# 154

Letting March 8, 2024

## Notice to Bidders, Specifications and Proposal



Contract No. 91619 MCLEAN County Section 20-00271-00-PV (Normal) Route FAU 6352 (West College Avenue) Project HTPY-283 () District 5 Construction Funds

> Prepared by Checked by

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#### **NOTICE TO BIDDERS**

- 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 8, 2024 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. 91619 MCLEAN County Section 20-00271-00-PV (Normal) Project HTPY-283 () Route FAU 6352 (West College Avenue) District 5 Construction Funds

Fulldepth pavement reconstruction, pipe underdrains, storm sewer, sidewalks, curb & gutter, signing, traffic signals, and lighting on West College Avenue from US 150/Rivian Motorway to west of the Norfolk Southern Railroad in Normal. Project includes reconstruction of the US 150, West College intersection to include a right turn lane onto West College Road.

- **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

#### **CONTRACT 91619**

#### INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

#### Adopted January 1, 2024

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS, frequently used RECURRING SPECIAL PROVISIONS, and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction

(Adopted 1-1-22) (Revised 1-1-24)

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#### RECURRING SPECIAL PROVISIONS

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#### LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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#### **BDE SPECIAL PROVISIONS**

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

	<u>File</u> Name	<u>Pg.</u>		Special Provision Title	<b>Effective</b>	<u>Revised</u>
	80099	73	$\boxtimes$	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2022
	80274		Ê	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
	80192		П	Automated Flagger Assistance Device	Jan. 1, 2008	April 1, 2023
	80173		П	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
	80426			Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	Jan. 1, 2022
	80241			Bridge Demolition Debris	July 1, 2009	
	5053I			Building Removal	Sept. 1, 1990	Aug. 1, 2022
	50261			Building Removal with Asbestos Abatement	Sept. 1, 1990	Aug. 1, 2022
*	80449	75	$\boxtimes$	Cement, Type IL	Aug. 1, 2023	
	80384	76	$\boxtimes$	Compensable Delay Costs	June 2, 2017	April 1, 2019
	80198			Completion Date (via calendar days)	April 1, 2008	
	80199			Completion Date (via calendar days) Plus Working Days	April 1, 2008	
	80453		Ц	Concrete Sealer	Nov. 1, 2023	
	80261		Ц	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
	80434			Corrugated Plastic Pipe (Culvert and Storm Sewer)	Jan. 1, 2021	
	80029	80		Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
	80229		H	Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
	80452		H	Full Lane Sealant Waterproofing System	Nov. 1, 2023	
	80447		H	Grading and Shaping Ditches	Jan 1, 2023	lan 1 0000
	80433		H	Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
*	80443 80456	00		High Tension Cable Median Barrier Removal	April 1, 2022	
	80436	90 91	$\boxtimes$	Hot-Mix Asphalt Hot-Mix Asphalt – Longitudinal Joint Sealant	Jan. 1, 2024 Nov. 1, 2022	Aug. 1, 2023
	80440	51		Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	Sept. 2, 2023
	80045		H	Material Transfer Device	June 15, 1999	Jan. 1, 2022
	80450		Н	Mechanically Stabilized Earth Retaining Walls	Aug. 1, 2023	0411. 1, 2022
	80441	93	$\boxtimes$	Performance Graded Asphalt Binder	Jan 1, 2023	
	80451	98		Portland Cement Concrete	Aug. 1, 2023	
	34261		Ē	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
*	80455	99	$\square$	Removal and Disposal of Regulated Substances	Jan. 1, 2024	,
	80445	101	$\square$	Seeding	Nov. 1, 2022	
	80448	107	$\boxtimes$	Source of Supply and Quality Requirements	Jan. 2, 2023	
	80340			Speed Display Trailer	April 2, 2014	Jan. 1, 2022
	80127			Steel Cost Adjustment	April 2, 2014	Jan. 1, 2022
	80397	108	$\boxtimes$	Subcontractor and DBE Payment Reporting	April 2, 2018	
_	80391	109	$\square$	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
*	80437	110		Submission of Payroll Records	April 1, 2021	
	80435	112		Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2023
	80410	440		Traffic Spotters	Jan. 1, 2019	0 1 0 0001
	20338	118		Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
	80429	104		Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
	80439	121 122	$\boxtimes$	Vehicle and Equipment Warning Lights Weekly DBE Trucking Reports	Nov. 1, 2021	Nov. 1, 2022
	80302 80454	122		Wood Sign Support	June 2, 2012 Nov. 1, 2023	Nov. 1, 2021
	80454 80427	123	$\mathbb{H}$	Wood Sign Support Work Zone Traffic Control Devices	Mar. 2, 2020	
	80427	120		Working Days	Jan. 1, 2002	
	00071			working Days	Jan. 1, 2002	

#### State of Illinois

#### **Special Provisions**

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2024; the "Supplemental Specifications and Recurring Special Provisions," adopted January 1, 2023 (as indicated on the check sheet included herein); the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways"; the latest edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois"; and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids. These Special Provisions included herein apply to and govern the construction of improvements to FAU Route 6352 (West College Avenue) in the Town of Normal, McLean County, Illinois, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and govern.

#### DESCRIPTION OF WORK

The project consists of the reconstruction of West College Avenue from US Route 150 / Rivian Motorway to 250 feet west of White Oak Road and including the intersection approaches with US Route 150 / Rivian Motorway, Unit Drive / Rivian Gatehouse 5, Rivian Gatehouse 4, Wylie Drive, and Merle Lane. The project includes 5'-wide sidewalk along the south side of West College Avenue and a 10'-wide multi-use path along the north side of West College Avenue. Improvements also include new curb & gutter, concrete medians and islands, underdrains, storm sewers, inlets, permanent traffic signalization, median irrigation, landscaping, and all necessary incidental work as shown on the plans or as described herein.

The western portion of the project (approximately 3,346' length) will be reconstructed with Portland Cement Concrete pavement. The eastern portion of the project (approximately 5,235' length) will rubblize the existing PCC pavement, widen the roadway, and overlay with hot-mix asphalt pavement. Pavement widening areas and transition areas will be full-depth hot-mix asphalt pavement.

#### PRE-CONSTRUCTION MEETING

The Contractor shall attend a Pre-Construction meeting at a mutually determined date.

At that meeting, the Contractor will present four (4) copies each of his/her Plan of Work in accordance with the Traffic Control and Maintenance of Traffic Plan as described herein, and initial shop drawings for materials to be used to the Town and IDOT for review. The Contractor shall also submit a list of all suppliers, subcontractors, and copies of concrete and hot-mix asphalt mix designs proposed for use on the project.

#### **EXAMINATION OF EXISTING CONDITIONS AND DOCUMENTATION**

It is the responsibility of each bidder to satisfy himself/herself as to conditions he/she will encounter in performing the work. Failure to do so will not be considered as grounds for additional compensation for unforeseen adverse conditions encountered during the progress of the work.

Prior to commencement of any construction activities, the Contractor shall document the existing condition of all roadways, sidewalks, driveways, side streets, landscaping and other items within or adjacent to the limits of construction with color photographs and/or videos and submit said pictures and/or videos to the Engineer for review. Construction shall not commence until the content and clarity of said pictures is reviewed by the Engineer and found acceptable. This work will not be paid for separately but shall be incidental to the contract work and no additional compensation will be allowed.

#### NOTIFICATION OF START

The Contractor shall be required to comply with any IDOT Construction Permit requirements for work within IDOT right-of-way. The Contractor shall coordinate and work with the Town to obtain the IDOT Construction Permit for work within their right-of-way. The Contractor shall notify the Engineer; the Town of Normal Engineering and Public Works Departments; the Illinois Department of Transportation; the Fire and Police Departments; the local Emergency Services; Connect Transit; all affected businesses and adjacent residents within the particular stage of construction; School District (if during the school year); coordinate with the garbage and postal service seven (7) calendar days prior to the beginning of work and shall keep the same entities updated on the status of lane closures or changes in traffic patterns throughout the duration of the project. Any less time of notification could cause delay to the Contractor. Contact information for the aforementioned entities will be provided to the Contractor at the Pre-Construction Meeting.

#### COMPLETION DATE

The Contractor shall complete all work and any punch list items no later than the specific date included herein. No deviation from this date will be permitted except by written permission from the Engineer and Town of Normal (Town).

The Contractor shall submit to the Town for approval, at the pre-construction conference, a feasible progress schedule showing the order in which the Contractor will start each major work activity and the planned dates for completing each.

All work including punch list items shall be complete by November 30, 2025. The Contractor may need to work multiple crews and Saturdays to meet this completion date.

#### **DEFINITION OF TERMS**

Section 101 of the Standard Specifications shall be revised as follows:

Article 101.14 Department. Town of Normal

Article 101.16 Engineer. The designated employee or representative of the Town of Normal.

The Engineer will not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs.

Article 101.19 Inspector. The authorized representative of the Engineer assigned to make detailed observations of any or all portions of the work or material therefore.

This activity is not to be interpreted as an inspection service, a construction supervision service, or a guaranteeing of the Contractor's performance. The authorized representative will not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs. The authorized representative will not be responsible for the Contractor's obligation to carry out the work in accordance with the Contract Documents.

#### STANDARDS IN THE PLANS

The Standards with the revision number listed in the "Highway Standards, General Notes and Commitments" in the plans shall hold precedence over Standard Numbers listed elsewhere in the plans or Special Provisions for this contract.

#### UTILITIES COORDINATION

The utility companies have been notified of the impending project and the plans indicate the general location of the utility main lines received from those agencies. The Contractor shall have the responsibility before any construction work has begun, of obtaining from all utilities the exact location of any underground or other facilities in the area of construction, whether indicated on the plans or not. The Contractor, at his own expense, shall be required to obtain actual locations and depths of all utilities not provided by the utility companies and shall take proper precautions to prevent damage or interruption of the utilities. All facilities disturbed by the Contractor shall be restored by him/her at his/her own expense. The Contractor shall coordinate with the proper utility the relocation of all facilities designated on the plans or deemed necessary to be relocated by the Engineer in order to complete construction of the project. Special attention is called to Article 107.39. Residents and businesses shall be notified of impending service outages and no residence or business shall be without service overnight.

Agency/Company	Base Sheets Sent	Phase I Preliminary Plans Sent	Pre-Final Plans Sent	Final Plans Sent
City of Bloomington Public Work (Water) Dept.	February 15, 2021	December 2, 2022	August 21, 2023	October 25, 2023
Bluebird Network	Feb. 15, 2021	Dec. 2, 2022	Aug. 21, 2023	Oct. 25, 2023
Campus Communications Group	Feb. 15, 2021	Dec. 2, 2022	Aug. 21, 2023	Oct. 25, 2023
CIRBN LLC	Feb. 15, 2021	Dec. 2, 2022	Aug. 21, 2023	Oct. 25, 2023
Comcast	Feb. 15, 2021	Dec. 2, 2022	Aug. 21, 2023	Oct. 25, 2023
Corn Belt Energy Corporation	Feb. 15, 2021	Dec. 2, 2022	Aug. 21, 2023	Oct. 25, 2023
Frontier Communications	Feb. 15, 2021	Dec. 2, 2022	Aug. 21, 2023	Oct. 25, 2023
Metro Communications Co., Inc.	Feb. 15, 2021	Dec. 2, 2022	Aug. 21, 2023	Oct. 25, 2023
Nicor Gas	Feb. 15, 2021	Dec. 2, 2022	Aug. 21, 2023	Oct. 25, 2023
Town of Normal Public Works and Engineering Dept.	Feb. 15, 2021	Dec. 2, 2022	Aug. 21, 2023	Oct. 25, 2023
Town of Normal Water Dept.	Feb. 15, 2021	Dec. 2, 2022	Aug. 21, 2023	Oct. 25, 2023
Stratus Networks, Inc.	Feb. 15, 2021	Dec. 2, 2022	Aug. 21, 2023	Oct. 25, 2023
T-Mobile	Feb. 15, 2021	Dec. 2, 2022	Aug. 21, 2023	Oct. 25, 2023
Windstream KDL / McLeod USA	Feb. 15, 2021	Dec. 2, 2022	Aug. 21, 2023	Oct. 25, 2023

The following utility agencies received plans during the development of the project.

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

Agency/Company Responsible to Resolve Conflict	Name of contact	Phone	E-mail address
City of Bloomington Public Works (Water) Dept.	Brett Lueschen Doug Nooden	309-434-2439	blueschen@cityblm.org dnooden@cityblm.org
Bluebird Network	Jack Coles	816-237-2137	jack.coles@bluebirdnetwork.com
Campus Communications Group	Samuel James		gis@pavlovmedia.com
Cirbn LLC	Jon Bachtold Dennis Leggett	309-434-0197 309-820-7321	jcbach@cirbn.org dennisl@cirbn.org
Comcast	Martha Gieras	224-229-5862	martha_gieras@comcast.com
Corn Belt Energy Corporation	James Ivers	309-662-5330	james.ivers@cornbeltenergy.com
Frontier Communications	Kalin Hinshaw Adam Gangloff	815-895-1515 309-557-1378	kalin.hinshaw@ftr.com adam.r.gangloff@ftr.com
Metro Communications Co., Inc.	Jason Koonce	217-728-3605	jkoonce@metrocomm.com
Nicor Gas	Michal Ann Beyke Parrott, Charles Jimmy Ly	630-388-2362	MBeyke@southernco.com cparrot@southernco.com JiLy@southernco.com
Town of Normal Public Works and Engineering Dept.	Ryan Otto Eric Herbst	(309) 454-9574 (309) 454-9744	rotto@normal.org Eherbst@normal.org
Town of Normal Water Dept.	Darryl Barron	309-454-9741	dbarron@normal.org
Stratus Networks, Inc.	Butch Forkell Jeremy Carr	309-696-6349 309-863-0422	bforkell@stratusnet.com jcarr@stratusnet.com
T-Mobile	Steven Hughes Jeff Fehr	309-472-1867	steven.hughes1@t-mobile.com Jeffrey.Fehr@t-mobile.com
Windstream KDL/Mcleod USA	Scott Builta Deven Barnhill	309.212.3870  815 715 2287	donald.builta@Windstream.com deven.barnhill@windstream.com

#### UTILITIES TO BE ADJUSTED

Conflicts and potential conflicts noted below have been identified by following the suggested staging plan included in the contract. The Agencies above have received proposed improvement plans and may be required to obtain the necessary permits to complete their work; in some instances, resolution will be a function of the construction staging. The responsible agency must confirm existing location, relocate, adjust, or complete new installations as noted below.

Agency/Company	Туре	Description	Location
City of Bloomington Public Works (Water) Dept.	Watermain	Fire hydrants and valves to be moved adjusted, and/or removed and replaced.	Stations 4+51 LT, 7+47 LT, 10+46 LT, 13+48 LT, 16+50 LT, 28+13 LT, 31+48 RT, 34+52 LT, 37+38 RT, 40+45 LT, 43+47 RT, 46+50 LT, 49+54 LT
Bluebird Network		No conflicts	s are known.
Campus Communications Group		No conflicts	s are known.
CIRBN LLC	Fiber Optic Communications	Vault to be adjusted	Station 59+45
Comcast	Overhead lines on poles owned by Corn Belt Energy Corp.	Light pole to be relocated.	Stations 5+32 RT, 15+32 RT, 35+33 RT, 40+42 RT, 45+35 RT, 50+39 RT, 55+48 RT, 60+56 RT, 65+56 RT, 70+56 RT, 75+56 RT, 80+44 RT
Corn Belt Energy Corporation	Poles	Light pole to be relocated.	Stations 5+32 RT, 15+32 RT, 27+80 LT, 32+82 LT, 35+33 RT, 37+83 LT, 40+42 RT, 42+82 LT, 45+35 RT, 47+83 LT, 50+39 RT, 52+91 LT, 55+48 RT, 58+00 LT, 60+56 RT, 63+06 LT, 65+56 RT, 67+75 LT, 70+56 RT, 73+06 LT, 75+56 RT, 77+98 LT, 80+44 RT
Frontier Communications	Underground Telephone	Manhole to be adjusted.	Stations 62+60 LT, 70+16 LT, 77+65 LT
Metro Communications Co., Inc.			s are known.
Nicor Gas		No conflicts	s are known.
Town of Normal Water Dept.	Watermain	Fire hydrants and valves to be moved, adjusted, and/or removed and replaced.	Stations 30+25 LT, 32+74 LT, 35+26 LT, 40+24 LT, 47+81 LT, 50+33 LT, 53+11 RT, 58+92 RT, 61+92 RT, 64+96 RT, 68+02 RT, 71+02 RT, 74+03 RT, 77+06 RT
Town of Normal Public Works and Engineering Dept.	Sanitary Sewer	Sanitary Manhole to be adjusted.	Stations 24+86 RT, 37+89 RT, 40+82 RT, 43+84 RT, 61+68 LT, 62+77 LT, 63+49 LT, 66+69 LT, 68+46 LT
Stratus Networks, Inc.	Underground Fiber	Handholes to be adjusted.	Stations 2+14 RT, 9+36 RT, 24+13 RT, 54+78 RT
T-Mobile	-Mobile No conflicts are known.		s are known.
Windstream KDL / McLeod USA		No conflicts	s are known.

#### UTILITIES TO BE WATCHED AND PROTECTED

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

Agency/Company	Туре	Description	Location
City of Bloomington Public Works (Water) Dept.	Watermain	Underground watermain, use caution with construction of proposed storm sewer.	Stations 3+25 RT, 3+50 RT, 5+50 RT, 7+52 RT, 21+50 RT, 23+01 RT, 25+74 RT, 27+70 RT, 32+50 RT, 36+50 RT, 40+55 RT, 42+08 RT, 44+0 RT, 53+69 RT, 74+18 LT
Bluebird Network			N/A
Campus Communications Group			N/A
CIRBN LLC			N/A
Comcast			N/A
Corn Belt Energy Corporation			N/A
Frontier Communications	N/A		
Metro Communications Co., Inc.	N/A		
Nicor Gas		Underground high pressure gas line, use caution when constructing proposed storm sewer, underdrains, and utility adjustments.	Stations 2+33 LT, 2+33 LT, 3+50 LT, 5+50 LT, 7+52 LT, 21+50 LT, 22+88 LT, 25+38 LT, 28+75 LT to 31+40 LT, 32+50 LT, 36+50 LT, 37+50 LT to 81+60 LT
Town of Normal Water Dept.	Watermain	Underground watermain, use caution with construction of proposed storm sewer.	Stations 30+00 LT, 31+00 LT, 32+50 LT, 36+50 LT, 38+75 LT, 40+65 LT, 42+25 LT, 44+00 LT, 45+50 LT, 48+61 LT
Stratus Networks, Inc.	N/A		N/A
T-Mobile	N/A		
Windstream KDL / McLeod USA	N/A		

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

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

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

#### J.U.L.I.E. SYSTEM

The J.U.L.I.E. (Joint Utility Locating Information for Excavators) must be notified prior to starting construction, so that the respective utilities may have adequate time to locate and mark their underground facilities. Phone: 1-800-892-0123 or 811. Allow 48 hours for other than emergency assistance. The following information may be requested by J.U.L.I.E.:

County Name: McLean Township Name: Town of Normal Section/Township/Range: S16 T24N R1E, R2E

#### EXISTING STATE-OWNED UTILITIES

Eff. 04-01-2020

Existing state-owned and maintained underground utilities exist with the right of way. The Department is not a member of JULIE and does not locate its own facilities. The Contractor shall be responsible for securing an approved locating firm to locate all existing Department underground facilities prior to commencing any excavation, per the requirements of Article 803 of the Standard Specifications. Utility locates may be also required outside the project limits for traffic control signing and other items. The Contractor may obtain, on request, plans of existing electrical facilities from the Department. For further information, the contractor may contact the District Traffic Operations Engineer, Gary Sims, at 217-251-4859.

This work shall not be paid for separately but shall be considered included in the various pay items for which JULIE locations are required.

#### PUBLIC SAFETY AND CONVENIENCE

The Contractor shall maintain all entrances and side roads along the proposed improvement. Interference with traffic movements and inconvenience to owners of abutting property and the public shall be kept to a minimum. Any delays or inconveniences caused by the Contractor by complying with these requirements shall be considered as incidental to the contract and no additional compensation will be allowed.

#### DAMAGE TO NEW OR EXISTING STRUCTURES OR PROPERTY

If damage is done to existing or new structures or property during construction of the proposed improvements, the item(s) shall be replaced or repaired by the Contractor at his/her own expense to the satisfaction of the Engineer. The replacement or repair method shall be reviewed by the Engineer and approved by the Town prior to replacement or repair.

#### SIGNS AND MAILBOXES TO BE MOVED

All existing signs, including street, traffic, parking, advertising or other signs, and mailboxes that interfere with construction operations, shall be removed and temporarily reset by the Contractor after notifying the owner of the sign or mailbox conflict. Every sign or mailbox removed must be re-erected at a temporary location in a workmanlike manner and be visible to roadway traffic. Signs or mailboxes shall not be moved other than laterally without the permission of the Engineer. All such signs and mailboxes must be maintained straight and neat for the duration of the temporary setting. Upon completion of the work, the signs and mailboxes shall not be moved until the progress of work requires it. Signs, mailboxes or posts broken or damaged during moving shall be replaced or repaired to their original condition at the Contractor's expense. Any Contractor or Private Party removing any sign without notice will be billed for the replacement costs associated with reinstalling of the sign and may be charged with a violation of the Illinois Vehicle Code 11-311. The Contractor shall provide a temporary location for delivery of mail while the road is under construction if any existing mailbox is not accessible due to construction activities.

Street signs to be relocated because of radius changes or other improvements shall be relocated by the Contractor in locations as determined by the Engineer.

This work shall not be measured for payment separately, but shall be included in the contract unit price bid for EARTH EXCAVATION.

#### PAY QUANTITY FOR EARTHWORK PAY ITEM

Should the Contractor have any disagreement in the plan quantity of the Earthwork pay items, he/she shall submit earthwork calculations showing such disagreement at the pre-construction meeting. Otherwise, the plan quantity for the Earth Excavation pay item shall be used as the basis for payment on the project, as long as the project is constructed according to plan grades. Cross Sections after clearing and ground surface preparation will not be provided or allowed. Changes in the lines, grades, or length of the project may result in changes to the quantities.

#### EARTH EXCAVATION

This work shall be performed in accordance with the applicable articles of Section 202 of the Standard Specifications.

Add the following provision to Section 202: Topsoil material within project improvement excavation limits as shown on the cross sections shall be excavated and removed from site. This excavation shall be included and is calculated as part of the Earth Excavation quantity and work. No additional compensation will be allowed for the removal from site work. Any holes or depressions made while excavating topsoil from within the project site shall be filled and graded by the Contractor. No additional compensation shall be allowed for filling holes due to earth excavation.

Any Earth Excavation that is suitable for fill embankment material shall be placed and compacted in fill areas as shown on the cross sections. All unsuitable material shall become the property of the Contractor and be removed from the site. No payment for overhaul will be allowed for earth moved from any source.

Any landscaping items such as timber, boulders, brick or block lawn edging, segmental brick or block retaining wall, plantings, or decorative stone in conflict with the construction shall be moved off right-of-way and offered to the property owner. If the property owner does not desire the material, the contractor shall dispose of same.

Existing pipe underdrains and existing filter fabric located within the limits of earth excavation shall be removed and disposed offsite.

This work as described above and herein shall be included in the cost for Earth Excavation.

#### SUBGRADE PREPARATION

The Contractor shall be required to complete this work strictly in accordance with Section 301 of the Standard Specifications for Road and Bridge Construction except as modified below:

All drainage swales, drainage structures, storm sewers, and underground utilities shall be installed prior to subgrade preparation.

Subgrade Preparation shall not be measured and paid for separately but shall be included in the unit cost for the applicable pay items including EARTH EXCAVATION, SUBBASE GRANULAR MATERIAL, PORTLAND CEMENT CONCRETE PAVEMENTS, HOT-MIX ASPHALT PAVEMENTS, DRIVEWAYS, SIDEWALK, CONCRETE CURB AND GUTTER, and AGGREGATE BASE COURSE.

#### TEST ROLLING OF SUBGRADE AND BASE COURSE

The test rolling of subgrade and base course shall follow the latest edition of the Subgrade Stability Manual except as modified by the following:

The Contractor will provide, at his/her own expense, a loaded truck and test roll separately, the compacted subgrade and base course in the presence of the Engineer before any sub-base, base

course, curb and gutter, or surface material is placed. The Contractor shall notify the Engineer two (2) business days prior to the test roll. The tandem axle truck shall be loaded to a minimum gross weight of 40,000 pounds. The Contractor shall provide the Engineer a weight ticket verifying this amount prior to operations. The test roll will be in addition to the requirements of Section 301 of the Standard Specifications. The density requirements of Section 301 will still be required.

The truck shall make four to six passes over the entire subgrade, sub-base, or base course area to be tested. Any areas which, in the opinion of the Engineer, show rutting, cracking or rolling of the compacted subgrade, sub-base, or base course upon test rolling will not be accepted. The Contractor will recompact and/or reconstruct the section that fails and test roll again prior to acceptance. Areas of subgrade repair will be paid for as specified in the Special Provision for Granular Subgrade Repair or Replacement. No additional compensation shall be allowed for any test rolling of repaired areas or the reconstruction or repair of the aggregate sub-base or base course.

Test rolling shall not be measured and paid for separately but shall be included in the cost of EARTH EXCAVATION.

#### **GRANULAR SUBGRADE REPAIR OR REPLACEMENT**

This work shall be completed in accordance with Section 311 of the Standard Specifications except as modified by the following:

This work, as provided for herein, shall consist of the removal of unsuitable material and the placement of Geotechnical Fabric and/or Granular Blanket in subgrades or embankment foundations. Following topsoil excavation and roadway excavation to the lines and grades shown on the plans and preparing the subgrade in accordance with the Special Provisions and Sections 301 and 302 of the Standard Specifications, the proof roll shall determine any limits of the area requiring repair or replacement. It is hereby understood that the Contractor shall notify the Engineer not less than forty-eight (48) hours (5:00 p.m. Friday to 8:00 a.m. Monday excluded) prior to any undercutting of the sub-base or subgrade.

Placement of Granular Blanket: The Sub-base Granular Material, Type B shall be CA-6 or CA-10 in accordance with Article 1004.04 of the Standard Specifications and placed in accordance with Section 311 of the Standard Specifications and as specified herein.

All Subbase Granular Material shall have a minimum IBR of 40.

Method of Measurement and Payment: Any subgrade excavation of existing unstable or unsuitable material to complete this work will be measured in its original position and the volume in cubic yards computed by the method of average end areas. This work will be paid for at the contract unit price per cubic yard for EARTH EXCAVATION and the paid plan quantity will be increased accordingly. The removal of material placed in fill sections as embankment will not be paid for separately.

The Granular Blanket will be measured for payment in tons and will be paid for at the contract unit price per ton for SUB-BASE GRANULAR MATERIAL, TYPE B. Geotechnical Fabric for Ground Stabilization shall be paid at the contract unit price bid per square yard for GEOTECHNICAL FABRIC FOR GROUND STABILIZATION.

All areas of repair shall be re-test rolled to confirm stability. All costs for re-test rolling shall be included in the contract unit price bid per ton for SUB-BASE GRANULAR MATERIAL, TYPE B.

#### ADJUSTMENT OF QUANTITIES FOR SUBGRADE TREATMENTS

The quantities for Sub-base Granular Material, Type B and Geotechnical Fabric for Ground Stabilization have been estimated in order to establish a unit bid price. No change in contract unit price will be allowed because of an adjustment of these quantities due to actual conditions encountered in the field.

#### **EMBANKMENT**

Embankment shall be placed in accordance with Section 205 of the Standard Specifications except as follows:

1) All embankment shall be constructed with not more than 110% of optimum moisture content, determined according to AASHTO T 99 (Method C). The 110% of optimum moisture limit may be waived in free draining granular material when authorized in writing by the Engineer.

The Contractor may, at his option, add a drying agent to lower the moisture content as specified above. The drying agent must be authorized by the Engineer prior to use. Extra compensation will not be allowed for the use of a drying agent but will be considered included in the cost of the various items of excavation.

- 2) All material that is proposed for use in embankment construction must be approved by the Engineer. The proposed material shall a Standard Dry Density of not less than 90 lb/ft3 (1442 kg/m3) when tested according to AASHTO T 99 and shall not have an organic content greater than 10 percent when tested according to AASHTO T 194. Soils that demonstrate any of the following properties shall be restricted to the interior of the embankment:
  - a. A grain size distribution with less than 35 percent passing the #200 sieve.
  - b. A plasticity index (PI) of less than 12.
  - c. A liquid limit (LL) in excess of 50.

Such soils shall be covered on top of the embankment by a minimum of 2 feet of soil not characterized by any of the items above. Other materials that may be considered by the Engineer as having the potential for erosion or excess volume change shall not be used in the 2 feet cover on the sides or top of the embankment.

3) All existing earth surfaces to receive embankment placement shall be disked and compacted in accordance with Articles 205.01 through 205.09 of the Standard Specifications. These surfaces shall be reviewed by the Engineer prior to placement of any Embankment. Existing surfaces that have been compacted, but do not meet the satisfaction of the Engineer, shall be test rolled. If the existing surface does not pass the test roll, the material shall be removed and replaced with Embankment or Subbase Granular Material as determined by the Engineer. Any Embankment placed on said surface shall be the sole responsibility of the Contractor. Should the Embankment so placed not pass the test roll prior to sub-base or pavement placement, the Contractor shall repair or replace said

Embankment at the Contractor's own expense. Removal of unsuitable existing surface shall be measured for payment as Earth Excavation.

- 4) Embankment shall not be placed on slopes steeper than 1:4 (V:H) slope without stepping existing subgrade. Slopes steeper than 1:4 shall be stepped and compacted prior to placing embankment. No additional compensation shall be allowed for stepping.
- 5) If the Contractor fails to obtain the Engineer's satisfaction of the existing surface after disking and compacting, any Embankment placed on said surface shall be the sole responsibility of the Contractor. Should the Embankment so placed not pass the test roll prior to pavement placement, the Contractor shall repair or replace said Embankment at the Contractor's own expense.
- 6) Cross Sections after clearing and ground surface preparation will not be provided or allowed.

Add the following to the requirements of Article 205.04:

Gravel, crushed stone or soils having less than 35% passing the number 200 sieve and other materials as allowed by Article 202.03 of the standard specifications are further restricted. The further restricted materials shall be placed in 4" lifts and disked with the underlying lift material until a uniform and homogenous material is formed having more than 35% passing the number 200 sieve.

The above work will not be paid for separately but shall be included in the cost of the cost of Earth Excavation.

#### **REMOVAL OF UNCLASSIFIED MATERIAL**

Existing hazard markers, delineators, and other unclassified materials shall be removed at the locations shown on the plans or as designated by the Engineer. The material removed, as required in this Special Provision, shall be disposed of outside the right-of-way limits in accordance with these special provisions and Article 202.03 of the Standard Specifications. The Engineer shall be notified before any of these items are removed.

Where right-of-way, U.S.C. & G.S. markers, or section and sub-section monuments are encountered, the Engineer shall be notified before such monuments are removed. The Contractor shall protect and carefully preserve all markers and monuments until the Engineer or authorized Land Surveyor has witnessed and referenced their location. The Contractor will be responsible for reimbursing the Engineer's Registered Land Surveyor for all costs associated with reestablishing any markers or monuments destroyed by his/her operations without proper notification.

#### REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

#### Description:

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

#### **Contract Specific Work Areas:**

For stationing, the lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit, whichever is less.

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

#### 4071-COV-3, Ashley Furniture, 2609 W. College Avenue, Normal, McLean County, IL

- Station 89+60 to Station 91+60, 0 to 70 feet RT. The Engineer has determined this material from 0 to 2-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: benzo(a)pyrene, pH.
- Station 91+60 to Station 94+16, 0 to 70 feet RT. The Engineer has determined this material from 0 to 2-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: iron and manganese.

#### 4071-COV-4, Commercial Building, 2601 North College Avenue, Normal, McLean County, IL

• Station 88+10 to Station 89+60, 0 to 70 feet RT. The Engineer has determined this material from 0 to 2-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: iron and manganese.

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

#### 4071-COV-1-SB-2

• Station 7+10 to Station 14+10, 0 to ROW LT. The Engineer has determined this material from 0 to 5-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(2). Contaminants of concern sampling parameters include: Manganese.

#### 4071-COV-1-SB-3&4

• Station 14+10 to Station 24+90, 0 to ROW LT. The Engineer has determined this material from 0 to 5-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: Manganese.

#### 4071-COV-1-SB-6

• Station 30+02 to Station 44+84, 0 to ROW LT. The Engineer has determined this material from 0 to 5-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(3). Contaminants of concern sampling parameters include: Benoz(a)pyrene.

#### 4071-COV-3-SB-1

• Station 2+35 to Station 7+35, 0 to ROW RT. The Engineer has determined this material from 0 to 9-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(2). Contaminants of concern sampling parameters include: Manganese.

#### 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).

#### EXPLORATORY EXCAVATION

Wherever, in the opinion of the Engineer, it is necessary to explore and excavate to determine the location and elevation of existing utilities, culverts, storm sewer, field tiles, underdrains, or other underground items, the Contractor shall make exploration and excavation for such purposes.

The cost of exploratory excavation will not be paid for separately but shall be included in the associated construction pay items.

#### TOPSOIL FURNISH AND PLACE, 4"

All disturbed areas not improved with pavement, curb and gutter, sidewalk, path, driveways, patching or median will require a minimum of 4 inches of topsoil. All topsoil placed shall be furnished and imported from off-site and meet the requirements of Section 211 of the Standard Specifications. The final surface of disturbed areas and embankment areas are to be seeded according to the plans. Prior to placing the topsoil, the top 2" of the surface receiving the material shall be disked sufficiently to reduce the soil compaction to less than 85%. Surfaces that become hardened or crusted after the initial disking shall be re-disked, raked or otherwise broken up.

All costs associated with furnishing from off-site, hauling, testing, and placing topsoil 4"will be measured and paid for at the contract unit price bid per square yard for TOPSOIL FURNISH AND PLACE, 4".

#### LANDSCAPE PLANTING

This work shall consist of furnishing and installing woody & perennial plant material in accordance with Sections 253 & 254 of the Standard Specifications except as noted herein.

All plant material substitutions, if required, shall be reviewed and approved prior to ordering. Submit a complete plant material list to the Town of Normal and the Landscape Architect within 14 days of delivery for review and approval. Written approval for substitutions shall be returned to the Contractor within 5 business days of receipt.

No bare root stock will be allowed for this project. All plant material shall be balled and burlapped, or in containers per the plant schedule on the plans.

Prior to any tree, shrub, grass, or perennial installation, all plants in the beds shall be placed above ground with public and private utility locations marked. The layout shall be reviewed with the Town of Normal and Landscape Architect before completing installation per the plans and specifications.

Omit Section 253.14 of the Standard Specifications. The contractor is responsible for all maintenance of the plant material once it leaves the nursery until final acceptance by the owner. The establishment and maintenance period shall be no less than six months of an active growing season, excluding dormant months November to March. This includes planting, watering, pruning, weed control, insect control, disease control, and remulching as needed. Shrubs and perennials shall be deep watered a minimum of 3 times per week. Once the irrigation system is complete, the contractor may use that to provide watering of the plant material in medians. Trees shall be watered with gator bags. All work as required to complete the landscape maintenance shall not be paid for separately but included in the contract unit price for the respective plant pay items.

All costs associated with furnishing, installing and maintaining the woody and perennial plant materials shall be paid for at the unit price per each of the individual plant pay items identified in the Schedule of Quantities.

### PLANTING MIXTURE – TOPSOIL FURNISH AND PLACE, 18" AND COMPOST FURNISH AND PLACE, 2"

This work shall consist of furnishing and placing planting mixture in accordance with Section 211 of the Standard Specifications except as modified herein.

All planting areas designated per plan shall receive a planting mixture at a depth of 20 inches consisting of 18 inches of topsoil imported from off-site and 2 inches of compost. The Contractor shall place the material at the depths indicated, hand till thoroughly until compost is fully incorporated into the topsoil and mixture is uniform, and gently compact as needed to eliminate air pockets. Excavation for placement of topsoil and compost shall be included in the quantities and the unit price for Earth Excavation.

This work, including finishing material, tilling, and compacting, associated with placing planting mixture in the planting beds designated on the plans will be measured and paid for at the contract unit price bid per square yard for TOPSOIL FURNISH AND PLACE, 18" and COMPOST FURNISH AND PLACE, 2".

#### <u>MULCH</u>

This work shall consist of furnishing and installing shredded hardwood mulch in accordance with Section 253 and Section 254 of the Standard Specifications. Mulch for all planting beds shall be hardwood bark mulch, derived from deciduous hardwood trees free of disease and insects. Particle sizes shall be no longer than 3" in length. The mulch shall be mechanically screened and/or shredded for uniform size. Submit a sample for review and written approval by the Landscape Architect a minimum of 14 days prior to delivery.

This work shall be measured in length and width and the area computed in square yards and paid for at the contract unit price per square yard for MULCH for the type of material specified on the plans.

#### REMOVE SIGN COMPLETE

This work shall consist of the complete removal and disposal of the "Welcome to Normal" sign, luminaire, appurtenances, and foundation as indicated in the plans at approximately Sta. 6+72. The existing electrical service associated with the sign shall be maintained and protected for potential future use by the Town.

The existing sign luminaire and appurtenances shall be removed, and the existing feeder conduit and circuit wiring shall be safely secured in place for future use by the Town. Disconnect the feeder wiring at the source. Provide waterproof terminations on the conductor ends at the existing luminaire. Waterproof terminations shall be according to Standard Specification 1066.06(b). Provide a 12" X 12" composite concrete handhole to protect the conduit and wiring ends at the sign location. Composite concrete handhole shall be according to Standard Specification Section 814 and Highway Standard 814001-03. Removal of the luminaire and appurtenances, termination of cable ends and composite concrete handhole shall be included in this pay item.

This work required by this special provision will be measured and paid at the contract unit price per each for REMOVE SIGN COMPLETE.

#### **IRRIGATION SLEEVES**

This work shall consist of furnishing and installing the irrigation sleeve as shown on the plan sheets and details.

This work shall be measured in length and paid for at the contract unit price per foot for IRRIGATION SLEEVES.

#### IRRIGATION SYSTEM

This work shall consist of furnishing and installing the complete irrigation system including but not limited to the Irrigation System Controller, Polyvinyl Chloride (PVC) Plastic Pipe of the diameters noted, valve box assembly, quick couplers, irrigation control wire in 2" conduit, point of connection, meter, pump, RPZ backflow device, and heads per the details and plans. The work shall include as shown on the plans:

#### Controller

- One Rainbird ESPLXME2P 12 Station outdoor controller with factory installed PRO Smart Module, in LXMM-LXMMPED Powder Coated Metal Cabinet with Pedestal.
- Complete electrical connection to the controller within the metal cabinet.

See irrigation plans and details for location and installation information.

#### PVC Class 200 Pipe 1", 1.5", 2" or 2.5"

All PVC piping within this system shall be PVC Type I-SDR21 (Class 200) conforming to ASTM D2241, "Specifications for PVC Plastic Pipe", with diameters as shown on the plans. Pipe shall have solvent weld sockets. All pipe shall be from the same manufacturer. Approved manufacturers are:

- Crestline
- Cantex
- Eagle

Work includes all necessary fittings, excavation, and backfilling per the irrigation plans and details.

#### Valve Box Assembly, Quick Coupler

- Rainbird Quick Coupling Valve, Model No. 44-NP-ACME
- Rainbird 6" Round Series Valve Box, Model No. VB-6RND
- Rainbird Valve Box Locking System, Model No. VB-LOCK-H
- Gravel sump per details.

Work includes all necessary fitting, excavation, and backfilling as shown on the irrigation plans and details.

#### Irrigation Control Wire in 2" Conduit

This work shall be in accordance with Section 873 of the Standard Specifications and consists of furnishing and installing irrigation control wire in 2" conduit.

Work includes all necessary fitting, excavation, and backfilling to complete the installation.

#### Irrigation Point of Connection, Meter, Pump, and RPZ Backflow Device

- Irrigation tap to the Town owned water main. The Town Water Department will make the tap. The Contractor shall furnish all material and make all required excavations.
- Water meter per state and local codes.
- RPZ Backflow Prevention Device per state and local codes.
- Booster Pump per the Irrigation Schedule on the plans.
- Stainless Steel Enclosure to house the meter, RPZ backflow prevention device, and Booster Pump.

The contractor shall take a pressure reading (psi) once the new irrigation tap is installed and then provide shop drawings which provides the final size and layout of the booster pump along with the water meter and RPZ Backflow Prevention Device. The final assembly shall produce a minimum of 50 psi working pressure using the static pressure from the water main and the booster pump. The Contractor shall not proceed with installation of the irrigation system until shop drawings have been approved.

Work includes all necessary fitting, excavation, and backfilling per the irrigation plans and details.

#### Irrigation Heads

Furnish and install irrigation heads and swing joints as called out in the irrigation schedule and irrigation details. All swing joints shall be from the same manufacturer. All heads shall be from the same manufacturer.

Approved manufacturers for heads and swing joints:

- Rainbird
- Hunter

Work includes all necessary fittings, excavation, and backfilling per the irrigation plans and details. The contractor shall adjust heads to provide head-to-head coverage once the system is operational.

All irrigation system components and appurtenances as indicated in the plans and herein shall be measured and paid for at the contract Lump Sum price for IRRIGATION SYSTEM SPEICAL.

#### RUBBLIZING PCC PAVEMENT

<u>Description.</u> This work shall consist of rubblizing the existing Portland cement concrete (PCC) pavement in accordance with applicable portions of Section 441 of the Standard Specifications and as modified herein.

<u>Materials.</u> Aggregate replacement material, for areas of approximately 1 sq m (10 sq ft) or less, shall be a class D quality (or better) crushed stone, crushed slag, crushed concrete, or crushed gravel meeting a CA 6 or CA 10 gradation according to Section 1004 of the Standard Specifications. Bituminous concrete mixture used for repairs shall be the same as noted in the mixture requirements for mainline binder.

Equipment. Equipment shall be according to the following Articles of Section 1100:

(c) Multi-head Breaker (MHB). The equipment shall consist of a self-contained, self-propelled MHB. Hammer heads shall be mounted laterally in pairs with half the hammers in a forward row and the remainder diagonally offset in a rear row so that there is continuous pavement breaking from side to

side. This equipment shall have the capability of rubblizing pavement up to 4 m (13 ft) in width in a single pass. Hammer drop height shall have the ability to be independently controlled. (Note 3)

(d) Resonant Breaker. The equipment shall consist of a self-contained, self-propelled resonant frequency pavement breaking unit capable of producing low amplitude, 8,880 N (2,000 lb) blows at a rate of not less than 44 per second.

(e) Z-Pattern Steel Grid Roller. The equipment shall consist of a self-contained, self-propelled vibratory steel wheel roller with a Z-pattern grid cladding bolted transversely to the surface of the drum. The vibratory roller shall have a minimum gross weight of 9 metric tons (10 tons).

Note 1. The vibratory roller shall have a minimum gross weight of 9 metric tons (10 tons). Note 2. The pneumatic tired rollers shall develop a compression of not less than 50 N/mm (300 lb/in.), nor more than 90 N/mm (500 lb/in.), of width of the tire tread in surface contact. Note 3. When the MHB is used, a Z-pattern steel grid roller shall be used for additional particle break down as described herein.

#### **Construction Requirements:**

<u>General.</u> Rubblization operations shall not take place over new storm sewer laterals with Class D Patches. For concrete patches that are not over new storm sewer laterals, it shall be rubblized. The Engineer will review the removal of any unstable material and method of replacement.

The Contractor shall prevent damage to underground and above ground utilities, drainage structures, and vehicular traffic during rubblizing. The Contractor shall provide a protective screen or other approved method on equipment to prevent flying material or debris from damaging adjacent vehicular traffic.

PCC pavement or other PCC appurtenances to remain in place shall be severed from the pavement to be rubblized with a full depth saw cut. Rubblized pavement less than or equal to 1 sq m (10 sq ft) dislodged by construction traffic shall be repaired with aggregate replacement material and compacted prior to the paving operation. Rubblized pavement greater than 1 sq m (10 sq ft) dislodged by construction traffic shall be repaired with bituminous concrete binder mixture.

Reinforcement shall be left in place, except that reinforcement projecting from the surface after breaking or compaction shall be cut off below the surface and removed. Any loose joint fillers, expansion material, or other similar items shall also be removed.

<u>Pavement Breaking.</u> Above the reinforcing steel or upper one-half of the pavement, the equipment shall break the pavement such that at least 75 percent of the pieces are a maximum of 75 mm (3 in.). Below the reinforcing steel or in the lower one-half of the pavement, at least 75 percent of the pieces shall be a maximum of 225 mm (9 in.). Concrete to steel bond shall be broken. Uniform breaking shall be maintained through successive passes of the breaking equipment.

Breaking shall be accomplished by Method 1 as defined as follows:

• Method I - This method uses the MHB and Z-pattern steel grid roller to break the pavement as specified herein.

The Contractor shall complete a strip for evaluation by the Engineer. To ensure the pavement is being broken to the specified dimensions; the Contractor shall excavate a broken area of 1 sq m (10 sq ft) in two separate locations during the first day of breaking as indicated by the Engineer. Modifications to the breaking procedure must be made if the size requirements are not met. These excavations may be repaired with replacement material. If breaking procedures or conditions change, additional excavations to review the broken pavement dimensions shall be made, as indicated by the Engineer.

Any large concrete pieces that result from inadequate breaking shall be treated as follows:

Size and Location of Pieces	Action
Greater than 225 mm (9 in.) at surface of broken pavement.	Reduce size to under 225 mm (9 in.) or remove and replace.
Greater than 300 mm (12 in.) steel or lower 1/2 of pavement.	Reduce size to under 300 mm below (12 in.) or remove and replace. broken

Unsuitable or unstable material encountered during the breaking process shall be removed and disposed of according to Article 202.03 of the Standard Specifications. Areas of approximately 1 sq m (10 sq ft) or less may be repaired by use of aggregate replacement material. Larger unstable areas require removal and replacement as indicated by the Engineer. Following subgrade repairs, bituminous concrete binder mixture shall be placed to the depth of the original PCC pavement and compacted to the satisfaction of the Engineer.

<u>Compaction.</u> Prior to placing the hot-mx asphalt overlay, the complete width of the broken pavement shall be compacted by vibratory steel wheel and pneumatic tired rollers in the following sequence:

After breaking:

- 1. Minimum of four passes with Z-pattern steel grid roller (only with the MHB).
- 2. Four passes with a vibratory roller.
- 3. Two passes with a pneumatic-tired roller.

The Contractor shall not trim the broken or rubblized pavement or otherwise attempt to grade the broken or rubblized pavement to improve grade lines.

Immediately prior to overlay:

Two passes with a vibratory roller.

Any unstable material encountered while compacting or under construction traffic shall be treated as defined in the section entitled Pavement Breaking. If a large area of unstable material is identified during the rubblizing process, work shall be halted, and the Engineer notified. Any depressions greater than 50 mm (2 in.) in depth shall be filled with replacement material and compacted. When specified by the Engineer, replacement material shall be used to re-establish the pavement crown. Water may be used to aid in compaction of the replacement material, when approved by the Engineer.

<u>Opening Roadway to Traffic.</u> Public traffic will not be allowed on the rubblized pavement before the required binder layers are in place, except at crossovers and/or access points. Public traffic will not be allowed on a rubblized crossover or access point for more than 24 hours. Maintenance of crossovers and/or access points shall be as specified by the Engineer. Crossovers and/or access points shall be maintained in the same compacted state as the other areas until the hot-mix asphalt overlay is in place. Construction traffic shall be limited to delivery of materials directly ahead of the paver.

<u>Paving Limitations.</u> A tracked paver shall be used to place the first lift of hot-mix asphalt binder over the prepared rubblized pavement. During stage construction, the overlay width shall be such that it will not interfere with subsequent rubblizing operations. At a given location, the overlay shall be placed within 48 hours of the pavement breaking operation. If rain occurs between rubblizing and paving, the rubblized pavement shall be dry and stable to the satisfaction of the Engineer before the paving operation begins.

If a material transfer device is proposed, the Contractor shall submit equipment specifications with axle loading configurations and proposed paving sequence to the Engineer three weeks prior to paving. The Engineer will provide any equipment restrictions based on device loadings and proposed paving sequence.

<u>Method of Measurement.</u> Rubblizing will be measured for payment in square yards of existing pavement in place.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per square yard for RUBBLIZING PORTLAND CEMENT CONCRETE PAVEMENT – METHOD 1.

Any required removal of unsuitable or unstable material, subgrade repair, and hot-mix asphalt placement will be paid for according to Article 109.04 of the Standard Specifications.

Action taken to address any large concrete pieces resulting from inadequate breaking will not be paid for separately.

#### PORTLAND CEMENT CONCRETE PAVEMENT (JOINTED)

This work shall be performed in accordance with Section 420 of the Standard Specifications and as noted herein. Joints shall be provided as indicated in the Jointing Plans and Details. Joints across main line travel lanes shall be perpendicular to the centerline.

All work required to perform the necessary jointing operation shall be available to begin sawing no later than four hours after the paving operation begins. Said operation shall start four hours after paving begins unless excess raveling occurs, or unless otherwise approved by the Engineer. The Contractor shall replace sawing blades as needed and coordinate timing of sawing, so raveling does not occur. The Contractor shall provide the necessary work needed to carry on the sawing at the same rate per longitudinal foot as the paving operation.

Trucks and mixer trucks shall operate and pour from adjacent lanes and adjacent access due to tie bar and dowel bar design and locations. The Contractor shall be responsible for all costs associated with facilitating trucks to pour from adjacent lanes and adjacent access.

Curb and gutter is to be formed in a separate operation from the pavement. Monolithic curb and gutter will not be permitted.

All epoxy coated tie bars and epoxy coated dowel bars shall be furnished and installed according to the typical section notes and standards shown in the plans and shall be included in the cost for PORTLAND CEMENT CONCRETE PAVEMENT (JOINTED) of the depth specified. All construction joint tie bars shall be drilled and grouted in place unless otherwise approved by the Town and Engineer.

Final finish shall be Type B, except burlap drag or light broom may be substituted for the artificial turf drag. Surface testing shall be in accordance with Section 407 of the Standard Specifications except that the pavement shall treated as Miscellaneous Pavement and a sixteen (16) foot straightedge set to a ¼ inch tolerance shall be used for surface testing. The Percent within Limits method will be used to determine the tolerance in thickness per Article 407.10 (a) of the Standard Specifications, with the exception that the TPF (Total Pay Factor) for the pavement shall not exceed 100 percent.

This work shall include all saw joints, hot applied joint sealer, expansion joints and P.C. concrete pavement connector sleeper slab, and all work to complete in place. All work shall be included in the contract unit price bid per square yard for PORTLAND CEMENT CONCRETE PAVEMENT (JOINTED) of the depth specified.

The Contractor is responsible to build the project to the lines and grades indicated on the typical sections and plans and match existing pavement grades accordingly. When the average pavement thickness is greater than or equal to the thickness specified in the plans, payment shall be made at the contract unit price per square yard without any adjustment or increase.

Uncontrolled cracking of concrete pavement is considered to be the Contractor's responsibility of work. The Contractor shall remove and complete all panels which have uncontrolled cracking and replace the work to the condition required by contract and shall bear all the expense and costs to do so. The pavement will be repaired prior to Final Acceptance according to Article 420.05(c)(1)(c), (d), and (e).

Opening the roadway to traffic does not relieve the Contractor of the responsibility of repairing the uncontrolled cracking by the method of removal and replacement. The Contractor is responsible for all pavement until Final Acceptance of the project, and in accordance with the Contract Bond time period associated with the project.

Pavement and Shoulders: Add the following to Articles 420.03, 421.03, and 483.03:

"The Contractor shall submit to the Engineer, for approval before paving, the proposed internal type vibrator spacing for the paver. The Contractor shall also provide the proposed vibrator operating frequencies for a paving speed greater than or equal to 3 ft./min. and a paving speed less than 3 ft/min."

Add the following to Article 420.07:

"When the surface temperature, as measured on the surface with a device as approved by the Engineer, of the Stabilized Sub-base is 115°F or greater the Contractor shall spray the Stabilized Sub-base with a water mist with equipment and methods that meet the approval of the Engineer. The Stabilized Sub-base shall be cooled below 115°F prior to paving on

top. The water spray shall not produce excessive water runoff or leave puddles on the Stabilized Sub-base at the time of paving. All cooling shall be completed a minimum of 10 minutes prior to paving. The surface temperature shall be monitored during the paving operation to determine if the Stabilized Sub-base requires re-spraying.

The water used shall meet the requirements of Section 1002. "Portland Cement Concrete: Revise Article 1020.02 (d) to read:

"(d) Coarse Aggregate (Note 1) ......1004.01 – 1004.02"

Add the following to Article 1020.02:

"Note 1. For pavement, median, curb, gutter, combination curb and gutter and concrete barrier, the freeze-thaw rating expansion limit for the coarse aggregate shall be a maximum of 0.040 percent according to Illinois Modified AASHTO T 161, Procedure B."

Revise the curing table of Article 1020.13 as follows:

"The curing period for pavement, median, curb, gutter and combination curb and gutter shall be a minimum of 7 days. At least 7 days of curing are required before opening the pavement to any construction or regular traffic."

Revise the first sentence of the second paragraph of Article 1020.13 (a)(4) to read:

"Membrane curing shall be completed within ten minutes after tining or as required by the Engineer."

Revise the second paragraph of Article 1020.14 (a) to read:

"The temperature of concrete immediately before placement shall be a minimum of 50 °F (10 °C) and a maximum of 89 °F (31.7 °C). If the temperature exceeds 89 °F (31.7 °C), concrete production will cease until appropriate corrective is taken to the satisfaction of the Engineer."

Revise the third paragraph of Article 420.05 (a) and the second paragraph of Article 420.05 (c)(1), to read:

"Sawing of the joints shall commence as soon as the concrete has hardened sufficiently to permit sawing without raveling, generally between 8 to 24 hours, and shall proceed at the same rate as the paving operation or as indicated by the Engineer. The sawing operation shall cease if any raveling, chipping, or spalling are observed. The Engineer shall be the final judge of the sufficiency of the pavement curing to prevent raveling, chipping, or spalling. Sawing shall commence again upon the approval of the Engineer and continue in a workmanlike manner until all joints are complete or raveling again occurs. All joints shall be sawed to the depth shown on the plans before uncontrolled shrinkage cracking takes place. If determined necessary by the Engineer, the sawing operations shall be carried on both during the day and night, regardless of weather conditions."

This work shall be measured and paid at the contract unit price per square yard for PORTLAND CEMENT CONCRETE PAVEMENT (JOINTED) of the depth specified and HIGH-EARLY

STRENGTH PORTLAND CEMENT CONCRETE PAVEMENT of the depth specified according to locations shown and described in the plans.

#### STRIP REFLECTIVE CRACK CONTROL TREATMENT

This work shall be in accordance with IDOT Bureau of Local Roads Recurring Special Provision LRS19 and Strip Reflective Crack Control Treatment shall be System A.

#### ISLAND REMOVAL

This work shall consist of the complete removal of existing concrete island pavement as noted on the plans in accordance with Section 440 of the Standard Specifications. This work shall be measured and paid for at the contract unit price bid per square foot for ISLAND REMOVAL.

#### ISLAND PAVEMENT

This work shall consist of the construction of concrete islands at the locations and in accordance with the types and details shown on the plans. Work shall also be in accordance with Section 606 of the Standard Specifications. All work as described herein shall be paid for at the contract unit price per square yard for ISLAND PAVEMENT (6").

#### CONCRETE MEDIAN SURFACE

This work shall consist of the construction of concrete medians at the locations and in accordance with the types and details shown on the plans. Work shall be in accordance with Section 606 of the Standard Specifications. All work as described herein shall be paid for at the contract unit price per square foot for CONCRETE MEDIAN SURFACE, 6 INCH.

#### CONCRETE BARRIER MEDIAN

This work shall be performed in accordance with Section 606 of the Standard Specifications for Road and Bridge Construction, the plan details, and as noted herein. Proposed median work shall be in accordance with the latest version of Standard 606301.

The proposed back of curb and curb flowline shall match the existing curb head heights to allow for the proposed reject (dry) gutter. The thickness of the curb and median shall match the existing pavement structure. Subbase Granular Material, Type B 12", shall be placed under the concrete barrier median. This work will not be paid for separately but will be considered as included in the contract unit prices per square foot for CONCRETE BARRIER MEDIAN and no additional compensation will be allowed.

All work as described herein shall be paid for at the contract unit price per square foot for CONCRETE BARRIER MEDIAN.

#### COMBINATION CONCRETE CURB AND GUTTER

This work shall be performed in accordance with Section 606 of the Standard Specifications for Road and Bridge Construction, the plan details, and as noted herein. Proposed curb and gutter work shall be in accordance with the latest version of Standard 606001, including dowel bar placement.

The combination concrete curb and gutter shall be sawed or scored at intervals coinciding with the joint intervals of the adjoining concrete pavement. Expansion joints in curb and gutter shall also be provided where expansion joints are located in pavement. Maximum spacing of saw joints shall be 12 feet. Expansion joints with dowel bars in curb and gutter shall be placed at all RPC's, on both sides of drainage structures as detailed in Standard 606001, and all construction joints. The minimum joint depth of the gutter shall be 2 inches and on the curb shall be 1 inch. Two No. 4 reinforcing bars shall be placed across all water or sewer trench crossings. These bars shall be a minimum of 10 feet long and shall be long enough to obtain at least 2 feet of embedment on either side of trench.

All work required to perform the necessary jointing operation shall be available to begin sawing no later than four hours after the paving operation begins. Said operation shall start four hours after paving begins unless excessive raveling occurs, or unless otherwise approved by the Engineer. The Contractor shall replace sawing blades as needed and coordinate timing of sawing, so raveling does not occur. The Contractor shall provide the necessary work needed to carry on the sawing at the same rate per longitudinal foot as the paving operation.

Combination concrete curb and gutter shall be formed and poured as a separate operation for the pavement. Monolithic construction shall not be allowed.

All joints in the curb and gutter shall be cleaned and sealed with stiff (NP) gray colored material matching the color of the concrete and meeting the requirements of Article 1050.03 of the Standard Specifications for Road and Bridge Construction. Any other proposed joint sealer shall be reviewed by the Engineer and Town prior to use.

All costs shall be included in the contract unit price bid per foot for COMBINATION CONCRETE CURB AND GUTTER of the type specified.

#### CURB AND GUTTER TRANSITIONS AND THICKNESS

Whenever it is necessary to make a smooth connection between the proposed curb or curb and gutter and the existing curb and gutter, the Contractor shall vary the horizontal and/or vertical dimensions of the proposed curb or curb and gutter as indicated by the Engineer. This work will not be paid for separately but will be considered as included in the contract unit prices for the various curb and gutter pay items and no additional compensation will be allowed.

#### EXPANSION JOINTS

Expansion Joints shall be placed at 50-foot intervals and between pours in sidewalks. Expansion Joints shall be placed at RPC's, P.C.'s and P.T.'s, on each side of drainage structures as detailed in Standard 606001, and in curb and gutter and pavement and at maximum 1,000 foot intervals and

as shown on the plans. Joints in pavement shall be made with 2-inch thick preformed closed cell plastic joint filler gray in color to match the concrete meeting the requirements of Article 1051 of the Standard Specifications. The cost of the expansion joints shall be included in the contract unit bid per square foot for sidewalk, per foot for curb and gutter and per square yard for pavement.

Expansion joints in pavement shall be supported by a P.C. Concrete Pavement Connector Sleeper Slab, per the detail in the plans. The P.C. Concrete Pavement Connector Sleeper Slab and expansion joint shall not be paid for separately but shall be included in the cost bid per square yard for pavement.

#### SAW JOINTS

This work shall include full-depth sawing of existing pavement or other existing items where the proposed project will match to existing. All work shall be performed in accordance with Section 440 of the Standard Specifications. Saw joints shall be made with a saw blade capable of providing a smooth, sharp edge. Use of milling machines for the final saw cut edge will not be allowed.

Saw joints will not be paid for separately but shall be included in the respective removal items in the contract. For any item not paid for separately as a removal item, the saw joint cost shall be included in the contract unit price bid per square yard for PORLAND CEMENT CONCRETE PAVEMENT (JOINTED) or HOT-MIX ASPHALT PAVEMENTS.

Saw joints for improvements including new pavement, curb and gutter, patching, driveway pavement shall be included in the unit cost of those pay items. No separate payments shall be made for saw joints on existing surfaces or new surfaces.

#### DETECTABLE WARNINGS

This work shall be done in accordance with Section 424 of the Standard Specifications except as modified herein. Detectable warning plates located within the multi-use path crossings at intersection shall be Neenah Foundry Company cast iron plates or East Jordan Duralast cast iron plates. This work will be paid for at the contract unit price per square foot for DETECABLE WARNINGS.

#### WATER VALVES TO BE ADJUSTED

This work shall be in accordance with applicable portions of Sections 561, 562, 563, 564, and 565 of the Standard Specifications for Road and Bridge Construction.

This work shall include furnishing and installing all necessary items to complete the adjustment of the existing auxiliary or gate water valves to the finish grade of the project improvements at locations shown in the plans. This work will be measured and paid for at the contract unit price per each for WATER VALVES TO BE ADJUSTED and no additional compensation shall be allowed.

## WATER VALVES TO BE MOVED

This work shall be in accordance with applicable portions of Sections 561, 562, 563, 564, and 565 of the Standard Specifications for Road and Bridge Construction.

This work shall include furnishing and installing all necessary items to complete the moving of the existing auxiliary, service line, or gate water valves to accommodate the project improvements at locations shown in the plans. This work will be measured and paid for at the contract unit price per each of the associated fire hydrant for FIRE HYDRANTS TO BE REMOVED AND REPLACED or FIRE HYDRANTS TO BE MOVED.

## FIRE HYDRANTS TO BE MOVED

For existing fire hydrants that need to be moved horizontally, this work shall consist of moving the existing fire hydrant at locations specified in the plans in accordance with the applicable portions of Section 564 of the Standard Specifications, The Standard Specification for Sewer and Water Main Construction in Illinois, the latest edition of, "The Town of Normal "Recurring Special Provisions for Water Main Improvements", the City of Bloomington "Design and Construction Standards for Water Distribution and Supply System", and these Special Provisions. All materials used shall be from an Illinois Department of Transportation approved source.

All new and existing materials affected by the movement shall be disinfected. Disinfection shall be in strict accordance with the Standard Specifications for Water and Sewer Construction in Illinois, latest edition.

Any new Water Main and fittings and appurtenances necessary to complete the horizontal movement of the fire hydrant shall be included in the contract unit price bid per each for FIRE HYDRANTS TO BE MOVED. No additional compensation shall be allowed.

All costs associated with horizontal movement of fire hydrants and associated disinfection at locations specified in the plans shall be included in the contract unit bid price per each for FIRE HYDRANTS TO BE MOVED.

## FIRE HYDRANTS TO BE ADJUSTED

For existing fire hydrants that need to be raised up in elevation (adjustment not to exceed 1 foot), this work shall consist of adjusting the existing fire hydrant at locations specified in the plans in accordance with the applicable portions of Section 564 of the Standard Specifications, The Standard Specification for Sewer and Water Main Construction in Illinois, the latest edition of, "The Town of Normal "Recurring Special Provisions for Water Main Improvements", the City of Bloomington "Design and Construction Standards for Water Distribution and Supply System", and these Special Provisions. All materials used shall be from an Illinois Department of Transportation approved source.

All new and existing materials affected by the adjustments shall be disinfected. Disinfection shall be in strict accordance with the Standard Specifications for Water and Sewer Construction in Illinois, latest edition.

Any new Water Main and fittings and appurtenances necessary to complete the adjustment of the fire hydrant shall be included in the contract unit price bid per each for FIRE HYDRANTS TO BE ADJUSTED. No additional compensation shall be allowed.

All costs associated with adjustment of fire hydrants and associated disinfection at locations specified in the plans shall be included in the contract unit bid price per each for FIRE HYDRANTS TO BE ADJUSTED.

### FIRE HYDRANTS TO BE REMOVED AND REPLACED

This work shall consist of removing and replacing fire hydrants at locations specified in the plans in accordance with the applicable portions of Section 564 of the Standard Specifications, The Standard Specification for Sewer and Water Main Construction in Illinois, the latest edition of, "The Town of Normal "Recurring Special Provisions for Water Main Improvements", the City of Bloomington "Design and Construction Standards for Water Distribution and Supply System", and these Special Provisions.

For existing fire hydrants that need to be reduced in elevation, a new fire hydrant shall be furnished and installed at proposed grade or within five (5) inches above proposed grade. The removal and salvage of existing hydrant and new fire hydrant shall be paid for at the unit price bid per each for FIRE HYDRANTS TO BE REMOVED AND REPLACED.

All new and existing materials affected by the adjustments shall be disinfected. Disinfection shall be in strict accordance with the Standard Specifications for Water and Sewer Construction in Illinois, latest edition.

Any new Water Main and fittings and appurtenances necessary to complete the removal and installation of the fire hydrant shall be included in the contract unit price bid per each for FIRE HYDRANTS TO BE REMOVED AND REPLACED. No additional compensation shall be allowed.

All costs associated with removing and replacing fire hydrants and associated disinfection at locations specified in the plans shall be included in the contract unit bid price per each for FIRE HYDRANTS TO BE REMOVED AND REPLACED.

Existing fire hydrants not reused after removal shall remain the property of the Town of Normal or City of Bloomington, respectively, and delivered to the respective water department facility. A written release shall be obtained from the department as evident of delivery.

### REMOVE EXISTING RIPRAP

This works consists of the removal and disposal of existing riprap on either side of the commercial entrance located at Sta 57+20.82 and further detailed in the plans. This work item shall be performed in accordance with the applicable sections of the Standard Specifications, and as indicated by the Engineer. The work required by this special provision will be measured and paid at the contract unit price per square yard for REMOVE EXISTING RIPRAP.

# **REMOVE EXISTING FLARED END SECTION**

This works consists of the removal and disposal of existing flared end sections at the locations specified in the plans. This work item shall be performed in accordance with the applicable sections of the Standard Specifications, and as indicated by the Engineer. This work required by this special provision will be measured and paid at the contract unit price per each for REMOVE EXISTING FLARED END SECTION.

## EXISTING DRAINAGE MATERIALS TO BE SALVAGED

All removed castings, existing frames, grates, and lids not reused for manhole or inlet adjustment that are of salvageable value, as determined solely by the Town of Normal, shall not be disposed of by the Contractor, but shall remain the property of the Town. These items shall be carefully removed by the Contractor and delivered to the Town of Normal Public Works Garage at 1301 Warriner Street. The Contractor shall obtain a written release from the Department of Public Works as evidence of delivery. The cost of such removal and delivery shall be included in the cost of the appropriate contract removal or adjustment pay item. All existing material not of salvageable value shall be disposed of offsite by the Contractor at the Contractor's expense.

The Town of Normal shall have the sole authority to make the determination as to which existing materials are salvageable. Such determination shall be binding on all parties involved.

## STORM SEWERS, WATER MAIN QUALITY PIPE

This work shall consist of furnishing and installing storm sewer to meet watermain standards, as required by the IEPA requirements and at locations shown in the plans. The work shall be performed in accordance with applicable parts of Section 550 of the Standard Specifications, applicable sections of the current edition of the IEPA Regulations (35 III. Adm. Cod 653.119), the applicable sections of the current edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", and as herein specified.

This provision shall govern the installation of all storm sewers which do not meet IEPA criteria for separation distance between storm sewers and watermains. Separation criteria for storm sewers placed adjacent to water lines are as follows:

- 1) Water lines shall be located at least 10 feet horizontally from any existing or proposed drain, storm sewer or sewer service connection.
- 2) Water lines may be located closer than 10 feet to a sewer line when:
  - a. local conditions prevent a lateral separation of 10 feet and
  - b. the water line invert is 18 inches above the crown of the sewer and
  - c. the water line is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.
- 3) A water line shall be separated from a sewer so that its invert is a minimum of 18 inches above the crown of the drain or sewer whenever water lines cross storm sewers, sanitary

sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water line located 10 feet horizontally of any sewer or drain crossed.

When it is impossible to meet 1, 2 or 3 above, the storm sewer shall be constructed of PVC pipe equivalent to watermain standards of construction.

Storm sewers constructed to meet watermain standards shall be constructed of the following pipe materials:

### Plastic Pipe:

Plastic pipe shall be marked with the manufacturer's name (or trademark); ASTM or AWWA specification; Schedule Number, Dimension Ratio (DR) Number or Standard Dimension Ratio (SDR) Number; and Cell Class. The pipe and fittings shall also meet NSF Standard 14 and bear the NSF seal of approval. Fittings shall be compatible with the type of pipe used. The plastic pipe options shall be in accordance with the following:

- 1. Polyvinyl Chloride (PVC) conforming to ASTM D 1785. Schedule 80 is required for all pipe sizes, except when the pipe is to be threaded, and then it shall be Schedule 120. It shall be made from PVC compound meeting ASTM D 1784, Class 12454.
- 2. Polyvinyl Chloride (PVC) conforming to ASTM D 2241. SDR 21 or less is required for all pipe sizes. It shall be made from PVC compound meeting ASTM D 1784, Class 12454.
- 3. Polyvinyl Chloride (PVC) conforming to ANSI/AWWA C900. SDR 21 or less is required for all pipe sizes. It shall be made from PVC compound meeting ASTM D 1784, Class 12454.
- 4. Polyvinyl Chloride (PVC) conforming to ANSI/AWWA C905. DR 21 or less is required for all pipe sizes. It shall be made from PVC compound meeting ASTM D 1784, Class 12454.

Joining of plastic pipe shall be by push-on joint in accordance with the pipe manufacturer's instructions and industry standards.

Elastomeric seals (gaskets) used for push-on joints shall comply with ASTM Standard F477.

Payment for all work required by this special provision will be made at the contract unit price per foot for STORM SEWERS, WATER MAIN QUALITY PIPE, of the type and diameter specified.

## STORM SEWER GRADE CHANGE

The Contractor shall be aware that at times the Engineer may require a change in storm sewer elevation due to a utility or other obstruction after consultation with the design Engineer of Record. If such a grade change does not alter the pipe type, any additional excavation, sheeting, or shoring required shall be considered included in the cost of the storm sewer. However, if the revised grade results in a change in pipe type, as set forth in Article 550.03 of the Standard Specifications, payment will be for the revised type of storm sewer.

## STORM SEWERS AND PIPE CULVERTS

All Storm Sewers and Pipe Culverts shall be provided in accordance with Sections 542 and 550 of the IDOT Standard Specifications and as noted herein. Storm sewers and Pipe Culverts shall be Class A reinforced concrete pipe.

## TYPE 1 FRAME AND LID

This work shall consist of furnishing and installing Type 1 Frame and Lid as noted on the plans and applicable portions of the State Highway Standards, except as modified herein. and details. Type 1 Frame and Lid shall be Neenah Foundry Company NO. R-1772 Manhole Frame with Solid Lid or Open Lid Grate; or East Jordan 1022Z1 Manhole Frame with Type 1020A Solid Lid or 1020M1 Grate. Grates shall be bicycle safe grates. All work shall be in accordance with Section 602 and 604 of the Standard Specifications.

Where proposed solid (closed) lids are located within the proposed multi-use path and sidewalk, the proposed lids shall be non-slip. The proposed non-slip lid shall not be paid for separately but shall be included in the work for the respective drainage structure. The locations are as follows:

Sta. 2+18.00, 84.62' Lt – Drainage Structure M1-1 Sta. 28+22.00, 33.0' Rt – Drainage Structure M1-2 Sta. 62+95.00, 27.73' Rt – Drainage Structure M3-1

## CONNECTION INTO EXISTING OR PROPOSED DRAINAGE STRUCTURES

This work shall include furnishing and installing all necessary items to satisfactorily complete the connection as shown in the plans and as determined by the Engineer. A Concrete Collar shall be constructed in accordance with the detail as shown on the plans where storm sewer, or pipe culverts of differing pipe types connect or where new storm sewer, or pipe culverts connects to existing storm sewer or pipe culverts. Work shall also include plugs utilizing brick, mortar, and concrete in pipes and structures due to adjusted or abandoned items. The work and materials for concrete collars, plugs, and connecting the existing or proposed drain tile, underdrains, culvert, or sewer into the existing or proposed sewer structures, shall not be paid for separately, but shall be included in the work for the respective sewer, underdrains, or drainage structure.

## INLETS TO BE ADJUSTED (SPECIAL)

This work shall consist of removing the existing Frame and Grate Special and replacing with proposed Type 1 Frame, Closed Lid. The contract unit price bid per each for Inlets to be Adjusted (Special) shall include work required to furnish and install the Type 1 Frame, Closed Lid in accordance with Sections 602, 603, and 604 of the Standard Specifications shall govern the adjustment of the Inlet and the Type 1 Frame, Closed Lid.

Existing Frame and Grate (Special) shall be removed and, if no flat slab concrete top is present, a new flat slab concrete top shall be furnished and installed. A proposed Type 1 Frame, Closed lid shall be installed and adjusted to match the proposed roadway surface.

This work shall be paid for at the contract unit price bid per each for INLETS TO BE ADJUSTED (SPECIAL).

### **ADJUSTING FRAMES AND GRATES**

All existing and proposed structure adjustments shall be done with expanded polypropylene (EPP) adjusting rings. The maximum adjustment is 6".

Add the following to Article 602.02 of the Standard Specifications:

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

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

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

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

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

### PROPOSED DRAINAGE STRUCTURES

All new drainage structures shall be cast-in-place concrete or precast concrete.

# MANHOLES TO BE ADJUSTED (SPECIAL)

This work shall consist of removing the existing grate, flat slab top, CMU blocks, and provide manhole barrel adjustment to proposed weir elevation shown in the plans and replacing or providing new MCU blocks (if necessary), flat slab top, and existing grate. The contract unit price bid per each for Manholes to Be Adjusted (Special) shall include all work required to furnish and install the materials and make the required adjustments in accordance with Sections 602, 603, and 604 of the Standard Specifications.

This work shall be paid for at the contract unit price bid per each for MANHOLES TO BE ADJUSTED (SPECIAL).

# MANHOLES TO BE ADJUSTED

This work shall consist of adjusting all the existing storm sewer, sanitary sewer, and utility manholes to the finish grade of the project improvements at locations shown in the plans. This work shall be in accordance with Sections 602, 603, and 604 of the Standard Specifications except as modified herein.

All structure adjustments shall be done with expanded polypropylene (EPP) adjusting rings. The maximum adjustment is 6".

Where existing sanitary sewer manhole and utility manhole solid lids are located within the proposed multi-use path and sidewalk, the existing frame and lid shall be removed and replaced with a new frame and new non-slip solid lid. For sanitary manholes, the frame and lid shall be self-sealing with closed pick hole and meet the Local Agency requirements. For utility manholes, the frame and lid shall meet the utility agency requirements. The new frame and non-slip solid lid shall be included in the cost of adjusting the structure. The removal and salvage of the existing frame and lid, and the furnishing and installation of the new frame and new non-slip solid lid shall be included in the contract unit price bid per each for MANHOLES TO BE ADJUSTED. The locations are as follows:

24+86.0, 58.0' Rt – Sanitary Sewer Manhole 63+48.8, 34.8' Lt – Sanitary Sewer Manhole 66+69.0, 36.4' Lt – Sanitary Sewer Manhole 70+16.1, 44.9' Lt – Utility Manhole 77+66.8, 47.8' Lt – Utility Manhole

This work required by this special provision will be measured and paid at the contract unit price per each for MANHOLES TO BE ADJUSTED.

# MANHOLES TO BE ADJUSTED WITH SPECIAL FRAME AND GRATE

This work shall consist of adjusting all the existing manholes to the finish grade of the project improvements at locations shown in the plans. This work shall be in accordance with Sections 602, 603, and 604 of the Standard Specifications except as modified herein.

All structure adjustments shall be done with expanded polypropylene (EPP) adjusting rings. The maximum adjustment is 6".

This work required by this special provision will be measured and paid at the contract unit price per each for MANHOLES, TO BE ADJUSTED WITH SPECIAL FRAME AND GRATE

## DRAINAGE STRUCTURE REPAIR

The Contractor shall repair existing manhole drainage structures as shown on the plans. The Contractor shall make spot repairs within manhole interior as necessary and as generally described below. Materials and repair methods shall be in accordance with the Standard Specifications.

The Contractor shall inspect and make necessary repairs which may include replacing mortar or mastic joints, replacing mortar connections between pipes and manhole openings, filling cracks, replacing bricks and mortar, isolated formed concrete repair, repairing or replacing manhole adjustment rings or steps, resetting frames and castings, and cleaning debris from manhole structures.

The contract unit price bid per each for the DRAINAGE STRUCTURE REPAIR shall be compensation in full for all work required to complete the necessary repairs in place as described herein and no additional compensation shall be allowed.

# INLETS, SPECIAL, WITH SPECIAL FRAME AND GRATE

This work shall consist of furnishing and installing Inlets with Special Frame and Grate as shown on the details in the plans. The contract unit price bid per each for Inlet, Special, with Special Frame and Grate shall include all work required to furnish and install the inlet in accordance with the details as shown on the plans. Sections 602 and 604 of the Standard Specifications shall govern the construction of the Inlet, Special and the Special Frame and Grate. The Special Frame and Grate (previously known in the Town of Normal as a Type 50) is intended to be used on curb inlets and shall be as shown in the plan detail. Only cast iron grates shall be used. The Special Frame and Grate shall be a bicycle safe grate. Connection of existing storm sewers, and underdrains, where required, to the Inlet Type Special shall be included in the contract unit price.

This work shall also include furnishing and placing a PCC wedge along the backside (entire length) of inlet curb boxes to completely cover gaps at bolt connections to the inlet frame. The PCC wedge shall be vibrated. All work shall be in accordance with Section 606 of the Standard Specifications.

The inside of the inlet and casting junction shall be "finished" when the casting is set. All structure adjustments shall be done with expanded polypropylene (EPP) adjusting rings. The maximum adjustment is 6".

This work shall be paid for at the contract unit price bid per each for INLETS, SPECIAL, WITH SPECIAL FRAME AND GRATE.

# INLETS, TYPE A OR B, WITH SPECIAL FRAME AND GRATE

This work shall consist of furnishing and installing inlets and castings as noted on the plans and details all in accordance with Section 602 and 604 of the Standard Specifications, including flat slab tops for Inlets Type B, if necessary. These items and all associated work shall be measured and paid for at the contract unit price bid per each of the type specified for INLETS, TYPE A, WITH SPECIAL FRAME AND GRATE or INLETS, TYPE B, WITH SPECIAL FRAME AND GRATE.

## MANHOLES, TYPE A, 4'-DIAMETER, WITH SPECIAL FRAME AND GRATE

This work shall consist of furnishing and installing manholes and castings as noted on the plans and details all in accordance with Section 602 and 604 of the Standard Specifications, including flat slab tops, if necessary. These items and all associated work shall be measured and paid for at the contract unit price bid per each for MANHOLES, TYPE A, 4'-DIAMETER, WITH SPECIAL FRAME AND GRATE.

## MANHOLES, TYPE A, 8'-DIAMETER, WITH SPECIAL FRAME AND GRATE

This work shall consist of furnishing and installing Manholes, Type A, 8'-Diameter, with Special Frame and Grate as shown on the details in the plans. The contract unit price bid per each for Manholes, Type A, 8'-Diameter, with Special Frame and Grate shall include all work required to furnish and install the Manhole in accordance with the details as shown on the plans, including flat slab top, if necessary. Sections 602 and 604 of the Standard Specifications shall govern the construction of the Manhole and the Special Frame and Grate. The Special Frame and Grate (previously known in the Town of Normal as a Type 50) is intended to be used on curb inlets and manholes and shall be as shown in the plan detail. Only cast iron grates shall be used. The Special Frame and Grate shall be a bicycle safe grate. Connection of existing storm sewers, existing inlet, and underdrains, where required, to the Manhole shall be included in the contract unit price.

Existing Frame and Grate Special will be removed. Existing inlet will be sawcut to top invert of proposed 8' manhole slab. Provide manhole opening in the bottom slab to match location and dimensions of existing inlet type special approximately 3.5' x 2.5' (to allow for existing inlet box to protrude through and connect to the proposed manhole). Provide for watertight, non-shrink mortar joint and sealant around existing inlet and manhole slab interface connection. Proposed Frame and Grate Special will be placed in the curb line and drain into the manhole. Roadway pipe underdrain, 4" will also drain into this manhole. A 6" hole shall be precast into the side of the manhole to accommodate this 4" pipe underdrain. Controlled Low Strength Material will be placed under and around the manhole to the dimensions shown in the Miscellaneous Details plan sheet.

This work shall be paid for at the contract unit price bid per each for MANHOLES, TYPE A, 8'-DIAMETER, WITH SPECIAL FRAME AND GRATE.

# MANHOLES, TYPE A, 4'-DIAMETER WITH SPECIAL GRATE

This work shall consist of furnishing and installing manholes and castings as noted on the plans and details all in accordance with Section 602 and 604 of the Standard Specifications, including flat slab tops, if necessary. These items and all associated work shall be measured and paid for at the contract unit price bid per each for MANHOLES, TYPE A, 4'-DIAMETER WITH SPECIAL GRATE.

## MANHOLES, TYPE A, 9'-DIAMETER WITH SPECIAL GRATE

This work shall consist of furnishing and installing manholes and castings as noted on the plans and details all in accordance with Section 602 and 604 of the Standard Specifications, including flat slab tops, as necessary. These items and all associated work shall be measured and paid for at the contract unit price bid per each for MANHOLES, TYPE A, 9'-DIAMETER WITH SPECIAL GRATE.

## **INLET FILTERS**

This work consists of furnishing, installing, maintaining and removing inlet filters at gutter inlet and gutter inlet/manhole locations in accordance with the Standard Specifications at locations shown in the plans or as determined by the Engineer. The inlet filters shall be of a non-woven geotextile catch bag type that fits inside the casting, held in place by the casting grate and be of high permeability,  $\geq$  100 gal/min/ft2.

Inlet Filters will be checked by the Resident Engineer weekly and after every rain of  $\ge \frac{1}{2}$ ". If requested by the Engineer, inlet filters shall be cleaned of debris by the Contractor at no additional cost within 24 hours of notification by the Engineer.

Where existing inlets and gutter inlet/manholes within the project limits are to remain in place, Inlet Filters shall be installed and remain until complete ground cover is fully established. Inlet Filters shall also be installed in new inlets and manholes within curb and gutter locations after the frames and grates have been installed and Inlet Filters shall remain in place until complete ground cover is fully established.

This work as described herein shall be measured and paid for at the contract unit price per each, for INLET FILTERS.

# PIPE UNDERDRAINS, TYPE 1, 4"

This work shall be according to Section 601 of the Standard Specifications and the details shown in the plans including excavation, trenching, and backfill material.

Contractor shall furnish and install pipe underdrain supplier recommended fittings to connect proposed pipe underdrains into existing pipe underdrains, existing and proposed inlets, and existing and proposed manholes, where necessary. This work shall not be paid for separately but included in the cost of PIPE UNDERDRAINS, TYPE 1, 4".

Wherever, in the opinion of the Engineer, it is necessary during the construction of the storm sewer system or pipe underdrains to explore and excavate to determine the location and elevation of

existing utilities, culverts, storm sewer, or other underground items, the Contractor shall make exploration and excavation for such purposes. This cost of exploratory excavation will not be paid for separately, but shall be included in the associated storm sewer, inlet, or underdrain pay item requiring the excavation.

This work shall be measured and paid for at the contract unit price bid per foot for PIPE UNDERDRAINS, TYPE 1, 4".

## **REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS**

This work shall consist of removing and disposing of concrete headwalls for pipe drains at locations shown in the plans. All work shall be performed in accordance with Section 501 of the Standard Specifications, except as modified herein.

Any holes or depressions left after removing a concrete headwall that will be under or within two feet of proposed improvements as defined in Article 208.01 of the Standard Specifications, shall be filled with trench backfill as shown on the plans, which is considered incidental to REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS and shall not be paid for separately. The remaining ground surface shall be graded, compacted, and leveled to the satisfaction of the Engineer.

The work required by this special provision will be measured and paid at the contract unit price per each for REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS and no additional compensation will be allowed.

## EXISTING FIELD TILE REMOVAL

This works consists of the removal of a portion of existing field, drain tile at the locations specified in the plans, along with furnishing and installing a new 45 degree elbow fitting and tile extension with trench backfill to tie into proposed Inlet 2-7 located at station 42+25 RT. All work and shall be performed in accordance with applicable portions of Section 611 of the Standard Specifications, and as indicated by the Engineer. The work required by this special provision will be measured and paid at the contract unit price per foot for EXISTING FIELD TILE REMOVAL.

## TEMPORARY EROSION CONTROL

Temporary erosion control systems and maintenance shall be the responsibility of the Contractor. The Contractor shall follow the Erosion Control Plan as shown in the plans and in these special provisions. Systems utilized for temporary erosion control shall be in accordance with Section 280 of the Standard Specifications and the latest revision of Standard 280001. Inlet and Pipe Protection shall be placed at all pipes and inlets, and manholes where indicated in the plans. Perimeter Erosion Barrier and Temporary Ditch Checks shall be placed to prevent silt from leaving the project limits. Inlet Filters shall be placed where indicated in the plans. Temporary Seeding and Mulch Method 2 shall be placed to establish groundcover and stabilize surface soil during construction.

Estimated quantities for these items have been included in the Summary of Quantities. No change in the contract unit price will be allowed for additions or deletions from the estimated quantities. Payment will only be made for items satisfactorily installed, maintained, and removed.

The erosion control devices shall be furnished and installed before commencing construction and shall be removed after complete grass cover is fully established. Upon completion of the project, temporary materials used for temporary erosion control shall be removed by the Contractor and become the property of the Contractor. The Contractor shall also be responsible for cleaning, maintaining and replacing the Temporary Erosion Control items during this project as needed or as requested by the Engineer and prior to acceptance of the project. Additional payment will not be made for maintenance or necessary replacement of Temporary Erosion Control items that may be required during this project.

The Contractor shall certify and follow the Storm Water Pollution Prevention Plan (SWPPP) included with these Special Provisions. Signed copies of the Contactor Certification Statement included with the SWPPP for the Prime Contractor and all Sub-contractors along with other documentation as required in the SWPPP shall be provided to the Town and the Engineer at the Preconstruction Meeting.

## AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS

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

Revise Article 402.10 of the Standard Specifications to read:

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

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

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

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

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

Add the following to Article 402.12 of the Standard Specifications:

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

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

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

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

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

## **TEMPORARY PAVEMENT MARKING REMOVAL**

This work shall consist of removing all applied applications of temporary pavement markings at locations specified in the plans in accordance with the applicable portions of Section 703 of the Standard Specifications.

All costs associated with removing the temporary pavement markings at locations specified in the plans or as indicated by the Engineer shall not be paid for separately, but shall be included in the contract unit bid price per FOOT for TEMPORARY PAVEMENT MARKING, of the size and type specified.

### UNDERGROUND CONDUIT

This work shall consist of furnishing and installing a conduit of the type and size specified, in accordance with Section 810 of the Standard Specifications except as described herein.

When PVC Conduit is required to be spliced to steel conduit sections, a heavy wall set screw connector with a PVC female adapter shall be installed and sealed by duct seal and plastic tape.

A <sup>1</sup>/<sub>4</sub> inch (6 mm) polypropylene pull rope shall be installed in all conduit runs. A minimum of 6 feet of rope shall be provided in each end of a conduit run.

This work shall be considered as included in the contract unit price per FOOT for UNDERGROUND CONDUIT, PVC, of the size specified.

## HANDHOLE TO BE ADJUSTED

This work shall be done in accordance with Sections 602 and 603 of the Standard Specifications. Castings and handholes shall be adjusted and set at the finished grade elevation.

This work will be paid for at the contract unit price per each for HANDHOLE TO BE ADJUSTED.

## HANDHOLE

The covers for the handhole, cast-in-place concrete or composite concrete, shall have recessed lift rings as described in Article 1088.06 of the Standard Specifications.

The handhole cover shall not be held down by hex head bolts or any other means.

(Gulfbox Junction cover shall be held down by the hex head bolts or any other means acceptable to the engineer.)

Concrete handholes shall be cast-in-place or precast. Composite concrete handholes shall not be allowed.

## ELECTRIC CABLE

All signal, lead-in, communication, service cable, and lighting cable shall be tagged with wiring identification markers at each point of access. All handholes, gulfbox junctions, mast arm pole handholes, and controller cabinet shall be considered as points of access.

Wiring identification markers shall be in accordance with Article 1066.07 of the Standard Specifications. The cost associated with this compliance shall be considered as included in the contract unit price per FOOT for ELECTRIC CABLE of the size and type specified.

### DAMAGE TO EQUIPMENT

Any equipment damaged by the Contractor in his/her operations shall be replaced at his/her own expense, and no additional compensations will be allowed.

### ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1/C

This work shall be in accordance with the latest revision of Standard 873001 and the applicable articles of Articles 801.04, 873.04 and 1076.04(e) of the Standard Specifications with the following modifications.

The controller foundation ground rod shall be located in the double handhole rather than in the foundation. All other foundations shall retain their ground rods as shown on the foundation detail sheet.

This work shall be considered as included in the contract unit cost per FOOT for ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C which price shall be payment in full for all work, including clamps, hardware and all equipment required to provide the grounding system described above.

### UNINTERRUPTABLE POWER SUPPLY, STANDARD

The supply and installation of the UPS shall be in accordance with Section 862 of the Standard Specifications in addition to the following:

When the proposed contract requires a Concrete Foundation, Type C or the modification of the existing concrete foundation to Type C dimensions, the proposed UPS cabinet shall be of the NEMA Type III with ground mount dimensions as listed in Article 1074.04 (b)(2)e.

When the proposed contract does not require a Concrete Foundation, Type C or the modification of the existing concrete foundation to Type C dimensions, the proposed UPS cabinet shall be NEMA Type III with piggy back type with dimensions capable of housing batteries only, per the approval of the engineer.

To maintain compatibility with current UPS systems, the UPS systems supplied in this contract shall be Alpha Technologies brand, model FXM 1100 or the pre-approved equivalent.

The inverter/charger, power transfer relay, and the manual bypass shall be installed inside the proposed traffic signal controller cabinet.

The UPS shall be equipped with the ethernet port.

The external battery cabinet shall be attached to the traffic signal controller cabinet via stainless steel bolts, flat washers and nuts of the size that is acceptable to the engineer. The battery cabinet shall be fastened in all four corners to the traffic signal cabinet.

The contractor shall cut an access hole through both adjacent cabinet walls of adequate size to accommodate the UPS cable. The contractor shall install a grommet around the edge of the hole that will fit firmly and protect the cable insulation from damage. The UPS cable shall be routed through the hole.

Compliance with this special provision shall be considered as included in the cost of UNINTERRUPTABLE POWER SUPPLY, STANDARD and no additional compensation will be allowed.

## TRAFFIC SIGNAL POST

This work shall be in accordance with Section 875 of the Standard Specifications except that in addition to the fabric post tightener, a pipe wrench shall also be an acceptable method of screwing the post to the base.

All traffic signal posts shall be aluminum provided with pole-base collars.

The Contractor shall protect the finish of the post by placing wood blocks in the jaws of the pipe wrench or by other means acceptable to the Engineer.

Post shall be field tightened to the base.

The access cover shall be installed in the direction away from traffic.

## MAST ARM MOUNTED TRAFFIC SIGNAL HEAD PLACEMENT

It is the intent of the Owner that the mast arm mounted traffic signal heads be positioned over the middle of the respective traffic lane.

Generally, an exception shall be made of signal heads with left turn indications over directly opposing left turn lanes where "masking" the view of the signal heads may occur. In the case of directly opposing left turn lanes, the mast arm length is designed to provide for the signal head to be located 1ft. offset from the center of the lane towards the respective mast pole creating a 2 ft. separation between opposing outside signal heads.

Occasionally the length of the proposed mast arm will cause a greater offset from the center of the lane and a greater offset between opposing signal heads.

To avoid misalignment of the mast arm mounted signal heads over the traffic lanes, the contractor shall not pre-drill the mounting holes on the mast arm until the final location of the mast arm pole foundation is determined and the foundation constructed.

### MAST ARM DAMPENING DEVICE

This work shall consist of installing a dampening device on mast arms, indicated in the plans, equidistant between the two outermost signal heads. Mast arm dampening devices shall be installed on mast arms that are 40 ft. in length or more.

The dampening device shall consist of a 36" X 72" Type 1 unpainted aluminum sign stock mounted horizontally on top of the mast arm with the 36" length perpendicular to the arm.

This work shall be considered as included in the unit cost each for STEEL COMBINATION MAST ARM ASSEMBLY AND POLE of the size and type specified. No additional compensation will be allowed.

## CONCRETE FOUNDATION, TYPE C

This work shall be in accordance with Section 878 of the Standard Specifications and Standard 878001 of the latest revision with the following exceptions:

The 4 inch gap shown in the detail for Type C foundation in the Standard shall be eliminated and the cabinets shall be attached.

The cable conduit shown in the foundation to route the cable from cabinet to cabinet shall be eliminated.

New cable between the UPS and traffic signal controller cabinet shall access through a grommet protected hole of adequate size once the cabinets are bolted together.

This work shall be considered as included in the contract unit price per FOOT of depth of CONCRETE FOUNDATION, TYPE C.

### SIGNAL HEAD, LED

This work shall be performed according to Section 880 of the Standard Specifications. The mast arm traffic signal heads shall be mounted with sky brackets manufactured by Olsen Aluminum Castings. The LED signal indications shall have a minimum 5-year warranty covering material and labor costs to replace the LED lamps should failure occur prior to the end of the warranty period.

## TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE

This work shall be in accordance with Sections 882 and 1078 of the Standard Specifications except as modified herein.

The traffic signal backplate shall be fabricated from sheet aluminum and shall have a nominal thickness of 0.05 in. (1.3 mm) and shall be according to ASTM B 209, Alloy 5052 or better and shall have matte black finish. The backplate shall be slotted to reduce wind load on the signal head. The slots shall accumulate 20 percent of the total exposed surface area when looking at the front of the signal. The backplate shall be split to allow installation without removal of the signal head from its mounting bracket. The backplate shall be secured to the existing signal head with a sufficient number of screws to prevent failure from wind loading.

A three-inch (3") side strip of reflective sheeting shall be applied to the outside perimeter of the face of the backplate. The reflective tape shall be fluorescent yellow in color and shall consists of Type AZ sheeting and should be shop applied with a pressure roller prior to being installed in the field.

Basis of Payment: This work will be paid for at the contract unit price per each for TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE and shall be payment in full for all work required to remove the existing backplate and furnish and install a traffic signal backplate with reflective tape as described above.

## WIRELESS INTERCONNECT (COMPLETE)

#### Description

This work shall consist of maintaining a complete wireless interconnect system at the locations as shown on the plans. The wireless interconnect system shall be compatible with Econolite controller closed loop systems. This work shall include all wireless interconnect components at all traffic signal(s) in the system to provide a completely operational closed loop system. This work shall include all necessary testing to provide the completely operational closed loop system as shown on the plans. The wireless interconnect system shall include, but not be limited to, the following components:

- a. Rack or Shelf Mounted RS-232 Frequency Hopping Spread Spectrum (FHSS) Radio
- b. Software for Radio Configuration (Configure Frequency and Hopping Patterns)
- c. Antennas (Omni Directional or Yagi Directional)
- d. Antennas Cables, LMR400, Low Loss. Max. 100-ft from controller cabinet to antenna
- e. Brackets, Mounting Hardware, and Accessories Required for Installation
- f. RS232 Data Cable for Connection from the radio to the local or master controller
- g. Radio repeater(s), if needed
- h. All other components required for a fully functional radio interconnect system

All controller cabinet modifications and other modifications to existing equipment that are required for the installation of the radio interconnect system components shall be included in the cost of WIRELESS INTERCONNECT (COMPLETE).

The radio interconnect system may operate at 900Mhz (902-928) or 2.4 Ghz depending on the results of a site survey. The telemetry shall have an acceptable rate of transmission errors, time outs, etc. comparable to that of a hardwire system.

The proposed or existing master controller and telemetry module shall be configured for use with the radio interconnect at a minimum rate of 9600 baud.

The radio interconnect system shall include all other components required for a complete and fully functional telemetry system and shall be installed in accordance to the vendors recommendations.

The Contractor shall verify that the radio interconnect equipment used is compatible with the existing equipment at the intersection of IL Route 9 and US Route 150.

#### Basis of Payment

This work will be paid for at the contract unit price each for WIRELESS INTERCONNECT (COMPLETE).

## VIDEO VEHICLE DETECTION SYSTEM

This work shall consist of furnishing and installing a video vehicle detection system as specified and/or as shown on the plans. This pay item shall include all necessary work and equipment required to have a fully operational system including but not limited to the detector units, the interface unit and all the necessary hardware, cables and accessories required to complete the installation in accordance with the manufacturer's specifications.

The video vehicle detection system shall work under all weather conditions, including rain, freezing rain, snow, wind, dust, fog, and changes in temperature and light. It shall work in an ambient temperature range of -34 to 74 degrees Celsius. The video detection system shall be compatible with only CAT 5 cable utilized for all directions of application.

The video vehicle detection system shall be compatible with the Town of Normal and IDOT approved traffic controller assemblies utilizing NEMA TS 2 Type 2 controllers and cabinet components for full time operation. The video vehicle detection system shall provide a minimum of one interface unit that has Ethernet connectivity, surge protection and shall be capable of supporting a minimum of 4 detector units. The video vehicle detection system shall include a display inside the cabinet that has a minimum 10" screen with a minimum 1280x800 resolution.

The video vehicle detection system shall include the following Town of Normal approved systems of Econolite - Autoscope Vision.

A representative from the supplier of the video vehicle detection system shall supervise the installation and testing of the video vehicle detection system and shall be present at the traffic signal turn-on inspection. Once the video vehicle detection system is configured, it shall not need reconfiguration to maintain performance, unless the roadway configuration or the application requirements change.

The mounting locations of the detector units shall be per the manufacturer's recommendations and as shown in the Plans. If an extension mounting assembly is needed, it shall be included in this item. All holes drilled into signal poles, mast arms, or posts shall require rubber grommets to prevent chafing of wires.

The video detection system shall be warrantied, free from material and workmanship defects for a period of three years from final inspection.

This work shall be paid for at the contract unit price each for Video Vehicle Detection System the price of which shall include the cost for all of the work and material described herein and includes furnishing, installing, delivery, handling, testing, set-up and all appurtenances and mounting hardware necessary for a fully operational video vehicle detection system.

## LUMINAIRE, LED, SPECIAL

### Description

This work shall consist of furnishing and installing a luminaire in accordance with Section 821 of the Standard Specifications, the details in the plans, and the following additions or exceptions.

### Materials

The full cut-off luminaire shall have a structured LED array to provide 23,000 initial lumens at 4,000K. Distribution shall be asymmetric medium. Luminaire shall utilize a 4-bolt slip fitter with +/- 5 degrees of adjustment for leveling. Provide luminaire with optional level and tool less entry. Luminaire shall be suitable for use on a 120-240 volt system. Each luminaire shall have an individual photocell. The luminaire shall have a black finish.

The luminaire shall be the Evolve LED series manufactured by GE Lighting Systems, catalog number ERS2-0-23-E1-40-D-BLCK-AGLR.

Basis of Payment

This work will be paid for at the contract unit price each for LUMINAIRE, LED, SPECIAL.

## PAINT TRAFFIC SIGNAL EQUIPMENT

It is the intent of the department that the signal equipment be finished in a color and texture that is available from the supplier and the choosing of the municipality. The Town of Normal requires black powder coated finishes.

All traffic signal equipment shall be finished, except for the proposed controller cabinets which shall remain in the natural aluminum finish.

All traffic signal equipment shall include but not be limited to combination mast arm assemblies and poles, luminaires, traffic signal posts and bases, signal head mounting brackets, pedestrian pushbutton posts.

The warranty level of the finish shall be for a period of 5 years.

Areas damaged during installation shall be touched up according to the specified painting process as directed by the manufacturer.

Payment for the painting of the proposed traffic signal equipment shall be paid for per the contract unit price per lump sum for Paint Traffic Signal Equipment and no additional compensation will be allowed.

### FULL-ACTUATED CONTROLLER AND CABINET, SPECIAL

This work shall be in accordance with the applicable Articles of Sections 857, 1073, and 1074 of the Standard Specifications with the following modifications:

The cabinet furnished under this contract shall be in accordance with the Section 857 of the Standard Specifications.

The cabinet shall be equipped with a NEMA TS2 Type 2 controller. The sequence and phasing of the controller shall be as shown in the plans. The controller shall be the Econolite Cobalt controller with EOS Software.

It is the intent of the Department that the proposed cabinet is compatible to being connected to a fiber optic network. A distribution enclosure shall be installed in accordance with Section 864 of the Standard Specifications. The distribution panel shall be connected to an ethernet switch via fiber optic jumpers. The ethernet switch shall be connected to the controller via ethernet jumper cables.

The new distribution enclosure shall be under the shelf mounted using LC connectors. The distribution enclosure shall be the Multilink Model# FRM-2RU-4X-SO or the pre-approved equivalent. The distribution enclosure shall be of adequate capacity to accommodate a minimum of 48 fiber terminations.

The controller, conflict monitor, and the uninterruptible power source shall be equipped with ethernet ports for communication. Cat. 5 ethernet jump cables shall be provided for connecting the devices to the ethernet switch. The ethernet switches will be paid for per the appropriate pay item.

The manufacturer's representative shall be on site for the traffic signal turn-on.

The Contractor shall provide the names and phone numbers of two technicians who would be able to respond to controller malfunctions that occur within the 30-day acceptance period after the controller is turned on. If neither person can be reached at the time of the malfunction or can be at the location within 2 hours of receiving the call, an available electrician capable of evaluating and correcting the malfunction may be called at the owner's discretion. All Invoices resulting from defective operation of the controller or cabinet shall be the responsibility of the Contractor.

### CONTROLLER CABINET

The cabinet shall also be furnished with a manual control switch and manual cord with the police compartment door as incidental to the controller work.

A clear plastic cover, or other high strength nonconductive cover, shall be installed over, and completely cover, the power panel and the power terminals for the thermostatically controlled exhaust fan. The cover shall completely shield the wires, and circuit breaker wires from accidental contact.

The door toggle switches shall be protected from accidental contact by a hinged cover or metal fins. The fins shall extend beyond the switches, in a manner like the terminals on the back panel. A resealable plastic plan holder shall be installed on the cabinet door. The holder shall be at least 12 inches high and 18 inches wide and shall open from the side.

The controller cabinet and components shall be fully wired and sized for the future expansion and use of all either phases, four pedestrian movements, and four overlaps. Pedestrian phases shall always be serviced by load switched 9, 10, 11, 12 corresponding to pedestrian phases 2, 4, 6, 8 respectively. The cabinet equipment shall be furnished with SDLC ports for communication between the controller and other cabinet components. A 16-position load bay shall be provided to accommodate future expansion.

This work shall be paid for at the contract unit price each for FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL, the price of which shall include the cost for all of the work and material described herein and includes furnishing, installing, delivery, handling, testing, set-up and all appurtenances and mounting hardware necessary for a fully operational video vehicle detection system.

## FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE

This work shall be performed in accordance with applicable portions of Section 871 and 1076 of the Standard Specifications for Road and Bridge Construction

This work shall be paid for per the contract unit cost per foot for FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE and shall include the work as described herein. No additional compensation will be allowed.

## ETHERNET SWITCH

This work shall include supplying, installing, and powering ethernet switches at locations designated in the plans for the purpose of interfacing with fiber optic network{s). Programming or configuring the switch shall be done by others. The ethernet switches provided for this contract shall be of the managed type or the unmanaged type as they are noted in the plans per location.

The ethernet switches shall be managed and shall be Comtrol RocketLinx ES8509-XT or the pre-approved equivalent.

Managed ethernet switches shall be equipped with Comtrol SFP {small form-factor pluggable) Single-Mode I0KM I000BASE-GLX (Extended Temperature) transceivers or the pre-approved equivalent.

All fiber optic jumpers necessary to connect SFP's to the fiber optic distribution enclosure shall be included in this pay item.

This work shall be paid for per the contract unit cost each for Ethernet Switch and shall include the work as described herein. No additional compensation will be allowed.

### UNDERGROUND CONDUIT, HDPE, 4" DIA.

### **Description**

This work shall consist of furnishing Installing, splicing, connecting and demonstrating continuity of a fiber optic conduit system of the size specified herein and as shown in the Plans. The conduit system shall be manufactured by Dura-Line, Blue Diamond Industries, or approved equivalent.

### <u>Materials</u>

The conduit and fittings shall meet the requirements of Article 1088.01(c) of the Standard Specifications, except as modified herein. The conduit system shall include no less than six (6) innerducts. Three (3) 1.25 in diameter standard HDPE conduit and three (3) 18 mm outside diameter (0.D.), 14 mm inside diameter (I.D.) micro-ducts shall be contained inside an HDPE protective outer sheath with a minimum thickness of 0.07 in.

The overall conduit system shall have a maximum nominal 4 in. outside diameter with a supported bend radius of 56 in., an unsupported bend radius of 93 in., and a safe working pull strength of 6,880 lbs.

Conduit shall be free from holes, blisters, inclusions, cracks, or other imperfections that would affect the performance or serviceability of the product.

Conduit shall be constructed of polymeric materials, which are lightweight, flexible, corrosion resistant and nonconductive. The base material shall be clean virgin-grade high-density polyethylene (HDPE), which conforms to ASTM D3350-98a, Type III, Category 5, Class B or C and Grade P- 34 per ASTM D1248-84 or equivalent.

Description Property	ASTM Standard	Value
Density	D1505	0.940-0.950 g/cm3
Melt Index (E)	D1238	0.10 - 0.35 g/10 Minutes
Environmental Stress Crack Resistance (ESCR)	D1693	192.0 hrs (per ASTM D3350)
Tensile @ Yield (min)	D638	2500 - 3200 psi (1,700 - 2,200 N/cm2)
Elongation	D638	300%
Flexural Modulus (min)	D790	115,000 psi (790,000 kPa)
Hardness	D2240	60 Shore D
VICAT Softening Point	D1525	248°F (120°C)
Brittleness Temperature	D746	-94°F (-70°C)

The base HDPE material shall conform to the following minimum mechanical properties:

Micro-ducts shall be smooth on the outside and ribbed on the inside. The inside shall have a coextruded permanent layer of silicone to provide a permanent low friction boundary layer between the micro-duct and the fiber optic cable for the anticipated service life of the micro-duct.

Standard available micro-duct colors shall be blue, orange, green, brown, grey, white, and red, or other colors as approved. Micro-ducts shall be individually colored and be sequentially numbered every two feet. Colors shall be protected from ultra-violet (UV) degradation by the incorporation of Hindered Amine Light Stabilizers (HALS) to allow for two years of outside storage UV protection. The duct material shall be compounded with antioxidant additives to prevent thermal degradation.

All 18/14 mm micro-ducts shall have a minimum safe pull strength of 3,500 lbs., a minimum sustained air pressure of 300 PSI, and a minimum burst pressure of 475 PSI.

The micro-duct system shall be equipped with an integrated 20 AWG (minimum) copper wire, insulated and installed within the oversheath that is designed to be used for underground utility locating purposes. Continuity of the tracer wire must be maintained at all points. Submittal information shall demonstrate how the tracer wire continuity will be maintained throughout the micro-duct run. Connection devices used shall be as approved by the tracer wire manufacturer, except wire nuts of any type are not acceptable and shall not be used.

The Contractor shall perform a locate or conductivity test as a part of the final documentation.

Conduit shall be supplied on 3,500 ft reels (or larger as equipment and installation techniques permit) to minimize the number of conduit splices. Fittings shall be mechanical or glued splices that preserve the seamless surface on the inside of the conduit. Fittings shall be capable of developing a minimum of 75% of the rated tensile (pull) strength of the conduit.

## **Installation**

Installation of conduit shall be in accordance with Article 810.04 of the Standard Specifications and as specified herein in accordance with manufacturer's specifications, and as specified herein.

### Pulling Tension

Pulling tension of the conduit shall be monitored throughout the pull, and pulling tension shall not exceed the specific manufacturer maximum pulling tensions as indicated in the catalog cut submittal. Failure to monitor the pulling tension will result in non-payment of that particular conduit span and the span shall be reinstalled with new duct at no additional cost to the Town of Normal. Lubricants used shall be compatible with the conduit and ducts.

### Handholes/Communications Vaults

Where conduit passes through handholes or vaults, the conduit shall be cut cleanly and rough edges removed to prevent damage to cable being coiled and stored in the handhole or vault.

### <u>Bends</u>

Minimum bending radius shall be in accordance with the manufacturer's recommended radius. Bends shall be made so that the duct will not be damaged and the internal diameter of the duct will not be effectively reduced. The degrees of bend in one duct run shall not exceed 360° between termination points.

### In Trench

The trench shall be closed and the site restored to match the surrounding conditions after all loose stones have been removed and all protruding stones have been removed or covered with backfill material as directed by the Engineer.

Where duct is shown to be installed in a trench, it shall be installed at a depth not less that 30 inches unless otherwise indicated in the Plans or specifically directed by the Engineer.

Plowing is allowed in lieu of trench and backfill. Unless otherwise indicated or specifically approved by the Engineer, plowing of innerduct shall lay the duct in place and shall not pull the duct through the length of the cut behind a bullet-nose mandrel or similar apparatus. In all cases, plowing operations shall be non-injurious to the duct. The disturbed surface shall be restored to match the surrounding conditions after completion of conduit installation.

### Post Installation Testing

The Contractor shall perform post installation testing on all conduit and ducts prior to installing fiber optic cable. As a minimum, tests shall include: an air test, a foam sponge test, a plastic sphere test and a pressure test.

Each duct shall be tested for continuity by blowing a sponge and then a plastic sphere (approximately 80% of the inside duct diameter) from one end to the other and each duct shall be pressure tested in accordance with the manufacturer's procedures to ensure that the duct will pressurize and hold air pressure for a specific amount of time.

The Contractor shall perform acceptance testing of the ducts in accordance with the manufacturer's recommended practices. Testing, at a minimum, shall demonstrate that the ducts are installed and assembled correctly, are air-tight, and have had no reduction of the interior diameter. Each duct shall be pressurized to check for leaks and other problems that would prevent the installation of fiber optic cable in the future. All testing shall be performed in the presence of the Resident Engineer. The Contractor shall submit testing results to the Town of Normal. The Contractor shall correct deficiencies to the satisfaction of the Engineer.

The Contractor shall submit testing information and procedures to the Town of Normal for review and approval included in the conduit submittal prior to ordering material.

A cable marking tape shall be installed above the conduit system according to Article 810 of the Standard Specifications. The color of the tape shall be red with large black lettering which reads "WARNING – FIBER OPTIC CABLE BELOW" or similar.

The Contractor shall submit catalog cut sheets for the conduit, micro-ducts, splice kits, and all installation and testing documents to the Town of Normal for review prior to ordering.

#### Method of Measurement

This work will be measured for payment in feet in place. Measurements will be made in straight lines along the centerline of the conduit between ends and changes in direction.

Vertical measurement of the duct shall be as follows:

For runs terminating at junction boxes and/or control cabinets, the vertical measurement will be made from the bottom of the trench, or horizontal raceway, to a point 18 inches beyond the center of the junction box or control cabinet.

For runs terminating at poles, the vertical measurement will be taken from the bottom of the trench, or horizontal raceway, to a point 18 inches beyond the center of the pole handhole.

### Basis of Payment

This item will be paid for at the contract unit price per foot for UNDERGROUND CONDUIT, HDPE, 4" DIA.

### MAINTENANCE OF EXISTING TEMPORARY TRAFFIC SIGNAL INSTALLATION

### Description

This work shall consist of maintaining an existing temporary traffic signal installation that has been designated to remain in operation during construction.

#### General

1. Full maintenance responsibility shall start as soon as the Contractor begins any physical work on the Contract or any portion thereof. If Contract work is started prior to a traffic

signal inspection, maintenance of the traffic signal installation(s) will be transferred to the Contractor without an inspection.

- 2. This item shall include maintenance of all existing and modified temporary traffic signal equipment and other connected and related equipment such as master controllers, uninterruptable power supply (UPS and batteries), vehicle detection, handholes, lighted signs, communication cables, conduits to adjacent intersections, and other traffic signal equipment.
- 3. The energy charges for the operation of the traffic signal installation shall be paid for by the Town of Normal.

### Maintenance

- 1. The Contractor shall check all controllers every two (2) weeks, which will include visually inspecting all timing intervals, relays, detectors, and per-emption equipment to ensure that they are functioning properly. The Contractor shall check signal system communications to assure proper operation. The Contractor shall maintain in stock at all times a sufficient amount of materials and equipment to provide effective temporary and permanent repairs. Prior to the traffic signal maintenance transfer, the contractor shall supply a detailed maintenance schedule that includes dates, locations, names of electricians providing the required checks and inspections along with any other information requested by the Engineer.
- 2. The Contractor is advised that the existing traffic signal installation must remain in operation during all construction stages, except for the most essential down time. Any shutdown of the traffic signal installation, which exceeds fifteen (15) minutes, must have prior approval of the Engineer. Approval to shut down the traffic signal installation will only be granted during the period extending from 10:00 a.m. to 3:00 p.m. on weekdays. Shutdowns shall not be allowed during inclement weather or holiday periods.
- 3. The Contractor shall provide immediate corrective action when any part or parts of the system fail to function properly. When repairs at a signalized intersection require that the controller be disconnected or otherwise removed from normal operation, and power is available, the Contractor shall place the traffic signal installation on flashing operation. The signals shall flash RED for all directions unless a different indication has been specified by the Engineer.
- 4. The Contractor shall provide the Engineer with 2 (two) 24 hour telephone numbers for the maintenance of the traffic signal installation and for emergency calls by the Engineer.
- 5. Traffic signal equipment which is lost or not returned to the Local Agency (Town of Normal) for any reason shall be replaced with new equipment meeting the requirements of the Standard Specifications and these special provisions.
- 6. The Contractor shall respond to all emergency calls from the Local Agency or others within one (1) hour after notification and provide immediate corrective action. When equipment has been damaged or becomes faulty beyond repair, the Contractor shall replace it with new and identical equipment. The cost of furnishing and installing the replaced equipment shall be borne by the Contractor at no additional charge to the contract. The Contractor may

institute action to recover damages from responsible third party. If at any time the Contractor fails to perform all work as specified herein to keep the traffic signal installation in proper operating condition or if the Engineer cannot contact the Contractor's designated personnel, the Engineer shall have the Local Agency's Electrical Maintenance Contractor perform the maintenance work. The Contractor shall be responsible for all of the Local Agency's Electrical Maintenance Contractor's costs and liquidated damages of \$1000 per day per occurrence. The Local Agency's Electrical Maintenance Contractor's costs and liquidated damages of \$1000 per day per occurrence. The Local Agency's Electrical Maintenance Contractor shall bill the Contractor for the total cost of the work. The Contractor shall pay this bill within thirty (30) days of the date of receipt of the invoice or the cost of such work will be deducted from the amount due the Contractor. The Contractor shall allow the Electrical Maintenance Contractor to make reviews of the Existing Traffic Signal Installation that has been transferred to the Contractor for Maintenance.

- 7. Equipment included in this item that is damaged or not operating properly from any cause shall be replaced with new equipment meeting current Town of Normal requirements. And provided by the Contractor at no additional cost to the Contract and/or owner of the traffic signal system, all as approved by the Engineer. Final replacement of damaged equipment must meet the approval of the Engineer prior to or at the time of final inspection otherwise the traffic signal installation will not be accepted. Cable splices outside the controller cabinet shall not be allowed.
- 8. The Contractor shall be responsible to clear snow, ice, dirt, debris and other condition that obstructs visibility of any traffic signal display or access to traffic signal equipment.

### Basis of Payment

This work will be paid for at the contract unit price per each for MAINTENANCE OF EXISTING TEMPORARY TRAFFIC SIGNAL INSTALLATION. Each intersection will be paid for separately.

## RECTANGULAR RAPID FLASHING BEACON ASSEMBLY (COMPLETE)

This pay item includes all work to furnish and install the post-mounted Pedestrian Activated Solar-Powered Rectangular Rapid Flashing Beacon Assembly (Complete) at the proposed pedestrian crossing locations shown on the plans. This work shall be in accordance with all applicable FHWA and MUTCD guidelines as well as Article 801 of the current Standard Specifications.

#### Solar Powered Rectangular Rapid Flashing Beacon (RRFB) Assembly

The system shall be fully self-contained and power autonomous without the need for an external power supply. All housings and components shall be weather, corrosion, and vandal resistant. The system shall consist of bi-directional (or double sided) RRFB units, including a solar array, batteries, wireless communications equipment, controls, push button, brackets and mounting hardware for each traffic signal post installation.

Each RRFB unit shall conform to current FHWA and MUTCD requirements for unit size, mounting location, flash rate, and operational parameters. The units shall be programmable to establish the appropriate duration of the flashing periods upon user activation via the push button. A single activation of either push button shall commence the flashing of each RRFB unit at the pedestrian crossing. The RRFB units shall communicate wirelessly using an unlicensed radio band, so as to

simultaneously commence and cease operations appropriately with each push button activation. Each RRFB unit shall provide a pilot light to the user and the housing shall be black in color.

The solar panels shall be top-of-pole mounted and sized appropriately to support up to 100 activations per day for up to two minutes of flash time (120 seconds) per activation. The batteries shall be sealed, maintenance free, and field replaceable. For the purpose of determining equipment type and size requirements, the location of the assemblies will be as shown in the plans.

The push buttons shall conform to Section 876 of the current Standard Specifications. In determining the usage of the "Yellow lights are flashing" message, the option of using the speech message shall be programmable by the end user. The push button housings shall be black in color.

All components of the RRFB assembly shall have a minimum three-year manufacturer's warranty.

#### Traffic Signal Post

This work shall be in accordance with Article 875 of the current Standard Specifications. The Type A foundations shall be adjacent to the accessible ramp to provide accessibility to the push button locations. Refer to State Standard 878001 for Type A foundation for Ground Mounted Controller Cabinet. The Traffic signal post and base shall be black powder coat over galvanized steel.

This work shall be paid for at the contract unit price each for RECTANGULAR RAPID FLASHING BEACON ASSEMBLY (COMPLETE), which shall be payment in full for furnishing all parts and installation of the entire solar assembly system, including the traffic signal poles and foundations. No additional compensation will be allowed.

### TIMBER RAILING

Description: This work shall consist of furnishing and installing timber railings, posts, and associated appurtenances.

Materials shall be in accordance with Section 507 and timber shall be treated according to Article 1007.12 of the Standard Specifications.

Railing and Hardware: The timber railing and hardware shall be according to Section 507 of the Standard Specifications, except the timber railing shall be treated and not painted.

Method of Measurement: This work shall be measured for payment in feet along the top edge of the rail elements and all appurtenances, continuous through laps and splices. Hardware will not be measured for payment.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for TIMBER RAILING.

### TEMPORARY PAVEMENT

<u>Description.</u> This work shall consist of constructing a temporary pavement at the locations shown on the plans or as indicated by the engineer. Materials shall be in accordance with the Standard Specifications and the pavement types indicated in the plans for permanent locations.

The thickness of the Temporary Pavement shall be either Aggregate Base Course, Type B, 8" and PC Concrete Pavement 6" or Hot-Mix Asphalt Pavement 8" on top of the Aggregate Base Course. The contractor shall have the option of constructing either material type if both Portland cement concrete and HMA are shown in the plans.

The necessary earth excavation and maintenance of temporary pavement shall not be paid for separately, but shall be included in the cost of TEMPORARY PAVEMENT.

<u>Method of Measurement</u>. Temporary pavement will be measured in place and the area computed in square yards.

Basis of Payment. This work will be paid for at the contract unit price per square yard for TEMPORARY PAVEMENT

Removal of temporary pavement will be paid for at the contract unit price per square yard for PAVEMENT REMOVAL.

## CONSTRUCTION LAYOUT

This work shall consist of construction layout in accordance Check Sheet #9 of the Supplemental Specifications and Recurring Special Provisions, and as indicated by the Engineer.

This work will be paid for at the contract unit price per lump sum for CONSTRUCTION LAYOUT.

### TRAFFIC CONTROL AND PROTECTION (SPECIAL)

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

No construction shall commence until such time that all required signs and barricades have been erected. The Contractor shall also be responsible for notifying the Town of Normal Department of Engineering, the Illinois Department of Transportation, Connect Transit, the Normal Fire Department, the Normal Police Department, the U.S. Postal Service, Unit 5 School District, Illinois State University, and the Bloomington-Normal Water Reclamation District no less than 72 hours prior to any lane closure or changes in travel patterns and shall notify the same agencies prior to opening the street.

Special attention is called to the following sections of the Standard Specifications, the State Standards, and the special provisions relating to traffic control:

Standard Specifications:

Article 105.03 (b) – Traffic Control Deficiency Deduction Article 107.09 – Public Convenience and Safety Article 107.14 – Maintenance of Traffic Article 107.15 – Dirt on Pavement or Structures

Article 107.25 – Protection and Restoration of Traffic Signs Section 701 - Work Zone Traffic Control and Protection Section 703 - Work Zone Pavement Marking Section 780 – Pavement Striping Section 783 - Pavement Marking and Marker Removal Section 1106 – Work Zone Traffic Control Devices

Highway Standards:

701001	701006	701011	701101	701106	701201
701301	701306	701311	701326	701421	701422
701426	701701	701901			

Recurring Special Provisions:

none

Design and Environment Special Provisions: Work Zone Traffic Control Devices

Fire hydrants on or adjacent to the work site shall be kept accessible to fire-fighting equipment at all times.

Any unattended obstacle, excavation, inlet, manhole, valve, pavement drop-off, or other appurtenance in the work zone shall be protected with drums or barricades. All traffic control devices and barricades throughout the project shall remain in place until the entire project location is substantially complete, or as otherwise indicated by the Engineer.

The Contractor shall furnish and install steel plates over storm sewer trench locations as needed to maintain traffic during removal, installation, backfill, and patch curing timelines.

The Contractor shall place additional traffic control whenever conditions warrant or whenever requested to do so by the Engineer.

This work shall include all traffic control and protection, any night time work protection or lighting, flaggers, surveillance, work zone pavement marking removal, signs, and barricades to furnish, install, maintain, relocate, and remove same shall not be paid for separately but shall be included in the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL).

## SEQUENCE OF OPERATIONS

The sequence of operations shown on the Maintenance of Traffic plans are described below. No deviation from the sequence will be permitted except by written permission from the Engineer and Town.

## Stage 1A - Construction of the North Side of the 3-lane section (Westbound Lanes)

• Prior to storm sewer installation, work zone speed and advisory signs and necessary traffic control signage and appurtenances shall be installed. All storm sewer lateral work (existing and proposed) and associated inlet structures east of Sta 24+00.00 shall be removed,

installed, backfilled, and Class D Patches, 9" placed in the first substage of the project prior to Stage 1A. Inlet and Pipe Protection shall also be provided. Traffic shall be maintained during storm sewer installation with day time flaggers in accordance with IDOT state standards and specifications. Steel plates shall be furnished and installed where needed. Contractor shall maintain drainage and also provide traffic control barrels at lateral locations. Rubblization operations shall not take place over new storm sewer laterals and Class D Patches, 9".

- Maintain 1-lane of one-way traffic going Eastbound between Gatehouse 4 and White Oak Road.
- 4-lane section between US Route 150 / Rivian Motorway and Gatehouse 4 operates as normal with 2-lanes in each direction and temporary signals while permanent signals are being ordered.
- As a substage in Stage 1A, temporary pavement shall be constructed as shown on the plans around the existing SE quadrant of the intersection of Wylie Drive and College Avenue. Wylie Drive shall remain open to EB right and NB right traffic.
- As a substage in Stage 1A, Merle Lane shall be completely closed and pavement apron constructed over a weekend with nighttime work as necessary. The dates of closure shall be coordinated with the affected property owners.

## Stage 1B - Construction of the South Side of the 3-lane section (Eastbound Lanes)

- Maintain 1-lane of one-way traffic going Westbound between Gatehouse 4 and White Oak Road on the hot-mix asphalt binder pavement constructed in Stage 1A.
- 4-lane section between US Route 150 / Rivian Motorway and Gatehouse 4 operates as normal with 2-lanes in each direction and temporary signals while permanent signals are being ordered.
- Wylie Drive in Stage 1B shall be completely closed and constructed as the first substage in Stage 1B. As soon as Wylie intersection is complete in Stage 1B open the intersection to allow for WB left and NB left traffic.
- Hot-mix asphalt surface course shall be placed full width as the final layer (all three lanes) as the final substage.

## <u>Stage 2A – Construction of North Side of the 4-lane section (Westbound Lanes)</u>

- Maintain 2-lanes of one-way traffic going Eastbound between US Route 150 / Rivian Motorway and Gatehouse 4.
- 3-lane section between Gatehouse 4 and White Oak Road is fully constructed and fully open to traffic. Westbound traffic in 3-lane section will have access to turn right into Gatehouse 4.
- <u>US Route 150 / Rivian Motorway:</u> Prior to Stage 2A the north median nose along US Route 150 shall be removed and temporary pavement constructed to allow for truck turning movements onto College Avenue. Additionally, prior to Stage 2A the ultimate conditions of the Route 150 south median nose will be constructed. In Stage 2A and initial Substage of 2B, US Route 150 / Rivian Motorways two NB through lanes shall be reduced to 10.5' wide and the right turn lane to access W. College Avenue shall be completely constructed up to Sta 94+15.87.

Gatehouse 5 Entrance: The intersection apron of the Gatehouse 5 entrance and north half of the College Avenue Intersection adjacent to Gatehouse 5 shall be constructed half at a time with the western half being constructed first to the limits shown in the Maintenance of Traffic plan sheets. From Friday afternoon after 5:30 PM to Monday morning at 6:30 AM, the Contractor shall construct the western half of the intersection area referenced above using High – Early Strength PC Concrete Pavement. The Contractor will likely need to work both daytime and nighttime crews during this time period to complete this work. The Contractor shall also provide full time, day and night Flaggers during this operation to allow for 1 lane of access into the Gatehouse 5 entrance during this operation and pavement curing timeline. EB trucks making a left turn into Gatehouse 5 shall utilize the northern through lane (not the left turn lane). Flaggers shall continue to be provided until the western pavement half constructed meets strength specification requirements and Gatehouse 5 entrance can be fully opened to traffic operations. Any differences in elevations between existing and newly constructed pavement shall be provided with Hot-Mix Asphalt Temporary Ramp material utilized with a bond breaker surface under the Temporary Ramp.

The eastern half of the intersection area shall be constructed during a separate weekend operation as indicated above.

Gatehouse 4 Entrance: The intersection apron of Gatehouse 4 entrance and north half of the College Avenue Intersection adjacent to Gatehouse 4 shall be constructed half at a time with the western half being constructed first to the limits shown in the Maintenance of Traffic plan sheets. From Friday afternoon after 5:30 PM to Monday morning at 6:30 AM, the Contractor shall construct the western half of the intersection area referenced above using High – Early Strength PC Concrete Pavement. The Contractor will likely need to work both daytime and nighttime crews during this time period to complete this work. The Contractor shall also provide full time, day and night Flaggers during this operation to allow for 1 lane of access into the Gatehouse 4 entrance during this operation. EB trucks making a left turn into Gatehouse 4 shall utilize the northern through lane (not the left turn lanes). SB trucks making a turn onto College Avenue shall utilize the eastern NB through lane. Temporary Pavement shall be constructed prior to Stage 2A through the median easternly adjacent to Gatehouse 4 as shown in the Maintenance of Traffic plan sheets. Flaggers shall continue to be provided until the western pavement half constructed meets strength specification requirements and Gatehouse 4 entrance can be fully opened to traffic operations. Any differences in elevations between existing and newly constructed pavement shall be provided with Hot-Mix Asphalt Temporary Ramp material utilized with a bond breaker surface under the Temporary Ramp.

The eastern half of the intersection area shall be constructed during a separate weekend operation as indicated above.

<u>College Avenue</u>: The westbound lane of travel just west of Wylie Drive shall be closed to all traffic on the weekend when the east half of Gatehouse 4 will be constructed. Contractor shall provide for applicable traffic control in accordance with state standards to provide for advanced warning traffic control along College Avenue and Wylie Drive.

## Stage 2B - Construction of South Side of the 4-lane section (Eastbound Lanes)

- Maintain 2-lanes of one-way traffic going Eastbound between US Route 150 / Rivian Motorway and Gatehouse 4 on the pavement constructed in Stage 2A.
- 3-lane section between Gatehouse 4 and White Oak Road is fully constructed and partially open to traffic. Westbound traffic in 3-lane section will not have access to west of Wylie Drive due to oncoming and transitioning traffic in the permanent WB lanes. Westbound traffic in the 3-lane section will be diverted south onto Wylie Drive for the duration of Stage 2B construction.
- <u>US Route 150 / Rivian Motorway:</u> Prior to Stage 2B, temporary pavement shall be constructed across the median to allow turning movements from NB Right US Route 150 / Rivian Motorway and SB Left US Route 150 / Rivian Motorway to EB W. College Avenue utilizing the pavement constructed in Stage 2A. In Stage 2B US Route 150 / Rivian Motorways two NB through lanes shall be reduced to 10.5' wide and the remaining southeast quadrant beginning at Sta 94+15.87 up to the eastern RPC of W. College Avenue shall be completely constructed as the first substage in Stage 2B. In areas of temporary pavement, the permanent median and the intersection island shall be constructed as last substage in Stage 2B.
- S. Unit Drive (Stage 2B): The intersection apron of S. Unit Drive and south half of the College Avenue Intersection adjacent to S. Unit Drive shall be constructed half at a time with the western half being constructed first to the limits shown in the Maintenance of Traffic plan sheets. From Friday afternoon after 5:30 PM to Monday morning at 6:30 AM, the Contractor shall construct the western half of the intersection area referenced above using High Early Strength PC Concrete Pavement. The Contractor will likely need to work both daytime and nighttime crews during this time period to complete this work and pavement curing timeline. The Contractor shall also provide full time, day and night Flaggers during this operation to allow for a single lane of access on S. Unit Drive during this operation. EB trucks along College Avenue making a SB right turn onto S. Unit Drive shall utilize the southern through lane. Flaggers shall continue to be provided until the western pavement half constructed meets strength specification requirements and S. Unit Drive can be fully opened to 2-way traffic operations. Any differences in elevations between existing and newly constructed pavement shall be provided with Hot-Mix Asphalt Temporary Ramp material utilized with a bond breaker surface under the Temporary Ramp.

The eastern half of the intersection area shall be constructed during a separate weekend operation as indicated above.

### COMMITMENTS

Any required tree removal shall not occur between April 1st and September 30th.

All work, staging, and otherwise-impacted areas must be mowed prior to equipment/impact and kept mowed at/below 8" in height for the duration of the project.





Route	Marked Route	Section Number
F.A.U. Route 6352	West College Avenue	20-00271-00-PV
Project Number	County	Contract Number
HTPY(283)	McLean	91619

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			Date
Rya LOH			11/9/23
Print Name	Title	Agency	
Ryan Otto	Town Engineer	Town of Normal	

<u>Note</u>: 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 on West College Avenue from US Route 150 / Rivian Motorway (FAP 0676) to 250' west of White Oak Road / CH 70 (FAU 6385). Latitude 40 29'15 , Longitude 89 2'26". T24N R1E,2E

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:

Reconstruction of West College Avenue including rubblizing existing P.C. concrete pavement, new P.C. concrete pavement, HMA pavement, P.C. curb and gutter, P.C. median, storm sewer, culvert extensions, HMA multi-use trail, P.C. sidewalk, irrigation, seeding/sodding, landscaping, and necessary appurtenances. Two construction stages. Erosion control measures include perimeter erosion control barrier, inlet and pipe protection, and ditch checks.

C. Provide the estimated duration of this project:	
20 months	

D. The total area of the construction site is estimated to be  $\frac{25}{25}$  acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 23 acres.

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:

Weighted C: Existing = 0.45, Proposed = 0.53

F. List all soils found within project boundaries; include map unit name, slope information, and erosivity: Ipava silt loam 0-2% Slopes, Kw=0.32; La Rose silt loam 2-5% Slopes, Kw=0.32; La Rose silt loam 5-10% Slopes, Kw=0.32; Stable silty clay loam 0-2% Slopes, Kw=0.24; Osco silt loam 2-5% Slopes, Kw=0.32; Saybrook silt loam 2-5% Slopes, Kw=0.37; Saybrook silt loam 5-10% Slopes, Kw=0.37; Catlin silt loam 2-5% Slopes, Kw=0.37; Peotone silty clay loam 0-2% Slopes, Kw=0.24; Radford silt loam 0-2% Slopes, Kw=0.37; Sawmill silty clay loam 0-2% Slopes, Kw=0.28

G. If wetlands were delineated for this project, provide an extent of wetland acreage at the site; see Phase I report: 0.042 acres

H. Provide a description of potentially erosive areas associated with this project: Any slopes steeper than 3:1

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.):

All earth excavation will expose bare earth. Slopes are to be held at 3:1 or flatter where possible. Any slopes steeper than 3:1 are subject to erosion.

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.

K. Identify who owns the drainage system (municipality or agency) this project will drain into: Town of Normal

L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located: Town of Normal, Bloomington and Normal Water Reclamation District

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:

Tributaries of Skunk Creek, which outlet downstream to Sugar Creek

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 waterdependent 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.

Does not apply.

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.

### Wetlands, Streams, threatened and endangered species

☐ 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:

N/A

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:

N/A

Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

N/A	
Applicable Federal, Tribal, State, or Local Programs	
N/A	
☐ Floodplain	
N/A	
Historic Preservation	

N/A

Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation TMDL (fill out this section if checked above)

The name(s) of the listed water body:

### N/A

Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:

N/A

If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:

N/A

X Threatened and Endangered Species/Illinois Natural Areas (INAI)/Nature Preserves

The following measures will be taken for the endangered bat species:

Any required tree removal shall not occur between April 1st and September 30th. If trees are removed during this time period, then coordination with the USFWS and Illinois Department of Natural Resources (IDNR) will occur. The following measures will be taken for the Rusty Patched Bumblebee:

All work, staging, and otherwise-impacted areas must be mowed prior to equipment/impact and kept mowed at/ below 8" in height for the duration of the project.

☐ Other N/A

K Wetland

Per NRR, no Wetland Mitigation or Banking required.

P. The following pollutants of concern will be associated with this construction project:

Antifreeze / Coolants	Solid Waste Debris
🔀 Concrete	Solvents
Concrete Curing Compounds	X Waste water from cleaning construction equipments
🔀 Concrete Truck Waste	Other (Specify)
K Fertilizers / Pesticides	Other (Specify)
🔀 Paints	Other (Specify)
🔀 Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)	Other (Specify)
🔀 Soil Sediment	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 Contractors, 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:

- 1. Minimize the amount of soil exposed during construction activity;
- 2. Minimize the disturbance of steep slopes;
- 3. 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.
  - 2. 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:

Erosion Control Blanket / Mulching	Temporary Turf (Seeding, Class 7)
Geotextiles	Temporary Mulching
Permanent Seeding	Vegetated Buffer Strips
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 seeding and mulch will be placed when work in an area is complete.

Describe how the stabilization practices listed above will be utilized after construction activities have been completed: Permanent seeding and mulch will be placed when construction is complete.

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
Dust Suppression	Slope Mattress
Dewatering Filtering	Slope Walls
Gabions	🔀 Temporary Ditch Check
In-Stream or Wetland Work	Temporary Pipe Slope Drain

Level Spreaders	Temporary Sediment Basin	
Paved Ditch	Temporary Stream Crossing	
Permanent Check Dams	Turf Reinforcement Mats	
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)	

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

Perimeter erosion barrier will be placed prior to construction commencing. Temporary ditch checks will be installed immediately following grading of ditches shown in the plans. Inlet and pipe protection will be installed immediately following the installation of all drainage structures. Riprap will be installed as indicated in the plans following construction of culvert end sections.

Describe how the structural practices listed above will be utilized after construction activities have been completed: The Town of Normal will maintain after the project is complete.

### D. Treatment Chemicals

Will polymer flocculants or treatment chemicals be utilized on this project:	Yes	🖂 No
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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.

1. 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 controls:

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

- 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 spill 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 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.

#### **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 Erosion 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: <u>epa.swnoncomp@illinois.gov</u>, 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.

## State of Illinois DEPARTMENT OF TRANSPORTATION Bureau of Local Roads & Streets SPECIAL PROVISION FOR LOCAL QUALITY ASSURANCE/ QUALITY MANAGEMENT QC/QA Effective: January 1, 2022

Replace the first five paragraphs of Article 1030.06 of the Standard Specifications with the following:

"**1030.06 Quality Management Program.** The Quality Management Program (QMP) will be Quality Control / Quality Assurance (QC/QA) according to the following."

Delete Article 1030.06(d)(1) of the Standard Specifications.

Revise Article 1030.09(g)(3) of the Standard Specifications to read:

"(3) If core testing is the density verification method, the Contractor shall provide personnel and equipment to collect density verification cores for the Engineer. Core locations will be determined by the Engineer following the document "Hot-Mix Asphalt QC/QA Procedure for Determining Random Density Locations" at density verification intervals defined in Article 1030.09(b). After the Engineer identifies a density verification location and prior to opening to traffic, the Contractor shall cut a 4 in. (100 mm) diameter core. With the approval of the Engineer, the cores may be cut at a later time."

Revise Article 1030.09(h)(2) of the Standard Specifications to read:

"(2) After final rolling and prior to paving subsequent lifts, the Engineer will identify the random density verification test locations. Cores or nuclear density gauge testing will be used for density verification. The method used for density verification will be as selected below.

Density Verification Method		
	Cores	
$\boxed{X}$ Nuclear Density Gauge (Correlated when paving ≥ 3,000 tons per mixture)		

Density verification test locations will be determined according to the document "Hot-Mix Asphalt QC/QA Procedure for Determining Random Density Locations". The density testing interval for paving wider than or equal to 3 ft (1 m) will be 0.5 miles (800 m) for lift thicknesses of 3 in. (75 mm) or less and 0.2 miles (320 m) for lift thicknesses greater than 3 in. (75 mm). The density testing interval for paving less than 3 ft (1 m) wide will be 1 mile (1,600 m). If a day's paving will be less than the prescribed density testing interval, the length of the day's paving will be the interval for that day. The density testing interval for mixtures used for patching will be 50 patches with a minimum of one test per mixture per project.

If core testing is the density verification method, the Engineer will witness the Contractor coring, and secure and take possession of all density samples at the

density verification locations. The Engineer will test the cores collected by the Contractor for density according to Illinois Modified AASHTO T 166 or AASHTO T 275.

If nuclear density gauge testing is the density verification method, the Engineer will conduct nuclear density gauge tests. The Engineer will follow the density testing procedure detailed in the document "Illinois Modified ASTM D 2950, Standard Test Method for Density of Bituminous Concrete In-Place by Nuclear Method".

A density verification test will be the result of a single core or the average of the nuclear density tests at one location. The results of each density test must be within acceptable limits. The Engineer will promptly notify the Contractor of observed deficiencies."

Revise the seventh paragraph and all subsequent paragraphs in Section D. of the document "Hot-Mix Asphalt QC/QA Initial Daily Plant and Random Samples" to read:

"Mixtures shall be sampled from the truck at the plant by the Contractor following the same procedure used to collect QC mixture samples (Section A). This process will be witnessed by the Engineer who will take custody of the verification sample. Each sample bag with a verification mixture sample will be secured by the Engineer using a locking ID tag. Sample boxes containing the verification mixture sample will be sealed/taped by the Engineer using a security ID label."

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

## SPECIAL PROVISION FOR INSURANCE

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

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

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

Town of Normal

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

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

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

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

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

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

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

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

METHOD OF MEASUREMENT: The unit of measurement is in hours.

BASIS OF PAYMENT: This work will be paid for at the contract unit price of \$15.00 per hour for each utilized certified TPG Program trainee (TRAINEES TRAINING PROGRAM GRADUATE). The estimated total number of hours, unit price, and total price must be included in the schedule of prices for the Contract submitted by Contractor prior to beginning work. The initial number of TPG trainees for which the incentive is available for this contract is <u>6</u>.

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 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.

## ACCESSIBLE PEDESTRIAN SIGNALS (APS) (BDE)

Effective: April 1, 2003 Revised: January 1, 2022

<u>Description</u>. This work shall consist of furnishing and installing accessible pedestrian signals (APS). Each APS shall consist of an interactive vibrotactile pedestrian pushbutton with speaker, an informational sign, a light emitting diode (LED) indicator light, a solid-state electronic control board, a power supply, wiring, and mounting hardware. The APS shall meet the requirements of the MUTCD and Sections 801 and 888 of the Standard Specifications, except as modified herein.

<u>Electrical Requirements</u>. The APS shall operate with systems providing 95 to 130 VAC, 60 Hz and throughout an ambient air temperature range of -29 to +160 °F (-34 to +70 °C).

The APS shall contain a power protection circuit consisting of both fuse and transient protection.

<u>Audible Indications</u>. A pushbutton locator tone shall sound at each pushbutton and shall be deactivated during the associated walk indication and when associated traffic signals are in flashing mode. Pushbutton locator tones shall have a duration of 0.15 seconds or less and shall repeat at 1-second intervals. Each actuation of the pushbutton shall be accompanied by the speech message "Wait".

If two accessible pedestrian pushbuttons are placed less than 10 ft (3 m) apart or placed on the same pole, the audible walk indication shall be a speech walk message. This message shall sound throughout the WALK interval only. The verbal message shall be modeled after: "<u>Street Name</u>." Walk Sign is on to cross "<u>Street Name</u>." For signalized intersections utilizing exclusive pedestrian phasing, the verbal message shall be "Walk sign is on for all crossings". In addition, a speech pushbutton information message shall be provided by actuating the APS pushbutton when the WALK interval is not timing. This verbal message shall be modeled after: "Wait. Wait to cross '<u>Street Name</u>' at '<u>Street Name</u>'".

Where two accessible pedestrian pushbuttons are separated by at least 10 ft (3 m), the walk indication shall be an audible percussive tone. It shall repeat at 8 to 10 ticks per second with a dominant frequency of 880 Hz.

Automatic volume adjustments in response to ambient traffic sound level shall be provided up to a maximum volume of 100 dBA. Locator tone and verbal messages shall be no more than 5 dB louder than ambient sound.

At locations with railroad interconnection, an additional speech message stating "Walk time shortened when train approaches" shall be used after the speech walk message. At locations with emergency vehicle preemption, an additional speech message "Walk time shortened when emergency vehicle approaches" shall be used after the speech walk message.

<u>Pedestrian Pushbutton</u>. Pedestrian pushbuttons shall be at least 2 in. (50 mm) in diameter or width. The force required to activate the pushbutton shall be no greater than 3.5 lb (15.5 N).

A red LED shall be located on or near the pushbutton which, when activated, acknowledges the pedestrians request to cross the street.

<u>Signage</u>. A sign shall be located immediately above the pedestrian pushbutton and parallel to the crosswalk controlled by the pushbutton. The sign shall conform to one of the following standard MUTCD designs: R10-3, R10-3a, R10-3e, R10-3i, R10-4, and R10-4a.

<u>Tactile Arrow</u>. A tactile arrow, pointing in the direction of travel controlled by a pushbutton, shall be provided on the pushbutton.

<u>Vibrotactile Feature</u>. The pushbutton shall pulse when depressed and shall vibrate continuously throughout the WALK interval.

Method of Measurement. This work will be measured for payment as each, per pushbutton.

Basis of Payment. This work will be paid for at the contract unit price per each for ACCESSIBLE PEDESTRIAN SIGNALS.

# CEMENT, TYPE IL (BDE)

Effective: August 1, 2023

Add the following to Article 302.02 of the Standard Specifications:

Revise Note 2 of Article 352.02 of the Standard Specifications to read:

"Note 2. Either Type I or Type IA portland cement or Type IL portland-limestone cement shall be used."

Revise Note 1 of Article 404.02 of the Standard Specifications to read:

"Note 1. The cement shall be Type I portland cement or Type IL portland-limestone cement."

Revise Article 1019.02(a) of the Standard Specifications to read:

"(a) Cement, Type I or IL ......1001"

## 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."

## DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

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

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

(e) <u>TERMINATION AND REPLACEMENT PROCEDURES</u>. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

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

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

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.

- (6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can 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) <u>FINAL PAYMENT</u>. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <u>ENFORCEMENT</u>. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be

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

(h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

# HOT-MIX ASPHALT (BDE)

Effective: January 1, 2024

Revise the second paragraph of Articles 1030.07(a)(11) and 1030.08(a)(9) of the Standard Specifications to read:

"When establishing the target density, the HMA maximum theoretical specific gravity  $(G_{mm})$  will be based on the running average of four available Department test results for that project. If less than four  $G_{mm}$  test results are available, an average of all available Department test results for that project will be used. The initial  $G_{mm}$  will be the last available Department test result from a QMP project. If there is no available Department test result from a QMP project. If there is no available Department test result from a QMP project. If there is no available Department test result from a QMP project. If there is no available Department test result from a QMP project.

In the Supplemental Specifications, replace the revision for the end of the third paragraph of Article 1030.09(h)(2) with the following:

"When establishing the target density, the HMA maximum theoretical specific gravity  $(G_{mm})$  will be the Department mix design verification test result."

Revise the tenth paragraph of Article 1030.10 of the Standard Specifications to read:

"Production is not required to stop after a test strip has been constructed."

## HOT-MIX ASPHALT – LONGITUDINAL JOINT SEALANT (BDE)

Effective: November 1, 2022 Revised: August 1, 2023

Add the following after the second sentence in the eighth paragraph of Article 406.06(h)(2) of the Standard Specifications:

"If rain is forecasted and traffic is to be on the LJS or if pickup/tracking of the LJS material is likely, the LJS shall be covered immediately following its application with FA 20 fine aggregate mechanically spread uniformly at a rate of  $1.5 \pm 0.5$  lb/sq yd ( $0.75 \pm 0.25$  kg/sq m). Fine aggregate landing outside of the LJS shall be removed prior to application of tack coat."

Add the following after the first sentence in the ninth paragraph of Article 406.06(h)(2) of the Standard Specifications:

"LJS half-width shall be applied at a width of  $9 \pm 1$  in. (225  $\pm$  25 mm) in the immediate lane to be placed with the outside edge flush with the joint of the next HMA lift. The vertical face of any longitudinal joint remaining in place shall also be coated."

Add the following after the eleventh paragraph of Article 406.06(h)(2) of the Standard Specifications:

"LJS Half-Width Application Rate, lb/ft (kg/m) <sup>1/</sup>			
Lift Thickness, in. (mm)	Coarse Graded Mixture (IL-19.0, IL-19.0L, IL-9.5, IL-9.5L, IL-4.75)	Fine Graded Mixture (IL-9.5FG)	SMA Mixture (SMA-9.5, SMA-12.5)
<sup>3</sup> ⁄ <sub>4</sub> (19)	0.44 (0.66)		
1 (25)	0.58 (0.86)		
1 ¼ (32)	0.66 (0.98)	0.44 (0.66)	
1 ½ (38)	0.74 (1.10)	0.48 (0.71)	0.63 (0.94)
1 ¾ (44)	0.82 (1.22)	0.52 (0.77)	0.69 (1.03)
2 (50)	0.90 (1.34)	0.56 (0.83)	0.76 (1.13)
≥ 2 ¼ (60)	0.98 (1.46)		

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

Revise the second paragraph of Article 406.13(b) of the Standard Specifications to read:

"Aggregate for covering tack, LJS, or FLS will not be measured for payment."

Add the following to the end of the second paragraph of Article 406.14 of the Standard Specifications:

"Longitudinal joint sealant (LJS) half-width will be paid for at the contract unit price per foot (meter) for LONGITUDINAL JOINT SEALANT, HALF-WIDTH."

## PERFORMANCE GRADED ASPHALT BINDER (BDE)

Effective: January 1, 2023

Revise Article 1032.05 of the Standard Specifications to read:

"1032.05 Performance Graded Asphalt Binder. These materials will be accepted according to the Bureau of Materials Policy Memorandum, "Performance Graded Asphalt Binder Qualification Procedure." The Department will maintain a qualified producer list. These materials shall be free from water and shall not foam when heated to any temperature below the actual flash point. Air blown asphalt, recycle engine oil bottoms (ReOB), and polyphosphoric acid (PPA) modification shall not be used.

When requested, producers shall provide the Engineer with viscosity/temperature relationships for the performance graded asphalt binders delivered and incorporated in the work.

(a) Performance Graded (PG) Asphalt Binder. The asphalt binder shall meet the requirements of AASHTO M 320, Table 1 "Standard Specification for Performance Graded Asphalt Binder" for the grade shown on the plans and the following.

Test	Parameter
Small Strain Parameter (AASHTO PP 113) BBR, ΔTc, 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)	-5 °C min.

(b) Modified Performance Graded (PG) Asphalt Binder. The asphalt binder shall meet the requirements of AASHTO M 320, Table 1 "Standard Specification for Performance Graded Asphalt Binder" for the grade shown on the plans.

Asphalt binder modification shall be performed at the source, as defined in the Bureau of Materials Policy Memorandum, "Performance Graded Asphalt Binder Qualification Procedure."

Modified asphalt binder shall be safe to handle at asphalt binder production and storage temperatures or HMA construction temperatures. Safety Data Sheets (SDS) shall be provided for all asphalt modifiers.

(1) Polymer Modification (SB/SBS or SBR). Elastomers shall be added to the base asphalt binder to achieve the specified performance grade and shall be either a styrene-butadiene diblock, triblock copolymer without oil extension, or a styrenebutadiene rubber. The polymer modified asphalt binder shall be smooth, homogeneous, and be according to the requirements shown in Table 1 or 2 for the grade shown on the plans.

Table 1 - Requirements for Styrene-Butadiene Copolymer (SB/SBS) Modified Asphalt Binders			
Test	Asphalt Grade SB/SBS PG 64-28 SB/SBS PG 70-22	Asphalt Grade SB/SBS PG 64-34 SB/SBS PG 70-28 SB/SBS PG 76-22 SB/SBS PG 76-28	
Separation of Polymer ITP, "Separation of Polymer from Asphalt Binder" Difference in °F (°C) of the softening point between top and bottom portions	4 (2) max.	4 (2) max.	
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)			
Elastic Recovery ASTM D 6084, Procedure A, 77 °F (25 °C), 100 mm elongation, %	60 min.	70 min.	

Table 2 - Requirements for Styrene-Butadiene Rubber (SBR) Modified Asphalt Binders			
Test	Asphalt Grade SBR PG 64-28 SBR PG 70-22	Asphalt Grade SB/SBS PG 64-34 SB/SBS PG 70-28 SBR PG 76-22 SBR PG 76-28	
Separation of Polymer ITP, "Separation of Polymer from Asphalt Binder" Difference in °F (°C) of the softening point between top and bottom portions	4 (2) max.	4 (2) max.	
Toughness ASTM D 5801, 77 °F (25 °C), 20 in./min. (500 mm/min.), inlbs (N-m)	110 (12.5) min.	110 (12.5) min.	
Tenacity ASTM D 5801, 77 °F (25 °C), 20 in./min. (500 mm/min.), inIbs (N-m)	75 (8.5) min.	75 (8.5) min.	
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)			
Elastic Recovery ASTM D 6084, Procedure A, 77 °F (25 °C), 100 mm elongation, %	40 min.	50 min.	

(2) Ground Tire Rubber (GTR) Modification. GTR modification is the addition of recycled ground tire rubber to liquid asphalt binder to achieve the specified performance grade. GTR shall be produced from processing automobile and/or truck tires by the ambient

grinding method or micronizing through a cryogenic process. GTR shall not exceed 1/16 in. (2 mm) in any dimension and shall not contain free metal particles, moisture that would cause foaming of the asphalt, or other foreign materials. A mineral powder (such as talc) meeting the requirements of AASHTO M 17 may be added, up to a maximum of four percent by weight of GTR to reduce sticking and caking of the GTR particles. When tested in accordance with Illinois Modified AASHTO T 27 "Standard Method of Test for Sieve Analysis of Fine and Coarse Aggregates" or AASHTO PP 74 "Standard Practice for Determination of Size and Shape of Glass Beads Used in Traffic Markings by Means of Computerized Optical Method", a 50 g sample of the GTR shall conform to the following gradation requirements.

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

GTR modified asphalt binder shall be tested for rotational viscosity according to AASHTO T 316 using spindle S27. GTR modified asphalt binder shall be tested for original dynamic shear and RTFO dynamic shear according to AASHTO T 315 using a gap of 2 mm.

The GTR modified asphalt binder shall meet the requirements of Table 3.

Table 3 - Requirements for Ground Tire Rubber (GTR) Modified Asphalt Binders			
Test	Asphalt Grade GTR PG 64-28 GTR PG 70-22	Asphalt Grade GTR PG 76-22 GTR PG 76-28 GTR PG 70-28	
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)			
Elastic Recovery ASTM D 6084, Procedure A, 77 °F (25 °C), 100 mm elongation, %	60 min.	70 min.	

(3) Softener Modification (SM). Softener modification is the addition of organic compounds, such as engineered flux, bio-oil blends, modified vegetable oils, glycol amines, and fatty acid derivatives, to the base asphalt binder to achieve the specified performance grade. Softeners shall be dissolved, dispersed, or reacted in the asphalt binder to enhance its performance and shall remain compatible with the asphalt binder with no separation. Softeners shall not be added to modified PG asphalt binder as defined in Articles 1032.05(b)(1) or 1032.05(b)(2).

An Attenuated Total Reflectance-Fourier Transform Infrared spectrum (ATR-FTIR) shall be collected for both the softening compound as well as the softener modified

asphalt binder at the dose intended for qualification. The ATR-FTIR spectra shall be collected on unaged softener modified binder, 20-hour Pressurized Aging Vessel (PAV) aged softener modified binder, and 40-hour PAV aged softener modified binder. The ATR-FTIR shall be collected in accordance with Illinois Test Procedure 601. The electronic files spectral files (in one of the following extensions or equivalent: \*.SPA, \*.SPG, \*.IRD, \*.IFG, \*.CSV, \*.SP, \*.IRS, \*.GAML, \*.[0-9], \*.IGM, \*.ABS, \*.DRT, \*.SBM, \*.RAS) shall be submitted to the Central Bureau of Materials.

Softener modified asphalt binders shall meet the requirements in Table 4.

Table 4 - Requirements for Softener Modified Asphalt Binders		
	Asphalt Grade	
	SM PG 46-28 SM PG 46-34	
Test	SM PG 52-28 SM PG 52-34	
	SM PG 58-22 SM PG 58-28	
	SM PG 64-22	
Small Strain Parameter (AASHTO PP 113)		
BBR, ΔTc, 40 hrs PAV (40 hrs	-5°C min.	
continuous or 2 PAV at 20 hrs)		
Large Strain Parameter (Illinois Modified		
AASHTO T 391) DSR/LAS Fatigue	≥ 54 %	
Property, $\Delta$  G <sup>*</sup>  peak τ, 40 hrs PAV	≥ 54 %	
(40 hrs continuous or 2 PAV at 20 hrs)		

The following grades may be specified as tack coats.

Asphalt Grade	Use
PG 58-22, PG 58-28, PG 64-22	Tack Coat"

Revise Article 1031.06(c)(1) and 1031.06(c)(2) of the Standard Specifications to read:

"(1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin ABR shall not exceed the amounts listed in the following table.

HMA Mixtures - RAP/RAS Maximum ABR % <sup>1/2/</sup>			
Ndesign	Binder	Surface	Polymer Modified Binder or Surface <sup>3/</sup>
30	30	30	10
50	25	15	10
70	15	10	10
90	10	10	10

1/ For Low ESAL HMA shoulder and stabilized subbase, the RAP/RAS ABR shall not exceed 50 percent of the mixture.

- 2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).
- 3/ The maximum ABR percentages for ground tire rubber (GTR) modified mixes shall be equivalent to the percentages specified for SBS/SBR polymer modified mixes.
- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the following table.

HMA Mixtures - FRAP/RAS Maximum ABR % <sup>1/2/</sup>			
Ndesign	Binder	Surface	Polymer Modified Binder or Surface <sup>3/</sup>
30	55	45	15
50	45	40	15
70	45	35	15
90	45	35	15
SMA			25
IL-4.75			35

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).
- 3/ The maximum ABR percentages for GTR modified mixes shall be equivalent to the percentages specified for SBS/SBR polymer modified mixes."

Add the following to the end of Note 2 of Article 1030.03 of the Standard Specifications.

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

# PORTLAND CEMENT CONCRETE (BDE)

Effective: August 1, 2023

Revise the second paragraph of Article 1103.03(a)(4) the Standard Specifications to read:

"The dispenser system shall provide a visual indication that the liquid admixture is actually entering the batch, such as via a transparent or translucent section of tubing or by independent check with an integrated secondary metering device. If approved by the Engineer, an alternate indicator may be used for admixtures dosed at rates of 25 oz/cwt (1630 mL/100 kg) or greater, such as accelerating admixtures, corrosion inhibitors, and viscosity modifying admixtures."

## REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2024

Revise the first paragraph of Article 669.04 of the Standard Specifications to read:

"669.04 Regulated Substances Monitoring. Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities. The excavated soil and groundwater within the work areas shall be managed as either uncontaminated soil, hazardous waste, special waste, or non-special waste.

As part of the regulated substances monitoring, the monitoring personnel shall perform and document the applicable duties listed on form BDE 2732 "Regulated Substances Monitoring Daily Record (RSMDR)"."

Revise the first two sentences of the nineteenth paragraph of Article 669.05 of the Standard Specifications to read:

"The Contractor shall coordinate waste disposal approvals with the disposal facility and provide the specific analytical testing requirements of that facility. The Contractor shall make all arrangements for collection, transportation, and analysis of landfill acceptance testing."

Revise the last paragraph of Article 669.05 of the Standard Specifications to read:

"The Contractor shall select a permitted landfill facility or CCDD/USFO facility meeting the requirements of 35 III. Admin. Code Parts 810-814 or Part 1100, respectively. The Department will review and approve or reject the facility proposed by the Contractor based upon information provided in BDE 2730. The Contractor shall verify whether the selected facility is compliant with those applicable standards as mandated by their permit and whether the facility is presently, has previously been, or has never been, on the United States Environmental Protection Agency (U.S. EPA) National Priorities List or the Resource Conservation and Recovery Act (RCRA) List of Violating Facilities. The use of a Contractor selected facility shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth."

Revise the first paragraph of Article 669.07 of the Standard Specifications to read:

"669.07 Temporary Staging. Soil classified according to Articles 669.05(a)(2), (b)(1), or (c) may be temporarily staged at the Contractor's option.

Topsoil for re-use as final cover which has been field screened and found not to exhibit PID readings over daily background readings as documented on the BDE 2732, visual staining or odors, and is classified according to Articles 669.05(a)(2), (a)(3), (a)(4), (b)(1), or (c) may be temporarily staged at the Contractor's option.

All other soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) shall be managed and disposed of without temporary staging to the greatest extent practicable.

If circumstances beyond the Contractor's control require temporary staging of these latter materials, the Contractor shall request approval from the Engineer in writing."

Add the following paragraph after the sixth paragraph of Article 669.11 of the Standard Specifications.

"The sampling and testing of effluent water derived from dewatering discharges for priority pollutants volatile organic compounds (VOCs), priority pollutants semi-volatile organic compounds (SVOCs), or priority pollutants metals, will be paid for at the contract unit price per each for VOC GROUNDWATER ANALYSIS using EPA Method 8260B, SVOC GROUNDWATER ANALYSIS using EPA Method 8270C, or RCRA METALS GROUNDWATER ANALYSIS using EPA Methods 6010B and 7471A. This price shall include transporting the sample from the job site to the laboratory."

# SEEDING (BDE)

Effective: November 1, 2022

Revise Article 250.07 of the Standard Specifications to read:

"**250.07** Seeding Mixtures. The classes of seeding mixtures and combinations of mixtures will be designated in the plans.

When an area is to be seeded with two or more seeding classes, those mixtures shall be applied separately on the designated area within a seven day period. Seeding shall occur prior to placement of mulch cover. A Class 7 mixture can be applied at any time prior to applying any seeding class or added to them and applied at the same time.

		TABLE 1 - SEEDING MIXTURES	
Class	- Туре	Seeds	lb/acre (kg/hectare)
1	Lawn Mixture 1/	Kentucky Bluegrass Perennial Ryegrass	100 (110) 60 (70)
		Festuca rubra ssp. rubra (Creeping Red Fescue)	40 (50)
1A	Salt Tolerant	Kentucky Bluegrass	60 (70)
	Lawn Mixture 1/	Perennial Ryegrass	20 (20)
		Festuca rubra ssp. rubra (Creeping Red Fescue)	20 (20) 20 (20)
		<i>Festuca brevipilla</i> (Hard Fescue) <i>Puccinellia distans</i> (Fults Saltgrass or Salty Alkaligrass)	60 (70)
1B	Low Maintenance	Turf-Type Fine Fescue 3/	150 (170)
	Lawn Mixture 1/	Perennial Ryegrass	20 (20)
		Red Top	10 (10)́
		Festuca rubra ssp. rubra (Creeping Red Fescue)	20 (20)
2	Roadside Mixture 1/	Lolium arundinaceum (Tall Fescue)	100 (110)
		Perennial Ryegrass	50 (55)
		Festuca rubra ssp. rubra (Creeping Red Fescue)	40 (50)
	0 H T L L	Red Top	10 (10)
2A	Salt Tolerant Roadside Mixture 1/	<i>Lolium arundinaceum</i> (Tall Fescue) Perennial Ryegrass	60 (70) 20 (20)
		Festuca rubra ssp. rubra (Creeping Red Fescue)	30 (20)
		Festuca brevipila (Hard Fescue)	30 (20)
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	60 (70)
3	Northern Illinois	Elymus canadensis	5 (5)
-	Slope Mixture 1/	(Canada Wild Rye) 5/	- (-)
		Perennial Ryegrass	20 (20)
		Alsike Clover 4/	5 (5)
		Desmanthus illinoensis	2 (2)
		(Illinois Bundleflower) 4/ 5/ Schizachyrium scoparium	12 (12)
		(Little Bluestem) 5/	12 (12)
		Bouteloua curtipendula	10 (10)
		(Side-Oats Grama) 5/	
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	30 (35)
		Oats, Spring	50 (55)
		Slender Wheat Grass 5/ Buffalo Grass 5/ 7/	15 (15) 5 (5)
ЗA	Southern Illinois	Perennial Ryegrass	
34	Slope Mixture 1/	Elymus canadensis	20 (20) 20 (20)
		(Canada Wild Rye) 5/	20 (20)
		Panicum virgatum (Switchgrass) 5/	10 (10)
		Schizachyrium scoparium	12 (12)
		(Little Blue Stem) 5/	
		Bouteloua curtipendula	10 (10)
		(Side-Oats Grama) 5/ Dalea candida	5 (5)
		(White Prairie Clover) 4/ 5/	5 (5)
		Rudbeckia hirta (Black-Eyed Susan) 5/	5 (5)
		Oats, Spring	50 (55)

Class	s – Туре	Seeds	lb/acre (kg/hectare)
4	Native Grass 2/ 6/	Andropogon gerardi (Big Blue Stem) 5/	4 (4)
		Schizachyrium scoparium (Little Blue Stem) 5/	5 (5)
		Bouteloua curtipendula (Side-Oats Grama) 5/	5 (5)
		<i>Elymus canadensis</i> (Canada Wild Rye) 5/	1 (1)
		Panicum virgatum (Switch Grass) 5/	1 (1)
		Sorghastrum nutans (Indian Grass) 5/	2 (2)
		Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
4.4		Perennial Ryegrass	15 (15)
4A	Low Profile Native Grass 2/ 6/	Schizachyrium scoparium (Little Blue Stem) 5/	5 (5)
		<i>Bouteloua curtipendula</i> (Side-Oats Grama) 5/	5 (5)
		Elymus canadensis (Canada Wild Rye) 5/	1 (1)
		Sporobolus heterolepis (Prairie Dropseed) 5/	0.5 (0.5)
		Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
		Perennial Ryegrass	15 (15)
4B	Wetland Grass and	Annual Ryegrass	25 (25)
	Sedge Mixture 2/ 6/	Oats, Spring Wetland Grasses (species below) 5/	25 (25) 6 (6)
	<u>Species:</u>		<u>% By Weight</u>
	Calamagrostis canadensis (Blue Joint Grass)		12
	Carex lacustris (Lake-Bank Sedge)		6
	Carex slipata (Awl-Fruited Sedge)		6
	<i>Carex stricta</i> (Tussock Sedge) <i>Carex vulpinoidea</i> (Fox Sedge)		6 6
	Eleocharis acicularis (Needle Spike Rush)		3
	Eleocharis acicularis (Needle Spike Rush)		3
	<i>Glyceria striata</i> (Fowl Manna Grass)		14
	Juncus effusus (Common Rush)		6
	Juncus tenuis (Slender Rush)		6
	Juncus torreyi (Torrey's Rush)		6
	Leersia oryzoides (Rice Cut Grass)		10
	Scirpus acutus (Hard-Stemmed Bulrush)		3
	Scirpus atrovirens (Dark Green Rush)		3
	Bolboschoenus fluviatilis (River Bulrush)		3
	Schoenoplectus tabernaemontani (Softstem Bulrush)		3
	Spartina pectinata (Cord Grass)		4

Clas	s – Type	Seeds	lb/acre (kg/hectare)
5	Forb with	Annuals Mixture (Below)	1 (1)
	Annuals Mixture 2/ 5/ 6/	Forb Mixture (Below)	10 (10)
	Annuals Mixture - Mixture not exceeding 25 % by weight of any one species, of the following:		
	Coreopsis lanceolata (S	and Coreonsis)	
	Leucanthemum maximu		
	Gaillardia pulchella (Blai		
	Ratibida columnifera (Pr		
	<i>Rudbeckia hirta</i> (Black-B		
		exceeding 5 % by weight PLS of	
	any one spec	cies, of the following:	
	Amorpha canescens (Le	ad Plant) 4/	
	Anemone cylindrica (Thi		
	Asclepias tuberosa (But		
	Aster azureus (Sky Blue		
	Symphyotrichum leave (		
	Aster novae-angliae (Ne		
	Baptisia leucantha (Whit		
	<i>Coreopsis palmata</i> (Prai <i>Echinacea pallida</i> (Pale		
	Eryngium yuccifolium (R		
	Helianthus mollis (Down		
	Heliopsis helianthoides (		
	Liatris aspera (Rough Bl		
	Liatris pycnostachya (Pr		
	Monarda fistulosa (Prair		
	Parthenium integrifolium		
	Dalea candida (White Pi		
	Dalea purpurea (Purple		
	Physostegia virginiana (		
	Potentilla arguta (Prairie		
	Ratibida pinnata (Yellow	Coneflower)	
	Rudbeckia subtomentos		
	Silphium laciniatum (Cor		
	Silphium terebinthinace		
	Oligoneuron rigidum (Rig		
	Tradescantia ohiensis (S	, ,	
	Veronicastrum virginicur	<i>n</i> (Culver's Root)	

Class -	– Туре	Seeds	lb/acre (kg/hectare)
5A	Large Flower Native Forb Mixture 2/ 5/ 6/	Forb Mixture (see below)	5 (5)
	Species:		<u>% By Weight</u>
	Aster novae-angliae (New England Aster)		5
	Echinacea pallida (Pale Purple Coneflower)		10
	Helianthus mollis (Downy Sunflower)		10
	Heliopsis helianthoide		10
	Liatris pycnostachya (Prairie Blazing Star)		10
	Ratibida pinnata (Yellow Coneflower)		5
	Rudbeckia hirta (Blac		10
	Silphium laciniatum (C		10
	Silphium terebinthina		20
	Oligoneuron rigidum (		10
5B	Wetland Forb 2/ 5/ 6/	Forb Mixture (see below)	2 (2)
	Species:		<u>% By Weight</u>
	Acorus calamus (Swe		3
	Angelica atropurpurea		6
	Asclepias incarnata (S		2
	Aster puniceus (Purple Stemmed Aster)		10
	Bidens cernua (Beggarticks)		7 7
	Eutrochium maculatum (Spotted Joe Pye Weed)		7
	Eupatorium perfoliatum (Boneset)		2
	Helenium autumnale (Autumn Sneeze Weed)		2
	<i>Iris virginica shrevei</i> (Blue Flag Iris) <i>Lobelia cardinalis</i> (Cardinal Flower)		2 5
	Lobelia siphilitica (Great Blue Lobelia)		5
	Lythrum alatum (Winged Loosestrife)		2
	Physostegia virginiana (False Dragonhead)		5
	Persicaria pensylvanica (Pennsylvania Smartweed)		10
	Persicaria lapathifolia (Curlytop Knotweed)		10
	Pychanthemum virginianum (Mountain Mint)		5
	Rudbeckia laciniata (Cut-leaf Coneflower)		5
	Oligoneuron riddellii (Riddell Goldenrod)		2
	Sparganium eurycarp	,	5
6	Conservation Mixture 2/ 6/	Schizachyrium scoparium (Little Blue Stem) 5/	5 (5)
		Elymus canadensis	2 (2)
		(Canada Wild Rye) 5/	<b>_</b> /=\
		Buffalo Grass 5/ 7/	5 (5)
		Vernal Alfalfa 4/ Oats, Spring	15 (15) 48 (55)
6A	Salt Tolerant	Schizachyrium scoparium	
ы	Conservation	(Little Blue Stem) 5/	5 (5)
	Mixture 2/6/	Elymus canadensis	2 (2)
		(Canada Wild Rye) 5/	. ,
		Buffalo Grass 5/ 7/	5 (5)
		Vernal Alfalfa 4/	15 (15)
		Oats, Spring	48 (55)
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	20 (20)
7	Temporary Turf	Perennial Ryegrass	50 (55)
	Cover Mixture	Oats, Spring	64 (70)

Notes:

- 1/ Seeding shall be performed when the ambient temperature has been between 45 °F (7 °C) and 80 °F (27 °C) for a minimum of seven (7) consecutive days and is forecasted to be the same for the next five (5) days according to the National Weather Service.
- 2/ Seeding shall be performed in late fall through spring beginning when the ambient temperature has been below 45 °F (7 °C) for a minimum of seven (7) consecutive days and ending when the ambient temperature exceeds 80 °F (27 °C) according to the National Weather Service.
- 3/ Specific variety as shown in the plans or approved by the Engineer.
- 4/ Inoculation required.
- 5/ Pure Live Seed (PLS) shall be used.
- 6/ Fertilizer shall not be used.
- 7/ Seed shall be primed with KNO<sub>3</sub> to break dormancy and dyed to indicate such.

Seeding will be inspected after a period of establishment. The period of establishment shall be six (6) months minimum, but not to exceed nine (9) months. After the period of establishment, areas not exhibiting 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at no additional cost to the Department."

# SOURCE OF SUPPLY AND QUALITY REQUIREMENTS (BDE)

Effective: January 2, 2023

Add the following to Article 106.01 of the Standard Specifications:

"The final manufacturing process for construction materials and the immediately preceding manufacturing stage for construction materials shall occur within the United States. Construction materials shall include an article, material, or supply that is or consists primarily of the following.

- (a) Non-ferrous metals;
- (b) Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- (c) Glass (including optic glass);
- (d) Lumber;
- (e) Drywall.

Items consisting of two or more of the listed construction materials that have been combined through a manufacturing process, and items including at least one of the listed materials combined with a material that is not listed through a manufacturing process shall be exempt."

# 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%"

## SUBMISSION OF PAYROLL RECORDS (BDE)

Effective: April 1, 2021 Revised: November 2, 2023

<u>FEDERAL AID CONTRACTS</u>. Revise the following section of Check Sheet #1 of the Recurring Special Provisions to read:

## **"STATEMENTS AND PAYROLLS**

The payroll records shall include the worker's name, social security number, last known address, telephone number, email address, classification(s) of work actually performed, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof), daily and weekly number of hours actually worked in total, deductions made, and actual wages paid.

The Contractor and each subcontractor shall submit certified payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers, last known addresses, telephone numbers, and email addresses shall not be included on weekly submittals. Instead, the payrolls need only include an identification number for each employee (e.g., the last four digits of the employee's social security number). The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at <a href="https://lcptracker.com/">https://lcptracker.com/</a>. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

<u>STATE CONTRACTS</u>. Revise Item 3 of Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

"3. Submission of Payroll Records. The Contractor and each subcontractor shall, no later than the 15<sup>th</sup> day of each calendar month, file a certified payroll for the immediately preceding month to the Illinois Department of Labor (IDOL) through the Illinois Prevailing Wage Portal in compliance with the State Prevailing Wage Act (820 ILCS 130). The portal can be found on the IDOL website at <u>https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx</u>. Payrolls shall be submitted in the format prescribed by the IDOL.

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at <a href="https://lcptracker.com/">https://lcptracker.com/</a>.

When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

## SURFACE TESTING OF PAVEMENTS – IRI (BDE)

Effective: January 1, 2021 Revised: January 1, 2023

<u>Description</u>. This work shall consist of testing the ride quality of the finished surface of pavement sections with new concrete pavement, PCC overlays, full-depth HMA, and HMA overlays with at least 2.25 in. (57 mm) total thickness of new HMA combined with either HMA binder or HMA surface removal, 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 the following to Article 406.03 of the Standard Specifications:

Revise Article 406.11 of the Standard Specifications to read:

"406.11 Surface Tests. Prior to HMA overlay 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 after the pavement improvement is complete but within the same construction season. 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 consists 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 consists of pavements, ramps, and loops with a posted speed limit of 45 mph or less. These sections shall be tested using a 16 ft (5 m) straightedge or with an IPS analyzed using the rolling 16 ft (5 m) straightedge simulation in ProVAL.
  - (3) Miscellaneous Pavement. Miscellaneous pavement are 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.

- 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. Pavement connector for bridge approach slab;
- i. Bridge approach slab;
- j. Pavement that must be constructed in segments of 600 ft (180 m) or less;
- k. Pavement within 25 ft (7.6 m) of manholes, utility structures, at-grade railroad crossings, 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.
  - a. MRI<sub>0</sub>. The MRI of the existing pavement prior to construction.
  - b. MRI<sub>I</sub>. The MRI value that warrants an incentive payment.

- c. MRI<sub>F</sub>. The MRI value that warrants full payment.
- d. MRI<sub>D</sub>. The MRI value that warrants a financial disincentive.
- (6) Areas of Localized Roughness (ALR). Isolated areas of roughness, which can cause significant increase in the calculated MRI for a given sublot.
- (7) Sublot. A continuous strip of pavement 0.1 mile (160 m) long and one lane wide. A partial sublot greater than or equal to 264 ft (80 m) 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 200 in./mile (3,200 mm/km) will be identified by the Engineer and shall be corrected by the Contractor. Any sublot having a MRI greater than MRI<sub>D</sub>, including ALR, shall be corrected to reduce the MRI to the MRI<sub>F</sub>, or replaced at the Contractor's option.
  - (2) Low-Speed Mainline Pavement. Surface variations in low-speed mainline pavement which exceed the 5/16 in. (8 mm) tolerance will be identified by the Engineer and shall be corrected by the Contractor.
  - (3) Miscellaneous Pavements. Surface variations in miscellaneous pavement which exceed the 5/16 in. (8 mm) tolerance 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 perpendicular 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 pavement. For pavement that is 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 (MRI<sub>0</sub>) and shall be determined as follows.

	MRI Thresholds (High-Speed, HMA Overlay)		
Upper MRI Thresholds <sup>1/</sup>	MRI₀ ≤ 125.0 in./mile (≤ 1,975 mm/km)	MRI <sub>0</sub> > 125.0 in./mile <sup>1/</sup> (> 1,975 mm/km)	
Incentive (MRI <sub>I</sub> )	45.0 in./mile (710 mm/km)	0.2 × MRI <sub>0</sub> + 20	
Full Pay (MRI <sub>F</sub> )	75.0 in./mile (1,190 mm/km)	0.2 × MRI <sub>0</sub> + 50	
Disincentive (MRI <sub>D</sub> )	100.0 in./mile (1,975 mm/km)	0.2 × MRI <sub>0</sub> + 75	

1/ MRI<sub>0</sub>, MRI<sub>I</sub>, MRI<sub>F</sub>, and MRI<sub>D</sub> 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 <sup>1/</sup>	
MRI ≤ MRI₁	+ (MRI <sub>I</sub> – MRI) × \$20.00 <sup>2/</sup>	
MRI₁ < MRI ≤ MRI <sub>F</sub>	+ \$0.00	
MRI <sub>F</sub> < MRI ≤ MRI <sub>D</sub>	– (MRI – MRI <sub>F</sub> ) × \$8.00	
MRI > MRI <sub>D</sub>	- \$200.00	

1/ MRI, MRI<sub>I</sub>, MRI<sub>F</sub>, and MRI<sub>D</sub> shall be in in./mile for calculation.

2/ The maximum incentive amount shall not exceed \$300.00.

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 <sup>1/</sup>	
≤ 45.0 (710)	+ (45 – MRI) × \$45.00 <sup>2/</sup>	
> 45.0 (710) to 75.0 (1,190)	+ \$0.00	
> 75.0 (1,190) to 100.0 (1,580)	– (MRI – 75) × \$20.00	
> 100.0 (1,580)	- \$500.00	

1/ MRI shall be in in./mile for calculation.

2/ The maximum incentive amount shall not exceed \$800.00."

## Portland Cement Concrete Pavement

Delete Article 420.03(i) of the Standard Specifications.

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 areas ground according to Article 420.18 at no additional cost to the Department.

Jointed portland cement concrete 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 <sup>1/</sup>	
≤ 45.0 (710)	+ (45 – MRI) × \$60.00 <sup>2/</sup>	
> 45.0 (710) to 75.0 (1,190)	+ \$0.00	
> 75.0 (1,190) to 100.0 (1,580)	– (MRI – 75) × \$37.50	
> 100.0 (1,580)	- \$750.00	

- 1/ MRI shall be in in./mile for calculation.
- 2/ The maximum incentive amount shall not exceed \$1200.00.
- 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)."

## General Equipment

Revise Article 1101.04 of the Standard Specifications to read:

"**1101.04 Pavement Surface Grinding Equipment.** The pavement surface grinding device shall have a minimum effective head width of 3 ft (0.9 m).

- (a) Diamond Saw Blade Machine. The machine shall be self-propelled with multiple diamond saw blades.
- (b) Profile Milling Machine. The profile milling machine shall be a drum device with carbide or diamond teeth with spacing of 0.315 in. (8 mm) or less and maintain proper forward speed for surface texture according to the manufacturer's specifications."

# 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  $\underline{\mathbf{6}}$ . 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.

## VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)

Effective: November 1, 2021 Revised: November 1, 2022

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. In accordance with 625 ILCS 5/12-215, the lights may only 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 Supports ......1106.02"

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."

## **REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Non-segregated 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. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

### ATTACHMENTS

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

## I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (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). 23 CFR 633.102(e).

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. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid designbuild 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) in accordance with 23 CFR 633.102. The designbuilder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals 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). 23 CFR 633.102(b).

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. 23 CFR 633.102(d).

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. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

# II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A 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 Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), 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 Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), 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 Part 230, Subpart A, 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 (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 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 Part 35 and 29 CFR Part 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. 23 CFR 230.409 (g)(4) & (5).

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, sexual orientation, gender identity, 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, preapprenticeship, 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 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 or other knowledgeable company official.

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, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure 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. 23 CFR 230.409. 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, sexual orientation, gender identity, 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, sexual orientation, gender identity, 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 thereunder. 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, sexual orientation, gender identity, 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, 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. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. 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 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 recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or

(4) Disqualifying the contractor from future bidding as nonresponsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

**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 nonminority 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 more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, 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, sexual orientation, gender identity, 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), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

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 (29 CFR 5.5)

a. Wage rates and fringe benefits. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), 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 basic hourly 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. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. 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 must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. 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 classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must 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. Frequently recurring classifications. (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in <u>29 CFR part 1</u>, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined; (ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. Conformance. (1) The contracting officer must 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 be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate 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 used 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) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) 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 will be sent by the contracting officer by email to <u>DBAconformance@dol.gov</u>. 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.

(4) 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 will, by email to <u>DBAconformance@dol.gov</u>, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The 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.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must 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.

d. *Fringe benefits not expressed as an hourly rate.* 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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. Unfunded plans. 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, in accordance with the criteria set forth in § 5.28, 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.

f. *Interest*. In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

### 2. Withholding (29 CFR 5.5)

a. Withholding requirements. The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and 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.

b. *Priority to withheld funds*. The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, <u>31</u> <u>U.S.C. 3901</u>–3907.

## 3. Records and certified payrolls (29 CFR 5.5)

a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; 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 40 U.S.C. <u>3141(2)(B)</u> of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section 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 <u>40 U.S.C.</u> <u>3141(2)(B)</u> of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, 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.

(4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Actscovered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker ( e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at https://www.dol.gov/sites/dolgov/files/WHD/ legacy/files/wh347/.pdf or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working 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 <u>29 CFR part 3</u>; and

(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(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) Use of Optional Form WH–347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature*. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification*. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under <u>18 U.S.C. 1001</u> and <u>31 U.S.C. 3729</u>.

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. Contracts, subcontracts, and related documents. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. Required disclosures and access (1) Required record disclosures and access to workers. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) Sanctions for non-compliance with records and worker access requirements. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, 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, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

# 4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. Apprentices (1) Rate of pay. Apprentices will be permitted to work at less than the predetermined rate for the work they perform 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 (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) Apprenticeship ratio. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must 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 this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) Reciprocity of ratios and wage rates. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. Equal employment opportunity. The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and <u>29 CFR part 30</u>.

c. 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 Federalaid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). 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 journeyworkers 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 as provided in 29 CFR 5.5.

**6. Subcontracts**. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 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 as provided in 29 CFR 5.5.

**9. Disputes concerning labor standards.** As provided in 29 CFR 5.5, 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 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  $\underline{40}$  U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of  $\underline{40}$  <u>U.S.C. 3144(b)</u> or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, <u>18</u> <u>U.S.C. 1001</u>.

**11. Anti-retaliation**. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or  $\frac{29 \text{ CFR part 1}}{29 \text{ CFR part 1}}$  or  $\frac{3}{23}$ ;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or <u>29 CFR part 1</u> or <u>3</u>;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or  $\underline{29 \ CFR \ part \ 1}$  or  $\underline{3}$ ; or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or  $\frac{29 \text{ CFR part 1}}{29 \text{ CFR part 1}}$  or  $\frac{3}{2}$ .

# V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), 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 watchpersons 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. 29 CFR 5.5.

#### 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 and interest from the date of the underpayment. 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 watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR  $5.5(b)(2)^*$  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.

\* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

### 3. Withholding for unpaid wages and liquidated damages

a. Withholding process. The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, 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 that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds*. The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, <u>31</u> <u>U.S.C. 3901</u>–3907.

**4. Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lowertier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

**5. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

#### **VI. SUBLETTING OR ASSIGNING THE CONTRACT**

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

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" in paragraph 1 of Section VI 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: (based on longstanding interpretation)

(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. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), 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. Pursuant to 23 CFR 635.116(c), 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. (based on longstanding interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

#### **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 Part 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. 23 CFR 635.108.

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 Part 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). 29 CFR 1926.10.

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 Part 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 11, 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 (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

### 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. 2 CFR 180.220 and 1200.220.

#### 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. 2 CFR 180.320.

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. 2 CFR 180.325.

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. 2 CFR 180.345 and 180.350. 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, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient 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 recipient or subrecipient 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. 2 CFR 180.330.

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. 2 CFR 180.220 and 180.300.

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. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. 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 System for Award Management website (<u>https://www.sam.gov/</u>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

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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 CFR 180.335;.

(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, 2 CFR 180.800;

(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, 2 CFR 180.700 and 180.800; 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. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

\* \* \* \* \*

#### 3. 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). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant 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. 2 CFR 180.365.

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, Subpart I, 180.900 - 180.1020, 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 recipient or subrecipient 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 recipient or subrecipient 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. 2 CFR 1200.220 and 1200.332.

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. 2 CFR 180.220 and 1200.220.

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 System for Award Management website (<u>https://www.sam.gov/</u>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

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. 2 CFR 180.325.

\* \* \* \* \*

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

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

 b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

\* \* \* \* \*

# XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

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.

 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.

## XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor 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. 46 CFR 381.7.

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 Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

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

**ROAD CONTRACTS** (23 CFR 633, Subpart B, Appendix B) 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.

 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.

 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.

 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.