143

Letting March 11, 2022

Notice to Bidders, Specifications and Proposal



Contract No. 66H63
IROQUOIS County
Section (38-7,38-6)RS
Route FAI 57
Project NHPP-2DQR(624)
District 3 Construction Funds

Prepared by

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Illinois Department of Transportation

NOTICE TO BIDDERS

- 1. **TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. March 11, 2022 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. 66H63
IROQUOIS County
Section (38-7,38-6)RS
Project NHPP-2DQR(624)
Route FAI 57
District 3 Construction Funds

Project consists on milling & resurfacing I-57 interstate and Buckley interchange ramps in Iroquois County. The project length is 6.9 miles. The work also includes structural upgrades, underdrain removal / replacement, guardrail upgrades and grading/shaping ditches. Resurfacing on Buckley Interchange ramps shall be accomplished at night.

- 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 re-advertise the proposed improvement, and to waive technicalities.

By Order of the Illinois Department of Transportation

Omer Osman, Secretary

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2022

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

No ERRATA this year.

SUPPLEMENTAL SPECIFICATIONS

Std. Spec. Sec. Page No.

No Supplemental Specifications this year.

RECURRING SPECIAL PROVISIONS

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

CHEC	CK SH	IEET#	PAGE NO
1	Χ	Additional State Requirements for Federal-Aid Construction Contracts	1
2	Χ	Subletting of Contracts (Federal-Aid Contracts)	4
3	Χ	EEO	5
4		Specific EEO Responsibilities Non Federal-Aid Contracts	15
5		Required Provisions - State Contracts	20
6		Asbestos Bearing Pad Removal	
7		Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	27
8		Temporary Stream Crossings and In-Stream Work Pads	28
9	Χ	Construction Layout Stakes	29
10		Use of Geotextile Fabric for Railroad Crossing	32
11		Subsealing of Concrete Pavements	34
12		Hot-Mix Asphalt Surface Correction	38
13		Pavement and Shoulder Resurfacing	40
14		Patching with Hot-Mix Asphalt Overlay Removal	41
15		Polymer Concrete	43
16		PVC Pipeliner	
17		Bicycle Racks	
18		Temporary Portable Bridge Traffic Signals	48
19		Nighttime Inspection of Roadway Lighting	50
20		English Substitution of Metric Bolts	51
21		Calcium Chloride Accelerator for Portland Cement Concrete	
22		Quality Control of Concrete Mixtures at the Plant	53
23	Χ	Quality Control/Quality Assurance of Concrete Mixtures	
24		Digital Terrain Modeling for Earthwork Calculations	77
25		Preventive Maintenance – Bituminous Surface Treatment (A-1)	
26		Temporary Raised Pavement Markers	
27		Restoring Bridge Approach Pavements Using High-Density Foam	86
28		Portland Cement Concrete Inlay or Overlay	
29		Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	93
30		Longitudinal Joint and Crack Patching	
31		Concrete Mix Design – Department Provided	
32	Χ	Station Numbers in Pavements or Overlays	99

TABLE OF CONTENTS

LOCATION OF PROJECT	1
DESCRIPTION OF PROJECT	1
FURNISHED EXCAVATION	2
MULCH METHOD 2	2
AGGREGATE SHOULDERS TYPE B	2
HMA SURFACE REMOVAL	2
SEQUENCE OF OPERATIONS	3
MAXIMUM DROP-OFFS BETWEEN ADJACENT LANES	5
DRAINAGE MITIGATION ON MILLING AND RESURFACING PROJECTS	5
TRAFFIC CONTROL SURVEILLANCE	6
TRAFFIC CONTROL AND PROTECTION (SPECIAL)	6
TRAFFIC CONTROL AND PROTECTION, STANDARD 701451, SPECIAL	6
SMART TRAFFIC MONITORING SYSTEM	7
CHANGEABLE MESSAGE SIGN, SPECIAL	11
TEMPORARY RUMBLE STRIPS (SPECIAL)	11
CONTROL OF WORK – SMART WORK ZONE	12
PLASTIC DRUMS	13
VEHICLE PARKING	
UNEVEN LANES	13
REMOVE EXISTING FLARED END SECTION	13
REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS	14
PIPE UNDERDRAIN REMOVAL	14
CLEAN EXISTING END SECTIONS	14
DRAINAGE STRUCTURES TO BE CLEANED	15
SHOULDER REMOVAL (SPECIAL)	15
AGGREGATE SHOULDER REMOVAL	
EXPANSION JOINT REHABILITATION	16
DELINEATOR REMOVAL	16
REMOVE AND REPLACE SAND MODULE IMPACT ATTENUATOR	
FENCE REMOVAL	17
PAVEMENT PATCHING	17
MILE POST MARKER ASSEMBLY (SPECIAL)	20
LINEAR DELINEATOR PANELS, 6 INCH	20

LINEAR DELINEATOR PANELS, 4 INCH	22
REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (JOB SPECIFIC)	24
CROSSING STRUCTURES WITH MATERIAL TRANSFER DEVICE	26
VIBRATORY ROLLER RESTRICTION	26
TOPSOIL EXCAVATION AND PLACEMENT (SPECIAL)	27
POLYUREA PAVEMENT MARKING	27
SHOULDER REMOVAL AND REPLACEMENT	28
STRUCTURAL REPAIR OF CONCRETE	28
BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)	37
BLENDED FINELY DIVIDED MINERALS (BDE)	39
COMPENSABLE DELAY COSTS (BDE)	39
CONCRETE END SECTIONS FOR PIPE CULVERTS (BDE)	43
DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)	44
FUEL COST ADJUSTMENT (BDE)	53
HOT-MIX ASPHALT – START OF PRODUCTION (BDE)	55
MATERIAL TRANSFER DEVICE (BDE)	55
PORTLAND CEMENT CONCRETE – HAUL TIME (BDE)	57
SPEED DISPLAY TRAILER (BDE)	58
STEEL COST ADJUSTMENT (BDE)	59
SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)	61
SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)	62
SURFACE TESTING OF PAVEMENTS – IRI (BDE)	62
TRAFFIC SPOTTERS (BDE)	67
TRAINING SPECIAL PROVISIONS (BDE)	69
IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION.	71
VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)	73
WEEKLY DBE TRUCKING REPORTS (BDE)	73
WORK ZONE TRAFFIC CONTROL DEVICES (BDE)	74
WORKING DAYS (BDE)	75
PROJECT LABOR AGREEMENT	76
SWPPP	95

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2022, the latest edition of the "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 FAI Route 57 (I-57), Project NHPP-2DQR(624), Section (38-7,38-6)RS, in Iroquois County, Contract No, 66H63 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

This project is located on I-57 from south of Onarga (Mile Post 278) to south of Buckley (Mile Post 271) in Iroquois County. The length of the project is 6.9 miles.

DESCRIPTION OF PROJECT

The project consists of milling the existing HMA overlays (5" NB and 4" SB) and resurfacing with 5" of HMA on both directions of I-57 mainline, milling and resurfacing the Buckley Interchange ramps, underdrain removal and replacement, and guardrail upgrades on all I-57 structures. Structural work involves increasing the crash wall heights on all overhead structures and removing the existing concrete parapet for structures 038-0151 and 038-0152.

FURNISHED EXCAVATION

(Effective July 1, 1990; Revised January 1, 2016)

This work shall consist of excavating, hauling, and placing suitable materials obtained from locations approved by the Engineer from outside the limits of the right of way.

The final surface of all embankment areas shall be seeded. The top 4 in. (100 mm) of the seeded areas shall be vegetation sustaining soil subject to the approval of the Engineer. The cost of shaping the slopes and providing vegetation sustaining soil will not be paid for separately but shall be included in the cost of FURNISHED EXCAVATION.

<u>Method of Measurement</u>. Furnished excavation will be measured per cubic yard (cubic meter) and shall be measured by truck volume methods at the point of unloading. The Engineer and the Contractor shall agree upon the volume of each truck before hauling begins.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per cubic yard (cubic meter) for FURNISHED EXCAVATION.

MULCH METHOD 2

(Effective August 1, 1994; Revised January 1, 2007)

Article 251.03 Method 2 Procedure 1 of the Standard Specifications shall be required for this improvement.

AGGREGATE SHOULDERS TYPE B

(Effective July 1, 1990; Revised July 31, 2020)

The aggregate shoulder shall be constructed according to Section 481 of the Standard Specifications. The shoulder shall be constructed in two lifts. The first lift shall be placed and compacted flush with the top of the adjacent HMA shoulder or binder. Placement of the HMA surface course will not be allowed until the first lift of aggregate shoulder is constructed.

HMA SURFACE REMOVAL

This work shall consist of the complete removal of the HMA surface material and existing patches on I-57 mainline and Buckley Interchange ramps.

Existing HMA depths are approximately 5" on the northbound lanes and approximately 4" on the southbound lanes on I-57, and approximately 31/4" on Buckley Interchange.

The removal shall be to the original concrete pavement as shown in the typical sections to prevent scabbing.

Milling HMA material shall be completed in accordance to Section 440. Milling through existing concrete patches and concrete patches that may be located under the HMA overlay shall be included in the cost of the HMA removal pay item.

This work will be measured for payment as specified in Article 440.07.

This work will be paid for at the contract unit price per square yard for HMA SURFACE REMOVAL, of the thickness specified and HMA SURFACE REMOVAL VARIABLE DEPTH.

SEQUENCE OF OPERATIONS

The Contractor shall adhere to the following sequence of operations unless approved by the Engineer:

Using the *SMART WORK ZONE TRAFFIC CONTROL ADVANCE SIGNING* detail, the Contractor shall perform the following work:

Pre-Stage I Construction

- a) Use highway standard 701401 and 701411 for traffic control.
- b) Mill and resurface outside shoulders at locations shown in the plans to support stage 1 traffic. Binder mix shall be used to reach existing grades.
- c) Remove and replace underdrains at outside shoulders.
- d) At any time, exposure to all drop-offs shall be resolved.
- e) Place temporary pavement marking for Stage 1.

Stage I Construction

Following the Stage I Construction plan sheets, the Contractor shall:

- a) Use the Stage 1 Traffic Control Detail as shown in the plans. Requirements shall conform to the TRAFFIC CONTROL AND PROTECTION (SPECIAL) provision.
- b) Place temporary concrete barriers and impact attenuators at the locations shown in the plans.
- c) Perform Structural work at median area.
- d) Perform proposed patching under overhead structures.
- e) Perform median guardrail upgrades.
- f) Remove and replace underdrains at inside shoulders.
- g) Perform any drainage work required.
- h) Mill and resurface inside shoulders at locations shown in the plans to support stage 2 traffic.
- i) At any time, exposure to all drop-offs shall be resolved.
- i) Mill and resurface inside mainline pavement (Binder only).
- k) Place temporary pavement marking for Stage 2.

Stage II Construction

Following Stage II Construction plan sheets, the Contractor shall:

I) Use the Stage 2 Traffic Control Detail as shown in the plans. Requirements shall conform to the TRAFFIC CONTROL AND PROTECTION (SPECIAL) provision.

- m) Place temporary concrete barriers and impact attenuators at the locations shown in the plans.
- n) Perform Structural work at outside shoulder areas.
- o) Perform proposed patching under overhead structures.
- p) Perform outside shoulder guardrail upgrades.
- q) Perform any drainage work required.
- r) Mill and resurface outside shoulders at locations shown in the plans. Final surface is recommended.
- s) Mill and resurface outside mainline pavement up to final grade. Final surface is recommended.
- t) Complete final pavement marking not conflicting with Stage III.
- u) At any time, exposure to all drop-offs shall be resolved.

Stage III Construction

- a) Use highway standard 701401 and 701411 for traffic control
- b) Place final surface on inside shoulders and inside mainline lanes.
- c) At any time, exposure to all drop-offs shall be resolved.
- d) Complete final pavement marking.

Buckley Interchange (Night Work)

- a) Prior to nightly closures, District Operations shall be notified at a minimum of 21 days in advance.
- b) Use Traffic Control and Protection 701451 (special) for traffic control and additional changeable message signs.
- c) Lane closures for resurfacing Buckley Interchange ramps will be allowed overnight (8:00PM-5:00AM) except on weekends (Friday 3:00PM to Sunday 12:00AM) and legal holiday periods.
- d) Perform milling and resurfacing at ramps.
- e) At any time, exposure to all drop-offs shall be resolved.

At any time during stage construction, the final surface and binder on HMA shoulders and mainline shall be protected from all construction operations. Damages shall be corrected to the satisfaction of the Engineer and will not be considered for additional compensation.

Exposure to all drop-offs shall comply to MAXIMUM DROP-OFFS BETWEEN ADJACENT LANES special provision.

The Contractor may propose modifications to sequence of operations. However, the modifications will require approval of the Engineer and shall not be grounds for additional compensation or extension of time.

MAXIMUM DROP-OFFS BETWEEN ADJACENT LANES

(Effective December 14, 2009; Revised December 14, 2021)

When the Contractor's operations cause a difference in elevation greater than 1.5 in. (38 mm) for a vertical milled face, or 2 in (50mm) for a lift of HMA resurfacing between adjacent lanes, the lane shall remain closed. The Contractor shall adjust his milling and paving operations so exposures to all drop-offs are compliant to Article 701.07 of the Standard Specifications and IDOT Safety Engineering Policy Memorandum 4-15.

To meet the above requirement, the Contractor shall

Place the binder lift immediately following the milling operation

Place a temporary wedge after the milling operations (minimum 1V:3H slope) or

Mill a sloped wedge between lanes (minimum 1V:3H slope).

When the difference in elevation between adjacent open traffic lanes is greater than 1 in. (25 mm) and less than or equal to 1.5 in. (38 mm) for a vertical milled face or 2 in (50mm) for a HMA lift, "UNEVEN LANES" signs (W8-11(FO)) shall be erected at 1 mile (1.6 km) intervals.

The above requirements were developed based on IDOT Safety Engineering Policy Memorandum 4-15. Any changes to the proposed lift thicknesses, milling depths or sequence of operations that change drop-offs at the centerline or edge of pavement must follow this policy and be approved by the Engineer.

This work will not be paid for separately, but shall be included in the cost of the applicable traffic control items.

DRAINAGE MITIGATION ON MILLING AND RESURFACING PROJECTS (Effective January 1, 2022)

Milling operations on this project have the potential to cause water encroachment on the travel lanes during and after a rainfall event. The Contractor shall schedule the milling and resurfacing operations to minimize the potential for the encroachment. The Contractor shall be responsible for mitigating any encroachments as directed by the Engineer. Mitigation may include, but not be limited to constructing lateral ditches through shoulders and modifying then repairing curb inlets to provide drainage.

The work associated with drainage mitigation will be included in the cost of the Hot-Mix Asphalt Surface Removal pay item.

TRAFFIC CONTROL SURVEILLANCE

(Effective January 1, 2016)

Revise the first sentence of Article 701.10 of the Standard Specifications to read:

701.10 Surveillance. When open holes, broken pavement, trenches over 3 in. (75 mm) deep and 4 in. (100 mm) wide, or other hazards are present within 8 ft (2.4 m) of the edge of an open lane; when opposing directions of traffic are separated by barrier wall; or on a closed road from the time a structure is removed until the time the structure has been replaced, the Contractor shall furnish traffic control surveillance during all hours when the Contractor is not engaged in construction operations

TRAFFIC CONTROL AND PROTECTION (SPECIAL)

This work shall include furnishing, installing, maintaining, replacing, relocating and removing all traffic control devices used for the purpose of regulating, warning, or directing traffic along I-57, adjacent entrance and exit ramps at Buckley Interchange during stage construction for all structural and mainline related work.

Traffic control and protection shall be provided as called for on the stage construction plan sheets, the Standard Specifications, these special provisions, or as directed by the Engineer. Modifications to the traffic control details will be approved by the Engineer.

This work will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL). The work shall include all labor, materials, transportation, handling, and any other work necessary to furnish, install, maintain, replace, relocate, and remove all traffic control devices required in the plans and specifications.

References to Traffic Control and Protection 701402 shall be considered included in the cost of this pay item.

Temporary concrete barrier, temporary pavement marking, and pavement marking removal will be paid for separately.

References to Traffic Control and Protection 701411 will be paid for separately.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701451, SPECIAL

This work shall be completed according to Section 701 of the Standard Specifications and plan details for the nightly closure of Buckley Interchange ramps.

The Contractor shall notify the District Bureau of Operations and the Resident Engineer a minimum of three weeks (21 days) and no earlier than four weeks (28 days) prior to the anticipated closure date.

Advance information signs shall be placed one (1) week prior closures.

No closure shall be erected on Friday, Saturday, or Sunday. The "RAMP CLOSED" sign on the Type III barricades shall be unobstructed and visible to traffic at all times.

No equipment, debris, or other materials shall be stored within 20 feet of the first set of Type III barricades, unless approved by the Engineer. The Contractor shall not drive around the outside of the Type III barricades but shall relocate the barricades temporarily for access. When it is necessary for the barricades to be moved for access, the Contractor shall move the devices into the left lane and/or left shoulder area behind barricades that are to remain in place. At no time shall the barricades be turned parallel to traffic flow for access purposes.

If a path becomes evident around the outside of the barricades, the Contractor shall be required to place additional Type III barricades to prevent driving around the existing barricades. The additional barricades will not be measured separately but shall be considered as included in the cost of this pay item.

Any damage caused by vehicles driving around the outside of barricades shall be repaired by the Contractor to the satisfaction of the Engineer at no additional expense to the Department.

Traffic control devices shall be removed after each nightwork and as directed by the Engineer.

Ramp closures shall be in accordance to Article 701.18(i) of the Standard Specifications.

This work will be measured in accordance to Article 701.19(c) of the Standard Specifications.

This work shall be paid for at the contract unit price per Lump Sum for TRAFFIC CONTROL AND PROTECTION, STANDARD 701451, SPECIAL.

SMART TRAFFIC MONITORING SYSTEM

(Revised November 23, 2021)

<u>Description</u>. This work shall consist of furnishing, installing, maintaining, relocating, removing, and programming various components of an automated Smart Traffic Monitoring (STM) System for <u>I-57 mainline</u>. This work shall be completed according to Article 701 of the Standard Specifications, as detailed in the plans, described herein, and as directed by the Engineer.

<u>Schedule</u>. The STM System shall be in operation 24 hours a day and seven (7) days per week when traffic is reduced to one lane in the direction for longer than one consecutive day and/or outside of non-peak hours. The system or any components will be relocated as needed for each new traffic control stage. One adjustment of component locations in each direction after the initial set-up of the system is included in the cost of the applicable components.

<u>Function</u>. The typical STM System components shall include Smart Traffic Monitoring Devices (STMD), Real-Time Traffic Control (RTTC) signing, portable changeable message signs (PCMSs), and control software for various communication functions.

The STM System shall collect real-time vehicle data at various locations prior to and within the work zone and, depending upon traffic conditions, shall activate various, specific preapproved messages, developed through coordination with the Engineer, on PCMSs and activate appropriate RTTC signs.

The STM system shall be capable of providing dynamic lane merging by use of pre-programmed conditions to allow the system to determine when early merging should be required (generally low volumes and high speeds), and when late merging should be required (generally high volumes and low speeds). STM system components shall have the capacity and the accuracy to determine to implement the specific messages for each type of merging and to prevent frequent and unnecessary changes in merge type. Dynamic lane merging will require PCM's, RTTC signing, or a combination of both throughout the expected queue area, as well as advance warning locations as described below.

The STM system shall activate RTTC signing flashers in advance of the congested area to warn traffic whenever the average traffic speed falls below 30 mph. Flashers shall turn off when the average speed returns to 40 mph or more. These speed thresholds shall be capable of being changed based on field conditions and sensor locations with approval of the Engineer.

The STM System shall notify road users of the delay, within 20% accuracy and the distance, within 0.5-mile accuracy, to stopped or significantly slowed traffic ahead (speeds less than 30 mph) by displaying messages on PCMS's located on mainline. The location of PCMS's will be intended to give traffic enough advance warning to choose alternate routes when appropriate and will be determined by the Engineer. PCMS's may be located in advance of entrance ramps within the project limits to allow users to make the choice to enter the highway based on current traffic conditions. The actual message text on each PCMS displaying messages will be determined by the Engineer. STM PCMS's shall display the flashing caution mode when not in use by the system or shall be treated as non-operating equipment in accordance with Article 701.11.

The STM System shall immediately inform delay time and slow or stopped traffic to the Resident Engineer and emergency services in addition to the District 3 Operations Center, the District 4 Traffic Operations Center, and the Illinois State Police (ISP) Dispatch Center. Notifications shall identify which RTTC signs and PCMS's are active and what message is being displayed, if applicable.

CONSTRUCTION REQUIREMENTS

Smart Traffic Monitoring Devices (STMD's). The Contractor shall provide devices that are MUTCD compliant, meeting NCHRP 350 or MASH, Category 2, crashworthy standards and shall be consistent with work zone channelizing devices used throughout the work zone. The STMD's shall have internal power sources, shall communicate wirelessly in real-time, and shall provide continuous, uninterrupted, data collection during normal operations or during power or communication interruptions. The STMD's shall communicate in real-time with multiple other STMD's, RTTC signs, and PCMS's in the system. Traffic sensors shall be a type whose accuracy is not degraded by inclement weather or degraded by environmental conditions. The STMD's shall be capable of collecting data for each lane separately, shall gather real-time data, provide 95 percent accuracy on all vehicle detection, have Global Positioning System (GPS) functionality, transfer data to web-based communications for monitoring, and communicate with the RTTC signs and PCMS's 24 hours a day, seven (7) days a week. The web-based interface shall provide vehicle speed, volume, and queue information at each device location and maintain data history for a minimum of 12 months beyond contract completion. The system shall provide vehicle detection in advance of the maximum projected vehicle queue and report real-time data 24 hours a day and seven (7) days per week throughout the duration of the project. The number and proper locations of STMD's needed to provide dynamic, travel time messages and queue detection from the STM System shall be recommended by the manufacturer and approved by the Engineer. Data shall include the date, time, and average vehicle speed through the work zone.

Real-Time Traffic Control Signing (RTTC). RTTC signing shall consist of sets of two warning signs with a sign legend as shown in the plans. Each sign shall have amber wigwag LED flashing lights (two flashers per sign for a total of four flashers per unit) attached, with a minimum lens size of 12 inches. The flash pattern and flash sequence shall comply with the Manual on Uniform Traffic Control Devices (MUTCD), Chapter 4L. The flashers shall be equipped with communications fully compatible with the STM System and shall wirelessly communicate with the STMD's and control software.

Control Software. The user interface shall be accessible via the web browser of an internet-enabled device. The software shall provide delay and queue calculations based on vehicle speed and traffic volume. The agency-only side shall be password protected to prevent public access, provide access to all system data, including average vehicle speed, volume, queue information, identification of active devices and PCMS messages being displayed, and allow the Engineer to override preapproved, preprogrammed PCMS messages and message activation logic. The software shall provide email and/or text alerts to specified department and emergency services personnel when speeds or queue lengths are outside department-defined parameters.

The software shall provide an XML (or other department-specified format) data feed to the department on request and shall hold an archive of data for a period of not less than 12 months beyond contract completion, and the Contractor shall provide archived data to the department at completion of the contract. The data shall be available for download from the agency-only side at all times. Public agencies authorized by the department shall be granted user accounts at no additional cost.

<u>Portable Changeable Message Signs (PCMS), Special</u>. The PCMSs shall meet the requirements of Article 701 of the Standard Specifications. The signs shall be equipped with communications fully compatible with the STM System and shall wirelessly communicate with the STMDs and control software. The STM system's PCMSs shall display the flashing caution mode when not in use by the system or shall be treated as non-operating equipment in accordance with Article 701.11. When specified in the plans, PCMS shall have flashers equivalent to those required for RTTC signs at no additional cost.

<u>Temporary Rumble Strips (Special)</u>. The Temporary rumble strips shall be placed 500 feet in advance of the first RTTC traffic will encounter.

<u>Protection</u>. All communications in the STM System shall be protected from vandalism and to prevent unauthorized personnel from accessing non-public data or changing the displays on the PCMSs.

<u>System Communications</u>. All communication networks used in the STM System shall be provided by the Contractor. When any part of the STM System has not been functioning for 10 minutes, the STM System shall notify the Engineer of the malfunction immediately. Upon the direction of the Engineer, the STM System shall notify the Contractor and/or the District 3 Operations Office and any other connected office or agency.

Method of Measurement. This work will be measured for payment as follows:

SMART TRAFFIC MONITORING SYSTEM measured on a week basis, which shall consist of furnishing, installing, maintaining, relocating, removing, and programming various hardware,

software, website, and network components necessary to run an automated Smart Traffic Monitoring (STM) System.

Real-Time Traffic Control (RTTC) Signing is shown in the *Smart Work Zone* plan detail, will be measured on a week basis per each unit and paid as REAL-TIME TRAFFIC CONTROL SENSOR UNIT. Each unit includes two signs, four flashers, remote communication hardware and software, and controllers capable of activating the flashing beacons.

Smart Traffic Monitoring Device (STMD) will be measured on a week basis per each unit which shall include any necessary hardware and software to communicate with the Smart Traffic Monitoring System.

The Temporary rumble strips will be measured for payment as EACH, as set forth in the TEMPORARY RUMBLE STRIPS (SPECIAL) special provisions.

<u>Basis of Payment</u>. This work will be paid for as follows:

SMART TRAFFIC MONITORING SYSTEM will be paid at the contract unit price per calendar week, from when they are in place and operational in accordance with the specifications as determined by the Engineer until they are authorized for pickup/removal by the Engineer.

REAL-TIME TRAFFIC CONTROL SENSOR UNIT will be paid at the contract unit price per week per each unit from when they are in place and operational in accordance with the specifications as determined by the Engineer until they are authorized for pickup/removal by the Engineer.

SMART TRAFFIC MONITORING DEVICE will be paid for at the contract unit price per calendar week for each unit from when they are in place and operational in accordance with the specifications as determined by the Engineer until they are authorized for pickup/removal by the Engineer.

Portable changeable message signs (PCMS's) used as part of the Smart Traffic Monitoring System will be paid for at the contract unit price per calendar week for each sign as CHANGEABLE MESSAGE SIGN SPECIAL.

Additional traffic control devices, speed display and advance signing shown in the Plan detail SMART ZONE TRAFFIC CONTROL – ADVANCE SIGNING & TRAFFIC CONTROL DEVICES shall be considered as included in the cost of the SMART TRAFFIC MONITORING SYSTEM.

CHANGEABLE MESSAGE SIGN, SPECIAL

(Revised November 23, 2021)

This work shall consist of providing seven (7) Portable Changeable Message Signs (PCMS) <u>per direction</u> according to Article 701.15(j). Each PCMS shall be connected and work as a part of the Smart Traffic Monitoring System.

Portable changeable message signs used in conjunction with the plan detail for *SMART ZONE TRAFFIC CONTROL – ADVANCE SIGNING & TRAFFIC CONTROL DEVICES* shall meet these requirements and the requirements set forth in the SMART TRAFFIC MONITORING SYSTEM special provision.

In addition to any changeable message signs shown in the traffic control standards, the Contractor shall furnish four (4) additional portable changeable message signs, and shall be required to be positioned on I-57 mainline to alert motorists of nightly ramp closures at Buckley Interchange (Exit 272). The signs shall be operational <u>one week prior</u> to any lane / ramp closure and shall be located as directed by the Engineer.

It is recommended to place two (2) changeable message signs per direction:

- Southbound Direction: Two (2) signs at approximately 0.25 mile and one (1) mile north of Onarga Interchange (Exit 280).
- Northbound Direction: Two (2) signs at approximately 0.25 mile and one (1) mile north of Paxton Interchange (Exit 261).

Any relocation of the signs directed by the Engineer during construction will not be paid for separately, but shall be included in the cost of the Changeable Message Sign.

This work shall be measured on a calendar WEEK per each PCMS sign.

This work will be paid for at the contract unit price per calendar WEEK for each sign as CHANGEABLE MESSAGE SIGN, SPECIAL.

TEMPORARY RUMBLE STRIPS (SPECIAL)

(Revised November 23, 2021)

<u>Description</u>. This work shall consist of the furnishing, installation, maintenance, and removal of temporary rumble strips and advance signage.

Materials. Materials shall be according to the following:

Item	Article/Section
(a) Sign Posts, Metal (Note 1)	1093.01(a)
(b) Sign Posts, Wood (Note 2)	1007.05
(c) Preformed Plastic Pavement Markings	

Note 1. Galvanizing of metal posts will not be required.

Note 2. The nominal size of wood posts shall be 4 x 4 in. (100 x 100 mm).

Equipment. Equipment shall be according to the following:

CONSTRUCTION REQUIREMENTS

<u>General</u>. The rumble strips shall consist of six (6) layers of Preformed Plastic Pavement Marking, Type B - Inlaid - Line 6" (White). The temporary rumble strips shall be placed as shown on the following details:

- SMART ZONE TRAFFIC CONTROL ADVANCE SIGNING & TRAFFIC CONTROL DEVICES
- As directed by the Engineer.

<u>Advance Signage</u>. In advance of the temporary rumble strips, advance signage shall be furnished and installed as shown on the applicable plan details for this special provision.

<u>Method of Measurement</u>. This work will be measured for payment as each, where each is defined as a set of three temporary rumble strips across a single lane of pavement; and each set of temporary rumble strips will be measured for payment once.

Furnishing, installation and removal of the advance signage shall not be paid for separately but shall be included in the cost of the "Temporary Rumble Strip (Special)" item.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per each for TEMPORARY RUMBLE STRIPS (SPECIAL) which price shall include all materials and labor to complete this work.

CONTROL OF WORK - SMART WORK ZONE

The department may conduct frequent inspections of the respective smart traffic control system and device locations to determine if the system is performing in the manner specified in the contract.

The department reserves the right to add, move or delete systems, devices, and changeable message signs at locations currently operational based on need.

The contractor must possess enough equipment to provide the following:

- One (1) Smart Traffic Monitoring (STM) systems and Five (5) Smart Traffic Monitoring devices (STMD's) per direction, described in the SMART TRAFFIC MONITORING SYSTEM special provision.
- Two (2) Real-time Traffic Control (RTTC) Signing units <u>per direction</u>. A unit (two signs, 4 flashers plus equipment) is described in the SMART TRAFFIC MONITORING SYSTEM special provision and shown in the applicable plan detail.

- Seven (7) Portable Changeable Message Signs (PCMS) per direction, described in the CHANGEABLE MESSAGE SIGN, SPECIAL provision and shown in the applicable plan detail.
- Additional control hardware and devices per direction as described in the SMART TRAFFIC MONITORING SYSTEM special provision.

PLASTIC DRUMS

(Effective August 15, 2005; Revised April 27, 2018)

Plastic drums according to Standard 701901 shall be used in lieu of cones, Type I and Type II barricades, and vertical barricades throughout lane closures.

VEHICLE PARKING

(Revised January 1, 2007)

Parking of personal vehicles within the interstate right of way will be strictly prohibited. Parking of construction equipment within the right of way will be permitted only at locations approved by the Engineer and never within median area or overnight on any roadway area.

UNEVEN LANES

(Effective July 24, 2000; Revised December 14, 2009)

Two "UNEVEN LANES" signs (W8-11(FO)) shall be installed at intervals not greater than 2 miles and on all entrance ramps when work creates a difference in elevation between lanes that will be open to traffic. These signs shall be removed or covered when the lanes are returned to the same elevation. These signs will not be paid for separately, but shall be included in the cost of the applicable traffic control items.

REMOVE EXISTING FLARED END SECTION

<u>Description</u>. This work shall consist of the removal of the existing precast concrete flared end section, according to Section 501 of the Specifications, at locations shown on the plans or as directed by the Engineer.

The contractor shall excavate as necessary and carefully remove the existing end flared end section to prevent damage to the existing pipe.

Damages to the existing pipe shall be replaced at no additional cost to the Department.

<u>Method of Measurement</u>. This work shall be measured for payment in units of Each at the location designated on the plans or as directed by the Engineer

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per Each for REMOVE EXISTING FLARED END SECTION.

REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS

This work shall consist of the removal of existing headwalls for pipe drains as designated in the plans. Materials resulting from the removal of headwalls shall be disposed according to Article 202.03 of the Standard Specifications.

This work shall include the cost of equipment, materials, and labor to complete the work. Excavation necessary to perform the removal of concrete headwall shall be considered as included in the cost of this pay item.

<u>Basis of payment</u>: Removal of the existing concrete headwalls will be paid at the contract unit price per EACH for REMOVE CONCRETE HEADWALLS FOR PIPE DRAIN.

PIPE UNDERDRAIN REMOVAL

Existing pipe underdrains and headwalls within the project limits shall be removed and disposed of by the Contractor. Any underdrain trenches that are below the elevation of the proposed subgrade shall be filled with impervious material, compacted to the satisfaction of the Engineer, to match the existing subgrade and nominal depths as shown in Highway Standard 601001.

Where underdrains tapping into RCP pipes are encountered, the Contractor shall propose a repair method to close / repair the existing hole. Means and methods shall be approved by the Engineer.

The work required to remove the existing pipe underdrain system, including the outlet drains, pipe repairs from underdrain taps and filling low spots with impervious material shall be paid for at the contract unit price per Foot for PIPE UNDERDRAIN REMOVAL

CLEAN EXISTING END SECTIONS

This work shall consist of furnishing all labor, material, and equipment to remove earth or silt and other debris from the existing end sections of drainage structures at the locations shown in the plans as directed by the Engineer.

The work shall include cleaning the existing end section of debris, sedimentation, trash, or other obstructions that interfere with the effective flow of water through the pipe. Cleaning the existing end section shall be to the satisfaction of the Engineer.

The materials removed shall be disposed of in accordance with the applicable portions of Article 202.03 of the Standard Specifications. When specified in the plans, earthen material or silt from cleaning operations shall remain within project limits.

Cleaning the existing end sections will measured and paid for at the contract unit price per Each for CLEAN EXISTING END SECTION.

DRAINAGE STRUCTURES TO BE CLEANED

<u>Description</u>. This work shall consist of the removal of debris and sediment from the entire length of each culvert cell or pipe culvert as shown in the plans in order to restore drainage.

<u>Construction</u>. The entire length of each culvert pipe or culvert cell shall be cleaned to remove all debris, garbage, rock, silt, and mud to restore drainage.

The contractor shall provide all required equipment and labor necessary for the cleaning the drainage structure. Cleaning methods and equipment shall be approved by the Engineer prior beginning of the work.

Any excess material removed from the existing pipe or culvert shall be removed as result of the cleaning operations shall be disposed of according to Article 202.03 of the Standard Specifications.

<u>Basis of Payment & Measurement</u>. Cleaning pipe culverts will be measured and paid for at the contract unit price Foot for PIPE CULVERTS TO BE CLEANED, of the size specified.

SHOULDER REMOVAL (SPECIAL)

This work shall consist of removing two (2) to four (4) feet of shoulder material at a depth of eight (8) inches as shown in the plans details for the widening of HMA shoulders at the maintenance crossovers.

The width and depth of the shoulder materials will be variable throughout the length of the removal (typically 2 to 4 feet of Aggregate / Earth shoulder, base course and 4 feet HMA material at the crossovers). A straight and neatly milled edge must be shaped along the existing pavement surface as a result of the removal. The neat line removal may also be performed with a similar method approved by the engineer.

The excavated material shall be used to backfill the remaining portion of the widening trench after the widening has been constructed. Backfill shall be completed within 24 hours. The excavated material shall be deposited on the shoulders in such a manner that it will not interfere with drainage or the construction of the shoulders until it can be used to backfill the trench or properly disposed of. Any surplus excavation not needed for backfill or any unsuitable material shall be disposed of according to Article 202.03 or Section 669, whichever is applicable.

This work will be paid for at the contract unit price per Square Yard for SHOULDER REMOVAL (SPECIAL).

AGGREGATE SHOULDER REMOVAL

This item shall consist of the removal of the existing aggregate shoulders at areas were guardrail is expected to be replaced and as shown in the plans.

The work shall be performed in accordance with Section 440 of the Standard Specifications.

Disposal of the aggregate shoulder materials shall be according to Section 202.03 of the Standard Specifications.

This work will be measured based on the length, width, and depth of aggregate shoulder removed in Cubic Yards.

This work will be paid for at the contract unit price per Cubic Yard for AGGREGATE SHOULDER REMOVAL.

EXPANSION JOINT REHABILITATION

This work shall consist of the rehabilitation of existing expansion joints in accordance with the details shown on the plans.

This work will be paid for at the contract unit price per foot for EXPANSION JOINT REHABILITATION, which price shall be payment in full for all labor, equipment, and materials required to perform the work specified.

DELINEATOR REMOVAL

<u>Description</u>. This work shall consist of the complete removal of delineators and delineator posts as shown in the plans and at locations as directed by the Engineer. Removal of delineators shall not damage adjacent or nearby culvers or drainage structures. Damages shall be repaired by the Contractor at no cost to the Department.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per Each for DELINEATOR REMOVAL.

REMOVE AND REPLACE SAND MODULE IMPACT ATTENUATOR

This work shall consist of removal and replacement of one or more individual sand module impact attenuators which are damaged by traffic other than construction traffic, or unsalvageable. The Contractor shall dispose of all damaged materials outside of the right-of-way and furnish and install new sand modules as directed by the Engineer. Sand modules that are not damaged but have been laterally shifted from their original position shall be realigned and relocated to the original locations, as directed by the Engineer. Any modules damaged by the Contractor's forces shall be replaced at his expense.

If damage to initial installation occurs, the damaged modules and the contents shall be removed completely and replaced with the required number of modules necessary to restore the installation

to its original condition. The replacement modules shall meet the requirements set forth by highway standard 643001.

The Contractor will be required to respond within 48 hours to any call from the Engineer concerning replacement of the sand module impact attenuators. If the Contractor does not respond to this matter and does not complete his work within seven (7) days after initial call from the Engineer, then the Contractor shall be liable to the Department from the time of the initial call, in the amount of \$200/calendar day, per sand module, not as a penalty but as liquidated damages, until replacement occurs.

<u>Method of Measurement</u>. Each individual sand module, complete with required hardware and filled with required amount of sand as shown on the plans, regardless of the weight, installed properly at construction site, will be measured as EACH.

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per each sand module for REMOVE AND REPLACE IMPACT ATTENUATOR SAND MODULE, which cost shall include the removal and disposal of all damaged materials outside of right of way and installation of a replacement module. Realignment and relocation of undamaged units to the original location will not be paid for separately but shall be considered as incidental to the replacement.

FENCE REMOVAL

<u>Description</u>. This work shall consist of complete removal and disposal of existing fence and posts at the locations shown in the plans.

<u>Construction Requirements</u>. The Contractor shall completely remove the fence and posts for the length specified. Fence sections to remain in place shall be left in a sound stable condition.

Where Fence reinstallation is anticipated and fence removals greater than 200 feet, the Contractor shall furnish stakes to delineate the original position of the fence centerline. Stakes shall be required at every 200 feet when required by the Engineer.

<u>Method of Measurement</u>. FENCE REMOVAL shall be measured for payment in feet. The length measured will include removal, disposal, and additional staking.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot for FENCE REMOVAL which price shall include all labor and equipment necessary to perform the work as specified herein.

PAVEMENT PATCHING

(Effective April 11, 2016; Revised April 27, 2018)

<u>Description</u>. This work shall consist of the removal of the existing pavement, the necessary excavation and the replacement with the class and type of patch specified at designated locations.

This work shall be according to Section 442 of the Standard Specifications for Class A and Class B patching and as modified herein.

<u>Materials</u>. Materials shall be according to Article 442.02 of the Standard Specifications and as modified below.

Revise the first paragraph of Article 1020.05(d)(2)b(2) to read:

(2) Class C Fly Ash. For cement aggregate mixture II, Class PV, RR, BS, PC, PS, DS, SC, and SI concrete, Class C fly ash shall be a minimum of 25.0 percent by weight (mass) of the cement and finely divided minerals summed together. For PP-1 and PP-2 concrete, Class C fly ash shall be a minimum of 15.0 percent by weight (mass) of the cement and finely divided minerals summed together.

Revise the first paragraph of Article 1020.05(d)(2)b(3) to read:

(3) When GGBF slag is used in Class PV, RR, BS, PC, PS, DS, SC, and SI concrete, ground granulated blast-furnace slag shall be a minimum of 25.0 percent by weight (mass) of the cement and finely divided minerals summed together. For PP-1 and PP-2 concrete, Ground Granulated Blast-Furnace Slag shall be a minimum of 15.0 percent by weight (mass) of the cement and finely divided minerals summed together.

CONSTRUCTION REQUIREMENTS

<u>Pavement Removal</u>. Pavement removal shall be according to Article 442.05 of the Standard Specifications and as modified herein.

Revise Article 442.05(a) to read:

(a) Class A Patches. Two transverse full depth saw cuts shall be made perpendicular to the centerline at each end of the patch, except that the saw cuts may be skewed slightly if necessary to maintain a minimum distance of 18 inches from the end of the patch to the nearest transverse crack in the pavement to remain in place. When approved by the Engineer, this minimum distance may be reduced to 6 inches in areas of close crack spacing where the pavement otherwise appears to be sound. The longitudinal edges of the patch shall be formed by full-depth saw cuts. Saw cut extensions into pavement which is to remain in place will not be permitted. All saw cuts shall be made with an approved concrete saw. After the transverse saw cuts have been made, intermediate cuts as shown on plan details may be made to make pressure relief cuts or to reduce the pavement length to a size that accommodates removal and hauling operations. The saw cutting operations shall be controlled to limit subbase penetration to a maximum of 1/2 inch.

The shoulder between the full-depth saw cut and the pavement edge shall be removed using a hand held hammer and hand tools prior to pavement removal. If available, the Contractor may use an approved wheel saw to make the shoulder cut and removal.

When the patch is adjacent to a portland cement concrete shoulder, a saw cut shall be made at the shoulder-pavement joint sufficiently deep to sever the tie bars. A second full-depth saw cut shall be made in the pavement a minimum of 4 inches from the edge of the shoulder. The pavement between the full-depth saw cut and the shoulder edge shall be removed using a hand held hammer and hand tools prior to removal of the remaining pavement.

The pavement between the saw cuts shall be removed by lifting. Sufficient care shall be taken to minimize subbase disturbance and prevent spalling of the pavement that is to remain in place. Any subbase or stabilized subbase material disturbed during pavement removal operations or determined unsuitable by the Engineer shall be removed and replaced with patch material.

If the Engineer determines that the concrete has deteriorated to the extent that it is not practical to lift, the pavement may be broken into small pieces and removed. The breaking equipment shall not transfer impact energy greater than 3,000 foot/pound per blow to the pavement surface.

Should the Contractor's operations cause a spall having a width or depth greater than 1 inch in the pavement to remain in place or cause excessive shattering or underbreaking of the existing slab to remain in place, a new saw cut shall be made extending the patch to remove the spall or underbreaking. After pavement removal, the pavement structure will be inspected by the Engineer to determine if it is sufficiently sound. If determined unsound, the Contractor shall extend the patch as directed by the Engineer.

Revise Article 442.06(a)(1) to read:

- (a) Reinforcement, Dowel Bars, and Joints. Reinforcement, dowel bars, and joints shall be according to the following.
 - (1) Class A Patching. The reinforcement shall be constructed according to Articles 508.03 through 508.09. Patches more than 20 feet in length, including half-lane patches, shall be tied to the adjacent pavement, portland cement concrete shoulders, and curb and gutter with No. 6 transverse epoxy coated tie bars, 24 inch long, embedded 8 inch at 36 inch centers according to Article 420.05(b).

Patch reinforcement (longitudinal) shall be tied to No. 6 epoxy coated tie bars, 32 inch long drilled and grouted 8 inch into existing pavement at a spacing that matches that of the existing pavement reinforcement.

The Contractor shall tie the steel together, using at least two secure ties for each lap splice according to Article 508.08(a)(1).

Reinforcement steel shall be placed and supported on chairs according to Article 508.06, and the placement tolerance for individual reinforcement bars shall be ±1 inch horizontally and vertically.

When the existing reinforcement is welded wire reinforcement, the longitudinal reinforcement bars shall be the same size and spacing as the existing longitudinal reinforcement.

Revise the sixth paragraph of Article 442.06(a)(2) of the Standard Specifications to read:

"Patches more than 20 feet in length shall be tied to the adjacent lane of pavement, portland cement concrete shoulders, and curb and gutter with No. 6 tie bars, 24 inches long, embedded 8 inches at 36-inch centers according to Article 420.05(b)."

Add the following sentence to the first paragraph of Article 442.06(d):

The patch material shall match the elevation of the existing concrete pavement or hotmix asphalt surface.

MILE POST MARKER ASSEMBLY (SPECIAL)

<u>Description</u>. This work shall consist of furnishing and installing a milepost marker on telescoping steel sign supports at the location specified in the plans and in accordance with Sections 726.

Telescoping steel sign supports shall be in accordance with Section 728.

Mile post marker assemblies shall be installed prior to construction.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per each for MILE POST MARKER ASSEMBLY (SPECIAL).

Telescoping steel sign supports will be paid for according to Article 728.06.

LINEAR DELINEATOR PANELS, 6 INCH

(Effective April 28, 2017)

<u>Description</u>. Linear delineator panels shall be placed on each parapet wall 6 inches down from the top. Panels shall also be placed on structures containing bridge rail as directed by the Engineer. These panels shall be either white or yellow, matching the color of the adjacent pavement marking edge line. They should be spaced at a minimum of 80 foot centers horizontally, with the first and last panel located within 20 feet of the parapet wall ends. Structures that contain existing linear delineator panels shall have any damaged or missing panels removed and replaced as directed by the Engineer.

When attaching linear delineator panels to concrete, the panels shall be secured using an anchor bolt method approved by the Engineer that will anchor the entire panel securely, but also facilitate removal of the panel by maintenance operations if damaged or weathered in the future. The Contractor shall also sufficiently cover the back side of the linear delineator panel, to the satisfaction of the Engineer, with an adhesive caulking system to aid in the permanent adhesion and alignment of the panels prior to drilling through the pre-drilled linear delineation system holes.

When securing the linear delineator panels to metal bridge rail or any other metal surfaces, the Contractor may use a linear delineation system panel and bracket mounting method approved by the Engineer. The Contractor may also use an adhesive caulking method to sufficiently cover the back side of the linear delineator panel to the satisfaction of the Engineer. The Contractor shall be responsible for testing the durability and strength of the method used to ensure permanent adhesion of the linear delineator panel to the bridge rail. Drilling into metal bridge rail or other metal surfaces to secure the linear delineator panels will not be permitted.

When removing and replacing missing or damaged linear delineator panels, the existing linear delineator panels and any adhesive used to secure the existing linear delineator panels shall be removed to the satisfaction of the Engineer. All cost and labor associated with the removal and cleanup of the existing linear delineator panels shall be included in the unit price of the pay item LINEAR DELINEATOR PANELS, 6 INCH.

Each panel shall not be less than 34 inches in length and 6.00 inches in width. The panels shall be constructed of cube-corner retroreflective material in standard highway colors permanently bonded to an aluminum substrate. The lateral edges of each panel shall be hemmed. The panel assembly shall have a repeating raised lateral ridge every 2.25 inches. Each ridge shall be 0.34 inches high with a 45° profile and a 0.28 inch radius top.

Daytime color requirements shall be determined from measurement of the retroreflective sheeting applied to aluminum test panels. Daytime color shall be measured instrumentally using a spectrophotometer employing annular 45/0 (or equivalent 0/45) illuminating and viewing geometry. Measurements shall be made in accordance with ASTM E1164 for ordinary colors or ASTM E2153 for fluorescent colors. Chromaticity coordinates shall be calculated for CIE Illuminant D65 and the CIE 1931 (20) Standard Colorimetric Observer in accordance with ASTM E308 for ordinary colors or ASTM E2152 for fluorescent colors.

Chromaticity Limits for White

	Х	у	Х	у	Х	у	Х	у	Limit	Y (%)
									Min	Max
White	0.303	0.287	0.368	0.353	0.340	0.380	0.274	0.316	40	-

Chromaticity Limits for Fluorescent Yellow

	х	Y	х	Y	х	у	х	у	Total Luminance Factor YT (%) Min
Fluor. Yellow	0.521	0.424	0.557	0.442	0.479	0.520	0.454	0.491	40

<u>Inspection of Linear Delineator Panels</u>. The linear delineator panels installed under this contract will be inspected following installation, but no later than December 30th. In addition, they will be inspected following a winter performance period that extends 180 days from December 30th.

Within 15 calendar days after the end of the winter performance period, a final performance inspection will be made. If this inspection discloses any work which is not visibly intact and serviceable, the Contractor shall, within 30 calendar days, completely repair or replace such work to the satisfaction of the Engineer.

Measured in its entirety, the work shall be 97 percent intact.

Upon completion of the final performance inspection, or after satisfactory completion of any necessary corrections, the Engineer shall notify the Contractor in writing of the date of such final performance inspection and release him/her from further performance responsibility.

This delay in performance inspection and performance acceptance of the linear delineator panels shall not delay acceptance of the entire project and final payment due if the contractor requires and receives from the subcontractor a third party "performance" bond naming the Department as obligee in the full amount of all linear delineator panels listed in the contract, multiplied by the contract unit price. The bond shall be executed prior to acceptance and final payment of the non-

linear delineator panel items and shall be in full force and effect until final performance inspection and performance acceptance of the linear delineator panels. Execution of the third party bond shall be the option of the Contractor.

<u>Basis of Payment</u>. This work, including all materials, equipment, and labor necessary to complete the work as described will be paid for at the contract unit price per each for LINEAR DELINEATOR PANELS, 6 INCH.

LINEAR DELINEATOR PANELS, 4 INCH

(Effective January 1, 2022)

<u>Description</u>. This work shall consist of furnishing and installing linear delineators on steel plate beam guardrail at locations shown on plan details.

CONSTRUCTION REQUIREMENTS

<u>General</u>. Linear delineator panels shall be attached to steel plate beam guardrail as shown on plan details and as directed by the Engineer. These panels shall be either white or yellow, matching the color of the adjacent pavement marking edge line. They should be spaced at a minimum of 80-foot centers horizontally, with a minimum of two linear delineator per guardrail run. Linear delineators shall not be place on guardrail terminal sections. Linear delineator spacing through horizontal curves where the normal speed limit is reduced, the spacing of the linear delineators shall be reduced to 40-foot centers. Existing steel plate beam guardrail that contain existing linear delineator panels shall have any damaged or missing panels removed and replaced as directed by the Engineer.

When securing the linear delineator panels to steel plate beam guardrail, the Contractor may use a linear delineation system panel and bracket mounting method approved by the Engineer. Linear delineation system panel and bracket including installation methods shall be according to the manufacture's recommendations.

The Contractor shall be responsible for testing the durability and strength of the method used to ensure permanent adhesion of the linear delineator panel to the bridge rail. Drilling into metal bridge rail or other metal surfaces to secure the linear delineator panels will not be permitted.

When removing and replacing missing or damaged linear delineator panels, the existing linear delineator panels and any adhesive or bracket when used to secure the existing linear delineator panels shall be removed to the satisfaction of the Engineer. All cost and labor associated with the removal and cleanup of the existing linear delineator panels shall not be paid for separately but shall be included in the cost of this work.

Each panel shall not be less than 34 inches in length and 4.00 inches in width. The panels shall be constructed of cube-corner retroreflective material in standard highway colors permanently bonded to an aluminum substrate. The lateral edges of each panel shall be hemmed. The panel assembly shall have a repeating raised lateral ridge every 2.25 inches. Each ridge shall be 0.34 inches high with a 45° profile and a 0.28-inch radius top.

Daytime color requirements shall be determined from measurement of the retroreflective sheeting applied to aluminum test panels. Daytime color shall be measured instrumentally using a spectrophotometer employing annular 45/0 (or equivalent 0/45) illuminating and viewing

geometry. Measurements shall be made in accordance with ASTM E1164 for ordinary colors or ASTM E2153 for fluorescent colors. Chromaticity coordinates shall be calculated for CIE Illuminant D65 and the CIE 1931 (20) Standard Colorimetric Observer in accordance with ASTM E308 for ordinary colors or ASTM E2152 for fluorescent colors.

Chromaticity Limits for White

	Х	у	Х	у	Х	у	Х	у	Limit Y (%)
									Min	Max
White	0.303	0.287	0.368	0.353	0.340	0.380	0.274	0.316	40	-

Chromaticity Limits for Fluorescent Yellow

	x	Y	x	Υ	x	у	x	у	Total Luminance Factor YT (%) Min
Fluor. Yellow	0.521	0.424	0.557	0.442	0.479	0.520	0.454	0.491	40

<u>Inspection of Linear Delineator Panels</u>. The linear delineator panels installed under this contract will be inspected following installation. In addition, they will be inspected following a winter performance period that extends 180 days from December 30th.

Within 15 calendar days after the end of the winter performance period, a final performance inspection will be made. If this inspection discloses any work which is not visibly intact and serviceable, the Contractor shall, within 30 calendar days, completely repair or replace such work to the satisfaction of the Engineer.

Measured in its entirety, the work shall be 97 percent intact.

Upon completion of the final performance inspection, or after satisfactory completion of any necessary corrections, the Engineer shall notify the Contractor in writing of the date of such final performance inspection and release him/her from further performance responsibility.

This delay in performance inspection and performance acceptance of the linear delineator panels shall not delay acceptance of the entire project and final payment due if the contractor requires and receives from the subcontractor a third party "performance" bond naming the Department as obligee in the full amount of all linear delineator panels listed in the contract, multiplied by the contract unit price. The bond shall be executed prior to acceptance and final payment of the non-linear delineator panel items and shall be in full force and effect until final performance inspection and performance acceptance of the linear delineator panels. Execution of the third-party bond shall be the option of the Contractor.

<u>Basis of Payment</u>. This work, including all materials, equipment, and labor necessary to complete the work as described will be paid for at the contract unit price per each for LINEAR DELINEATOR PANELS, 4 INCH.

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (JOB SPECIFIC)

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

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

<u>Soil Disposal Analysis.</u> When the waste material requires sampling for landfill disposal acceptance, the Contractor shall secure a written list of the specific analytical parameters and analytical methods required by the landfill. The Contractor shall collect and analyze the required number of samples for the parameters required by the landfill using the appropriate analytical procedures. A copy of the required parameters and analytical methods (from landfill email or on landfill letterhead) shall be provided as Attachment 4A of the BDE 2733 (Regulated Substances Final Construction Report). The price shall include all sampling materials and effort necessary for collection and management of the samples, including transportation of samples from the job site to the laboratory. The Contractor shall be responsible for determining the specific disposal facilities to be utilized; and collect and analyze any samples required for disposal facility acceptance using a NELAP certified analytical laboratory registered with the State of Illinois.

The following contract specific work areas shall be monitored by the Environmental Firm for soil contamination and workers protection.

<u>Site 3917-1 – Right-of-Way, I-57 between MM 270 and MM 279, unincorporated Artesia and Onarga Townships, Iroquois County</u>

- Station 1028+73 to Station 1033+20, 25 feet LT and 25 feet RT. (HMA Cross-Over Widening) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.
- Station 1260+02 to Station 1264+47, 25 feet LT and 25 feet RT. (HMA Cross-Over Widening)
 The Engineer has determined this material meets the criteria of and shall be managed in
 accordance to Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs,
 SVOCs, and Metals.
- Station 915+00 to Station 1226+00, LT. (Cleaning NB End Section Pipe Culverts) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.
- Station 1164+00 to Station 1175+75, RT. (Cleaning SB End Section Pipe Culverts) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.
- Station 1221+65 to Station 1230+14, RT. (Cleaning Buckley Ramp Pipe Culvert End Sections) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(5). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.
- Station 992+00 to Station 1108+00, LT and RT. (Riprap Installation) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.

- Station 938+68 to Station 1219+58, LT and RT. (Cleaning Pipe Culverts) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.
- Station 975+00 to Station 1128+47, LT and RT. (Flared End Section Removal) The Engineer
 has determined this material meets the criteria of and shall be managed in accordance to
 Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs, and
 Metals.
- Station 957+00 to Station 1017+15, 80 feet LT and 80 feet RT. (Pipe Culvert Removal) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.
- Station 911+00 to Station 1210+00, LT. (Grading and Shaping Ditches (NB)) The Engineer
 has determined this material meets the criteria of and shall be managed in accordance to
 Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs, and
 Metals.
- Station 919+50 to Station 1263+00, LT. (Grading and Shaping Ditches (SB)) The Engineer
 has determined this material meets the criteria of and shall be managed in accordance to
 Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs, and
 Metals.
- Station 1220+00 to Station 1232+23, LT and RT. (Grading and Shaping Buckley Ramp Ditches) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(5). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.
- Station 909+00 to Station 1270+88, RT. (Underdrain Removal and Replacement SBL) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs. and Metals.
- Station 909+00 to Station 1271+88, LT. . (Underdrain Removal and Replacement NBL) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.
- Station 1211+81 to Station 1240+84, LT. (Buckley Ramps Underdrain Removal and Replacement) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.
- Station 909+00 to Station 1270+88, RT. (Underdrain Removal and Replacement for Outlets SBL) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.
- Station 909+00 to Station 1271+88, LT. (Underdrain Removal and Replacement for Outlets NBL) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(1). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.

<u>Site 3917-17 – Lion's Den, 362 800 N Road, unincorporated Artesia Township, Iroquois County</u>

- Station 1218+81 to Station 1219+02, 94 feet LT to 110 feet LT. (Ramp A Grading and Shaping Ditches) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(5). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.
- Station 1217+30 to Station 1217+40, 255 feet LT to 245 feet LT. (Ramp A Underdrain Removal and Replacement for Outlets) The Engineer has determined this material meets the criteria of and shall be managed in accordance to Article 669.05(a)(5). Contaminants of concern sampling parameters: VOCs, SVOCs, and Metals.

Work Zones

Three distinct OSHA HAZWOPER work zones (exclusion, decontamination, and support) shall apply to projects adjacent to or within sites with documented leaking underground storage tank (LUST) incidents, or sites under management in accordance with the requirements of the Site Remediation Program (SRP), Resource Conservation and Recovery Act (RCRA), or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or as deemed necessary. For this project, the work zones apply for the following ISGS PESA Sites: **None**

Additional information on the contract specific work areas listed above collected during the regulated substances due-diligence process is available through the District's Environmental Studies Unit (DESU).

Any waste generated as a special waste or a waste not certified as a non-special waste from this project should be manifested off-site using the IEPA Bureau of Land generator number associated IDOT right-of-way in the affected county. **The IEPA generator number for IDOT right-of-way in Iroquois County is 0758995003.**

CROSSING STRUCTURES WITH MATERIAL TRANSFER DEVICE

(Effective May 23, 2001; Revised November 23, 2021)

The Bureau of Bridges and Structures has analyzed the existing structures within the specified construction zone. Based on this analysis, the following structures can be crossed with an empty MTD with the following maximum gross weight restrictions:

- 038-0151 (40 tons)
- 038-0152 (40 tons)
- 038-0153 (40 tons)
- 038-0154 (40 tons)
- 038-0155 (40 tons)
- 038-0156 (40 tons)

If the same MTD is used throughout the entire contract, then it must be limited to an empty gross weight ≤ 40 tons.

The Material Transfer Device shall be empty and the crossing shall be as described in the special provision "Material Transfer Device (BDE)."

VIBRATORY ROLLER RESTRICTION

(Effective November 26, 2013)

The use of vibratory rollers in dynamic mode shall not be allowed on bridge decks and in urban areas that may include aging infrastructure under the roadway. These locations will be determined in the field by the Engineer.

The restriction of dynamic vibratory rollers in these areas shall not waive density requirements.

TOPSOIL EXCAVATION AND PLACEMENT (SPECIAL)

Description: This work shall consist of the excavation, stockpiling and re-spreading and regrading of the existing topsoil (4 inches) located within Buckley Interchange infields for the storage of surplus material that cannot be reused within ROW limits.

Removal and stockpiling shall be in accordance to Article 211.03 of the standard specifications.

The contractor shall re-spread and regrade the previously excavated topsoil to cover the surplus material obtained from construction operations at Buckley interchange infields. Additional topsoil required to complete the work shall be paid as FURNISHED EXCAVATION or shall be obtained from other suitable vegetation sustaining materials approved by the Engineer.

It is recommended that the infields at exit ramps be used to store materials.

The final grade shall be reseeded and fertilized.

At no time, the placement of these materials shall not affect the existing drainage patterns.

This item will be measured according to Article 211.08 and will be paid for at the contract unit price per cubic yard for TOPSOIL EXCAVATION AND PLACEMENT (SPECIAL).

If additional excavation is required below the limits of existing topsoil, this work will be measured and paid for at the contract unit price per Cubic Yard for EARTH EXCAVATION.

Seeding, fertilizer and tree removal required to complete the work will be paid separately.

POLYUREA PAVEMENT MARKING

Two separate applications of polyurea pavement marking will be required. The second application shall be placed a minimum of 7 days after the first application.

The Contractor shall not place one thick application in lieu of two regular applications.

This requirement shall be included in the cost of POLYUREA PAVEMENT MARKING of the width and type specified in the plans.

SHOULDER REMOVAL AND REPLACEMENT

The Contractor is advised that approximately 13" of HMA shoulder material shall be required to be removed in order to reach the existing underdrains. The maximum trench width for the removal of the pipe underdrain and pipe underdrain (special) under HMA shoulder shall be a maximum of 12 inches unless approved by the Engineer.

The trench shall be backfilled with aggregate from the bottom of the underdrain as seen in the highway standards to the bottom of the <u>existing HMA</u> shoulder. Backfilling the trench with HMA Mix shall be from the bottom of the <u>existing HMA</u> shoulder to the bottom of the proposed HMA surface removal as seen in the typical sections for milling and resurfacing.

This work requirement shall be considered as included in the cost of SHOULDER REMOVAL AND REPLACEMENT.

STRUCTURAL REPAIR OF CONCRETE

Effective: March 15, 2006 Revised: August 9, 2019

<u>Description</u>. This work shall consist of structurally repairing concrete.

Materials. Materials shall be according to the following.

Item	Article/Section
(a) Portland Cement Concrete (Note 1)	1020
(b) R1, R2, or R3 Concrete (Note 2)	
(c) Normal Weight Concrete (Notes 3 and 4)	
(d) Shotcrete (High Performance) (Notes 5 and 6)	
(e) Reinforcement Bars	1006.10
(f) Anchor Bolts	1006.09
(g) Water	1002
(h) Curing Compound	
(i) Cotton Mats	1022.02
(j) Protective Coat	1023.01
(k) Epoxy (Note 7)	
(I) Mechanical Bar Splicers	

- Note 1. The concrete shall be Class SI, except the cement factor shall be a minimum 6.65 cwt/cu yd (395 kg/cu m), the coarse aggregate shall be a CA 16, and the strength shall be a minimum 4000 psi (27,500 kPa) compressive or 675 psi (4650 kPa) flexural at 14 days. A high range water-reducing admixture shall be used to obtain a 5-7 in. (125-175 mm) slump, but a cement factor reduction according to Article 1020.05(b)(8) is prohibited. A self-consolidating concrete mixture is also acceptable per Article 1020.04, except the mix design requirements of this note regarding the cement factor, coarse aggregate, strength, and cement factor reduction shall apply.
- Note 2. The R1, R2, or R3 concrete shall be from the Department's qualified product list of Packaged, Dry, Rapid Hardening, Cementitious Materials for Concrete Repairs. The R1, R2, or R3 concrete shall comply with the air content and strength requirements for Class SI concrete as indicated in Note 1. Mixing shall be per the manufacturer's

recommendations, except the water/cement ratio shall not exceed the value specified for Class SI concrete as indicated in Note 1. A high range water-reducing admixture shall be used to obtain a 5-7 in. (125-175 mm) slump, and a retarder may be required to allow time to perform the required field tests. The admixtures shall be per the manufacturer's recommendation, and the Department's qualified product list of Concrete Admixtures shall not apply.

Note 3. The "high slump" packaged concrete mixture shall be from the Department's qualified product list of Packaged, Dry, Formed, Concrete Repair Mixtures. The materials and preparation of aggregate shall be according to ASTM C 387. The cement factor shall be 6.65 cwt/cu yd (395 kg/cu m) minimum to 7.05 cwt/cu yd (418 kg/cu m) maximum. Cement replacement with fly ash or ground granulated blastfurnace slag shall be according to Section 1020. The "high slump" packaged concrete mixture shall have a water soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the "high slump" packaged concrete mixture shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every two years, and the test results shall be provided to the Department. The coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm). The packaged concrete mixture shall comply with the air content and strength requirements for Class SI concrete as indicated in Note 1. Mixing shall be per the manufacturer's recommendations, except the water/cement ratio shall not exceed the value specified for Class SI concrete as indicated in Note 1. A high range waterreducing admixture shall be used to obtain a 5-7 in. (125-175 mm) slump. The admixture shall be per the manufacturer's recommendation, and the Department's qualified product list of Concrete Admixtures shall not apply. A maximum slump of 10 in. (250 mm) may be permitted if no segregation is observed by the Engineer in a laboratory or field evaluation.

The "self-consolidating concrete" packaged concrete mixture shall be from the Note 4 Department's qualified product list of Packaged, Dry. Formed, Concrete Repair Mixtures. The materials and preparation of aggregate shall be according to ASTM C 387. The cement factor shall be 6.65 cwt/cu yd (395 kg/cu m) minimum to 7.05 cwt/cu yd (418 kg/cu m) maximum. Cement replacement with fly ash or ground granulated blast-furnace slag shall be according to Section 1020. The "selfconsolidating concrete" packaged concrete mixture shall have a water soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the "self-consolidating concrete" packaged concrete mixture shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every two years, and the test results shall be provided to the Department. The concrete mixture should be uniformly graded, and the coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm). The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used. The packaged concrete mixture shall comply with the air content and strength requirements for Class SI concrete as indicated in Note 1. Mixing shall be per the manufacturer's recommendations, except the water/cement ratio shall not exceed the value specified for Class SI concrete as indicated in Note 1. The admixtures used to self-consolidating concrete shall be per the manufacturer's recommendation, and the Department's qualified product list of Concrete Admixtures

shall not apply. The packaged concrete mixture shall meet the self-consolidating requirements of Article 1020.04.

Note 5. Packaged shotcrete that includes aggregate shall be from the Department's qualified product list of Packaged High Performance Shotcrete, and independent laboratory test results showing the product meets Department specifications will be required. The product shall be a packaged, pre-blended, and dry combination of materials, for the wet-mix shotcrete method according to ASTM C 1480. A non-chloride accelerator may be used according to the shotcrete manufacturer's recommendations. The shotcrete shall be Type FA or CA, Grade FR, and Class I. The fibers shall be Type III synthetic according to ASTM C 1116.

The packaged shotcrete shall have a water soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the hardened shotcrete shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every two years, and the test results shall be provided to the Department.

Each individual aggregate used in the packaged shotcrete shall have either a maximum ASTM C 1260 expansion of 0.16 percent or a maximum ASTM C 1293 expansion of 0.040 percent. However, the ASTM C 1260 value may be increased to 0.27 percent for each individual aggregate if the cement total equivalent alkali content (Na₂O + 0.658K₂O) does not exceed 0.60 percent. As an alternative to these requirements, ASTM C 1567 testing which shows the packaged shotcrete has a maximum expansion of 0.16 percent may be submitted. The ASTM C 1260, C 1293, or C 1567 test shall be performed a minimum of once every two years.

The 7 and 28 day compressive strength requirements in ASTM C 1480 shall not apply. Instead the shotcrete shall obtain a minimum compressive strength of 4000 psi (27,500 kPa) at 14 days.

The packaged shotcrete shall be limited to the following proportions:

The portland cement and finely divided minerals shall be 6.05 cwt/cu yd (360 kg/cu m) to 8.50 cwt/cu yd (505 kg/cu m) for Type FA and 6.05 cwt/cu yd (360 kg/cu. m) to 7.50 cwt/cu yd (445 kg/cu m) for Type CA. The portland cement shall not be below 4.70 cwt/cu yd (279 kg/cu m) for Type FA or CA.

The finely divided mineral(s) shall constitute a maximum of 35 percent of the total cement plus finely divided mineral(s).

Class F fly ash is optional and the maximum shall be 20 percent by weight (mass) of cement.

Class C fly ash is optional and the maximum shall be 25 percent by weight (mass) of cement.

Ground granulated blast-furnace slag is optional and the maximum shall be 30 percent by weight (mass) of cement.

Microsilica is required and shall be a minimum of 5 percent by weight (mass) of cement, and a maximum of 10 percent. As an alternative to microsilica, high-reactivity metakaolin may be used at a minimum of 5 percent by weight (mass) of cement, and a maximum of 10 percent.

Fly ash shall not be used in combination with ground granulated blast-furnace slag. Class F fly ash shall not be used in combination with Class C fly ash. Microsilica shall not be used in combination with high-reactivity metakaolin. A finely divided mineral shall not be used in combination with a blended hydraulic cement, except for microsilica or high-reactivity metakaolin.

The water/cement ratio as defined in Article 1020.06 shall be a maximum of 0.42.

The air content as shot shall be 4.0 - 8.0 percent.

Note 6 Packaged shotcrete that does not include pre-blended aggregate shall be from the Department's qualified product list of Packaged High Performance Shotcrete, and independent laboratory test results showing the product meets Department specifications will be required. The shotcrete shall be according to Note 5, except the added aggregate shall be according to Articles 1003.02 and 1004.02 in addition to each individual aggregate meeting the maximum expansion requirements of Note 5. The aggregate gradation shall be according to the manufacturer. The shotcrete shall be batched and mixed with added aggregate according to the manufacturer.

Note 7. In addition ASTM C 881, Type IV, Grade 2 or 3, Class A, B, or C may be used.

Equipment. Equipment shall be according to Article 503.03 and the following.

Chipping Hammer – The chipping hammer for removing concrete shall be a light-duty pneumatic or electric tool with a 15 lb. (7 kg) maximum class or less.

Blast Cleaning Equipment – Blast cleaning equipment for concrete surface preparation shall be the abrasive type, and the equipment shall have oil traps.

Hydrodemolition Equipment – Hydrodemolition equipment for removing concrete shall be calibrated, and shall use water according to Section 1002.

High Performance Shotcrete Equipment – The batching, mixing, pumping, hose, nozzle, and auxiliary equipment shall be for the wet-mix shotcrete method, and shall meet the requirements of ACI 506R.

Construction Requirements

<u>General</u>. The repair methods shall be either formed concrete repair or shotcrete. The repair method shall be selected by the Contractor with the following rules.

(a) Rule 1. For formed concrete repair, a subsequent patch to repair the placement point after initial concrete placement will not be allowed. As an example, this may occur in a vertical location located at the top of the repair.

- (b) Rule 2. Formed concrete repair shall not be used for overhead applications.
- (c) Rule 3. If formed concrete repair is used for locations that have reinforcement with less than 0.75 in. (19 mm) of concrete cover, the concrete mixture shall contain fly ash or ground granulated blast-furnace slag at the maximum cement replacement allowed.
- (d) Rule 4. Shotcrete shall not be used for any repair greater than 6 in. (150 mm) in depth, except in horizontal applications, where the shotcrete may be placed from above in one lift.
- (e) Rule 5. Shotcrete shall not be used for column repairs greater than 4 in. (100 mm) in depth, unless the shotcrete mixture contains 3/8 in. (9.5 mm) aggregate.

Temporary Shoring or Cribbing. When a temporary shoring or cribbing support system is required, the Contractor shall provide details and computations, prepared and sealed by an Illinois licensed Structural Engineer, to the Department for review and approval. When ever possible the support system shall be installed prior to starting the associated concrete removal. If no system is specified, but during the course of removal the need for temporary shoring or cribbing becomes apparent or is directed by the Engineer due to a structural concern, the Contractor shall not proceed with any further removal work until an appropriate and approved support system is installed.

Concrete Removal. The Contractor shall provide ladders or other appropriate equipment for the Engineer to mark the removal areas. Repair configurations will be kept simple, and squared corners will be preferred. The repair perimeter shall be sawed a depth of 1/2 in. (13 mm) or less, as required to avoid cutting the reinforcement. Any cut reinforcement shall be repaired or replaced at the expense of the Contractor. If the concrete is broken or removed beyond the limits of the initial saw cut, the new repair perimeter shall be recut. The areas to be repaired shall have all loose, unsound concrete removed completely by the use of chipping hammers, hydrodemolition equipment, or other methods approved by the Engineer. The concrete removal shall extend along the reinforcement bar until the reinforcement is free of bond inhibiting corrosion. Reinforcement bar with 50 percent or more exposed shall be undercut to a depth of 3/4 in. (19 mm) or the diameter of the reinforcement bar, whichever is greater.

If sound concrete is encountered before existing reinforcement bars are exposed, further removal of concrete shall not be performed unless the minimum repair depth is not met.

The repair depth shall be a minimum of 1 in. (25 mm). The substrate profile shall be \pm 1/16 in. (\pm 1.5 mm). The perimeter of the repair area shall have a vertical face.

If a repair is located at the ground line, any excavation required below the ground line to complete the repair shall be included in this work.

The Contractor shall have a maximum of 14 calendar days to complete each repair location with concrete or shotcrete, once concrete removal has started for the repair.

The Engineer shall be notified of concrete removal that exceeds 6 in. (150 mm) in depth, one fourth the cross section of a structural member, more than half the vertical column reinforcement is exposed in a cross section, more than 6 consecutive reinforcement bars are exposed in any direction, within 1.5 in. (38 mm) of a bearing area, or other structural concern. Excessive

deterioration or removal may require further evaluation of the structure or installation of temporary shoring and cribbing support system.

<u>Surface Preparation</u>. Prior to placing the concrete or shotcrete, the Contractor shall prepare the repair area and exposed reinforcement by blast cleaning. The blast cleaning shall provide a surface that is free of oil, dirt, and loose material.

If a succeeding layer of shotcrete is to be applied, the initial shotcrete surface and remaining exposed reinforcement shall be free of curing compound, oil, dirt, loose material, rebound (i.e. shotcrete material leaner than the original mixture which ricochets off the receiving surface), and overspray. Preparation may be by lightly brushing or blast cleaning if the previous shotcrete surface is less than 36 hours old. If more than 36 hours old, the surface shall be prepared by blast cleaning.

The repair area and perimeter vertical face shall have a rough surface. Care shall be taken to ensure the sawcut face is roughened by blast cleaning. Just prior to concrete or shotcrete placement, saturate the repair area with water to a saturated surface-dry condition. Any standing water shall be removed.

Concrete or shotcrete placement shall be done within 3 calendar days of the surface preparation or the repair area shall be prepared again.

<u>Reinforcement.</u> Exposed reinforcement bars shall be cleaned of concrete and corrosion by blast cleaning. After cleaning, all exposed reinforcement shall be carefully evaluated to determine if replacement or additional reinforcement bars are required.

Reinforcing bars that have been cut or have lost 25 percent or more of their original cross sectional area shall be supplemented by new in kind reinforcement bars. New bars shall be lapped a minimum of 32 bar diameters to existing bars. A mechanical bar splicer shall be used when it is not feasible to provide the minimum bar lap. No welding of bars shall be performed.

Intersecting reinforcement bars shall be tightly secured to each other using 0.006 in. (1.6 mm) or heavier gauge tie wire, and shall be adequately supported to minimize movement during concrete placement or application of shotcrete.

For reinforcement bar locations with less than 0.75 in. (19 mm) of cover, protective coat shall be applied to the completed repair. The application of the protective coat shall be according to Article 503.19, 2nd paragraph, except blast cleaning shall be performed to remove curing compound.

The Contractor shall anchor the new concrete to the existing concrete with 3/4 in. (19 mm) diameter hook bolts for all repair areas where the depth of concrete removal is greater than 8 in. (205 mm) and there is no existing reinforcement extending into the repair area. The hook bolts shall be spaced at 15 in. (380 mm) maximum centers both vertically and horizontally, and shall be a minimum of 12 in. (305 mm) away from the perimeter of the repair. The hook bolts shall be installed according to Section 584.

Repair Methods. All repair areas shall be inspected and approved by the Engineer prior to placement of the concrete or application of the shotcrete.

(a) Formed Concrete Repair. Falsework shall be according to Article 503.05. Forms shall be according to Article 503.06. Formwork shall provide a smooth and uniform concrete finish,

and shall approximately match the existing concrete structure. Formwork shall be mortar tight and closely fitted where they adjoin the existing concrete surface to prevent leakage. Air vents may be provided to reduce voids and improve surface appearance. The Contractor may use exterior mechanical vibration, as approved by the Engineer, to release air pockets that may be entrapped.

The concrete for formed concrete repair shall be a Class SI Concrete, or a packaged R1, R2, or R3 Concrete,, or a packaged Normal Weight Concrete at the Contractor's option. The concrete shall be placed and consolidated according to Article 503.07. The concrete shall not be placed when frost is present on the surface of the repair area, or the surface temperature of the repair area is less than 40 °F (4 °C). All repaired members shall be restored as close as practicable to their original dimensions.

Curing shall be done according to Article 1020.13.

If temperatures below 45°F (7°C) are forecast during the curing period, protection methods shall be used. Protection Method I according to Article 1020.13(d)(1), or Protection Method II according to Article 1020.13(d)(2) shall be used during the curing period.

The surfaces of the completed repair shall be finished according to Article 503.15.

(b) Shotcrete. Shotcrete shall be tested by the Engineer for air content according to Illinois Modified AASHTO T 152. The sample shall be obtained from the discharge end of the nozzle by shooting a pile large enough to scoop a representative amount for filling the air meter measuring bowl. Shotcrete shall not be shot directly into the measuring bowl for testing.

For compressive strength of shotcrete, a $18 \times 18 \times 3.5$ in. $(457 \times 457 \times 89 \text{ mm})$ test panel shall be shot by the Contractor for testing by the Engineer. A steel form test panel shall have a minimum thickness of 3/16 in. (5 mm) for the bottom and sides. A wood form test panel shall have a minimum 3/4 in. (19 mm) thick bottom, and a minimum 1.5 in. (38 mm) thickness for the sides. The test panel shall be cured according to Article 1020.13 (a) (3) or (5) while stored at the jobsite and during delivery to the laboratory. After delivery to the laboratory for testing, curing and testing shall be according to ASTM C 1140.

The method of alignment control (i.e. ground wires, guide strips, depth gages, depth probes, and formwork) to ensure the specified shotcrete thickness and reinforcing bar cover is obtained shall be according to ACI 506R. Ground wires shall be removed after completion of cutting operations. Guide strips and formwork shall be of dimensions and a configuration that do not prevent proper application of shotcrete. Metal depth gauges shall be cut 1/4 in. (6 mm) below the finished surface. All repaired members shall be restored as close as practicable to their original dimensions.

For air temperature limits when applying shotcrete in cold weather, the first paragraph of Article 1020.14(b) shall apply. For hot weather, shotcrete shall not be applied when the air temperature is greater than 90°F (32°C). The applied shotcrete shall have a minimum temperature of 50°F (10°C) and a maximum temperature of 90°F (32°C). The shotcrete shall not be applied during periods of rain unless protective covers or enclosures are installed. The shotcrete shall not be applied when frost is present on the surface of the repair area, or the surface temperature of the repair area is less than 40°F (4°C). If necessary, lighting shall be provided to provide a clear view of the shooting area.

The shotcrete shall be applied according to ACI 506R, and shall be done in a manner that does not result in cold joints, laminations, sandy areas, voids, sags, or separations. In addition, the shotcrete shall be applied in a manner that results in maximum densification of the shotcrete. Shotcrete which is identified as being unacceptable while still plastic shall be removed and re-applied.

The nozzle shall normally be at a distance of 2 to 5 ft. (0.6 to 1.5 m) from the receiving surface, and shall be oriented at right angles to the receiving surface. Exceptions to this requirement will be permitted to fill corners, encase large diameter reinforcing bars, or as approved by the Engineer. For any exception, the nozzle shall never be oriented more than 45 degrees from the surface. Care shall be taken to keep the front face of the reinforcement bar clean during shooting operations. Shotcrete shall be built up from behind the reinforcement bar. Accumulations of rebound and overspray shall be continuously removed prior to application of new shotcrete. Rebound material shall not be incorporated in the work.

Whenever possible, shotcrete shall be applied to the full thickness in a single layer. The maximum thickness shall be according to Rules 4 and 5 under Construction Requirements, General. When two or more layers are required, the minimum number shall be used and shall be done in a manner without sagging or separation. A flash coat (i.e. a thin layer of up to 1/4 in. (6 mm) applied shotcrete) may be used as the final lift for overhead applications.

Prior to application of a succeeding layer of shotcrete, the initial layer of shotcrete shall be prepared according to the surface preparation and reinforcement bar cleaning requirements. Upon completion of the surface preparation and reinforcement bar treatment, water shall be applied according to the surface preparation requirements unless the surface is moist. The second layer of shotcrete shall then be applied within 30 minutes.

Shotcrete shall be cut back to line and grade using trowels, cutting rods, screeds or other suitable devices. The shotcrete shall be allowed to stiffen sufficiently before cutting. Cutting shall not cause cracks or delaminations in the shotcrete. For depressions, cut material may be used for small areas. Rebound material shall not be incorporated in the work. For the final finish, a wood float shall be used to approximately match the existing concrete texture. A manufacturer approved finishing aid may be used. Water shall not be used as a finishing aid. All repaired members shall be restored as close as practicable to their original dimensions.

Contractor operations for curing shall be continuous with shotcrete placement and finishing operations. Curing shall be accomplished using wetted cotton mats, membrane curing, or a combination of both. Cotton mats shall be applied according to Article 1020.13(a)(5) except the exposed layer of shotcrete shall be covered within 10 minutes after finishing, and wet curing shall begin immediately. Curing compound shall be applied according to Article 1020.13(a)(4), except the curing compound shall be applied as soon as the shotcrete has hardened sufficiently to prevent marring the surface, and each of the two separate applications shall be applied in opposite directions to ensure coverage. The curing compound shall be according to Article 1022.01. Note 5 of the Index Table in Article 1020.13 shall apply to the membrane curing method.

When a shotcrete layer is to be covered by a succeeding shotcrete layer within 36 hours, the repair area shall be protected with intermittent hand fogging, or wet curing with either burlap or cotton mats shall begin within 10 minutes. Intermittent hand fogging may be used only for the first hour. Thereafter, wet curing with burlap or cotton mats shall be used until the succeeding shotcrete layer is applied. Intermittent hand fogging may be extended to the first hour and a half if the succeeding shotcrete layer is applied by the end of this time.

The curing period shall be for 7 days, except when there is a succeeding layer of shotcrete. In this instance, the initial shotcrete layer shall be cured until the surface preparation and reinforcement bar treatment is started.

If temperatures below 45°F (7°C) are forecast during the curing period, protection methods shall be used. Protection Method I according to Article 1020.13(d)(1), or Protection Method II according to Article 1020.13(d)(2) shall be used during the curing period

<u>Inspection of Completed Work.</u> The Contractor shall provide ladders or other appropriate equipment for the Engineer to inspect the repaired areas. After curing but no sooner than 28 days after placement of concrete or shooting of shotcrete, the repair shall be examined for conformance with original dimensions, cracks, voids, and delaminations. Sounding for delaminations will be done with a hammer or by other methods determined by the Engineer.

The acceptable tolerance for conformance of a repaired area shall be within 1/4 in. (6 mm) of the original dimensions. A repaired area not in dimensional conformance or with delaminations shall be removed and replaced.

A repaired area with cracks or voids shall be considered as nonconforming. Exceeding one or more of the following crack and void criteria shall be cause for removal and replacement of a repaired area.

- 1. The presence of a single surface crack greater than 0.01 in. (0.25 mm) in width and greater than 12 in. (300 mm) in length.
- 2. The presence of two or more surface cracks greater than 0.01 in. (0.25 mm) in width that total greater than 24 in. (600 mm) in length.
- 3. The presence of map cracking in one or more regions totaling 15 percent or more of the gross surface area of the repair.
- 4. The presence of two or more surface voids with least dimension 3/4 in. (19 mm) each.

A repaired area with cracks or voids that do not exceed any of the above criteria may remain in place, as determined by the Engineer.

If a nonconforming repair is allowed to remain in place, cracks greater than 0.007 in. (0.2 mm) in width shall be repaired with epoxy according to Section 590. For cracks less than or equal to 0.007 in. (0.2 mm) in width, the epoxy may be applied to the surface of the crack. Voids shall be repaired according to Article 503.15.

<u>Publications and Personnel Requirements</u>. The Contractor shall provide a current copy of ACI 506R to the Engineer a minimum of one week prior to start of construction.

The shotcrete personnel who perform the work shall have current American Concrete Institute (ACI) nozzlemen certification for vertical wet and overhead wet applications, except one individual may be in training. This individual shall be adequately supervised by a certified ACI nozzlemen as determined by the Engineer. A copy of the nozzlemen certificate(s) shall be given to the Engineer.

<u>Method of Measurement</u>. This work will be measured for payment in place and the area computed in square feet (square meters). For a repair at a corner, both sides will be measured.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per square foot (square meter) for STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 IN. (125 MM), STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN. (125 MM).

When not specified to be paid for elsewhere, the work to design, install, and remove the temporary shoring and cribbing will be paid for according to Article 109.04.

With the exception of reinforcement damaged by the Contractor during removal, the furnishing and installation of supplemental reinforcement bars, mechanical bar splicers, hook bolts, and protective coat will be paid according to Article 109.04.

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)

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

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

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

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

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

Where: CA = Cost Adjustment, \$.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BLENDED FINELY DIVIDED MINERALS (BDE)

Effective: April 1, 2021

Revise the second paragraph of Article 1010.01 of the Standard Specifications to read:

"Different sources or types of finely divided minerals shall not be mixed or used alternately in the same item of construction, except as a blended finely divided mineral product according to Article 1010.06."

Add the following article to Section 1010 of the Standard Specifications:

"1010.06 Blended Finely Divided Minerals. Blended finely divided minerals shall be the product resulting from the blending or intergrinding of two or three finely divided minerals. Blended finely divided minerals shall be according to ASTM C 1697, except as follows.

- (a) Blending shall be accomplished by mechanically or pneumatically intermixing the constituent finely divided minerals into a uniform mixture that is then discharged into a silo for storage or tanker for transportation.
- (b) The blended finely divided mineral product will be classified according to its predominant constituent or the manufacturer's designation and shall meet the chemical requirements of its classification. The other finely divided mineral constituent(s) will not be required to conform to their individual standards."

COMPENSABLE DELAY COSTS (BDE)

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

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

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

(3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days."

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

- "(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.
 - (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.
 - Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).
 - (2) Major Delay. Labor will be the same as for a minor delay.
 - Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the Contractor's yard or another job and the cost to re-mobilize, whichever is less. Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.
 - (3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven calendar days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

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

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

- "(b) No working day will be charged under the following conditions.
 - (1) When adverse weather prevents work on the controlling item.
 - (2) When job conditions due to recent weather prevent work on the controlling item.
 - (3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.

- (4) When delays caused by utility or railroad adjustments prevent work on the controlling item.
- (5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.
- (6) When any condition over which the Contractor has no control prevents work on the controlling item."

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

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

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

Add the following to Section 109 of the Standard Specifications.

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

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

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

(a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.

- (b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.
 - (1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

Original Contract Amount	Supervisory and Administrative Personnel	
Up to \$5,000,000	One Project Superintendent	
Over \$ 5,000,000 - up to \$25,000,000	One Project Manager, One Project Superintendent or Engineer, and One Clerk	
Over \$25,000,000 - up to \$50,000,000	One Project Manager, One Project Superintendent, One Engineer, and One Clerk	
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 according to Article 109.04.

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

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

CONCRETE END SECTIONS FOR PIPE CULVERTS (BDE)

Effective: January 1, 2013 Revised: April 1, 2016

Description. This work shall consist of constructing cast-in-place concrete and precast concrete end sections for pipe culverts. These end sections are shown on the plans as Highway Standard 542001 or 542011. This work shall be according to Section 542 of the Standard Specifications except as modified herein.

Materials. Materials shall be according to the following Articles of Division 1000 – Materials of the Standard Specifications.

Item	Article/Section
(a) Portland Cement Concrete (Note 1)	1020
(b) Precast Concrete End Sections (Note 2)	
(c) Coarse Aggregate (Note 3)	1004.05
(d) Structural Steel (Note 4)	1006.04
(e) Anchor Bolts and Rods (Note 5)	1006.09
(f) Reinforcement Bars	1006.10(a)
(g) Nonshrink Grout	1024.02
(h) Chemical Adhesive Resin System	
(i) Mastic Joint Sealer for Pipe	1055
(j) Hand Hole Plugs	1042.16

- Note 1. Cast-in-place concrete end sections shall be Class SI, except the 14 day mix design shall have a compressive strength of 5000 psi (34,500 kPa) or a flexural strength of (800 psi) 5500 kPa and a minimum cement factor of 6.65 cwt/cu yd (395 kg/cu m).
- Note 2. Precast concrete end sections shall be according to Articles 1042.02 and 1042.03(b)(c)(d)(e) of the Standard Specifications. The concrete shall be Class PC according to Section 1020, and shall have a minimum compressive strength of 5000 psi (34,000 kPa) at 28 days.

Joints between precast sections shall be produced with reinforced tongue and groove ends according to the requirements of ASTM C 1577.

- Note 3. The granular bedding placed below a precast concrete end section shall be gradation CA 6, CA 9, CA 10, CA 12, CA 17, CA 18, or CA 19.
- Note 4. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable.
- Note 5. The anchor rods for the culvert ties shall be according to the requirements of ASTM F 1554, Grade 105 (Grade 725).

CONSTRUCTION REQUIREMENTS

The concrete end sections may be precast or cast-in-place construction. Toe walls shall be either precast or cast-in-place, and shall be in proper position and backfilled according to the applicable paragraphs of Article 502.10 of the Standard Specifications prior to the installation of the concrete end sections. If soil conditions permit, cast-in-place toe walls may be poured directly against the soil. When poured directly against the soil, the clear cover of the sides and bottom of the toe wall shall be increased to 3 in. (75 mm) by increasing the thickness of the toe wall.

- (a) Cast-In-Place Concrete End Sections. Cast-in-place concrete end sections shall be constructed according to the requirements of Section 503 of the Standard Specifications and as shown on the plans.
- (b) Precast Concrete End Sections. When the concrete end sections will be precast, shop drawings detailing the slab thickness and reinforcement layout shall be submitted to the Engineer for review and approval.

The excavation and backfilling for precast concrete end sections shall be according to the requirements of Section 502 of the Standard Specifications, except a layer of granular bedding at least 6 in. (150 mm) in thickness shall be placed below the elevation of the bottom of the end section. The granular bedding shall extend a minimum of 2 ft (600 mm) beyond each side of the end section.

Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional 2/3 turn on one of the nuts. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut.

When individual, precast end sections are placed side-by-side for a multi-pipe culvert installation, a 3 in. (75 mm) space shall be left between adjacent end section walls and the space(s) filled with Class SI concrete.

Method of Measurement. This work will be measured for payment as each, with each end of each culvert being one each.

Basis of Payment. This work will be paid for at the contract unit price per each for CONCRETE END SECTION, STANDARD 542001 or CONCRETE END SECTION, 542011, of the pipe diameter and slope specified.

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

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

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

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

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

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

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

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 8.00% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

(a) The bidder documents enough DBE participation has been obtained to meet the goal or,

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

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

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

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

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

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

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

(a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other

factors or efforts brought to the attention of the Department may be relevant in appropriate cases and will be considered by the Department.

- (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
- (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.
- (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.

- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided it is otherwise eligible for award. If the Department determines the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification will also include a statement of reasons for the adverse determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period to cure the deficiency.
- (c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "DOT.DBE.UP@illinois.gov" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
 - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
 - (2) The DBE may also lease trucks from a non-DBE firm, including from an 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.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall

become the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

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

materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

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

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

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness:
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.
- (6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal:
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;

- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.
 - When a DBE is terminated or fails to complete its work on the Contract for any reason, the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.
- (f) FINAL PAYMENT. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <u>ENFORCEMENT</u>. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

FUEL COST ADJUSTMENT (BDE)

Effective: April 1, 2009 Revised: August 1, 2017

Description. Fuel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in fuel prices when optioned by the Contractor. The bidder shall indicate with their bid whether or not this special provision will be part of the contract. Failure to indicate "Yes" for any category of work will make that category of work exempt from fuel cost adjustment.

General. The fuel cost adjustment shall apply to contract pay items as grouped by category. The adjustment shall only apply to those categories of work checked "Yes", and only when the cumulative plan quantities for a category exceed the required threshold. Adjustments to work items in a category, either up or down, and extra work paid for by agreed unit price will be subject to fuel cost adjustment only when the category representing the added work was subject to the fuel cost adjustment. Extra work paid for at a lump sum price or by force account will not be subject to fuel cost adjustment. Category descriptions and thresholds for application and the fuel usage factors which are applicable to each are as follows:

- (a) Categories of Work.
 - (1) Category A: Earthwork. Contract pay items performed under Sections 202, 204, and 206 including any modified standard or nonstandard items where the character of the work to be performed is considered earthwork. The cumulative total of all applicable item plan quantities shall exceed 25,000 cu yd (20,000 cu m). Included in the fuel usage factor is a weighted average 0.10 gal/cu yd (0.50 liters/cu m) factor for trucking.
 - (2) Category B: Subbases and Aggregate Base Courses. Contract pay items constructed under Sections 311, 312 and 351 including any modified standard or nonstandard items where the character of the work to be performed is considered construction of a subbase or aggregate, stabilized or modified base course. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is a 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
 - (3) Category C: Hot-Mix Asphalt (HMA) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 355, 406, 407 and 482 including any modified standard or nonstandard items where the character of the work to be performed is considered HMA bases, pavements and shoulders. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
 - (4) Category D: Portland Cement Concrete (PCC) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 353, 420, 421 and 483 including any modified standard or nonstandard items where the character of the work to be performed is considered PCC base, pavement or shoulder. The cumulative total of all applicable item plan quantities shall exceed 7500 sq yd (6000 sq m). Included in the fuel usage factor is 1.20 gal/cu yd (5.94 liters/cu m) factor for trucking.

(5) Category E: Structures. Structure items having a cumulative bid price that exceeds \$250,000 for pay items constructed under Sections 502, 503, 504, 505, 512, 516 and 540 including any modified standard or nonstandard items where the character of the work to be performed is considered structure work when similar to that performed under these sections and not included in categories A through D.

(b) Fuel Usage Factors.

English Units		
Category	Factor	Units
A - Earthwork	0.34	gal / cu yd
B – Subbase and Aggregate Base courses	0.62	gal / ton
C – HMA Bases, Pavements and Shoulders	1.05	gal / ton
D – PCC Bases, Pavements and Shoulders	2.53	gal / cu yd
E – Structures	8.00	gal / \$1000
Metric Units		
Category	Factor	Units
A - Earthwork	1.68	liters / cu m
B – Subbase and Aggregate Base courses	2.58	liters / metric ton
C – HMA Bases, Pavements and Shoulders	4.37	liters / metric ton
D – PCC Bases, Pavements and Shoulders	12.52	liters / cu m
E – Structures	30.28	liters / \$1000

(c) Quantity Conversion Factors.

Category	Conversion	Factor
В	sq yd to ton sq m to metric ton	0.057 ton / sq yd / in depth 0.00243 metric ton / sq m / mm depth
С	sq yd to ton sq m to metric ton	0.056 ton / sq yd / in depth 0.00239 m ton / sq m / mm depth
D	sq yd to cu yd sq m to cu m	0.028 cu yd / sq yd / in depth 0.001 cu m / sq m / mm depth

Method of Adjustment. Fuel cost adjustments will be computed as follows.

 $CA = (FPI_P - FPI_L) \times FUF \times Q$

Where: CA = Cost Adjustment, \$

 FPI_P = Fuel Price Index, as published by the Department for the month the work is

performed, \$/gal (\$/liter)

FPI_L = Fuel Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/gal (\$/liter)

FUF = Fuel Usage Factor in the pay item(s) being adjusted

Q = Authorized construction Quantity, tons (metric tons) or cu yd (cu m)

The entire FUF indicated in paragraph (b) will be used regardless of use of trucking to perform the work.

Basis of Payment. Fuel cost adjustments may be positive or negative but will only be made when there is a difference between the FPI_L and FPI_P in excess of five percent, as calculated by:

Percent Difference = $\{(FPI_L - FPI_P) \div FPI_L\} \times 100$

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

HOT-MIX ASPHALT – START OF PRODUCTION (BDE)

Effective: January 1, 2022

Add the following paragraph between the third and four paragraphs of Article 1030.10 of the Standard Specifications:

"When a test strip is not required, each HMA mixture with a quantity of 3,000 tons (2,750 metric tons) or more shall still be sampled on the first day of production: I-FIT and Hamburg wheel testing for High ESAL; I-FIT testing for Low ESAL. Within two working days after sampling the mixture, the Contractor shall deliver gyratory cylinders to the District laboratory for Department verification testing. The High ESAL mixture test results shall meet the requirements of Articles 1030.05(d)(3) and 1030.05(d)(4). The Low ESAL mixture test results shall meet the requirements of Article 1030.05(d)(4)."

MATERIAL TRANSFER DEVICE (BDE)

Effective: June 15, 1999 Revised: January 1, 2022

Add the following to Article 406.03 of the Standard Specifications:

"(n) Material Transfer Device1102.02"

Add the following to the end of Article 406.06(f) of the Standard Specifications:

"When required, a material transfer device (MTD) shall be used to transfer the HMA from the haul trucks to the spreading and finishing machine. The particular HMA mixtures for which an MTD is required will be specified in the plans. When not required, an MTD may still be used at the Contractor's option, subject to the requirements and restrictions herein. Use of MTDs shall be according to the following.

MTD Category Usage

Category I Any resurfacing application

Full-Depth HMA where the in-place binder thickness is

≥ 10 in. (250 mm)

Category II Full-Depth HMA where the in-place binder thickness is

< 10 in. (250 mm)

Category I MTD's will only be allowed to travel over structures under the following conditions:

(1) Approval will be given by the Engineer.

- (2) The MTD shall be emptied of HMA material prior to crossing the structure and shall travel at crawl speed across the structure.
- (3) The tires of the MTD shall travel on or in close proximity and parallel to the beam and/or girder lines of the structure."

Add the following to the end of Article 406.13(b) of the Standard Specifications:

"The required use of an MTD will be measured for payment in tons (metric tons) of the HMA mixtures placed with the MTD. The use of an MTD at the Contractor's option will not be measured for payment."

Add the following between the second and third paragraphs of Article 406.14 of the Standard Specifications:

"The required use of an MTD will be paid for at the contract unit price per ton (metric ton) for MATERIAL TRANSFER DEVICE. The HMA mixtures placed with the MTD will be paid for separately according to their respective specifications."

Revise Article 1102.02 of the Standard Specifications to read:

"1102.02 Material Transfer Device (MTD). The MTD shall be according to the following.

- (a) Requirements. The MTD shall have a minimum surge capacity of 15 tons (13.5 metric tons), shall be self-propelled and capable of moving independent of the paver, and shall be equipped with the following.
 - (1) Front-Dump Hopper and Conveyor. The conveyor shall provide a positive restraint along the sides of the conveyor to prevent material spillage. MTDs having paver style hoppers shall have a horizontal bar restraint placed across the foldable wings which prevents the wings from being folded.
 - (2) Paver Hopper Insert. The paver hopper insert shall have a minimum capacity of 14 tons (12.7 metric tons).
 - (3) Mixer/Agitator Mechanism. This re-mixing mechanism shall consist of a segmented, anti-segregation, re-mixing auger.

- (b) Qualification and Designation. The MTD shall be on the Department's qualified product list with one of the following designations.
 - (1) Category I. The MTD has a documented maximum HMA carrying capacity contact pressure greater than 25 psi and has a central surge hopper of sufficient capacity to mix upstream HMA with downstream HMA.
 - (2) Category II. The MTD has a documented maximum HMA carrying capacity contact pressure less than or equal to 25 psi."

PORTLAND CEMENT CONCRETE - HAUL TIME (BDE)

Effective: July 1, 2020

Revise Article 1020.11(a)(7) of the Standard Specifications to read:

"(7) Haul Time. Haul time shall begin when the delivery ticket is stamped. The delivery ticket shall be stamped no later than five minutes after the addition of the mixing water to the cement, or after the addition of the cement to the aggregate when the combined aggregates contain free moisture in excess of two percent by weight (mass). If more than one batch is required for charging a truck using a stationary mixer, the time of haul shall start with mixing of the first batch. Haul time shall end when the truck is emptied for incorporation of the concrete into the work. The maximum haul time shall be as follows.

Concrete Temperature at Point of Discharge,	Maximum Haul Time ^{1/} (minutes)	
°F (°C)	Truck Mixer or Truck Agitator	Nonagitator Truck
50 - 64 (10 - 17.5)	90	45
> 64 (> 17.5) - without retarder	60	30
> 64 (> 17.5) - with retarder	90	45

1/ To encourage start-up testing for mix adjustments at the plant, the first two trucks will be allowed an additional 15 minutes haul time whenever such testing is performed.

For a mixture which is not mixed on the jobsite, a delivery ticket shall be required for each load. The following information shall be recorded on each delivery ticket: (1) ticket number; (2) name of producer and plant location; (3) contract number; (4) name of Contractor; (5) stamped date and time batched; (6) truck number; (7) quantity batched; (8) amount of admixture(s) in the batch; (9) amount of water in the batch; and (10) Department mix design number.

For concrete mixed in jobsite stationary mixers, the above delivery ticket may be waived, but a method of verifying the haul time shall be established to the satisfaction of the Engineer."

SPEED DISPLAY TRAILER (BDE)

Effective: April 2, 2014 Revised: January 1, 2022

Revise the last paragraph of Article 701.11 of the Standard Specifications to read:

"When not being utilized to inform and direct traffic, sign trailers, speed display trailers, arrow boards, and portable changeable message boards shall be treated as nonoperating equipment."

Add the following to Article 701.15 of the Standard Specifications:

"(m) Speed Display Trailer. A speed display trailer is used to enhance safety of the traveling public and workers in work zones by alerting drivers of their speed, thus deterring them from driving above the posted work zone speed limit."

Add the following to Article 701.20 of the Standard Specifications:

"(k) When speed display trailers are shown on the Standard, this work will not be paid for separately but shall be considered as included in the cost of the Standard.

For all other speed display trailers, this work will be paid for at the contract unit price per calendar month or fraction thereof for each trailer as SPEED DISPLAY TRAILER."

Add the following to Article 1106.02 of the Standard Specifications:

"(o) Speed Display Trailer. The speed display trailer shall consist of a LED speed indicator display with self-contained, one-direction radar mounted on an orange see-through trailer. The height of the display and radar shall be such that it will function and be visible when located behind concrete barrier.

The speed measurement shall be by radar and provide a minimum detection distance of 1000 ft (300 m). The radar shall have an accuracy of ±1 mile per hour.

The speed indicator display shall face approaching traffic and shall have a sign legend of "YOUR SPEED" immediately above or below the speed display. The sign letters shall be between 5 and 8 in. (125 and 200 mm) in height. The digital speed display shall show two digits (00 to 99) in mph. The color of the changeable message legend shall be a yellow legend on a black background. The minimum height of the numerals shall be 18 in. (450 mm), and the nominal legibility distance shall be at least 750 ft (250 m).

The speed indicator display shall be equipped with a violation alert that flashes the displayed detected speed when the work zone posted speed limit is exceeded. The speed indicator shall have a maximum speed cutoff. On roadway facilities with a normal posted speed limit greater than or equal to 45 mph, the detected speeds of vehicles traveling more than 25 mph over the work zone speed limit shall not be displayed. On facilities with normal posted speed limit of less than 45 mph, the detected speeds of vehicles traveling more than 15 mph over the work zone speeds limit shall not be displayed. On any roadway facility if detected speeds are less than 25 mph, they shall not be displayed. The display shall include automatic dimming for nighttime operation.

The speed indicator measurement and display functions shall be equipped with the power supply capable of providing 24 hours of uninterrupted service."

STEEL COST ADJUSTMENT (BDE)

Effective: April 2, 2004 Revised: January 1, 2022

<u>Description</u>. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate with their bid whether or not this special provision will be part of the contract. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment.

<u>Types of Steel Products</u>. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

Metal Piling (excluding temporary sheet piling) Structural Steel Reinforcing Steel

Other steel materials such as dowel bars, tie bars, welded reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), and frames and grates will be subject to a steel cost adjustment when the pay items they are used in have a contract value of \$10,000 or greater.

The adjustments shall apply to the above items when they are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply when the item is added as extra work and paid for at a lump sum price or by force account.

<u>Documentation</u>. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

Q = quantity of steel incorporated into the work, in lb (kg)

D = price factor, in dollars per lb (kg)

 $D = MPI_M - MPI_L$

Where: MPI_M = The Materials Cost Index for steel as published by the Engineering News-

Record for the month the steel is shipped from the mill. The indices will be

converted from dollars per 100 lb to dollars per lb (kg).

MPI_L = The Materials Cost Index for steel as published by the Engineering News-

Record for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price,. The indices will be converted from

dollars per 100 lb to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the MPI_M will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

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

Percent Difference = $\{(MPI_L - MPI_M) \div MPI_L\} \times 100$

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the items of work are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Attachment

Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights
	(masses)
Reinforcing Steel	See plans for weights
	(masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Welded Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail	
Steel Plate Beam Guardrail, Type A w/steel posts	20 lb/ft (30 kg/m)
Steel Plate Beam Guardrail, Type B w/steel posts	30 lb/ft (45 kg/m)
Steel Plate Beam Guardrail, Types A and B w/wood posts	8 lb/ft (12 kg/m)
Steel Plate Beam Guardrail, Type 2	305 lb (140 kg) each
Steel Plate Beam Guardrail, Type 6	1260 lb (570 kg) each
Traffic Barrier Terminal, Type 1 Special (Tangent)	730 lb (330 kg) each
Traffic Barrier Terminal, Type 1 Special (Flared)	410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms	
Traffic Signal Post	11 lb/ft (16 kg/m)
Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 – 12 m)	14 lb/ft (21 kg/m)
Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 – 16.5 m)	21 lb/ft (31 kg/m)
Light Pole w/Mast Arm, 30 - 50 ft (9 – 15.2 m)	13 lb/ft (19 kg/m)
Light Pole w/Mast Arm, 55 - 60 ft (16.5 – 18 m)	19 lb/ft (28 kg/m)
Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m)	31 lb/ft (46 kg/m)
Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 – 42.5 m)	65 lb/ft (97 kg/m)
Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 – 48.5 m)	80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence)	<u> </u>
Steel Railing, Type SM	64 lb/ft (95 kg/m)
Steel Railing, Type S-1	39 lb/ft (58 kg/m)
Steel Railing, Type T-1	53 lb/ft (79 kg/m)
Steel Bridge Rail	52 lb/ft (77 kg/m)
Frames and Grates	1
Frame	250 lb (115 kg)
Lids and Grates	150 lb (70 kg)

SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

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

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

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

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: November 2, 2017

Revised: April 1, 2019

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

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

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

SURFACE TESTING OF PAVEMENTS – IRI (BDE)

Effective: January 1, 2021 Revised: January 1, 2022

<u>Description</u>. This work shall consist of testing the ride quality of the finished surface of pavements, according to Illinois Test Procedure 701, "Ride Quality Testing Using the International Roughness Index (IRI)". Work shall be according to Sections 406, 407, or 420 of the Standard Specifications, except as modified herein.

Hot-Mix Asphalt (HMA) Overlays

Add Article 406.03(n) to the Standard Specifications:

"(n) Pavement Surface Grinding Equipment......1101.04"

Revise Article 406.11 of the Standard Specifications to read:

"406.11 Surface Tests. Prior to pavement improvements, the Engineer will measure the smoothness of the existing high-speed mainline pavement. The Contractor shall measure the smoothness of the finished high-speed mainline, low-speed mainline, and miscellaneous pavements within seven days of paving. Testing shall be performed in the presence of the Engineer and according to Illinois Test Procedure 701. The pavement will be identified as high-speed mainline, low-speed mainline, or miscellaneous as follows.

(a) Test Sections

- (1) High-Speed Mainline Pavement. High-speed mainline pavement shall consist of pavements, ramps, and loops with a posted speed limit greater than 45 mph. These sections shall be tested with an inertial profiling system (IPS).
- (2) Low-Speed Mainline Pavement. Low-speed mainline pavement shall consist of pavements, ramps, and loops with a posted speed limit of 45 mph or less. These sections shall be tested with an IPS and will be analyzed using the rolling 16 ft (5 m) straightedge simulation in ProVAL.
- (3) Miscellaneous Pavement. Miscellaneous pavement includes segments that either cannot readily be tested by an IPS or conditions beyond the control of the contractor preclude the achievement of smoothness levels typically achievable with mainline pavement construction. This may include the following examples or as determined by the Engineer.
 - (a) Pavement on horizontal curves with a centerline radius of curvature of less than or equal to 1,000 ft (300 m) and the pavement within the superelevation transition of such curves;
 - (b) Pavement on vertical curves having a length less than or equal to 200 ft (60 m) in combination with an algebraic change in tangent grade greater than or equal to 3 percent as may occur on urban ramps or other constricted-space facilities;
 - (c) The first and last 50 ft (15 m) of a pavement section where the Contractor is not responsible for the adjoining surface;
 - (d) Intersections and the 25 ft (7.6 m) before and after an intersection or end of radius return;
 - (e) Variable width pavements;
 - (f) Side street returns, to the end of radius return;
 - (g) Crossovers;
 - (h) Connector pavement from the mainline pavement expansion joint to the bridge approach slab;
 - (i) Bridge approach slab;
 - (j) Pavement that must be constructed in multiple short segments, typically defined as 600 ft (180 m) or less;
 - (k) Pavement within 25 ft (7.6 m) of manholes, utility structures, or other appurtenances;
 - (I) Turn lanes; and

(m) Pavement within 5 ft (1.5 m) of jobsite sampling locations for HMA volumetric testing that fall within the wheel path.

Miscellaneous pavement shall be tested using a 16 ft (5 m) straightedge.

- (4) International Roughness Index (IRI). An index computed from a longitudinal profile measurement using a quarter-car simulation at a simulation speed of 50 mph (80 km/h).
- (5) Mean Roughness Index (MRI). The average of the IRI values for the right and left wheel tracks.
- (6) Areas of Localized Roughness (ALR). Isolated areas of roughness, which can cause significant increase in the calculated MRI for a given sublot.
- (7) Lot. A lot will be defined as a continuous strip of pavement 1 mile (1,600 m) long and one lane wide. When the length of a continuous strip of pavement is less than 1 mile (1,600 m), that pavement will be included in an adjacent lot. Structures will be omitted when measuring pavement length, but will not be considered as a discontinuity and the numbering of sublots will not restart. The limits of the structure shall include the entire length between the outside ends of both connector pavements.
- (8) Sublot. Lots will be divided into 0.1 mile (160 m) sublots. A partial sublot greater than or equal to 264 ft (80 m) resulting from an interruption in the pavement will be subject to the same evaluation as a whole sublot. Partial sublots less than 264 ft (80 m) shall be included with the previous sublot for evaluation purposes.
- (b) Corrective Work. Corrective work shall be completed according to the following.
 - (1) High-Speed Mainline Pavement. For high-speed mainline pavement, any 25 ft (7.6 m) interval with an ALR in excess of 150 in./mile (2,400 mm/km) will be identified by the Engineer and shall be corrected by the Contractor. Any sublot having a MRI greater than MRI_D, including ALR, shall be corrected to reduce the MRI to the MRI_F, or replaced at the Contractor's option.
 - (2) Low-Speed Mainline Pavement. Bumps in low-speed mainline pavement which exceed the 5/16 in. (8 mm) tolerance using a simulated 16 ft (5 m) straightedge will be identified by the Engineer and shall be corrected by the Contractor.
 - (3) Miscellaneous Pavements. Bumps in miscellaneous pavement which exceed the 5/16 in. (8 mm) tolerance on a 16 ft (5 m) straightedge will be identified by the Engineer and shall be corrected by the Contractor.

Corrective work shall be completed with pavement surface grinding equipment or by removing and replacing the pavement. Corrective work shall be applied to the full lane width. When completed, the corrected area shall have uniform texture and appearance, with the beginning and ending of the corrected area normal to the centerline of the paved surface.

Upon completion of the corrective work, the surface of the sublot(s) shall be retested. The Contractor shall furnish the data and reports to the Engineer within 2 working days after

corrections are made. If the MRI and/or ALR still do not meet the requirements, additional corrective work shall be performed.

Corrective work shall be at no additional cost to the Department.

(c) Smoothness Assessments. Assessments will be paid to or deducted from the Contractor for each sublot of high-speed mainline pavement per the Smoothness Assessment Schedule. Assessments will be based on the MRI of each sublot prior to performing any corrective work unless the Contractor has chosen to remove and replace the sublot. For sublots that are replaced, assessments will be based on the MRI determined after replacement.

The upper MRI thresholds for high-speed mainline pavement are dependent on the MRI of the existing pavement before construction (MRI₀) and shall be determined as follows.

	MRI Thresholds (High-Speed, HMA Overlay)		
Upper MRI Thresholds 1/	MRI₀ ≤ 125.0 in./mile (≤ 1,975 mm/km)	$MRI_0 > 125.0 \text{ in./mile}^{1/}$ (> 1,975 mm/km)	
Incentive (MRI _I)	45.0 in./mile (710 mm/km)	0.2 × MRI ₀ + 20	
Full Pay (MRI _F)	75.0 in./mile (1,190 mm/km)	0.2 × MRI ₀ + 50	
Disincentive (MRI _D)	100.0 in./mile (1,975 mm/km)	0.2 × MRI ₀ + 75	

^{1/} MRI₀, MRI₁, MRI_F, and MRI_D shall be in in./mile for calculation.

Smoothness assessments for high-speed mainline pavement shall be determined as follows.

SMOOTHNESS ASSESSMENT SCHEDULE (High-Speed, HMA Overlay)		
Mainline Pavement MRI Range	Assessment Per Sublot 1/	
MRI ≤ MRI _I	+ (MRI _I – MRI) × \$33.00 ^{2/}	
$MRI_{I} < MRI \le MRI_{F}$	+ \$0.00	
$MRI_F < MRI \le MRI_D$	$- (MRI - MRI_F) \times 20.00	
MRI > MRI _D	- \$500.00	

- 1/ MRI, MRI, MRI_E, and MRI_D shall be in in./mile for calculation.
- 2/ The maximum incentive amount shall not exceed \$500.00.

Smoothness assessments will not be paid or deducted until all other contract requirements for the pavement are satisfied. Pavement that is corrected or replaced for reasons other than smoothness, shall be retested as stated herein."

Hot-Mix Asphalt (HMA) Pavement (Full-Depth)

Revise the first paragraph of Article 407.03 of the Standard Specifications to read:

"407.03 Equipment. Equipment shall be according to Article 406.03."

Revise Article 407.09 of the Standard Specifications to read:

"407.09 Surface Tests. The finished surface of the pavement shall be tested for smoothness according to Article 406.11, except as follows:

The testing of the existing pavement prior to improvements shall not apply and the smoothness assessment for high-speed mainline pavement shall be determined according to the following table.

SMOOTHNESS ASSESSMENT SCHEDULE (High-Speed, Full-Depth HMA)		
Mainline Pavement MRI, in./mile (mm/km)	Assessment Per Sublot 1/	
≤ 45.0 (710)	+ (45 – MRI) × \$80.00 ^{2/}	
> 45.0 (710) to 75.0 (1,190)	+ \$0.00	
> 75.0 (1,190) to 100.0 (1,580)	– (MRI – 75) × \$30.00	
> 100.0 (1,580)	- \$750.00	

- 1/ MRI shall be in in./mile for calculation.
- 2/ The maximum incentive amount shall not exceed \$1,200.00."

Portland Cement Concrete Pavement

Delete Article 420.03(i) of the Standard Specifications.

Revise Article 420.03(j) of the Standard Specifications to read:

"(i) Coring Machine (Note 1)"

Revise Article 420.10 of the Standard Specifications to read:

"420.10 Surface Tests. The finished surface of the pavement shall be tested for smoothness according to Article 406.11, except as follows.

The testing of the existing pavement prior to improvements shall not apply. The Contractor shall measure the smoothness of the finished surface of the pavement after the pavement has attained a flexural strength of 250 psi (3,800 kPa) or a compressive strength of 1,600 psi (20,700 kPa).

Membrane curing damaged during testing shall be repaired as directed by the Engineer at no additional cost to the Department.

(a) Corrective Work. No further texturing for skid resistance will be required for areas corrected by grinding. Protective coat shall be reapplied to ground areas according to Article 420.18 at no additional cost to the Department.

Pavement corrected by removal and replacement, shall be corrected in full panel sizes.

(b) Smoothness Assessments. Smoothness assessment for high-speed mainline pavement shall be determined as follows.

SMOOTHNESS ASSESSMENT SCHEDULE (High-Speed, PCC)		
Mainline Pavement MRI, in./mile (mm/km) 3/	Assessment Per Sublot 1/	
≤ 45.0 (710)	+ (45 – MRI) × \$120.00 ^{2/}	
> 45.0 (710) to 75.0 (1,190)	+ \$0.00	
> 75.0 (1,190) to 100.0 (1,580)	− (MRI − 75) × \$45.00	
> 100.0 (1,580)	- \$1,125.00	

- 1/ MRI shall be in in./mile for calculation.
- 2/ The maximum incentive amount shall not exceed \$1,800.00.
- 3/ If pavement is constructed with traffic in the lane next to it, then an additional 10 in./mile will be added to the upper thresholds."

Removal of Existing Pavement and Appurtenances

Revise the first paragraph of Article 440.04 of the Standard Specifications to read:

"440.04 HMA Surface Removal for Subsequent Resurfacing. The existing HMA surface shall be removed to the depth specified on the plans with a self-propelled milling machine. The removal depth may be varied slightly at the discretion of the Engineer to satisfy the smoothness requirements of the finished pavement. The temperature at which the work is performed, the nature and condition of the equipment, and the manner of performing the work shall be such that the milled surface is not torn, gouged, shoved or otherwise damaged by the milling operation. Sufficient cutting passes shall be made so that all irregularities or high spots are eliminated to the satisfaction of the Engineer. When tested with a 16 ft (5 m) straightedge, the milled surface shall have no surface variations in excess of 3/16 in. (5 mm)."

TRAFFIC SPOTTERS (BDE)

Effective: January 1, 2019

Revise Article 701.13 of the Standard Specifications to read:

"701.13 Flaggers and Spotters. Flaggers shall be certified by an agency approved by the Department. While on the job site, each flagger shall have in his/her possession a current driver's license and a current flagger certification I.D. card. For non-drivers, the Illinois Identification Card issued by the Secretary of State will meet the requirement for a current driver's license. This certification requirement may be waived by the Engineer for emergency situations that arise due to actions beyond the Contractor's control where flagging is needed to maintain safe traffic control on a temporary basis. Spotters are defined as certified flaggers that provide support to workers by monitoring traffic.

Flaggers and spotters shall be stationed to the satisfaction of the Engineer and be equipped with a fluorescent orange, fluorescent yellow/green, or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of ANSI/ISEA 107-2004 or ANSI/ISEA 107-2010 for Conspicuity Class 2 garments. Flaggers shall be equipped with a stop/slow traffic control sign. Spotters shall be equipped with a loud warning device. The warning sound shall be identifiable by workers so they can take evasive action when necessary. Other types of garments may be substituted for the vest as long as the garments have a manufacturer's tag identifying them as meeting the ANSI Class 2 requirement. The longitudinal placement of the flagger may be increased up to 100 ft (30 m) from that shown on the plans to improve the visibility of the flagger. Flaggers shall not encroach on the open lane of traffic unless traffic has been stopped. Spotters shall not encroach on the open lane of traffic, nor interact with or control the flow of traffic.

For nighttime flagging, flaggers shall be illuminated by an overhead light source providing a minimum vertical illuminance of 10 fc (108 lux) measured 1 ft (300 mm) out from the flagger's chest. The bottom of any luminaire shall be a minimum of 10 ft (3 m) above the pavement. Luminaire(s) shall be shielded to minimize glare to approaching traffic and trespass light to adjoining properties. Nighttime flaggers shall be equipped with fluorescent orange or fluorescent orange and fluorescent yellow/green apparel meeting the requirements of ANSI/ISEA 107-2004 or ANSI/ISEA 107-2010 for Conspicuity Class 3 garments.

Flaggers and spotters shall be provided per the traffic control plan and as follows.

- (a) Two-Lane Highways. Two flaggers will be required for each separate operation where two-way traffic is maintained over one lane of pavement. Work operations controlled by flaggers shall be no more than 1 mile (1600 m) in length. Flaggers shall be in sight of each other or in direct communication at all times. Direct communication shall be obtained by using portable two-way radios or walkie-talkies.
 - The Engineer will determine when a side road or entrance shall be closed to traffic. A flagger will be required at each side road or entrance remaining open to traffic within the operation where two-way traffic is maintained on one lane of pavement. The flagger shall be positioned as shown on the plans or as directed by the Engineer.
- (b) Multi-Lane Highways. At all times where traffic is restricted to less than the normal number of lanes on a multilane pavement with a posted speed limit greater than 40 mph and the workers are present, but not separated from the traffic by physical barriers, a flagger or spotter shall be furnished as shown on the plans. Flaggers shall warn and direct traffic. Spotters shall monitor traffic conditions and warn workers of errant approaching vehicles or other hazardous conditions as they occur. One flagger will be required for each separate activity of an operation that requires frequent encroachment in a lane open to traffic. One spotter will be required for each separate activity with workers near the edge of the open lane or with their backs facing traffic.

Flaggers will not be required when no work is being performed, unless there is a lane closure on two-lane, two-way pavement."

TRAINING SPECIAL PROVISIONS (BDE)

Effective: October 15, 1975 Revised: September 2, 2021

This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be <u>4</u>. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also ensure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee it employs on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he or she has successfully completed a training course leading to journeyman status or in which he or she has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the

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

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

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

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

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

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

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting its performance under this Training Special Provision.

For contracts with an awarded contract value of \$500,000 or more, the Contractor is required to comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules to the extent permitted by Section 20-20(g). For federally funded projects, the number of trainees to be trained under this contract, as stated in the Training Special Provisions, will be the established goal for the Illinois Works Apprenticeship Initiative 30 ILCS 559/20-20(g). The Contractor shall make a good faith effort to meet this goal. For federally funded projects, the Illinois Works Apprenticeship Initiative will be implemented using the FHWA approved OJT procedures. The Contractor must comply with the recordkeeping and reporting obligations of the Illinois Works Apprenticeship Initiative for the life of the project, including the certification as to whether the trainee/apprentice labor hour goals were met.

Method of Measurement. The unit of measurement is in hours.

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

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

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

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

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

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

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

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

Method of Measurement: The unit of measurement is in hours.

Basis of Payment: This work will be paid for at the contract unit price of \$15.00 per hour for each utilized certified TPG Program trainee (TRAINES TRAINING PROGRAM GRADUATE). The estimated total number of hours, unit price, and total price must be included in the schedule of prices for the Contract submitted by Contractor prior to beginning work. The initial number of TPG trainees for which the incentive is available for this contract is **4**.

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

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

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

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

VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)

Effective: November 1, 2021

Add the following paragraph after the first paragraph of Article 701.08 of the Standard Specifications:

"The Contractor shall equip all vehicles and equipment with high-intensity oscillating, rotating, or flashing, amber or amber-and-white, warning lights which are visible from all directions. The lights shall be in operation while the vehicle or equipment is engaged in construction operations."

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012 Revised: November 1, 2021

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 Sunday through Saturday 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.

WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

"(q) Temporary Sign Supports1106.02"

Revise the third paragraph of Article 701.14 of the Standard Specifications to read:

"For temporary sign supports, the Contractor shall provide a FHWA eligibility letter for each device used on the contract. The letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device. The signs shall be supported within 20 degrees of vertical. Weights used to stabilize signs shall be attached to the sign support per the manufacturer's specifications."

Revise the first paragraph of Article 701.15 of the Standard Specifications to read:

"701.15 Traffic Control Devices. For devices that must meet crashworthiness standards, the Contractor shall provide a manufacturer's self-certification or a FHWA eligibility letter for each Category 1 device and a FHWA eligibility letter for each Category 2 and Category 3 device used on the contract. The self-certification or letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device."

Revise the first six paragraphs of Article 1106.02 of the Standard Specifications to read:

"1106.02 Devices. Work zone traffic control devices and combinations of devices shall meet crashworthiness standards for their respective categories. The categories are as follows.

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, plastic drums, and delineators, with no attachments (e.g. lights). Category 1 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 1 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include vertical panels with lights, barricades, temporary sign supports, and Category 1 devices with attachments (e.g. drums with lights). Category 2 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 2 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as arrow boards, changeable message signs, temporary traffic signals, and area lighting supports. It is preferable for Category 4 devices manufactured after December 31, 2019 to be MASH-16 compliant; however, there are currently no crash tested devices in this category, so it remains exempt from the NCHRP 350 or MASH compliance requirement.

For each type of device, when no more than one MASH-16 compliant is available, an NCHRP 350 or MASH-2009 compliant device may be used, even if manufactured after December 31, 2019."

Revise Articles 1106.02(g), 1106.02(k), and 1106.02(l) to read:

- "(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be approved for use at Test Level 3. Test Level 2 may be used for normal posted speeds less than or equal to 45 mph.
- (k) Temporary Water Filled Barrier. The water filled barrier shall be a lightweight plastic shell designed to accept water ballast and be on the Department's qualified product list.
 - Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings.
- (I) Movable Traffic Barrier. The movable traffic barrier shall be on the Department's qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings. The barrier shall be capable of being moved on and off the roadway on a daily basis."

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within **100** working days.

PROJECT LABOR AGREEMENT

Effective: May 18, 2007 Revised: August 1, 2019

Description. The Illinois Project Labor Agreements Act, 30 ILCS 571, states that the State of Illinois has a compelling interest in awarding public works contracts so as to ensure the highest standards of quality and efficiency at the lowest responsible cost. A project labor agreement (PLA) is a form of pre-hire collective bargaining agreement covering all terms and conditions of employment on a specific project that is intended to support this compelling interest. It has been determined by the Department that a PLA is appropriate for the project that is the subject of this contract. The PLA document, provided below, only applies to the construction site for this contract. It is the policy of the Department on this contract, and all construction projects, to allow all contractors and subcontractors to compete for contracts and subcontracts without regard to whether they are otherwise parties to collective bargaining agreements.

Execution of Letter of Assent. A copy of the PLA applicable to this project is included as part of this special provision. As a condition of the award of the contract, the successful bidder and each of its subcontractors shall execute a "Contractor Letter of Assent", in the form attached to the PLA as Exhibit A. The successful bidder shall submit a Subcontractor's Contractor Letter of Assent to the Department prior to the subcontractor's performance of work on the project. Upon request, copies of the applicable collective bargaining agreements will be provided by the appropriate signatory labor organization at the pre-job conference.

Quarterly Reporting. Section 37 of the Illinois Project Labor Agreements Act requires the Department to submit quarterly reports regarding the number of minorities and females employed under PLAs. To assist in this reporting effort, the Contractor shall provide a quarterly workforce participation report for all minority and female employees working under the PLA of this contract. The data shall be reported on Construction Form BC 820, Project Labor Agreement (PLA) Workforce Participation Quarterly Reporting Form available on the Department's website http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BC/BC%20820.docx.

The report shall be submitted no later than the 15th of the month following the end of each quarter (i.e., April 15 for the January – March reporting period). The form shall be emailed to DOT.PLA.Reporting@illinois.gov or faxed to (217) 524-4922.

Any costs associated with complying with this provision 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.

Illinois Department of Transportation PROJECT LABOR AGREEMENT

This Project Labor Agreement	("PLA" or "Agreement") is e	ntered into this da	ay of
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, 2022, by and between the Illinois Department of Transportation ("IDOT" or "Department") in its proprietary capacity, and each relevant Illinois AFL-CIO Building Trades signatory hereto as determined by the Illinois AFL-CIO Statewide Project Labor Agreement Committee on behalf of each of its affiliated members (individually and collectively, the "Unions"). This PLA shall apply to Construction Work (as defined herein) to be performed by IDOT's Prime Contractor and each of its subcontractors of whatever tier ("Subcontractor" or "Subcontractors") on Contract No. (hereinafter, the "Project").

ARTICLE I - INTENT AND PURPOSES

- 1.1 This PLA is entered into in accordance with the Project Labor Agreement Act ("Act", 30 ILCS 571). It is mutually understood and agreed that the terms and conditions of this PLA are intended to promote the public interest in obtaining timely and economical completion of the Project by encouraging productive and efficient construction operations; by establishing a spirit of harmony and cooperation among the parties; and by providing for peaceful and prompt settlement of any and all labor grievances or jurisdictional disputes of any kind without strikes, lockouts, slowdowns, delays, or other disruptions to the prosecution of the work. The parties acknowledge the obligations of the Contractors and Subcontractors to comply with the provisions of the Act. The parties will work with the Contractors and Subcontractors within the parameters of other statutory and regulatory requirements to implement the Act's goals and objectives.
- 1.2 As a condition of the award of the contract for performance of work on the Project, IDOT's Prime Contractor and each of its Subcontractors shall execute a "Contractor Letter of Assent", in the form attached hereto as Exhibit A, prior to commencing Construction Work on the Project. The Contractor shall submit a Subcontractor's Contractor Letter of Assent to the Department prior to the Subcontractor's performance of Construction Work on the Project. Upon request copies of the applicable collective bargaining agreements will be provided by the appropriate signatory labor organization consistent with this Agreement and at the pre-job conference referenced in Article III, Section 3.1.

- 1.3 Each Union affiliate and separate local representing workers engaged in Construction Work on the Project in accordance with this PLA are bound to this agreement by the Illinois AFL-CIO Statewide Project Labor Agreement Committee which is the central committee established with full authority to negotiate and sign PLAs with the State on behalf of all respective crafts. Upon their signing the Contractor Letter of Assent, the Prime Contractor, each Subcontractor, and the individual Unions shall thereafter be deemed a party to this PLA. No party signatory to this PLA shall, contract or subcontract, nor permit any other person, firm, company, or entity to contract or subcontract for the performance of Construction Work for the Project to any person, firm, company, or entity that does not agree in writing to become bound for the term of this Project by the terms of this PLA prior to commencing such work and to the applicable area-wide collective bargaining agreement(s) with the Union(s) signatory hereto.
- 1.4 It is understood that the Prime Contractor(s) and each Subcontractor will be considered and accepted by the Unions as separate employers for the purposes of collective bargaining, and it is further agreed that the employees working under this PLA shall constitute a bargaining unit separate and distinct from all others. The parties hereto also agree that this PLA shall be applicable solely with respect to this Project, and shall have no bearing on the interpretation of any other collective bargaining agreement or as to the recognition of any bargaining unit other than for the specific purposes of this Project.
- 1.5 In the event of a variance or conflict, whether explicit or implicit, between the terms and conditions of this PLA and the provisions of any other applicable national, area, or local collective bargaining agreement, the terms and conditions of this PLA shall supersede and control. For any work performed under the NTL Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, the National Agreement of the International Union of Elevator Constructors, and for any instrument calibration work and loop checking performed under the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, the preceding sentence shall apply only with respect to Articles I, II, V, VI, and VII.

- 1.6 Subject to the provisions of paragraph 1.5 of this Article, it is the parties' intent to respect the provisions of any other collective bargaining agreements that may now or hereafter pertain, whether between the Prime Contractor and one or more of the Unions or between a Subcontractor and one or more of the Unions. Accordingly, except and to the extent of any contrary provision set forth in this PLA, the Prime Contractor and each of its Subcontractors agrees to be bound and abide by the terms of the following in order of precedence: (a) the applicable collective bargaining agreement between the Prime Contractor and one or more of the Unions made signatory hereto; (b) the applicable collective bargaining agreement between a Subcontractor and one or more of the Unions made signatory hereto; or (c) the current applicable area collective bargaining agreement for the relevant Union that is the agreement certified by the Illinois Department of Labor for purposes of establishing the Prevailing Wage applicable to the Project. The Union will provide copies of the applicable collective bargaining agreements pursuant to part (c) of the preceding sentence to the Prime Contractor. Assignments by the Contractors or Subcontractors amongst the trades shall be consistent with area practices; in the event of unresolved disagreements as to the propriety of such assignments, the provisions of Article VI shall apply.
- 1.7 Subject to the limitations of paragraphs 1.4 to 1.6 of this Article, the terms of each applicable collective bargaining agreement as determined in accordance with paragraph 1.6 are incorporated herein by reference, and the terms of this PLA shall be deemed incorporated into such other applicable collective bargaining agreements only for purposes of their application to the Project.
- 1.8 To the extent necessary to comply with the requirements of any fringe benefit fund to which the Prime Contractor or Subcontractor is required to contribute under the terms of an applicable collective bargaining agreement pursuant to the preceding paragraph, the Prime Contractor or Subcontractor shall execute all "Participation Agreements" as may be reasonably required by the Union to accomplish such purpose; provided, however, that such Participation Agreements shall, when applicable to the Prime Contractor or Subcontractor solely as a result of this PLA, be amended as reasonably necessary to reflect such fact. Upon written notice in the form of a lien of a Contractor's or Subcontractor's delinquency from any applicable fringe benefit fund, IDOT will withhold from the Contractor's periodic pay request an amount sufficient to extinguish any delinquency obligation of the Contractor or Subcontractor arising out of the Project.
- 1.9 In the event that the applicable collective bargaining agreement between a Prime Contractor and the Union or between the Subcontractor and the Union expires prior to the completion of this Project, the expired applicable contract's terms will be maintained until a new applicable collective bargaining agreement is ratified. The wages and fringe benefits included in any new applicable collective bargaining agreement will apply on and after the effective date of the newly negotiated collective bargaining agreement, except to the extent wage and fringe benefit retroactivity is specifically agreed upon by the relevant bargaining parties.

ARTICLE II – APPLICABILITY, RECOGNITION, AND COMMITMENTS

- 2.1 The term Construction Work as used herein shall include all "construction, demolition, rehabilitation, renovation, or repair" work performed by a "laborer or mechanic" at the "site of the work" for the purpose of "building" the specific structures and improvements that constitute the Project. Terms appearing within quotation marks in the preceding sentence shall have the meaning ascribed to them pursuant to 29 CFR Part 5 and Illinois labor laws.
- 2.2 By executing the Letters of Assent, Prime Contractor and each of its Subcontractors recognizes the Unions signatory to this PLA as the sole and exclusive bargaining representatives for their craft employees employed on the jobsite for this Project. Unions who are signatory to this PLA will have recognition on the Project for their craft.
- 2.3 The Prime Contractor and each of its Subcontractors retains and shall be permitted to exercise full and exclusive authority and responsibility for the management of its operations, except as expressly limited by the terms of this PLA or by the terms and conditions of the applicable collective bargaining agreement.
- 2.4 Except to the extent contrary to an express provision of the relevant collective bargaining agreement, equipment or materials used in the Project may be preassembled or pre- fabricated, and there shall be no refusal by the Union to handle, transport, install, or connect such equipment or materials. Equipment or materials delivered to the job-site will be unloaded and handled promptly without regard to potential jurisdictional disputes; any such disputes shall be handled in accordance with the provisions of this PLA.
- 2.5 The parties are mutually committed to promoting a safe working environment for all personnel at the job-site. It shall be the responsibility of each employer to which this PLA applies to provide and maintain safe working conditions for its employees, and to comply with all applicable federal, state, and local health and safety laws and regulations.
- 2.6 The use or furnishing of alcohol or drugs and the conduct of any other illegal activity at the job-site is strictly prohibited. The parties shall take every practical measure consistent with the terms of applicable collective bargaining agreements to ensure that the job-site is free of alcohol and drugs.
- 2.7 All parties to this PLA agree that they will not discriminate against any employee based on race, creed, religion, color, national origin, union activity, age, gender or sexual orientation and shall comply with all applicable federal, state, and local laws.

In accordance with the Act and to promote diversity in employment, IDOT will establish, in cooperation with the other parties, the apprenticeship hours which are to be performed by minorities and females on the Project. IDOT shall consider the total hours to be performed by these underrepresented groups, as a percentage of the workforce, and create aspirational goals for each Project, based on the level of underutilization for the service area of the Project (together "Project Employment Objectives"). IDOT shall provide a quarterly report regarding the racial and gender composition of the workforce on the Project.

Persons currently lacking qualifications to enter apprenticeship programs will have the opportunity to obtain skills through basic training programs as have been established by the Department. The parties will endeavor to support such training programs to allow participants to obtain the requisite qualifications for the Project Employment Objectives.

The parties agree that all Contractors and Subcontractors working on the Project shall be encouraged to utilize the maximum number of apprentices as permitted under the terms of the applicable collective bargaining agreements to realize the Project Employment Objectives.

The Unions shall assist the Contractor and each Subcontractor in efforts to satisfy Project Employment Objectives. A Contractor or Subcontractor may request from a Union specific categories of workers necessary to satisfy Project Employment Objectives. The application of this section shall be consistent with all local Union collective bargaining agreements, and the hiring hall rules and regulations established for the hiring of personnel, as well as the apprenticeship standards set forth by each individual Union.

- 2.9 The parties hereto agree that engineering consultants and materials testing employees, to the extent subject to the terms of this PLA, shall be fully expected to objectively and responsibly perform their duties and obligations owed to the Department without regard to the potential union affiliation of such employees or of other employees on the Project.
- 2.10 This Agreement shall not apply to IDOT employees or employees of any other governmental entity.

<u>ARTICLE III - ADMINISTRATION OF AGREEMENT</u>

- 3.1 In order to assure that all parties have a clear understanding of the PLA, and to promote harmony, at the request of the Unions a post-award pre-job conference will be held among the Prime Contractor, all Subcontractors and Union representatives prior to the start of any Construction Work on the Project. No later than the conclusion of such pre-job conference, the parties shall, among other matters, provide to one another contact information for their respective representatives (including name, address, phone number, facsimile number, e-mail). Nothing herein shall be construed to limit the right of the Department to discuss or explain the purpose and intent of this PLA with prospective bidders or other interested parties prior to or following its award of the job.
- 3.2 Representatives of the Prime Contractor and the Unions shall meet as often as reasonably necessary following award until completion of the Project to assure the effective implementation of this PLA.
- 3.3 Any notice contemplated under Article VI and VII of this Agreement to a signatory labor organization shall be made in writing to the Local Union with copies to the local union's International Representative.

ARTICLE IV - HOURS OF WORK AND GENERAL CONDITIONS

- 4.1 The standard work day and work week for Construction Work on the Project shall be consistent with the respective collective bargaining agreements. In the event Project site or other job conditions dictate a change in the established starting time and/or a staggered lunch period for portions of the Project or for specific crafts, the Prime Contractor, relevant Subcontractors and business managers of the specific crafts involved shall confer and mutually agree to such changes as appropriate. If proposed work schedule changes cannot be mutually agreed upon between the parties, the hours fixed at the time of the pre-job meeting shall prevail.
- 4.2 Shift work may be established and directed by the Prime Contractor or relevant Subcontractor as reasonably necessary or appropriate to fulfill the terms of its contract with the Department. If used, shift hours, rates and conditions shall be as provided in the applicable collective bargaining agreement.
- 4.3 The parties agree that chronic and/or unexcused absenteeism is undesirable and must be controlled in accordance with procedures established by the applicable collective bargaining agreement. Any employee disciplined for absenteeism in accordance with such procedures shall be suspended from all work on the Project for not less than the maximum period permitted under the applicable collective bargaining agreement.

- 4.4 Except as may be otherwise expressly provided by the applicable collective bargaining agreement, employment begins and ends at the Project site; employees shall be at their place of work at the starting time; and employees shall remain at their place of work until quitting time.
- 4.5 Except as may be otherwise expressly provided by the applicable collective bargaining agreement, there shall be no limit on production by workmen, no restrictions on the full use of tools or equipment, and no restrictions on efficient use of manpower ortechniques of construction other than as may be required by safety regulations.
- 4.6 The parties recognize that specialized or unusual equipment may be installed on the Project. In such cases, the Union recognizes the right of the Prime Contractor or Subcontractor to involve the equipment supplier or vendor's personnel in supervising the setting up of the equipment, making modifications and final alignment, and performing similar activities that may be reasonably necessary prior to and during the start-up procedure in order to protect factory warranties. The Prime Contractor or Subcontractor shall notify the Union representatives in advance of any work at the jobsite by such vendor personnel in order to promote a harmonious relationship between the equipment vendor's personnel and other Project employees.
- 4.7 For the purpose of promoting full and effective implementation of this PLA, authorized Union representatives shall have access to the Project job-site during scheduled work hours. Such access shall be conditioned upon adherence to all reasonable visitor and security rules of general applicability that may be established for the Project site at the pre-job conference or from time to time thereafter.

ARTICLE V – GRIEVANCE PROCEDURES FOR DISPUTES ARISING UNDER A PARTICULAR COLLECTIVE BARGAINING AGREEMENT

- 5.1 In the event a dispute arises under a particular collective bargaining agreement specifically not including jurisdictional disputes referenced in Article VI below, said dispute shall be resolved by the Grievance/Arbitration procedure of the applicable collective bargaining agreement. The resulting determination from this process shall be final and binding on all parties bound to its process.
- 5.2 Employers covered under this Agreement shall have the right to discharge or discipline any employee who violates the provisions of this Agreement. Such discharge or discipline by a contractor or subcontractor shall be subject to Grievance/Arbitration procedure of the applicable collective bargaining agreement only as to the fact of such violation of this agreement. If such fact is established, the penalty imposed shall not be disturbed. Work at the Project site shall continue without disruption or hindrance of any kind as a result of a Grievance/Arbitration procedure under this Article.

5.3 In the event there is a deadlock in the foregoing procedure, the parties agree that the matter shall be submitted to arbitration for the selection and decision of an Arbitrator governed under paragraph 6.8.

ARTICLE VI – DISPUTES: GENERAL PRINCIPLES

- 6.1 This Agreement is entered into to prevent strikes, lost time, lockouts and to facilitate the peaceful adjustment of jurisdictional disputes in the building and construction industry and to prevent waste and unnecessary avoidable delays and expense, and for the further purpose of at all times securing for the employer sufficient skilled workers.
- 6.2 A panel of Permanent Arbitrators are attached as addendum (A) to this agreement. By mutual agreement between IDOT and the Unions, the parties can open this section of the agreement as needed to make changes to the list of permanent arbitrators.
 - The arbitrator is not authorized to award back pay or any other damages for a miss assignment of work. Nor may any party bring an independent action for back pay or any other damages, based upon a decision of an arbitrator.
- 6.3 The PLA Jurisdictional Dispute Resolution Process ("Process") sets forth the procedures below to resolve jurisdictional disputes between and among Contractors, Subcontractors, and Unions engaged in the building and construction industry. Further, the Process will be followed for any grievance or dispute arising out of the interpretation or application of this PLA by the parties except for the prohibition on attorneys contained in 6.11. All decisions made through the Process are final and binding upon all parties.

DISPUTE PROCESS

- 6.4 Administrative functions under the Process shall be performed through the offices of the President and/or Secretary-Treasurer of the Illinois State Federation of Labor, or their designated representative, called the Administrator. In no event shall any officer, employee, agent, attorney, or other representative of the Illinois Federation of Labor, AFL- CIO be subject to any subpoena to appear or testify at any jurisdictional dispute hearing.
- 6.5 There shall be no abandonment of work during any case participating in this Process or in violation of the arbitration decision. All parties to this Process release the Illinois State Federation of Labor ("Federation") from any liability arising from its action or inaction and covenant not to sue the Federation, nor its officers, employees, agents or attorneys.

6.6 In the event of a dispute relating to trade or work jurisdiction, all parties, including the employers, Contractors or Subcontractors, agree that a final and binding resolution of the

dispute shall be resolved as follows:

- (a) Representatives of the affected trades and the Contractor or Subcontractor shall meet on the job site within two (2) business days after receiving written notice in an effort to resolve the dispute. (In the event there is a dispute between local unions affiliated with the same International Union, the decision of the General President, or his/her designee, as the internal jurisdictional authority of that International Union, shall constitute a final and binding decision and determination as to the jurisdiction of work.)
- (b) If no settlement is achieved subsequent to the preceding Paragraph, the matter shall be referred to the local area Building & Construction Trades Council, which shall meet with the affected trades within two (2) business days subsequent to receiving written notice. In the event the parties do not wish to avail themselves of the local Building & Construction Trades Council, the parties may elect to invoke the services of their respective International Representatives with no extension of the time limitations. An agreement reached at this Step shall be final and binding upon all parties.
- (c) If no settlement agreement is reached during the proceedings contemplated by Paragraphs "a" or "b" above, the matter shall be immediately referred to the Illinois Jurisdictional Dispute Process for final and binding resolution of said dispute. Said referral submission shall be in writing and served upon the Illinois State Federation of Labor, or the Administrator, pursuant to paragraph 6.4 of this agreement. The Administrator shall, within three (3) days, provide for the selection of an available Arbitrator to hear said dispute within this time period. Upon good cause shown and determined by the Administrator, an additional three (3) day extension for said hearing shall be granted at the sole discretion of the Administrator. Only upon mutual agreement of all parties may the Administrator extend the hearing for a period in excess of the time frames contemplated under this Paragraph. Business days are defined as Monday through Friday, excluding contract holidays.
- 6.7 The primary concern of the Process shall be the adjustment of jurisdictional disputes arising out of the Project. A sufficient number of Arbitrators shall be selected from list of approved Arbitrators as referenced Sec. 6.2 and shall be assigned per Sec. 6.8. Decisions shall be only for the Project and shall become effective immediately upon issuance and complied with by all parties. The authority of the Arbitrator shall be restricted and limited specifically to the terms and provisions of Article VI and generally to this Agreement as a whole.

6.8 Arbitrator chosen shall be randomly selected based on the list of Arbitrators in Sec. 6.2 and geographical location of the jurisdictional dispute and upon his/her availability, and ability to conduct a Hearing within two (2) business days of said notice. The Arbitrator may issue a "bench" decision immediately following the Hearing or he/she may elect to only issue a written decision, said decision must be issued within two (2) business days subsequent to the completion of the Hearing. Copies of all notices, pleadings, supporting memoranda, decisions, etc. shall be provided to all disputing parties and the Illinois State Federation of Labor.

Any written decision shall be in accordance with this Process and shall be final and binding upon all parties to the dispute and may be a "short form" decision. Fees and costs of the arbitrator shall be divided evenly between the contesting parties except that any party wishing a full opinion and decision beyond the short form decision shall bear the reasonable fees and costs of such full opinion. The decision of the Arbitrator shall be final and binding upon the parties hereto, their members, and affiliates.

In cases of jurisdictional disputes or other disputes between a signatory labor organization and another labor organization, both of which is an affiliate or member of the same International Union, the matter or dispute shall be settled in the manner set forth by their International Constitution and/or as determined by the International Union's General President whose decision shall be final and binding upon all parties. In no event shall there be an abandonment of work.

- 6.9 In rendering a decision, the Arbitrator shall determine:
 - (a) First, whether a previous agreement of record or applicable agreement, including a disclaimer agreement, between National or International Unions to the dispute or agreements between local unions involved in the dispute, governs;
 - (b) Only if the Arbitrator finds that the dispute is not covered by an appropriate or applicable agreement of record or agreement between the crafts to the dispute, he shall then consider the established trade practice in the industry and prevailing practice in the locality. Where there is a previous decision of record governing the case, the Arbitrator shall give equal weight to such decision of record, unless the prevailing practice in the locality in the past ten years favors one craft. In that case, the Arbitrator shall base his decision on the prevailing practice in the locality. Except, that if the Arbitrator finds that a craft has improperly obtained the prevailing practice in the locality through raiding, the undercutting of wages or by the use of vertical agreements, the Arbitrator shall rely on the decision of record and established trade practice in the industry rather than the prevailing practice in the locality; and,

- (c) Only if none of the above criteria is found to exist, the Arbitrator shall then consider that because efficiency, cost or continuity and good management are essential to the well being of the industry, the interests of the consumer or the past practices of the employer shall not be ignored.
- (d) The arbitrator is not authorized to award back pay or any other damages for a mis-assignment of work. Nor may any party bring an independent action for back pay or any other damages, based upon a decision of an arbitrator.
- 6.10 The Arbitrator shall set forth the basis for his/her decision and shall explain his/her findings regarding the applicability of the above criteria. If lower ranked criteria are relied upon, the Arbitrator shall explain why the higher-ranked criteria were not deemed applicable. The Arbitrator's decision shall only apply to the Project. Agreements of Record, for other PLA projects, are applicable only to those parties signatory to such agreements. Decisions of Record are those that were either attested to by the former Impartial Jurisdictional Disputes Board or adopted by the National Arbitration Panel.
- 6.11 All interested parties, as determined by the Arbitrator, shall be entitled to make presentations to the Arbitrator. Any interested labor organization affiliated to the PLA Committee and party present at the Hearing, whether making a presentation or not, by such presence shall be deemed to accept the jurisdiction of the Arbitrator and to agree to be bound by its decision. In addition to the representative of the local labor organization, a representative of the labor organization's International Union may appear on behalf of the parties. Each party is responsible for arranging for its witnesses. In the event an Arbitrator's subpoena is required, the party requiring said subpoena shall prepare the subpoena for the Arbitrator to execute. Service of the subpoena upon any witness shall be the responsibility of the issuing party.

Attorneys shall not be permitted to attend or participate in any portion of a Hearing.

The parties are encouraged to determine, prior to Hearing, documentary evidence which may be presented to the Arbitrator on a joint basis.

- 6.12 The Order of Presentation in all Hearings before an Arbitrator shall be
 - I. Identification and Stipulation of the Parties
 - II. Unions(s) claiming the disputed work presents its case
 - III. Union(s) assigned the disputed work presents its case
 - IV. Employer assigning the disputed work presents its case
 - V. Evidence from other interested parties (i.e., general contractor, project manager, owner)
 - VI. Rebuttal by union(s) claiming the disputed work
 - VII. Additional submissions permitted and requested by

Arbitrator VIII. Closing arguments by the parties

- 6.13 All parties bound to the provisions of this Process hereby release the Illinois State Federation of Labor and IDOT, their respective officers, agents, employees or designated representatives, specifically including any Arbitrator participating in said Process, from any and all liability or claim, of whatsoever nature, and specifically incorporating the protections provided in the Illinois Arbitration Act, as amended from time to time.
- 6.14 The Process, as an arbitration panel, nor its Administrator, shall have any authority to undertake any action to enforce its decision(s). Rather, it shall be the responsibility of the prevailing party to seek appropriate enforcement of a decision, including findings, orders or awards of the Arbitrator or Administrator determining non-compliance with a prior award or decision.
- 6.15 If at any time there is a question as to the jurisdiction of the Illinois Jurisdictional Dispute Resolution Process, the primary responsibility for any determination of the arbitrability of a dispute and the jurisdiction of the Arbitrator shall be borne by the party requesting the Arbitrator to hear the underlying jurisdictional dispute. The affected party or parties may proceed before the Arbitrator even in the absence or one or more stipulated parties with the issue of jurisdiction as an additional item to be decided by the Arbitrator. The Administrator may participate in proceedings seeking a declaration or determination that the underlying dispute is subject to the jurisdiction and process of the Illinois Jurisdictional Dispute Resolution Process. In any such proceedings, the non-prevailing party and/or the party challenging the jurisdiction of the Illinois Jurisdictional Dispute Resolution Process shall bear all the costs, expenses and attorneys' fees incurred by the Illinois Jurisdictional Dispute Resolution Process and/or its Administrator in establishing its jurisdiction.

ARTICLE VII - WORK STOPPAGES AND LOCKOUTS

7.1 During the term of this PLA, no Union or any of its members, officers, stewards, employees, agents or representatives shall instigate, support, sanction, maintain, or participate in any strike, picketing, walkout, work stoppage, slow down or other activity that interferes with the routine and timely prosecution of work at the Project site or at any other contractor's or supplier's facility that is necessary to performance of work at the Project site. Hand billing at the Project site during the designated lunch period and before commencement or following conclusion of the established standard workday shall not, in itself, be deemed an activity that interferes with the routine and timely prosecution of work on the Project.

- 7.2 Should any activity prohibited by paragraph 7.1 of this Article occur, the Union shall undertake all steps reasonably necessary to promptly end such prohibited activities.
 - 7.2.A No Union complying with its obligations under this Article shall be liable for acts of employees for which it has no responsibility or for the unauthorized acts of employees it represents. Any employee who participates or encourages any activity prohibited by paragraph 7.1 shall be immediately suspended from all work on the Project for a period equal to the greater of (a) 60 days; or (b) the maximum disciplinary period allowed under the applicable collective bargaining agreement for engaging in comparable unauthorized or prohibited activity.
 - 7.2.B Neither the PLA Committee nor its affiliates shall be liable for acts of employees for which it has no responsibility. The principal officer or officers of the PLA Committee will immediately instruct, order and use the best efforts of his office to cause the affiliated union or unions to cease any violations of this Article. The PLA Committee in its compliance with this obligation shall not liable for acts of its affiliates. The principal officer or officers of any involved affiliate will immediately instruct, order or use the best effort of his office to cause the employees the union represents to cease any violations of this Article. A union complying with this obligation shall not be liable for unauthorized acts of employees it represents. The failure of the Contractor to exercise its rights in any instance shall not be deemed a waiver of its rights in any other instance.

During the term of this PLA, the Prime Contractor and its Subcontractors shall not engage in any lockout at the Project site of employees covered by this Agreement.

- 7.3 Upon notification of violations of this Article, the principal officer or officers of the local area Building and Construction Trades Council, and the Illinois AFL-CIO Statewide Project Labor Agreement Committee as appropriate, will immediately instruct, order and use their best efforts to cause the affiliated union or unions to cease any violations of this Article. A Trades Council and the Committee otherwise in compliance with the obligations under this paragraph shall not be liable for unauthorized acts of its affiliates.
- 7.4 In the event that activities in violation of this Article are not immediately halted through the efforts of the parties, any aggrieved party may invoke the special arbitration provisions set forth in paragraph 7.5 of this Article.

- 7.5 Upon written notice to the other involved parties by the most expeditious means available, any aggrieved party may institute the following special arbitration procedure when a breech of this Article is alleged:
 - 7.5.A The party invoking this procedure shall notify the individual designated as the Permanent Arbitrator pursuant to paragraph 6.8 of the nature of the alleged violation; such notice shall be by the most expeditious means possible. The initiating party may also furnish such additional factual information as may be reasonably necessary for the Permanent Arbitrator to understand the relevant circumstances. Copies of any written materials provided to the arbitrator shall also be contemporaneously provided by the most expeditious means possible to the party alleged to be in violation and to all other involved parties.
 - 7.5.B Upon receipt of said notice the Permanent Arbitrator shall set and hold a hearing within twenty-four (24) hours if it is contended the violation is ongoing, but not before twenty-four (24) hours after the written notice to all parties involved as required above.
 - 7.5.C The Permanent Arbitrator shall notify the parties by facsimile or any other effective written means, of the place and time chosen by the Permanent Arbitrator for this hearing. Said hearing shall be completed in one session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an Award by the Permanent Arbitrator.
 - 7.5.D The sole issue at the hearing shall be whether a violation of this Article has, in fact, occurred. An Award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the Award. The Permanent Arbitrator may order cessation of the violation of this Article, and such Award shall be served on all parties by hand or registered mail upon issuance.
 - 7.5.E Such Award may be enforced by any court of competent jurisdiction upon the filing of the Award and such other relevant documents as may be required. Facsimile or other hardcopy written notice of the filing of such enforcement proceedings shall be given to the other relevant parties. In a proceeding to obtain a temporary order enforcing the Permanent Arbitrator's Award as issued under this Article, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Permanent Arbitrator's Award shall be served on all parties by hand or by delivery to their last known address or by registered mail.

- 7.6 Individuals found to have violated the provisions of this Article are subject to immediate termination. In addition, IDOT reserves the right to terminate this PLA as to any party found to have violated the provisions of this Article.
- 7.7 Any rights created by statue or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance therewith are hereby waived by parties to whom they accrue.
- 7.8 The fees and expenses of the Permanent Arbitrator shall be borne by the party or parties found in violation, or in the event no violation is found, such fees and expenses shall be borne by the moving party.

ARTICLE VIII - TERMS OF AGREEMENT

- 8.1 If any Article or provision of this Agreement shall be declared invalid, inoperative or unenforceable by operation of law or by any of the above mentioned tribunals of competent jurisdiction, the remainder of this Agreement or the application of such Article or provision to persons or circumstances other than those as to which it has been held invalid, inoperative or unenforceable shall not be affected thereby.
- 8.2 This Agreement shall be in full force as of and from the date of the Notice of Award until the Project contract is closed.
- 8.3 This PLA may not be changed or modified except by the subsequent written agreement of the parties. All parties represent that they have the full legal authority to enter into this PLA. This PLA may be executed by the parties in one or more counterparts.
- 8.4 Any liability arising out of this PLA shall be several and not joint. IDOT shall not be liable to any person or other party for any violation of this PLA by any other party, and no Contractor or Union shall be liable for any violation of this PLA by any other Contractor or Union.
- 8.5 The failure or refusal of a party to exercise its rights hereunder in one or more instances shall not be deemed a waiver of any such rights in respect of a separate instance of the same or similar nature.

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Addendum A

IDOT Slate of Permanent Arbitrators

- 1. Bruce Feldacker
- 2. Thomas F. Gibbons
- 3. Edward J. Harrick
- 4. Brent L. Motchan
- 5. Robert Perkovich
- 6. Byron Yaffee
- 7. Glenn A. Zipp

Execution Page

Director of Highways Project Implementation Director of Finance & Administration Yangsu Kim, Chief Counsel Omer Osman, Secretary (Date) Illinois AFL-CIO Statewide Project Labor Agreement Committee, representing the Unions listed below: (Date) List Unions:

Exhibit A - Contractor Letter of Assent	
(Date)	
To All Parties:	

In accordance with the terms and conditions of the contract for Construction Work on [Contract No.], this Letter of Assent hereby confirms that the undersigned Prime Contractor or Subcontractor agrees to be bound by the terms and conditions of the Project Labor Agreement established and entered into by the Illinois Department of Transportation in connection with said Project.

It is the understanding and intent of the undersigned party that this Project Labor Agreement shall pertain only to the identified Project. In the event it is necessary for the undersigned party to become signatory to a collective bargaining agreement to which it is not otherwise a party in order that it may lawfully make certain required contributions to applicable fringe benefit funds, the undersigned party hereby expressly conditions its acceptance of and limits its participation in such collective bargaining agreement to its work on the Project.

(Authorized Company Officer)

(Company)

SWPPP



Storm Water Pollution Prevention Plan



Route	Marked Route	Section Number
FAI 57	I-57	(38-7,38-6)RS
Project Number	County	Contract Number
NHPP-2DQR(624)	IROQUOIS	66H63

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature		D	ate
Mond Herwol			12-17-2021
Print Name	Title	Agency	
Masood Ahmad	Regional Engineer	Illinois Department of Tra	ansportation

Note: Guidance on preparing each section of BDE 2342 can be found in Chapter 41 of the IDOT Bureau of Design and Environment (BDE) Manual. Chapter 41 and this form also reference the IDOT Drainage Manual which should be readily available.

I. Site Description:

A. Provide a description of the project location; include latitude and longitude, section, town, and range:

The project is located on I-57, from south of Onarga (Mile Post 278) to South of Buckley (Mile Post 271) in Iroquois County. The length of the project is 6.8 miles and located in R10E, T26N - sections 26,25,35, 36 and in R10E, T25N - sections 2,11,14,22,23,27. Coordinates: 40°38'54.6"N, 88°02'05.9"W

B. Provide a description of the construction activity which is the subject of this plan. Include the number of construction stages, drainage improvements, in-stream work, installation, maintenance, removal of erosion measures, and permanent stabilization:

The project consists of milling the existing HMA overlays (5" NB and 4" SB) and resurfacing with 5" of HMA on both directions of I-57 mainline, milling and resurfacing the Buckley Interchange ramps, underdrain removal and replacement, and guardrail upgrades on all I-57 structures. Structural work involves increasing the crash wall heights on all overhead structures and removing the existing concrete parapet for structures 038-0151 and 038-0152. Grading and shaping work is also proposed along with some minor drainage improvements. Three stages are proposed.

Erosion control measures will be provided in the job where exposure of existing soil is anticipated due to grading and shaping ditches and where expected to exceed 7 days. Once complete, open areas shall be stabilized with mulch, erosion control blanket and permanent seeding.

C. Provide the estimated duration of this 12 months	s project:	
D. The total area of the construction site The total area of the site estimated to	e is estimated to be 231 acres. b be disturbed by excavation, grading or other activities is 4.25	acres.
Printed 12/16/21	Page 1 of 8	BDE 2342 (Rev. 07/19/19)

E. The following are weighted averages of the runoff coefficient for this project before and after construction activities are completed; see Section 4-102 of the IDOT Drainage Manual:

Before Construction = 0.43 / After Construction = 0.43

- F. List all soils found within project boundaries; include map unit name, slope information, and erosivity:
- 69A Milford silty clay loam, 0 to 2 percent slopes Poorly Drained with moderately high permeability. The soil has moderately susceptible to water erosion and is moderately susceptible to wind erosion.
- 91A Swygert silty clay loam, 0 to 2 percent slopes Somewhat poorly drained with moderately low permeability. The soil has moderately susceptible to water erosion and is slightly susceptible to wind erosion.
- 147A Clarence silty clay loam, 0 to 2 percent slopes Somewhat poorly drained with very low to moderately low permeability. The soil has moderately susceptible to water erosion and is slightly susceptible to wind erosion.
- 189A Martinton silt loam, 0 to 2 percent slopes Somewhat poorly drained with moderately high permeability.
 The soil has moderately susceptible to water erosion and is slightly susceptible to wind erosion.
- 189B Martinton silt loam, 2 to 4 percent slopes Somewhat poorly drained with moderately high permeability.
 The soil has moderately susceptible to water erosion and is slightly susceptible to wind erosion.
- 189B2 Martinton silty clay loam, 2 to 4 percent slopes, eroded Somewhat poorly drained with moderately high permeability. The soil has moderately susceptible to water erosion and is slightly susceptible to wind erosion.
- 192B2 Del Rey silty clay loam, 2 to 6 percent slopes, eroded Somewhat poorly drained with moderately low to moderately high permeability. The soil has moderately susceptible to water erosion and is slightly susceptible to wind erosion.
- 230A Rowe silty clay loam, 0 to 2 percent slopes Poorly Drained with very low to moderately low permeability. The soil has moderately susceptible to water erosion and is slightly susceptible to wind erosion.
- 235A Bryce silty clay, 0 to 2 percent slopes Poorly Drained with moderately low permeability. The soil has moderately low susceptibility to water erosion and is moderately susceptible to wind erosion.
- 238A Rantoul silty clay, 0 to 2 percent slopes Very poorly drained with moderately low permeability. The soil has moderately susceptible to water erosion and is moderately susceptible to wind erosion.
- 375B Rutland silty clay loam, 2 to 5 percent slopes Somewhat poorly drained with moderately low permeability. The soil has moderately susceptible to water erosion and is slightly susceptible to wind erosion.
- 570D2 Martinsville loam, 6 to 12 percent slopes, eroded Well drained with moderately high to high permeability. The soil has moderately susceptible to water erosion and is slightly susceptible to wind erosion.
- 805B Orthents, clayey, undulating Moderately well drained with moderately low permeability. The soil has moderately susceptible to water erosion and is moderately susceptible to wind erosion.
- 3405A Zook silty clay, 0 to 2 percent slopes, frequently flooded Poorly Drained with moderately low to moderately high permeability. The soil has moderately susceptible to water erosion and is moderately susceptible to wind erosion.
- G. If wetlands were delineated for this project, provide an extent of wetland acreage at the site; see Phase I report: n/a

Printed 12/16/21 Page 2 of 8 BDE 2342 (Rev. 07/19/19)

H. Provide a description of potentially erosive areas associated with this project:

Some areas within existing ditches are erosive due to their steep 1:2 slopes.

Potential erosive areas involve wind and water erosion at the proposed areas where grading and shaping ditches will occur.

I. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g., steepness of slopes, length of slopes, etc.):

Selected ditches within the job limits will be disturbed due to regrading in order to restore positive drainage. Other disturbing activities involve removing the topsoil at Buckley interchange infields to regrade the area with surplus excavation.

J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to surface water including wetlands.

structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to surface water including wetlands.
K. Identify who owns the drainage system (municipality or agency) this project will drain into:
State of Illinois
L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located:
n/a
M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. In addition, include receiving waters that are listed as Biologically Significant Streams by the Illinois Department of Natural Resources (IDNR). The location of the receiving waters can be found on the erosion and sediment control plans:
Louis Creek & Spring Creek ultimately drain to the Iroquois river.
N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes (i.e., 1:3 or steeper), highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc. Include any commitments or requirements to protect adjacent wetlands. For any storm water discharges from construction activities within 50-feet of Waters of the U.S. (except for activities for water-dependent structures authorized by a Section 404 permit, describe: a) How a 50-foot undisturbed natural buffer will be provided between the construction activity and the Waters of the U.S. or b) How additional erosion and sediment controls will be provided within that area
N/A
O. Per the Phase I document, the following sensitive environmental resources are associated with this project and may have the potential to be impacted by the proposed development. Further guidance on these resources is available in Section 41-4 of the BDE Manual.
N/A
303(d) Listed receiving waters for suspended solids, turbidity, or siltation. The name(s) of the listed water body, and identification of all pollutants causing impairment:

Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

- Perimeter Erosion Barrier (Silt Fence) will be used in all areas where runoff from disturbed areas has the potential to travel offsite or into swales, ponds, wetlands or other natural water bodies. See Erosion Control Plan Sheet.
- Temporary Ditch Checks will be used in all ditches where runoff from disturbed areas is collected.
- Riprap Stone riprap with filter fabric will be used at some drainage structures and adjacent to structures (if

Printed 12/16/21 Page 3 of 8 BDE 2342 (Rev. 07/19/19)

• Temporary Seeding - to be applied at jobsite for stabiliz	zation when applicable.			
Provide a description of the location(s) of direct discharge from the pr	roject site to the 303(d) water body:			
Iva				
Provide a description of the location(s) of any dewatering discharges	to the MS4 and/or water body:			
Trovace a description of the location(s) of any dewatering discharges	to the West and/or water body.			
Applicable Federal, Tribal, State, or Local Programs				
Applicable Federal, Tribal, State, of Local Flograms				
☐ Floodplain				
☐ Historic Preservation		- 1		
Receiving waters with Total Maximum Daily Load (TMDL) for sedi	iment, total suspended solids, turbidity or siltation			
TMDL (fill out this section if checked above)				
The name(s) of the listed water body:				
Provide a description of the erosion and sediment control strategy tha	at will be incorporated into the site design that is consistent with t			
assumptions and requirements of the TMDL:	at this so most portated into the site design that is consistent than t			
Perimeter Erosion Barrier (Silt Fence) will be used in all				
potential to travel offsite or into swales, ponds, wetlands	or other natural water bodies. See Erosion Control P	lan		
Sheet.				
• Temporary Seeding - to be applied at jobsite for stabiliz				
d. T. margenishing anti-makin mering bilah-makan sekaritati dan maka-makan dian disambah melah-maka		 Temporary Ditch Checks will be used in all ditches where runoff from disturbed areas is collected. Riprap – Stone riprap with filter fabric will be used at some drainage structures and adjacent to structures (if 		
applicable) to prevent scouring.	while drainage structures and adjacent to structures (ii			
If a specific numeric waste load allocation has been established that v	would apply to the project's discharges, provide a description of t			
necessary steps to meet that allocation:				
☐ Threatened and Endangered Species/Illinois Natural Areas (INAI))/Nature Preserves			
☐ Threatened and Endangered Species/Illinois Natural Areas (INAI))/Nature Preserves			
☐ Threatened and Endangered Species/Illinois Natural Areas (INAI) ☐ Other)/Nature Preserves			
)/Nature Preserves			
Other)/Nature Preserves			
)/Nature Preserves			
Other)/Nature Preserves			
Other				
☐ Other ☐ Wetland				
Other Wetland P. The following pollutants of concern will be associated with this cons	struction project:			
☐ Other ☐ Wetland ☐ P. The following pollutants of concern will be associated with this cons ☐ Antifreeze / Coolants	struction project: ☐ Solid Waste Debris			
☐ Other ☐ Wetland ☐ P. The following pollutants of concern will be associated with this cons ☐ Antifreeze / Coolants ☐ Concrete	struction project: Solid Waste Debris Solvents			
☐ Other ☐ Wetland ☐ P. The following pollutants of concern will be associated with this cons ☐ Antifreeze / Coolants ☐ Concrete ☐ Concrete Curing Compounds	struction project Solid Waste Debris Solvents Waste water from cleaning construction equipments			
□ Other □ Wetland □ P. The following pollutants of concern will be associated with this cons □ Antifreeze / Coolants □ Concrete □ Concrete Curing Compounds □ Concrete Truck Waste	struction project Solid Waste Debris Solvents Waste water from cleaning construction equipments Other (Specify)			
□ Other □ Wetland □ Nother □ Wetland □ Concrete Curing Compounds □ Concrete Truck Waste □ Fertilizers / Pesticides	struction project: Solid Waste Debris Solvents Waste water from cleaning construction equipments Other (Specify) Other (Specify)			
□ Other □ Wetland □ Nother □ Wetland □ P. The following pollutants of concern will be associated with this cons □ Antifreeze / Coolants □ Concrete □ Concrete Curing Compounds □ Concrete Truck Waste □ Fertilizers / Pesticides □ Paints	struction project: Solid Waste Debris Solvents Waste water from cleaning construction equipments Other (Specify) Other (Specify) Other (Specify)			

II. Controls:

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in Section I.C above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor will be responsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The Contractor, and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Each such Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

A. Erosion and Sediment Controls: At a minimum, controls must be coordinated, installed and maintained to:

- Minimize the amount of soil exposed during construction activity;
- 2. Minimize the disturbance of steep slopes;
- Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
- 4. Minimize soil compaction and, unless infeasible, preserve topsoil.
- B. Stabilization Practices: Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II.B.1 and II.B.2, stabilization measures shall be initiated immediately where construction activities have temporarily or permanently ceased, but in no case more than one (1) day after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.
 - 1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used The following stabilization practices will be used for this project: Temporary Turf (Seeding, Class 7) ☐ Geotextiles ☐ Temporary Mulching Permanent Seeding ☐ Preservation of Mature Seeding Other (Specify) Protection of Trees Other (Specify) Sodding Other (Specify) Temporary Erosion Control Seeding Other (Specify)

Describe how the stabilization practices listed above will be utilized during construction:

*Temporary Erosion Control Seeding will be placed over all disturbed areas until permanent seeding is required.
*Erosion Control Blanket / Mulch (Method 2) will be installed to cover all permanent seeding and to protect
slopes from erosion and allow permanent seeds to germinate.

Describe how the stabilization practices listed above will be utilized after construction activities have been completed:

*Permanent seeding will protect disturbed areas where grading and shaping is needed or where other disturbances within ROW will occur.

C. Structural Practices: Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

Aggregate Ditch	Stabilized Construction Exits
Concrete Revetment Mats	☐ Stabilized Trench Flow

Printed 12/16/21 Page 5 of 8 BDE 2342 (Rev. 07/19/19)

☐ Dust Suppression	☐ Slope Mattress		
Dewatering Filtering	☐ Slope Walls		
Gabions	☐ Temporary Ditch Che	eck	
☐ In-Stream or Wetland Work	☐ Temporary Pipe Slop	oe Drain	
Level Spreaders	☐ Temporary Sedimen	t Basin	
Paved Ditch	☐ Temporary Stream C	Crossing	
Permanent Check Dams	Turf Reinforcement I	Vlats	
Perimeter Erosion Barrier	Other (Specify)		
Permanent Sediment Basin	Other (Specify)		
☐ Retaining Walls	Other (Specify)		
☐ Riprap	Other (Specify)		
Rock Outlet Protection	Other (Specify)		
☐ Sediment Trap	Other (Specify)		
Storm Drain Inlet Protection	Other (Specify)	-	
*** Operation of the Association and the Association of the Assoc			
*Temporary Ditch checks will be installed on open ditch areas to prevent runoff from traveling off-site. *Perimeter Erosion Barrier (Silt Fence) will be used in all areas where runoff from disturbed areas has the potential to travel offsite or into swales, ponds, wetlands or other natural water bodies. See Erosion Control Plan Sheet. *Riprap – Stone riprap with filter fabric will be used at some drainage structures and adjacent to structures (if applicable) to prevent scouring.			
, , , ,			
Describe how the structural practices listed above will be Temporary ditch checks will be immediately references.			
D. Treatment Chemicals Will polymer flocculants or treatment chemicals be utilized on this project: Yes No If yes above, identify where and how polymer flocculants or treatment chemicals will be utilized on this project.			
E. Permanent (i.e., Post-Construction) Storm Water Management Controls: Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.			
 Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices). 			
The practices selected for implementation were determined based on the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT BDE Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.			
2. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).			
Description of permanent storm water management of	ontrols:		
It was determined during phase 2 that a storn	n water detention is not required	or this project.	
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Printed 12/16/21	Page 6 of 8	BDE 2342 (Rev. 07/19/19)	

F. Approved State or Local Laws: The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the IEPA's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under the Permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

All management practices, controls and other provisions provided in the plans are in accordance with IDOT standard specifications and the Illinois Urban Manual

- G. Contractor Required Submittals: Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342A.
- 1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
 - Approximate duration of the project, including each stage of the project
 - Rainy season, dry season, and winter shutdown dates
 - Temporary stabilization measures to be employed by contract phases
 - Mobilization time-frame
 - · Mass clearing and grubbing/roadside clearing dates
 - Deployment of Erosion Control Practices
 - Deployment of Sediment Control Practices (including stabilized cons)
 - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
 - Paving, saw-cutting, and any other pavement related operations
 - Major planned stockpiling operation
 - Time frame for other significant long-term operations or activities that may plan non-storm water discharges as dewatering, grinding, etc
 - Permanent stabilization activities for each area of the project
- 2. During the pre-construction meeting, the Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
 - Temporary Ditch Checks Identify what type and the source of Temporary Ditch Checks that will be installed as part of the project. The installation details will then be included with the SWPPP.
 - Vehicle Entrances and Exits Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
 - Material Delivery, Storage and Use Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
 - Stockpile Management Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
 - Waste Disposal Discuss methods of waste disposal that will be used for this project.
 - Spill Prevention and Control Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
 - Concrete Residuals and Washout Wastes Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
 - Litter Management Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
 - Vehicle and Equipment Fueling Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and soill prevention.
 - Vehicle and Equipment Cleaning and Maintenance Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
 - Dewatering Activities Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
 - Polymer Flocculants and Treatment Chemicals Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
 - Additional measures indicated in the plan.

III. Maintenance:

When requested by the Contractor, the Resident Engineer will provide general maintenance guides (e.g., IDOT Erosion and Sediment

Printed 12/16/21 Page 7 of 8 BDE 2342 (Rev. 07/19/19)

Control Field Guide) to the Contractor for the practices associated with this project. Describe how all items will be checked for structural integrity, sediment accumulation and functionality. Any damage or undermining shall be repaired immediately. Provide specifics on how repairs will be made. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

During construction the contractor shall clean up and grade the work area to eliminate concentration of runoff, maintain or replace (if determined by the Engineer) the erosion and sediment control items. Areas where erosion control blanket, mulch or silt fence is defective will be repaired immediately.

All maintenance of erosion control system will be the responsibility of the contractor. All locations where equipment enter and exit the construction site shall be inspected periodically. Inspection of these areas shall be made at least once every 7 days and within 24 hours of the end of a storm greater than 0.5 inches of rainfall or equivalent snowfall.

IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site including Borrow, Waste, and Use Areas, which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosino Control Inspection Report, BC 2259. Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm or by the end of the following business or work day that is 0.5 inch or greater or equivalent snowfall.

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address: Illinois Environmental Protection Agency Division of Water Pollution Control Attn: Compliance Assurance Section 1021 North Grand East Post Office Box 19276 Springfield, Illinois 62794-9276

V. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the Contractor.

Printed 12/16/21 Page 8 of 8 BDE 2342 (Rev. 07/19/19)

FAI Route 57 (I-57) Project NHPP-2DQR(624) Section (38-7,38-6)RS Iroquois County Contract No. 66H63



Route

FAI 57

Contractor Certification Statement

Section Number

(38-7,38-6)RS



Prior to conducting any professional services at the site covered by this contract, the Contractor and every subcontractor must complete and return to the Resident Engineer the following certification. A separate certification must be submitted by each firm. Attach to this certification all items required by Section II.G of the Storm Water Pollution Prevention Plan (SWPPP) which will be handled by the Contractor/subcontractor completing this form.

Marked Route

I-57

Project Number	County	Contract Number
NHPP-2DQR(624)	IROQUOIS	66H63
This certification statement is a part of SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.		
I certify under penalty of law that I understand the terms of the Permit No. ILR 10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.		
Additionally, I have read and understand all of the information and requirements stated in SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.		
Contractor		
Sub-Contractor		
Signature	Date	
Print Name	Title	
Name of Firm	Phone	
Street Address	City	State Zip Code
Items which this Contractor/subcontractor will be responsible for as required in Section II.G. of SWPPP		

Printed 12/17/21 BDE 2342A (07/19/19)

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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

ATTACHMENTS

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

I. GENERAL

 Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

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

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

II. NONDISCRIMINATION

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

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

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

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

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

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

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

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

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

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

6. Training and Promotion:

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

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

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

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

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

III. NONSEGREGATED FACILITIES

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

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

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

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

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

1. Minimum wages

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

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

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

- b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
 - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a

separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

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

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

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

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

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

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

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

b. Trainees (programs of the USDOL).

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

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

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

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

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

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

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

10. Certification of eligibility.

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

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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

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

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

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

VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

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

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

VII. SAFETY: ACCIDENT PREVENTION

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

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

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

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

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

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

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

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

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

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

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

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

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

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

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

1. Instructions for Certification – First Tier Participants:

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

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

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

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

2. Instructions for Certification - Lower Tier Participants:

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

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

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

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

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

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

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of

Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

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

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

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.
- 6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

Contract Provision - Cargo Preference Requirements

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

- "(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- (2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- (3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract."

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