# Letting March 6, 2020

# Notice to Bidders, Specifications and Proposal



Contract No. 61E69 COOK-DUPAGE Counties Section 14-00245-05-LS Route FAP 345 (II 390) Project USYC-144 () District 1 Construction Funds

Prepared by

Checked by

# Illinois Department of Transportation

# **NOTICE TO BIDDERS**

- 1. TIME AND PLACE OF OPENING BIDS. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 10:00 a.m. March 6, 2020 at which time the bids will be publicly opened from the iCX SecureVault.
- **2. DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 61E69 COOK-DUPAGE Counties Section 14-00245-05-LS Project USYC-144 () Route FAP 345 (II 390) District 1 Construction Funds

Landscaping and sign installation along the Elgin O'Hare Western Access Corridor at Lake Street (US 20), Roselle Road, Plum Grove Road and Rohlwing Road. Project is located in the villages of Roselle, Itasca and Hanover Park.

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

By Order of the Illinois Department of Transportation

Omer Osman, Acting Secretary

# INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

# Adopted January 1, 2020

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

ERRATA Standard Specifications for Road and Bridge Construction

(Adopted 4-1-16) (Revised 1-1-20)

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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  $^{\star}$  indicates a new or revised special provision for the letting.

	<u>File</u> Name	<u>Pg.</u>		Special Provision Title	<b>Effective</b>	Revised
	80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
	80274			Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
	80192			Automated Flagger Assistance Device	Jan. 1, 2008	, ,
	80173			Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
*	80246			Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	<b>5</b> /
	80241			Bridge Demolition Debris	July 1, 2009	
	50261			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	50481			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	50491			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
	50531			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
*	80425			Cape Seal	Jan. 1, 2020	, ,
	80384	76	Х	Compensable Delay Costs	June 2, 2017	April 1, 2019
	80198			Completion Date (via calendar days)	April 1, 2008	,
	80199			Completion Date (via calendar days) Plus Working Days	April 1, 2008	
	80293			Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	July 1, 2016
	80311			Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
	80277			Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
	80261	80	Х	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
	80387			Contrast Preformed Plastic Pavement Marking	Nov. 1, 2017	
	80029	83	Х	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
	80402	93	Х	Disposal Fees	Nov. 1, 2018	
	80378			Dowel Bar Inserter	Jan. 1, 2017	Jan. 1, 2018
	80405			Elastomeric Bearings	Jan. 1, 2019	
*	80421			Electric Service Installation	Jan. 1, 2020	
	80415			Emulsified Asphalts	Aug. 1, 2019	
*	80423			Engineer's Field Office Laboratory	Jan. 1, 2020	
	80388	95	Χ	Equipment Parking and Storage	Nov. 1, 2017	
	80229			Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
	80417			Geotechnical Fabric for Pipe Underdrains and French Drains	Nov. 1, 2019	
	80420			Geotextile Retaining Walls	Nov. 1, 2019	
	80304			Grooving for Recessed Pavement Markings	Nov. 1, 2012	Nov. 1, 2017
*	80422			High Tension Cable Median Barrier Reflectors	Jan. 1, 2020	
	80416			Hot-Mix Asphalt – Binder and Surface Course	July 2, 2019	Nov. 1, 2019
	80398			Hot-Mix Asphalt – Longitudinal Joint Sealant	Aug. 1, 2018	Nov. 1, 2019
*	80406			Hot-Mix Asphalt – Mixture Design Verification and Production (Modified for I-FIT Data Collection)	Jan. 1, 2019	Jan. 2, 2020
	80347			Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	July 2, 2019
	80383			Hot-Mix Asphalt – Quality Control for Performance	April 1, 2017	July 2, 2019
	80411			Luminaires, LED	April 1, 2019	
	80393			Manholes, Valve Vaults, and Flat Slab Tops	Jan. 1, 2018	Mar. 1, 2019
	80045			Material Transfer Device	June 15, 1999	Aug. 1, 2014
	80418			Mechanically Stabilized Earth Retaining Walls	Nov. 1, 2019	
*	80424			Micro-Surfacing and Slurry Sealing	Jan. 1, 2020	
	80165			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
	80412			Obstruction Warning Luminaires, LED	Aug. 1, 2019	
	80349			Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
	80371			Pavement Marking Removal	July 1, 2016	
	80389	96	Х	Portland Cement Concrete	Nov. 1, 2017	
	80359			Portland Cement Concrete Bridge Deck Curing	April 1, 2015	Nov. 1, 2019

	<u>File</u> Name	<u>Pg.</u>		Special Provision Title	<b>Effective</b>	Revised
	80300			Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
	80328	97	Х	Progress Payments	Nov. 2, 2013	, .p, _0
	34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
	80157			Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	,
*	80306			Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 2, 2020
*	80407	98	Х	Removal and Disposal of Regulated Substances	Jan. 1, 2019	Jan. 1, 2020
	80419	109	Χ	Silt Fence, Ground Stabilization and Riprap Filter Fabric	Nov. 1, 2019	
	80395			Sloped Metal End Section for Pipe Culverts	Jan. 1, 2018	
	80340			Speed Display Trailer	April 2, 2014	Jan. 1, 2017
	80127	112	Х	Steel Cost Adjustment	April 2, 2014	Aug. 1, 2017
	80408			Steel Plate Beam Guardrail Manufacturing	Jan. 1, 2019	
	80413			Structural Timber	Aug. 1, 2019	
	80397	115	Х	Subcontractor and DBE Payment Reporting	April 2, 2018	
	80391	116	Х	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
	80317			Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	Aug. 1, 2019
	80298	117	Х	Temporary Pavement Marking	April 1, 2012	April 1, 2017
	80403			Traffic Barrier Terminal, Type 1 Special	Nov. 1, 2018	
	80409	120	Χ	Traffic Control Devices – Cones	Jan. 1, 2019	
*	80410			Traffic Spotters	Jan. 1, 2019	
	20338	121	Х	Training Special Provisions	Oct. 15, 1975	
	80318			Traversable Pipe Grate for Concrete End Sections	Jan. 1, 2013	Jan. 1, 2018
	80288			Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
	80302	124	Х	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
	80414			Wood Fence Sight Screen	Aug. 1, 2019	
	80071	125	Х	Working Days	Jan. 1, 2002	

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

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

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

#### STATE OF ILLINOIS

# **SPECIAL PROVISIONS**

# ELGIN O'HARE WESTERN ACCESS TOLLWAY (IL 390) LANDSCAPING AND SCENIC BEAUTIFICATION

The following special provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted April 1, 2016, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures of Materials" in effect on the date of invitation for bids, and the "Supplemental Specifications and recurring Special Provisions" indicated on the Check Sheet included herein which apply and govern the construction of FAU 345A (IL 390) Section No. 14-00245-05-LS, Project No. USYC(144), Job No. C-91-400-16, Contract No. 61E69, Cook and DuPage Counties, various locations along IL-390, in case of conflict with any part or parts of said Specifications, the said Specifications shall take precedence and shall govern.

# LOCATION OF PROJECT

This project is located at various locations along the Elgin O'Hare Western Access Tollway (IL 390) at Lake Street (US 20), Roselle Road, Plum Grove Road and Rohlwing Road, installed in the existing Right-of-Way of the Elgin O'Hare Western Access Tollway (IL 390), owned and maintained by the Illinois State Toll Highway Authority and Cook and DuPage Counties in the Villages of Roselle, Itasca, and Hanover Park. Net and Gross length not applicable. This work consists of four locations including:

- 1.) IL 390 at Westbound entrance/exit Ramps at Lake Street.
- 2.) IL 390 at exit ramps to Roselle Road.
- 3.) IL 390 at Plum Grove Road: Steel Fence Panels
- 4.) IL 390 at exit ramp at Rohlwing Road.

#### **DESCRIPTION OF PROJECT**

This work consists of the installation of landscape and hardscape features corresponding to the four locations above:

- 1.) Steel Fence Panels, Vertical Identifier, Gateway Monument Sign and various landscaping.
- 2.) Steel Fence Panels, Vertical Identifiers and various landscaping.
- 3.) Steel Fence Panels.
- 4.) Gateway Monument Sign and various landscaping.

Additional work includes excavation of earthen parkway (SELECTIVE CLEARING) and solar LED lighting units and all other incidental and collateral work necessary to complete the project as shown on the plans and as described herein.

Route: F.A.P. 345A IL Route 390 Elgin O'Hare Western Access Tollway Contract No.: 61E69

Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

# **AVAILABLE REPORTS**

	No Project specific reports were prepared.
	applicable, the following checked reports and record information is available for dders' reference upon request:  Record structural plans Preliminary Site Investigation (PSI) Preliminary Environmental Site Assessment (PESA) Soils/Geotechnical Report Boring Logs Pavement Cores Location Drainage Study (LDS) Hydraulic Report Noise Analysis Other:
Those	seeking the available reports listed above please contact:
Kent l	Cuper, PE
Princi	pal Civil Engineer
DuPag	ge County Division of Transportation
(630)	407-6915

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16

Cook and DuPage County

# PUBLIC CONVENIENCE AND SAFETY (D-1)

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

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

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

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

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

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

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

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

# STATUS OF UTILITIES (D-1)

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

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

#### UTILTIES TO BE ADJUSTED

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

#### NO CONFLICTS TO BE RESOLVED

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

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

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER
Along all ramps at all interchanges	UG Fiber	No Anticipated Conflict  The UG Fiber shall be protected from damage by the contractor during construction.	Illinois Tollway
Crossing @ Lake Street, East side @ Roselle Road, and @ Rohlwing Road	UG Electric Cable	No Anticipated Conflict  The UG Electric Cable shall be protected from damage by the contractor during construction.	Com Ed

Route: F.A.P. 345A IL Route 390

Elgin O'Hare Western Access Tollway
Contract No.: 61E69
Section: 14-00245-05-LS

Job No.: C-91-400-16 Cook and DuPage County

		No Anticipated Conflict	
East side @ Roselle Road Crossing the WB Roselle Ramp	UG Telephone Cable	The UG Telephone Cable shall be protected from damage by the contractor during construction.	AT&T
West side @ Roselle Road Crossing EB Roselle Ramp  UG Natural Gas Pipe		No Anticipated Conflict  The UG Natural Gas Pipe shall be protected from damage by the contractor during construction.	NICOR
West side @ Roselle Road Crossing EB Roselle Ramp		No Anticipated Conflict  The UG Water shall be protected from damage by the contractor during construction.	Village of Schaumburg
Parallel to EB ramp at Rohlwing Road	UG Electric Cable	No Anticipated Conflict  The UG Electric Cable shall be protected from damage by the contractor during construction.	Com Ed
Crossing EB ramp at Rohlwing Road	UG Natural Gas Pipe	No Anticipated Conflict  The UG Natural Gas Pipe shall be protected from damage by the contractor during construction.	NICOR
Crossing EB ramp at Rohlwing Road	UG Water	No Anticipated Conflict  The UG Water shall be protected from damage by the contractor during construction.	Village of Itasca
Crossing EB ramp at Rohlwing Road	UG Sanitary Sewer	No Anticipated Conflict  The UG Sanitary Sewer shall be protected from damage by the contractor during construction.	Village of Itasca

Route: F.A.P. 345A IL Route 390 Elgin O'Hare Western Access Tollway Contract No.: 61E69

Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

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

Agency/Company Responsible to Resolve Conflict	Name of contact	Address	Phone	e-mail address
AT&T	Mr. Steve Larson	1000 Commerce Drive Oak Brook, IL 60523	(630) 573- 6484	None Listed
ComEd	Ms. Angela Harrell	One Lincoln Centre Suite 600 Oakbrook Terrace, IL 60181	(630) 576- 6185	None Listed
NICOR Gas	Mr. Bruce Koppang	1844 Ferry Road Naperville, IL 60563-9600	(630) 388- 3046	bkoppan@aglresources.com
Comcast Cable Communications, Inc.	Mrs. Martha Gieras	688 Industrial Drive Elmhurst, IL 60126	(630) 600- 6352	Martha _Gieras@cable.comcast.com
G4S / ADESTA	Mr. Thomas Kucharski	565 Willowbrook Centre Parkway Willowbrook, IL 60527	(630 568- 5207	Thomas.kucharski@adestagroup.c om
Illinois Tollway	Permits Division	2700 Ogden Ave Downers Grove, IL 60515	(630) 241- 6800 Ext. 3306	None Listed

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Village of Schaumburg	Permits Division	101 Schaumburg Court, Schaumburg, IL 60193-1878	(847) 895 - 4500	None Listed
Village of Itasca	Carie Anne Ergo	550 W. Irving Park Road, Itasca, IL 60143-1795	(630) 773- 0835	cergo@itasca.com

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

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

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

Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

# **TOLLWAY PERMIT AND BOND**

Effective: January 13, 1989

The Contractor will be required to obtain a permit from the Illinois State Toll Highway Authority (ISTHA) according to Article 107.04 of the Standard Specifications prior to initiating any lane closures on the Tollway or doing any work on the ISTHA right of way. As part of the permit, the Contractor will be required to post a surety bond with the ISTHA.

The Contractor will furnish a copy of the authorized permit to the Engineer.

> Contract No.: 61E69 Section: 14-00245-05-LS

Job No.: C-91-400-16 Cook and DuPage County

#### **APPLICATION OF TOLLWAY SUPPLEMENTAL SPECIFICATIONS**

**DESCRIPTION.** The Illinois Tollway Supplemental Specifications are applicable to this contract and are included by reference as a supplement to the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction Adopted April 1, 2016. The following restrictions apply:

- Said Illinois Tollway Supplemental Specifications are restricted in application to all items of work within the Tollway's jurisdiction.
- Any conflicts between the Tollway Supplemental Specifications and any references to them, and other items in the Contract, will be interpreted and resolved by the Engineer.

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

# TRAFFIC CONTROL PLAN

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

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

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

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

### STANDARDS:

<u> </u>			
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5m) TO 24" (600 mm)		
	FROM PAVEMENT EDGE		
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY		
701311-03	LANE CLOSURE 2L, 2W, MOVING OPERATIONS - DAY ONLY		
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER.,		
	FOR SPEEDS <= 45 MPH		
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED		
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH		
	NONTRAVERSABLE MEDIAN		
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION		
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE		
701901-08	TRAFFIC CONTROL DEVICES		

#### **DETAILS**:

<u>DE 17 (120</u> .			
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS,		
	INTERSECTIONS, AND DRIVEWAYS		
TC-14	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN		
	OPEN TO TRAFFIC)		
TC-22	ARTERIAL ROAD INFORMATION SIGN		

#### **SPECIAL PROVISIONS:**

Keeping Arterial Roadways Open to Traffic (Lane Closures Only)

Public Convenience and Safety (D1)

Temporary Information Signing (D1)

Lights on Barricades (BDE)

Equipment Parking and Storage (BDE)

Traffic Control Devices – Cones (BDE)

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

# **TEMPORARY INFORMATION SIGNING (D-1)**

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

#### Description.

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

#### Materials.

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

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

- Note 1. The Contractor may use 5/8 inch (16 mm) instead of 3/4 inch (19 mm) thick plywood.
- Note 2. Type A sheeting can be used on the plywood base.
- Note 3. All sign faces shall be Type A except all orange signs shall meet the requirements of Article 1106.01.
- Note 4. The overlay panels shall be 0.08 inch (2 mm) thick.

#### **GENERAL CONSTRUCTION REQUIRMENTS**

#### Installation.

The sign sizes and legend sizes shall be verified by the Contractor prior to fabrication.

Signs which are placed along the roadway and/or within the construction zone shall be installed according to the requirements of Article 701.14 and Article 720.04. The signs shall be 7 ft (2.1 m) above the near edge of the pavement and shall be a minimum of 2 ft (600 mm) beyond the edge of the paved shoulder. A minimum of two (2) posts shall be used.

The attachment of temporary signs to existing sign structures or sign panels shall be approved by the Engineer. Any damage to the existing signs due to the Contractor's operations shall be repaired or signs replaced, as determined by the Engineer, at the Contractor's expense.

Signs which are placed on overhead bridge structures shall be fastened to the handrail with stainless steel bands. These signs shall rest on the concrete parapet where possible. The Contractor shall furnish mounting details for approval by the Engineer.

#### Method of Measurement.

This work shall be measured for payment in square feet (square meters) edge to edge (horizontally and vertically).

All hardware, posts or skids, supports, bases for ground mounted signs, connections, which are required for mounting these signs will be included as part of this pay item.

Route: F.A.P. 345A IL Route 390 Elgin O'Hare Western Access Tollway Contract No.: 61E69

Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

# Basis Of Payment.

This work shall be paid for at the contract unit price per square foot (square meter) for TEMPORARY INFORMATION SIGNING.

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

# KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC (LANE CLOSURES ONLY)

Effective: January 22, 2003 Revised: August 10, 2017

The Contractor shall provide the necessary traffic control devices to warn the public and to delineate the work zone as required in these Special Provisions, the Standard Specifications, the State Standards, and the District Details.

Arterial lane closures shall be in accordance with the Standard Specifications, Highway Standards, District Details, and the direction of the Engineer. The Contractor shall request and gain approval from the Engineer seventy–two (72) hours in advance of all long-term (24 hrs. or longer) lane closures.

Arterial lane closures not shown in the staging plans will not be permitted during **peak traffic volume hours**.

Peak traffic volume hours are defined as weekdays (Monday through Friday) from 6:00 AM to 8:30 AM and 4:30 PM to 6:00 PM.

Private vehicles shall not be parked in the work zone. Contractor's equipment and/or vehicles shall not be parked on the shoulders or in the median during non-working hours. The parking of equipment and/or vehicles on State right-of-way will only be permitted at locations approved by the Engineer in accordance with Articles 701.08 and 701.11 of the Standard Specifications.

Should the Contractor fail to completely open and keep open all the traffic lanes to traffic in accordance with the limitations specified above, the Contractor shall be liable to the Department for the amount of:

One lane or ramp blocked = \$1,000

Two lanes blocked = \$2,500

Not as a penalty but as liquidated and ascertained damages for each and every 15 minute interval or a portion thereof that a lane is blocked outside the allowable time limitations. Such damages may be deducted by the Department from any monies due the Contractor. These damages shall apply during the contract time and during any extensions of the contract time.

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

#### GENERAL REQUIREMENTS FOR WEED CONTROL SPRAYING

Effective: February 7, 2007

#### Experience.

The Contractor shall have previous experience with the use of weed control chemicals. He/she shall have had at least one (1) season's experience in the use of their chemicals in spraying highway right-of-way or at least three (3) season's experience in their use in farm or custom spraying. The Contractor shall observe and comply with all sections of the Illinois Custom Spray Law, including licensing.

#### Equipment.

The equipment used shall consist of a vehicle-mounted tank, pump, spray bar and handgun, plus any other accessories needed to complete the specified work. Spraying shall be done through multiple low-pressure flooding or broad jet nozzles mounted on spray bars operated not more than 36" above the ground. If different sizes or types of nozzles are used to make up the spray pattern, the pressure, sizes and capacities shall be adjusted to provide a uniform rate of application for each segment of the spray pattern. Hand spray guns may be used for spraying areas around traffic control devices, lighting standard and similar inaccessible areas. Maximum speed of the spray vehicle during application of chemical shall be five (5) miles per hour.

Pumps used shall have a volume and pressure capacity range sufficient to deliver the mixture at a pressure to provide the required coverage and to keep the spray pattern full and steady without pulsation or excessive pressure as to cause fogging. Maximum pressure for application shall be 15 PSI. Quick acting shut-off valves and spring-loaded ball check valves shall be provided to stop the spray pattern with a minimum of nozzle drip. In areas where the spray vehicle must traverse the right-of-way, a four-wheel drive vehicle with flotation tires will be required to minimize damage to the ground surface.

Prior to beginning work, the Contractor shall obtain approval from the Engineer of the spraying equipment proposed for completing this work. The proposed equipment shall be in an operational condition and available for inspection by the Engineer at least two (2) weeks prior to the proposed starting time. If requested by the Engineer, the Contractor shall demonstrate the calibration of the equipment.

The equipment must provide consistently uniform coverage and keep the spray mixture sufficiently agitated or the work will be suspended until the equipment is repaired or replaced.

# Spraying Areas.

This work includes roadsides and other types of right-of-way of various widths and gradients. Spray areas often extend more than thirty (30) feet from the edge of the roadway, requiring both spray bar and hand gun applications.

When the description of work requires weed control of a stated species, such as teasel, the chemical shall be applied only to locations where the stated species is present. When the description of work requires general weed control within a bed or area, such as broadleaf weed control in turf, then the chemical shall be applied to the entire bed or area.

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

# Exclusion of Spraying Areas.

Areas where weed control spraying is inappropriate or detrimental to the environment, desirable planting, or private property shall be excluded from the spray area.

Spraying will not be permitted over any drainage swales or waterways, or other areas where the chemical label prohibits application. Spraying within 150 feet of a natural area or site where endangered or threatened species occur.

### Responsibility for Prevention of Damage to Private Property.

The Contractor shall, at all times, exercise extreme caution to prevent damage to residential plantings, flower or vegetable gardens, vegetable crops, farm crops, orchard or desirable plants adjacent to the roadside.

The Contractor or Department receives a complaint, the Contractor shall contact a complaint within ten (10) days after receiving a claim for damages, either in person or by letter. The Contractor, or his authorized representative, shall make a personal contact with the complainant within twenty (20) days. The Engineer shall also be notified by the Contractor of all claims for damage he received and shall keep the Engineer informed as to the progress in arriving at a settlement for such claims.

#### Communication with the Engineer.

The Contractor is required to communicate with the Engineer to receive all required approvals in a timely way and to assure that the Engineer can accurately document the work performed.

It shall be the Contractor's responsibility to assure that all chemical containers are opened and added to the spray mixture in the presence of the Engineer.

The Contractor shall obtain approval from the Engineer to proceed with spraying at each location 24 hours prior to the proposed spray operations.

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

#### FENCE REMOVAL

<u>Description.</u> This work shall consist of complete removal and salvage of the existing fence as shown in the Plans, regardless of type or method of installation. The removal shall include posts, fittings, and accessories. This work includes cleaning the existing concrete bridge parapet of structure SN 022-0208. The salvage shall include the transportation of the fence to the District Bridge Maintenance Yard.

<u>Construction Requirements.</u> No removal work shall be completed without the approval of the Engineer. All associated hardware and appurtenances of the existing fence including but not limited to posts, fittings, and accessories, shall be removed off-site and disposed of by the Contractor in a legal disposal site. Any part of the fence that is damaged that is not called out for to be removed shall be replaced at the Contractor's expense.

All sides of the existing concrete parapet where the fence is to be replaced are to be cleaned per Section 592 of the Standard Specifications except it will not paid for separately but included in the cost of FENCE REMOVAL.

<u>Method of Measurement.</u> Fence removal shall be measured for payment in feet of FENCE REMOVAL and measured along the top of the fence from center of post to center of post.

<u>Basis of Payment.</u> This work will paid for at the contract unit price per foot for FENCE REMOVAL. The price shall include all labor, materials, and equipment necessary to complete the work described herein and as shown in the plans. No additional compensation will be allowed.

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

#### **SELECTIVE CLEARING**

Effective: February 8, 2007

<u>Description</u>. This work shall consist of extensive removal and disposal of shrubs, brush, debris (including rocks, bottles, etc.) and selected trees up to six (6) inches (150 mm) in diameter. All trees and shrubs to be saved shall be carefully protected as provided by Article 201.05 of the Standard Specifications. Locations for Selective Clearing and vegetation to be cleared or saved shall be designated by the Engineer.

The undesirable trees and brush (Siberian Elm, European Buckthorn, Mulberry, etc.) shall be cut flush with the ground and all stubs or stumps shall be treated with a re-sprout herbicide approved by the Engineer to prevent re-growth from the stumps. Trees of Tree of Heaven shall not be cut off as specified above, but shall be pulled or grubbed in such a manner as to insure complete removal. Branches on remaining trees shall be pruned off up to 6 feet (2 meters) from the ground.

All cleared areas shall be graded, trimmed, smoothed, and finished uniformly to the satisfaction of the Engineer with equipment approved by the Engineer. Disposal of material shall be done in accordance with Article 202.03.

<u>Method of Measurement</u>. Selective Clearing will be measured in units of 1,000 square feet (90 square meters). Areas not meeting the satisfaction of the Engineer shall not be measured for payment. Plan quantities are estimates only. Actual quantities will be measured in place. Agreement to plan quantities will not be allowed.

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

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

#### WEED CONTROL, NON-SELECTIVE AND NON-RESIDUAL

<u>Description</u>: This work shall consist of the application of a non-selective and non-residual herbicide to kill all existing vegetation at designated areas along highway roadsides.

<u>Materials</u>: The non-selective and non-residual herbicide shall have the following formulation:

A. Active Ingredient

\*Glyphosate, N- (phosphonomethyl) glycine, in the form of its isopropylamine salt

41.00%

B. Inert Ingredients (including surfactant)

59.00%

TOTAL 100.00%

\*Contains 480 grams per liter or 4 pounds per U.S. gallon of the active ingredient Glyphosate, in the form of its isopropylamine salt. Equivalent to 356 grams per liter or 3 pounds per U.S. gallon of the acid, glyphosate.

The Contractor shall submit a certificate, including the following, prior to starting work:

- 1. The chemical names of the compound and the percentage by volume of the ingredients which must match the above specified formulation.
- 2. A statement that the material is in a solution which will form a satisfactory emulsion for use when diluted with water for normal spraying conditions.
- 3. A statement that the herbicide, when mixed with water, will be completely soluble and dispersible and remain in suspension with continuous agitation.
- 4. A statement describing the products proposed for use when the manufacturer requires that surfactants, drift control agents, or other additives be used with the product. These tank mix additives shall be used as specified by the manufacture. Required additives will not be paid for separately.

All material shall be brought to the spray area in the original, unopened containers supplied by the manufacturer.

<u>Schedule</u>: Spraying will not be allowed when temperatures exceed 90° F or under 60° F, when wind velocities exceed fifteen (15) miles per hour, when foliage is wet or rain is eminent, when visibility is poor or during legal holiday periods.

<u>Application Rate</u>: The non-selective and non-residual herbicide shall be applied at the rate of one (1) gallon per acre.

One (1) gallon of herbicide formulation shall be diluted with a minimum of fifty-five (55) gallons of water and applied as a mixture. Water for dilution of the mixture will not be paid for separately.

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<u>Method of Measurement</u>: Weed Control, Non-selective and Non-residual will be measured for payment in gallons of undiluted herbicide applied as specified. The gallons for payment will be determined based on the gallons specified on the label attached to the original container supplied by the manufacturer.

<u>Basis of Payment</u>: Weed Control, Non-Selective and Non-residual will be paid for at the contract unit price per gallon for WEED CONTROL, NON-SELECTIVE AND NON-RESIDUAL. Water for dilution of the mixture and additives required for application will not be paid for as separate items, but the costs shall be considered as included in the contract unit price for Weed Control, Non-selective and Non-residual, and no additional compensation will be allowed.

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#### WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE

<u>Description</u>: This work shall consist of spreading a pre-emergent granular herbicide in areas as shown on the plans or as directed by the Engineer. This item will be used in mulched plant beds and mulch rings.

<u>Materials</u>: The pre-emergent granular herbicide shall contain the chemicals Trifluralin 2% active ingredient and Isoxaben with 0.5% active ingredient. The herbicide label shall be submitted to the Engineer for approval at least seventy-two (72) hours prior to application.

<u>Method</u>: The pre-emergent granular herbicide shall be used in accordance with the manufacturer's directions on the package. The granules are to be applied prior to mulching.

Apply the granular herbicide using a drop or rotary-type designed to apply granular herbicide or insecticides. Calibrate application equipment to use according to manufacturer's directions. Check frequently to be sure equipment is working properly and distributing granules uniformly. Do not use spreaders that apply material in narrow concentrated bands. Avoid skips or overlaps as poor weed control or crop injury may occur. More uniform application may be achieved by spreading half of the required amount of product over the area and then applying the remaining half in swaths at right angles to the first. Apply the granular herbicide at the rate of 100 lbs/acre (112 kg/ha) or 2.3 lbs/1000 sq. ft. (11.2 kg/1000 sq. meters).

<u>Method of Measurement</u>: Pre-emergent granular herbicide will be measured in place in Pounds (Kilograms) of Pre-emergent Granular Herbicide applied. Areas treated after mulch placement shall not be measured for payment.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per pound (kilogram) of WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE which price shall include all materials, equipment, and labor necessary to complete the work as specified.

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

#### GENERAL REQUIREMENTS FOR WEED CONTROL SPRAYING

# Experience:

The Contractor shall have previous experience with the use of weed control chemicals. He/she shall have had at least one (1) season's experience in the use of their chemicals in spraying highway right-of-way or at least three (3) season's experience in their use in farm or custom spraying. The Contractor shall observe and comply with all sections of the Illinois Custom Spray Law, including licensing.

### Equipment:

The equipment used shall consist of a vehicle-mounted tank, pump, spray bar and handgun, plus any other accessories needed to complete the specified work. Spraying shall be done through multiple low-pressure flooding or broad jet nozzles mounted on spray bars operated not more than 36" above the ground. If different sizes or types of nozzles are used to make up the spray pattern, the pressure, sizes and capacities shall be adjusted to provide a uniform rate of application for each segment of the spray pattern. Hand spray guns may be used for spraying areas around traffic control devices, lighting standard and similar inaccessible areas. Maximum speed of the spray vehicle during application of chemical shall be five (5) miles per hour.

Pumps used shall have a volume and pressure capacity range sufficient to deliver the mixture at a pressure to provide the required coverage and to keep the spray pattern full and steady without pulsation or excessive pressure as to cause fogging. Maximum pressure for application shall be 15 PSI. Quick acting shut-off valves and spring-loaded ball check valves shall be provided to stop the spray pattern with a minimum of nozzle drip. In areas where the spray vehicle must traverse the right-of-way, a four-wheel drive vehicle with flotation tires will be required to minimize damage to the ground surface.

Prior to beginning work, the Contractor shall obtain approval from the Engineer of the spraying equipment proposed for completing this work. The proposed equipment shall be in an operational condition and available for inspection by the Engineer at least two (2) weeks prior to the proposed starting time. If requested by the Engineer, the Contractor shall demonstrate the calibration of the equipment.

The equipment must provide consistently uniform coverage and keep the spray mixture sufficiently agitated or the work will be suspended until the equipment is repaired or replaced.

# **Spraying Areas**:

This work includes roadsides and other types of right-of-way of various widths and gradients. Spray areas often extend more than thirty (30) feet from the edge of the roadway, requiring both spray bar and hand gun applications.

When the description of work requires weed control of a stated species, such as teasel, the chemical shall be applied only to locations where the stated species is present. When the description of work requires general weed control within a bed or area, such as broadleaf weed control in turf, then the chemical shall be applied to the entire bed or area.

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# **Exclusion of Spraying Areas**:

Areas where weed control spraying is inappropriate or detrimental to the environment, desirable planting, or private property shall be excluded from the spray area.

Spraying will not be permitted over any drainage swales or waterways, or other areas where the chemical label prohibits application. Spraying within 150 feet of a natural area or site where endangered or threatened species occur.

# Responsibility for Prevention of Damage to Private Property:

The Contractor shall, at all times, exercise extreme caution to prevent damage to residential plantings, flower or vegetable gardens, vegetable crops, farm crops, orchard or desirable plants adjacent to the roadside.

The Contractor or Department receives a complaint, the Contractor shall contact a complaint within ten (10) days after receiving a claim for damages, either in person or by letter. The Contractor, or his authorized representative, shall make a personal contact with the complainant within twenty (20) days. The Engineer shall also be notified by the Contractor of all claims for damage he received and shall keep the Engineer informed as to the progress in arriving at a settlement for such claims.

#### Communication with the Engineer:

The Contractor is required to communicate with the Engineer to receive all required approvals in a timely way and to assure that the Engineer can accurately document the work performed.

It shall be the Contractor's responsibility to assure that all chemical containers are opened and added to the spray mixture in the presence of the Engineer.

The Contractor shall obtain approval from the Engineer to proceed with spraying at each location 24 hours prior to the proposed spray operations.

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#### **PLANTING WOODY PLANTS**

This work shall consist of planting woody plants as specified in Section 253 of the Standard Specifications with the following revisions:

# Delete Article 253.03 Planting Time and substitute the following:

Spring Planting. This work shall be performed between March 15th and May 31st except that evergreen planting shall be performed between March 15th and April 30th in the northern zone.

# Add the following to Article 253.03 (a) (2) and (b):

All plants shall be obtained from Illinois Nurserymen's Association or appropriate state chapter nurseries. All trees and shrubs shall be dug prior to leafing out (bud break) in the spring or when plants have gone dormant in the fall, except for the following species which are only to be dug prior to leafing out in the spring:

- Maple (Acer spp.)
- Buckeye (Aesculus spp.)
- Serviceberry (Amelanchier spp.)
- Birch (Betulus spp.)
- American Hornbeam (Carpinus caroliana)
- Hickory (Carya spp.)
- Hackberry (Celtis occidentalis)
- Eastern Redbud (Cercis canandensis)
- Hawthorn (Crataegus spp.)
- Walnut (Juglans spp.)
- Tuliptree (Liriodendron spp.)
- Crabapple (Malus spp.)
- Black Tupelo (Nyssa sylvatica)
- American Hophornbeam (Ostraya virginiana)
- Oak (Quercus spp.)
- Sassafras (Sassafras albidum)
- Baldcypress (Taxodium distichum)
- American Linden (Tilia americana)

Fall Planting. This work shall be performed between October 1 and November 30 except that evergreen planting shall be performed between August 15 and October 15.

Planting dates are dependent on species of plant material and weather. Planting might begin or end prior or after above dates as approved by the Engineer. Do not plant when soil is muddy or during frost.

#### Add the following to Article 253.05 Transportation:

Cover plants during transport to prevent desiccation. Plant material transported without cover shall be automatically rejected. During loading and unloading, plants shall be handled such that stems are not stressed, scraped or broken and that root balls are kept intact.

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# Delete the third sentence of Article 253.07 and substitute the following:

Trees must be installed first to establish proper layout and to avoid damage to other plantings such as shrubs and perennials.

The Contractor shall be responsible for all plant layout. The layout must be performed by qualified personnel. The planting locations must be laid out as shown in the landscape plan. This will require the use of an engineer's scale to determine some dimensions. Tree locations within each planting area shall be marked with a different color stake/flag and labeled to denote the different tree species. Shrub beds limits must be painted.

All utilities shall have been marked prior to contacting the Roadside Development Unit. The Engineer will contact the Roadside Development Unit at (847) 705-4171 to approve the layout prior to installation. Allow a minimum of seven (7) working days prior to installation for approval.

# Delete the first paragraph to Article 253.08 Excavation of Plant Holes and substitute with the following:

Protect structures, utilities, sidewalks, bicycle paths, knee walls, fences, pavements, utility boxes, other facilities, lawns and existing plants from damage caused by planting operations. Excavation of the planting hole may be performed by hand, machine excavator, or auger.

The excavated material shall not be stockpiled on turf, in ditches, or used to create enormous water saucer berms around newly installed trees or shrubs. Remove all excess excavated subsoil from the site and dispose as specified in Article 202.03.

# Delete the second sentence of Article 253.08 Excavation of Plant Holes (a) and the third paragraph of Article 253.08(b) and substitute with the following:

Excavation of planting hole width. Planting holes for trees, shrubs, and vines shall be three times the diameter of the root mass and with 45-degree sides sloping down to the base of the root mass to encourage rapid root growth. Roots can become deformed by the edge of the hole if the hole is too small and will hinder root growth.

Planting holes dug with an auger shall have the sides cut down with a shovel to eliminate the glazed, smooth sides and create sloping sides.

Excavation of planting hole depth. The root flare shall be visible at the top of the root mass. If the trunk flare is not visible, carefully remove soil from around the trunk until the root flare is visible without damaging the roots. Remove excess soil until the top of the root mass exposes the root collar.

The root flare shall always be slightly above the surface of the surrounding soil. The depth of the hole shall be equal to the depth of the root mass minus 2" allowing the tree or shrub to sit 2" higher than the surrounding soil surface for trees.

For stability, the root mass shall sit on existing undisturbed soil. If the hole was inadvertently dug too deep, backfill and recompact the soil to the correct depth.

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Excavation of planting hole on slopes. Excavate away the slope above the planting hole to create a flattened area uphill of the planting hole to prevent the uphill roots from being buried too deep. Place the excess soil on the downslope of the planting hole to extend the planting shelf to ensure roots on the downhill side of the tree remain buried. The planting hole shall be three times the diameter of the root mass and saucer shaped. The hole may be a bit elongated to fit the contour of the slope as opposed to the typical round hole on flat ground.

Add backfill to create a small berm on the downhill portion of the planting shelf to trap water and encourage movement into the soil to increase water filtration around the tree. Smooth out the slope above the plant where you have cut into the soil so the old slope and the new slope transition together smoothly.

# Add the following to Article 253.08 Excavation of Plant Holes (b):

When planting shrubs in shrub beds as shown on the plans or as directed by the Engineer, spade a planting bed edge at approximately a 45-degree angle and to a depth of approximately 3-inches around the perimeter of the shrub bed prior to placement of the mulch. Remove any debris created in the spade edging process and dispose of as specified in Article 202.03.

# Delete Article 253.09 (b) Pruning and substitute with the following:

Deciduous Shrubs. Shrubs shall be pruned to remove dead, conflicting, or broken branches and shall preserve the natural form of the shrub.

# Delete the third and fourth paragraphs of Article 253.10 Planting Procedures and Article 253.10 (a) and substitute the following:

Approved watering equipment shall be at the site of the work and in operational condition PRIOR TO STARTING the planting operation and DURING all planting operations OR PLANTING WILL NOT BE ALLOWED.

All plants shall be placed in a plumb position and avoid the appearance of leaning. Confirm the tree is straight from two directions prior to backfilling.

Before the plant is placed in the hole, any paper or cardboard trunk wrap shall be removed. Check that the trunk is not damaged. Any soil covering the tree's root flare shall be removed to expose the root crown prior to planting.

Check the depth of the root ball in the planting hole. With the root flare exposed, the depth of the hole shall be equal to the depth of the root mass minus 2" allowing the tree or shrub to sit 2" higher than the surrounding soil surface for trees. The root flare shall always be slightly above the surface of the surrounding soil. For stability, the root ball shall sit on existing undisturbed soil. If the hole was inadvertently dug too deep, backfill and recompact the soil to the correct depth.

After the plant is place in the hole, all cords and burlap shall be removed from the trunk. Remove the wire basket from the top three quarters (3/4) of the root ball. The remaining burlap shall be loosened and scored to provide the root system quick contact with the soil. All ropes or twine shall be removed from the root ball and tree trunk. All materials shall be disposed of properly.

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The plant hole shall be backfilled with the same soil that was removed from the hole. Clay soil clumps shall be broken up as much as possible. Where rocks, gravel, heavy clay or other debris are encountered, clean top soil shall be used. Do not backfill excavation with subsoil.

The hole shall be 1/3 filled with soil and firmly packed to assure the plant remains in plumb, then saturated with water. After the water has soaked in, complete the remaining backfill in 8" lifts, tamping the topsoil to eliminate voids, and then the hole shall be saturated again. Maintain plumb during backfilling. Backfill to the edge of the root mass and do not place any soil on top of the root mass. Visible root flare shall be left exposed, uncovered by the addition of soil.

# Add the following to Article 253.10 (b):

After removal of the container, inspect the root system for circling, matted or crowded roots at the container sides and bottom. Using a sharp knife or hand pruners, prune, cut, and loosen any parts of the root system requiring corrective action.

### Delete the first sentence of Article 253.10(e) and substitute with the following:

Water Saucer. All plants placed individually and not specified to be bedded with other plants, shall have a water saucer constructed of soil by mounding up the soil 4-inches high x 8-inches wide outside the edge of the planting hole.

# **Delete Article 253.11 and substitute the following:**

Individual trees, shrubs, shrub beds, and vines shall be mulched within 48 hours after being planted. No weed barrier fabric will be required for tree and shrub plantings. Pre-emergent herbicide will be used instead of weed barrier fabric. The pre-emergent herbicide shall be applied prior to mulching. See specification for Weed Control, Pre-Emergent Granular Herbicide.

The mulch shall consist of wood chips or shredded tree bark not to exceed two (2) inches in its largest dimension, free of foreign matter, sticks, stones, and clods. Mulch shall be aged in stockpiles for a minimum of four (4) months where interior temperatures reach a minimum of 140-degrees. The mulch shall be free from inorganic materials, contaminants, fuels, invasive weed seeds, disease, harmful insects such as emerald ash borer or any other type of material detrimental to plant growth. A sample must be supplied to the Roadside Development Unit for approval prior to performing any work. Allow a minimum of seven (7) working days prior to installation for approval.

Mulch shall be applied at a depth of 4-inches around all plants within the entire mulched bed area or around each individual tree forming a minimum 6-foot diameter mulch ring around each tree. An excess of 4-inches of mulch is unacceptable and excess shall be removed. Mulch shall not be tapered so that no mulch shall be placed within 6-inches of the shrub base or trunk to allow the root flare to be exposed and shall be free of mulch contact.

Care shall be taken not to bury leaves, stems, or vines under mulch material. All finished mulch areas shall be left smooth and level to maintain uniform surface and appearance. After the mulch placement, any debris or piles of material shall be immediately removed from the right of way, including raking excess mulch out of turf areas in accordance with Article 202.03.

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# **Delete Article 253.12 Wrapping and substitute the following:**

Within 48 hours after planting, screen mesh shall be wrapped around the trunk of all deciduous trees with a caliper of 1-inch or greater. Multi-stem or clump form trees, with individual stems having a caliper of 1-inch or greater, shall have each stem wrapped separately. The screen mesh shall be secured to itself with staples or single wire strands tied to the mesh. Trees shall be wrapped at time of planting, before the installation of mulch. The lower edge of the screen wire shall be in continuous contact with the ground and shall extend up to a minimum of 36-inches or to the lowest major branch, whichever is less. Replacement plantings shall not be wrapped.

#### Delete Article 253.13 Bracing and substitute with the following:

Unless otherwise specified by the Engineer, within 48 hours after planting all deciduous and evergreen trees, with the exception of multi-stem or clump form specimens, over 8-feet in height shall require three 6-foot long steel posts equally spaced from each other and adjacent to the outside of the ball. The posts shall be driven vertically to a depth of 18-inches below the bottom of the hole. The anchor plate shall be aligned perpendicular to a line between the tree and the post. The tree shall be firmly attached to each post with a double guy of 14-gauge steel wire. The portion of the wire in contact with the tree shall be encased in a hose of a type and length approved by the Engineer.

During the life of the contract, within 72 hours the Contractor shall straighten any tree that deviates from a plumb position. The Contractor shall adjust backfill compaction and install or adjust bracing on the tree as necessary to maintain a plumb position. Replacement trees shall not be braced.

# Delete the second sentence of the first paragraph of Article 253.14 Period of Establishment and substitute the following:

This period shall begin in April and end in November of the same year.

# Delete the first paragraph of Article 253.15 Plant Care and substitute the following:

From planting until final acceptance of planting, the Contractor shall properly care for all plants including watering, weeding, adjusting braces, repairing water saucers, spraying insect infected plants, or other work which is necessary to maintain the health, vigor and satisfactory appearance of the plantings. The Contractor shall provide plant care a minimum of every two weeks, or within three days following notification by the Engineer. Water shall be applied at a reasonable velocity and distance such as to cause no harm to the plant or displacement of mulch or soil. All requirements for plant care shall be considered as included in the cost of the contract.

# Delete the first paragraph of Article 253.15 Plant Care (a) and substitute with the following:

During plant care watering shall be performed at least every two weeks during the months of April through November. The Contractor shall apply a minimum of 35 gallons of water per tree, 25 gallons per large shrub, 15 gallons per small shrub, and 4 gallons per vine. The Engineer

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may direct the Contractor to adjust the watering rate and frequency depending upon weather conditions.

# Add the following to Article 253.15 Plant Care (c):

The contractor shall correct any vine growing across the ground plane that should be growing up desired vertical element (noise wall, retaining wall, fence, knee wall, etc.). Work may include but is not limited to carefully weaving vines through fence and/or taping vines to vertical elements.

# Add the following to Article 253.15 Plant Care (d):

The contractor shall inspect all trees, shrubs, and vines for pests and diseases at least every two weeks during the months of initial planting through final acceptance. Contractor must identify and monitor pest and diseases and determine action required to maintain the good appearance, health and, top performance of all plant material. Contractor shall notify the Engineer with their inspection findings and recommendations within twenty-four hours of findings. The recommendations for action by the Contractor must be reviewed and by the Engineer for approval/rejection. All approved corrective activities will be included in the cost of the contract and shall be performed within 48 hours following notification by the Engineer.

### Delete Article 253.16 Method of Measurement and substitute with the following:

Trees, shrubs, evergreens, vines, and seedlings will be measured as each individual plant.

- (a) This work will be measured for initial payment, in place, for plant material found to be in live and healthy condition by June 1.
- (b) This work will be measured for final payment, in place, for plant material found to be in live and healthy condition upon final acceptance by the department.
- (c) Pre-emergent Herbicide will be measured for payment as specified in Weed Control, Pre-emergent Granular Herbicide.

#### Delete Article 253.17 Basis of Payment and substitute the following:

This work will be paid for at the contract unit price per each for TREES, SHRUBS, EVERGREENS, or VINES, of the species, root type, and plant size specified; and per unit for SEEDLINGS.

The unit price shall include the cost of all materials, mulch, equipment, labor, plant care, watering, and disposal required to complete the work as specified herein and to the satisfaction of the Engineer. Payment will be made according to the following schedule.

- (a) Initial Payment. Upon completion of planting, mulch, wrapping, and bracing 75 percent of the pay item(s) will be paid.
- (b) Final Payment. After the successful completion of all required replacement plantings, clean-up work and receipt of the "Final Acceptance of Landscape Work" memorandum from the Bureau of Maintenance, or upon execution of a third-party bond, the remaining 25 percent of the pay item(s) will be paid.

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(c) The placement of Pre-emergent Herbicide shall be paid for at the contract unit price for WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE.

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### REQUIRED INSPECTION OF WOODY PLANT MATERIAL

## Delete Article 1081.01(a)(5) and substitute the following:

The place of growth for all material, and subsequent inspection, must be located within 200 miles of the project.

# Delete Article 1081.01(c)(1) and substitute the following:

Inspection of plant material will be made at the nursery by the Engineer, or a duly authorized representative of the Department; all plant material must be in the ground of the nursery supplying the material.

The Contractor shall provide the Engineer a minimum of 50 calendar days advance notice of the plant material to be inspected. Written certification by the Nursery will be required certifying that the plants are true to their species and/or cultivar specified in the plans.

The Department reserves the right to place identification seals on any or all plants selected. No trees shall be delivered without IDOT seal. Plant material not installed within 60 days of initial inspection will be required to be re-inspected.

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### FAILURE TO COMPLETE PLANT CARE AND ESTABLISHMENT WORK ON TIME

Should the Contractor fail to complete the plant care and/or supplemental watering work within the scheduled time frame as specified in the Special Provision for "Tree Planting" and "Supplemental Watering", or within 24 hours notification from the Engineer, or within such extended times as may have been allowed by the Department, the Contractor shall be liable to the Department in the amount of \$50.00 per tree/per day and \$40.00 per shrub/per day, not as penalty but as liquidated damages, for each calendar day or a portion thereof of overrun in the contract time or such extended time as may have been allowed.

In fixing the damages as set out herein, the desire is to establish a mode of calculation for the work since the Department's actual loss, in the event of delay, cannot be predetermined, would be difficult of ascertainment, and a matter of argument and unprofitable litigation. This said mode is an equitable rule for measurement of the Department's actual loss and fairly takes into account the loss of the tree(s) if the watering or plant care is delayed. The Department shall not be required to provide any actual loss in order to recover these liquidated damages provided herein, as said damages are very difficult to ascertain. Furthermore, no provision of this clause shall be construed as a penalty, as such is not the intention of the parties.

A calendar day is every day shown on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty four hours later.

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### **GATEWAY MONUMENT SIGN COMPLETE**

Description. Work under this item shall consist of providing all the labor, tools, equipment, and materials necessary to fabricate and furnish, deliver, and install Gateway Monument Sign above the concrete foundation, ornamental metal fabrications, metal letters, limestone veneers, stone cap, CMU core, and all mounting hardware as shown in the drawings and as herein specified, all complete and subject to the terms and conditions of the Contract Documents, and as directed by the Engineer. Gateway Monument Sign as shown on the Drawings and specified herein include but are not necessarily limited to the following:

Gateway monument sign – with dimensions and colors as specified in plans

- 1. Metal component of Gateway monument sign:
  - A. Dimensions as indicated on drawings
  - B. Aluminum I-Beam
  - C. Aluminum letters with different sizes and thicknesses
  - D. All anchoring hardware and accessories required
  - E. Stone cap
  - F. 15 year manufacturer's warranty against fade and deterioration for all painted metal components.
  - G. 15 year manufacturer's corrosion warranty for all painted steel components.
- 2. Masonry component of Gateway Monument Sign:
  - A. Dimensions as indicated on drawings
  - B. Concrete Block see structural drawings
  - C. Sandstone Veneer
  - D. Cast Stone Cap
  - E. Accessory materials, such as bond breaker strips, and others indicated on the Contract Documents, including all hardware and materials required to complete, assemble and install each fabrication
  - F. Anchoring accessories such as steel dowel, bolts, including all hardware and materials required to complete, assemble and install each fabrication

General Requirements.

Fabricator Certifications: Provide Ornamental metal sign fabrications by a firm specializing in the type of ornamental metal sign work shown on the Drawings and described herein as

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evidenced by past experience. Upon request, the fabricator must submit such required evidence to the Engineer with a minimum experience of five years.

- A. All welding personnel and weld procedures used in the fabrication of the Gateway monument sign shall be qualified according to AWS D1.2, "Standard Welding Code Aluminum"
- B. Gateway monument sign Fabricator shall participate in the American Society of Steel Construction (AISC) Quality Certification Program and shall be designated an AISC-Certified Plant, Category STD.
  - a. Non-AISC Certified Fabricator shall not be used unless the fabricator's written quality control manual is submitted to and approved by the Engineer prior to beginning the Work.

Fabricator Responsibilities: Provide ornamental metal sign fabrications and accessories of the assembly by a firm having full responsibility for the design, fabrication and installation as shown on the Drawings and specified herein.

Graphics: Digital output ready graphics will be supplied to the Contractor by the Engineer. The Contractor will develop finished artwork and all necessary attachments for the final Gateway monument sign.

Gateway monument sign element connection requirements:

- 1. All final connections for structural elements shall be either welded connections or highstrength bolted connections utilizing ASTM A325 bolts and subject to the requirements of the "Specification for Structural Joints Using High-Strength Bolts" published by the Research Council on Structural Connections (RCSC).
- 2. The use of self-tapping screws will not be acceptable as a final structural connection.
- 3. Gateway monument sign Structural elements shall be assembled in the shop to the greatest extent possible
- 4. Gateway monument sign Fabricator shall engage an independent testing and inspecting agency to perform shop and field tests and inspections and prepare test reports for all welded connections. Submit the name and qualifications of the independent testing agency to the Engineer for approval. In addition to Visual Inspections, all welded connections shall be shall be tested an inspected according to AWS D1.2 and the following inspection procedures:
  - a. Radiographic Inspection in accordance with ASTM E94
- 5. Connections of the aluminum panels to the concrete or masonry structure of the Gateway Monument Sign shall be made at a maximum spacing of 18" on center. Additional connections shall be provided as required by the Delegated Designer.

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6. Connections between dissimilar metals shall be detailed to preclude galvanic corrosion. Dissimilar metals shall be separated through the use of advanced non-stick coating insulating washers and bolt sleeves (bushings).

# Performance Requirements.

- A. Structural Performance for architectural metalwork: Gateway Monument Sign Assemblies, including anchorages and supports, shall withstand the effects of gravity loads, and the following loads and stresses within limits and under conditions indicated according to the following design criteria:
  - a. Wind Loads: Design for the condition resulting from
    - i. Basic Wind Speed of 90 miles per hour, and Exposure Category B, according to SEI/ASCE 7. 2005.
    - ii. Wind Loading as defined by the Chicago Building Code, 2015

### Submittals.

### Quality Assurance Submittals:

- A. Gateway Monument Sign Fabricator's letter of certification for AISC-Certified Plant, Category STD
- B. Welding certificates for all welders involved in fabrication of the Gateway monument sign.
- C. Welding Procedure Specifications (WPSs) and Procedure Qualification Records (PQRs):
  - a. Provide according to AWS D1.2, "Structural Welding Code Aluminum," for each welded joint whether prequalified or qualified by testing, including the following:
    - i. Power source (constant current or constant voltage).
    - ii. Electrode manufacturer and trade name.
- D. Mill Test Reports for aluminum assemblies used in the fabrication of the Gateway Monument Sign.
- E. Product Test Reports for the following:
  - a. Bolts, nuts, and washer including mechanical properties and chemical analysis.
- F. Submit Independent Testing Agencies test and inspection reports for all welded connections.

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G. Submit a working plan and schedule for the coordination of installation of masonry work and metal components with related work. This includes coordinating the delivery and installation of limestone veneers, concrete, delivery to site and final erection.

Product Data: For each product specified herein or on drawings.

## Samples:

- A. Color samples: For each paint color to be utilized, as determined by Engineer and as approved thru the submittal review process.
- B. Panel Assembly and Graphic Approval Samples: Submit 24"x24" sample of typical section of Gateway monument sign artwork, including thermal or water jet cut aluminum panel assemblies for approval of quality, connections, finish and color fidelity of all colors shown.

### **Shop Drawings:**

- A. Provide shop drawings for all items including:
  - 1. Complete fabrication and installation drawings for Gateway Monument Sign. Indicate dimensions, materials, finishes, fastenings, anchorage (size and arrangement of anchor bolts), jointing, sealing, backing, utility requirements, rough-in, and adjacent site conditions.
  - 2. Details: Thermal or Water Jet Cut areas, lettering, graphics, metal materials, dimensions, gages, finishes, methods of fabrication, fasteners, fittings, accessories, supports, framing and anchors. Show adjacent construction and method of anchorage of fabricated items.
  - 3. Additional elements required to clearly convey the fabrication and installation requirements.
- B. Scaled color print of each ornamental metal fabricated item as shown and specified on the Drawings.
- C. Gateway monument sign Shop drawings for signage and fabricated metal assemblies shall be signed and sealed by a licensed structural engineer responsible for their preparation.
- D. Details on drawings indicate a design approach for fabricated metalwork and sign fabrication but do not necessarily include all fabricating details required for the complete structural integrity of the signs, erecting, and service at the installed locations, nor do they necessarily consider the preferred shop practices of the individual Sign Fabricators. Therefore, it shall be the responsibility of the fabricator to perform the complete structural design of the signs and to incorporate all the reasonable safety factors. Designs which survive rational engineering analysis will be acceptable, provided that

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shop drawings, including structural design. Signs must meet all applicable local, state, and federal codes, as well as testing laboratory listings where required.

- E. Subsequent iterations for submittal will be included in the cost of this item.
- F. Maintenance data: For installed products, including precautions against harmful cleaning materials and methods.
- G. Pre-Product Sample: One sample of pre-production casting of typical aluminum letters and other accessories- bracelets, brackets, gussets, plates, straps, tubes and couplings required for assembly.
- H. Warranty: Provide written manufacturer's warranty for painted metal finishes.

### Metals Materials:

- A. Metal Material Components:
  - Metal Material: Alloy and temper must be of adequate strength and durability, and capable of performing function of holding identifier securely in place without bending or deforming.
  - 2. Aluminum Plate and Sheet: ASTM B209 or alloy and temper as recommended by manufacturer.
  - 3. Aluminum Extrusions: ASTM B221 or alloy and temper as recommended by manufacturer.
  - 4. Aluminum Bars, Rods and Wire: ASTM 8211.
  - 5. Steel Tubes (if used): ASTM A500, Grade B.
  - 6. Steel Plate (if used): ASTM A36 or ASTM A572.
  - 7. High-Strength Bolts: ASTM A325
  - 8. Anchor Bolts: ASTM F1554, Grade 36, minimum.
  - 9. Non-shrink, non-metalic grout: ASTM C1107
- B. Fasteners: Use fasteners fabricated from same basic metal or alloy as the metal fastened, and finished to match in color and texture, unless otherwise specified. Comply with Federal Specification (GSA) FF-S-92 for machine screws. Use of metals that are corrosive or incompatible with joined materials are prohibited. If dissimilar metals are unavoidable, provide connection details that isolate the dissimilar metals to ensure galvanic corrosion will not occur.
- C. Provide bracelets, brackets, gussets, plates, straps, tubes and couplings with each fabricated assembly, as may be required for proper support and anchorage to the

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construction and for other work. Cut, reinforce, drill and tap fabricated metal work as may be required to receive other items of work.

## Masonry Materials:

- A. Masonry Material Components:
  - Concrete Block Concrete Masonry Units (CMU) as indicated on structural drawings
  - 2. Materials Mortar and Grout:
    - a. Portland Cement: ASTM C 150, Type I.
    - b. Masonry Cement: ASTM C 91.
    - c. Lime: ASTM C 207, Type S.
    - d. Aggregate for Mortar: Sand, ASTM C 144 or ASTM C 404, Size No. 2, except for joints 1/4" and less (if any) use aggregate graded with 100% passing the No. 16 sieve.
    - e. Water: Clean, free of deleterious materials which would impair strength or bond.
    - f. Aggregate for Grout: ASTM C 404.
  - 4. Continuous Wire Reinforcing— as indicated on structural drawings
    - a. Anchoring Devices: as indicated on the structural drawings
  - 5. Accessory Materials:
    - a. Bond Breaker Strips: 15 lb. asphalt impregnated building felt.
    - b. Pre-Molded Control Joint Strips: Solid rubber or PVC strips with a minimum Shore A durometer hardness of 70, designed to maintain lateral stability in masonry wall.
    - c. Compressible Filler: Expanded polyethylene.
  - 6. Steel Lintels: Fabricate from ASTM A-36 steel. Shop prime with one heavy coat of dust inhibitive, non-lead and non-chrome metal primer after fabrication.
  - 7. Custom sandstone veneer:
    - a. General: All sandstone shall be of structural sandstone, dark red/warm sandstone color Engineering Grade, and hard and durable. Sandstone shall be free from seams which impair its structural integrity, and shall be of smooth splitting character. Natural variations characteristic of the

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deposit will be permitted for cobbles. Sandstone shall come from an approved quarry. Test samples of sandstone shall conform to the requirements of ASTM C 616, Classification I Sandstone.

- b. All sandstone to be used under this contract shall be quarried from the same parent material source and shipped to the Contractor at the same time. Contractor shall store sandstone venners in a dry and covered condition until such time as they shall be installed.
- c. Stone shall conform to the following minimum requirements as demonstrated by submitted certified test results.
  - i. Density = 155 lbs/CF
  - ii. Absorp. = 3%
  - iii. Comn. PSI = 15,000
  - iv. Mod. Of Rupture PSI = 2,500
- d. Varieties and Sources: Subject to compliance with requirements, provide the following:
  - a. Depth = 4" nominal (full bed stone)
  - b. Pattern = Ashlar
- 8. Stone cap: color and finish to be determined by Engineer

### B. MORTAR MIXES

- 1. Comply with ASTM C 270, Proportion Specifications for Type "N" Mortar.
  - a. Where used in ground-face CMU, tinted mortar colors selected by the Engineer to match CMU.
- 2. Grout: Portland cement, sand, gravel and water, proportioned as required to provide a 28-day minimum compressive strength of 3000 psi.
- 3. Mixing Mortar and Grout:
  - a. Combine and mix cement, lime, water and aggregates for a minimum of 5 minutes in a mechanical batch mixer. For mortar, add as much water as is required for workability. Mortar may be retempered by adding water and remixing, as required for workability. Do not use mortar or grout which has begun to set or if more than 2-1/2 hours, has elapsed after initial mixing.
  - b. Mix grout to have a slump of 10" plus or minus 1" at time of placement.

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c. Do not add air-entraining agents or other admixtures

#### Fabrication.

Fabricate and assemble all items in the shop and mark each item to ensure proper installation at the project site. Disassemble for shipment only to the extent required by shipping limitations.

Carefully match parts of the fabrication to maintain continuity of line and design. Joint all parts with hairline contact, flush and smooth with adjacent surfaces. Form joints exposed to weather to be watertight. Remove all mold marks so as to produce smooth, even surfaces, free of blemishes and surface shadows.

Fabricate and thermal or water jet cut to the thicknesses, sizes and shapes shown on the Drawings, or as required to produce work of adequate strength and durability, without objectionable deflections. Perform all cutting by machine. Plane cut edges which are to be welded. Use proven details of fabrication, as required to achieve proper assembly and alignment of the various components of the work. Provide finished fabrications with surfaces, exposed to view, which do not exhibit pitting, stains, marks, discolorations or other imperfections on the finished units.

The approved Independent Testing Agency shall perform inspections and test on all shop-fabricated structural joints for the Gateway monument sign, and any defects shall be repaired and retested prior to the assembly being delivered.

### Delivery and Handling.

Deliver fabrications to the project site clearly marked for proper identification. Wrap fabrications to protect finish from damage during delivery, storage and handling. Deliver to site when supporting construction is completed and prepared for fabrication installation.

Handle materials at the job site in such a manner as to prevent damage. Immediately remove from the job site, damaged or otherwise unsuitable material when so ascertained.

### Examination and Preparation.

Contractor must examine all parts of supporting structures and conditions under which ornamental work is to be erected, and notify Engineer in writing of conditions detrimental to proper and timely completion of the work. Correct conditions that affect the proper installation of the ornamental metal fabrications. Fabrication and/or installation of ornamental metal and associated items constitutes acceptance of the existing conditions by the Contractor.

Field Measurements: Where ornamental fabrications are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

Provide a Mock-Up: Prior to the start of production prepare the following for the Engineer's review.

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- A. Artwork graphics panel displaying wide range of colors and finishes to be used in the finished work.
- B. Anchoring accessories such as straps, gussets, tubes, and couplings, including all hardware and materials required to complete, assemble and install each fabrication
- C. Approved mockups may become part of finished work

The Engineer's review of the mock-ups will be for final acceptance of material finish, conformance with general quality prior to production and does not relieve the Contractor from the responsibility and conformance of requirements as herein specified.

## Finish.

Metal Finish: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.

#### Paint Finish:

### A. Surface Preparation:

- 1. Mechanically or chemically abrade surface to establish a surface profile similar to medium grit sandpaper finish.
  - a. If chemically abraded, use a concentrated, water-reducible phosphoric acid and detergent blend formulated to clean and profile. Dilute with water before use.

### B. Coating:

- 1. Paint process shall be a 1-coat Polyamidoamine Epoxy primer and a 1-coat Advanced Thermoset Solution Fluoropolymer with a manufacturer's 15 year color and gloss retention warranty.
- 2. Epoxy prime coat: In the shop, all aluminum designated to be painted must be primed with a polyamidoamine epoxy base coat: Dry Mils 50 microns (2.0 mils) min., 250 microns (10.0 mils) max.
- 3. High-solids Fluoropolymer finish coat: In the shop, apply an Advanced Thermoset Solution Fluoropolymer coating that provides a semi-gloss durable finish with a brush, roll or spray application: Dry Mils 50 microns (2.0 mils) min., 75 microns (3.0 mils) max.
- C. Fabricator to confirm surface preparation and coating process with paint system manufacturer. If any variation exists between the specified coating system and process

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recommended by the paint system manufacturer, notify the Engineer in writing prior to the start of work.

- D. The paint manufacturer's product data sheets must be submitted to the Engineer prior to start of work and the requirements as outlined in the data sheets must be followed.
- E. Written approval of color by Engineer must be obtained prior to ordering and application of paint.
- F. Application of Polyamidoamine primer and Advanced Thermoset Solution Fluoropolymer finish coat paint system will not be allowed when the metal and/or air temperature is expected to fall below 10 degrees C (50 degrees F).
- G. Field cleaning and touch-up painting must only be done between May 1 and October 31.

Protection: Protect fabrication surfaces and corners by covering with padding and kraft paper or plastic covering prior to shipment from the fabrication shop.

Attachments: Bracelets, collars, couplings, and hardware necessary to assemble Gateway monument sign must be provided with dimensions as shown on the Drawings. All exposed screws shall be stainless steel and finished to match in color and texture metal being fastened, unless otherwise specified. Do not use metals that are corrosive or incompatible with joined materials.

### Installation.

Examine all surfaces and conditions of the installation to receive ornamental metal fabrications. Installation of the ornamental metal fabrications and associated construction constitutes acceptance of the existing materials and conditions.

Verify dimensions and conditions of the supporting structures at the project site.

Provide protection of in-place construction, surfaces and materials which can be damaged during the installation of this work. Patch, repair or replace any such construction damaged during the work of this section as reviewed and approved by the Engineer at no additional cost to the Engineer.

Set ornamental metal fabrications accurately as measured from established building lines and levels, plumb and in true alignment with existing and previously completed new work. Allow for expansion and contraction of materials and building construction.

Anchor securely in place in the manner shown on the approved shop drawings and the final mock-up samples, using specified anchors. Separate aluminum and steel fabrications using plastic washers.

The approved Independent Testing Agency shall inspect all field welded and bolted connections, including radiographic testing of field welds. Any defects shall be repaired and retested to verify adequacy.

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Do not cut or abrade finishes which cannot be completely restored in the field. Return units with such finishes to the shop for required alterations, followed by complete refinishing.

Remove protective coverings when there is no longer any danger of damage to the ornamental metal fabrications from other work yet to be performed in the same location. Restore protective coverings which have been removed or damaged during shipment or installation of the work, or if such other work is yet to be performed.

Repair and refinish all damaged surfaces of fabrications that will affect the appearance and performance of finish coatings. Submit materials and methods of surface repair and repainting to the Engineer for review prior to application. Damaged surfaces will be repaired and refinished at no additional cost to the Engineer. Remove and replace or remove and factory refinish any fabrication which, if after review and decision by the Engineer, cannot be successfully field repaired at no additional cost to the Engineer.

Method of Measurement. Gateway monument sign: This work shall be measured per each GATEWAY MONUMENT SIGN COMPLETE furnished and installed.

Basis of Payment. This item of work will be paid for at the Contract Unit Price per EACH for GATEWAY MONUMENT SIGN COMPLETE which will include all labor, furnishing, placing and installation, equipment, materials including architectural metalwork, metal letters, bracelets, limestone veneers, stone cap, CMU core, mounting hardware and any incidental work necessary to complete work as specified.

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## WEED CONTROL, SELECTIVE (WOODY PLANTS & BROADLEAF)

<u>Description</u>: This work shall consist of the application of a broadleaf herbicide (2,4-D) along highway roadsides for control of broadleaf plants in tree groves. Work will primarily consist of spraying various sized areas where trees are present.

<u>Materials</u>: The broadleaf herbicide (2,4-D) shall have the following formulation:

The Contractor shall submit a certificate, including the following, prior to starting work:

- 1. The chemical names of the compound and the percentage by weight of the ingredients which must match the above specified formulation.
- 2. A statement that the material is in a solution which will form a satisfactory emulsion for use when diluted with water for normal spraying conditions.
- 3. A statement that the 2,4-D, when mixed with water, will be completely soluble and dispersible and remain in suspension with continuous agitation.
- 4. A statement describing the products proposed for use when the manufacturer of 2,4-D requires that surfactants, drift control agents, or other additives be used with the product. These tank mix additives shall be used as specified by the manufacturer. Required additives will not be paid for separately.

All material shall be brought to the spray area in the original, unopened containers supplied by the manufacturer.

<u>Application Rate</u>: The 2,4-D broadleaf herbicide shall be applied at the rate of four (4) pints per acre. 2,4-D formulation shall be diluted with a minimum of fifty (50) gallons of water and applied as a mixture. Water for dilution of the mixture will not be paid for separately.

<u>Method of Measurement</u>: Weed Control, Selective (Woody Plants & Broadleaf) will be measured for payment in gallons (liters) of undiluted 2,4-D as specified.

<u>Basis of Payment</u>: Weed Control, Selective (Woody Plants & Broadleaf) will be paid for at the contract unit price per gallon. Water for dilution of the mixture and additives required for application will not be paid for as separate items, but the costs shall be considered as included in the contract unit price for Weed Control, Selective (Woody Plants & Broadleaf) and no additional compensation will be allowed.

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## **SOLAR LED LIGHTING UNIT COMPLETE**

<u>Description</u>. Work under this item shall consist of providing all the labor, tools, equipment, and materials necessary to furnish, deliver, and install solar LED lighting, including all wiring and conduits, and as directed by the Engineer. The contractor shall use Solar Illumination brand Solar Sign Light System Model FL10 (<a href="http://solarilluminations.com/solar-sign-lights/fl10-solar-sign-light-universal-head">http://solarilluminations.com/solar-sign-lights/fl10-solar-sign-light-universal-head</a>). Installation shall be in accordance with the manufacturer specification and lights shall be placed within the plant beds in such a way that the associated sign is illuminated. Solar panels shall be installed adjacent to the plant beds in an unobtrusive location 6 feet from the sign in accordance with the manufacturer specification. Lighting units shall consist of a 30 Watt LED sign light fixture with a 240 Watt solar panel and a pair of 12V 92A-Hr AGM batteries.

<u>Method of Measurement</u>. SOLAR LED LIGHTING UNIT COMPLETE shall be measured by EACH, fully installed.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per each for SOLAR LED LIGHTING UNIT COMPLETE.

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#### VERTICAL IDENTIFIER

Description. Work under this item shall consist of providing all the labor, tools, equipment, and materials necessary to fabricate and furnish, deliver, and install Vertical Identifiers above the concrete foundation and outside of the concrete core, and all mounting hardware as shown in the drawings and as herein specified, all complete and subject to the terms and conditions of the Contract Documents, and as directed by the Engineer. Vertical Identifier as shown on the Drawings and specified herein include but are not necessarily limited to the following:

Vertical Identifier – with dimensions and colors as specified in plans

- 1. Metal component of Vertical Identifier:
  - A. Dimensions as indicated on drawings
  - B. Thermal or Water Jet cut Aluminum Panels with painted colors
  - C. Thermal or Water Jet Painted aluminum Panels
  - D. Aluminum letters with different sizes and thicknesses
  - E. Aluminum log with different sizes
  - F. All anchoring hardware and accessories required
  - G. 15-year manufacturer's warranty against fade and deterioration for all painted metal components.
  - H. 15-year manufacturer's corrosion warranty for all painted steel components.
- 2. Masonry component of Vertical Identifier:
  - A. Dimensions as indicated on drawings
  - C. Limestone Veneer
  - D. Cast Stone Cap
  - E. Accessory materials, such as bond breaker strips, and others indicated on the Contract Documents, including all hardware and materials required to complete, assemble and install each fabrication
  - F. Anchoring accessories such as steel dowel, bolts, including all hardware and materials required to complete, assemble and install each fabrication

### General Requirements.

Fabricator Qualifications: Provide Ornamental metal sign fabrications by a firm specializing in the type of ornamental metal sign work shown on the Drawings and described herein as

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evidenced by past experience. Upon request, the fabricator must submit such required evidence to the Engineer with a minimum experience of five years.

- A. All welding personnel and weld procedures used in the fabrication of the Vertical Identifier shall be qualified according to AWS D1.2, "Standard Welding Code Aluminum"
- B. Vertical Identifier Fabricator shall participate in the American Society of Steel Construction (AISC) Quality Certification Program and shall be designated an AISC-Certified Plant, Category STD.
  - Non-AISC Certified Fabricator shall not be used unless the fabricator's written quality control manual is submitted to and approved by the Engineer prior to beginning the Work.

Fabricator Responsibilities: Provide ornamental metal sign fabrications and accessories of the assembly by a firm having full responsibility for the design, fabrication and installation as shown on the Drawings and specified herein.

Graphics: Digital output ready graphics will be supplied to the Contractor by the Engineer. The Contractor will develop finished artwork and all necessary attachments for the final Vertical Identifier.

Vertical Identifier element connection requirements:

- 1. All final connections for structural elements shall be either welded connections or highstrength bolted connections utilizing ASTM A325 bolts and subject to the requirements of the "Specification for Structural Joints Using High-Strength Bolts" published by the Research Council on Structural Connections (RCSC).
- 2. The use of self-tapping screws will not be acceptable as a final structural connection.
- 3. Vertical Identifier architectural metalwork elements shall be assembled in the shop to the greatest extent possible
- 4. Vertical Identifier Fabricator shall engage an independent testing and inspecting agency to perform shop and field tests and inspections and prepare test reports for all welded connections. Submit the name and qualifications of the independent testing agency to the Engineer for approval. In addition to Visual Inspections, all welded connections shall be shall be tested an inspected according to AWS D1.2 and the following inspection procedures:
  - a. Radiographic Inspection in accordance with ASTM E94
- 6. Connections between dissimilar metals shall be detailed to preclude galvanic corrosion. Dissimilar metals shall be separated through the use of advanced non-stick coating insulating washers and bolt sleeves (bushings).

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# Performance Requirements.

- A. Structural Performance: Vertical Identifier Assemblies for architectural metalwork, including anchorages and supports, shall withstand the effects of gravity loads, and the following loads and stresses within limits and under conditions indicated according to the following design criteria:
  - a. Wind Loads: Design for the worst case condition resulting from
    - i. Basic Wind Speed of 90 miles per hour, and Exposure Category B, according to SEI/ASCE 7, 2005.
    - ii. Wind Loading as defined by the Chicago Building Code, 2015

### Submittals.

# Quality Assurance Submittals:

- A. Vertical Identifier Fabricator's letter of certification for AISC-Certified Plant, Category STD
- B. Welding certificates for all welders involved in fabrication of the Vertical Identifier.
- C. Welding Procedure Specifications (WPSs) and Procedure Qualification Records (PQRs):
  - a. Provide according to AWS D1.2, "Structural Welding Code Aluminum," for each welded joint whether prequalified or qualified by testing, including the following:
    - i. Power source (constant current or constant voltage).
    - ii. Electrode manufacturer and trade name.
- D. Mill Test Reports for aluminum assemblies used in the fabrication of the Vertical Identifier.
- E. Product Test Reports for the following:
  - a. Bolts, nuts, and washer including mechanical properties and chemical analysis.
- F. Submit Independent Testing Agencies test and inspection reports for all welded connections.
- G. Submit a working plan and schedule for the coordination of installation of masonry work and metal components with related work. This includes coordinating the delivery and installation of limestone veneers, delivery to site and final erection.

Product Data: For each product specified herein or on drawings.

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## Samples:

- A. Color samples: For each paint color to be utilized, as determined by Engineer and as approved thru the submittal review process.
- B. Panel Assembly and Graphic Approval Samples: Submit 24"x24" sample of typical section of Vertical Identifier artwork, including thermal or water jet cut aluminum panel assemblies for approval of quality, connections, finish and color fidelity of all colors shown.
- C. Pre-Product Sample: One sample of pre-production casting of typical aluminum letters and other accessories- bracelets, brackets, gussets, plates, straps, tubes and couplings required for assembly.

### **Shop Drawings:**

- A. Provide shop drawings for all items including:
  - 1. Complete fabrication and installation drawings for each Vertical Identifier. Indicate dimensions, materials, finishes, fastenings, anchorage (size and arrangement of anchor bolts), jointing, sealing, backing, utility requirements, rough-in, and adjacent site conditions.
  - 2. Details: Thermal or Water Jet Cut areas, lettering, graphics, metal materials, dimensions, gages, finishes, methods of fabrication, fasteners, fittings, accessories, supports, framing and anchors. Show adjacent construction and method of anchorage of fabricated items.
  - 3. Additional elements required to clearly convey the fabrication and installation requirements.
- B. Scaled color print of each ornamental metal fabricated item as shown and specified on the Drawings.
- C. Vertical Identifier Shop drawings for architectural metalwork and signage shall be signed and sealed by a licensed structural engineer responsible for their preparation.
- Details on drawings indicate a design approach for architectural metalwork and sign fabrication but do not necessarily include all fabricating details required for the complete structural integrity of the signs, erecting, and service at the installed locations, nor do they necessarily consider the preferred shop practices of the individual Sign Fabricators. Therefore, it shall be the responsibility of the fabricator to perform the complete structural design of the signs and to incorporate all the reasonable safety factors. Designs which survive rational engineering analysis will be acceptable, provided that shop drawings, including structural design. Signs must meet all applicable local, state, and federal codes, as well as testing laboratory listings where required.

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- E. Subsequent iterations for submittal will be incidental to this item.
- F. Maintenance data: For installed products, including precautions against harmful cleaning materials and methods.
- G. Warranty: Provide written manufacturer's warranty for painted metal finishes.

#### Metals Materials:

- A. Metal Material Components:
  - Metal Material: Alloy and temper must be of adequate strength and durability, and capable of performing function of holding identifier securely in place without bending or deforming.
  - 2. Aluminum Plate and Sheet: ASTM B209 or alloy and temper as recommended by manufacturer.
  - 3. Aluminum Extrusions: ASTM B221 or alloy and temper as recommended by manufacturer.
  - 4. Aluminum Bars, Rods and Wire: ASTM 8211.
  - 5. Steel Tubes (if used): ASTM A500, Grade B.
  - 6. Steel Plate (if used): ASTM A36 or ASTM A572.
  - 7. High-Strength Bolts: ASTM A325
  - 8. Anchor Bolts: ASTM F1554, Grade 36, minimum.
  - 9. Non-shrink, non-metalic grout: ASTM C1107
- B. Fasteners: Use fasteners fabricated from same basic metal or alloy as the metal fastened, and finished to match in color and texture, unless otherwise specified. Comply with Federal Specification (GSA) FF-S-92 for machine screws. Use of metals that are corrosive or incompatible with joined materials are prohibited. If dissimilar metals are unavoidable, provide connection details that isolate the dissimilar metals to ensure galvanic corrosion will not occur.
- C. Provide bracelets, brackets, gussets, plates, straps, tubes and couplings with each fabricated assembly, as may be required for proper support and anchorage to the construction and for other work. Cut, reinforce, drill and tap fabricated metal work as may be required to receive other items of work.

## Masonry Materials:

A. Masonry Material Components:

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- 1. Structural Masonry Components see structural drawings
- 2. Materials Mortar and Grout:
  - a. Portland Cement: ASTM C 150, Type I.
  - b. Masonry Cement: ASTM C 91.
  - c. Lime: ASTM C 207, Type S.
  - d. Aggregate for Mortar: Sand, ASTM C 144 or ASTM C 404, Size No. 2, except for joints 1/4" and less (if any) use aggregate graded with 100% passing the No. 16 sieve.
  - e. Water: Clean, free of deleterious materials which would impair strength or bond.
  - f. Aggregate for Grout: ASTM C 404.
- 3. Masonry Reinforcing and Embeds
  - a. Anchoring Devices: as indicated on the structural drawings
  - b. Stainless steel dowels for anchorage of cast stone into cast-in-place concrete.
- 4. Accessory Materials:
  - a. Bond Breaker Strips: 15 lb. asphalt impregnated building felt.
  - b. Pre-Molded Control Joint Strips: Solid rubber or PVC strips with a minimum Shore A durometer hardness of 70, designed to maintain lateral stability in masonry wall.
  - c. Compressible Filler: Expanded polyethylene.
- 5. Custom limestone veneer: color, pattern and finish to be determined by Engineer
- 6. Cast Stone Cap: color and finish to be determined by Engineer

### B. MORTAR MIXES

- 1. Comply with ASTM C 270, Proportion Specifications for Type "N" Mortar.
  - a. Where used in ground-face CMU, tinted mortar colors selected by the Engineer to match CMU.
- 2. Grout: Portland cement, sand, gravel and water, proportioned as required to provide a 28-day minimum compressive strength of 3000 psi.

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# 3. Mixing Mortar and Grout:

- a. Combine and mix cement, lime, water and aggregates for a minimum of 5 minutes in a mechanical batch mixer. For mortar, add as much water as is required for workability. Mortar may be retempered by adding water and remixing, as required for workability. Do not use mortar or grout which has begun to set or if more than 2-1/2 hours, has elapsed after initial mixing.
- b. Mix grout to have a slump of 10" plus or minus 1" at time of placement.
- c. Do not add air-entraining agents or other admixtures

#### Fabrication.

Fabricate and assemble all items in the shop and mark each item to ensure proper installation at the project site. Disassemble for shipment only to the extent required by shipping limitations.

Carefully match parts of the fabrication to maintain continuity of line and design. Joint all parts with hairline contact, flush and smooth with adjacent surfaces. Form joints exposed to weather to be watertight. Remove all mold marks so as to produce smooth, even surfaces, free of blemishes and surface shadows.

Fabricate and thermal or water jet cut to the thicknesses, sizes and shapes shown on the Drawings, or as required to produce work of adequate strength and durability, without objectionable deflections. Perform all cutting by machine. Plane cut edges which are to be welded. Use proven details of fabrication, as required to achieve proper assembly and alignment of the various components of the work. Provide finished fabrications with surfaces, exposed to view, which do not exhibit pitting, stains, marks, discolorations or other imperfections on the finished units.

The approved Independent Testing Agency shall perform inspections and test on all shop-fabricated structural joints for the Vertical Identifier, and any defects shall be repaired and retested prior to the assembly being delivered.

### Delivery and Handling.

Deliver fabrications to the project site clearly marked for proper identification. Wrap fabrications to protect finish from damage during delivery, storage and handling. Deliver to site when supporting construction is completed and prepared for fabrication installation.

Handle materials at the job site in such a manner as to prevent damage. Immediately remove from the job site, damaged or otherwise unsuitable material when so ascertained.

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# Examination and Preparation.

Contractor must examine all parts of supporting structures and conditions under which ornamental work is to be erected, and notify Engineer in writing of conditions detrimental to proper and timely completion of the work. Correct conditions that affect the proper installation of the ornamental metal fabrications. Fabrication and/or installation of ornamental metal and associated items constitutes acceptance of the existing conditions by the Contractor.

Field Measurements: Where ornamental fabrications are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

Provide a Mock-Up: Prior to the start of production prepare the following for the Engineer's review.

- A. Artwork graphics panel displaying wide range of colors and finishes to be used in the finished work.
- B. Anchoring accessories such as straps, gussets, tubes, and couplings, including all hardware and materials required to complete, assemble and install each fabrication
- C. Approved mockups may become part of finished work

The Engineer's review of the mock-ups will be for final acceptance of material finish, conformance with general quality prior to production and does not relieve the Ornamental Metal Fabricator from the responsibility and conformance of requirements as herein specified.

Finish.

Metal Finish: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.

### Paint Finish:

- A. Surface Preparation:
  - 1. Mechanically or chemically abrade surface to establish a surface profile similar to medium grit sandpaper finish.
    - a. If chemically abraded, use a concentrated, water-reducible phosphoric acid and detergent blend formulated to clean and profile. Dilute with water before use.
    - b. Acceptable product: "Great Lakes Laboratories: Clean 'n Etch".

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# B. Coating:

- Paint process shall be a 1-coat Polyamidoamine Epoxy primer and a 1-coat Advanced Thermoset Solution Fluoropolymer with a manufacturer's 15 year color and gloss retention warranty.
- 2. Epoxy prime coat: In the shop, all aluminum designated to be painted must be primed with a polyamidoamine epoxy base coat: Dry Mils 50 microns (2.0 mils) min., 250 microns (10.0 mils) max.
- 3. High-solids Fluoropolymer finish coat: In the shop, apply an Advanced Thermoset Solution Fluoropolymer coating that provides a semi-gloss durable finish with a brush, roll or spray application: Dry Mils 50 microns (2.0 mils) min., 75 microns (3.0 mils) max.
- C. Fabricator to confirm surface preparation and coating process with paint system manufacturer. If any variation exists between the specified coating system and process recommended by the paint system manufacturer, notify the Engineer in writing prior to the start of work.
- D. The paint manufacturer's product data sheets must be submitted to the Engineer prior to start of work and the requirements as outlined in the data sheets must be followed.
- E. Written approval of color by Engineer must be obtained prior to ordering and application of paint.
- F. Application of Polyamidoamine primer and Advanced Thermoset Solution Fluoropolymer finish coat paint system will not be allowed when the metal and/or air temperature is expected to fall below 10 degrees C (50 degrees F).
- G. Field cleaning and touch-up painting must only be done between May 1 and October 31.

Protection: Protect fabrication surfaces and corners by covering with padding and kraft paper or plastic covering prior to shipment from the fabrication shop.

Attachments: Bracelets, collars, couplings, and hardware necessary to assemble Vertical Identifier must be provided with dimensions as shown on the Drawings. All exposed screws shall be stainless steel and finished to match in color and texture metal being fastened, unless otherwise specified. Do not use metals that are corrosive or incompatible with joined materials.

Installation.

Examine all surfaces and conditions of the installation to receive ornamental metal fabrications. Installation of the ornamental metal fabrications and associated construction constitutes acceptance of the existing materials and conditions.

Verify dimensions and conditions of the supporting structures at the project site.

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Provide protection of in-place construction, surfaces and materials which can be damaged during the installation of this work. Patch, repair or replace any such construction damaged during the work of this section as reviewed and approved by the Engineer at no additional cost to the Engineer.

Set ornamental metal fabrications accurately as measured from established building lines and levels, plumb and in true alignment with existing and previously completed new work. Allow for expansion and contraction of materials and building construction.

Anchor securely in place in the manner shown on the final reviewed shop drawings and the final reviewed mock-up samples, using specified anchors. Separate aluminum and steel fabrications using plastic washers.

The approved Independent Testing Agency shall inspect all field welded and bolted connections, including radiographic testing of field welds. Any defects shall be repaired and retested to verify adequacy.

Do not cut or abrade finishes which cannot be completely restored in the field. Return units with such finishes to the shop for required alterations, followed by complete refinishing.

Remove protective coverings when there is no longer any danger of damage to the ornamental metal fabrications from other work yet to be performed in the same location. Restore protective coverings which have been removed or damaged during shipment or installation of the work, or if such other work is yet to be performed.

Repair and refinish all damaged surfaces of fabrications that will affect the appearance and performance of finish coatings. Submit materials and methods of surface repair and repainting to the Engineer for review prior to application. Damaged surfaces will be repaired and refinished at no additional cost to the Engineer. Remove and replace or remove and factory refinish any fabrication which, if after review and decision by the Engineer, cannot be successfully field repaired at no additional cost to the Engineer.

Method of Measurement. Vertical Identifier: This work shall be measured per VERTICAL IDENTIFIER furnished and installed.

Basis of Payment. This item of work will be paid for at the Contract Unit Price per EACH for VERTICAL IDENTIFIER which will include all labor, furnishing, placing and installation, equipment, materials including architectural metalwork, metal letters, metal log, bracelets, limestone veneers, stone cap, mounting hardware and any incidental work necessary to complete work as specified.

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### STEEL FENCE PANELS

Description. Work under this item shall consist of providing all the labor, tools, equipment, and materials necessary to furnish, deliver, and install ornamental metal fabrications and all mounting hardware as shown in the Contract Plans and as herein specified, all complete and subject to the terms and conditions of the Contract, and as directed by the Engineer. Fence Affixment as shown on the Drawings and specified herein includes but is not necessarily limited to the following:

Fence Affixment – with dimensions and colors as specified in plans

- A. Panel Assemblies
- 1. Thermal or Water Jet Cut Aluminum Panels with painted colors
- 2. Thermal or Water Jet Cut Painted Aluminum Panels
- 3. Aluminum Perimeter Tube
- 4. All anchoring hardware and accessories required
- B. Cast Aluminum Mounting Collars
- C. Anchoring accessories such as straps, gussets, and tubes, including all hardware and materials required to complete, assemble and install each fabrication
- D. 15 year manufacturer's warranty against fade and deterioration for all painted metal components.
- E. 15 year corrosion warranty for all painted steel components.

Fabricator Qualifications: Provide Ornamental aluminum panels/tube fabrications by a firm specializing in the type of ornamental metal fence affixment work shown on the Drawings and described herein as evidenced by past experience. Upon request, the fabricator must submit such required evidence to the Engineer with a minimum experience of five years.

- A. All welding personnel and weld procedures used in the fabrication of the Fence Affixment shall be qualified according to AWS D1.1/D1.1M, "Standard Welding Code Steel"
- B. Fence Affixment Fabricator shall participate in the American Society of Steel Construction (AISC) Quality Certification Program and shall be designated an AISC-Certified Plant, Category STD.
- C. Non-AISC Certified Fabricator shall not be used unless the fabricator's written quality control manual is submitted to and approved by the Engineer prior to beginning the Work.

Fabricator Responsibilities: Provide ornamental metal sign fabrications and accessories of the assembly by a firm having full responsibility for the design, fabrication and installation as shown on the Drawings and specified herein.

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Graphics: Digital output ready graphics will be supplied to the Contractor by the Engineer. The Contractor will develop finished artwork and all necessary attachments for the final Fence Affixment.

Fence Affixment element connection requirements:

- 1. All final connections for structural elements shall be either welded connections or highstrength bolted connections utilizing ASTM A325 bolts and subject to the requirements of the "Specification for Structural Joints Using High-Strength Bolts" published by the Research Council on Structural Connections (RCSC).
- 2. The use of self-tapping screws will not be acceptable as a final structural connection.
- 3. Fence Affixment Structural elements shall be assembled in the shop to the greatest extent possible
- 4. Fence Affixment Fabricator shall engage an independent testing and inspecting agency to perform shop and field tests and inspections and prepare test reports for all welded connections. Submit the name and qualifications of the independent testing agency to the Engineer for approval. In addition to Visual Inspections, all welded connections shall be tested and inspected according to AWS D1.1/D1.1M and the following inspection procedures:
- A. Radiographic Inspection in accordance with ASTM E94
- 5. Connections of the aluminum fence affixment panels to the existing fence posts shall be reviewed by Engineer prior to installation. Additional connections shall be provided as required by the detailed design.
- 6. Connections between dissimilar metals shall be detailed to preclude galvanic corrosion. Dissimilar metals shall be separated through the use of advanced non-stick coating insulating washers and bolt sleeves (bushings).

Performance Requirements.

- A. Structural Performance: Fence Affixment Assemblies, including anchorages and supports, shall withstand the effects of gravity loads, and the following loads and stresses within limits and under conditions indicated according to the following design criteria:
- B. Wind Loads: Design for the condition resulting from
- C. Basic Wind Speed of 90 miles per hour, and Exposure Category B, according to SEI/ASCE 7, 2005.

Submittals.

Quality Assurance Submittals:

A. Fence Affixment Fabricator's letter of certification for AISC-Certified Plant, Category STD

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- B. Welding certificates for all welders involved in fabrication of the Fence Affixment.
- C. Welding Procedure Specifications (WPSs) and Procedure Qualification Records (PQRs):
- D. Provide according to AWS D1.1/D1.1M, "Structural Welding Code Steel," for each welded joint whether prequalified or qualified by testing, including the following:
- Power source (constant current or constant voltage).
- ii. Electrode manufacturer and trade name.
- E. Mill Test Reports for Structural Steel used in the fabrication of the Fence Affixment.
- F. Product Test Reports for the following:
- i. Bolts, nuts, and washer including mechanical properties and chemical analysis.
- G. Submit Independent Testing Agencies test and inspection reports for all welded connections.
- H. Submit a working plan and schedule for the coordination of installation of masonry work and metal components with related work. This includes coordinating the delivery and installation of components, delivery to site and final erection.

Product Data: For each product specified herein or on drawings.

### Samples:

- A. Color samples: For each paint color to be utilized.
- B. Panel Assembly and Graphic Approval Samples: Submit 24"x24" sample of each typical fence affixment panel of the artwork, including thermal or water jet cut aluminum panel assemblies for approval of quality, connections, finish and color fidelity of all colors shown.

# Shop Drawings:

- A. Provide shop drawings for all items including:
- 1. Complete fabrication and installation drawings for each Fence Affixment. Indicate dimensions, materials, finishes, fastenings, anchorage (size and arrangement of anchor bolts), jointing, sealing, backing, utility requirements, rough-in, and adjacent site conditions.
- 2. Details: Thermal or Water Jet Cut areas, graphics, metal materials, dimensions, gages, finishes, methods of fabrication, fasteners, fittings, accessories, supports, framing and anchors. Show adjacent construction and method of anchorage of fabricated items.
- 3. Additional elements required to clearly convey the fabrication and installation requirements.

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- B. Scaled color print of each ornamental metal fence affixment fabricated item as shown and specified on the Drawings.
- C. Fence Affixment Shop drawings shall be signed and sealed by a licensed structural engineer responsible for their preparation.
- D. Details on drawings indicate a design approach for fence fabrication but do not necessarily include all fabricating details required for the complete structural integrity of the fences, erecting, and service at the installed locations, nor do they necessarily consider the preferred shop practices of the individual Fabricators. Therefore, it shall be the responsibility of the fabricator to perform the complete structural design of the fences and to incorporate all the reasonable safety factors necessary to protect the Owner, its representatives, and Designer against public liability. Designs which survive rational engineering analysis will be acceptable, provided that shop drawings, including structural design are approved by the Owner. Fences must meet all applicable local, state, and federal codes, as well as testing laboratory listings where required.
- E. Subsequent iterations for submittal will be incidental to this item.
- F. Maintenance data: For installed products, including precautions against harmful cleaning materials and methods.
- G. Pre-Product Sample: One sample of pre-production casting of typical aluminum panels and other accessories- bracelets, brackets, gussets, plates, straps, tubes and couplings required for assembly.
- H. Warranty: Provide written manufacturer's warranty for painted metal finishes.

#### Materials

- 1. Metal Material: Alloy and temper must be of adequate strength and durability, and capable of performing functioning without bending or deforming.
- 2. Aluminum Plate and Sheet: ASTM B209 or alloy and temper as recommended by manufacturer.
- 3. Aluminum Extrusions: ASTM B221 or alloy and temper as recommended by manufacturer.
- 4. Aluminum Bars, Rods and Wire: ASTM 8211.
- 5. Steel Tubes (if used): ASTM A500, Grade B.
- 6. Steel Plate (if used): ASTM A36 or ASTM A572.
- 7. High-Strength Bolts: ASTM A325
- 8. Anchor Bolts: ASTM F1554, Grade 36, minimum.

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

## 9. Non-shrink, non-metalic grout: ASTM C1107

Fasteners: Use fasteners fabricated from same basic metal or alloy as the metal fastened, and finished to match in color and texture, unless otherwise specified. Comply with Federal Specification (GSA) FF-S-92 for machine screws. Use of metals that are corrosive or incompatible with joined materials are prohibited. If dissimilar metals are unavoidable, provide connection details that isolate the dissimilar metals to ensure galvanic corrosion will not occur.

Provide bracelets, brackets, gussets, plates, straps, tubes and couplings with each fabricated assembly, as may be required for proper support and anchorage to the construction and for other work. Cut, reinforce, drill and tap fabricated metal work as may be required to receive other items of work.

#### Fabrication.

Fabricate and assemble all items in the shop and mark each item to ensure proper installation at the project site. Disassemble for shipment only to the extent required by shipping limitations.

Carefully match parts of the fabrication to maintain continuity of line and design. Joint all parts with hairline contact, flush and smooth with adjacent surfaces. Form joints exposed to weather to be watertight. Remove all mold marks so as to produce smooth, even surfaces, free of blemishes and surface shadows.

Fabricate and thermal or water jet cut to the thicknesses, sizes and shapes shown on the Drawings, or as required to produce work of adequate strength and durability, without objectionable deflections. Perform all cutting by machine. Plane cut edges which are to be welded. Use proven details of fabrication, as required to achieve proper assembly and alignment of the various components of the work. Provide finished fabrications with surfaces, exposed to view, which do not exhibit pitting, stains, marks, discolorations or other imperfections on the finished units.

The approved Independent Testing Agency shall perform inspections and test on all shopfabricated structural joints for the Fence Affixment, and any defects shall be repaired and retested prior to the assembly being delivered.

### Delivery and Handling.

Deliver fabrications to the project site clearly marked for proper identification. Wrap fabrications to protect finish from damage during delivery, storage and handling. Deliver to site when supporting construction is completed and prepared for fabrication installation.

Handle materials at the job site in such a manner as to prevent damage. Immediately remove from the job site, damaged or otherwise unsuitable material when so ascertained.

### Examination and Preparation.

Contractor must examine all parts of supporting structures and conditions under which ornamental work is to be erected, and notify Engineer in writing of conditions detrimental to

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proper and timely completion of the work. Correct conditions that affect the proper installation of the ornamental metal fabrications. Fabrication and/or installation of ornamental metal and associated items constitutes acceptance of the existing conditions by the Contractor.

Field Measurements: Where ornamental fabrications are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

Provide a Mock-Up: Prior to the start of production prepare the following for the Engineer's review.

- A. Artwork graphics panel displaying wide range of colors and finishes to be used in the finished work.
- B. Anchoring accessories such as straps, gussets, tubes, and couplings, including all hardware and materials required to complete, assemble and install each fabrication
- C. Approved mockups may become part of finished work

The Engineer's review of the mock-ups will be for final acceptance of material finish, conformance with general quality prior to production and does not relieve the Ornamental Metal Fabricator from the responsibility and conformance of requirements as herein specified.

Finish.

Metal Finish: Comply with National Association of Architectural Metal Manufacturer's (NAAMM) "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.

#### Paint Finish:

- A. Surface Preparation:
- 1. Mechanically or chemically abrade surface to establish a surface profile similar to medium grit sandpaper finish.
- a. If chemically abraded, use a concentrated, water-reducible phosphoric acid and detergent blend formulated to clean and profile. Dilute with water before use.
- B. Coating:
- 1. Paint process shall be a 1-coat Polyamidoamine Epoxy primer and a 1-coat Advanced Thermoset Solution Fluoropolymer with a manufacturer's 15 year color and gloss retention warranty.

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- 2. Epoxy prime coat: In the shop, all aluminum designated to be painted must be primed with a polyamidoamine epoxy base coat: Dry Mils 50 microns (2.0 mils) min., 250 microns (10.0 mils) max.
- 3. High-solids Fluoropolymer finish coat: In the shop, apply an Advanced Thermoset Solution Fluoropolymer coating that provides a semi-gloss durable finish with a brush, roll or spray application: Dry Mils 50 microns (2.0 mils) min., 75 microns (3.0 mils) max.
- C. Fabricator to confirm surface preparation and coating process with paint system manufacturer. If any variation exists between the specified coating system and process recommended by the paint system manufacturer, notify the Engineer in writing prior to the start of work.
- D. The paint manufacturer's product data sheets must be submitted to the Engineer prior to start of work and the requirements as outlined in the data sheets must be followed.
- E. Written approval of color by Engineer must be obtained prior to ordering and application of paint.
- F. Application of Polyamidoamine primer and Advanced Thermoset Solution Fluoropolymer finish coat paint system will not be allowed when the metal and/or air temperature is expected to fall below 10 degrees C (50 degrees F).
- G. Field cleaning and touch-up painting must only be done between May 1 and October 31.

Protection: Protect fabrication surfaces and corners by covering with padding and kraft paper or plastic covering prior to shipment from the fabrication shop.

Attachments: Bracelets, collars, couplings, and hardware necessary to assemble Fence Affixment must be provided with dimensions as shown on the Drawings. All exposed screws shall be stainless steel and finished to match in color and texture metal being fastened, unless otherwise specified. Do not use metals that are corrosive or incompatible with joined materials.

Installation.

Examine all surfaces and conditions of the installation to receive ornamental metal fabrications. Installation of the ornamental metal fabrications and associated construction constitutes acceptance of the existing materials and conditions.

Verify dimensions and conditions of the supporting structures at the project site.

Provide protection of in-place construction, surfaces and materials which can be damaged during the installation of this work. Patch, repair or replace any such construction damaged during the work of this section as reviewed and approved by the Engineer at no additional cost to the Engineer.

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Set ornamental metal fabrications accurately as measured from established building lines and levels, plumb and in true alignment with existing and previously completed new work. Allow for expansion and contraction of materials and building construction.

Anchor securely in place in the manner shown on the final reviewed shop drawings and the final reviewed mock-up samples, using specified anchors. Separate aluminum and steel fabrications using plastic washers.

The approved Independent Testing Agency shall inspect all field welded and bolted connections, including radiographic testing of field welds. Any defects shall be repaired and retested to verify adequacy.

Do not cut or abrade finishes which cannot be completely restored in the field. Return units with such finishes to the shop for required alterations, followed by complete refinishing.

Remove protective coverings when there is no longer any danger of damage to the ornamental metal fabrications from other work yet to be performed in the same location. Restore protective coverings which have been removed or damaged during shipment or installation of the work, or if such other work is yet to be performed.

Repair and refinish all damaged surfaces of fabrications that will affect the appearance and performance of finish coatings. Submit materials and methods of surface repair and repainting to the Engineer for review prior to application. Damaged surfaces will be repaired and refinished at no additional cost to the Engineer. Remove and replace or remove and factory refinish any fabrication which, if after review and decision by the Engineer, cannot be successfully field repaired at no additional cost to the Engineer.

Method of Measurement. Fence Affixment: This work shall be measured per foot of STEEL FENCE PANELS furnished and installed.

Basis of Payment. This item of work will be paid for at the Contract Unit Price per foot for STEEL FENCE PANELS.

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# MAINTENANCE OF TRAFFIC (ILLINOIS TOLLWAY)

<u>Description.</u> This work shall consist of furnishing, installation, maintenance, relocation and removal of work zone traffic control devices for maintenance of traffic in accordance with Section 701 of the Illinois Tollway Supplemental Specifications, plans, details, and as further defined and prescribed herein. This item shall be used for maintenance of traffic on the Elgin-O'Hare Western Access Tollway (IL 390) between Lake Street and Rohlwing Road. Maintenance of traffic on roadways other than the Elgin O'Hare Western Access Tollway (IL 390) shall be in accordance with the special provision for "TRAFFIC CONTROL PLAN" and "TRAFFIC CONTROL AND PROTECTION (ARTERIALS)", plans, details and as further defined and described therein.

# General Requirements.

**Tollway Standard Drawings** 

Tollway Standards used on Tollway jurisdiction:

E1 E2 E3 E5

The governing factor in the execution and staging of work for this project is to provide the motoring public with the safest possible travel conditions through the construction zone. The Contractor shall arrange his/her operations to keep the closing of lanes, shoulders and/or roads to a minimum.

Traffic conditions, accidents, and other unforeseen emergency conditions may require the Engineer to restrict, modify, or remove lane closures or channelizations installed by the Contractor. The Contractor shall make the necessary adjustments, as directed by the Engineer, without delay. The Contractor shall respond within 30 minutes from the time of notification by the Engineer to any request made by the Engineer, for correction, improvement, or modification of the maintenance of traffic control devices. Failure to respond within as specified above will result in a \$2,500.00 penalty per day, per incident, whenever the Engineer determines that the Contractor has not complied.

### Devices

Per Illinois Tollway Supplemental Specifications 701.03 except modified to include the following additions.

All traffic control devices used for the maintenance of traffic shall be reflectorized prior to installation and cleaned as specified by the Engineer.

### <u>Signs</u>

The Contractor shall be responsible for the proper location, installation, and arrangement of all traffic control devices as is necessary for performance of the work. Special attention shall be given to existing warning signs and guide signs during all construction operations. Warning signs and existing guide signs with arrows shall be kept consistent with the barricade placement at all times. The Contractor shall immediately remove or completely cover all signs that are inconsistent with the lane assignment patterns.

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The Contractor shall remove or cover all conflicting existing signs for the duration of the construction.

The maintenance of all signs, drums, pavement markings, barriers, reflective markers, delineators, relocation of traffic control devices for snow removal operations and maintaining points for temporary access shall be required.

### Coordination

Per Illinois Tollway Supplemental Specifications 701.04(a) except as modified herein.

If the Contractor requests implementation of an alternate traffic pattern to that specified in the Contract Plans, the Contractor shall submit a maintenance of traffic deviation plan, twenty-one (21) days prior of the changes for approval by the Tollway. In addition, the Contractor is required to attend a maintenance of traffic meeting arranged by the Engineer with representatives of the Tollway two (2) days prior to the implementation of the new maintenance of traffic stage changes.

In accordance with Article 105.08 of the Tollway Supplemental Specifications, the maintenance of traffic including, but not limited to, lane and shoulder closures, the placement and removal of signs, pavement striping, and/or placement and removal of other traffic control devices within the limits of this Contract may require coordination with Contracts in adjacent sections. Should a conflict arise between Contracts with respect to sequence of construction or maintenance of traffic requirements, said conflicts shall be resolved by or at the direction of the Engineer.

### Miscellaneous Maintenance Items

The Contractor is responsible for overall project maintenance and safety within the construction zone. The Contractor shall maintain construction site safety meeting OSHA requirements including but not limited to fall protection, excavation requirements, hazard communication and general safety and health provisions.

### Allowable Lane Closures

The Contract Plans specify construction of the proposed improvements along IL 390 within the project limits. The general Sequence of Construction expected to be followed by the Contractor is as specified in the Contract Plans and shall include provisions for allowable lane and shoulder closures necessary to perform the work in the contract. Unless specifically shown on the contract plans, permanent lane and/or permanent shoulder closures are not allowed.

The Contractor will be allowed to request temporary lane and temporary shoulder closures in accordance with the following process and requirements:

Temporary lane or shoulder closures on IL 390 within the Contract limits will be permitted only with the Tollway's approval. All temporary lane or shoulder closures shall be submitted by the Contractor to the Engineer no later than 7:00 a.m. weekdays at least one (1) day prior to closure. The lane closure coordination must be routed through the Engineer and no contact shall be made directly with the Tollway. Closures shall be in accordance with the Tollway Traffic Control and Communication Guidelines and applicable Tollway Standard Drawing(s) and shall be allowed only during allowable temporary lane and temporary shoulder closure hours specified herein.

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The allowable temporary lane closure hours shall be as follows:

START DAY	ALLOWABLE TEMPORARY 1-LANE CLOSURE TIMES ELGIN O'HARE WESTERN ACCESS TOLLWAY (IL 390): M.P. 5.9 (LAKE STREET) to M.P. 11.2 (ROHLWING ROAD)		
	Eastbound IL 390	Westbound IL 390	
Sunday – Thursday	8:00 p.m. – 5:00 a.m.	9:00 p.m. – 6:00 a.m.	
Friday	9:00 p.m. (Fri) – 8:00 a.m. (Sat)	10:00 p.m. (Fri) – 10:00 a.m. (Sat)	
Saturday	9:00 p.m. (Sat) – 10:00 a.m. (Sun)	11:00 p.m. (Sat) – 11:59 a.m. (Sun)	

2-Lane closures will not be allowed.

In addition to the hours noted above, temporary shoulder and non-system interchange partial ramp closures are allowed weekdays between 9:00 a.m. and 3:00 p.m. and between 7:00 p.m. and 5:00 a.m.

The Contractor shall strictly adhere to the temporary lane closure hours set out above throughout the duration of the contract. Temporary lane closures will not be allowed, or must be removed, if so directed by the Engineer, due to inclement weather or heavy traffic, in accordance with the Standard Specifications.

#### General Lane Closure Requirements

No lane closure signs shall be erected any earlier than one-half (1/2) hour before the starting hours listed above. Also, these signs should be taken down within one-half (1/2) hour after the closure is removed.

The Contractor is expected to be working in the areas closed due to the temporary lane or shoulder closures. The Contractor shall remove the temporary lane or shoulder closure when the scheduled work shift is over or when so required by the Contract documents, whichever occurs first.

All signs and sign appurtenance that have been taken down shall be properly stored outside the roadway clear zone or thirty-five (35) feet from the edge of the pavement whichever is greater and the location shall be approved by the Engineer.

#### Non-Compliance

Should the Contractor fail to re-open lanes of traffic, in accordance with the above time limits, the Contractor shall be considered Non-Compliant with the Maintenance of Traffic Specifications, per Article 701.01(b)(1) & (2) of the Tollway Supplemental Specifications. For this Contract, it is understood "incident" is defined as every 10 minute interval, or portion thereof, where the Contractor fails to re-open the lanes of traffic by the time limit specified.

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### **Contractor Access**

Per Article 701.08 of the Tollway Supplemental Specifications, except as modified herein:

The lane configurations, dimensions, and channelization devices shown in the Maintenance of Traffic plans are the minimum to be provided by the Contractor. The Contractor shall notify the Engineer if alternate or additional construction access points are required due to site conditions or lack of access from local roads and/or cross streets. The relocation or additional Contractor access will not be paid for separately.

Contractor access to the work zone may be available from cross streets or adjacent properties. If access from cross streets or adjacent properties is available, the Contractor shall be responsible for providing information as specified for obtaining necessary permits, providing traffic control, and restoring areas to existing conditions.

The Contractor shall install traffic control devices in locations where they do not block or impede other existing traffic control devices.

Changeable message signs shall be placed to notify affected motorists seven (7) calendar days in advance of closures and detours required for construction.

### Construction Sequences and Traffic Staging

Per Tollway Supplemental Specifications Article 701.05, except as modified as herein:

For additional information, see Contract plans.

### **General**

Construction operations for this contract shall be in accordance with the Contract Plans.

#### Staging Restriction

Any and all stage and/or phase changes shall be implemented by the Contractor and approved by the Engineer.

### **Holiday Periods**

For roadways under jurisdiction of the Tollway, Per Article 701.12 of the Tollway Supplemental Specifications with the following additions:

Period	Dates	Times	
Labor Day Weekend 2019	August 30, 2019 to September 3, 2019	12:00 noon, Friday to 9:00 A.M. Tuesday	
Thanksgiving Day Weekend	November 27, 2019 to	12:00 noon, Wednesday to	
2019	December 2, 2019	9:00 A.M. Monday	
Christmas 2019 / New Year	December 24, 2019 to	12:00 noon, Tuesday to 9:00	
2020	January 2, 2020	A.M. Thursday	

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For roadways under jurisdiction of agencies other than the Tollway, holiday periods shall be as specified in Article 107.09 of the Standard Specifications and in accordance with the special provision for "PUBLIC CONVENIENCE AND SAFETY (DIST 1)".

<u>Method of Measurement.</u> All maintenance of traffic required for work under this contract shall be considered part of the lump sum measurement for MAINTENANCE OF TRAFFIC (ILLINOIS TOLLWAY), including modifications specified herein.

<u>Basis of Payment.</u> This work will be paid for at the contract lump sum price for MAINTENANCE OF TRAFFIC (ILLINOIS TOLLWAY) and as specified in Article 701.15 of the Tollway Supplemental Specifications.

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# IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION (TPG)

Effective: August 1, 2012 Revised: February 1, 2014

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

It is the policy of IDOT to fund IDOT pre-apprenticeship training programs throughout Illinois to provide training and skill-improvement opportunities to assure the increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The intent of this IDOT Training Program Graduate (TPG) Special Provision is to place certified graduates of these IDOT funded pre-apprentice training programs on IDOT project sites when feasible, and provide the graduates with meaningful on-the-job training intended to lead to journey-level employment. IDOT and its sub-recipients, in carrying out the responsibilities of a state contract, shall determine which construction contracts shall include "Training Program Graduate Special Provisions." To benefit from the incentives to encourage the participation in the additional on-the-job training under this Training Program Graduate Special Provision, the Contractor shall make every reasonable effort to employ certified graduates of IDOT funded Pre-apprenticeship Training Programs to the extent such persons are available within a reasonable recruitment area.

Participation pursuant to IDOT's requirements by the Contractor or subcontractor in this Training Program Graduate (TPG) Special Provision entitles the Contractor or subcontractor to be reimbursed at \$15.00 per hour for training given a certified TPG on this contract. As approved by the Department, reimbursement will be made for training persons as specified herein. This reimbursement will be made even though the Contractor or subcontractor may receive additional training program funds from other sources for other trainees, provided such other source does not specifically prohibit the Contractor or subcontractor from receiving other reimbursement. For purposes of this Special Provision the Contractor is not relieved of requirements under applicable federal law, the Illinois Prevailing Wage Act, and is not eligible for other training fund reimbursements in addition to the Training Program Graduate (TPG) Special Provision reimbursement.

No payment shall be made to the Contractor if the Contractor or subcontractor fails to provide the required training. It is normally expected that a TPG will begin training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project through completion of the contract, so long as training opportunities exist in his work classification or until he has completed his training program. Should the TPG's employment end in advance of the completion of the contract, the Contractor shall promptly notify the designated IDOT staff member under this Special Provision that the TPG's involvement in the contract has ended and supply a written report of the reason for the end of the involvement, the hours completed by the TPG under 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 TPG.

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

> Contract No.: 61E69 Section: 14-00245-05-LS Job No.: C-91-400-16 Cook and DuPage County

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 certified TRAINEES TRAINING PROGRAM GRADUATE. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

The Contractor shall provide training opportunities aimed at developing full journeyworker in the type of trade or job classification involved. The initial number of TPGs for which the incentive is available under this contract is 1. During the course of performance of the Contract the Contractor may seek approval from the Department for additional incentive eligible TPGs. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the TPGs 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 insure that this Training Program Graduate Special Provision is made applicable to such subcontract if the TPGs are to be trained by a subcontractor and that the incentive payment is passed on to each subcontractor.

For the Contractor to meet the obligations for participation in this TPG incentive program under this Special Provision, the Department has contracted with several entities to provide screening, tutoring and pre-training to individuals interested in working in the applicable construction classification and has certified those students who have successfully completed the program and are eligible to be TPGs. A designated IDOT staff member, the Director of the Office of Business and Workforce Diversity (OBWD), will be responsible for providing assistance and referrals to the Contractor for the applicable TPGs. For this contract, the Director of OBWD is designated as the responsible IDOT staff member to provide the assistance and referral services related to the placement for this Special Provision. For purposes of this Contract, contacting the Director of OBWD and interviewing each candidate he/she recommends constitutes reasonable recruitment.

Prior to commencing construction, the Contractor shall submit to the Department for approval the TPGs to be trained in each selected classification. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. No employee shall be employed as a TPG in any classification in which he/she has successfully completed a training course leading to journeyman status or in which he/she has been employed as a journeyman. Notwithstanding the on-the-job training purpose of this TPG Special Provision, some offsite training is permissible as long as the offsite training is an integral part of the work of the contract and does not comprise a significant part of the overall training.

Training and upgrading of TPGs of IDOT pre-apprentice training programs is intended to move said TPGs toward journeyman status and is the primary objective of this Training Program Graduate Special Provision. Accordingly, the Contractor shall make every effort to enroll TPGs by recruitment through the IDOT funded TPG programs to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance and entitled to the Training Program Graduate Special Provision \$15.00 an hour incentive.

The Contractor or subcontractor shall provide each TPG with a certificate showing the type and length of training satisfactorily completed.

# 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' eneral liability insurance policy in accordance with Article 107.27:						
The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.						

Form Approved OMB No. 2120-0001 Expiration Date: 10/31/2017

# SUPPLEMENTAL NOTICE

Submission Instructions: For Advance Notice of Act and 6. If applicable, also complete items 4 and 5. Det Office for your area. Part 1A is provided for your file.			Aeronautical Study No.	
U.S. Department of Transportation Federal Aviation Administration	ce of Actual Cons (Ple ase Type or Pr	truction or Alteration rint on this Form)		
	1. Const	ruction		
A. Type and Description of Construction  New Alte	ration	B. Owner of Structure		
	2. Construction L	ocation Height		
A. Coordinates (To hundredths of seconds, if known)	an aitu da	B. Location (City, State, include Street Address if any)		
Latitude L	ongitude ' "	Address II arry)		
C. Construction Heights  Total Height (Structure & Site)  Above Mean Sea Level				
Site Elevation Ft. AMSL Structure Height Ft. AGL	Ft. AMSL			
D. Site Elevation Determined By  Actual Survey USGS 7.5' Quad Chart  E. Reference d	atum of coordinates D 27 D 83 er (Specify)	F. Name of Nearest Public-Use or Military Airport (include Distance and Direction from the Airport	)	
3. Construction Notifications				
A. Notification		B. Construction/Project		
(Notice Is Critical to Flight ★ Safety FAR Part 77 Required)	Date		Date	
(1) Construction will start (Submit at least 48 hrs. in advance		(1) Project Abandoned		
(2) Estimated Completion				
(3) Structure Reached Greatest Height (Submit within 5 days)		(2) Construction Dismantled		
	4. Marking a	nd Lighting		
A. Marked  Yes No Temporary		ensity White	Red None	
_	5. Antenna Requir			
A. Call Sign B. Frequency	C. Date Applied for FC	CC Construction Permit D. Date Co.	nstruction Permit Issued	
	6. Preparer's			
A. Proponent's Representative		B. Construction Proponent Name:		
Address:		Address:		
Address:  Address:  Address:  Address:  Address:  Tel. No.: (Include Area Code)  I hereby certify that the inform Signature  Signature				
Tel. No.: (Include Area Code)		Tel. No.: (Include Area Code)		
I hereby certify that the inform		rue, complete, and correct to the best o		
Signature Signature	Title		Date	
Notice is required by 14 Code of Federal Reginguishingly violate the notice requirements of part 7 49 U. & C., Section 46301(a).				

FAA Form 7460-2 (7-98) SUPERSEDES PREVIOUS EDITION

Form Approved OMB No. 2120-0001 Expiration Date: 10/31/2017

# SUPPLEMENTAL NOTICE

Submission Instructions: For Advance Notice of Actual Construction or Alteration. Complete items 1, 2, 3A (1), 3A(2), and 6. If applicable, also complete items 4 and 5. Detach Part 1. Fold and tape at bottom. Mail to the FAA Regional Office for your area. Part 1A is provided for your file.							
	U.S. Department of Transportation Federal Aviation Administration  Notice of Actual Construction or Alteration (Ple ase Type or Print on this Form)						
				1. Consti	ruction		
A. Type	A. Type and Description of Construction  New Alteration  B. Owner of Structure						
				2. Construction Lo	ocation Height		
A. Coord	•	redths of seconds, i			B. Location (City, State, include Stree Address if any)	eet	
Site Elev	C. Construction Heights  Total Height (Structure & Site) Above Mean Sea Level  Site Elevation  Ft. AMSL						
Structure		Ft. AGL		Ft. AMSL	5 11 (1) (5)	****	
D. Site Elevation Determined By  Actual Survey USGS 7.5' Quad Chart Other (Specify)  E. Reference datum of coordinates NAD 27  NAD 83  Other (Specify)  F. Name of Nearest Public-Use or Military Airport (include Distance and Direction from the Airport)							
				3. Construction	Notifications		
A. Notific	cation				B. Construction/Project		
	Sa	(Notice Is Criti afety FAR Part 7		Date			Date
	1) Construction weast 48 hrs. in adv	ill start (Submit at vance			(1) Project Abandoned		
	2) Estimated Com	npletion  thed Greatest Heigh	 ht		(2) Construction Dismantled		
	Submit within 5 da						
				4. Marking ar	nd Lighting		
A. Marke	Yes 🗆	No 🗌 Tem	nporary	B. Lighted  Medium Inte Dual (Mediu White & Rec	ım Intensity 🔲 Dual (F	ntensity White High Intensity & Red)	Red None
				5. Antenna Requir	=		
A. Call S	Sign	B. Frequency		C. Date Applied for FC	C Construction Permit	D. Date Construction F	Permit Issued
				6. Preparer's (	Certification		
Se a	•	Representative			B. Construction Proponent		
Name:				Name:			
A. Proponent's Representative Name: Address:  Address:  Tel. No.: (Include Area Code)  Tel. No.: (Include Area Code)  I hereby certify that the information provided is true, complete, and correct to the best of my knowledge.  Signature  B. Construction Proponent Name: Address:  Tel. No.: (Include Area Code)  Tel. No.: (Include Area Code)  Title  Date							
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49 U. & C., Section 46301(a).

Form Approved OMB No. 2120-0001 Expiration Date: 10/31/2017

# **SUPPLEMENTAL NOTICE**

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Form Approved OMB No. 2120-0001 Expiration Date: 10/31/2017

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Form Approved OMB No. 2120-0001 Expiration Date: 10/31/2017

# **SUPPLEMENTAL NOTICE**

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and 6.	Submission Instructions: For Advance Notice of Actual Construction or Alteration. Complete items 1, 2, 3A (1), 3A(2), and 6. If applicable, also complete items 4 and 5. Detach Part 1. Fold and tape at bottom. Mail to the FAA Regional Office for your area. Part 1A is provided for your file.						
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### **COMPENSABLE DELAY COSTS (BDE)**

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

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

- "(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows.
  - (1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.
  - (2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.
  - (3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days."

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

- "(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.
  - (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.
    - Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).
  - (2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the

Contractor's yard or another job and the cost to re-mobilize, whichever is less. Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

(3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven calendar days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

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

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

- "(b) No working day will be charged under the following conditions.
  - (1) When adverse weather prevents work on the controlling item.
  - (2) When job conditions due to recent weather prevent work on the controlling item.
  - (3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.
  - (4) When delays caused by utility or railroad adjustments prevent work on the controlling item.
  - (5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.
  - (6) When any condition over which the Contractor has no control prevents work on the controlling item."

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

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

other than as allowed by Article 109.13, lost opportunity, preparation of claim expenses and other consequential indirect costs regardless of method of calculation.

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

Add the following to Section 109 of the Standard Specifications.

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

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

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

- (a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.
- (b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.
  - (1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

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

	One Clerk
	One Project Manager,
Over \$50,000,000	Two Project Superintendents,
Over \$50,000,000	One Engineer, and
	One Clerk

- (2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.
- (c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid for according to Article 109.04.

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

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

### CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

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

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

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

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

<sup>1/</sup> Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

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

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

<sup>2/</sup> Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

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

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

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

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

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

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

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

#### **Diesel Retrofit Deficiency Deduction**

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

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

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

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

### **DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)**

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

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

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

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

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

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

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

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

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform  $\frac{17.00}{}$ % of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

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

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

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

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

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

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

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

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases and will be considered by the Department.
  - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
  - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.
  - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
  - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided it is otherwise eligible for award. If the Department determines the

bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification will also include a statement of reasons for the adverse determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period to cure the deficiency.

(c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "DOT.DBE.UP@illinois.gov" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.

- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
  - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
  - (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
  - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
  - (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
  - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

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

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

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

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

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

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

- (6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal:
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.
  - When a DBE is terminated or fails to complete its work on the Contract for any reason, the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.
- (f) FINAL PAYMENT. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <u>ENFORCEMENT</u>. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be

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

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

### **DISPOSAL FEES (BDE)**

Effective: November 1, 2018

Replace Articles 109.04(b)(5) - 109.04(b)(8) of the Standard Specifications with the following:

- "(5) Disposal Fees. When the extra work performed includes paying for disposal fees at a clean construction and demolition debris facility, an uncontaminated soil fill operation or a landfill, the Contractor shall receive, as administrative costs, an amount equal to five percent of the first \$10,000 and one percent of any amount over \$10,000 of the total approved costs of such fees.
- (6) Miscellaneous. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.
- (7) Statements. No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer with itemized statements of the cost of such force account work. Statements shall be accompanied and supported by invoices for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from his/her stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

Itemized statements at the cost of force account work shall be detailed as follows.

- a. Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman. Payrolls shall be submitted to substantiate actual wages paid if so requested by the Engineer.
- b. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
- c. Quantities of materials, prices and extensions.
- d. Transportation of materials.
- e. Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.
- (8) Work Performed by an Approved Subcontractor. When extra work is performed by an approved subcontractor, the Contractor shall receive, as administrative costs, an amount equal to five percent of the total approved costs of such work with the minimum payment being \$100.

(9) All statements of the cost of force account work shall be furnished to the Engineer not later than 60 days after receipt of the Central Bureau of Construction form "Extra Work Daily Report". If the statement is not received within the specified time frame, all demands for payment for the extra work are waived and the Department is released from any and all such demands. It is the responsibility of the Contractor to ensure that all statements are received within the specified time regardless of the manner or method of delivery."

### **EQUIPMENT PARKING AND STORAGE (BDE)**

Effective: November 1, 2017

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

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

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

### PORTLAND CEMENT CONCRETE (BDE)

Effective: November 1, 2017

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

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

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

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

### PROGRESS PAYMENTS (BDE)

Effective: November 2, 2013

Revise Article 109.07(a) of the Standard Specifications to read:

"(a) Progress Payments. At least once each month, the Engineer will make a written estimate of the quantity of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

Progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics' Lien Act, 770 ILCS 60/23(c).

If a Contractor or subcontractor has defaulted on a loan issued under the Department's Disadvantaged Business Revolving Loan Program (20 ILCS 2705/2705-610), progress payments may be reduced pursuant to the terms of that loan agreement. In such cases, the amount of the estimate related to the work performed by the Contractor or subcontractor, in default of the loan agreement, will be offset, in whole or in part, and vouchered by the Department to the Working Capital Revolving Fund or designated escrow account. Payment for the work shall be considered as issued and received by the Contractor or subcontractor on the date of the offset voucher. Further, the amount of the offset voucher shall be a credit against the Department's obligation to pay the Contractor, the Contractor's obligation to pay the subcontractor, and the Contractor's or subcontractor's total loan indebtedness to the Department. The offset shall continue until such time as the entire loan indebtedness is satisfied. The Department will notify the Contractor and Fund Control Agent in a timely manner of such offset. The Contractor or subcontractor shall not be entitled to additional payment in consideration of the offset.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved."

### REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

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

Revise Section 669 of the Standard Specifications to read:

#### "SECTION 669. REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

**669.01 Description.** This work shall consist of the transportation and proper disposal of regulated substances. This work shall also consist of the removal, transportation, and proper disposal of underground storage tanks (UST), their contents and associated underground piping to the point where the piping is above the ground, including determining the content types and estimated quantities.

**669.02 Equipment.** The Contractor shall notify the Engineer of the delivery of all excavation, storage, and transportation equipment to a work area location. The equipment shall comply with OSHA and American Petroleum Institute (API) guidelines and shall be furnished in a clean condition. Clean condition means the equipment does not contain any residual material classified as a non-special waste, non-hazardous special waste, or hazardous waste. Residual materials include, but are not limited to, petroleum products, chemical products, sludges, or any other material present in or on equipment.

Before beginning any associated soil or groundwater management activity, the Contractor shall provide the Engineer with the opportunity to visually inspect and approve the equipment. If the equipment contains any contaminated residual material, decontamination shall be performed on the equipment as appropriate to the regulated substance and degree of contamination present according to OSHA and API guidelines. All cleaning fluids used shall be treated as the contaminant unless laboratory testing proves otherwise.

**669.03 Pre-Construction Submittals and Qualifications.** Prior to beginning this work, or working in areas with regulated substances, the Contractor shall submit a "Regulated Substances Pre-Construction Plan (RSPCP)" to the Engineer for review and approval using form BDE 2730. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.

As part of the RSPCP, the Contractor(s) or firm(s) performing the work shall meet the following qualifications.

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

- Qualification for each individual performing regulated substances monitoring shall require a minimum of one-year of experience in similar activities as those required for the project.
- (b) Underground Storage Tank Removal. Qualification for underground storage tank (UST) removal work shall require licensing and certification with the Office of the State Fire Marshall (OSFM) and possession of all permits required to perform the work. A copy of the permit shall be provided to the Engineer prior to tank removal.

The qualified Contractor(s) or firm(s) shall also document it does not have any current or former ties with any of the properties contained within, adjoining, or potentially affecting the work.

The Engineer will require up to 21 calendar days for review of the RSPCP. The review may involve rejection or revision and resubmittal; in which case, an additional 21 days will be required for each subsequent review. Work shall not commence until the RSPCP has been approved by the Engineer. After approval, the RSPCP shall be revised as necessary to reflect changed conditions in the field and documented using BDE 2730A "Regulated Substances Pre-Construction Plan (RSPCP) Addendum" and submitted to the Engineer for approval.

#### CONSTRUCTION REQUIREMENTS

- **669.04 Regulated Substances Monitoring.** Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities at the contract specific work areas. As part of the regulated substances monitoring, the monitoring personnel shall perform and document the applicable duties listed on form BDE 2732 "Regulated Substances Monitoring Daily Record (RSMDR)".
  - (a) Environmental Observation. Prior to beginning excavation, the Contractor shall mark the limits of the contract specific work areas. Once work begins, the monitoring personnel shall be present on-site continuously during the excavation and loading of material.
  - (b) Field Screening. Field screening shall be performed during the excavation and loading of material from the contract specific work areas, except for material classified according to Article 669.05(b)(1) or 669.05(c) where field screening is not required.
    - Field screening shall be performed with either a photoionization detector (PID) (minimum 10.6eV lamp) or a flame ionization detector (FID), and other equipment as appropriate, to monitor for potential contaminants associated with regulated substances. The PID or FID shall be calibrated on-site, and background level readings taken and recorded daily, and as field and weather conditions change. Field screen readings on the PID or FID in excess of background levels indicates the potential presence of regulated substances requiring handling as a non-special waste, special waste, or hazardous waste. PID or FID readings may be used as the basis of increasing the limits of removal with the approval of the Engineer but shall in no case be used to decrease the limits.

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

- (a) Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate detected levels exceed the most stringent maximum allowable concentration (MAC) for chemical constituents in soil established pursuant to Subpart F of 35 III. Adm. Code 1100.605, the soil shall be managed as follows:
  - (1) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC, but still considered within area background levels by the Engineer, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable. If the soils cannot be utilized within the right-of-way, they shall be managed and disposed of at a landfill as a non-special waste.
  - (2) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County identified in 35 III. Admin. Code 742 Appendix A. Table G, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of at a clean construction and demolition debris (CCDD) facility or an uncontaminated soil fill operation (USFO) within an MSA County provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
  - (3) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25 9.0, inclusive.
  - (4) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25 9.0, inclusive.
  - (5) When the Engineer determines soil cannot be managed according to Articles 669.05(a)(1) through (a)(4) above and the materials do not contain special waste or hazardous waste, as determined by the Engineer, the soil shall be managed and disposed of at a landfill as a non-special waste.
  - (6) When analytical results indicate soil is hazardous by characteristic or listing pursuant to 35 III. Admin. Code 721, contains radiological constituents, or the Engineer otherwise determines the soil cannot be managed according to Articles 669.05(a)(1)

through (a)(5) above, the soil shall be managed and disposed of off-site as a special waste or hazardous waste as applicable.

- (b) Soil Analytical Results Do Not Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels do not exceed the most stringent MAC, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO for any of the following reasons.
  - (1) The pH of the soil is less than 6.25 or greater than 9.0.
  - (2) The soil exhibited PID or FID readings in excess of background levels.
- (c) Soil Analytical Results Exceed Most Stringent MAC but Do Not Exceed Tiered Approach to Corrective Action Objectives (TACO) Residential. When the soil analytical results indicate that detected levels exceed the most stringent MAC but do not exceed TACO Tier 1 Soil Remediation Objectives for Residential Properties pursuant to 35 III. Admin. Code 742 Appendix B Table A, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO.
- (d) Groundwater. When groundwater analytical results indicate the detected levels are above Appendix B, Table E of 35 III. Admin. Code 742, the most stringent Tier 1 Groundwater Remediation Objectives for Groundwater Component of the Groundwater Ingestion Route for Class 1 groundwater, the groundwater shall be managed off-site as a special waste or hazardous waste as applicable. Special waste groundwater shall be containerized and trucked to an off-site treatment facility, or may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority. Groundwater discharged to a sanitary sewer or combined sewer shall be pre-treated to remove particulates and measured with a calibrated flow meter to comply with applicable discharge limits. A copy of the permit shall be provided to the Engineer prior to discharging groundwater to the sanitary sewer or combined sewer.

Groundwater encountered within trenches may be managed within the trench and allowed to infiltrate back into the ground. If the groundwater cannot be managed within the trench, it may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority, or it shall be containerized and trucked to an off-site treatment facility as a special waste or hazardous waste. The Contractor is prohibited from discharging groundwater within the trench through a storm sewer. The Contractor shall install backfill plugs within the area of groundwater contamination.

One backfill plug shall be placed down gradient to the area of groundwater contamination. Backfill plugs shall be installed at intervals not to exceed 50 ft (15 m). Backfill plugs are to be 4 ft (1.2 m) long, measured parallel to the trench, full trench width and depth. Backfill plugs shall not have any fine aggregate bedding or backfill, but shall be entirely cohesive

soil or any class of concrete. The Contractor shall provide test data that the material has a permeability of less than 10<sup>-7</sup> cm/sec according to ASTM D 5084, Method A or per another test method approved by the Engineer.

The Contractor shall use due care when transferring contaminated material from the area of origin to the transporter. Should releases of contaminated material to the environment occur (i.e., spillage onto the ground, etc.), the Contractor shall clean-up spilled material and place in the appropriate storage containers as previously specified. Clean-up shall include, but not be limited to, sampling beneath the material staging area to determine complete removal of the spilled material.

The Contractor shall provide engineered barriers, when required, and shall include materials sufficient to completely line excavation surfaces, including sloped surfaces, bottoms, and sidewall faces, within the areas designated for protection.

The Contractor shall obtain all documentation including any permits and/or licenses required to transport the material containing regulated substances to the disposal facility. The Contractor shall coordinate with the Engineer on the completion of all documentation. The Contractor shall make all arrangements for collection and analysis of landfill acceptance testing. The Contractor shall coordinate waste disposal approvals with the disposal facility.

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

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

Any waste generated as a special or hazardous waste from a non-fixed facility shall be manifested off-site using the Department's county generator number provided by the Bureau of Design and Environment. An authorized representative of the Department shall sign all manifests for the disposal of the contaminated material and confirm the Contractor's transported volume. Any waste generated as a non-special waste may be managed off-site without a manifest, a special waste transporter, or a generator number.

The Contractor shall select a landfill permitted for disposal of the contaminant within the State of Illinois. The Department will review and approve or reject the facility proposed by the Contractor to use as a landfill. The Contractor shall verify whether the selected disposal facility is compliant with those applicable standards as mandated by their permit and whether the disposal facility is presently, has previously been, or has never been, on the United States Environmental Protection Agency (U.S. EPA) National Priorities List or the Resource Conservation and Recovery Act (RCRA) List of Violating Facilities. The use of a Contractor selected landfill shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth.

- **669.06 Non-Special Waste Certification.** An authorized representative of the Department shall sign and date all non-special waste certifications. The Contractor shall be responsible for providing the Engineer with the required information that will allow the Engineer to certify the waste is not a special waste.
  - (a) Definition. A waste is considered a non-special waste as long as it is not:
    - (1) a potentially infectious medical waste;
    - (2) a hazardous waste as defined in 35 III. Admin. Code 721;
    - (3) an industrial process waste or pollution control waste that contains liquids, as determined using the paint filter test set forth in subdivision (3)(A) of subsection (m) of 35 III. Admin. Code 811.107;
    - (4) a regulated asbestos-containing waste material, as defined under the National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61.141;
    - (5) a material containing polychlorinated biphenyls (PCB's) regulated pursuant to 40 CFR Part 761;
    - (6) a material subject to the waste analysis and recordkeeping requirements of 35 III. Admin. Code 728.107 under land disposal restrictions of 35 III. Admin. Code 728;
    - (7) a waste material generated by processing recyclable metals by shredding and required to be managed as a special waste under Section 22.29 of the Environmental Protection Act; or
    - (8) an empty portable device or container in which a special or hazardous waste has been stored, transported, treated, disposed of, or otherwise handled.
  - (b) Certification Information. All information used to determine the waste is not a special waste shall be attached to the certification. The information shall include but not be limited to:
    - (1) the means by which the generator has determined the waste is not a hazardous waste;
    - (2) the means by which the generator has determined the waste is not a liquid;
    - (3) if the waste undergoes testing, the analytic results obtained from testing, signed and dated by the person responsible for completing the analysis;
    - (4) if the waste does not undergo testing, an explanation as to why no testing is needed;

- (5) a description of the process generating the waste; and
- (6) relevant material safety data sheets.

**669.07 Temporary Staging.** Soil classified according to Articles 669.05(a)(2), (b)(1), or (c) may be temporarily staged at the Contractor's option. Soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) shall be managed and disposed of without temporary staging to the greatest extent practicable. If circumstances beyond the Contractor's control require temporary staging of these latter materials, the Contractor shall request approval from the Engineer in writing.

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

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

When containers are used, the containers and their contents shall remain intact and inaccessible to unauthorized persons until the manner of disposal is determined. The Contractor shall be responsible for all activities associated with the storage containers including, but not limited to, the procurement, transport, and labeling of the containers. The Contractor shall not use a storage container if visual inspection of the container reveals the presence of free liquids or other substances that could cause the waste to be reclassified as a hazardous or special waste.

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

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

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

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

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

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

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

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

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

**669.08 Underground Storage Tank Removal.** For the purposes of this section, an underground storage tank (UST) includes the underground storage tank, piping, electrical controls, pump island, vent pipes and appurtenances.

Prior to removing an UST, the Engineer shall determine whether the Department is considered an "owner" or "operator" of the UST as defined by the UST regulations (41 III. Adm. Code Part 176). Ownership of the UST refers to the Department's owning title to the UST during storage, use or dispensing of regulated substances. The Department may be considered an "operator" of the UST if it has control of, or has responsibility for, the daily operation of the UST. The Department may however voluntarily undertake actions to remove an UST from the ground without being deemed an "operator" of the UST.

In the event the Department is deemed not to be the "owner" or "operator" of the UST, the OSFM removal permit shall reflect who was the past "owner" or "operator" of the UST. If the "owner" or "operator" cannot be determined from past UST registration documents from OSFM, then the OSFM removal permit will state the "owner" or "operator" of the UST is the Department. The Department's Office of Chief Counsel (OCC) will review all UST removal permits prior to submitting any removal permit to the OSFM. If the Department is not the "owner" or "operator" of the UST then it will not register the UST or pay any registration fee.

The Contractor shall be responsible for obtaining permits required for removing the UST, notification to the OSFM, using an OSFM certified tank contractor, removal and disposal of the UST and its contents, and preparation and submittal of the OSFM Site Assessment Report in accordance with 41 III. Admin. Code Part 176.330.

The Contractor shall contact the Engineer and the OSFM's office at least 72 hours prior to removal to confirm the OSFM inspector's presence during the UST removal. Removal, transport, and disposal of the UST shall be according to the applicable portions of the latest revision of the "American Petroleum Institute (API) Recommended Practice 1604".

The Contractor shall collect and analyze tank content (sludge) for disposal purposes. The Contractor shall remove as much of the regulated substance from the UST system as necessary to prevent further release into the environment. All contents within the tank shall be removed, transported and disposed of, or recycled. The tank shall be removed and rendered empty according to IEPA definition.

The Contractor shall collect soil samples from the bottom and sidewalls of the excavated area in accordance with 35 III. Admin. Code Part 734.210(h) after the required backfill has been removed during the initial response action, to determine the level of contamination remaining in the ground, regardless if a release is confirmed or not by the OSFM on-site inspector.

In the event the UST is designated a leaking underground storage tank (LUST) by the OSFM's inspector, or confirmation by analytical results, the Contractor shall notify the Engineer and the District Environmental Studies Unit (DESU). Upon confirmation of a release of contaminants and notifications to the Engineer and DESU, the Contractor shall report the release to the Illinois Emergency Management Agency (IEMA) (e.g., by telephone or electronic mail) and provide them with whatever information is available ("owner" or "operator" shall be stated as the past registered "owner" or "operator", or the IDOT District in which the tank is located and the DESU Manager).

The Contractor shall perform the following initial response actions if a release is indicated by the OSFM inspector:

- (a) Take immediate action to prevent any further release of the regulated substance to the environment, which may include removing, at the Engineer's discretion, and disposing of up to 4 ft (1.2 m) of the contaminated material, as measured from the outside dimension of the tank;
- (b) Identify and mitigate fire, explosion and vapor hazards;
- (c) Visually inspect any above ground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils and groundwater; and
- (d) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors and free product that have migrated from the tank excavation zone and entered into subsurface structures (such as sewers or basements).

The tank excavation shall be backfilled according to applicable portions of Sections 205, 208, and 550 with a material that will compact and develop stability. All uncontaminated concrete and soil removed during tank extraction may be used to backfill the excavation, at the discretion of the Engineer.

After backfilling the excavation, the site shall be graded and cleaned.

- **669.09 Regulated Substances Final Construction Report.** Not later than 90 days after completing this work, the Contractor shall submit a "Regulated Substances Final Construction Report (RSFCR)" to the Engineer using form BDE 2733 and required attachments. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.
- **669.10 Method of Measurement.** Non-special waste, special waste, and hazardous waste soil will be measured for payment according to Article 202.07(b) when performing earth excavation, Article 502.12(b) when excavating for structures, or by computing the volume of the trench using the maximum trench width permitted and the actual depth of the trench.

Groundwater containerized and transported off-site for management, storage, and disposal will be measured for payment in gallons (liters).

Backfill plugs will be measured in cubic yards (cubic meters) in place, except the quantity for which payment will be made shall not exceed the volume of the trench, as computed by using the maximum width of trench permitted by the Specifications and the actual depth of the trench, with a deduction for the volume of the pipe.

Engineered Barriers will be measured for payment in square yards (square meters).

**669.11 Basis of Payment.** The work of preparing, submitting and administering a Regulated Substances Pre-Construction Plan will be paid for at the contract lump sum price for REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN.

Regulated substances monitoring, including completion of form BDE 2732 for each day of work, will be paid for at the contract unit price per calendar day, or fraction thereof to the nearest 0.5 calendar day, for REGULATED SUBSTANCES MONITORING.

The installation of engineered barriers will be paid for at the contract unit price per square yard (square meter) for ENGINEERED BARRIER.

The work of UST removal, soil excavation, soil and content sampling, the management of excavated soil and UST content, and UST disposal, will be paid for at the contract unit price per each for UNDERGROUND STORAGE TANK REMOVAL.

The transportation and disposal of soil and other materials from an excavation determined to be contaminated will be paid for at the contract unit price per cubic yard (cubic meter) for NON-SPECIAL WASTE DISPOSAL, SPECIAL WASTE DISPOSAL, or HAZARDOUS WASTE DISPOSAL.

The transportation and disposal of groundwater from an excavation determined to be contaminated will be paid for at the contract unit price per gallon (liter) for SPECIAL WASTE GROUNDWATER DISPOSAL or HAZARDOUS WASTE GROUNDWATER DISPOSAL. When groundwater is discharged to a sanitary or combined sewer by permit, the cost will be paid for according to Article 109.05.

Backfill plugs will be paid for at the contract unit price per cubic yard (cubic meter) for BACKFILL PLUGS.

Payment for temporary staging of soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) will be paid for according to Article 109.04. The Department will not be responsible for any additional costs incurred, if mismanagement of the staging area, storage containers, or their contents by the Contractor results in excess cost expenditure for disposal or other material management requirements.

Payment for accumulated stormwater removal and disposal will be according to Article 109.04. Payment will only be allowed if appropriate stormwater and erosion control methods were used.

Payment for decontamination, labor, material, and equipment for monitoring areas beyond the specified areas, with the Engineer's prior written approval, will be according to Article 109.04.

When the waste material for disposal requires sampling for landfill disposal acceptance, the samples shall be analyzed for TCLP VOCs, SVOCs, RCRA metals, pH, ignitability, and paint filter test. The analysis will be paid for at the contract unit price per each for SOIL DISPOSAL ANALYSIS using EPA Methods 1311 (extraction), 8260B for VOCs, 8270C for SVOCs, 6010B and 7470A for RCRA metals, 9045C for pH, 1030 for ignitability, and 9095A for paint filter.

The work of preparing, submitting and administering a Regulated Substances Final Construction Report will be paid for at the contract lump sum price REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT."

# SILT FENCE, GROUND STABILIZATION AND RIPRAP FILTER FABRIC (BDE)

Effective: November 1, 2019

Revise Article 1080.02 of the Standard Specifications to read:

**"1080.02 Geotextile Fabric.** The fabric for silt filter fence shall consist of woven fabric meeting the requirements of AASHTO M 288 for unsupported silt fence.

The fabric for ground stabilization shall consist of woven yarns or nonwoven filaments of polyolefins or polyesters. Woven fabrics shall be Class 2 and nonwoven fabrics shall be Class 1 according to AASHTO M 288.

The physical properties for silt fence and ground stabilization fabrics shall be according to the following.

PHYSICAL PROPERTIES			
	Silt Fence Woven 1/	Ground Stabilization Woven <sup>2/</sup>	Ground Stabilization Nonwoven <sup>2/</sup>
Grab Strength, lb (N) <sup>3/</sup> ASTM D 4632	123 (550) MD 101 (450) XD	247 (1100) min. <sup>4/</sup>	202 (900) min. <sup>4/</sup>
Elongation/Grab Strain, % ASTM D 4632 4/	49 max.	49 max.	50 min.
Trapezoidal Tear Strength, lb (N) ASTM D 4533 4/		90 (400) min.	79 (350) min.
Puncture Strength, lb (N) ASTM D 6241 4/		494 (2200) min.	433 (1925) min.
Apparent Opening Size, Sieve No. (mm) ASTM D 4751 5/	30 (0.60) max.	40 (0.43) max.	40 (0.43) max.
Permittivity, sec <sup>-1</sup> ASTM D 4491	0.05 min.		
Ultraviolet Stability, % retained strength after 500 hours of exposure ASTM D 4355	70 min.	50 min.	50 min.

- 1/ NTPEP results or manufacturer's certification to meet test requirements.
- 2/ NTPEP results to meet test requirements. Manufacturer shall have public release status and current reports on laboratory results in Test Data of NTPEP's DataMine.
- 3/ MD = Machine direction. XD = Cross-machine direction.
- 4/ Values represent the minimum average roll value (MARV) in the weaker principle direction, MD or XD.

5/ Values represent the maximum average roll value."

Revise Article 1080.03 of the Standard Specifications to read:

"1080.03 Filter Fabric. The filter fabric shall consist of woven yarns or nonwoven filaments of polyolefins or polyesters. Woven fabrics shall be Class 3 for riprap gradations RR 4 and RR 5, and Class 2 for RR 6 and RR 7 according to AASHTO M 288. Woven slit film geotextiles (i.e. geotextiles made from yarns of a flat, tape-like character) shall not be permitted. Nonwoven fabrics shall be Class 2 for riprap gradations RR 4 and RR 5, and Class 1 for RR 6 and RR 7 according to AASHTO M 288. After forming, the fabric shall be processed so that the yarns or filaments retain their relative positions with respect to each other. The fabric shall be new and undamaged.

The filter fabric shall be manufactured in widths of not less than 6 ft (2 m). Sheets of fabric may be sewn together with thread of a material meeting the chemical requirements given for the yarns or filaments to form fabric widths as required. The sheets of filter fabric shall be sewn together at the point of manufacture or another approved location.

The filter fabric shall be according to the following.

PHYSICAL PROPERTIES 1/				
	Gradation Nos. RR 4 & RR 5		Gradation Nos. RR 6 & RR 7	
	Woven	Nonwoven	Woven	Nonwoven
Grab Strength, lb (N) ASTM D 4632 <sup>2/</sup>	180 (800) min.	157 (700) min.	247 (1100) min.	202 (900) min.
Elongation/Grab Strain, % ASTM D 4632 2/	49 max.	50 min.	49 max.	50 min.
Trapezoidal Tear Strength, lb (N) ASTM D 4533 2/	67 (300) min.	56 (250) min.	90 (400) min.	79 (350) min.
Puncture Strength, lb (N) ASTM D 6241 <sup>2/</sup>	370 (1650) min.	309 (1375) min.	494 (2200) min.	433 (1925) min.
Ultraviolet Stability, % retained strength after 500 hours of exposure - ASTM D 4355	50 min.			

- 1/ NTPEP results to meet test requirements. Manufacturer shall have public release status and current reports on laboratory results in Test Data of NTPEP's DataMine.
- 2/ Values represent the minimum average roll value (MARV) in the weaker principle direction [machine direction (MD) or cross-machine direction (XD)].

As determined by the Engineer, the filter fabric shall meet the requirements noted in the following after an onsite investigation of the soil to be protected.

Soil by Weight (Mass) Passing	Apparent Opening Size,	Permittivity, sec <sup>-1</sup>
the No. 200 sieve (75 µm), %	Sieve No. (mm) - ASTM D 4751 1/	ASTM D 4491
49 max.	60 (0.25) max.	0.2 min.
50 min.	70 (0.22) max.	0.1 min.

<sup>1/</sup> Values represent the maximum average roll value."

## STEEL COST ADJUSTMENT (BDE)

Effective: April 2, 2004 Revised: August 1, 2017

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

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

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

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

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

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

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

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

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

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

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

 $D = MPI_M - MPI_1$ 

Where:  $MPI_M =$  The Materials Cost Index for steel as published by the Engineering News-Record for the month the steel is shipped from the mill. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

MPI<sub>L</sub> = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price,. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

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

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

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

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

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

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

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

### Attachment

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

# SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

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

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

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

# **SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)**

Effective: November 2, 2017

Revised: April 1, 2019

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

following:

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

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

## **TEMPORARY PAVEMENT MARKING (BDE)**

Effective: April 1, 2012 Revised: April 1, 2017

Revise Article 703.02 of the Standard Specifications to read:

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

(	(a) Pavement Marking Tape, Type I and Type III	1095.06
(	(b) Paint Pavement Markings	1095.02
(	c) Pavement Marking Tape, Type IV	1095.11"

Revise the second paragraph of Article 703.05 of the Standard Specifications to read:

"Type I marking tape or paint shall be used at the option of the Contractor, except paint shall not be applied to the final wearing surface unless authorized by the Engineer for late season applications where tape adhesion would be a problem. Type III or Type IV marking tape shall be used on the final wearing surface when the temporary pavement marking will conflict with the permanent pavement marking such as on tapers, crossovers and lane shifts."

Revise Article 703.07 of the Standard Specifications to read:

"703.07 Basis of Payment. This work will be paid for as follows.

- a) Short Term Pavement Marking. Short term pavement marking will be paid for at the contract unit price per foot (meter) for SHORT TERM PAVEMENT MARKING. Removal of short term pavement markings will be paid for at the contract unit price per square foot (square meter) for SHORT TERM PAVEMENT MARKING REMOVAL.
- b) Temporary Pavement Marking. Where the Contractor has the option of material type, temporary pavement marking will be paid for at the contract unit price per foot (meter) for TEMPORARY PAVEMENT MARKING of the line width specified, and at the contract unit price per square foot (square meter) for TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS.

Where the Department specifies the use of pavement marking tape, the Type III or Type IV temporary pavement marking will be paid for at the contract unit price per foot (meter) for PAVEMENT MARKING TAPE, TYPE III or PAVEMENT MARKING TAPE, TYPE IV of the line width specified and at the contract unit price per square feet (square meter) for PAVEMENT MARKING TAPE, TYPE III - LETTERS AND SYMBOLS or PAVEMENT MARKING TAPE, TYPE IV – LETTERS AND SYMBOLS.

Removal of temporary pavement markings will be paid for at the contract unit price per square foot (square meter) for TEMPORARY PAVEMENT MARKING REMOVAL.

When temporary pavement marking is shown on the Standard, the cost of the temporary pavement marking and its removal will be included in the cost of the Standard."

Add the following to Section 1095 of the Standard Specifications:

"1095.11 Pavement Marking Tape, Type IV. The temporary, preformed, patterned markings shall consist of a white or yellow tape with wet retroreflective media incorporated to provide immediate and continuing retroreflection during both wet and dry conditions. The tape shall be manufactured without the use of heavy metals including lead chromate pigments or other similar, lead-containing chemicals.

The white and yellow Type IV marking tape shall meet the Type III requirements of Article 1095.06 and the following.

- (a) Composition. The retroreflective pliant polymer pavement markings shall consist of a mixture of high-quality polymeric materials, pigments and glass beads distributed throughout its base cross-sectional area, with a layer of wet retroreflective media bonded to a durable polyurethane topcoat surface. The patterned surface shall have approximately 40% ± 10% of the surface area raised and presenting a near vertical face to traffic from any direction. The channels between the raised areas shall be substantially free of exposed beads or particles.
- (b) Retroreflectance. The white and yellow markings shall meet the following for initial dry and wet retroreflectance.
  - (1) Dry Retroreflectance. Dry retroreflectance shall be measured under dry conditions according to ASTM D 4061 and meet the values described in Article 1095.06 for Type III tape.
  - (2) Wet Retroreflectance. Wet retroreflectance shall be measured under wet conditions according to ASTM E 2177 and meet the values shown in the following table.

Wet Retroreflectance, Initial R<sub>L</sub>

Color	R <sub>∟</sub> 1.05/88.76
White	300
Yellow	200

(c) Color. The material shall meet the following requirements for daylight reflectance and color, when tested, using a color spectrophotometer with 45 degrees circumferential/zero degree geometry, illuminant D65, and a two degree observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm.

Color Daylight Reflectance	
White	65 minimum
*Yellow	36-59

\*Shall match Federal 595 Color No. 33538 and the chromaticity limits as follows.

Х	0.490	0.475	0.485	0.530
у	0.470	0.438	0.425	0.456

- (d) Skid Resistance. The surface of the markings shall provide an average minimum skid resistance of 50 BPN when tested according to ASTM E 303.
- (e) Sampling, Testing, Acceptance, and Certification. Prior to approval and use of the wet reflective, temporary, removable pavement marking tape, the manufacturer shall submit a notarized certification from an independent laboratory, together with the results of all tests, stating that the material meets the requirements as set forth herein. The certification test report shall state the lot tested, manufacturer's name, and date of manufacture.

After approval by the Department, samples and certification by the manufacturer shall be submitted for each batch used. The manufacturer shall submit a certification stating that the material meets the requirements as set forth herein and is essentially identical to the material sent for qualification. The certification shall state the lot tested, manufacturer's name, and date of manufacture.

All costs of testing (other than tests conducted by the Department) shall be borne by the manufacturer."

## TRAFFIC CONTROL DEVICES - CONES (BDE)

Effective: January 1, 2019

Revise Article 701.15(a) of the Standard Specifications to read:

"(a) Cones. Cones are used to channelize traffic. Cones used to channelize traffic at night shall be reflectorized; however, cones shall not be used in nighttime lane closure tapers or nighttime lane shifts."

Revise Article 1106.02(b) of the Standard Specifications to read:

"(b) Cones. Cones shall be predominantly orange. Cones used at night that are 28 to 36 in. (700 to 900 mm) in height shall have two white circumferential stripes. If non-reflective spaces are left between the stripes, the spaces shall be no more than 2 in. (50mm) in width. Cones used at night that are taller than 36 in. (900 mm) shall have a minimum of two white and two fluorescent orange alternating, circumferential stripes with the top stripe being fluorescent orange. If non-reflective spaces are left between the stripes, the spaces shall be no more than 3 in. (75 mm) in width.

The minimum weights for the various cone heights shall be 4 lb for 18 in. (2 kg for 450 mm), 7 lb for 28 in. (3 kg for 700 mm), and 10 lb for 36 in. (5 kg for 900 mm) with a minimum of 60 percent of the total weight in the base. Cones taller than 36 in. shall be weighted per the manufacturer's specifications such that they are not moved by wind or passing traffic."

**TRAINING SPECIAL PROVISIONS (BDE)** 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 1. In the event the contractor subcontracts a portion of the contract work, he 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 insure 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 employed by him 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 that he 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 has successfully completed a training course leading to journeyman status or in which he 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, Manpower Administration, Bureau of Apprenticeship and Training 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 then 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 will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

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.

# WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012 Revised: April 2, 2015

The Contractor shall submit a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used for DBE goal credit.

The report shall be submitted to the Engineer on Department form "SBE 723" within ten business days following the reporting period. The reporting period shall be Monday through Sunday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

# WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 75 working days.

# REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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

#### **ATTACHMENTS**

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

### I. GENERAL

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

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

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

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

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

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

#### II. NONDISCRIMINATION

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

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

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

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

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

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

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

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

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

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

## 6. Training and Promotion:

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

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

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

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

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

#### III. NONSEGREGATED FACILITIES

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

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

#### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

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

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

### 1. Minimum wages

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

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

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

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

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

### 2. Withholding

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

#### 3. Payrolls and basic records

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

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

## 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

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

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

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

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

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

b. Trainees (programs of the USDOL).

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

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

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

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

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

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

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

### 10. Certification of eligibility.

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

### V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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

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

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

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

### VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

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

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

### **VII. SAFETY: ACCIDENT PREVENTION**

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

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

## **VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

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

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

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

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

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

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

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

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

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

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

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

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

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

### 1. Instructions for Certification – First Tier Participants:

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

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

\* \* \* \*

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

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

## 2. Instructions for Certification - Lower Tier Participants:

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

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

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

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

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

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

# XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

\* \* \* \* \*

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

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

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

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

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

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

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

## Contract Provision - Cargo Preference Requirements

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

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

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

# MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.