland cement concrete pavement. The minimum thickness of driveway shall not be less than 6" of concrete. Prior to replacement with concrete, the exposed base course shall be shaped and compacted to the satisfaction of the Engineer. The surface finish of those driveways being replaced shall match the finish of the existing driveway.

Method of Measurement and Basis of Payment. This item shall be paid for at the contract unit price per square yard for DRIVEWAY REMOVAL AND REPLACEMENT. This price shall include the excavation and replacement to complete the driveway.

PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL

Description. This work shall consist of removal and disposal of existing concrete sidewalk and the construction of new P.C.C. Sidewalk at various locations throughout the Village. All P.C.C. Sidewalk shall be removed and replaced by methods and with materials in accordance with Section 424 and Section 440 of the Standard of Specifications for Road and Bridge Construction, except as amended herein.

Replacement of sidewalk shall be the same width as the existing, unless otherwise directed by the Engineer. Placement of sidewalk shall include four inches (4") of Type B, CA-6, compacted aggregate base, the (3/4") three-quarter inch scoring of contraction joints (5') five feet on center,

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

the placing of (3/4") three-quarter inch pre-molded expansion joints where new concrete abuts existing concrete and/or at (50') fifty foot on center and/or at the end of a pour. This work shall also include the adjustment to proper grade of all private utility structures encountered.

All sidewalk shall include the application of membrane curing compound, Type III, of the materials and methods in accordance with the Articles 1020.13 and 1022.01 of the Standard Specifications unless otherwise directed by the Engineer.

The Engineer shall observe existing or compacted sub-base material prior to each concrete pour. Expansion joints shall be placed at intervals of not more than 50 feet and against all existing concrete structures. Expansion joints shall be placed where the sidewalk abuts existing sidewalk, driveway pavement, and curb and gutter. Sidewalk ramps shall be constructed according to the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

As soon as possible, but no later than seven (7) days after placement of the concrete, the sidewalk and curb ramps shall be backfilled to the finished elevation with approved material. The material shall be compacted until firm, and the surface neatly graded.

Sidewalk Curb

The curb (sidewalk curb) shall be located between the new sidewalk and landscaped area as shown on the plans. The curb shall have a head height of less than 7", as measured from the top of sidewalk. The sidewalk curb may be poured monolithically with the sidewalk and will be paid for as PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL. If the curb height is 7" or more, it shall be paid for as CONCRETE CURB, TYPE B (SPECIAL).

Method of Measurement and Basis of Payment. This item shall be paid for at the contract unit price per square foot for PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL which shall include all required labor, equipment, and materials necessary to construct the sidewalk (at the specified depth) on a prepared aggregate base course. Detectable warnings (per BDE 80146) will be paid for as TACTILE/DETECTABLE WARNING SURFACE in accordance with these Special Provisions.

FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)

This work shall consist of the adjustment of inlets, catch basins, valve vaults, and manholes at those locations as directed by the Engineer in the field. This work shall be completed in accordance with the applicable portions of Section 602, 603, and 604 of the Standard Specifications as well as the District One Standard Detail "Details for Frames and Lids Adjustment with Milling" (BD600-03 (BD-8)).

The existing pavement around each structure to be adjusted or reconstructed shall be removed by a straight, saw-cut joint.

All structures requiring frame and lid adjustment shall also be cleaned in accordance with Article 602.15. Any trench backfill necessary to fill in the area around the adjusted structure will not be

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

paid for separately but considered included in the cost of the structure being adjusted or reconstructed.

After adjustment or reconstruction is completed the pavement around the structure shall be replaced with Leveling Binder (Hand Method), N70 or Class PP-1 concrete. The leveling binder or concrete will be placed on a compacted, prepared subgrade, and the thickness shall match the existing conditions. The pavement being replaced will not be paid for separately but considered included in the cost of the structure being adjusted or reconstructed.

The work will be paid for at the contract unit price per EACH for FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) which price shall include all material and equipment to perform the work specified above.

CONCRETE CURB, TYPE B (SPECIAL)

Description. This work consists of the installation of a Portland Cement Concrete Curb, adjacent to sidewalk locations on a compacted aggregate base in accordance with Section 606 of the Standard Specifications.

The curb (sidewalk curb) shall be located between the new sidewalk and landscaped area as shown on the plans. The curb shall have a head height of 7" or more, as measured from the top of sidewalk. If the curb height is less than 7", it shall be paid for as PORTLAND CEMENT CONCRETE SIDEWALK 5 TO 6 INCHES, SPECIAL.

Method of Measurement and Basis of Payment. This item shall be paid for at the contract unit price per foot for CONCRETE CURB, TYPE B (SPECIAL).

HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3"

Description. This work consists of the installation of hot-mix asphalt surface course on a compacted aggregate base in accordance with Section 406 of the Standard Specifications.

Installation and compaction of the aggregate base course, 6" (CA-6 gradation) shall be considered included in the cost of HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3".

Method of Measurement and Basis of Payment. This item shall be paid for at the contract unit price per square yard for HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3". This cost shall include installation of the bituminous driveway pavement composition and aggregate base course to the lines and grades shown on the Plans.

HOT-MIX ASPHALT DRIVEWAY PAVEMENT REMOVAL

Description. This work consists of furnishing equipment, labor, tools and materials necessary for the removal and satisfactory disposal of all existing bituminous driveways in accordance with

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

the applicable requirements of Section 440 of the Standard Specifications for Road and Bridge Construction except as follows:

This work shall include complete removal of the existing hot-mix asphalt driveway, its base course, and excavation to the proposed subgrade elevation as shown in the Plans. Excavation and grading for the proposed aggregate base course improvement for the full width of the proposed driveway shall be performed in accordance with Section 202 of the Standard Specification except that earth excavation will not be paid for separately but shall be included in the cost of HOT-MIX ASPHALT DRIVEWAY PAVEMENT REMOVAL.

Method of Measurement and Basis of Payment. This item shall be paid for at the contract unit price per square yard for HOT-MIX ASPHALT DRIVEWAY PAVEMENT REMOVAL. This cost shall include removal and disposal of the existing hot-mix asphalt driveway pavement composition, base course, and subgrade materials to the final aggregate base course elevation required to construct the proposed Aggregate Base Course, Type A 6" and Hot-Mix Asphalt Driveway Pavement, 3".

Aggregate base course, 6" (CA-6 gradation) shall be considered included in the cost of HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3".

DRAINAGE & UTILITY STRUCTURES TO BE RECONSTRUCTED (SPECIAL)

This work shall consist of furnishing equipment, labor, tools, and materials necessary for the reconstruction of existing catch basins, manholes, and valve vaults in indicated in the Plans or as directed by the Engineer. The existing catch basin, manhole, or valve vault shall be reconstructed according to articles of Section 602 of the Standard Specifications.

Construction Requirements. The limits of work shall include the excavation, removal, and replacement of the uppermost precast reinforced concrete section, or flat slab top, as the case may be. The actual need for furnishing and placing a new section will be determined in the field at the time of construction by the Engineer. The Engineer shall designate whether a flat top, concentric or eccentric cone section is required to make up the reconstruction. The contractor is required to ascertain the details of the precast section prior to ordering and shipping the material to the jobsite.

Prior to setting the new precast section, all joint surfaces shall be made free of dirt, stones and debris by wire brushing each surface. Prior to making the final grade adjustment of the frame, all joint surfaces shall be made free of dirt, stones and debris by wire brushing each surface. Broken concrete or other construction debris shall not be used to shim the adjusting rings or frame. Each frame or adjusting ring shall be set to the angle required to meet the elevation of the final construction. The maximum total height of the adjusting rings shall be 8 inches per structure.

In areas where the existing pavement is to remain, the pavement area shall be saw cut not to exceed 12 inches from the outside of the reconstructed structure, the pavement then removed including all debris. The space between the adjusted frame and the existing pavement shall

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

then be filled with Class PP Concrete and barricaded for a minimum of 24 hours or until adequate curing has occurred.

Classification. The work is classified as reconstruction when a new precast concrete cone or concrete flat slab top section is required to complete the work. All other classifications shall be considered as an adjustment.

Method of Measurement and Basis of Payment. This work shall be paid for at the contract unit price per Each for DRAINAGE & UTILITY STRUCTURES TO BE RECONSTRUCTED (SPECIAL), which includes all excavation, saw cutting, pavement removal, disposal, and furnishing the precast reinforced cone section, or flat slab top, as the case may be, backfill, and pavement patching as specified. New frames and lids, where required, shall be paid for separately.

DRAINAGE STRUCTURES TO BE CLEANED

This work shall consist of furnishing equipment, labor, tools, and materials necessary for cleaning and patching existing catch basins, manholes, and valve vaults in indicated in the Plans or as directed by the Engineer. The existing catch basin, manhole, or valve vault shall be cleaned and patched according to Articles 602.13 and 602.15 of the Standard Specifications.

Construction Requirements. The Contractor shall be responsible for cleaning catch basins or drainage structures by removing all debris, soils, organic matter, and other miscellaneous items. The Contractor shall properly dispose of all solid debris resulting from the manhole cleaning and preparation activities at no additional cost to the Owner. Said disposal shall be in accordance with all local, state and federal laws and regulations and shall not involve disposal within the sewer system. All patching shall be performed during dry periods of no or low stormwater flow. The limits of patching work shall include all openings and connections through which pipes enter the structure. All inlet and outlet connections shall be made watertight. Adjusting rings shall be mortared if the existing frame is not to be adjusted. Prepare cracks and voids to be patched and filled, and apply and cure patching materials, in accordance with the product manufacturer's instructions and recommendations.

Method of Measurement and Basis of Payment. This work shall be paid for at the contract unit price per Each for DRAINAGE STRUCTURES TO BE CLEANED, which includes all cleaning and patching as specified herein.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

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
- DuPage Engineer at (630) 512-7066

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:

- 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.
- 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.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

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

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

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.

Section No.: 19-00082-00-RS

Project No.: ZR18(517) Job No.: C-91-357-19 DuPage County Contract No. 61G27

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

MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.

This work shall consist of the removal of existing magnetic detectors, magnetic detector lead-in cable and magnetic detection amplifiers and related control equipment wiring, installation of detector lead-in cable, detector loops, detector amplifiers and related equipment wiring. The detector loop, cable, and amplifier shall be installed according to the applicable portions of the "Standard Specifications" and the applicable portions of the Special Provision for "Detector Loop Replacement." All drilling of handholes, furnishing and installing CNC, cable splicing, trench and backfill, removal of equipment, and removing cable from conduit shall be included in this item.

Basis of Payment.

Magnetic Detector Removal and Detector Loop Installation shall be paid for at the contract unit price per foot (meter) for DETECTOR LOOP, TYPE I, per each for INDUCTIVE LOOP DETECTOR, and foot (meter) for ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR.

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 general liability insurance policy in accordance with Article 107.27:		
Village of Woodridge		
The entities listed above and their officers, employees, and agents shall be indemnified and		

held harmless in accordance with Article 107.26.



To: Mr. Brandon Tonarelli, P.E. - Project Manager- Village of Woodridge, IL

From: Jeremy J. Reynolds, P.G.

Date: August 30, 2019

Re: CCDD LPC-663 Form - Woodward Avenue Resurfacing Project

Huff & Huff, Inc., a subsidiary of GZA, Inc. (H&H), provided services in support of a Form LPC-663 for the Woodward Avenue Resurfacing Project. The Project Area consists of the public right-of-way (ROW) from 75th Street to the northern Village corporate limits (approximately 200 feet north of Wheeler Street) in the Village of Woodridge, DuPage County, Illinois.

Based on due diligence conducted as part of a Preliminary Environmental Site Assessment (PESA) for the Project Area, four (4) Potentially Impacted Properties (PIPs) were identified near the Project Area. Due to the presence of PIPs, this LPC-663 Form is considered appropriate for assessing Project Area soils for CCDD suitability. Hand augers were advanced at fourteen (14) locations within the Project Area on May 24, 2019 in close proximity to the PIPs, as well as select areas along the Project Area for assessment of soil pH, for CCDD suitability of spoils requiring off-site disposal. Soils were screened in the field using a photoionization detector (PID). Eight (8) representative soil samples were submitted for analysis of the following contaminants of concern associated with the identified PIPs: benzene, toluene, ethylbenzene, total xylene (BTEX) and methyl-tert-butyl ether (MTBE); volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); and total RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). Eleven (11) soil samples were submitted for laboratory analysis of soil pH to assess CCDD suitability.

Low levels of carbon disulfide were detected in samples SB-08 (0-1), SB-11 (0-1), and SB-12 (0-1) at 0.0446 mg/kg, 0.0084 mg/kg, and 0.0061 mg/kg, respectively, below the MAC value of 9 mg/kg. The remaining VOC and BTEX/MTBE results were below detection limits, achieving their respective Maximum Allowable Concentrations (MACs).

Fluoranthene was detected at a low level of 0.362 mg/kg in SB-08 (0-1), below its respective MAC value of 3,100 mg/kg. In addition, benzo(a)pyrene was detected at 0.164 mg/kg in SB-08 (0-1) below MAC values of 0.98 mg/kg (Non-MSA Counties), 1.3 mg/kg (Chicago Corporate Limits) and 2.1 mg/kg (MSA Counties), but above the MAC value of 0.09 mg/kg for CCDD facilities located outside of populated areas. The remaining SVOC results were below detection limits, achieving their respective MACs. Since disposal of spoils at CCDD facilities outside of populated areas in non-MSA counties is not anticipated, we have not identified SB-08 as a CCDD exclusion area, except for the unlikely event that spoils are directed to facilities in such areas.

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Soil sample SB-08 (0-1) contained total chromium at a concentration (30.2 mg/kg) that exceeded the MAC value (21 mg/kg). This sample was subsequently analyzed for TCLP chromium method. The TCLP chromium result was below the detection limit (<0.005 mg/L), achieving the MAC of 0.1 mg/L.

Samples SB-3 (0-1) and SB-7 (0-1) had pH results of 9.03 and 9.17, respectively, exceeding the acceptable range of 6.25 to 9.0. This will preclude these areas from being eligible for CCDD disposal. The remaining soil pH results ranged from 8.15 to 9.00, within the required range for CCDD disposal (between 6.25 and 9.0).

Based on the due diligence and analytical testing conducted, with the exception of soils generated in the vicinity of borings SB-03 and SB-07, soils generated from the Woodward Avenue Resurfacing Project are considered to meet the requirements for CCDD disposal.

CCDD Exclusion Areas:

• SB-3 and SB-7 (0-1 feet bgs, or until bottom of excavation): SB-3 (0-1) and SB-7 (0-1) exceeded the MACs for pH. The area is defined as from the midpoint between boring SB-2 and SB-3, located approximately 150 feet north of the intersection with 75th street, and extends approximately 1,000 feet north to the midpoint between SB-7 and SB-8, located at the midpoint of the intersection with Parking Lot Road. The exclusion zone also extends from the eastern extent of the Project Area to the centerline of Woodward Avenue. *These soils are considered to be 669.05* (b)(1) soils.

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 the Project Area. If you have any questions regarding this matter, please contact us at 630-684-9100.

Jeremy J. Reynolds, P.G. Associate Principal



Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

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 Loca	ation Information			
(Describe the local	tion of the source of the ur	ncontaminated so	il)	
Project Name: Wo	odward Avenue Resurfac	ing Project	Office Phone Nu	mber, if available: <u>630-719-4767</u>
•	tion (address, including nu e, from 75th Street to appr	,		· · · · · · · · · · · · · · · · · · ·
City: Wood	ridge	State: IL	Zip Code: 60517	
County: DuPa	ge	Township: Lisle	e	
Lat/Long of approx	kimate center of site in dec	imal degrees (DE	o.ddddd) to five decimal p	laces (e.g., 40.67890, -90.12345):
Latitude: 41.7582	4 Longitude: -	88.0312		
•	l Degrees) t/long data were determine	(-Decimal Degree ed:	es)	
◯ GPS ◯ Ma	p Interpolation O Photo	Interpolation (Survey 🕜 Other	
Approximate cente	er of Project Area using Go	oogle Earth (decir	mal degrees)	
IEPA Site Number	(s), if assigned: BOL:		BOW:	BOA:
Approximate Start	Date (mm/dd/yyyy):		Approximate End Date	e (mm/dd/yyyy):
Estimated Volume	of debris (cu. Yd.):			
•	rator Information for	Source Site	Cita Omanata	
Site Owner			Site Operator	
Name:	Villag	e of Woodridge	Name:	
Street Address: 1 Plaza Drive		Street Address:		
PO Box:			PO Box:	
City:	Woodridge	State: IL	City:	State:
Zip Code: 60517 Phone: 630-719-4767		Zip Code:	Phone:	
Contact: Brandon Tonarelli, P.E., Civil Engineer			Contact:	
Email, if available: btonarelli@vil.woodridge.il.us			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 Management Center.

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

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

a. 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 total of four (4) potentially impacted properties (PIPs) were identified during environmental due diligence. Fourteen (14) soil borings were advanced within the Project Area on May 24, 2019, including nearest the identified 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]:

On May 24, 2019, 14 borings were advanced in the Project Area to a depth of 1' bgs. The PID readings (0.3 ppm or less) did not exceed background values. Samples were analyzed for one or more of the following: VOCs, SVOCs, BTEX/MTBE, total RCRA metals, and pH, except soil in the vicinity of SB-02 and SB-07 (pH>9.0), the soils achieve their respective MAC values.

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

I, Jerem	y J. Reynolds, P.G.	(name of licensed professional engineer or geologist)
certify und	der penalty of law that the information submitted, including I	out not limited to, all attachments and other information, is to
the best o	f my knowledge and belief, true, accurate and complete. Ir	accordance with the Environmental Protection Act [415
	2.51 or 22.51a] and 35 III. Adm. Code 1100.205(a), I certify	
	t the soil pH is within the range of 6.25 to 9.0. In addition, I	
	leanup or removal of contaminants. All necessary docume	
	-	

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., a subsidiary of GZA GeoEnvironmental, Inc.

State: IL

Street Address:

915 Harger Road, Suite 330

City:

Oak Brook

Zip Code: 60523

Phone:

630-684-9100

Jeremy J. Reynolds, P.G.

Printed Name:

Licensed Professional Engineer or

Licensed Professional Geologist Signature:

EREMY REYNOLDS

IL 532-2922 LPC 663 Rev. 1/2019

Uncontaminated Soil Certification

Page 2 of 2



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 Woodridge, IL
Project Name: Woodward Avenue Resurfacing Project

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 generated from the Woodward Avenue Resurfacing Project. The Project Corridor consists of the public right-of-way (ROW) along Woodward Avenue, from 75th Street to the northern Village corporate limits (approximately 200 feet north of Wheeler Street), in the Village of Woodridge, DuPage County, Illinois.

The maximum anticipated depth of excavation is approximately 2 feet below ground surface (bgs) to accommodate roadway resurfacing, cross-walk/ramp improvements, and spot curb and gutter replacements throughout the Project Corridor. A map depicting the Project Area location, identified sites, and soil sample locations has been included in **Attachment A**, and a photo log of site reconnaissance is included in **Attachment B**.

The following information presents a summary of the records review, the identified PIPs, and other nearby sites. A Preliminary Environmental Site Assessment (PESA) was completed for the Project Area and is supplemental to this submittal. The H&H 2019 PESA report is included in **Attachment C**. The analyses conducted and results are summarized at the end of this narrative. The laboratory analytical report and pH sampling report are included in **Attachment D**.

Historic Aerial Photographs

Aerial photographs of the Project Corridor were provided by Environmental Risk Information Services (ERIS). The earliest photograph available is dated 1939. Photographs from 1946, 1952, 1962, 1972, 1978, 1983, 1988, 1998, 2006, 2007, 2009, 2010, 2011, 2012, 2014, 2015, and 2017 were also reviewed. A general discussion of the aerials is provided below; for a detailed, site-specific discussion of the land use regarding identified PIPs, refer to Section 5. The aerial photographs are attached in Appendix C.

1939 The 1939 aerial photograph depicts undeveloped agricultural farmland along both sides of the Project Corridor and surrounding area. Woodward Avenue and 75th Street are present. Multiple residential/agricultural structures are depicted along Woodward Avenue, including on the west side of Woodward Avenue (approximately 500 feet north of 75th Street, at the southwest corner of present-day 71st Street and Woodward Avenue, and approximately 500 feet north of present-day 71st Street) and at the southeast corner of Woodward Avenue and the northern Village limits.

<u>1946</u> The 1946 aerial photograph depicts the Project Corridor as mostly unchanged, with one additional residential/agricultural structure now depicted along the east side of Woodward Avenue, approximately 800 feet north of 75th Street. Undeveloped agricultural farmland still predominately surrounds the Project Corridor.



<u>1952</u> The quality of the 1952 aerial photograph is poor, but there appears to be no substantial changes made to the Project Corridor or surrounding area.

1962 The 1962 aerial photograph depicts the Project Corridor mostly unchanged, with wetlands/standing water present on both sides of Woodward Avenue, approximately 1,600 feet north of 75th Street. Additional structures are now depicted along both sides of 75th Street, which appear to be of residential/agricultural use. A new local/service road is depicted traveling east from Woodward Avenue, along the approximate location of present-day 71st Street, which ends at a small paved area with a structure, likely a utility structure.

<u>1972</u> The 1972 aerial photograph depicts significant residential development at the northern extent of the Project Corridor (within present-day Village of Downers Grove corporate limits), as well as along the eastern side of Woodward Avenue, just north of 75th Street, with what appears to be large multi-family apartment buildings. The remaining area along the Project Corridor is depicted as unchanged from the 1962 aerial photograph.

1978 The 1978 aerial photograph depicts additional significant development along the Project Corridor. A large residential subdivision is depicted as under construction/development at the northwestern portion of the Project Corridor. Land disturbance and/or grading activities are depicted at the southwestern portion of the Project Corridor. The multifamily apartment buildings at the southeastern portion of the Project Corridor have been further developed to the north and the wetland area has been reconfigured adjacent to the north of the residential development, which is depicted consistent with present day configuration. The remaining area along the Project Corridor is depicted as unchanged from the 1972 aerial photograph.

1983 The 1983 aerial photograph depicts continued residential development at the northwestern portion of the Project Corridor, as well as in the surrounding area. Sunnydale Park is depicted at the northwestern portion of the Project Corridor, south of Wheeler Street. The remaining area along the Project Corridor is depicted as unchanged from the 1978 aerial photograph.

1988 The 1988 aerial photograph depicts significant land disturbance and/or site grading activities along the northeastern and southwestern portions of the Project Corridor. Interstate 355 (Veterans Memorial Tollway) is depicted as under construction approximately 1,000 feet west of the Project Corridor. The remaining area along the Project Corridor is depicted as unchanged from the 1983 aerial photograph.

<u>1998</u> The 1998 aerial photograph depicts the Project Corridor and surrounding area as fully developed and consistent with present day configuration. The northeastern portion of the Project Corridor has been developed with detached single-family residential structures and suburban local residential roads. The southwestern portion of the Project Corridor has been developed with large commercial/retail structures and parking lots adjacent to Woodward Avenue.

2006 The 2006 aerial photograph depicts the Project Corridor and surrounding area as fully developed and consistent with present day configuration. The property adjacent to the Project Corridor at 7440 Woodward Avenue is depicted as developed with a gasoline filling station (Site ID 5, south portion).



2007-Present The subsequent 2007, 2009, 2010, 2011, 2012, 2014, 2015, and 2017 aerial photographs are consistent with conditions noted in the 2006 aerial photograph and significant changes in development or land use are not depicted.

Google Earth was also utilized for more recent aerial photograph (2018 and 2019), which depicts the Project Corridor essentially as was noted in the previous years (2007-2017), except for the gasoline filling station at 7440 Woodward Avenue (Site ID 5, south portion), which is depicted as demolished/removed sometime between April 2017 and March 2018. The demolition would likely correspond to the Sam's Club departure from the property at 7300 Woodward Avenue and the building remaining vacant to present day.

Records Search

A database report for the Project Corridor was completed by Environmental Risk Information Services (ERIS) on April 18, 2019. The ERIS database report listing nearby sites are included in **Attachment C** of this report. The following table summarizes the identified sites from the database review that are within 1,000 feet of the Project Areas. Sites located 500 feet or more from the Project Areas are considered non-PIPs based on separation distance and not further discussed. A Preliminary Environmental Site Assessment (PESA) was completed by Huff & Huff, Inc. (H&H), a subsidiary of GZA GeoEnvironmental, Inc. on May 31, 2019. Table 1 below lists the Site IDs from the PESA report.

TABLE 1 – Identified Sites from PESA Report and ERIS Database Report

PESA Site ID	ERIS Map ID	Name	Address	Database/Reason	Distance & Direction	PIP?
2	4, 6	Mobil Oil #05AWB / Woodridge Fuels, Inc. / Bucky's Express #543 / Qhu Rcag	1940 W. 75th Street	LUST, RCRA-SQG, SPILLS, UST, LUST TRUST	Adjacent, E	Yes
5	2	Previous Gasoline Filling Station / Sams Club 6488 / Sam's Club Fueling Station #6488	7300 & 7440 Woodward Avenue	LUST, RCRA-SQG, SPILLS, UST, LUST TRUST; Historic gasoline filling station; previous gasoline USTs (removed)	Adjacent, W	Yes
6	3	JC Penney 2924	7400 Woodward Avenue	RCRA-CESQG (No violations associated with facility)	Adjacent, W	No
9	11	Home Depot 1942	7200 Woodward Avenue	RCRA-SQG, TIER 2 (No violations associated with facility)	Adjacent, W	No
10	1	Young Cleaners	7056 Woodward Avenue	RCRA-NG	Adjacent, E	Yes
А	9	Sherwin Williams 3092	2037 W. 75th Street	RCRA-CESQG	~550 ft, SW	No
В	7, 8	Fabricate Cleaners and Tailors / Dry Cleaning, Tailoring, and Alterations	2003-2005 W. 75th Street	RCRA-SQG, SPILLS (PCE)	~200 ft, SW	Yes





PESA Site ID	ERIS Map ID	Name	Address	Database/Reason	Distance & Direction	PIP?
С	10	Super-Lube	7520 Woodward Avenue	UST	~400 ft, S	No
D	12	Clean and Save / Umang L. Patel MD	7530 Woodward Avenue	RCRA-SQG, SPILLS	~550 ft, S	No
Е	5	MGL Classic Touch Cleaners	1999 W. 75th Street	DELISTED DRYCLEANERS, RCRA-SQG	~500 ft, SE	No
F	13	Village of Woodridge / Village Greens of Woodridge Golf Course	1575 W. 75th Street	LUST	~550 ft, SE	No

PESA Site ID 2 - Mobil Oil #05AWB/Woodridge Fuels, Inc./Bucky's Express #543/Qhu Rcag

This site is listed in the ERIS database under the operator names of "Mobil Oil #05AWB", "Woodridge Fuels, Inc.", "Bucky's Express #543", and "Qhu Rcag" located at 1940 W. 75th Street, adjacent to the east of the Project Corridor. During site reconnaissance, the site was noted to be occupied by Mobil Oil and was serving as a gasoline filling station and convenience store. The site is identified in the LUST, SPILLS, UST, LUST TRUST, and RCRA-SQG databases. According to the LUST and SPILLS listings, two incidents occurred on the site. The first incident (Incident No. 931367) occurred in July 1993 and involved a release of gasoline from an UST and the second incident (Incident No. 890181) occurred in June 2009 and also involved a release of gasoline from an UST. Both incidents have since been closed and received a No Further Remediation (NFR) letter from the Illinois Environmental Protection Agency (IEPA) in December 2015, with "Buchanon Energy S, LLC" listed as the responsible party. Mobil Oil is also listed as a SQG of RCRA hazardous wastes, including ignitable waste (waste code D001) and lead (D008); however, there are no violations associated with the site. The following USTs are registered under "Woodridge Fuels, Inc." (Facility No. 2024004) and are associated with the site:

- Four (4) 10,000-gallon gasoline USTs, currently in use
- One (1) 8,000-gallon gasoline UST, removed in November 1986
- One (1) 10,000-gallon gasoline UST, removed in November 1986
- One (1) 6,000-gallon gasoline UST, removed in November 1986

An additional UST is registered under the Federal Aviation Administration (Facility No. 2020276) at the same location, listed as "75th & Woodward, Woodridge". The listing indicates a 515-gallon diesel fuel UST was removed from the property in July 1998. Based on the available information, it is unclear if the property is owned by the Federal Aviation Administration and leased by Mobil Oil, or if Mobil Oil owns and operates the property. According to the historic aerial photographs, the property was undeveloped land from 1939 through 1962; however, 75th Street and Woodward Avenue were depicted in the earliest available photograph (1939). The 1972 aerial photograph depicts a small structure on the property, with an adjacent access/frontage road running parallel to 75th Street. The 1988 aerial photograph depicts the property redeveloped with a structure which resembles the present-day configuration. The 1998 and subsequent aerial photographs depict the property as was noted during the site visit. The UST tank farm/pad is visible at the northeast portion of the property, approximately 80 feet east of the Project Corridor. Based on the available information; the LUST, SPILLS, UST, and RCRA-SQG database listings; and its proximity to the Project Corridor, this site is considered a PIP.



PESA Site ID 5 – Previous Gasoline Filling Station/Sams Club 6488/Sam's Club Fueling Station #6488

This site is listed in the ERIS database under the operator names of "Sams Club 6488" and "Sam's Club Fueling Station #6488" and is located at 7300 Woodward Avenue, adjacent to the west of the Project Corridor. Based on review of historic aerial photographs, a gasoline filling station (likely associated with the "Sam's Club Fueling Station #6488") was depicted at the approximate address of 7440 Woodward Avenue, adjacent to the west of the Project Corridor. During site reconnaissance, the site at 7440 Woodward Avenue (previous gasoline filling station) was noted to be vacant and undeveloped and the building at 7300 Woodward Avenue (previous Sam's Club department store and auto maintenance garage) was noted to be vacant. The site is identified in the RCRA-SQG and UST databases. Sam's Club is listed as a SQG of RCRA hazardous wastes, including reactive waste (D003), mercury (D009), multiple volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs), cadmium (D006), chromium (D007), arsenic (D004), barium (D005), tetrachloroethylene (D039), corrosive waste (D002), ignitable waste (D001), and others. There are no violations listed for the generator, as of December 2018. The following USTs are registered under "Sam's West, Inc." (Facility No. 2042779) and are associated with the site.

Three (3) 20,000-gallon gasoline USTs, removed in November 2017

According to the historic aerial photographs, the property was undeveloped farmland from 1939 to 1978, with land disturbance depicted on the property in the 1983 and 1988 aerial photographs. The 1998 aerial photograph depicts the Sam's Club property at 7300 Woodward Avenue fully developed and consistent with present-day configuration; however, the property to the south (at approximately 7440 Woodward Avenue) is depicted as undeveloped. The 2006 aerial photograph depicts the property at approximately 7440 Woodward Avenue as fully developed with a gasoline filling station present; access to the property is depicted as only available off of the east-west commercial service road and no access is depicted directly from Woodward Avenue. The subsequent aerial photographs depict the gasoline filling station on the south property essentially unchanged. Based on the three gasoline USTs removed in November 2017, the gasoline filling station was likely demolished around this time and has since remained vacant/undeveloped. According to Google Earth's aerial photographs, the site was demolished sometime between April 2017 and March 2018. Based on the available information, the previous gasoline filling station and subsequent UST removals, the nature/extent of the RCRA-SQG listing, and its location adjacent to the Project Corridor, this site (both the closed Sam's Club store at 7300 Woodward Avenue property and the former Sam's Club gasoline filling station at 7440 Woodward Avenue, which is now vacant/undeveloped property) is considered a PIP.

PESA Site ID 6 – JC Penney 2924

The site was identified in the ERIS database as "JC Penney 2924" and is located at 7400 Woodward Avenue, adjacent to the west of the Project Corridor. The site is occupied by a large commercial/retail structure previously leased by JC Penney, a large department store retailer. Additionally, a large surface parking lot occupies the eastern portion of the property, adjacent to the commercial structure. JC Penney is listed as a conditionally-exempt small-quantity generator of RCRA hazardous wastes, including reactive waste (waste code D003), corrosive waste (D002), and ignitable waste (D001). There are no violations listed for the generator. At the time of site reconnaissance, the property was vacant and a sign on the front of the building showed contact information for leasing the building. Good housekeeping was noted at the time of the site reconnaissance. According to the historical aerial photographs, the site is depicted as being occupied by a building



resembling present-day conditions as early as 1998 The 1988 aerial photograph depicts the property with land disturbance and site grading activities. Based on the available information, the nature of the previous site use as a department store, no violations associated with the RCRA-CESQG listing, and the good housekeeping noted during site reconnaissance, this site is **not** considered a PIP.

PESA Site ID 9 – Home Depot 1942

The site was identified during site reconnaissance as a large commercial building located at 7200 Woodward Avenue, adjacent to the west of the Project Corridor. At the time of site reconnaissance, the site was occupied by a large home improvement equipment and material retail store (Home Depot), and a large surface parking lot adjacent to the west of Woodward Avenue. Additionally, an office supply retailer (Office Max) was noted to occupy 7250 Woodward Avenue, adjacent to Home Depot. The site was identified in the RCRA and TIER 2 databases as a small-quantity generator of hazardous wastes, including nonhalogenated solvents (F003, F005), ignitable waste (D001), benzene (D018), cadmium (D006), corrosive waste (D002), mercury (D009), methyl ethyl ketone (D035), and 2,4-dichlorophenoxyacetic acid (D016). According to the TIER 2 database, the facility handles between 500 and 999 pounds of sulfuric acid (liquid) daily; however, there are no violations associated with the site for the RCRA listing. According to the historical aerial photographs, the site is depicted as being occupied by commercial buildings resembling present-day conditions as early as 1998. Subsequent aerial photographs depict the property as unchanged and resembling present-day conditions. The 1988 aerial photograph depicts the property with land disturbance and site grading activities. Based on the available information, the nature of the site use as a retail home improvement store, no violations associated with the RCRA-SQG listing, and the good housekeeping noted during site reconnaissance, this site is **not** considered a PIP.

PESA Site ID 10 - Young Cleaners

This site is listed in the ERIS database under the operator name of "Young Cleaners" located at 7056 Woodward Avenue, adjacent to the west of the Project Corridor. The site is listed as a NG of RCRA hazardous wastes, including spent halogenated solvents (F002), with no violations associated with the facility. During the site reconnaissance, the property was occupied by a dry cleaner within a strip mall, adjacent to a convenience/grocery store, a vacant space, a restaurant, and a chiropractic office. According to the historic aerial photographs, the property was undeveloped farmland from 1939 to 1972, with land disturbance and development of the adjacent residential subdivision depicted in 1978. A structure depicting the present-day configuration of the property is depicted in the 1988 aerial photograph, with subsequent aerial photographs depicting the property essentially unchanged. Based on the available information, the nature of the property use, the RCRA listing, and its location near the Project Corridor, this site is considered a PIP.

PESA Site ID A – Sherwin Williams 3092

The site was identified in the ERIS database as "Sherwin Williams 3092" and is located at 2037 W. 75th Street, approximately 550 feet southwest of the Project Corridor. The site is listed as a conditionally-exempt small-quantity generator of RCRA hazardous wastes, including ignitable wastes (D001), with no violations indicated for the site. At the time of site reconnaissance, the property was occupied by a paint retail store (Sherwin Williams). According to the historical aerial photographs, the site is depicted as being occupied by a building resembling present day conditions in the 1998 aerial photograph. The 1988 aerial photograph depicts the property as undeveloped with land disturbance and/or site grading activities. Based on the available information, the separation distance from the Project Corridor, no violations



listed for the RCRA-CESQG site, and the good housekeeping noted during site reconnaissance, this site is **not** considered a PIP.

PESA Site ID B – Fabricate Cleaners and Tailors/Dry Cleaning, Tailoring, and Alterations

The site was identified in the ERIS database as "Fabricate Cleaners and Tailors" and "Dry Cleaning, Tailoring, and Alterations" and is located at 2003-2005 W. 75th Street, approximately 300 feet southwest of the Project Corridor. The site was listed in the SPILLS and RCRA databases. "Fabricate Cleaners and Tailors" is listed as a small-quantity generator of RCRA hazardous wastes, including spent halogenated solvents (F002) typically associated with drycleaners; however, there are no violations indicated for the site. "Dry Cleaning, Tailoring, and Alterations" was listed in the SPILLS database with an incident (Incident No. H20050146) that occurred on January 27, 2005, involving a release of approximately 20-30 gallons of liquid tetrachloroethylene from a dry-cleaning machine onto the asphalt paved area at the rear of the building (south side). According to the SPILLS listing, the strip mall was evacuated by the Fire Department (Downers Grove, Darien-Woodridge, Lisle-Woodridge, Bolingbrook, and/or Romeoville), including the seven people who occupied the drycleaner, and the spill was contained and later cleaned by a contractor. At the time of site reconnaissance, the property was occupied by an electronics/audio repair shop (Deltronics Pro Audio Repair at 2003 W. 75th Street) and a vacant space (2005 W. 75th Street). The rear of the building where the reported spill occurred is depicted in Photograph 22 of the Photo Log (in Appendix A). According to the historical aerial photographs, the site is depicted as under construction in 1983 and being occupied by a building resembling present day conditions in the 1988 aerial photograph. Based on the available information, the nature of the historic property use, the RCRA and SPILLS listings, and its location near the Project Corridor, this site is considered a PIP.

PESA Site ID C – Super-Lube

The site was identified in the ERIS database as "Super-Lube" and is located at 7520 Woodward Avenue, approximately 400 feet south of the Project Corridor. The site was listed in the UST database, with the following registered under "Sunshine Car Care, LLC" (Facility No. 2034783) and are associated with the site:

- Two (2) 1,500-gallon motor oil USTs, removed in July 2011
- One (1) 1,000-gallon used oil UST, removed in July 2011

There are no releases from the USTs noted at the time of removal, based on review of the UST database listing. At the time of site reconnaissance, the property was occupied by an automotive repair/maintenance shop (Super-Lube). According to the historical aerial photographs, the site is depicted as being occupied by a building resembling present day conditions in the 1983 aerial photograph. The 1978 aerial photograph depicts the property as undeveloped with land disturbance and/or site grading activities. Based on the available information, the separation distance from the Project Corridor, no releases noted from the USTs removed from the property, and the good housekeeping noted during site reconnaissance, this site is **not** considered a PIP.

PESA Site ID D - Clean and Save/Umang L. Patel MD

The site was identified in the ERIS database as "Clean and Save" and "Umang L. Patel MD" and is located at 7530 Woodward Avenue, approximately 550 feet south of the Project Corridor. "Clean and Save" is listed as a small-quantity generator of RCRA hazardous wastes, including spent halogenated wastes (F002) typically associated with drycleaners;



however, there are no violations indicated for the site. "Umang L. Patel MD" is listed in the SPILLS database with an incident (Incident No. 950844) that involved the discovery of an abandoned drum of unknown contents on April 25, 1995. The listing indicated that there was no release from the abandoned drum and it was discovered in the parking lot by the Darien-Woodridge Fire Department. At the time of site reconnaissance, the property was occupied by a rehabilitation clinic (Advocate Imaging and Midwest Rehabilitation Services). According to the historical aerial photographs, the site appears to be depicted as being occupied by a building resembling present day conditions in the 1998 aerial photograph; however, the aerial photograph does not depict the majority of the property. Based on the available information, the separation distance from the Project Corridor, no violations listed for the RCRA-SQG site, and the good housekeeping noted during site reconnaissance, this site is **not** considered a PIP.

PESA Site ID E – MGL Classic Touch Cleaners

The site was identified in the ERIS database as "MGL Classic Touch Cleaners" and is located at 1999 W. 75th Street, approximately 500 feet southeast of the Project Corridor. The site is listed as a small-quantity generator of RCRA hazardous wastes, including spent halogenated wastes (F002) typically associated with drycleaners; however, there are no violations indicated for the site. The site was also listed in the DELISTED DRYCLEANERS database. At the time of site reconnaissance, the property was occupied by a small grocery store (FMB Indian Grocery). According to the historical aerial photographs, the site is depicted as being occupied by a building resembling present day conditions in the 1988 aerial photograph. The 1983 aerial photograph depicts the property as undeveloped with land disturbance and/or site grading activities. Based on the available information, the separation distance from the Project Corridor, no violations listed for the RCRA-SQG site, and the good housekeeping noted during site reconnaissance, this site is **not** considered a PIP.

PESA Site ID F – Village of Woodridge/Village Greens of Woodridge Golf Course

The site was identified in the ERIS database as "Village of Woodridge" and "Village Greens of Woodridge Golf Course" and is located at 1575 W. 75th Street, approximately 550 feet southeast of the Project Corridor. The site is listed in the LUST database, which involved a release of gasoline in June 1998 (Incident No. 981459) and in August 1990 (Incident No 902364). The June 1998 incident is listed as closed, with a NFR letter date of August 26, 1999. At the time of site reconnaissance, the property was occupied by the Village of Woodridge, with what appears to be a maintenance garage attached to offices, with material storage noted on the south side (rear) of the structure. According to the historical aerial photographs, the site is depicted as being occupied by a building resembling present day conditions in the 1962 aerial photograph. The 1952 aerial photograph depicts the property as undeveloped farmland. Based on the available information and the separation distance from the Project Corridor, this site is **not** considered a PIP.

Analytical Summary

On May 24, 2019, fourteen (14) hand augers were advanced along the Project Corridor to a maximum depth of approximately 1 foot bgs to assess impacts to Project Corridor soils from the identified PIPs, and to determine CCDD suitability of soils for pH. Soils were screened continuously using a PID meter and one representative soil sample was collected from each boring. Eight samples were submitted for the analysis of one or more of the following: benzene, toluene, ethylbenzene, total xylene (BTEX) and Methyl-tert-butyl ether (MTBE); volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); and total RCRA metals as depicted in the table below:



Boring ID	Depth, ft	Relative to PIP#	VOCs	BTEX/MTBE	SVOCs	RCRA Metals	TCLP Chromium	рН
SB-1	0-1	В, 2	Х					Х
SB-2	0-1	2		X			5	Х
SB-3	0-1	2		Х				Χ
SB-4	0-1							Х
SB-5	0-1	5		X				
SB-6	0-1	5		Х				Х
SB-7	0-1							Х
SB-8	0-1	5	Х		X	Х	Х	Х
SB-9	0-1							
SB-10	0-1							Χ
SB-11	0-1	10	Х					
SB-12	0-1	10	Х					Χ
SB-13	0-1							Χ
SB-14	0-1							Χ

Eleven soil samples were submitted for laboratory analysis of soil pH. The PID results for each of the samples were within background levels (less than 1 ppm).

Sampling Location	Depth (ft)	PID Reading (ppm)
SB-1	0-1	0.0
SB-2	0-1	0.0
SB-3	0-1	0.0
SB-4	0-1	0.1
SB-5	0-1	0.0
SB-6	0-1	0.0
SB-7	0-1	0.0
SB-8	0-1	0.1
SB-9	0-1	0.1
SB-10	0-1	0.3
SB-11	0-1	0.0
SB-12	0-1	0.1
SB-13	0-1	0.3
SB-14	0-1	0.2
		<u> </u>



VOCs (and subset BTEX/MTBE)

Four samples [SB-01 (0-1), SB-08 (0-1), SB-11 (0-1), and SB-12 (0-1)] were submitted for the analysis of VOCs. Four samples [SB-02 (0-1), SB-03 (0-1), SB-05 (0-1), and SB-06 (0-1)] were submitted for the analysis of BTEX and MTBE due to the identified PIPs. Low levels of carbon disulfide were detected in samples SB-08 (0-1), SB-11 (0-1), and SB-12 (0-1) at 0.0446 mg/kg, 0.0084 mg/kg, and 0.0061 mg/kg, respectively, below the MAC value of 9 mg/kg. The remaining VOC and BTEX/MTBE results were below detection limits, achieving their respective Maximum Allowable Concentrations (MACs).

SVOCs

Sample SB-08 (0-1 foot) was submitted for the analysis of SVOCs due to the identified PIP. Fluoranthene was detected at a low level of 0.362 mg/kg in SB-08 (0-1), below its respective MAC value of 3,100 mg/kg. In addition, benzo(a)pyrene was detected at 0.164 mg/kg in SB-08 (0-1) below MAC values of 0.98 mg/kg (Non-MSA Counties), 1.3 mg/kg (Chicago Corporate Limits) and 2.1 mg/kg (MSA Counties), but above the MAC value of 0.09 mg/kg for CCDD facilities located outside of populated areas. The remaining SVOC results were below detection limits, achieving their respective MACs.

Since disposal of spoils at CCDD facilities outside of populated areas in non-MSA counties is not anticipated, we have not identified SB-08 as a CCDD exclusion area, except for the unlikely event that spoils are directed to facilities in such areas.

Total RCRA metals

Sample SB-08 (0-1 foot) was submitted for the analysis of total RCRA metals due to the identified PIP. Arsenic, barium, chromium, lead, and silver were detected at concentrations below their respective MACs. The cadmium, mercury, and selenium results were below detection limits, achieving their respective MACs. The results are summarized in the following table.

Soil Boring	Maximum Allowable	SB-08
Depth, ft	Concentration ^{a/}	0-1
Constituent	mg/kg	
Arsenic	13	11.5
Barium	1,500	77.3
Cadmium	5.2	<0.5
Chromium	21	30.2*
Lead	107	23.7
Mercury	0.89	<0.05
Selenium	1.3	<1.0
Silver	4.4	0.9

^{a/} Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F).

^{*}Indicated sample analyzed for TCLP



August 30, 2019 CCDD LPC-663 Form Woodward Avenue Resurfacing Project Village of Woodridge, DuPage County, IL Page | 11

Soil sample SB-08 (0-1) contained chromium (30.2 mg/kg) at a concentration that exceeded the MAC value (21mg/kg). Sample SB-08 (0-1) was subsequently analyzed for TCLP chromium. The sample had a result below the detection limit (<0.005 mg/L), achieving the MAC (0.1 mg/L). Based on the subsequent TCLP chromium results, chromium is considered to achieve the MAC for each of the samples analyzed. Low concentrations of metals were detected in the remaining samples below the MAC values.

Soil pH

Eleven samples [SB-1 (0-1), SB-2 (0-1), SB-3 (0-1), SB-4 (0-1), SB-6 (0-1), SB-7 (0-1), SB-8 (0-1), SB-10 (0-1), SB-12 (0-1), SB-13 (0-1), and SB-14 (0-1)] were submitted for laboratory analysis of soil pH to assess CCDD suitability. The results are summarized in the following table.

Sample ID	Depth, ft	Soil pH result
CCDD Soil pH Re	quirement: Betwe	en 6.25 and 9.0
SB-1	0-1	8.58
SB-2	0-1	8.80
SB-3	0-1	9.03
SB-4	0-1	8.70
SB-6	0-1	8.15
SB-7	0-1	9.17
SB-8	0-1	8.65
SB-10	0-1	8.55
SB-12	0-1	8.50
SB-13	0-1	9.00
SB-14	0-1	8.94

Samples SB-3 (0-1) and SB-7 (0-1) had pH results of 9.03 and 9.17, respectively, exceeding the acceptable range of 6.25 to 9.0. This will preclude these areas from being eligible for CCDD disposal

The remaining soil pH results ranged from 8.15 to 9.00, within the required range for CCDD disposal (between 6.25 and 9.0). The laboratory analytical report has been included in **Attachment D** of this narrative for reference.

CCDD Determination

Based on the due diligence and analytical testing conducted, with the exception of soils generated in the vicinity of borings SB-03 and SB-07, soils generated from the Woodward Avenue Resurfacing Project meet the requirements for CCDD disposal.



August 30, 2019 CCDD LPC-663 Form Woodward Avenue Resurfacing Project Village of Woodridge, DuPage County, IL Page | 12

It should be noted that the PNA results achieve the MAC values for CCDD facilities located within MSA Counties (excluding Chicago), populated areas within non-MSA counties, and within Chicago corporate limits, which is where we anticipate spoil to be directed. However, detections of benzo(a)pyrene compound in SB-08 (0-1 foot) exceeded the MAC values for CCDD facilities located outside of populated areas, though it is unlikely that project spoils will be directed to such facilities.

CCDD Exclusion Areas:

• SB-3 and SB-7 (0-1 feet bgs, or until bottom of excavation): SB-3 (0-1) and SB-7 (0-1) exceeded the MACs for pH with results of 9.03 and 9.17, respectively. The area is defined as from the midpoint between boring SB-2 and SB-3, located approximately 150 feet north of the intersection with 75th street, and extends approximately 1,000 feet north to the midpoint between SB-7 and SB-8, located at the midpoint of the intersection with Parking Lot Road. The exclusion zone also extends from the eastern extent of the Project Area to the centerline of Woodward Avenue. These soils are considered to be 669.05 (b)(1) soils. 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 soil cannot be taken to a CCDD facility since the pH of the soil is greater than 9.0.

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 the Project Area. If you have any questions regarding this matter, please contact us at 630-684-9100.

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
	One Project Manager,
Over \$50,000,000	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
1 0044 2/	100.000	0000
June 1, 2011 ^{2/}	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 2/	50-99	2004
,	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

^{1/} Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) Verified Retrofit Technology List (http://www.epa.gov/cleandiesel/verification/verif-list.htm), or verified by the California Air Resources Board (CARB) (http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

^{2/} Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

Diesel Retrofit Deficiency Deduction

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

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.

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

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

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

- (a) Withholding progress payments;
- (b) Assessing sanctions;
- (c) Liquidated damages; and/or
- (d) Disqualifying the Contractor from future bidding as non-responsible.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a

good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined 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 25.00 % 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-enterprise-certification/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.

GOOD FAITH EFFORT PROCEDURES. 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 owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the 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) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) 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 self-perform 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) FINAL PAYMENT. 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."

EMULSIFIED ASPHALTS (BDE)

Effective: August 1, 2019

Revise Article 1032.06 of the Standard Specifications to read:

"1032.06 Emulsified Asphalts. Emulsified asphalts will be accepted according to the current Bureau of Materials Policy Memorandum, "Emulsified Asphalt Acceptance Procedure". These materials shall be homogeneous and shall show no separation of asphalt after thorough mixing, within 30 days after delivery, provided separation has not been caused by freezing. They shall coat the aggregate being used in the work to the satisfaction of the Engineer and shall be according to the following requirements.

- (a) Anionic Emulsified Asphalt. Anionic emulsified asphalts RS-1, RS-2, HFRS-2, SS-1h, and SS-1 shall be according to AASHTO M 140, except as follows.
 - (1) The cement mixing test will be waived when the emulsion is being used as a tack coat.
 - (2) The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent.
- (b) Cationic Emulsified Asphalt. Cationic emulsified asphalts CRS-1, CRS-2, CSS-1h, and CSS-1 shall be according to AASHTO M 208, except as follows.
 - (1) The cement mixing test will be waived when the emulsion is being used as a tack coat.
 - (2) The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent.
- (c) High Float Emulsion. High float emulsions HFE-90, HFE-150, and HFE-300 are medium setting and shall be according to the following table.

Test	HFE-90	HFE-150	HFE-300
Viscosity, Saybolt Furol, at 122 °F (50 °C),			
(AASHTO T 59), SFS 1/	50 min.	50 min.	50 min.
Sieve Test, No. 20 (850 µm), retained on			
sieve, (AASHTO T 59), %	0.10 max.	0.10 max.	0.10 max.
Storage Stability Test, 1 day,			
(AASHTO T 59), %	1 max.	1 max.	1 max.
Coating Test (All Grades),			
(AASHTO T 59), 3 minutes	stone	e coated thorou	ughly
Distillation Test, (AASHTO T 59):			
Residue from distillation test to			
500 °F (260 °C), %	65 min.	65 min.	65 min.
Oil distillate by volume, %	7 max.	7 max.	7 max.

Characteristics of residue from distillation test to 500 °F (260 °C): Penetration at 77 °F (25 °C), (AASHTO T 49), 100 g,			
5 sec, dmm	90-150	150-300	300 min.
Float Test at 140 °F (60 °C),			
(AASHTO T 50), sec.	1200 min.	1200 min.	1200 min.

- 1/ The emulsion shall be pumpable.
- (d) Penetrating Emulsified Prime. Penetrating Emulsified Prime (PEP) shall be according to AASHTO T 59, except as follows.

Test	Result
Viscosity, Saybolt Furol, at 77 °F (25 °C), SFS	75 max.
Sieve test, retained on No. 20 (850 µm) sieve, %	0.10 max.
Distillation to 500 °F (260 °C) residue, %	38 min.
Oil distillate by volume, %	4 max.

The PEP shall be tested according to the current Bureau of Materials Illinois Laboratory Test Procedure (ILTP), "Sand Penetration Test of Penetrating Emulsified Prime (PEP)". The time of penetration shall be equal to or less than that of MC-30. The depth of penetration shall be equal to or greater than that of MC-30.

- (e) Delete this subparagraph.
- (f) Polymer Modified Emulsified Asphalt. Polymer modified emulsified asphalts, e.g. SS-1hP, CSS-1hP, CRS-2P (formerly CRSP), CQS-1hP (formerly CSS-1h Latex Modified) and HFRS-2P (formerly HFP) shall be according to AASHTO M 316, except as follows.
 - (1) The cement mixing test will be waived when the polymer modified emulsion is being used as a tack coat.
 - (2) CQS-1hP (formerly CSS-1h Latex Modified) emulsion for micro-surfacing treatments shall use latex as the modifier.
 - (3) Upon examination of the storage stability test cylinder after standing undisturbed for 24 hours, the surface shall show minimal to no white, milky colored substance and shall be a homogenous brown color throughout.
 - (4) The distillation for all polymer modified emulsions shall be performed according to AASHTO T 59, except the temperature shall be 374 ± 9 °F (190 ± 5 °C) to be held for a period of 15 minutes and measured using an ASTM 16F (16C) thermometer.
 - (5) The specified temperature for the Elastic Recovery test for all polymer modified emulsions shall be 50.0 ± 1.0 °F (10.0 ± 0.5 °C).

- (6) The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent.
- (g) Non-Tracking Emulsified Asphalt. Non-tracking emulsified asphalt NTEA (formerly SS-1vh) shall be according to the following.

Test	Requirement		
Saybolt Viscosity at 77 °F (25 °C),			
(AASHTO T 59), SFS	20-100		
Storage Stability Test, 24 hr, (AASHTO T 59), %	1 max.		
Residue by Distillation, 500 ± 10 °F (260 ± 5 °C), or			
Residue by Evaporation, 325 ± 5 °F (163 ± 3 °C),			
(AASHTO T 59), %	50 min.		
Sieve Test, No. 20 (850 μm), (AASHTO T 59), %	0.3 max.		
Tests on Residue from Evaporation			
Penetration at 77 °F (25 °C), 100 g, 5 sec,			
(AASHTO T 49), dmm	40 max.		
Softening Point, (AASHTO T 53), °F (°C)	135 (57) min.		
Ash Content, (AASHTO T 111), % 1/	1 max.		

^{1/} The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent

The different grades are, in general, used for the following.

Grade	Use
SS-1, SS-1h, RS-1, RS-2, CSS-1, CRS-1, CRS-2, CSS-1h, HFE-90, SS-1hP, CSS-1hP, NTEA (formerly SS-1vh)	Tack Coat
PEP	Prime Coat
RS-2, HFE-90, HFE-150, HFE-300, CRS-2P (formerly CRSP), HFRS-2P (formerly HFP), CRS-2, HFRS-2	Bituminous Surface Treatment
CQS-1hP (formerly CSS-1h Latex Modified)	Micro-Surfacing Slurry Sealing Cape Seal"

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 - LONGITUDINAL JOINT SEALANT (BDE)

Effective: August 1, 2018 Revised: November 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 longitudinal joint sealant (LJS) is specified, the surface to which the LJS is applied shall be thoroughly cleaned and dry. The LJS may be placed before or after the tack coat. When placed after the tack coat, the tack shall be fully cured prior to placement of the LJS.

The LJS shall be applied in a single pass with a pressure distributor, melter kettle, or hand applied from a roll. 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 18 in. (450 mm) \pm 1 1/2 in. (38 mm) and centered \pm 2 in. (\pm 50 mm) under the joint of the next HMA lift to be constructed. 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 application rate of LJS shall be according to the following.

LJS Application Table				
Overlay Thickness in. (mm)	Coarse Graded Application Rate ^{1/} (IL-19.0, IL-19.0L, IL-9.5, IL-9.5L, IL-4.75) Ib/ft (kg/m)	Fine Graded Application Rate ^{1/} lb/ft (kg/m)	SMA Mixtures 1/2/	
3/4 (19)	0.88 (1.31)			
1 (25)	1.15 (1.71)			
1 1/4 (32)	1.31 (1.95)	0.88 (1.31)		
1 1/2 (38)	1.47 (2.19)	0.95 (1.42)	1.26 (1.88)	
1 3/4 (44)	1.63 (2.43)	1.03 (1.54)	1.38 (2.06)	
2 (50)	1.80 (2.68)	1.11 (1.65)	1.51 (2.25)	
≥ 2 1/4 (60)	1.96 (2.92)			

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. 2/ If the joint is between SMA and either Coarse Graded or Fine Graded, the SMA rate shall be used.

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 placement and every 12,000 ft (3600 m) thereafter. 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 10 percent. The LJS shall be replaced 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 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	300 max.	AASHTO T 313
m-value Ash, %	0.300 min. 1.0 – 4.0	AASHTO T 111
Elastic Recovery,	1.0 – 4.0	
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"

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 PP-5	4.0 - 8.0"	

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."

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2019 Revised: January 1, 2020

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 regulated substances. This work shall also consist of the removal, transportation, and proper disposal of underground storage tanks (UST), their contents 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 and Qualifications. Prior to beginning this work, or working in areas with regulated substances, the Contractor shall submit a "Regulated Substances 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 Contractor(s) or firm(s) performing the work shall meet the following qualifications.

(a) Regulated Substances Monitoring. Qualification for environmental observation and field screening of regulated substances work and environmental observation of UST removal shall require either pre-qualification in Hazardous Waste by the Department or demonstration of acceptable project experience in remediation and operations for contaminated sites in accordance with applicable Federal, State, or local regulatory requirements using BDE 2730.

- Qualification for each individual performing regulated substances monitoring shall require a minimum of one-year of experience in similar activities as those required for the project.
- (b) Underground Storage Tank Removal. Qualification for underground storage tank (UST) removal work shall require 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 21 calendar days for review of the RSPCP. The review may involve rejection or revision and resubmittal; in which case, an additional 21 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 and documented using BDE 2730A "Regulated Substances Pre-Construction Plan (RSPCP) Addendum" and submitted to the Engineer for approval.

CONSTRUCTION REQUIREMENTS

- **Regulated Substances Monitoring.** Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities at the contract specific work areas. As part of the regulated substances monitoring, the monitoring personnel shall perform and document the applicable duties listed on form BDE 2732 "Regulated Substances Monitoring Daily Record (RSMDR)".
 - (a) Environmental Observation. Prior to beginning excavation, the Contractor shall mark the limits of the contract specific work areas. Once work begins, the monitoring personnel shall be present on-site continuously during the excavation and loading of material.
 - (b) Field Screening. Field screening shall be performed during the excavation and loading of material from the contract specific work areas, except for material classified according to Article 669.05(b)(1) or 669.05(c) where field screening is not required.

Field screening shall be performed 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 regulated substances. The PID or FID shall be calibrated on-site, and background level readings taken and recorded daily, and as field and weather conditions change. Field screen readings on the PID or FID in excess of background levels indicates the potential presence of regulated substances 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.

669.05 Regulated Substances Management and Disposal. The management and disposal of soil and/or groundwater containing regulated substances shall be according to the following:

- (a) Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate detected levels exceed the most stringent maximum allowable concentration (MAC) for chemical constituents in soil established pursuant to Subpart F of 35 III. Adm. Code 1100.605, the soil shall be managed as follows:
 - (1) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC, but still considered within area background levels by the Engineer, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable. If the soils cannot be utilized within the right-of-way, they shall be managed and disposed of at a landfill as a non-special waste.
 - (2) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County identified in 35 III. Admin. Code 742 Appendix A. Table G, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of 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 right-of-way as embankment or fill, when suitable, or managed and disposed of off-site 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 right-of-way as embankment or fill, when suitable, or managed and disposed of off-site 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 and the materials do not contain special waste or hazardous waste, as determined by the Engineer, the soil shall be managed and disposed of at a landfill as a non-special waste.
 - (6) When analytical results indicate soil is hazardous by characteristic or listing pursuant to 35 III. Admin. Code 721, contains radiological constituents, or the Engineer otherwise determines the soil cannot be managed according to Articles 669.05(a)(1)

through (a)(5) above, the soil shall be managed and disposed of off-site as a 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 right-of-way as embankment or fill, when suitable, or managed and disposed of off-site 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 III. Admin. Code 742 Appendix B Table A, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site 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 III. Admin. 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 or hazardous waste as applicable. Special waste 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 sanitary sewer or combined 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 sanitary sewer or combined sewer.

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 may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority, or it shall be containerized and trucked to an off-site treatment facility as a special waste or hazardous waste. The Contractor is prohibited from discharging groundwater within the trench through a 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 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 Contractor shall obtain all documentation including any permits and/or licenses required to transport the material containing regulated substances to the disposal facility. The Contractor shall coordinate with the Engineer on the completion of all documentation. The Contractor shall make all arrangements for collection and analysis of landfill acceptance testing. The Contractor shall coordinate waste disposal approvals with the disposal facility.

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

Transportation and disposal of material classified according to Article 669.05(a)(5) or 669.05(a)(6) shall be completed each day so that none of the material remains on-site by the close of business, except when temporary staging has been approved.

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 provided by the Bureau of Design and Environment. 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 permitted for disposal 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 their permit 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 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 III. Admin. Code 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 III. Admin. Code 811.107;
 - (4) a regulated asbestos-containing waste material, as defined under the National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 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 III. Admin. Code 728.107 under land disposal restrictions of 35 III. Admin. Code 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. Soil classified according to Articles 669.05(a)(2), (b)(1), or (c) may be temporarily staged at the Contractor's option. Soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) shall be managed and disposed of without temporary staging to the greatest extent practicable. If circumstances beyond the Contractor's control require temporary staging of these latter materials, the Contractor shall request approval from the Engineer in writing.

Temporary staging shall be accomplished within the right-of-way and the Contractor's means and methods shall be described in the approved or amended RSPCP. Staging areas shall not be located within 200 feet (61 m) of a public or private water supply well; nor within 100 feet (30 m) of sensitive environmental receptor areas, including wetlands, rivers, streams, lakes, or designated habitat zones.

The method of staging shall consist of containerization or stockpiling as applicable for the type, classification, and physical state (i.e., liquid, solid, semisolid) of the material. Materials of different classifications shall be staged separately with no mixing or co-mingling.

When containers are used, the containers and their contents shall remain intact and inaccessible to unauthorized persons until the manner of disposal is determined. 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 not use a storage container if visual inspection of the container reveals the presence of free liquids or other substances that could cause the waste to be reclassified as a hazardous or special waste.

When stockpiles are used, they shall be covered with a minimum 20-mil plastic sheeting or tarps secured using weights or tie-downs. Perimeter berms or diversionary trenches shall be provided to contain and collect for disposal any water that drains from the soil. Stockpiles shall be managed to prevent or reduce potential dust generation.

When staging non-special waste, special waste, or hazardous waste, the following additional requirements shall apply:

- (a) Non-Special Waste. When stockpiling soil classified according to Article 669.05(a)(1) or 669.05(a)(5), an impermeable surface barrier between the materials and the ground surface shall be installed. The impermeable barrier shall consist of a minimum 20-mil plastic liner material and the surface of the stockpile area shall be clean and free of debris prior to placement of the liner. Measures shall also be taken to limit or discourage access to the staging area.
- (b) Special Waste and Hazardous Waste. Soil classified according to Article 669.05(a)(6) shall not be stockpiled but shall be containerized immediately upon generation in containers, tanks or containment buildings as defined by RCRA, Toxic Substances Control

Act (TSCA), and other applicable State or local regulations and requirements, including 35 III. Admin. Code Part 722, Standards Applicable to Generators of Hazardous Waste.

The staging area(s) shall be enclosed (by a fence or other structure) to restrict direct access to the area, and all required regulatory identification signs applicable to a staging area containing special waste or hazardous waste shall be deployed.

Storage containers shall be placed on an all-weather gravel-packed, asphalt, or concrete surface. Containers shall be in good condition and free of leaks, large dents, or severe rusting, which may compromise containment integrity. Containers must be constructed of, or lined with, materials that will not react or be otherwise incompatible with the hazardous or special waste contents. Containers used to store liquids shall not be filled more than 80 percent of the rated capacity. Incompatible wastes shall not be placed in the same container or comingled.

All containers shall be legibly labeled and marked using pre-printed labels and permanent marker in accordance with applicable regulations, clearly showing the date of waste generation, location and/or area of waste generation, and type of waste. The Contractor shall place these identifying markings on an exterior side surface of the container.

Storage containers shall be kept closed, and storage pads covered, except when access is needed by authorized personnel.

Special waste and hazardous waste shall be transported and disposed within 90 days from the date of generation.

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 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 III. Admin. 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 III. Admin. 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 District Environmental Studies Unit (DESU). Upon confirmation of a release of contaminants 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 tank 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 tank excavation zone and entered into subsurface structures (such as sewers or basements).

The tank excavation shall be backfilled according to applicable portions of Sections 205, 208, and 550 with a material that will compact and develop stability. 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 Substances Final Construction Report.** Not later than 90 days after completing this work, the Contractor shall submit a "Regulated Substances 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.

Regulated substances monitoring, 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 to the nearest 0.5 calendar day, for REGULATED SUBSTANCES MONITORING.

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 UST removal, soil excavation, soil and content sampling, the management of excavated soil and 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 of soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) will be paid for according to Article 109.04. 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.

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.

When the waste material for disposal requires sampling for landfill 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."

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%"

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 $\ 50$ working days.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

 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).

- Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor

performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection

for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- 4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- **7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
 - a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391.

The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each

classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and $% \left(1\right) =\left(1\right) \left(1\right)$
 - (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.
- (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
 - (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
 - (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice

performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- 7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12
- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one

and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
- **4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
 - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more — as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of

Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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.