65

Letting March 9, 2018

Notice to Bidders, Specifications and Proposal



Springfield, Illinois 62764

Contract No. 61E41 COOK County Section 16-00055-00-RS (Chicago Ridge) Route AUSTIN AVENUE Project 1P5V-081 () District 1 Construction Funds

Prepared by

Checked by

F

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 9, 2018 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. 61E41 COOK County Section 16-00055-00-RS (Chicago Ridge) Project 1P5V-081 () Route AUSTIN AVENUE District 1 Construction Funds

Resurfacing on Austin Avenue from 111th Street to 107th Street in the Village of Chicago Ridge.

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

By Order of the Illinois Department of Transportation

Randall S. Blankenhorn, Secretary

CONTRACT 61E41

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2018

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 1-1-18)

SUPPLEMENTAL SPECIFICATIONS

Std. Spe	ec. Sec.	No.
106	Control of Materials	1
403	Bituminous Surface Treatment (Class A-1, A-2, A-3)	2
404	Micro-Surfacing and Slurry Sealing	3
405	Cape Seal	14
420	Portland Cement Concrete Pavement	24
442	Pavement Patching	26
502	Excavation for Structures	27
503	Concrete Structures	29
504	Precast Concrete Structures	32
542	Pipe Culverts	33
586	Sand Backfill for Vaulted Abutments	34
630	Steel Plate Beam Guardrail	
631	Traffic Barrier Terminals	
670	Engineer's Field Office and Laboratory	40
701	Work Zone Traffic Control and Protection	41
704	Temporary Concrete Barrier	42
781	Raised Reflective Pavement Markers	
888	Pedestrian Push-Button	45
1003	Fine Aggregates	
1004	Coarse Aggregates	47
1006	Metals	
1020	Portland Cement Concrete	
1050	Poured Joint Sealers	53
1069	Pole and Tower	
1077	Post and Foundation	56
1096	Pavement Markers	57
1101	General Equipment	58
1102	Hot-Mix Asphalt Equipment	
1103	Portland Cement Concrete Equipment	
1106	Work Zone Traffic Control Devices	63

CHECK SHEET FOR RECURRING SPECIAL PROVISIONS

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

RECURRING SPECIAL PROVISIONS

<u>CH</u>	<u>ECK</u>	<u>(SHEET #</u>	<u>PAGE NO.</u>
1	Χ	Additional State Requirements for Federal-Aid Construction Contracts	64
2	Χ	Subletting of Contracts (Federal-Aid Contracts)	67
3	Χ	EEO	68
4		Specific EEO Responsibilities Non Federal-Aid Contracts	78
5		Required Provisions - State Contracts	83
6		Asbestos Bearing Pad Removal	89
7		Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	90
8		Temporary Stream Crossings and In-Stream Work Pads	91
9		Construction Layout Stakes Except for Bridges	92
10	Χ	Construction Layout Stakes	95
11		Use of Geotextile Fabric for Railroad Crossing	98
12		Subsealing of Concrete Pavements	100
13		Hot-Mix Asphalt Surface Correction	104
14		Pavement and Shoulder Resurfacing	106
15		Patching with Hot-Mix Asphalt Overlay Removal	107
16		Polymer Concrete	109
17		PVC Pipeliner	111
18		Bicycle Racks	112
19		Temporary Portable Bridge Traffic Signals	114
20		Work Zone Public Information Signs	116
21		Nighttime Inspection of Roadway Lighting	117
22		English Substitution of Metric Bolts	118
23		Calcium Chloride Accelerator for Portland Cement Concrete	119
24		Quality Control of Concrete Mixtures at the Plant	120
25	Х	Quality Control/Quality Assurance of Concrete Mixtures	128
26		Digital Terrain Modeling for Earthwork Calculations	144
27		Reserved	146
28		Preventive Maintenance – Bituminous Surface Treatment (A-1)	147
29		Reserved	153
30		Reserved	154
31		Reserved	155
32		Temporary Raised Pavement Markers	156
33		Restoring Bridge Approach Pavements Using High-Density Foam	157
34		Portland Cement Concrete Inlay or Overlay	160
35		Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	164

CHECK SHEET FOR 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:

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

CHECK	SHEET #	PAGE NO.
LRS 1	Reserved	168
LRS 2	☐ Furnished Excavation	169
LRS 3		170
LRS 4	☐ Flaggers in Work Zones	171
LRS 5	Contract Claims	172
LRS 6	☐ Bidding Requirements and Conditions for Contract Proposals	173
LRS 7	☐ Bidding Requirements and Conditions for Material Proposals	179
LRS 8	Reserved	185
LRS 9	☐ Bituminous Surface Treatments	186
LRS 10	Reserved	187
LRS 11	☐ Employment Practices	188
LRS 12	☐ Wages of Employees on Public Works	190
LRS 13	Selection of Labor	192
LRS 14	Paving Brick and Concrete Paver Pavements and Sidewalks	193
LRS 15	Partial Payments	196
LRS 16	Protests on Local Lettings	197
LRS 17	Substance Abuse Prevention Program	198
LRS 18	Multigrade Cold Mix Asphalt	199

INDEX OF SPECIAL PROVISIONS

SPECIAL PROVISIONS	1
LOCATION OF PROJECT	1
DESCRIPTION OF IMPROVEMENT	1
STATUS OF UTILITIES (D-1)	
TRAFFIC CONTROL PLÀN	5
MAINTENANCE OF ROADWAYS (DISTRICT 1)	6
SIGN RELOCATIONS	
SAW CUTTING	8
PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	9
DETECTABLE WARNINGS	10
HOT-MIX ASPHALT SURFACE REMOVAL, OF SPECIFIED DEPTH	
PORTLAND CEMENT CONCRETE SIDEWALK 5-INCH, SPECIAL	
FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	14
BRICK DRIVEWAY REMOVAL AND REPLACEMENT	
DRAINAGE STRUCTURES TO BE CLEANED AND GROUTED	
HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3"	17
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	
DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED	
ADJUSTMENTS AND RECONSTRUCTIONS (D-1)	
AGGREGATE SUBGRADE IMPROVEMENT (D-1)	
AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS	
DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (DISTRICT 1)	26
FRICTION AGGREGATE (D-1)	28
GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1)	
HMA MIXTURE DESIGN REQUIREMENTS (D-1)	
PUBLIC CONVENIENCE AND SAFETY (DIST 1)	
RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (D-1)	42
DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING,	
RESURFACING, & PATCHING OPERATIONS)	53
MAINTENANCE OF EXISTING TRAFFIC SIGNAL AND FLASHING BEACON	
INSTALLATION	57
TEMPORARY INFORMATION SIGNING	
AVAILABLE REPORTS	
LR 107-4	
IEPA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT	
IEPA NOTICE OF INTENT FOR GENERAL PERMIT	
EPA LPC 662	68
IEPA LPC 663	70

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
	80382	72	X Adjusting Frames and Grates	April 1, 2017	,
	80274		Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
	80192		Automated Flagger Assistance Device	Jan. 1, 2008	, ,
	80173	74	X Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
	80241		Bridge Demolition Debris	July 1, 2009	
	5026I		Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	5048I		Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	5049I		Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	5053I		Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
	80366		Butt Joints	July 1, 2016	
	80386		Calcium Aluminate Cement for Class PP-5 Concrete Patching	Nov. 1, 2017	
*	80396		Class A and B Patching	Jan. 1, 2018	
	80384	77	X Compensable Delay Costs	June 2, 2017	
	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	81	X Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
	80387		Contrast Preformed Plastic Pavement Marking	Nov. 1, 2017	
_	80029	84	X Disadvantaged Business Enterprise Participation	Sept. 1, 2000	July 2, 2016
*	80378		Dowel Bar Inserter	Jan. 1, 2017	Jan. 1, 2018
	80388	95	X Equipment Parking and Storage	Nov. 1, 2017	
	80229		Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
	80304		Grooving for Recessed Pavement Markings	Nov. 1, 2012	Nov. 1, 2017
	80246	96	X Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2016
*	80347		Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits - Jobsite Sampling	Nov. 1, 2014	Jan. 1, 2018
	80383		Hot-Mix Asphalt – Quality Control for Performance	April 1, 2017	Nov. 1, 2017
	80376	97	X Hot-Mix Asphalt – Tack Coat	Nov. 1, 2016	
*	80392	98	X Lights on Barricades	Jan. 1, 2018	
	80336		Longitudinal Joint and Crack Patching	April 1, 2014	April 1, 2016
*	80393		Manholes, Valve Vaults, and Flat Slab Tops	Jan. 1, 2018	
	80045		Material Transfer Device	June 15, 1999	Aug. 1, 2014
*	80394		Metal Flared End Section for Pipe Culverts	Jan. 1, 2018	
	80165		Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
	80349		Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
4	80371	400	Pavement Marking Removal	July 1, 2016	
*	80390	100	X Payments to Subcontractors	Nov. 2, 2017	A '14 0047
	80377	404	Portable Changeable Message Signs	Nov. 1, 2016	April 1, 2017
	80389	101	X Portland Cement Concrete	Nov. 1, 2017	N: 4 0047
	80359	400	Portland Cement Concrete Bridge Deck Curing	April 1, 2015	Nov. 1, 2017
	80385	102	X Portland Cement Concrete Sidewalk	Aug. 1, 2017	A == :1 4 0040
	80300	400	Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
	80328	103	X Progress Payments	Nov. 2, 2013	lan 1 0000
	3426I		Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
	80157		Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	

	<u>File</u> Name	<u>Pg.</u>	Special Provision Title	<u>Effective</u>	Revised
*	80306		Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 1, 2018
*	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
*	80391	104	X Subcontractor Mobilization Payments	Nov. 2, 2017	
	80317		Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016
	80298		Temporary Pavement Marking (NOTE: This special provision was previously named "Pavement Marking Tape Type IV".)	April 1, 2012	April 1, 2017
	20338		Training Special Provision	Oct. 15, 1975	
*	80318		Traversable Pipe Grate for Concrete End Sections (Note: This special provision was previously named "Traversable Pipe Grate".)	Jan. 1, 2013	Jan. 1, 2018
	80288	105	X Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
	80302	107	X Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
	80071	108	X Working Days	Jan. 1, 2002	

The following special provisions are in the 2018 Supplemental Specifications and Recurring Special Provisions.

<u>File</u>	Special Provision Title	New Location	Effective	Revised
<u>Name</u>				
80368	Light Tower	Article 1069.08	July 1, 2016	
80369	Mast Arm Assembly and Pole	Article 1077.03(a)(1)	July 1, 2016	
80338	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	Recurring CS #35	April 1, 2014	April 1, 2016
80379	Steel Plate Beam Guardrail	Articles 630.02, 630.05, 630.06, and 630.08	Jan. 1, 2017	
80381	Traffic Barrier Terminal, Type 1 Special	Article 631.04	Jan. 1, 2017	
80380	Tubular Markers	Articles 701.03, 701.15, 701.18, and 1106.02	Jan. 1, 2017	

STATE OF ILLINOIS SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted April 1, 2016 (hereinafter referred to as the "Standard Specifications"); the latest edition of the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways" and the "Manual of Test Procedure of Materials" in effect on the date of invitation for bids; and the "Supplemental Specifications and Recurring Special Provisions", adopted January 1, 2018, indicated on the Check Sheet included herein; all of which apply to and govern the construction of Austin Avenue Resurfacing Project, Section Number 16-00055-00-RS, Project Number 1P5V(081), Contract Number 61E41 in Chicago Ridge, Cook County, Illinois.

These Special Provisions included herein apply to and govern the proposed improvement designated and in case of conflict with any part or parts of said specifications, said Special Provisions shall take precedent and shall govern.

LOCATION OF PROJECT

These improvements are located in the Village of Chicago Ridge, Cook County, Illinois along Austin Avenue (MUN 1070) between 111th Street (FAU 1581) and 107th Street (MUN 1070). The gross length of the project is 2,569 feet (0.49 miles), and the net length is 2,569 feet (0.49 miles).

DESCRIPTION OF IMPROVEMENT

The work consists of curb and gutter removal and replacement, hot-mix asphalt surface removal, P.C.C. sidewalk removal and replacement, driveway removal and replacement, hot-mix asphalt surface course, hot-mix asphalt binder course, pavement striping, landscaping restoration, and all collateral work necessary to complete the project as shown on the plans and as described herein.

STATUS OF UTILITIES (D-1)

Effective: June 1, 2016

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

UTILTIES TO BE ADJUSTED

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

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	ACTION
Austin Avenue Sta. 16+88.47 Offset 37.81' RT	Gas Valve Box	Existing gas valve is located in the northeast sidewalk curb ramp at 110 th Street and Austin Avenue. The valve box will need to be adjusted during construction of the new curb ramp at this location.	Nicor Gas	Nicor contractor to adjust gas valve box, 1 day.

___1__Day Total Installation

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	Address	Phone	e-mail address
Nicor Gas	Joe Gaca	1844 Ferry Rd. Naperville, IL 60563	(815) 272- 9242	

<u>UTILITIES TO BE WATCHED AND PROTECTED</u>

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

No facilities requiring extra consideration.

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	Address	Phone	e-mail address
AT&T (Distribution)	Steve Larson	1000 Commerce Dr., Floor 1 Oak Brook, IL 60523	(630) 573- 5450	G11629@att.com
ComEd	Jim Peto	25000 S. Governors Highway University Park, IL 60466	(708) 235- 2422	james.peto@comed.com
Comcast	Martha Gieras	688 Industrial Dr. Elmhurst, IL 60126	(630) 600- 6352	martha_gieras@cable.comcast.com

Nicor Gas	Bruce Koppang	1844 Ferry Rd. Naperville, IL 60563	(630) 388- 3046	bkoppan@aglresources.com
Village of Oak Lawn	David Leslie	9446 Raymond Ave. Oak Lawn, IL 60453	(708) 499- 7746	

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

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

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

TRAFFIC CONTROL PLAN

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

Special attention is called to Article 107.09 of the Standard Specification 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 Village of Chicago Ridge (Telephone: (708) 425-7700) at least 72 hours in advance of beginning work.

STANDARDS: 701006-05, 701301-04, 701311-03, 701501-06, 701701-10, 701801-06, 701901-07.

<u>DETAILS</u>: Traffic Control and Protection for Sideroads, Intersections and Driveways (TC-10); District One Typical Pavement Marking (TC-13); Arterial Road Information Sign (TC-22)

SPECIAL PROVISIONS: Maintenance for Roadways, Work Zone Traffic Control Surveillance (LRS 3), and Public Convenience and Safety.

Fresh oil signs (W21-2(0)) shall be posted at both ends of the roadway and all side streets as directed by the Engineer. Construction Ahead Signs shall be placed at all side streets and both ends of the roadway while construction is in process. This work shall be included in the cost of the appropriate Traffic Control and Protection pay items.

MAINTENANCE OF ROADWAYS (DISTRICT 1)

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

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

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

SIGN RELOCATIONS

The CONTRACTOR shall remove and relocate all street signs located in or near the construction zone as directed by the ENGINEER. The CONTRACTOR shall be responsible for replacing at his expense all signs damaged during the course of construction and the operation of removing and relocating signs. The removal and relocation of all existing signs within the construction limits shall not be paid for separately but shall be included in the cost of the contract in accordance with Article 107.25.

Basis of Payment. This work shall not be paid for separately but rather shall be included in the cost of the contract in accordance with Article 107.25.

SAW CUTTING

All existing pavement, curb and gutter, driveway and sidewalk to be removed shall be sawcut at neat lines. All trenches in paved areas shall be sawcut. The concrete saw shall be equipped with a diamond blade of sufficient size to saw pavements full-depth and be capable of accurately maintaining cutting depth.

Basis of Payment. All sawcutting shall be included in the bid price for each respective removal item and no additional compensation for this work shall be made.

PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH

Description. This work shall consist of the construction of new driveway pavement at locations directed by the Engineer in accordance with Sections 301, 351, and 423 of the Standard Specifications, and as specified herein.

CONTRACTOR shall place embankment or excavate in accordance with Sections 202 and 205 of the Standard Specifications in order to achieve the required finished grades shown on the plans or as directed by the Engineer.

The proposed driveway pavement shall consist of 7" Portland Cement Concrete Pavement and 3" of Aggregate Base Course, Type B (CA-6).

All excavation, embankment, Aggregate Base Course, Type B and P.C.C. Driveway Pavement will not be paid for separately but shall be included in this pay item.

Method of Measurement and Basis of Payment. This work will be measured and paid for at the contract unit price per square yard for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH, which price shall be payment in full for constructing this item as specified, including all materials, labor and equipment.

DETECTABLE WARNINGS

Description. This work shall consist of installing detectable warnings at locations shown on the plans or as directed by the Engineer. The Contractor shall install the Engineered Polymer Composite Replaceable Cast in Place Detectable Warning Plates manufactured by Access Tile (Phone: 888-679-4022), ADA Solutions (Phone: 800-372-0519) or Detectile Corporation (Phone: 630-734-0277). The detectable warning shall be installed in accordance with the manufacturer's recommendations and as shown on the plans and details or as required by the Engineer. Color and model of the detectable warning shall be approved by the ENGINEER as coordinated with the VILLAGE prior to installation. Once this detectable warning has been approved, only this brand can be used.

Articles 424.08 – 424.12 of the Standard Specifications shall be replaced with the following:

424.08 Curb Ramps. Curb ramps shall be constructed according to the Americans with Disabilities Act Accessibility Guidelines (ADAAG), the Illinois Accessibility Code, the IDOT Standard details and as shown on the plans. Curb ramps shall be constructed to the same thickness as the adjacent sidewalk with a minimum thickness of 100 mm (5 in.).

424.09 Detectable Warnings. The detectable warning shall be installed during the construction of the PCC sidewalk. The top of the plate shall be flush with the surface of the sidewalk. The detectable warning shall be installed according to the manufacturer's specifications.

The detectable warnings shall be installed at curb ramps, medians and pedestrian refuge islands, at-grade railroad crossings, transit platform edges, and other locations where pedestrians are required to cross a hazardous vehicular way. Detectable warnings shall also be installed at alleys and commercial entrances when permanent traffic control devices are present. The installation shall be an integral part of the walking surface and only the actual domes shall project above the walking surface. The product or method used for installing detectable warnings shall come with the following documents which shall be given to the Engineer prior to use.

- (a) Manufacturer's certification stating the product is fully compliant with the ADAAG.
- (b) Manufacturer's five year warranty.
- (c) Manufacturer's specifications stating the required materials, equipment, and installation procedures. Products that are colored shall be colored their entire thickness. The materials, equipment, and installation procedures used shall be according to the manufacturer's specifications.

424.10 Backfill. After the concrete has been cured, the spaces along the edges of the sidewalk and ramps shall be backfilled with approved material. The material shall be compacted until firm and the surface neatly graded.

424.11 Disposal of Surplus Material. Surplus or waste material shall be disposed of according to Article 202.03.

424.13 Method of Measurement and Basis of Payment. This work will be measured and paid for at the contract unit price per square foot for DETECTABLE WARNINGS which price shall include all materials, labor, and equipment necessary to perform the work as specified herein.

HOT-MIX ASPHALT SURFACE REMOVAL, OF SPECIFIED DEPTH

Description. This work shall be constructed in accordance with Section 440 of the Standard Specifications. This work shall be done by a machine capable of cold milling minimum 6 feet wide in one pass. A machine that can mill a full lane width would be preferred, but not required.

The existing hot-mix asphalt surface shall be removed to the specified depth. The grindings shall be removed from site and the surface mechanically broomed until the surface is complete free of any loose material and debris. In the event the CONTRACTOR leaves the aggregate base course exposed commencing on the third night following the start of pavement removal, a \$5,000 per night penalty per street will be deducted from monies due to the CONTRACTOR. A time extension may be granted by the Engineer for unforeseen weather conditions that occur prior to the start of penalties.

The removal and disposal of additional material or aggregate base necessary to obtain the required elevation for Binder Course installation shall be included in the cost of this item. This shall include the removal of residual layers of asphalt that are not of sufficient thickness to be paved over.

No additional compensation shall be considered for petromat (fabric) encountered during grinding operations. Removal of petromat shall be considered included in this item.

Basis of Payment. This work shall be paid for at the contract unit price per square yard of HOT-MIX ASPHALT SURFACE REMOVAL, of specified depth, which shall include all labor and equipment necessary to complete the above work.

PORTLAND CEMENT CONCRETE SIDEWALK 5-INCH, SPECIAL

Description. This work shall consist of placing Portland Cement concrete sidewalk on a compacted subbase and shall be performed in accordance with Sections 311 and 424 of the STANDARD SPECIFICATIONS with the following alterations.

The CONTRACTOR shall place embankment or excavate in accordance with Sections 202 and 205 of the STANDARD SPECIFICATIONS in order to achieve the finished grades shown on the plans.

Sidewalks shall be placed on 4-inches of Subbase Granular Material, Type B for new sidewalks and 2 inches of Subbase Granular Material for replacing existing sidewalk. Expansion joints shall be placed at intervals of not more than 50 feet. At driveway apron locations, the depth of concrete shall be increased to 7-inches.

Adjustment of any valve boxes and domestic water service boxes needed to accommodate the proposed sidewalk shall be included in this pay item.

The Contractor is responsible for providing access to all residents during the period for which the sidewalk is removed.

All embankment and/or excavation, the Subbase Granular Material, Type B, the thickened concrete through driveways, and the adjustment of valve and water boxes will not be paid for separately but shall be considered part of this item.

Method of Measurement and Basis of Payment. This work will be measured and paid for at the contract unit price per square foot for PORTLAND CEMENT CONCRETE SIDEWALK 5-INCH, SPECIAL which price shall be payment in full for constructing this item as specified, including all materials, labor and equipment.

FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)

Description. These items of work shall be performed as directed by the ENGINEER in conformance with applicable provisions of Sections 353, 406, 602 and 603 of the "Standard Specifications for Road and Bridge Construction". This work shall be completed in accordance with the Details for Frames and Lids Adjustment with Milling (BD-8) in the Plans, and shall include the following:

Stage I (Before Pavement Milling)

- A. Remove a minimum of 12" of the pavement from around the structure.
- B. Remove the existing frame and lid from the structure.
- C. Cover the structure opening with a 36" diameter metal plate.
- D. Backfill with crushed stone and a minimum 1½" thick bituminous material approved by the ENGINEER.

Stage II (After Pavement Milling/Binder Course)

- A. Remove the bituminous material and crushed stone.
- B. Install the frame and lid; adjust the frame to its final surface elevation.
- C. The surrounding space shall be filled with Class SI concrete to the elevation of the surface of the existing base course or the binder course.

Additionally, this work shall include the removal of any debris, which has accumulated in the structure. Also, any mortar repairs, which need to be made around existing sewer pipes shall be included.

All adjustment rings less than 2" shall be rubber. Rings shall be sealed using 3/8" thick polyurethane premium construction adhesive.

Method of Measurement and Basis of Payment. This work will be paid for at the contract unit EACH price for FRAMES AND LIDS TO BE ADJUSTED (SPECIAL).

BRICK DRIVEWAY REMOVAL AND REPLACEMENT

Description. This work shall consist of removing and replacing brick driveway at locations directed by the Engineer. This work shall be performed in accordance with Section 301, and 440 of the Standard Specifications, as directed by the Engineer and herein specified.

Existing brick driveway pavement materials may vary. Driveway pavement materials may include, but are not limited to brick, brick edged, and stone.

If the Contractor removes or damages the existing driveway outside the limits designated by the Engineer, the Contractor will be required to remove and replace that portion at the Contractor's own expense to the satisfaction of the Engineer. The existing material shall be carefully stored and replaced after the adjacent curb and gutter or driveway is completed. In some locations, the Contractor may have to provide additional material. The additional brick, pavers or flagstone must match the existing and be approved by the Engineer before installation. The Contractor shall provide a 2" thick sand base or equal to the thickness of the existing base whichever is greater. This work will not be paid for separately but shall be included in this pay item.

The Contractor shall backfill adjacent to the new driveway pavement, to the satisfaction of the Engineer, within seven (7) calendar days of the placement of the driveway pavement. Failure to comply will result in a \$500.00 per location per day penalty that will be deducted from the monies due to the Contractor. This charge is separate from the cost of any corrective work ordered.

All saw cutting, excavation, embankment, brick, stone, aggregate base course, sand, and any other material required to match the existing brick driveway will not be measured for payment separately, but shall be included in the unit cost for BRICK DRIVEWAY REMOVAL AND REPLACEMENT.

The Contractor shall complete driveway construction, to the satisfaction of the Engineer, within fourteen (14) calendar days of the placement of the adjacent curb and gutter driveway. Failure to comply will result in a \$500.00 per calendar day penalty that will be deducted from the monies due to the Contractor. This charge is separate from the cost of any corrective work ordered.

Method of Measurement and Basis of Payment. This work will be measured in place and paid for at the contract unit price per square foot for BRICK DRIVEWAY REMOVAL AND REPLACEMENT, which price shall be payment in full for constructing this item as specified, including all materials, labor and equipment.

DRAINAGE STRUCTURES TO BE CLEANED AND GROUTED

Description. This work shall consist of cleaning, repairing and re-mortaring drainage structures at locations shown on the plans or as directed by the ENGINEER. These items of work shall be performed as directed by the ENGINEER. The word STRUCTURES shall be understood to mean catch basins, inlets, or manholes inclusive.

Construction Requirements. The structure shall be cleaned of debris and cracked and/or broken mortar shall be removed. If there is flow in the structure, inlet pipes must be plugged temporarily and water pumped out to perform the work. The CONTRACTOR shall repair and re-mortar around pipes; joints between blocks, sections, and rings; and under the frame as required to rehabilitate the structure. Disposal of debris removed from the structure shall be included in the cost of this item.

Basis of Payment. This work will be paid for at the contract unit price per each for DRAINAGE STRUCTURES TO BE CLEANED AND GROUTED, which shall include all equipment, materials, and labor to perform the described work.

HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3"

Description. Work under this item consists of construction of new HMA driveway pavement at locations shown on the plans, or as directed by the ENGINEER, in accordance with Sections 301, 351 and 406 of the Standard Specifications and as directed by the ENGINEER.

CONTRACTOR shall place embankment or excavate in accordance with Sections 202 and 205 of the Standard Specifications in order to achieve the required finished grades.

The proposed driveway pavement shall consist of 3" HMA Surface Course, Mix D, N50 and 6" of Aggregate Base Course, Type B (CA-6).

All excavation, embankment, Aggregate Base Course, Type B and HMA Surface Course will not be paid for separately but shall be included in this pay item.

Basis of Payment. This work will be paid for at the contract unit price per square yard for HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3", measured in place, which price shall include all materials, labor, and equipment necessary to satisfactorily complete the work as specified herein.

COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT

Description. This work shall consist of the removal of the existing curb and gutter and the construction of new concrete curb and gutter including all necessary pavement removal, excavation, embankment and subbase granular material as shown in the detail on the plans and in accordance with Sections 606, 202, 205 and 311 of the Standard Specifications and as specified herein.

Construction Requirements. In addition to the requirements of Article 606.06 of the Standard Specifications the CONTRACTOR shall excavate all material necessary to build the proposed curb and gutter and proposed subbase in accordance with Section 202 of the Standard Specifications. Excavated material will not be permitted to be stockpiled behind the curb. The proposed subbase shall be subbase granular material, Type B of the thickness shown on the plans in accordance with Section 311 of the Standard Specifications. Backfill behind the proposed back of curb shall be in accordance with Section 205 of the Standard Specifications. For streets with full depth asphalt replacement, any existing pavement removed adjacent to the new curb and gutter shall be replaced with suitable stone backfill.

Expansion joints shall be placed at a maximum spacing of 60 feet.

Contraction joints shall be placed at a maximum spacing of 20 feet.

The following items are to be considered included in the cost of the curb and gutter as shown on the detail:

- Stone backfill (for full depth asphalt replacement) or Class SI concrete between existing pavement and proposed Curb and Gutter.
- Excavation to 6" behind the proposed Back of Curb.
- Suitable backfill materials behind new curb and gutter, CA-6 if beneath driveway or sidewalk.
- Proposed ¾" performed expansion joint at concrete sidewalks or driveways.
- 4" earth excavation for the construction of the line item Subbase Granular Material, Type B 4".
- Subbase Granular Materials, Type B 4"
- Longitudinal bars, if encountered in the existing curb or curb and gutter, are not to be placed. Cutting and removing longitudinal bars shall be included.
- Drill and grout 2 #6 epoxy coated dowel bars to the existing curb and gutter.
- Pavement removal adjacent to the curb and gutter.

Method of Measurement and Basis of Payment. This work shall be measured in place and paid for at the contract unit price per foot for COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT, which price shall include all excavation, subbase material, dowel bars, expansion joints, Class SI concrete, backfill, labor, materials and equipment necessary to complete the work as specified herein.

DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED

Description. This work shall consist of adjusting catch basins, manholes, valve vaults, water valves and inlets with their existing frame and grate in accordance with Section 602 of the Standard Specifications and as specified herein.

Each structure adjustment shall be limited to two adjustment rings. The final ring and rings under 2" on all drainage adjustments shall be rubber. A material specification for the rubber adjustment ring is to be submitted to the ENGINEER for review and approval prior to installation. The rubber ring must meet the testing requirements of Section 1043.03 of the Standard Specifications. The CONTRACTOR shall place a continuous strip 3/8" thick of polyurethane sealer/adhesive between the PCC structure or PCC ring and the bottom of the rubber ring. The CONTRACTOR shall also place a continuous strip 3/8" thick of polyurethane sealer/adhesive between the top of the rubber ring and the bottom of the frame.

Hydraulic cement shall be used in the adjustment of said structure to seal the outside of the adjustment rings and under the frame.

Basis of Payment. This work will be measured and paid for at the contract unit price per each for DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED. The word STRUCTURE shall be understood to mean catch basin, manhole, valve vault, water valve or inlet as the case may be.

<u>ADJUSTMENTS AND RECONSTRUCTIONS (D-1)</u>

Effective: March 15, 2011

Revise the first paragraph of Article 602.04 to read:

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

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

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

Revise Article 603.05 to read:

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

Revise Article 603.06 to read:

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

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

Revise the first sentence of Article 603.07 to read:

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

AGGREGATE SUBGRADE IMPROVEMENT (D-1)

Effective: February 22, 2012

Revised: April 1, 2016

Add the following Section to the Standard Specifications:

"SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

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

303.02 Materials. Materials shall be according to the following.

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

- 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.
- **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				
Glau No.	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

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

AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS

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

Revise Article 402.10 of the Standard Specifications to read:

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

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

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

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

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

Add the following to Article 402.12 of the Standard Specifications:

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

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

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

Partial payment of the each amount bid for temporary access, of the type specified, will be paid according to the following schedule:

- (a) Upon construction of the temporary access, sixty percent of the contract unit price per each, of the type constructed, will be paid.
- (b) Subject to the approval of the Engineer for the adequate maintenance and removal of the temporary access, the remaining forty percent of the pay item will be paid upon the permanent removal of the temporary access."

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

Revise Article 603.07 of the Standard Specifications to read:

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

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

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

Dimension	Requirement
Inside Opening	Outside dimensions of casting + 1 in. (25 mm)

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

Placement shall be according to the manufacturer's specifications.

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

FRICTION AGGREGATE (D-1)

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

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

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

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

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	Allowed Alone or in Combination ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA 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/}

Use	Mixture	Aggregates Allowed		
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-9.5 or IL-9.5L SMA Ndesign 50 Surface	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/}		
HMA High ESAL	D Surface and Leveling 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 Up to	Allowed: 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 C	Combination ^{5/6/} :	
	SMA Ndesign 80 Surface	Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.		
		Other Combinations Allowed:		
		Up to	With	

Use	Mixture	Aggregates Allowed		
		50% Dolomite ^{2/}	Any Mixture E aggregate	
		75% Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone	
		75% Crushed Gravel ^{2/} or Crushed Concrete ^{3/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag	
HMA High ESAL	F Surface IL-9.5	Allowed Alone or in Combination 5/6/:		
HIGH ESAL	SMA Ndesign 80 Surface	3 \ ,		
		Other Combinations	Allowed:	
		Up to	With	
		50% Crushed Gravel ^{2/} , Crushed Concrete ^{3/} , or Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone	

- 1/ Crushed steel slag allowed in shoulder surface only.
- 2/ Carbonate crushed stone (limestone) and/or crushed gravel shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.
- 3/ Crushed concrete will not be permitted in SMA mixes.
- 4/ Crushed steel slag shall not be used as leveling binder.
- 5/ When combinations of aggregates are used, the blend percent measurements shall be by volume."
- 6/ Combining different types of aggregate will not be permitted in SMA Ndesign 80."

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

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

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

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

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

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

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

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

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

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

"(c) RAP Materials (Note 5)1031"

Add the following note to 1030.02 of the Standard Specifications:

Note 5. When using reclaimed asphalt pavement and/or reclaimed asphalt shingles, the maximum asphalt binder replacement percentage shall be according to the most recent special provision for recycled materials.

HMA MIXTURE DESIGN REQUIREMENTS (D-1)

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

1) Design Composition and Volumetric Requirements

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

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

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

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

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

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

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

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

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

≤ 2.0 percent."

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

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

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

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

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

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

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

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

- Note 1. Slaked quicklime shall be according to ASTM C 5.
- Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be an Elvaloy or SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.
- Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive

shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included meets AASHTO T305 requirements. The RAS shall be from a certified source that produces either Type I or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

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

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

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

High ESAL, MIXTURE COMPOSITION (% PASSING) 1/										
Sieve	IL-19.0		SMA 4/		SMA 4/		IL-9.5		IL-4.75	
Size	m	m		12.5		9.5	m	m	m	m
		i		m		m				
4 4 (0)	min	max	min	max	mın	max	mın	max	mın	max
1 1/2 in (37.5 mm)										
1 in. (25 mm)		100								
3/4 in. (19 mm)	90	100		100						
1/2 in. (12.5 mm)	75	89	80	100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	90	100
#8 (2.36 mm)	20	42	16	24 ^{5/}	16	32 ^{5/}	34 ^{6/}	52 ^{2/}	70	90
#16 (1.18 mm)	15	30					10	32	50	65
#30 (600 μm)			12	16	12	18				
#50 (300 μm)	6	15					4	15	15	30
#100 (150 μm)	4	9					3	10	10	18
#200 (75 μm)	3	6	7.0	9.0	7.5	9.5 ^{3/}	4	6	7	9 3/
Ratio Dust/Asph alt Binder		1.0		1.5		1.5		1.0		1.0

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

- 4/ The maximum percent passing the #635 (20 μm) sieve shall be ≤ 3 percent.
- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.
- 6/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

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

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

VOLUMETRIC REQUIREMENTS High ESAL						
	Voids ir	the Mineral Ag	gregate	Voids Filled		
		(VMA),		with Asphalt		
		% minimum		Binder		
Ndesign		IL-4.75 ^{1/}				
	IL-19.0	(VFA), %				
50		65 – 78 ^{2/}				
70	13.5 15.0 65 - 75					
90	10.0	10.0		03 - 75		

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

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

"(3) SMA Mixtures.

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

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

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

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

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

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

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

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

2) Design Verification and Production

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

"(d) Verification Testing. High ESAL, IL-4.75, and SMA mix designs submitted for verification will be tested to ensure that the resulting mix designs will pass the required criteria for the Hamburg Wheel Test (IL mod AASHTO T-324) and the Tensile Strength Test (IL mod AASHTO T-283). The Department will perform a verification test on gyratory specimens compacted by the Contractor. If the mix fails the Department's verification test, the Contractor shall make the necessary changes to the mix and resubmit compacted specimens to the Department for verification. If the mix fails again, the mix design will be rejected.

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

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

Illinois Modified AASHTO T 324 Requirements ^{1/}

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

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

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

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

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

<u>Production Testing.</u> Revise first paragraph of Article 1030.06(a) of the Standard Specifications to read:

"(a) High ESAL, IL-4.75, WMA, and SMA Mixtures. For each contract, a 300 ton (275 metric tons) test strip, except for SMA mixtures it will be 400 ton (363 metric ton), will be required at the beginning of HMA production for each mixture at the

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

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

"The Hamburg Wheel test shall also be conducted on all HMA mixtures from a sample taken within the first 500 tons (450 metric tons) on the first day of production or during start up with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T 324 and shall meet the requirements specified herein. Mix production shall not exceed 1500 tons (1350 metric tons) or one day's production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the plant produced mixture demonstrates conformance prior to start of mix production for a contract.

If the mixture fails to meet the Hamburg Wheel criteria, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria"

Method of Measurement:

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

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

Basis of Payment.

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

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

PUBLIC CONVENIENCE AND SAFETY (DIST 1)

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

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

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

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

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

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

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

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

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

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

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

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

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

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

- (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mix the FRAP will be used in.
- (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, HMA (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 in. (75 mm) single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or HMA (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".
- RAP or FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, plant cleanout etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.
- (b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall be sufficiently separated to prevent intermingling at the base. Each stockpile shall be signed indicating what type of RAS is present.
 - However, a RAS source may submit a written request to the Department for approval to blend mechanically a specified ratio of Type 1 RAS with Type 2 RAS.

The source will not be permitted to change the ratio of the blend without the Department prior written approval. The Engineer's written approval will be required, to mechanically blend RAS with any fine aggregate produced under the AGCS, up to an equal weight of RAS, to improve workability. The fine aggregate shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The fine aggregate shall be one that is approved for use in the HMA mixture and accounted for in the mix design and during HMA production.

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

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

- (a) FRAP Testing. When used in HMA, the FRAP shall be sampled and tested either during processing or after stockpiling. It shall also be sampled during HMA production.
 - (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 \leq 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS shall be in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

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

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

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

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

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

Parameter	FRAP
No. 4 (4.75 mm)	± 6 %
No. 8 (2.36 mm)	± 5 %
No. 30 (600 μm)	± 5 %
No. 200 (75 μm)	± 2.0 %
Asphalt Binder	± 0.3 %
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 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 Lim	its of Precision
% Passing: ^{1/}	FRAP	RAS
1/2 in.	5.0%	
No. 4	5.0%	
No. 8	3.0%	4.0%
No. 30	2.0%	4.0%
No. 200	2.2%	4.0%
Asphalt Binder Content	0.3%	3.0%
G _{mm}	0.030	

1/ Based on washed extraction.

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

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

1031.05 Quality Designation of Aggregate in RAP and FRAP.

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

If the quality is not known, the quality shall be determined as follows. Fractionated RAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5,000 tons (4,500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified

AASHTO T 164 by a consultant laboratory prequalified by the Department for the specified testing. The consultant laboratory shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the Central Bureau of Materials Aggregate Lab for MicroDeval Testing, according to ITP 327. A maximum loss of 15.0 percent will be applied for all HMA applications. The fine aggregate portion of the fractionated RAP shall not be used in any HMA mixtures that require a minimum of "B" quality aggregate or better, until the coarse aggregate fraction has been determined to be acceptable thru a MicroDeval Testing.

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

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

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

Max Asphalt Binder Rep	placement for FRAP wi	th RAS Combination

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

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the percent asphalt binder replacement shall not exceed 50 % of the total asphalt binder in the mixture.
- 2/ When the binder replacement exceeds 15 % for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 % binder replacement using a virgin asphalt binder grade of PG64-22 will be reduced to a PG58-28). When constructing full depth HMA and the ABR is less than 15 %, the required virgin asphalt binder grade shall be PG64-28.
- 3/ When the ABR for SMA or IL-4.75 is 15 % or less, the required virgin asphalt binder shall be SBS PG76-22 and the elastic recovery shall be a minimum of 80. When the ABR for SMA or IL-4.75 exceeds 15%, the virgin asphalt binder grade shall be SBS PG70-28 and the elastic recovery shall be a minimum of 80.
- 4/ When FRAP or RAS is used alone, the maximum percent asphalt binder replacement designated on the table shall be reduced by 10 %.
- **1031.07 HMA Mix Designs.** At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP and/or RAS material meeting the detailed requirements specified herein.
 - (a) FRAP and/or RAS. FRAP and /or RAS mix designs shall be submitted for verification. If additional FRAP or RAS stockpiles are tested and found to be within tolerance, as defined under "Evaluation of Tests" herein, and meet all requirements

herein, the additional FRAP or RAS stockpiles may be used in the original design at the percent previously verified.

(b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design.

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

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

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAS and FRAP feed system to remove or reduce oversized material.

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

- (a) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within ± 0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.
- (b) HMA Plant Requirements. HMA plants utilizing FRAP and/or RAS shall be capable of automatically recording and printing the following information.
 - (1) Dryer Drum Plants.
 - a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - d. Accumulated dry weight of RAS and FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).

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

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

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

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used shall be according to the current Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- (b) Gradation. The RAP material shall meet the gradation requirements for CA 6 according to Article 1004.01(c), except the requirements for the minus No. 200 (75 μm) sieve shall not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation."

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

Effective: January 1, 1985 Revised: January 5, 2016

886.02TS

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

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

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

Notification of Intent to Work.

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

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

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

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

Acceptance of Material.

The Contractor shall provide:

1. All material approval requests shall be submitted a minimum of seven (7) days prior to the delivery of equipment to the job site, or within 30 consecutive calendar days after the contract is awarded, or within 15 consecutive calendar days after the preconstruction meeting, whichever is first.

- 2. Four (4) copies of a letter listing the vendor's name and model numbers of the proposed equipment shall be supplied. The letter will be reviewed by the Traffic Design Engineer to determine whether the equipment to be used is approved. The letters will be stamped as approved or not approved accordingly and returned to the Contractor.
- 3. One (1) copy of material catalog cuts.
- 4. The contract number, permit number or intersection location must be on each sheet of the letter and material catalog cuts as required in items 2 and 3.

Inspection of Construction.

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

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

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

Restoration of Work Area.

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

Removal, Disposal and Salvage of Existing Traffic Signal Equipment.

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

DETECTOR LOOP REPLACEMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

Basis of Payment.

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

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.

MAINTENANCE OF EXISTING TRAFFIC SIGNAL AND FLASHING BEACON INSTALLATION

Effective: May 22, 2002 Revised: July 1, 2015

850.01TS

General.

- 1. Full maintenance responsibility shall start as soon as the Contractor begins any physical work on the Contract or any portion thereof. If Contract work is started prior to a traffic signal inspection, maintenance of the traffic signal installation(s) will be transferred to the Contractor without an inspection.
- 2. The Contractor shall have electricians with IMSA Level II certification on staff to provide signal maintenance. A copy of the certification shall be immediately available upon request of the Engineer.
- 3. This item shall include maintenance of all traffic signal equipment and other connected and related equipment such as flashing beacons, emergency vehicle preemption equipment, master controllers, uninterruptable power supply (UPS and batteries), PTZ cameras, vehicle detection, handholes, lighted signs, telephone service installations, communication cables, conduits to adjacent intersections, and other traffic signal equipment.
- 4. Regional transit, County and other agencies may also have equipment connected to existing traffic signal or peripheral equipment such as PTZ cameras, switches, transit signal priority (TSP and BRT) servers, radios and other devices that shall be included with traffic signal maintenance at no additional cost to the contract.
- 5. Maintenance shall not include Automatic Traffic Enforcement equipment, such as Red Light Enforcement cameras, detectors, or peripheral equipment. This equipment is operated and maintained by the local municipality and should be deactivated while on contractor maintenance.
- 6. The energy charges for the operation of the traffic signal installation shall be paid for by the Contractor.

Maintenance.

1. The Contractor shall check all controllers every two (2) weeks, which will include visually inspecting all timing intervals, relays, detectors, and pre-emption equipment to ensure that they are functioning properly. The Contractor shall check signal system communications and phone lines to assure proper operation. This item includes, as routine maintenance, all portions of emergency vehicle pre-emption equipment. The Contractor shall maintain in stock at all times a sufficient amount of materials and equipment to provide effective temporary and permanent repairs. Prior to the traffic signal maintenance transfer, the contractor shall supply a detailed maintenance schedule that includes dates, locations, names of electricians providing

the required checks and inspections along with any other information requested by the Engineer.

- 2. The Contractor is advised that the existing and/or span wire traffic signal installation must remain in operation during all construction stages, except for the most essential down time. Any shutdown of the traffic signal installation, which exceeds fifteen (15) minutes, must have prior approval of the Engineer. Approval to shut down the traffic signal installation will only be granted during the period extending from 10:00 a.m. to 3:00 p.m. on weekdays. Shutdowns shall not be allowed during inclement weather or holiday periods.
- 3. The Contractor shall provide immediate corrective action when any part or parts of the system fail to function properly. Two far side heads facing each approach shall be considered the minimum acceptable signal operation pending permanent repairs. When repairs at a signalized intersection require that the controller be disconnected or otherwise removed from normal operation, and power is available, the Contractor shall place the traffic signal installation on flashing operation. The signals shall flash RED for all directions unless a different indication has been specified by the Engineer. The Contractor shall be required to place stop signs (R1-1-36) at each approach of the intersection as a temporary means of regulating traffic. When the signals operate in flash, the Contractor shall furnish and equip all their vehicles assigned to the maintenance of traffic signal installations with a sufficient number of stop signs as specified herein. The Contractor shall maintain a sufficient number of spare stop signs in stock at all times to replace stop signs which may be damaged or stolen.
- 4. The Contractor shall provide the Engineer with 2 (two) 24 hour telephone numbers for the maintenance of the traffic signal installation and for emergency calls by the Engineer.
- Traffic signal equipment which is lost or not returned to the Department for any reason shall be replaced with new equipment meeting the requirements of the Standard Specifications and these special provisions.
- 6. The Contractor shall respond to all emergency calls from the Department or others within one (1) hour after notification and provide immediate corrective action. When equipment has been damaged or becomes faulty beyond repair, the Contractor shall replace it with new and identical equipment. The cost of furnishing and installing the replaced equipment shall be borne by the Contractor at no additional charge to the contract. The Contractor may institute action to recover damages from a responsible third party. If at any time the Contractor fails to perform all work as specified herein to keep the traffic signal installation in proper operating condition or if the Engineer cannot contact the Contractor's designated personnel, the Engineer shall have the State's Electrical Maintenance Contractor perform the maintenance work. The Contractor shall be responsible for all of the State's Electrical Maintenance Contractor's costs and liquidated damages of \$1000 per day per occurrence. The State's Electrical Maintenance Contractor shall bill the Contractor for the total cost of

the work. The Contractor shall pay this bill within thirty (30) days of the date of receipt of the invoice or the cost of such work will be deducted from the amount due the Contractor. The Contractor shall allow the Electrical Maintenance Contractor to make reviews of the Existing Traffic Signal Installation that has been transferred to the Contractor for Maintenance.

- 7. Any proposed activity in the vicinity of a highway-rail grade crossing must adhere to the guidelines set forth in the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) regarding work in temporary traffic control zones in the vicinity of highway-rail grade crossings which states that lane restrictions, flagging, or other operations shall not create conditions where vehicles can be queued across the railroad tracks. If the queuing of vehicles across the tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the crossing to prevent vehicles from stopping on the tracks, even if automatic warning devices are in place.
- 8. Equipment included in this item that is damaged or not operating properly from any cause shall be replaced with new equipment meeting current District One traffic signal specifications and provided by the Contractor at no additional cost to the Contract and/or owner of the traffic signal system, all as approved by the Engineer. Final replacement of damaged equipment must meet the approval of the Engineer prior to or at the time of final inspection otherwise the traffic signal installation will not be accepted. Cable splices outside the controller cabinet shall not be allowed.
- Automatic Traffic Enforcement equipment, such as Red Light Enforcement cameras, detectors, and peripheral equipment, damaged or not operating properly from any cause, shall be the responsibility of the municipality or the Automatic Traffic Enforcement Company per Permit agreement.
- 10. The Contractor shall be responsible to clear snow, ice, dirt, debris or other condition that obstructs visibility of any traffic signal display or access to traffic signal equipment.
- 11. The Contractor shall maintain the traffic signal in normal operation during short or long term loss of utility or battery back-up power at critical locations designated by the Engineer. Critical locations may include traffic signals interconnected to railroad warning devices, expressway ramps, intersection with an SRA route, critical corridors or other locations identified by the Engineer. Temporary power to the traffic signal must meet applicable NEC and OSHA guidelines and may include portable generators and/or replacement batteries. Temporary power to critical locations shall not be paid for separately but shall be included in the contract.
- 12. Temporary replacement of damaged or knockdown of a mast arm pole assembly shall require construction of a full or partial span wire signal installation or other method approved by the Engineer to assure signal heads are located overhead and over traveled pavement. Temporary replacement of mast arm mount signals with post mount signals will not be permitted.

Basis of Payment.

This work will be paid for at the contract unit price per each for MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION. Each intersection will be paid for separately. Maintenance of a standalone and or not connected flashing beacon shall be paid for at the contract unit price for MAINTENANCE OF EXISITNG FLASHING BEACON INSTALLATION. Each flashing beacon will be paid for separately.

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.

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.

AVAILABLE REPORTS

	No project specific reports were prepared.
	applicable, the following checked reports and record information is available for reference upon request:
	Record structural plans
	Preliminary Site Investigation (PSI)
	Preliminary Environmental Site Assessment (PESA)
\bowtie	Soils/Geotechnical Report
	Boring Logs
\bowtie	Pavement Cores
	Location Drainage Study (LDS)
	Hydraulic Report
	Noise Analysis
	Other:

Those seeking these reports should request access from:

Andrew Pufundt, Project Manager Christopher B. Burke Engineering, Ltd.

Phone: 847-823-0500 Email: apufundt@cbbel.com

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.

general liability insurance policy in accordance with Article 107.27:	rs
The entities listed above and their officers, employees, and agents shall be indemnified at held harmless in accordance with Article 107.26.	nd



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

217/782-0610

10/26/2017

VILLAGE OF CHICAGO RIDGE STANLEY BARWOCK 10455 S. Ridgeland Avenue Chicago Ridge, IL 60415

RE: FACILITY: MUN Route 1070 (Austin Ave) Resurfacing, Chicago Ridge, IL

COUNTY: COOK, NPDES Permit No: ILR10Z308

Notice of Coverage Under Construction Site Activity Storm Water General Permit

Dear NPDES Permittee:

We have reviewed your application and determined that storm water discharges associated with industrial activity from construction sites are appropriately covered by the attached General NPDES Permit issued by the Agency. Your discharge is covered by this permit effective as of the date of this letter or as identified by the conditions of the permit. The Permit as issued covers application requirements, a storm water pollution prevention plan and reporting requirements.

As a Permit Holder, it is your responsibility to:

- 1. Submit a modified Notice of Intent of any ownership or address change to the Permit Section within 30 days;
- 2. A Notice of Termination must be sent to the Agency, at the address indicated on the Notice of Termination, once your construction project has been <u>completed and the site is properly stabilized</u>. A Notice of Termination form has been enclosed for your convenience;

This letter shows your facility permit number below the construction site name. Please save this number and reference it in all future correspondence. Should you have any questions concerning the Permit, please contact Melissa Parrott at (217) 782-0610.

Very truly yours,

Alan Keller, P.E.

Manager, Permit Section

Division of Water Pollution Control

CC: Records Unit, Billing System, CB Engineers, Region: DesPlaines

COP

DEGISTIVE

OCI 3 U 2017

OHEROLOGISTICAL RUBKE

4302 N. Main St., Rockford, IL 61103 [815]987-7760 595 S. State, Elgin, IL 60123 (847]606-3131 2125 S. First St., Champaign, IL 61820 (217)278-5800 2009 Mail St., Collinsville, IL 62234 (618)346-5120 9511 Harrison St., Des Plaines, IL 60016 (847)294-4000 5407 N. University St., Arbor 113, Peoria, IL 61614 (309)693-5462 2309 W. Main St., Suite 116, Marion, IL 62959 (618)993-7200 100 W. Randolph, Suite 11-300, Chicago, IL 60601 (312)814-6026



Illinois Environmental Protection Agency

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

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

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

For Office Use Only

OWNER INFORMATION	Permit No. ILR10
Company/Owner Name: Village of Chicago Ridge	
Mailing Address: 10455 S. Ridgeland Avenue Pho	one: 708-425-7700
City: Chicago Ridge State: IL Zip: 60415 Fax	x:
Contact Person: Stanley Barwock E-mail: sbarwock	ck@chicagoridge.org
Owner Type (select one) City	
CONTRACTOR INFORMATION MS4 C	Community: Yes No
Contractor Name: TBD	
Mailing Address: Pho	one:
	x:
CONSTRUCTION SITE INFORMATION	
Select One: New Change of information for: ILR10	
Project Name: MUN Route 1070 (Austin Ave) Resurfacing Cou	unty: Cook
Street Address: Austin Ave & 111th Street City: Chicago Ridge	IL Zip: 60415
Latitude: 41 41 26.46 Longitude: 87 46 8.66	17 <u>37N</u> 13E
(Deg) (Min) (Sec) (Deg) (Min) (Sec)	Section Township Range
Approximate Construction Start Date Apr 1, 2018 Approximate Construction	End Date Dec 30, 2018
Total size of construction site in acres: 2.0	Fee Schedule for Construction Sites:
If less than 1 acre, is the site part of a larger common plan of development?	Less than 5 acres - \$250
○ Yes ○ No	5 or more acres - \$750
STORM WATER POLLUTION PREVENTION PLAN (SWPPP)	
Has the SWPPP been submitted to the Agency? Yes	○ No
(Submit SWPPP electronically to: epa.constilr10swppp@illinois.gov)	City, Chicago Didge
Location of SWPPP for viewing: Address: 10455 S. Ridgeland Avenue	City: Chicago Ridge
SWPPP contact information:	Inspector qualifications:
Contact Name: Stanley Barwock	Other
	ock@chicagoridge.org
Project inspector, if different from above	Inspector qualifications:
Inspector's Name: Steve Gasperec	Other
Phone: 847-833-0373 Fax: E-mail: sgasp	erec@cbbel.com

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Page 66

TYPE OF CONSTRUCTION (select one) Construction Type Transportation	
SIC Code: 1611	
Type a detailed description of the project:	
This project includes milling variable thickness of asphalt and replacement, curb and gutter replacement, driveway and	
sidewalk removal and replacement, minor storm sewer improvements, BMP installation and final stabilization.	
HISTORIC PRESERVATION AND ENDANGERED SPECIES COMPLIANCE	
Has the project been submitted to the following state agencies to satisfy applicable requirements for compliance with Illinois law on:	
Historic Preservation Agency Yes No	
Endangered Species	
RECEIVING WATER INFORMATION	
Does your storm water discharge directly to: Waters of the State or Storm Sewer	
Owner of storm sewer system: Village of Chicago Ridge	
Name of closest receiving water body to which you discharge: Stoney Creek	_
Mail completed form to: Illinois Environmental Protection Agency Division of Water Pollution Control Attn: Permit Section Post Office Box 19276 Springfield, Illinois 62794-9276 or call (217) 782-0610 FAX: (217) 782-9891	
Or submit electronically to: epa.constilr10swppp@illinois.gov	
certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible or gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.	× 600
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. (415 ILCS 5/44(h))	
Mun Bauvock 9/25/17 Owner Signature: Date:	
Stan Barwock Printed Name: Director P.W. Title:	



I. Source Location Information

Illinois Environmental Protection Agency

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

Source Site Certification by Owner or Operator for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-662

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 source site owners and operators to certify, pursuant to 35 III. Adm. Code 1100.205(a)(1) (A), that soil (i) was removed from a site that is not potentially impacted property and is presumed to be uncontaminated soil and (ii) is within a pH range of 6.25 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 fill operations or uncontaminated soil fill operations.

(Describe the location of the source of the uncontaminated soi	1)
Project Name: Chicago Ridge Pavement Reconstruction	Office Phone Number, if available: 847-823-0500
Physical Site Location (Street, Road): 107th Street from Prince	ess Avenue to Austin Avenue, Austin Avenue from 107th Street
City: Chicago Ridge State: IL	Zip Code: 60415
County: Cook	Township: Worth
Lat/Long of approximate center of site in decimal degrees (DD	.ddddd) to five decimal places (e.g., 40.67890, -90.12345):
Latitude: 41.69410 Longitude: -87.76810	
(Decimal Degrees) (-Decimal Degre	ees)
Identify how the lat/long data were determined:	
☐ GPS ☐ Map Interpolation ☐ Photo Interpolation	n ☐ Survey ⊠ Other
Google Earth	
IEPA Site Number(s), if assigned: BOL: None	BOW: None BOA: None
II. Owner/Operator Information for Source Site Site Owner	Site Operator
Name: Christopher B. Burke Engineering, Ltd.	Name: same
Street Address: 9575 West Higgins Road, Suite 600	Street Address:
PO Box:	PO Box:
City: Rosemont State: IL	City: State:
Zip Code: 60018-4920 Phone: 847-823-0500	Zip Code: Phone:
Contact: Andrew Pufundt	Contact:
Email, if available: apufundt@cbbel.com	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

LPC 348 Rev. 10/2013 the Forms Management Center.

D! N	Chicago I	Older Davisses I	D	Page 2 of 2
•	41.69410	Ridge Pavement F Longitude:	-87.76810	-
Latitude.			Control of the second s	
	(Decimal Degr	ees)	(-Decimal Degrees)	f'
			Source Site Certi	fication
Describe description properties individual storage to releases environm storage, can unknown Number of See attached photos a residential Report description of the storage	the current and on must take into so for commercial containers great anks (above groor any environmental violations; or disposal of trawn source or situation pages attached report for Ind topo maps dal development	past uses of the so account, at a minimal or industrial purpositer than 5 gallons and or undergrous ental cleanup or 1 (7) any contaminationsformers or capee. Ted: 40 TSC job # 81836. atting back to 1890 of the area beganders it and reviewed to any reviewed to the site on any reviewed.	nimum, the following for the coses; (2) the use, storage is or collectively more than nd); (4) any waste storage removal of contaminants; (ation in a well that exceed acitors manufactured before Source site is roadways in the collection of the cource site was before 1951 and it was conserved.	* Attach additional information as needed. The e source site and for nearby property: (1) use of the or disposal of chemical or petroleum products in 50 gallons; (3) the current or past presence of any treatment or disposal at the properties; (5) any reported (6) any environmental liens or governmental notification of the Board's groundwater quality standards; (8) the use, ore 1979; and (9) any fill dirt brought to the properties from a residential subdivision. Review of historical aerial was undeveloped farmland until after 1938. Some completely subdivided by 1961. The EDR Radius Map hases. Site reconnaissance by PG did not identify any of the
IV. Soil Describe	te owner or oper I pH Testing the results of so tation.	ator to provide thi Results il pH testing show	is certification.	e is not potentially impacted property, thereby allowing the in the range of 6.25 to 9.0 and attach any supporting
Number of	of pages attache	d: <u>10</u>		
Laborato of 8.09, 0	ries, Inc., an EL. C-5 had 7.68, C-	AP/NELAC certifi 7 had 7.52, C-10	ed laboratory. Analytical r had 8.67 and C-13 had 8.	source site and analyzed for pH by First Environmental eport dated 7/15/14 indicates that soil sample C-2 had a pH 19. sentative's Certification Statement and
Signatu		nois Environment	al Protection Act (415 II C	S 5/22.51 or 22.51a] and 35 III. Adm. Code 1100.205(a), I
certify tha the soil ph cleanup o representa submitted	t this site is not a I is within the ra r removal of con ative of the site o	a potentially impa nge of 6.25 to 9.0 taminants. Addit owner or site oper	(ow cted property and the soil b. I further certify that the s ionally, I certify that I am e rator and am authorized to	rner, operator or authorized representataive of source site) is presumed to be uncontaminated soil. I also certify that soil has not been removed from the site as part of a ither the site owner or operator or a duly authorized sign this form. Furthermore, I certify that all information mation, is to the best of my knowledge and belief, true,
Any pers	on who knowin	gly makes a fals	e, fictitious, or frauduler	nt material statement, orally or in writing, to the Illinois
EPA com	mits a Class 4	felony. A secon	d or subsequent offense	after conviction is a Class 3 felony. (415 ILCS 5/44(h))
Owr			Oper	
O Owr	ner's Duly Author	rized Representat	tive C Oper	ator's Duly Authorized Representative
	Printe	ed Name		
	Signa	ature		Date



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification

by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 III. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

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

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

I. Source Location Information	
(Describe the location of the source of the uncontaminate	ated soil)
Project Name: Chicago Ridge Pavement Reconstructi	Office Phone Number, if available: 847-823-0500
Physical Site Location (address, inclduding number an	d street):
Austin Avenue from 110th Street to 111th Street, and	Menard Avenue/108th Street/Pleasant Boulevard from halfway between 🛔
City: Chicago Ridge State: IL	Zip Code: <u>60415</u>
County: Cook	Township: Worth
Lat/Long of approximate center of site in decimal degre	es (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):
Latitude: 41.69410 Longitude: -87.7681	0
(Decimal Degrees) (-Decima	al Degrees)
Identify how the lat/long data were determined:	
☐ GPS ☐ Map Interpolation ☐ Photo Inter	polation
	_ carre, _ carre,
Google Earth	
IEPA Site Number(s), if assigned: BOL: None	BOW: None BOA: None
II. O	0.40%
II. Owner/Operator Information for Source	
Site Owner	Site Operator
Name: Christopher B. Burke Engineering, Ltd	Name: Same
Street Address: 9575 West Higgins Road, Suite 600	Street Address:
PO Box:	PO Box:
City: Rosemont State: IL	City: State:
Zip Code: 60018-4920 Phone: 847-823-05	00
Contact: Andrew Pufundt	Contact:
Email if available: anufundt@chhel.com	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

Project Name:	Chicago Ridg	je Pavement Reco	onstruction	
Latitude:	41 69410	Longitude:	- 87 76810	

Uncontaminated Site Certification

III. Basis for Certification and Attachments

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

a. 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)]:

See attached report. Topos & aerial photos show source site undeveloped farmland until after 1938, Some residential development before 1951, completely subdivided by 1961. The EDR Radius Map Report did not identify the site on any reviewed environmental databases.

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]:

Two soil samples (C-8 and C-9) were collected from the site and analyzed for BTEX/MTBE, PNAs, Lead, & pH. Analytical results meet MACs. The sample pH result for C-8 is 8.52 and for C-9 is 7.47.

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

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

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name:	Testing Service Corpora	ition	
Street Address:	360 S. Main Place		
City:	Carol Stream	State: <u>IL</u>	
Phone:	630-462-2600		WIND YOU TON
Aaron Ulrey Printed N	ame:		IN PARTY OF THE PA
Mans J.	May	8-7-14	196.001390 REGISTERED PROFESSIONAL
Licensed Profession	onal Engineer or onal Geologist Signature:	Date:	OF ILLINOIS INTERIOR OF ILLINO

P.E. or L.P.G. Seal:

ADJUSTING FRAMES AND GRATES (BDE)

Effective: April 1, 2017

Add the following to Article 602.02 of the Standard Specifications:

"(s) High Density Expanded Polystyrene Adjusting Rings	
with Polyurea Coating (Note 4)	1043.04
(t) Expanded Polypropylene (EPP) Adjusting Rings (Note 5)	

Note 4. High density expanded polystyrene adjusting rings with polyurea coating shall meet the design load requirements of AASHTO HS20/25. The rings may be used to adjust the frames and grates of drainage and utility structures up to a maximum of 6 in. (150 mm). They shall be installed and sealed underneath the frames according to the manufacturer's specifications.

Note 5. Riser rings fabricated from EPP may be used to adjust the frames and grates of drainage and utility structures up to a maximum of 6 in. (150 mm). An adhesive meeting ASTM C 920, Type S, Grade N5, Class 25 shall be used with EPP adjustment rings. The top ring of the adjustment stack shall be a finish ring with grooves on the lower surface and flat upper surface. The joints between all manhole adjustment rings and the frame and cover shall be sealed using the approved adhesive. In lieu of the use of an adhesive, an internal or external mechanical frame-chimney seal may be used for watertight installation. EPP adjustment rings shall not be used with heat shrinkable infiltration barriers."

Add the following to Section 1043 of the Standard Specifications:

"1043.04 High Density Expanded Polystyrene Adjusting Rings with Polyurea Coating. High density expanded polystyrene adjustment rings with polyurea coating shall be designed and tested to meet or exceed an HS25 wheel load according to the AASHTO Standard Specifications for Highway Bridges (AASHTO M306 HS-25). The raw material suppliers shall provide certifications of quality or testing using the following ASTM standards, and upon request, certify that only virgin material was used in the manufacturing of the expanded polystyrene rings.

Physical Property	erty Test Standard		/alue	
Friysical Property	Test Standard	3.0 lb/cu ft	4.5 lb/cu ft	
Compression Resistance	ASTM D 1621			
at 10% deformation		50 - 70	70 - 90	
at 5% deformation		45 - 60	60 - 80	
at 2% deformation		15 - 20	20 - 40	
Flexural Strength	ASTM D 790	90 - 120	130 - 200	
Water Absorption	ASTM D 570	2.0%	1.7%	
Coefficient of Linear Expansion	ASTM D 696	2.70E-06 in./in./ºF	2.80E-06 in./in./ºF	
Sheer Strength	ASTM D 732	55	80	

Tensile Strength	ASTM D 1623	70 - 90	130 - 140
Water Vapor Transmission	ASTM C 355	0.82 - 0.86	perm – in.

High density expanded polystyrene adjustment rings with polyurea coating shall have no void areas, cracks, or tears. The actual diameter or length shall not vary more than 0.125 in. (3 mm) from the specified diameter or length. Variations in height are limited to \pm 0.063 in. (\pm 1.6 mm). Variations shall not exceed 0.25 in. (6 mm) from flat (dish, bow, or convoluting edge) or 0.125 in. (3 mm) for bulges or dips in the surface.

1043.05 Expanded Polypropylene (EPP) Adjusting Rings. The EPP adjusting rings shall be manufactured using a high compression molding process to produce a minimum finished density of 7.5 lb/cu ft (120 g/l). The EPP rings shall be made of materials meeting ASTM D 3575 and ASTM D 4819-13. The grade adjustments shall be designed and tested according to the AASHTO Standard Specifications for Highway Bridges (AASHTO M 306 HS-25).

Grade rings shall contain upper and lower keyways (tongue and groove) for proper vertical alignment and sealing. The top ring, for use directly beneath the cast iron frame, shall have keyways (grooves) on the lower surface with a flat upper surface.

Adhesive or sealant used for watertight installation of the manhole grade adjustment rings shall meet ASTM C 920, Type S, Grade NS, Class 25, Uses NT, T, M, G, A, and O.

EPP adjustment rings shall have no void areas, cracks, or tears. The actual diameter or length shall not vary more than 0.125 in. (3 mm) from the specified diameter or length. Variations in height are limited to \pm 0.063 in. $(\pm$ 1.6 mm). Variations shall not exceed 0.25 in. (6 mm) from flat (dish, bow, or convoluting edge) or 0.125 in. (3 mm) for bulges or dips in the surface."

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)

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

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

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

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

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

Where: CA = Cost Adjustment, \$.

BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

BPI_L = Bituminous Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/ton (\$/metric ton).

 $^{\circ}$ AC $_{V}$ = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the $^{\circ}$ AC $_{V}$ will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC $_{V}$ and undiluted emulsified asphalt will be considered to be 65% AC $_{V}$.

Q = Authorized construction Quantity, tons (metric tons) (see below).

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

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

Where: A = Area of the HMA mixture, sq yd (sq m).

D = Depth of the HMA mixture, in. (mm).

 G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).

SG = Specific Gravity of bituminous material as shown on the bill of lading.

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

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

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

BUTT JOINTS (BDE)

Effective: July 1, 2016

Add the following to Article 406.08 of the Standard Specifications.

"(c) Temporary Plastic Ramps. Temporary plastic ramps shall be made of high density polyethylene meeting the properties listed below. Temporary plastic ramps shall only be used on roadways with permanent posted speeds of 55 mph or less. The ramps shall have a minimum taper rate of 1:30 (V:H). The leading edge of the plastic ramp shall have a maximum thickness of 1/4 in. (6 mm) and the trailing edge shall match the height of the adjacent pavement ± 1/4 in. (± 6 mm).

The ramp will be accepted by certification. The Contractor shall furnish a certification from the manufacturer stating the temporary plastic ramp meets the following requirements.

Physical Property	Test Method	Requirement
Melt Index	ASTM D 1238	8.2 g/10 minutes
Density	ASTM D 1505	0.965 g/cc
Tensile Strength @ Break	ASTM D 638	2223 psi (15 MPa)
Tensile Strength @ Yield	ASTM D 638	4110 psi (28 MPa)
Elongation @ Yield ^{1/} , percent	ASTM D 638	7.3 min.
Durometer Hardness, Shore D	ASTM D 2240	65
Heat Deflection Temperature, 66 psi	ASTM D 648	176 °F (80 °C)
Low Temperature Brittleness, F ₅₀	ASTM D 746	<-105 °F (<-76 °C)

1/ Crosshead speed -2 in./minute

The temporary plastic ramps shall be installed according to the manufacturer's specifications and fastened with anchors meeting the manufacturer's recommendations. Temporary plastic ramps that fail to stay in place or create a traffic hazard shall be replaced immediately with temporary HMA ramps at the Contractor's expense."

COMPENSABLE DELAY COSTS (BDE)

Effective: June 2, 2017

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
Over \$50,000,000	One Project Manager,
	Two Project Superintendents,
	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 working day contracts the payment will be made according to Article 109.04. For completion date contracts, an adjustment will be determined as follows.

Extended Traffic Control occurs between April 1 and November 30:

ETCP Adjustment (\$) = TE x (%/100 x CUP / OCT)

Extended Traffic Control occurs between December 1 and March 31:

ETCP Adjustment (\$) = TE x 1.5 (%/100 x CUP / OCT)

Where: TE = Duration of approved time extension in calendar days.

% = Percent maintenance for the traffic control, % (see table below).

CUP = Contract unit price for the traffic control pay item in place during the delay.

OCT = Original contract time in calendar days.

Original Contract Amount	Percent Maintenance	
Up to \$2,000,000	65%	
\$2,000,000 to \$10,000,000	75%	
\$10,000,000 to \$20,000,000	85%	
Over \$20,000,000	90%	

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

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

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010 Revised: November 1, 2014

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term "equipment" refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment's respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 1/	600-749	2002
	750 and up	2006
June 1, 2011 ^{2/}	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 ^{2/}	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

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

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: July 2, 2016

<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 that the Contractor signs with a subcontractor.

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

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

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

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

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 14.00% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

- (a) The bidder documents that enough DBE participation has been obtained to meet the goal or,
- (b) The bidder documents that a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

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

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 required prior to the award of the contract and the failure of the low bidder to comply will render the bid not responsive.

In order to assure the timely award of the contract, the low bidder shall submit:

- (a) The bidder shall submit a DBE Utilization Plan on completed Department forms SBE 2025 and 2026.
 - (1) The final Utilization Plan must be submitted within five calendar days after the date of the letting in accordance with subsection (a)(2) of Bidding Procedures herein.

(2) To meet the five day requirement, the bidder may send the Utilization Plan electronically by scanning and sending to DOT.DBE.UP@illinois.gov or faxing to (217) 785-1524. The subject line must include the bid Item Number and the Letting date. The Utilization Plan should be sent as one .pdf file, rather than multiple files and emails for the same Item Number. It is the responsibility of the bidder to obtain confirmation of email or fax delivery.

Alternatively, the Utilization Plan may be sent by certified mail or delivery service within the five calendar day period. If a question arises concerning the mailing date of a Utilization Plan, the mailing date will be established by the U.S. Postal Service postmark on the certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service when the Utilization Plan is received by the Department. It is the responsibility of the bidder to ensure the postmark or receipt date is affixed within the five days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Utilization Plan is to be submitted to:

Illinois Department of Transportation Bureau of Small Business Enterprises Contract Compliance Section 2300 South Dirksen Parkway, Room 319 Springfield, Illinois 62764

The Department will not accept a Utilization Plan if it does not meet the five day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Utilization Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration.

- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of Utilization Plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and scanned or faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:

- (1) The names and addresses of DBE firms that will participate in the contract;
- (2) A description, including pay item numbers, of the work each DBE will perform;
- (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
- (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
- (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the Utilization Plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
- (6) If the contract goal is not met, evidence of good faith efforts; the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document that good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere pro forma efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

(a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors

are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.

- (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
- (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
- (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with subsection (c)(6) of the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons for the determination. 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 in order to cure the deficiency.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217) 785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be forwarded to the Department's Reconsideration Officer. Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for consideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration

Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

<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 prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
 - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
 - (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:

- (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
- (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
- (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a 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 submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) <u>CHANGES TO WORK</u>. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A 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, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

- (c) <u>SUBCONTRACT</u>. The Contractor must provide DBE subcontracts to IDOT upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
- (d) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractorinitiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
 - (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
 - (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
 - (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) 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 prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.
- (6) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE 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 prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated, or fails to complete its work on the Contract for any reason the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department shall provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the 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 that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <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 my request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

EQUIPMENT PARKING AND STORAGE (BDE)

Effective: November 1, 2017

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

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

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

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

Effective: January 1, 2010 Revised: April 1, 2016

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

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

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

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

- a. Confined Edge. Each confined edge density shall be represented by a 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."

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

"Mixture Composition	Parameter	Individual Test (includes confined	Unconfined Edge Joint Density Minimum
		edges)	
IL-4.75	Ndesign = 50	93.0 – 97.4% ^{1/}	91.0%
IL-9.5	Ndesign = 90	92.0 – 96.0%	90.0%
IL-9.5,IL-9.5L	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0	Ndesign = 90	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L	Ndesign < 90	93.0 ^{2/} – 97.4%	90.0%
SMA	Ndesign = 50 & 80	93.5 - 97.4%	91.0%"

HOT-MIX ASPHALT - TACK COAT (BDE)

Effective: November 1, 2016

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

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

LIGHTS ON BARRICADES (BDE)

Effective: January 1, 2018

Revise Article 701.16 of the Standard Specifications to read:

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

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

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

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

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

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

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: November 2, 2017

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

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

PORTLAND CEMENT CONCRETE (BDE)

Effective: November 1, 2017

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

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

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

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

PORTLAND CEMENT CONCRETE SIDEWALK (BDE)

Effective: August 1, 2017

Revise the first paragraph of Article 424.12 of the Standard Specifications to read:

"424.12 Method of Measurement. This work will be measured for payment in place and the area computed in square feet (square meters). Curb ramps, including side curbs and side flares, will be measured for payment as sidewalk. No deduction will be made for detectable warnings located within the ramp."

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."

SUBCONTRACTOR MOBILILATION PAYMENTS (BDE)

Effective: November 2, 2017

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

"This mobilization payment shall be made at least 14 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%"

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 $\ ^{30}$ 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
 - (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.
- 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.