2

September 22, 17 Letting

Notice to Bidders, Specifications and Proposal



Springfield, Illinois 62764

Contract No. 46900 MENARD County Section PARK ROADS 2018-01 Route PARK ROADS District 6 Construction Funds

Prepared by	s
Checked by	
(Printed by authority of the State	of Illinois



NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 10:00 a.m. September 22, 17 prevailing time 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. 46900 MENARD County Section PARK ROADS 2018-01 Route PARK ROADS District 6 Construction Funds

Removing a single span structure and replacing with a pre-cast box culvert, entrance roadway resurfacing, parking lot sealing and striping, and guardrail installation at Lincoln's New Salem State Park.

- **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

INDEX

FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2017

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS and frequently used RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 4-1-16) (Revised 1-1-17)

SUPPLEMENTAL SPECIFICATIONS

Std. Spe	ec. Sec.	Page No.
106	Control of Materials	1
403	Bituminous Surface Treatment (Class A-1, A-2, A-3)	2
420	Portland Cement Concrete Pavement	
502	Excavation for Structures	5
503	Concrete Structures	7
504	Precast Concrete Structures	10
542	Pipe Culverts	11
586	Sand Backfill for Vaulted Abutments	
670	Engineer's Field Office and Laboratory	14
704	Temporary Concrete Barrier	15
888	Pedestrian Push-Button	
1003	Fine Aggregates	18
1004	Coarse Aggregates	
1006	Metals	
1020	Portland Cement Concrete	
1103	Portland Cement Concrete Equipment	24
	•••	

RECURRING SPECIAL PROVISIONS

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

CHE	ск s	PAG	E NO.
1		Additional State Requirements for Federal-Aid Construction Contracts	26
2		Subletting of Contracts (Federal-Aid Contracts)	
3	Х	EEO	
4	Х	Specific EEO Responsibilities Non Federal-Aid Contracts	
5	Х	Required Provisions - State Contracts	45
6		Asbestos Bearing Pad Removal	
7		Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	
8		Temporary Stream Crossings and In-Stream Work Pads	
9		Construction Layout Stakes Except for Bridges	
10	Х	Construction Layout Stakes	
11		Use of Geotextile Fabric for Railroad Crossing	
12		Subsealing of Concrete Pavements	
13		Hot-Mix Asphalt Surface Correction	
14		Pavement and Shoulder Resurfacing	
15		Patching with Hot-Mix Asphalt Overlay Removal	
16		Polymer Concrete	
17		PVĆ Pipeliner	
18		Bicycle Racks	
19		Temporary Portable Bridge Traffic Signals	
20		Work Zone Public Information Signs	
21		Nighttime Inspection of Roadway Lighting	
22		English Substitution of Metric Bolts	
23		Calcium Chloride Accelerator for Portland Cement Concrete	80
24	Х	Quality Control of Concrete Mixtures at the Plant	
25		Quality Control/Quality Assurance of Concrete Mixtures	89
26		Digital Terrain Modeling for Earthwork Calculations	105
27		Reserved	107
28		Preventive Maintenance – Bituminous Surface Treatment (A-1)	108
29		Preventive Maintenance – Cape Seal	114
30		Preventive Maintenance – Micro-Surfacing	
31		Preventive Maintenance – Slurry Seal	
32		Temporary Raised Pavement Markers	
33		Restoring Bridge Approach Pavements Using High-Density Foam	150
34		Portland Cement Concrete Inlay or Overlay	

TABLE OF CONTENTS

LOCATION OF PROJECT	1
DESCRIPTION	1
TRAFFIC CONTROL PLAN	1
TRAFFIC CONTROL AND PROTECTION (SPECIAL)	4
TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	5
CONSTRUCTION COORDINATION WITH SITE OPERATIONS	5
EARTH EXCAVATION, SPECIAL	5
GATE REMOVAL	6
GRANULAR CULVERT BACKFILL	6
INSERTION CULVERT LINER	7
MEMBRANE WATERPROOFING FOR BURIED STRUCTURES	7
NON-BLOCKED STEEL PLATE BEAM GUARD RAIL	9
PARKING LOT SEAL COAT	9
ROCKFILL - FOUNDATION	11
TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH	12
TUBULAR STEEL GATE	12
WOOD POST AND RAIL FENCE	13
BUTT JOINTS (BDE)	14
COMPENSABLE DELAY COSTS (BDE)	15
DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)	19
HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)	30
HOT-MIX ASPHALT – TACK COAT (BDE)	31
PAVEMENT MARKING REMOVAL (BDE)	31
PORTLAND CEMENT CONCRETE SIDEWALK (BDE)	32
PROGRESS PAYMENTS (BDE)	32
RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)	33
STEEL PLATE BEAM GUARDRAIL (BDE)	42
WARM MIX ASPHALT (BDE)	44
WEEKLY DBE TRUCKING REPORTS (BDE)	46
WORKING DAYS (BDE)	46
404 PERMIT	47

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction" adopted April 1, 2016, the latest edition of the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", and the Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein which apply to and govern the construction of PARK ROADS (Lincoln's New Salem State Historic Site), Section PARK ROADS 2018-01, Menard County, Contract No. 46900 and in case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

The project limits are within the Lincoln's New Salem State Historic Site, located at 15588 History Lane, Petersburg, IL in Menard County.

DESCRIPTION

This proposed improvements consist of the removal of the New Salem Road bridge over Rocky Branch, its replacement with a double 12' span X 6' rise box culvert, asphalt resurfacing of the New Salem Road from IL 97 to the Visitor Center parking lot, and crack filling, parking lot sealing, and pavement marking of the Visitor Center parking lot and its north access to State Park Road, and all other necessary work to complete the project within the Lincoln's New Salem State Historic Site in, Menard County.

TRAFFIC CONTROL PLAN

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

Special attention is called to Sections 107 and 701 through 705 of the Standard Specifications for Road and Bridge Construction, and as amended by the Supplemental Specifications, Recurring Special Provisions, the Special Provisions contained herein, and the following highway standards relating to traffic control:

LINCOLN'S NEW SALEM STATE HISTORIC SITE (IHPA) SECTION PARK ROADS 2018-01 MENARD COUNTY

HIGHWAY STANDARDS:

701901

Limitations of Construction: The Contractor shall coordinate the items of work in order to keep hazards and traffic inconveniences to a minimum, as specified below.

1. The Contractor shall provide, erect, and maintain all the necessary barricades, cones, drums, and lights for the warning and protection of traffic as required by Sections 107 and 701 through 703 of the Standard Specifications and as modified.

2. The Contractor will be responsible for the traffic control devices at all times during construction activities and shall coordinate the items of work in order to keep hazardous traffic inconveniences to a minimum.

3. The Contractor will be responsible for the traffic control devices at all times during any construction shut-down periods.

4. Traffic control devices shall be in new or like-new condition equipped with new reflective sheeting at the time of use. The Engineer will be the sole judge of the condition of the devices. All warning signs shall be 48 inches by 48 inches and have a black legend on a fluorescent orange reflectorized background.

5. At the direction of the Engineer, when closing parking lots to traffic, one Type III barricade with Standard Sign R11-2 or R11-4 (ROAD CLOSED) mounted shall be used.

6. At the direction of the Engineer, W20-I103(0)-48 (ROAD CONSTRUCTION AHEAD) signs shall be placed prior to active work areas.

7. At the direction of the Engineer, R11-I101-2418 (SIDEWALK CLOSED) signs shall be used to denote sidewalk closure at sidewalk repair areas.

<u>Sequence and Limits of Construction</u>: The following is the anticipated sequence of construction for removal and replacement of the bridge, the resurfacing, and the sealing of the parking lot and north access road:

- Establish the road closure signage and barricades in accordance with the details in the plans for Phase 1
- Remove and replace the existing bridge, provide asphalt resurfacing of the New Salem Road from IL 97 to the Visitor Center parking lot, insert the liners at the noted culvert locations, fill cracks and remove existing pavement markings in the Visitor Center parking lot, seal the Visitor Center parking lot keeping at least 3 bays open for parking at all times, stripe the Visitor Center parking lot after the seal coat has cured and patch the pavement in the Visitor Center parking lot.
- Remove the Phase 1 and establish the road closure signage and barricades in for Phase 2
- Fill cracks and remove existing pavement markings in the southern portion of the north access road
- Seal the southern portion of the north access road.
- Remove the Phase 2 road closure signage and barricades and establish the Phase 3 road closure signage and barricades
- Fill cracks and remove existing pavement markings in the northern portion of the north access road
- Seal the northern portion of the north access road.
- Stripe the northern portion of the north access road after the seal coat has cured.
- Remove the Phase 3 road closure signage and barricades

As this project will be constructed while the site is open, the Contractor is expected to coordinate activities to facilitate site operations.

All work requiring the main park road road closure (Phase I) must be completed within 42 consecutive calendar days of the initial closure. The initial closure is to start May 1, 2018, but may occur earlier with the permission of the Engineer and the IHPA site superintendent. Failure to complete this work in time will subject the contractor to liquidated damages in accordance with Article 108 of the Standard Specifications.

<u>Measurement and Payment for Traffic Control and Protection</u>: Traffic Control and Protection will be accomplished in accordance with the Traffic Control and Protection (Special) special provision.

TRAFFIC CONTROL AND PROTECTION (SPECIAL)

This item of work shall include furnishing, installing, maintaining, replacing, relocating and removing all traffic control devices used for the purpose of regulating, warning, or directing vehicular and pedestrian traffic during the construction of this project.

Traffic Control and Protection (Special) shall be provided as called for in these special provisions, applicable Highway Standards, applicable sections of the Standard Specifications, or as directed by the Engineer. The traffic control noted in Standard BLR21 shall be used in both directions on IL 97 while the main entrance road is closed, in both directions on TR 650 when the north entrance road is closed, and on internal roads at the direction of the Engineer.

All traffic control devices used on this project shall conform to the Special Provisions, Traffic Control Standards, "Illinois Supplement to the National Manual on Uniform Traffic Control Devices", and "Manual on Uniform Traffic Control Devices." No modification of these requirements will be allowed without prior written approval of the Engineer. Traffic Control Devices include signs and their supports, signals, barricades with sand bags, channelizing devices, warning lights, arrow boards, flaggers, or any other device used for the purpose of regulating, detouring, warning or guiding traffic through or around the construction zone.

When directed by the Engineer, the Contractor shall remove all traffic control devices which were furnished, installed and maintained under this contract, and such devices shall remain the property of the Contractor. Lane closures and the prohibition of access to portions of the site shall only be left in place as long as they are needed. At all other times, traffic control shall be removed unless directed by the Engineer. Failure to restore lanes to full width will result in a traffic control deficiency as specified in Article 105.03.

All traffic control and protection items, including those for BLR 21, shall be considered as included in the cost of Traffic Control and Protection (Special). This work will be measured for payment on a lump sum basis and paid for at the contract per lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL) with no additional compensation allowed.

TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR

This work shall consist of providing all detour signage for the required closures in accordance with the details shown in the plans and as specified by the Engineer. This work will be measured and paid for at the contract unit price of each for TRAFFIC CONTROL AND PROTECTION FOR TEMPOARY DETOUR, which price shall include all labor, materials, and equipment to complete the work.

CONSTRUCTION COORDINATION WITH SITE OPERATIONS

The work at the Lincoln's New Salem State Historic Site will require coordination with the site personnel to assure the maximum possible use of these facilities by the public during the construction period. All construction area preparations, means and methods are required to be submitted to site personnel and must receive written approval prior to the initiation of construction.

For the various project components to be constructed, the work may be limited to certain areas prior to and during weekends. Safety measures, including barricades, lighting, and traffic control measures, must be provided and maintained during the entire period from initiation of work at a location within the site until all the work at that location is completed.

The costs involved with providing the necessary staging and related safety measures will not be paid for separately but shall be considered included in the cost of the contract.

EARTH EXCAVATION, SPECIAL

This item shall consist of the excavation necessary for the construction of items (such as sidewalks, asphalt surfacing, concrete pavements for parking stalls, etc.) and for the removal of aggregate surfaces or bases with oil and chip or asphalt surfaces throughout the project limits. Sufficient excavation shall be provided to accommodate the item to be constructed or to remove 6 inches of aggregate where it is to be replaced by topsoil. For the excavation necessary to widen the roads, the contractor shall coordinate with the Engineer to make a determination as to the width of excavation necessary to achieve a stable base for the widened road surface. The quantity of excavation shall be computed by measuring the surface area of the item to be constructed or 6-inches for a removal, to determine the cubic yards of excavation, regardless of material. The work shall be done in accordance with applicable portions of Section 202 of the Standard Specifications and this special provision. Excess material shall be disposed in accordance with Article 202.03 or shall be used to shape the ground surface in the vicinity of the item to be constructed, as directed by the Engineer.

The cost of all the labor, shaping, disposal, transport, placement, materials and equipment necessary to complete the work as indicated in this Special Provision shall be included in the contract unit price per Cu. Yd. for EARTH EXCAVATION (SPECIAL).

GATE REMOVAL

This work shall consist of removing and disposing of existing gates from the locations noted in the plans in accordance with the Standard Specifications, this Special Provision, and as directed by the Engineer. All associated hardware and appurtenances of the existing gate shall be removed off-site and disposed of by the Contractor in a legal disposal site. The resulting void from the removal of the post or foundation holes shall be backfilled with compacted (hand tamped as a minimum) coarse aggregate material (CA-6, CA-10, or CA-12). If the holes are in turf, areas at finished grade shall be capped with four (4) inches of topsoil graded to match the existing ground. All ruts resulting from these operations shall be filled with topsoil and graded smooth. No additional compensation shall be made for the materials and for the filling of the foundation holes and ruts.

The work under this item will be paid for at the Contract unit price per Each for GATE REMOVAL for each gate removed. This price shall include all labor, equipment, and material needed to complete the work as specified above and as shown in the plans.

GRANULAR CULVERT BACKFILL

This work consists of backfilling box culverts or three-sided structures with granular materials. This work shall be performed at locations shown on the plans or as directed by the Engineer.

Backfilling shall be performed according to Article 502.10. The backfill material shall meet the requirements of Article 1004.05, except the gradation shall be CA-06 or CA-10.

This work satisfies select granular backfill (porous granular material) requirements of ASTM C 1577.

Granular Culvert Backfill will be measured for payment in cubic yards compacted in place. Additional material required to backfill excavation outside the limits shown on the plans will not be measured for payment. This work shall be paid for at the contract unit price per cubic yard for GRANULAR CULVERT BACKFILL.

INSERTION CULVERT LINER

This work shall be constructed in accordance with Section 543 of the Standard Specifications and this Special Provision. A smooth interior pipe product shall be used for the liner. All excavation, tree removal, reshaping, seeding and related activities to gain access to the culvert ends, provide working space for the liner insertion, and to leave the location in a smooth stable surface upon completion of construction shall be considered incidental to this item. It is recommended that the contractor insert the liner from the upstream end of the existing culvert to minimize the tree removal necessary to complete this work.

This work will be measured and paid in accordance with Articles 543.04 and 543.05 of the Standard Specifications for the sizes specified in the plans.

MEMBRANE WATERPROOFING FOR BURIED STRUCTURES

Effective: October 4, 2016

<u>Description</u>. This work shall consist of furnishing and applying a self adhesive membrane waterproofing system to the top slab and sidewalls, or portions thereof, for buried structures as detailed on the contract plans.

<u>Materials.</u> The material used in the waterproofing system shall consist of a cold-applied, selfadhering membrane incorporating a woven or non-woven polypropylene mesh or fiberglass reinforcement with release film on one side.

The sheet membrane shall have the following physical properties:

Physical Properties	
Thickness ASTM D 1777	60 mils (1.500 mm) min.
Width	36 inches (914 mm) min.
Pliability [180° bend over 1/4 inch (6 mm) mandrel @ -25 °F (-32 °C)] ASTM D 146	No Effect
Elongation ASTM D 412 (Die C)	300% min
Puncture Resistance-Membrane ASTM E 154	40 lb (18 kg) min.
Permeance (Grains/ft ² /hr/in Hg) ASTM E 96, Method B	0.1 max.
Water Absorption (% by Weight) ASTM D 570	0.2 max.
Adhesion to concrete ASTM D 903	5.0 lb/in (89 g/mm) min.

<u>Certification</u>: Prior to approval and use of the material the Contractor shall submit, to the Engineer, a notarized certification by an independent test laboratory stating that the materials conform to the requirements of these specifications. The certification shall include or have attached specific results of tests performed on the material supplied. The Engineer may at his option require samples of any material for testing. Materials may be accepted on certification but are subject to control and/or approval by subsequent testing.

<u>Construction.</u> The areas requiring waterproofing shall be prepared and the waterproofing installed in accordance with the manufacturer's instructions. Surfaces to be waterproofed shall be smooth and free from projections which might damage the waterproofing membrane. Projections or depressions on the surface on which the membrane is to be applied that may cause damage to the membrane shall be removed or filled as directed by the Engineer. The surface shall be power washed and cleaned of dust, dirt, grease, and loose particles, and shall be dry before the waterproofing is applied.

The installation of the sheet membrane shall be such that all joints are shingled to shed water by commencing from the lowest elevation of the buried structure's top slab and progress towards the highest elevation. The membrane strips shall be overlapped a minimum of 2 $\frac{1}{2}$ inches (64 mm). The membrane shall be smooth and free of wrinkles and there shall be no depressions in horizontal surfaces of the finished waterproofing.

Sealing bands at joints between precast segments shall be installed prior to the sheet membrane being applied. Where the waterproofing membrane and sealing band overlap, the installation shall be planned such that water will not be trapped or directed underneath the membrane or sealing band.

Care shall be taken to protect and to prevent damage to the membrane surface prior to and during backfilling operations. The sheet membrane shall be removed as required for the installation of slab mounted guardrails and other appurtenances. After the installation is complete, the sheet membrane shall be repaired and sealed against water intrusion according to the manufacturer's instructions and to the satisfaction of the Engineer.

Replace the last paragraph of Article 540.06 Precast Concrete Box Culverts and replace with:

Handling holes shall be filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation nor project above the outside surface to the extent that may cause damage to the membrane. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar compatible with the membrane.

<u>Method of Measurement</u>. The waterproofing system will be measured in place, in square yards (square meters) of the concrete surface to be waterproofed.

<u>Basis of Payment.</u> This will work will be paid for at the contract unit price, per square yard (square meter) for MEMBRANE WATERPROOFING FOR BURIED STRUCTURES.

NON-BLOCKED STEEL PLATE BEAM GUARD RAIL

This work shall consist of furnishing and installing steel plate beam guardrail at the locations noted on the plans in accordance with Section 630 of the Standard Specifications, this special provision, and Standard 630006: all posts shall be Nine feet (9') in length.

Steel posts shall be used for the guardrail and shall be in accordance with Article 630.05 and Article 1006.23 of the Standard Specifications. This work shall be measured for payment in accordance with Article 630.07 of the Standard Specifications.

This work shall be paid for at the contract unit price per Foot for NON-BLOCKED STEEL PLATE BEAM GUARDRAIL which price shall include all labor, materials and equipment, and no additional compensation will be allowed.

PARKING LOT SEAL COAT

<u>Description.</u> This work will consist of applying a seal coat to the existing hot mix asphalt pavement. This application is to occur prior to the placement of any proposed asphalt binder or surface course material in areas adjacent to the existing pavement.

The seal coat consists of 2 applications of coal tar pitch emulsion slurry. The Contractor shall coordinate the construction of this work with site personnel so as to minimize the time that access to the site is restricted. Application of the seal coats in the access areas to the restrooms shall be accomplished at times when the site is not open to the public.

Materials.

(a) Coal Tar Pitch Emulsion used for seal coat shall meet the requirements of ASTM D5727 Standard Specification for Emulsified Refined Coal Tar (Mineral Colloid Type) with a latex additive.

(b) Aggregate for the Seal Coat shall meet the requirements of Article 1003.01 of the Standard Specifications, be clean, dry, hard, angular, and meet the following gradation: 95% to 100% passing the No. 16 sieve, 40% to 85% passing the No. 40 sieve, and 0% to 5% passing the No. 200 sieve.

(c) Crack Filler materials shall be accordance with Article 451.02 of the Standard Specifications. Seal Coat and Crack Filler materials must be compatible.

<u>Surface Preparation.</u> Pavement markings shall be removed according to Article 783.03(a) of the Standard Specifications. Only very small particles of tightly adhering existing markings may remain in place. All loose aggregate, pavement material, and dirt shall be removed from the existing pavement surface using a method approved by the Engineer. Waste material produced during pavement cleaning operations shall be removed at the close of each day's work and shall be disposed of according to Article 202.03.

Joints and cracks shall be cleaned of loose and unsound material and filled with a crack filler material. Routing in accordance with Article 451.04 of the Standard Specifications is not required. Crack filling shall occur as specified in Article 451.03 and 451.04 of the Standard Specifications, with the exception that care shall be taken to ensure the cleaned cracks are only filled to the top and are not overfilled and feathered out.

<u>Construction Requirements.</u> Construction requirements shall be according to Article 403.04 of the Standard Specifications and as specified below.

(a) Weather Limitations – No work shall be started if local weather forecasts indicate the possibility of rain within 24 hours.

The mix design and application rate shall be in accordance with the sealer manufacturer's requirements. The Contractor shall provide documentation for review by the Engineer, prior to beginning work on this item, including the sealer manufacturer's recommendations and requirements, the mix design, latex additive information, and sand type and gradation.

During the entire mixing process, there shall be no breaking, segregating or hardening of the emulsion, nor balling, lumping, or swelling of the aggregate. After the required mixing period, the slurry shall be spread over the designated area while the slurry is of the proper consistency. Each application of the slurry shall be applied uniformly at a rate that is in accordance with the manufacturer's recommendations for a moderate traffic area. The exact rate of application will be determined by the Engineer.

The application of the slurry shall be in accordance with the manufacturer's recommendations either by hand methods using rubber squeegees for spreading or by any other suitable mechanical method approved by the Engineer. The slurry shall be applied at a uniform rate as specified. Care shall be taken to ensure slurry is not placed on existing concrete or buildings.

A suitable spray type applicator or distributor approved by the Engineer may be used for applying the slurry. Such equipment shall be equipped with an agitator to keep the slurry uniformly mixed before and during application and so designed to uniformly spread the slurry on the HMA surface at the specified rate of application.

The first coat of slurry shall be cured for a time sufficient to prevent damage from equipment placing the final coat of slurry as determined by the Engineer. The final coat of slurry shall be cured for 24 hours, prior to the placement of pavement markings.

<u>Method of Measurement.</u> The cleaning and filling of cracks as noted above will be measured for payment in accordance with Article 451.05 of the Standard Specifications. The sealing of the area designated in the plans shall be measured for payment in gallons of the PARKING LOT SEAL COAT of the prepared slurry applied.

<u>Basis of Payment.</u> The cleaning and filling of cracks as noted above will be paid for at the contract unit price per Pound for CRACK FILLING, which price shall include all labor, materials, and equipment necessary to complete the work as indicated in this Special Provision and noted on the plans. The slurry sealing as noted above will be paid for at the contract unit price per Gallon for PARKING LOT SEAL COAT, which price shall include all labor, materials, and equipment necessary to complete the work as indicated in this Special Provision and noted on the plans.

ROCKFILL - FOUNDATION

This work consists of constructing a layer of rockfill below culverts or spread footings having unstable or unsuitable soil conditions. When shown on the plans, the rockfill limits and thickness shall be confirmed by the Engineer prior to excavating below the theoretical top of rockfill line.

Materials shall meet the requirements of the following Articles of the Standard Specifications:

Bedding or Capping Material 1003.04 or 1004.05

Rockfill materials other bedding and capping material shall be crushed stone or crushed concrete consisting of sound durable particles reasonably free of deleterious materials.

The gradation of rockfill shall be selected based on layer thickness as shown below:

- Less than or equal to 1 ft Gradations with a max size of 4 inches^a
- ^a Gradations with a maximum size of 2 inches or smaller shall have less than 6% passing the No. 200 sieve.

Greater than 1 ft shall be RR 01 or according to the table below.

	ROCKFILL GRADATIONS					
Grad No.	Sieve Size and Percent Passing					
Giau No.	8"	6"	4"	2"	#4	#200
CS 01	10	97 ± 3	90 ± 10	45 ± 25	20 ± 20	5 ± 5
CS 02		100	80 ± 10	25 ± 15		

Excavation shall be performed according to Section 202 of the Standard Specifications.

The method of rockfill placement shall be approved by the Engineer. Rockfill shall be capped according to application as shown below:

Spread Footing	 4 to 6 inches CA-6
Cast-In-Place Box Culverts	 4 to 6 inches CA-7 or CA-11
Pre-Cast Box Culverts	 Porous Granular Bedding Material (Article 540.02)
Pre-Cast Pipe Culverts	 Coarse or Fine Aggregate Bedding (Article 542.04)

In spread footing applications, the CA-6 cap shall be compacted to the satisfaction of the Engineer. No compaction of rockfill is required for culvert applications.

This work will be measured and paid for at the contract unit price per ton for ROCKFILL -FOUNDATION. The contract price for ROCKFILL-FOUNDATION shall include excavation, aggregate materials, aggregate material placement, and placement of excavated materials within right-of-way or disposal off right-of-way. *Excavation will not be measured or paid for separately or as part of EARTH EXCAVATION.* For precast concrete box culverts, porous granular bedding material and the excavation volume required for bedding will be paid for according to Article 540.08. For pipe culverts, the aggregate bedding material and excavation volume required for the aggregate bedding material will be paid for according to Article 542.11.

TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH

This item shall consist of all furnishing and placing topsoil at locations, depths, and slopes designated on the plans. All topsoil shall be supplied from off-site and be compatible for the Class 1 seeding and fertilizer nutrients. All work shall comply with Section 211 of the Standard Specifications.

This item shall also include the provision and installation of seeding Class I, fertilizer nutrients and mulching (Method 2) in accordance with Sections 211 and 250 of the Standard Specifications throughout the project limits. The seeding, nutrients, and mulch shall be incidental to TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH and shall not be measured for payment.

This work will be measured for payment in square yards at the surface of the topsoil.

This work shall be paid for at the contract unit price per square yard for TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH, which price shall include all labor, materials and equipment, and no additional compensation will be allowed.

TUBULAR STEEL GATE

This work shall consist of furnishing and installing tubular steel gates at the locations noted in the plans and in accordance with details in the plans and this special provision. The openings in the posts shall be ground so as to leave no sharp edges.

Materials shall meet the following requirements of the Standard Specifications:

<u>Item</u>	Article/Section
Gate Posts	1006.27
Truss Rods	1006.26
Bolts & Nuts	1006.27
Steel Pipe & Tubes	1006.27

The Contractor shall submit duplicate copies of detailed shop drawings to the Engineer for approval before fabrication is begun. The tubular steel gate may be "Standard Weight" pipe and the posts shall be "Extra Strong" pipe. Either welded or seamless pipe may be used.

The tubular steel gates, posts, and associated hardware shall be sanded, primed, and painted with two shop coats of paint after fabrication and galvanizing and one field coat of paint after erection. Cleaning and painting shall conform to the requirements of Section 506 of the Standard Specifications. The kind and color of paint shall be compatible with galvanizing and shall be stated on the shop drawings. A color sample 4"x6" shall be submitted prior to painting the top coat for approval by the IHPA Site Superintendent. The color selected shall be rustic brown compatible with other structures present within the park.

Padlocks of the same type and key, to match the other padlocks at the site, shall be provided to site personnel for each gate location. Class SI concrete, in accordance with Section 1020 of the Standard Specifications, shall be used for the post foundation and filling. Gates shall not be installed until the concrete, in which the posts are set, has cured for at least seven days. The sign panel(s) on the gate shall be constructed in accordance with Section 720 of the Standard Specifications and shall be hung from the gate by a method approved by the Engineer.

This work will be paid for at the contract unit price per Each for TUBULAR STEEL GATE, of the width(s) noted on the plans. This price shall include all labor, equipment and material needed to complete the work as specified above and as shown in the plans.

WOOD POST AND RAIL FENCE

This work shall consist of furnishing and installing a wood post and rail fence at the locations noted in the plans and in accordance with the details in the plans, applicable portions of Sections 507 and 641 of the Standard Specifications, and this special provision.

The posts and rails shall comply with the requirements of Section 1007 of the Standard Specifications for No. 1 Dense SR 1550 F for southern pine or Dense 1400 F for Douglas fir. All lumber shall be sound and free from excessive splitting or deterioration. Dimensions shown on the plans are for actual size surfaced (S2S) lumber. All wood used for posts and rails shall be treated with CCA or ACA according to Article 1007.12, Miscellaneous Lumber for Human Contact. The lumber shall be kiln dried after being treated. The rails shall be a single lumber section between the posts. After erection of the fence, the Contractor shall apply two (2) coats of a commercially available water seal for treated lumber meeting the approval of the Engineer.

Hardware shall include are necessary fasteners and appurtenances for construction of the fence and shall be in accordance with Article 1006.17. All stainless steel plates and associated hardware shall be used and shall be sanded, primed, and painted with two shop coats of paint after fabrications and one field coat of paint after erection. Cleaning and painting shall conform to the requirements of Section 506 of the Standard Specifications. The kind and color of paint shall be compatible with stainless steel and shall be stated on the shop drawings. The color selected shall be flat black.

The post caps shall be Sheet Metal Caps, Saltire Painted Post Caps, or approved equal. The caps shall be sanded, primed, and painted with two shop coats of paint after fabrication. Color samples 4"x6" shall be submitted prior to ordering the caps for approval of the color by the IHPA Site Superintendent.

The backfill for posts beyond the culvert headwall shall be CA 6, CA 10, or CA 12 aggregated according to Article 1004.01. Backfill shall be thoroughly compacted, meeting the approval of the Engineer. All concrete foundations, if required, to stabilize the posts shall not be paid for separately but shall be considered included in the cost of this pay item.

The wood posts and rail fence will be measured for payment in feet along the top of the fence from center to center of the end posts. This work will be paid for at the contract unit price, per foot, for WOOD POST AND RAIL FENCE. The price shall include all equipment, materials, and labor to complete the work as noted in the plans and specified herein.

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."

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.

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

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

<u>OVERALL GOAL SET FOR THE DEPARTMENT</u>. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal. <u>CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR</u>. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined 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 **0.00**% 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-enterprisecertification/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 <u>DOT.DBE.UP@illinois.gov</u> 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 delivered. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for consideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

<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 owneroperator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.

- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

<u>CONTRACT COMPLIANCE</u>. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall be come the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

- (a) <u>NO AMENDMENT</u>. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be 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) <u>TERMINATION AND REPLACEMENT PROCEDURES</u>. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the 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.

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.

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

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

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

a. Confined Edge. Each confined edge density shall be represented by a 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	Parameter	Individual Test	Unconfined Edge
Composition		(includes confined	Joint Density
		edges)	Minimum
IL-4.75	Ndesign = 50	93.0 – 97.4% ^{1/}	91.0%
IL-9.5	Ndesign = 90	92.0 – 96.0%	90.0%
IL-9.5,IL-9.5L	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0	Ndesign = 90	93.0 - 96.0%	90.0%
IL-19.0, IL-19.0L	Ndesign < 90	93.0 ^{2/} - 97.4%	90.0%
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."

PAVEMENT MARKING REMOVAL (BDE)

Effective: July 1, 2016

Revise Article 783.02 of the Standard Specifications to read:

"783.02 Equipment. Equipment shall be according to the following.

Item	Article/Section
(a) Grinders (Note 1)	
(b) Water Blaster with Vacuum Recovery .	

Note 1. Grinding equipment shall be approved by the Engineer."

Revise the first paragraph of Article 783.03 of the Standard Specifications to read:

"783.03 Removal of Conflicting Markings. Existing pavement markings that conflict with revised traffic patterns shall be removed. If darkness or inclement weather prohibits the removal operations, such operations shall be resumed the next morning or when weather permits. In the event of removal equipment failure, such equipment shall be repaired, replaced, or leased so removal operations can be resumed within 24 hours."

Revise the first and second sentences of the first paragraph of Article 783.03(a) of the Standard Specifications to read:

"The existing pavement markings shall be removed by the method specified and in a manner that does not materially damage the surface or texture of the pavement or surfacing. Small particles of tightly adhering existing markings may remain in place, if in the opinion of the Engineer, complete removal of the small particles will result in pavement surface damage."

Revise the first paragraph of Article 783.04 of the Standard Specifications to read:

"**783.04 Cleaning.** The roadway surface shall be cleaned of debris or any other deleterious material by the use of compressed air or water blast."

Revise the first paragraph of Article 783.06 of the Standard Specifications to read:

***783.06 Basis of Payment.** This work will be paid for at the contract unit price per each for RAISED REFLECTIVE PAVEMENT MARKER REMOVAL, or at the contract unit price per square foot (square meter) for PAVEMENT MARKING REMOVAL – GRINDING and/or PAVEMENT MARKING REMOVAL – WATER BLASTING."

Delete Article 1101.13 from the Standard Specifications.

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."

RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)

Effective: November 1, 2012

Revise: April 1, 2016

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 produced by cold milling or crushing an existing hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Bureau of Materials and Physical Research approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and 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. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

Prior to milling, the Contractor shall request the District provide documentation on the quality of the RAP to clarify the appropriate stockpile.

(1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) 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 fractionated prior to testing by screening into a minimum of two size 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 shall pass the sieve size specified below for the mix into which the FRAP will be incorporated.

Mixture FRAP will be used in:	Sieve Size that 100 % of FRAP Shall Pass
IL-19.0	1 1/2 in. (40 mm)
IL-9.5	3/4 in. (20 mm)
IL-4.75	1/2 in. (13 mm)

- (2) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogeneous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) 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 prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag.
- (4) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP/FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, 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 not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise specified by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) up to an equal weight of RAS with the processed RAS will be permitted to improve workability. The sand shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The sand shall be 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. RAP/FRAP and RAS testing shall be according to the following.

- (a) RAP/FRAP Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.
 - (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) 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.

Each sample shall be split to obtain two equal 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 or RAS blended with manufactured sand shall be sampled and tested during stockpiling according to Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Source".

Samples shall be collected during stockpiling 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 250 tons (225 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 or RAS blended with manufactured sand shall be stockpiled 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.

Before testing, each sample shall be split to obtain two test samples. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall perform a washed extraction and test for unacceptable materials on 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.

If the sampling and testing was performed at the shingle processing facility in accordance with the QC Plan, the Contractor shall obtain and make available all of the test results from start of the initial stockpile.

- **1031.04 Evaluation of Tests.** Evaluation of test results shall be according to the following.
- (a) Evaluation of RAP/FRAP Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation, and when applicable G_{mm}. Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	FRAP/Homogeneous/ Conglomerate
1 in. (25 mm)	
1/2 in. (12.5 mm)	±8 %
No. 4 (4.75 mm)	±6 %
No. 8 (2.36 mm)	± 5 %
No. 16 (1.18 mm)	
No. 30 (600 µm)	± 5 %
No. 200 (75 µm)	± 2.0 %
Asphalt Binder	\pm 0.4 % $^{1/}$
G _{mm}	± 0.03

1/ The tolerance for FRAP shall be \pm 0.3 %.

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, the RAP/FRAP shall not be used in HMA unless the RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

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)".

(b) Evaluation of RAS and RAS Blended with Manufactured Sand 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. Individual test results, when compared to the averages, 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)	± 2.0 %
Asphalt Binder Content	± 1.5 %

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, or if the percent unacceptable material exceeds 0.5 percent by weight of material retained on the # 4 (4.75 mm) sieve, the RAS or RAS blend shall not be used in Department projects. All test data and acceptance ranges shall be sent to the District for evaluation.

1031.05 Quality Designation of Aggregate in RAP/FRAP.

- (a) RAP. The aggregate quality of the RAP for homogeneous and conglomerate stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.
 - (1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
 - (2) RAP from Class I binder, Superpave/HMA (High ESAL) binder, or (Low ESAL) IL-19.0L binder mixtures are designated as containing Class C 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. Coarse and fine FRAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5000 tons (4500 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 Bureau of Materials and Physical Research Aggregate Lab for MicroDeval Testing, according to ITP 327. A maximum loss of 15.0 percent will be applied for all HMA applications.

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

- (a) RAP/FRAP. The use of RAP/FRAP in HMA shall be as follows.
 - (1) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
 - (2) Steel Slag Stockpiles. Homogeneous RAP stockpiles containing steel slag will be approved for use in all HMA (High ESAL and Low ESAL) Surface and Binder Mixture applications.
 - (3) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. RAP/FRAP from Conglomerate stockpiles shall be considered equivalent to limestone for frictional considerations. Known frictional contributions from plus #4 (4.75 mm) homogeneous RAP and FRAP stockpiles will be accounted for in meeting frictional requirements in the specified mixture.
 - (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
 - (5) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, or conglomerate.
 - (6) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in Article 1031.06(c)(1) below for a given Ndesign.
- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) RAP/FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with RAP or FRAP in HMA mixtures up to a maximum of 5.0 percent by weight of the total mix.
 - (1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the Max RAP/RAS ABR table listed below for the given Ndesign.

HMA Mixtures	RAP/RAS Maximum ABR %		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified
30	30	30	10
50	25	15	10
70	15	10	10
90	10	10	10

RAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the RAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28). If warm mix asphalt (WMA) technology is utilized and production temperatures do not exceed 275 °F (135 °C), the high and low virgin asphalt binder grades shall each be reduced by one grade when RAP/RAS ABR exceeds 25 percent (i.e. 26 percent RAP/RAS ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).
- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the FRAP/RAS table listed below for the given Ndesign.

HMA Mixtures	FRAP/RAS Maximum ABR %		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified ^{3/, 4/}
30	50	40	10
50	40	35	10
70	40	30	10
90	40	30	10

FRAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28). If warm mix asphalt (WMA) technology is utilized and production temperatures do not exceed 275 °F (135 °C), the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP/RAS ABR exceeds 25 percent (i.e. 26 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 64-22 to be reduced to a PG 58-28).

- 3/ For SMA the FRAP/RAS ABR shall not exceed 20 percent.
- 4/ For IL-4.75 mix the FRAP/RAS ABR shall not exceed 30 percent.

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) RAP/FRAP and/or RAS. RAP/FRAP and/or RAS mix designs shall be submitted for verification. If additional RAP/FRAP and/or RAS stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP and/or RAS stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP and/or RAS stockpiles may be used in the original mix design at the percent previously verified.
- (b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design. A RAS stone bulk specific gravity (Gsb) of 2.300 shall be used for mix design purposes.

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

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

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 RAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

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

- (c) RAP/FRAP and/or RAS. HMA plants utilizing RAP/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 RAP/FRAP/RAS 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 RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
 - h. Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)
 - (2) Batch Plants.
 - a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - d. Mineral filler weight to the nearest pound (kilogram).
 - e. RAP/FRAP/RAS weight to the nearest pound (kilogram).
 - f. Virgin asphalt binder weight to the nearest pound (kilogram).
 - g. Residual asphalt binder in the RAP/FRAP/RAS material as a percent of the total mix to the nearest 0.1 percent.

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

1031.09 RAP in Aggregate Surface Course and Aggregate Wedge Shoulders, Type B. The use of RAP in aggregate surface course (temporary access entrances only) and aggregate wedge shoulders, Type B 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 Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

STEEL PLATE BEAM GUARDRAIL (BDE)

Effective: January 1, 2017

Revise Article 630.02 of the Standard Specifications to read:

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

Item	Article/Section
(a) Steel Plate Beam Guardrail	
(b) Wood Posts and Wood Block	
(c) Steel Posts, Blockouts, Restraints and Wire Rope	
(d) Preservative Treatment	
(e) Reinforcement Bars	
(f) Plastic Blockouts (Note 1)	
(g) Chemical Adhesive Resin System	
(h) Controlled Low-Strength Material (CLSM)	

Note 1. Plastic blockouts may be used in lieu of wood blockouts for steel plate beam guardrail. The plastic blockouts shall be the minimum dimensions shown on the plans and shall be on the Department's qualified product list."

Revise Article 630.05 of the Standard Specifications to read:

"630.05 Posts. Posts shall be as follows.

- (a) Wood Posts. Wood posts and blocks shall be treated. The posts and blocks shall be cut to the proper dimensions before treatment. No cutting of the posts or blocks will be permitted after treatment. Posts shall be erected according to Article 634.05.
- (b) Steel Posts. Steel posts may be driven by hand or mechanical methods provided they are protected by a suitable driving cap and the earth around the posts compacted, if necessary, after driving. When steel posts are driven to incorrect alignment or grade, they shall be removed and set according to Article 634.05.

When it is necessary to shorten the posts in the field, the lower portion shall be cut off in a manner to provide a smooth cut with minimum damage to the galvanizing. Cut areas shall be repaired according to the requirements of AASHTO M 36."

Revise Article 630.06 of the Standard Specifications to read:

"630.06 Shoulder Stabilization at Guardrail. Shoulder stabilization shall be constructed at the locations of steel plate beam guardrail installation according to the details shown on the plans. On new construction projects, the material used in the shoulder stabilization shall be the same as that used in the adjacent paved shoulder. On shoulder resurfacing projects, the material used in the shoulder stabilization shall be the same as that used in the shoulder stabilization shall be the same as that used for the shoulder stabilization shall be the same as that used for the shoulder resurfacing.

When portland cement concrete is used, shoulder stabilization shall be constructed according to the applicable portions of Section 483. The shoulder stabilization shall be constructed simultaneously with the adjacent portland cement concrete shoulder. Guardrail posts shall be driven through leaveouts or holes cored in the completed shoulder stabilization. The void around each post shall be backfilled with earth or aggregate and capped with hot-mix asphalt (HMA) or CLSM.

When HMA is used, shoulder stabilization shall be constructed according to the applicable portions of Section 482. On new construction, the shoulder stabilization shall be constructed simultaneously with the HMA shoulder. On shoulder resurfacing projects, the portion of the shoulder stabilization below the surface of the existing paved shoulder shall be placed and compacted separately. The guardrail posts shall be driven through holes cored in the completed shoulder stabilization. The void around each post shall be backfilled with earth or aggregate and capped with HMA or CLSM.

When driving guardrail posts through existing shoulders, shoulder stabilization, or other paved areas, the posts shall be driven through cored holes. The void around each post shall be backfilled with earth or aggregate and capped with HMA or CLSM."

Revise Article 630.08 of the Standard Specifications to read:

"630.08 Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for NON-BLOCKED STEEL PLATE BEAM GUARDRAIL; STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT (1.83 M) POSTS; STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT (2.74 M) POSTS; STEEL PLATE BEAM GUARDRAIL, TYPE B, 9 FOOT (2.74 M) POSTS; or STEEL PLATE BEAM GUARDRAIL, TYPE D, 6 FOOT (1.83 M) POSTS.

When end sections are specified, they will not be paid for as a separate item, but shall be considered as included in the unit price for steel plate beam guardrail.

Steel plate beam guardrail mounted on existing culverts will be paid for at the contract unit price per foot (meter) for STRONG POST GUARDRAIL ATTACHED TO CULVERT or WEAK POST GUARDRAIL ATTACHED TO CULVERT, of the case specified.

Portland cement concrete shoulder stabilization at guardrail will be paid for according to Article 483.10.

HMA shoulder stabilization at guardrail will be paid for according to Article 482.08.

Excavation in rock will be paid for according to Article 502.13.

Steel plate beam guardrail incorporating long-span spacing will be paid for at the contract unit price per foot (meter) for LONG-SPAN GUARDRAIL OVER CULVERT, 12 FT 6 IN (3.8 M) SPAN; LONG-SPAN GUARDRAIL OVER CULVERT, 18 FT 9 IN (5.7 M) SPAN; or LONG-SPAN GUARDRAIL OVER CULVERT, 25 FT (7.6 M) SPAN.

Steel plate beam guardrail incorporating treated timber at the back side of the post will be paid for at the contract unit price per foot (meter) for BACK SIDE PROTECTION OF GUARDRAIL."

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 $^{\circ}$ F (135 $^{\circ}$ 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 <u>45</u> working days.

404 PERMIT



DEPARTMENT OF THE ARMY CORPS OF ENGINEERS, ROCK ISLAND DISTRICT P.O. BOX 2004 CLOCK TOWER BUILDING ROCK ISLAND, ILLINOIS 61204-2004

May 3, 2017

Operations Division

SUBJECT: CEMVR-OD-P-2017-499

REPLY TO ATTENTION OF

Ms. Jane Rhetta Illinois Historic Preservation Agency Historic Sites Division 313 S. 6th St. Springfield, Illinois 62701

Dear Ms. Rhetta:

Our office reviewed your application dated 28 March 2017, concerning the proposed replacement of an existing bridge with a box culvert on Lincoln's New Salem Road over Rocky Branch in Section 25, Township 18 North Range 7 West in Menard County, Illinois.

Your project is covered under Nationwide Permit No. 14, as published in the enclosed Fact Sheet No. 8 (IL), provided you meet the permit conditions for the nationwide permits, which are also included in the Fact Sheet. The Corps has also made a determination of no effect on federally threatened and endangered species or critical habitat. Per the Illinois Historic Preservation Agency, the project is determined to have no adverse effect on the National Historic Preservation Act. The decision regarding this action is based on information found in the administrative record, which documents the District's decision-making process, the basis for the decision, and the final decision.

The Illinois Environmental Protection Agency (IEPA) also issued Section 401 Water Quality Certification with conditions for this nationwide permit. Please note these additional conditions included in the Fact Sheet.

This verification is valid until March 18, 2022, unless the nationwide permit is modified, reissued or revoked. It is your responsibility to remain informed of changes to the nationwide permit program. We will issue a public notice announcing any changes if and when they occur. Furthermore, if you commence or are under contract to commence this activity before the date the nationwide permits are modified or revoked, you will have twelve months from that date to complete your activity under the present terms and conditions of this nationwide permit. If your project plans change, you should contact our office for another determination.

This authorization does not eliminate the requirement that you must still acquire other applicable Federal, state, and local permits. If you have not already coordinated your project with the Illinois Department of Natural Resources – Office of Water Resources, please contact them at 217/782-3863 to determine if a floodplain development permit is required for your project. You may contact the IEPA Facility Evaluation Unit at 217/782-3362 to determine whether additional authorizations are required from the IEPA. Please send any electronic correspondence to EPA.401.bow@illinois.gov.

-2-

You are required to complete and return the enclosed "Completed Work Certification" upon completion of your project, in accordance with General Condition No. 30 of the nationwide permits.

The Rock Island District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete the attached postcard and return it or go to our Customer Service Survey found on our web site at <u>http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey</u>. (Be sure to select "Rock Island District" under the area entitled: Which Corps office did you deal with?)

Should you have any questions, please contact our Regulatory Branch by letter, telephone or email Mr. Brant Vollman at 309/794-5380 or brant.j.vollman@usace.army.mil

Sincerely

Donna M. Jones, P.E. Chief, Illinois/Missouri Section **Regulatory Branch**

When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s), of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

Transferee

Enclosures

Copies Furnished:

Mr. Steve Altman, P.E. Office of Water Resources IL Department of Natural Resources One Natural Resources Way Springfield, Illinois 62701-1271 <u>Steve.Altman@illinois.gov</u> (email copy) Date

Mr. Dan Heacock Illinois Environmental Protection Agency Watershed Management Section, Permit Sec. 15 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276 Epa.401.bow@illinois.gov (email copy)

:

COMPLETED WORK CERTIFICATION

and the second second	COMPLETED WORK CERTIFICATION
Permit Number:	CEMVR-OD-P-2017-499
 Name of Permittee:	Ms. Jane Rhetta, Illinois Historic Preservation Agency
Date of Issuance:	May 3, 2017
County/State:	Menard County, Illinois

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S. Army Engineer District, Rock Island ATTN: Regulatory Branch Clock Tower Building Post Office Box 2004 Rock Island, Illinois 61204-2004

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above reference permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

BV



US Army Corps of Engineers Rock Island District

FACT SHEET NO. 8(IL)

NATIONWIDE PERMITS IN ILLINOIS

EFFECTIVE DATE: MARCH 19, 2017

On January 6, 2017, the Corps of Engineers published in the Federal Register (82 FR 1860), the Final Rule for the Nationwide Permits Program under the Rivers and Harbors Act of 1899; the Clean Water Act; and the Marine Protection, Research and Sanctuaries Act. These Nationwide Permits became effective on March 19, 2017.

The Nationwide Permit Program is an integral part of the Corps' Regulatory Program. The Nationwide Permits are a form of general permits issued by the Chief of Engineers and are intended to apply throughout the entire United States and its territories. A listing of the nationwide permits and general conditions is included herein. We encourage prospective permit applicants to consider the advantages of nationwide permit authorization during the preliminary design of their projects. Assistance and further information regarding all aspects of the Corps of Engineers Regulatory Program may be obtained by contacting the appropriate Corps of Engineers District at the address and/or telephone number listed on the last page of this Fact Sheet.

To ensure projects authorized by a Nationwide Permit will result in minimal adverse effects to the aquatic environment, the following Regional Conditions were developed for projects proposed within the state of Illinois (See NOTE regarding the Chicago District):

 Stormwater management facilities shall not be located within a stream, except for NWPs 21, 44, 49, or 50.

2. For newly constructed channels through areas that are unvegetated, native grass filter strips, or a riparian buffer with native trees or shrubs, a minimum of 25 feet wide from the top of bank must be planted along both sides of the new channel. A survival rate of 80 percent of desirable native species with aerial coverage of at least 50 percent shall be achieved within 3 years of establishment of the buffer strip.

3. Side slopes of a newly constructed channel will be no steeper than 2:1 and planted to permanent, perennial, native vegetation if not armored.

4. For a single family residence authorized under Nationwide Permit No. 29, the permanent loss of waters of the United States (including jurisdictional wetlands) must not exceed 1/4 acre.

5. For NWP 46, the discharge of dredged or fill material into ditches and canals that would sever the jurisdiction of an upstream water of the United States from a downstream water of the United States is not allowed.

6. For NWP 52, no project will be authorized within Lake Michigan. An individual permit will be required.

7. Any bank stabilization activity involving a method that protrudes from the bank contours, such as jetties, stream barbs, and/or weirs, will require a pre-construction notification in accordance with General Condition 32.

8. Mitigation shall be constructed prior to, or concurrent with, the discharge of dredged or fill material into waters of the United States unless an alternate timeline is specifically approved in the authorization.

9. Operation of heavy equipment within the stream channel should be avoided. If in-stream work is unavoidable, it shall be performed in such a manner as to minimize the duration of the disturbance, turbidity increases, substrate disturbance, bank disturbance, and disturbance to riparian vegetation. This condition does not further restrict otherwise authorized drainage ditch maintenance activities.

NOTE: The Chicago District has suspended many of the Nationwide Permits and established regional permits for work in McHenry, Kane, Lake, DuPage, Will and Cook Counties in Illinois. Information regarding Chicago District requirements can be accessed through their website at http://www.lrc.usace.army.mil/Missions/Regulatory.aspx. If you have any questions regarding the Chicago District program, please contact the Regulatory Office by telephone at 312/846-5530, or e-mail http://www.lrc.usace.army.mil/Missions/Regulatory.aspx. If you have any questions regarding the Chicago District program, please contact the Regulatory Office by telephone at 312/846-5530, or http://www.lrc.usace.army.mil/Wissions/Regulatory.aspx. If you have any questions regarding the Chicago District program, please contact the Regulatory Office by telephone at 312/846-5530, or http://www.lrc.usace.army.mil/wissions/Regulatory.

Permits, issued by the Corps of Engineers, under the authority of Section 404 of the Clean Water Act may not be issued until the state (where the discharge will occur) certifies, under Section 401 of the Act, that the discharge will comply with the water quality standards of the State. On February 27, 2017, the Illinois Environmental Protection Agency (IEPA) issued their final Section 401 Water-Quality Certification decision.

REVISIONS TO THE ILLINOIS PREVAILING WAGE RATES

The Prevailing rates of wages are included in the Contract proposals which are subject to Check Sheet #5 of the Supplemental Specifications and Recurring Special Provisions. The rates have been ascertained and certified by the Illinois Department of Labor for the locality in which the work is to be performed and for each craft or type of work or mechanic needed to execute the work of the Contract. As required by Prevailing Wage Act (820 ILCS 130/0.01, et seq.) and Check Sheet #5 of the Contract, not less than the rates of wages ascertained by the Illinois Department of Labor and as revised during the performance of a Contract shall be paid to all laborers, workers and mechanics performing work under the Contract. Post the scale of wages in a prominent and easily accessible place at the site of work.

If the Illinois Department of Labor revises the prevailing rates of wages to be paid as listed in the specification of rates, the contractor shall post the revised rates of wages and shall pay not less than the revised rates of wages. Current wage rate information shall be obtained by visiting the Illinois Department of Labor web site at http://www.state.il.us/agency/idol/ or by calling 312-793-2814. It is the responsibility of the contractor to review the rates applicable to the work of the contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the contractor by means of the Illinois Department of Labor web site satisfies the notification of revisions by the Department to the contractor pursuant to the Act, and the contractor agrees that no additional notice is required. The contractor shall notify each of its subcontractors of the revised rates of wages.