# 39

### Letting September 21, 2018

### Notice to Bidders, Specifications and Proposal



Contract No. 61E00 WILL County Section 12-00029-00-PV (Rockdale) Route FAU 3795 (Moen Avenue) Project F1U5-430 () District 1 Construction Funds

Prepared by

Checked by

F



#### **NOTICE TO BIDDERS**

- 1. TIME AND PLACE OF OPENING BIDS. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 10:00 a.m. September 21, 2018 at which time the bids will be publicly opened from the iCX SecureVault.
- 2. DESCRIPTION OF WORK. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 61E00 WILL County Section 12-00029-00-PV (Rockdale) Project F1U5-430 () Route FAU 3795 (Moen Avenue) District 1 Construction Funds

#### Reconstruction of Moen Avenue from Mound Road to Larkin Avenue in the Village of Rockdale.

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

By Order of the Illinois Department of Transportation

Randall S. Blankenhorn, Secretary

#### CONTRACT 61E00

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

#### Adopted January 1, 2018

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

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 4-1-16) (Revised 1-1-18)

#### SUPPLEMENTAL SPECIFICATIONS

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

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#### **BDE SPECIAL PROVISIONS**

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

Bool         Accessible Pedestrian Signals (APS)         April 1, 2003         Jan. 1, 2014           80382         99         X         Adjusting Frames and Crates         April 1, 2017         April 1, 2018         April 1, 2017         April 1, 2017         April 1, 2017         April 1, 2016         April 1, 2017         April 1, 2016         April 1, 2010         April 1, 2016	<u>File</u> Name	<u>Pg.</u>		Special Provision Title	<b>Effective</b>	<u>Revised</u>
80382         99         X         Adjusting Frames and Grätes         April 1, 2017           80274         Aggregate Subgrade Improvement         April 1, 2018         April 1, 2016           80173         101         X         Bituminous Materials Cost Adjustments         Nov. 2, 2006           802173         Bituminous Materials Cost Adjustments         July 1, 2009         Aug. 1, 2017           80241         Building Removal-Case I (Non-Friable Asbestos)         Sept. 1, 1990         April 1, 2010           50481         Building Removal-Case II (Non-Friable Asbestos)         Sept. 1, 1990         April 1, 2010           50531         Building Removal-Case IV (No Asbestos)         Sept. 1, 1990         April 1, 2010           80386         Calcum Aluminate Cement for Class PP-5 Concrete Patching         Not. 2, 2017           80386         Completion Date (via calendar days) Plus Working Days         April 1, 2008           80293         Completion Date (via calendar days) Plus Working Days         April 1, 2016           80381         Concrete Box Cluverts with Skews > 30 Degrees and Design Fills \$ 5         April 1, 2016           80381         Concrete Box Cluverts with Skews > 30 Degrees and Design Fills \$ 5         April 1, 2016           80281         Concrete Box Cluverts with Skews > 30 Degrees and Design Fills \$ 5         April 1, 2016				Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
80274         Aggregate Subgrade Improvement         April 1, 2012         April 1, 2016           80173         101         X         Bituminous Materials Cost Adjustments         Nov. 2, 2006         Aug. 1, 2017           80241         Bridge Demolition Debris         July 1, 2009         April 1, 2010           50261         Building Removal-Case II (Non-Friable Asbestos)         Sept. 1, 1990         April 1, 2010           50481         Building Removal-Case II (Friable Asbestos)         Sept. 1, 1990         April 1, 2010           50491         Building Removal-Case IV (No Asbestos)         Sept. 1, 1990         April 1, 2010           80386         103         Butt Joints         Calcium Aluminate Cement for Class PP-5 Concrete Patching         Nov. 1, 2017           80396         Completion Date (via calendar days)         June 2, 2017         April 1, 2008           80199         Completion Date (via calendar days) Plus Working Days         April 1, 2016           80311         Concrete Mix Design - Department Provided         Jan. 1, 2017           80367         Construction Air Quality – Diesel Retrofit         June 1, 2010           80377         Construction Air Quality – Diesel Retrofit         June 1, 2017           80387         Dowel Bar Inserter         Joan. 1, 2018           80388         145			Х			,
80173         101         Bituminous Materials Cost Adjustments         Nov. 2, 2006         Aug. 1, 2017           80241         Bidding Removal-Case I (Non-Friable Asbestos)         Sept. 1, 1990         April 1, 2010           50461         Building Removal-Case II (Non-Friable Asbestos)         Sept. 1, 1990         April 1, 2010           50431         Building Removal-Case II (Friable Asbestos)         Sept. 1, 1990         April 1, 2010           50361         Building Removal-Case IV (No Asbestos)         Sept. 1, 1990         April 1, 2010           80386         104         X         Compensable Delay Costs         July 1, 2006           60386         Completion Date (via calendar days)         April 1, 2010         April 1, 2010           80384         104         X         Compensable Delay Costs         June 2, 2017           80386         Completion Date (via calendar days)         April 1, 2018         April 1, 2016           80311         Concrete Mix Design – Department Provided         Jan. 1, 2012         April 1, 2016           80271         Construction Air Quality – Diseel Retrofit         June 1, 2017         June 1, 2017           80381         Y         Fuel Cost Adjustment         April 1, 2018         April 1, 2018           80378         Hot-Mix Asphat – Density resting of Longitudinal Joints<	80274					April 1, 2016
B0241         Bridge Demolition Debris         July 1, 2009         April 1, 2010           50261         Building Removal-Case II (Non-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 IV (No Asbestos)         Sept. 1, 1990         April 1, 2010           80366         Calcium Aluminate Cament for Class PP-5 Concrete Patching         July 1, 2016           80386         Calcium Aluminate Cament for Class PP-5 Concrete Patching         Jun. 2, 2017           80386         Completion Date (via calendar days)         April 1, 2008           80199         Completion Date (via calendar days)         April 1, 2016           80381         Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5         April 1, 2013           80381         Concrete Mix Design – Department Provided         Jan. 1, 2013         April 1, 2016           80221         Tal         Concrete Mix Design – Department Provided         Jan. 1, 2014         April 1, 2016           80381         Concrete Mix Design – Department Provided         Jan. 1, 2013         April 1, 2016           80381         Concrete Mix Design – Department Provided         Jan. 1, 2017         April 2, 2018           8037 <td>80192</td> <td></td> <td></td> <td>Automated Flagger Assistance Device</td> <td>Jan. 1, 2008</td> <td>-</td>	80192			Automated Flagger Assistance Device	Jan. 1, 2008	-
50261         Building Removal-Case II (Non-Friable Asbestos)         Sept. 1, 1990         April 1, 2010           50481         Building Removal-Case III (Non-Friable Asbestos)         Sept. 1, 1990         April 1, 2010           50451         Building Removal-Case III (Non-Friable Asbestos)         Sept. 1, 1990         April 1, 2010           60531         Building Removal-Case III (Friable Asbestos)         Sept. 1, 1990         April 1, 2010           80386         Calcium Aluminate Cement for Class PP-5 Concrete Patching         Nov. 1, 2017           80386         Complexiton Date (via calendar days)         June 2, 2017           80199         Completion Date (via calendar days)         April 1, 2008           80293         108         Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5         April 1, 2012           80311         Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5         April 1, 2016           80261         131         Concrete Mix Design – Department Provided         Jan. 1, 2011         April 2, 2016           80261         131         Concrete Mix Design – Department Provided         Jan. 1, 2012         April 1, 2016           80261         131         Concrete Mix Design – Department Provided         Jan. 1, 2017         April 2, 2018           80378         Dowel Bar Inserter         Jan. 1	80173	101	Х	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
50481         Building Removal-Case II (Non-Friable Asbestos)         Sept. 1, 1990         April 1, 2010           50491         Building Removal-Case II (Non Asbestos)         Sept. 1, 1990         April 1, 2010           80366         IO3         Building Removal-Case IV (No Asbestos)         Sept. 1, 1990         April 1, 2010           80386         Calcium Aluminate Cement for Class PP-5 Concrete Patching         Nov. 1, 2017         Dias A and B Patching         July 1, 2016           80384         104         X         Compensable Delay Costs         June 2, 2017           80384         104         X         Completion Date (via calendar days)         April 1, 2008           80199         Completion Date (via calendar days)         Plus Working Days         April 1, 2016           80231         108         X         Concrete Mix Design – Department Provided         Jan. 1, 2013         April 1, 2016           80217         Concrete Mix Design – Department Provided         Jan. 1, 2014         April 2, 2016         Nov. 1, 2017         Nov. 1, 2017           80387         Contrast Preformed Plastic Pavement Marking         Nov. 1, 2017         Nov. 1, 2017         Nov. 1, 2017           80384         145         X         Equipment Parking and Storage         Nov. 1, 2017         Nov. 1, 2017           80384 <td>80241</td> <td></td> <td></td> <td>Bridge Demolition Debris</td> <td>July 1, 2009</td> <td></td>	80241			Bridge Demolition Debris	July 1, 2009	
50491       Building Removal-Case IV (No Asbestos)       Sept. 1, 1990       April 1, 2010         80366       103       X       Butt Joints       July 1, 2016         80386       Calcium Aluminate Cement for Class PP-5 Concrete Patching       Nov. 1, 2017         80386       Calcium Aluminate Cement for Class PP-5 Concrete Patching       Nov. 1, 2017         80386       Calcium Aluminate Cement for Class PP-5 Concrete Patching       Nov. 1, 2017         80384       104       X       Competion Date (via calendar days)       April 1, 2008         80199       Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5       April 1, 2012       July 1, 2016         80211       Concrete End Sections for Pipe Culverts       Jan. 1, 2013       April 1, 2016         80221       131       Concrete Mix Design – Department Provided       Jan. 1, 2014       April 1, 2016         80387       Concrete Mix Design – Department Provided       Jan. 1, 2014       April 1, 2016       April 2, 2018         80388       145       Equipment Partoring and Storage       Nov. 1, 2017       Jan. 1, 2018         80388       145       Equipment Parting and Storage       Nov. 1, 2017       Jan. 1, 2018         80388       151       Hot-Mix Asphalt – Donsitudinal Joints Sealant       Aug. 1, 2018       Jabsite Samplin	5026I				Sept. 1, 1990	
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80366         103         X         Butt Joints         July 1, 2016           80386         Calcium Aluminate Cement for Class PP-5 Concrete Patching         Nov. 1, 2017           80384         104         X         Compensable Delay Costs         June 2, 2017           80198         Completion Date (via calendar days)         April 1, 2008         April 1, 2008           80293         108         X         Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5         April 1, 2016           80311         Concrete End Sections for Pipe Culverts         Jan. 1, 2013         April 1, 2016           80217         Construction Afr Quality - Disel Retrofit         June 1, 2010         Nov. 1, 2014           80387         Construction Afr Quality - Disel Retrofit         June 1, 2010         Nov. 1, 2017           80387         Disadvantaged Business Enterprise Participation         Set 1, 2000         April 2, 2018           80378         Dowel Bar Inserter         Jan. 1, 2017         Jan. 1, 2018         Sourd           80388         145         X         Equipment Parking and Storage         Nov. 1, 2017         Aug. 1, 2018           80399         155         X         Hot-Mix Asphalt - Density Testing of Longitudinal Joints         Jan. 1, 2017         Aug. 1, 2018           80399						•
80386         Calcium Aluminate Cement for Class PP-5 Concrete Patching         Nov. 1, 2017           80384         104         X         Compensable Delay Costs         June 2, 2017           80198         Completion Date (via calendar days)         April 1, 2008         April 1, 2008           80293         108         X         Completion Date (via calendar days)         April 1, 2012         July 1, 2016           80293         108         X         Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5         April 1, 2012         April 1, 2016           80311         Concrete End Sections for Pipe Culverts         Jan. 1, 2011         April 1, 2016           802277         Concrete Mix Design – Department Provided         Jan. 1, 2017         Nov. 1, 2014           80386         121         X         Construction Air Quality – Disel Retrofit         June 1, 2017         Nov. 1, 2017           80329         134         X         Disadvantaged Business Enterprise Participation         Sept. 1, 2000         April 2, 2018           80388         145         X         Equipment Parking and Storage         Nov. 1, 2017         Jan. 1, 2017         Jan. 1, 2018           80387         Dowel Bar Inserter         April 1, 2008         April 1, 2017         Nov. 1, 2017           80399 <t< td=""><td></td><td></td><td></td><td></td><td>•</td><td>April 1, 2010</td></t<>					•	April 1, 2010
80396         Class A and B Patching         Jan. 1, 2018           80384         104         X         Compensable Delay Costs         June 2, 2017           80199         Completion Date (via calendar days)         April 1, 2008         April 1, 2008           80293         108         X         Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5         April 1, 2012         July 1, 2016           80311         Concrete End Sections for Pipe Culverts         Jan. 1, 2013         April 1, 2016           80261         131         Concrete Mix Design – Department Provided         Jan. 1, 2014         April 1, 2016           80261         131         Contrast Preformed Plastic Pavement Marking         Nov. 1, 2017         Nov. 1, 2017           80029         134         Disadvantaged Business Enterprise Participation         Sept. 1, 2000         April 2, 2018           80378         Dowel Bar Inserter         Jan. 1, 2017         Jan. 1, 2017         Jan. 1, 2017           80381         145         Equipment Parking and Storage         Nov. 1, 2017         Vov. 1, 2017           80390         155         Hot-Mix Asphalt – Longitudinal Joint Sealant         Jan. 1, 2018         Jan. 1, 2018           80391         155         Hot-Mix Asphalt – Quality Control for Performance         April 1, 2017			Х		•	
80384         104         X         Compensable Delay Costs         June 2, 2017           80198         Completion Date (via calendar days)         April 1, 2008         April 1, 2008           80293         108         X         Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5         April 1, 2012         July 1, 2016           80311         Concrete End Sections for Pipe Culverts         Jan. 1, 2013         April 1, 2016           80277         Construction Air Quality – Diesel Retrofit         June 1, 2010         Nov. 1, 2016           80281         X         Construction Air Quality – Diesel Retrofit         June 1, 2010         Nov. 1, 2014           80378         Dowel Bar Inserter         Jan. 1, 2017         Jan. 1, 2017         Jan. 1, 2017           80381         45         Equipment Parking and Storage         Nov. 1, 2017         Jan. 1, 2010         Aug. 1, 2017           80384         151         X         Foreoving for Recessed Pavement Markings         Nov. 1, 2017         Nov. 1, 2017           80388         155         X         Hot-Mix Asphat – Density Testing of Longitudinal Joints         Jan. 1, 2018         Nov. 1, 2017           80398         155         X         Hot-Mix Asphat – Quality Control for Performance         April 1, 2017         Nov. 1, 2017						
80198       Completion Date (via calendar days)       April 1, 2008         80199       Completion Date (via calendar days) Plus Working Days       April 1, 2008         80293       108       X       Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5         80311       Concrete Ind Sections for Pipe Culverts       Jan. 1, 2012       April 1, 2016         80277       Concrete Mix Design – Department Provided       Jan. 1, 2011       April 1, 2016         80281       131       Construction Air Quality – Diesel Retrofit       June 1, 2010       Nov. 1, 2017         8029       134       X       Disadvantaged Business Enterprise Participation       Sept. 1, 2000       April 2, 2018         80378       Dowel Bar Inserter       Jan. 1, 2017       Jan. 1, 2017       Jan. 1, 2017         80384       145       K       Equipment Parking and Storage       Nov. 1, 2011       Nov. 1, 2017         80344       Grooving for Recessed Pavement Markings       Nov. 1, 2012       Nov. 1, 2017       Nov. 1, 2018         80398       151       X       Hot-Mix Asphalt – Dongitudinal Joint Sealant       Aug. 1, 2018         80398       155       X       Hot-Mix Asphalt – Congitudinal Joint Sealant       Aug. 1, 2017         80393       160       X       Manholes, Valve Vauits,						
80199 80293Completion Date (via calendar days) Plus Working Days Concrete Box Culverts with Skews > 30 Degrees and Design Fills \$ 5 FectApril 1, 2012 April 1, 2012July 1, 201680311 80311 80311Concrete End Sections for Pipe Culverts Construction Air Quality - Diesel Retrofit Contrast Preformed Plastic Pavement Marking 80328Jan. 1, 2013 June 1, 2010April 1, 2016 April 1, 201680277 80297Contrast Preformed Plastic Pavement Marking Contrast Preformed Plastic Pavement Marking 80387Nov. 1, 201780298 80299134 XDisadvantaged Business Enterprise ParticipationSept. 1, 2000 Jan. 1, 2017April 2, 2018 Jan. 1, 201780329145 XEquipment Parking and Storage Fuel Cost Adjustment 80398Nov. 1, 2017 Aug. 1, 2017Nov. 1, 2017 Aug. 1, 201880388 80398151 XHot-Mix Asphalt - Density Testing of Longitudinal Joints Jobsite SamplingJan. 1, 2018 Aug. 1, 2018Aug. 1, 2018 			X			
80293         108         X         Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5         April 1, 2012         July 1, 2016           Feet         Feet         Jan. 1, 2013         April 1, 2016         April 1, 2016           80311         Concrete End Sections for Pipe Culverts         Jan. 1, 2012         April 1, 2016           80277         Concrete Mix Design – Department Provided         Jan. 1, 2012         April 1, 2016           80261         131         X         Construction Air Quality – Diesel Retroft         June 1, 2010         Nov. 1, 2017           *         80029         134         X         Disadvantaged Business Enterprise Participation         Sept. 1, 2000         April 2, 2018           80378         Dowel Bar Inserter         Jan. 1, 2017         Jan. 1, 2017         Jan. 1, 2017           80292         146         X         Fuel Cost Adjustment         April 1, 2009         Aug. 1, 2017           80384         15         X         Equipment Parking and Storage         Nov. 1, 2017         Nov. 1, 2017           80394         Grooving for Recessed Pavement Markings         Nov. 1, 2017         Nov. 1, 2017         Nov. 1, 2017           80394         Tot-Mix Asphalt – Longitudinal Joint Sealant         Aug. 1, 2018         Nov. 1, 2014         Aug. 1, 2018					•	
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*       80398       151       X       Hot-Mix Asphalt – Longitudinal Joint Sealant       Aug. 1, 2018         *       80399       155       X       Hot-Mix Asphalt – Oscillatory Roller       Aug. 1, 2018         *       80347       Hot-Mix Asphalt – Day for Performance Using Percent Within Limits - Jobsite Sampling       Nov. 1, 2014       Aug. 1, 2018         *       80383       Hot-Mix Asphalt – Quality Control for Performance       April 1, 2017       Nov. 1, 2017         *       80376       157       X       Hot-Mix Asphalt – Tack Coat       Nov. 1, 2016         *       80336       Lights on Barricades       Jan. 1, 2018       April 1, 2014       April 1, 2016         *       80333       160       X       Manholes, Valve Vaults, and Flat Slab Tops       Jan. 1, 2018       March 2, 2018         *       80400       Mast Arm Assembly and Pole       Aug. 1, 2014       April 1, 2014         *       80404       Metarial Transfer Device       June 15, 1999       Aug. 1, 2014         *       Moisture Cured Urethane Paint System       Nov. 1, 2014       April 1, 2016         *       80394       Metarial Transfer Device       July 1, 2016       Jan. 1, 2018         *       Moisture Cured Urethane Paint System       Nov. 1, 2014       April 1, 2017						
<ul> <li>* 80399 151 X Hot-Mix Asphalt - Conglutatinal Soft Operating Soft Operating Aug. 1, 2018</li> <li>* 80347 X Hot-Mix Asphalt - Day for Performance Using Percent Within Limits - Jobsite Sampling</li> <li>80383 Hot-Mix Asphalt - Quality Control for Performance</li> <li>80383 Hot-Mix Asphalt - Tack Coat</li> <li>80392 157 X Hot-Mix Asphalt - Tack Coat</li> <li>80392 158 X Lights on Barricades</li> <li>80336 Longitudinal Joint and Crack Patching</li> <li>80386 Longitudinal Joint and Crack Patching</li> <li>80396 April 1, 2014 April 1, 2016</li> <li>* 80390 160 X Manholes, Valve Vaults, and Flat Slab Tops</li> <li>* 80400 Mast Arm Assembly and Pole</li> <li>80045 Material Transfer Device</li> <li>80349 Pavement Marking Blackout Tape</li> <li>80371 162 X Pavement Marking Removal</li> <li>9077 164 X Portable Changeable Message Signs</li> <li>80401 Portland Cement Concrete Bridge Deck Curing</li> <li>* 80401 Portland Cement Concrete Pavement Connector for Bridge Approach</li> <li>* 80401 Portland Cement Concrete Pavement Connector for Bridge Approach</li> </ul>	00240		-			Aug. 1, 2018
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	80401				Aug. 1, 2018	

	<u>File</u>	<u>Pg.</u>	Special Provision Title	<b>Effective</b>	Revised
<u>I</u>	<u>Name</u> 80385		Portland Cement Concrete Sidewalk	Aug. 1, 2017	
	80300		Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
	80328	166	X Progress Payments	Nov. 2, 2013	
	3426I		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. 1, 2018
	80395		Sloped Metal End Section for Pipe Culverts	Jan. 1, 2018	
	80340		Speed Display Trailer	April 2, 2014	Jan. 1, 2017
	80127	167	X Steel Cost Adjustment	April 2, 2014	Aug. 1, 2017
*	80397	170	X Subcontractor and DBE Payment Reporting	April 2, 2018	
	80391	171	X Subcontractor Mobilization Payments	Nov. 2, 2017	
	80317		Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016
	80298		Temporary Pavement Marking (NOTE: This special provision was previously named <i>"Pavement Marking Tape Type IV"</i> .)	April 1, 2012	April 1, 2017
	20338	172	X Training Special Provision	Oct. 15, 1975	
	80318		Traversable Pipe Grate for Concrete End Sections (Note: This special provision was previously named " <i>Traversable Pipe Grate</i> ".)	Jan. 1, 2013	Jan. 1, 2018
	80288	175	X Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
	80302	177	X Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
	80071		Working Days	Jan. 1, 2002	

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

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

#### GUIDE BRIDGE SPECIAL PROVISION INDEX/CHECK SHEET

Effective as of the: June 15, 2018 Letting

<u>Pg</u> #	$\checkmark$	File Name	Title	Effective	Revised
		GBSP 4	Polymer Modified Portland Cement Mortar	June 7, 1994	Apr 1, 2016
		GBSP 12	Drainage System	June 10, 1994	Jun 24, 2015
		GBSP 13	High-Load Multi-Rotational Bearings	Oct 13, 1988	Apr 1, 2016
		GBSP 14	Jack and Remove Existing Bearings	April 20, 1994	April 13, 2018
		GBSP 15	Three Sided Precast Concrete Structure	July 12, 1994	Dec 21, 2016
		GBSP 16	Jacking Existing Superstructure	Jan 11, 1993	April 13, 2018
		GBSP 17	Bonded Preformed Joint Seal	July 12, 1994	Jan 1, 2007
		GBSP 18	Modular Expansion Joint	May 19, 1994	Dec 29, 2014
		GBSP 21	Cleaning and Painting Contact Surface Areas of Existing Steel Structures	June 30, 2003	April 13, 2018
		GBSP 25	Cleaning and Painting Existing Steel Structures	Oct 2, 2001	Apr 22, 2016
		GBSP 26	Containment and Disposal of Lead Paint Cleaning Residues	Oct 2, 2001	Apr 22, 2016
		GBSP 28	Deck Slab Repair	May 15, 1995	April 13, 2018
		GBSP 29	Bridge Deck Microsilica Concrete Overlay	May 15, 1995	Oct 20, 2017
		GBSP 30	Bridge Deck Latex Concrete Overlay	May 15, 1995	Oct 20, 2017
		GBSP 31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	Oct 20, 2017
		GBSP 33	Pedestrian Truss Superstructure	Jan 13, 1998	Dec 29, 2014
		GBSP 34	Concrete Wearing Surface	June 23, 1994	Oct 4, 2016
		GBSP 35	Silicone Bridge Joint Sealer	Aug 1, 1995	Oct 15, 2011
		GBSP 45	Bridge Deck Thin Polymer Overlay	May 7, 1997	Feb 6, 2013
		GBSP 51	Pipe Underdrain for Structures	May 17, 2000	Jan 22, 2010
		GBSP 53	Structural Repair of Concrete	Mar 15, 2006	Apr 1, 2016
		GBSP 55	Erection of Curved Steel Structures	June 1, 2007	
178	Х	GBSP 56	Setting Piles in Rock	Nov 14, 1996	Apr 1, 2016
		GBSP 59	Diamond Grinding and Surface Testing Bridge Sections	Dec 6, 2004	Mar 29, 2017
		GBSP 60	Containment and Disposal of Non-Lead Paint Cleaning Residues	Nov 25, 2004	Apr 22, 2016
		GBSP 61	Slipform Parapet	June 1, 2007	Apr 22, 2016
		GBSP 67	Structural Assessment Reports for Contractor's Means and Methods	Mar 6, 2009	Oct 5, 2015
		GBSP 71	Aggregate Column Ground Improvement	Jan 15, 2009	Oct 15, 2011
		GBSP 72	Bridge Deck Fly Ash or GGBF Slag Concrete Overlay	Jan 18, 2011	Oct 20, 2017
		GBSP 75	Bond Breaker for Prestressed Concrete Bulb-T Beams	April 19, 2012	
180	Х	GBSP 77	Weep Hole Drains for Abutments, Wingwalls, Retaining Walls And Culverts	April 19, 2012	Oct 22, 2013
		GBSP 78	Bridge Deck Construction	Oct 22, 2013	Dec 21, 2016
		GBSP 79	Bridge Deck Grooving (Longitudinal)	Dec 29, 2014	Mar 29, 2017
181	Х	GBSP 81	Membrane Waterproofing for Buried Structures	Oct 4, 2016	April 13, 2018
		GBSP 82	Metallizing of Structural Steel	Oct 4, 2016	Oct 20, 2017
		GBSP 83	Hot Dip Galvanizing for Structural Steel	Oct 4, 2016	Oct 20, 2017
		GBSP 85	Micropiles	Apr 19, 1996	Oct 5, 2015
		GBSP 86	Drilled Shafts	Oct 5, 2015	Oct 4, 2016
		GBSP 87	Lightweight Cellular Concrete Fill	Nov 11, 2011	Apr 1, 2016
		GBSP 88	Corrugated Structural Plate Structures	Apr 22, 2016	April 13, 2018
		GBSP 89	Preformed Pavement Joint Seal	Oct 4, 2016	
		GBSP 90	Three Sided Precast Concrete Structure (Special)	Dec 21, 2016	April 13, 2018
		GBSP 91	Crosshole Sonic Logging Testing of Drilled Shafts	Apr 20, 2016	
		GBSP 92	Thermal Integrity Profile Testing of Drilled Shafts	Apr 20, 2016	

<u>Pg</u> #	$\checkmark$	File Name	Title	<u>Effective</u>	Revised
		GBSP 93	Preformed Bridge Joint Seal	Dec 21, 2016	April 13, 2018
		GBSP 94	Warranty for Cleaning and Painting Steel Structures	Mar 3, 2000	Nov 24, 2004
		GBSP 95	Bituminous Coated Aggregate Slopewall	April 13, 2018	

#### LIST ANY ADDITIONAL SPECIAL PROVISIONS BELOW

The following Guide Bridge Special Provisions have been incorporated into the 2016 Standard Specifications:

File	Title	Std Spec
Name		Location
GBSP32	Temporary Sheet Piling	522
GBSP38	Mechanically Stabilized Earth Retaining Walls	522
GBSP42	Drilled Soldier Pile Retaining Wall	522
GBSP43	Driven Soldier Pile Retaining Wall	522
GBSP44	Temporary Soil Retention System	522
GBSP46	Geotextile Retaining Walls	522
GBSP57	Temporary Mechanically Stabilized Earth Retaining Walls	522
GBSP62	Concrete Deck Beams	504
GBSP64	Segmental Concrete Block Wall	522
GBSP65	Precast Modular Retaining Wall	522
GBSP73	Cofferdams	2017 Supp
GBSP74	Permanent Steel Sheet Piling (LRFD)	522
GBSP76	Granular Backfill for Structures	2017 Supp
GBSP80	Fabric Reinforced Elastomeric	1028
GBSP84	Precast, Prestressed Concrete Beams	2017 Supp

The following Guide Bridge Special Provisions have been discontinued or have been superseded:

File	Title	Disposition:
Name		
GBSP70	Braced Excavation	Use TSRS per Sec 522
GBSP95	Bridge Deck Concrete Sealer	Use July 1, 2012 version for
		Repair projects only

#### STATE OF ILLINOIS

#### SPECIAL PROVISIONS

#### CONTRACT NO. 61E00

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", Adopted <u>April 1, 2016</u>, 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 of bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included here in which apply to and govern the construction of <u>Section 12-00029-00-PV</u>, Job No. C-91-072-13, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

#### LOCATION OF PROJECT

The project includes portions of Moen Avenue and Mound Road located in the Village of Rockdale within Will County, Illinois. The project spans from approximately 500 feet west of the Village of Rockdale limits on Mound Road to approximately 400 feet west of IL Route 7 (Larkin Avenue) on Moen Avenue. The gross length and net length is 5,537 feet (1.05 miles). The project is located in the North Half of Section 19, and the Northeast Quarter of Section 24 in Township 35 North, Range 10 East of the Third Principal Meridian.

#### **DESCRIPTION OF PROJECT**

The work consists of curb and gutter, storm sewer, roadside ditches, box culvert replacement, utility adjustments, driveways reconstruction, a one-way detour, erosion control, pavement marking, guardrail, tree removal, landscaping, and adjusting water main.

#### SAW CUTS

All saw cuts required for bike paths, curb and gutter, driveway, or other removal as specified will not be measured and paid for separately, but shall be included in the cost of the item being removed. Saw cutting shall be performed at all locations where existing bike paths, curbs and gutters, driveways, and existing pavement are scheduled for removal and replacement, or as directed by the Resident Engineer. The saw cuts shall be to such a depth that when bike paths, curbs and gutters, driveways, and pavement are removed, a clean, neat edge will result, with no spalling of the remaining adjacent bituminous pavement or concrete.

#### **REGIONAL 404 PERMIT**

The work governed by this contract includes discharge or fill into the Waters of the United States and disturbs wetlands. The Village of Rockdale secured an US Army Corps of Engineers (USACE) 404 reginal permit for the required work within the limits of construction. As a condition of the Regional 404 permit, the contractor will need to submit an in-stream work plan to the Village of Rockdale for approval. Guidelines on acceptable in-stream work techniques can be found on the USACE Chicago District website. The USACE defines and determines in-stream

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work in wetlands and waterways. The cost of all material and labor necessary to comply with the above provisions to prepare and implement an in-stream work plan will not be paid for separately but shall be considered as included in the unit bid prices of the contract and no additional compensation will be allowed. The Contractor shall obtain permit(s) for any work to be performed outside the limits of construction included these plans or special provisions.

#### PERMITS FOR OFF SITE BORROW, WASTE, USE AREAS

No permits for offsite Borrow, Waste, Use (BWU) areas have been obtained. If the Contractor chooses to use activities requiring permits, it is the Contractor's responsibility to secure the proper permits. In addition to the Borrow Review (BDE 2289) and Use/Waste Review (BDE 2290) submittals, the Contractor shall submit an Erosion and Sediment Control (ESC) Plan for every BWU site to the Department for acceptance. Guidelines for acceptable BWU practices can be found in the Storm Water Pollution Prevention Plan (SWPPP). The cost of all materials and labor necessary to comply with the above provisions to prepare and implement ESC Plans will not be paid for separately, but shall be considered as included in the unit bid prices of the contract and no additional compensation will be allowed.

#### **CLEAN CONSTRUCTION DEMOLITION DEBRIS**

The Contractor is advised that an initial delineation of the chemical impact to the onsite soil was completed by Huff & Huff, Inc. in October 2016 prior to commencement of construction activities (See included in special provision "Available Reports"). All soils achieved Tier 1 construction worker (and industrial/commercial) remedial objectives and the maximum allowable concentrations for clean construction demolition debris (CCDD) disposal; therefore, soils may be disposed of at a CCDD facility, or remain on-site and used as backfill anywhere along the project corridor. If photo-ionization detector (PID) results of any load are above background during disposal and the loads are rejected, the soil would require profiling and disposal at a sanitary landfill. Should soils be encountered within the areas identified as CCDD acceptable that are not representative of the soils encountered during the PSI boring activates, those soils would need to be reassessed prior to disposal at a clean fill facility. Disposal at a landfill is applicable only in the event of the occurrence of rejected loads from the CCDD facility and requires approval by the Engineer.

The Contractor needs to only delineate the soil further if uncertainties arise with respect to disposal considerations (CCDD, special waste, or potentially hazardous waste) due to on-site observations (visual or olfactory). If additional impacted areas are suspected or determined to not be addressed by historic sampling, the Contractor shall document in the field the PID reading of the suspect soil and notify the Engineer. If the PID reading is above background concentrations, the soil sample location shall be further investigated, including sampling for contaminants of concern (COCs) according to the procedure outlined in Contaminated Soil and/or Groundwater Monitoring (Article 669.08 of the Standard Specifications). The soil at the area of suspected impact will be handled/disposed of appropriately, based on the analytical results. Any additional investigation or soil sampling must be approved by the Engineer prior to commencement, as the soils have already been documented and permitted for disposal.

The Contractor shall not mix materials acceptable for CCDD disposal with suspect soil.

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The Contractor shall not conduct soil sampling activities, as the soils in the project area have been characterized for disposal. Should the Contractor elect to conduct further soil assessment without approval from the Engineer, the Contractor will not be compensated for these costs.

#### WATER MAIN REMOVAL, SIZE SPECIFIED

This item shall be removed in accordance with Section 561 and Section 563 of the Standard Specifications for Road and Bridge Construction and latest Standard Specifications for Water and Sewer Main Construction in Illinois.

This item consists of removal of the water mains to avoid vertical conflicts with existing or proposed utilities.

For areas where the existing water main must be removed, the length of removed water main shall be paid for at the contract unit price per FOOT (meter) for WATER MAIN REMOVAL, SIZE SPECIFIED, which shall be payment in full for all equipment, labor, testing and material required. No additional compensation will be allowed.

#### PLUG EXISTING WATER MAIN

This item shall be removed in accordance with Section 561 and Section 563 of the Standard Specifications for Road and Bridge Construction and latest Standard Specifications for Water and Sewer Main Construction in Illinois.

This item consists of plugging the existing water mains after removal to avoid leaking.

For areas where the existing water main must be removed, the plugging location shall be paid for at the contract unit price per EACH for PLUG EX WATER MAIN, which shall be payment in full for all equipment, labor, testing and material required.

#### INLETS, SPECIAL, NO. 4

This item shall be constructed in accordance with Section 602 of the Standard Specifications for Road and Bridge Construction and details included in the plans.

This item includes all materials (concrete, reinforcement, frames, lids, etc.), labor and equipment necessary to construct to the lines and grades shown within the plans.

This work shall be at the contract unit price per EACH for INLETS, SPECIAL, NO. 4.

#### INLETS, SPECIAL, NO. 5

This item shall be constructed in accordance with Section 602 of the Standard Specifications for Road and Bridge Construction and details included in the plans.

This item includes all materials (concrete, reinforcement, frames, lids, etc.), labor and equipment necessary to construct to the lines and grades shown within the plans.

This work shall be at the contract unit price per EACH for INLETS, SPECIAL, NO. 5.

#### INLETS, SPECIAL, NO. 6

This item shall be constructed in accordance with Section 602 of the Standard Specifications for Road and Bridge Construction and details included in the plans.

This item includes all materials (concrete, reinforcement, frames, lids, etc.), labor and equipment necessary to construct to the lines and grades shown within the plans.

This work shall be at the contract unit price per EACH for INLETS, SPECIAL, NO. 6.

#### PIPE CULVERTS, CLASS C, TYPE 1 (TEMPORARY), SIZE SPECIFIED

This item shall be constructed in accordance with Section 550 of the Standard Specifications for Road and Bridge Construction and details included in the plans.

This item includes all materials, labor, and equipment necessary to excavate, place for temporary use, and removal of the storm sewer to the grades shown within the plans.

This work shall be at the contract unit price per FOOT (meter) for PIPE CULVERTS, CLASS C, TYPE 1 (TEMPORARY), SIZE SPECIFIED.

#### TEMPORARY INLET

This item shall be constructed in accordance with Section 602 of the Standard Specifications for Road and Bridge Construction and details included in the plans.

This item includes all materials (concrete, reinforcement, frames, lids, etc.), labor and equipment necessary to construct, place for temporary use, and removal of the temporary inlet to the lines and grades shown within the plans.

This work shall be at the contract unit price per EACH for TEMPORARY INLET.

#### PAVED DITCH (SPECIAL)

This work consists of furnishing and installing a paved ditch at the locations and specifications shown in the plans.

The paved ditch shall be reinforced concrete conforming with the applicable requirements of Section 606 of the Standard Specifications, the details shown in the plans, and as described herein.

The ditch shall be constructed with 6 inches of concrete with welded wire reinforcement 4 inches below the proposed grade. At the option of the Contractor, No. 3 (No. 10) reinforcing bars placed at 12 inch (300 mm) centers longitudinally in the paved ditch and vertically in the walls may be used in lieu of the welded wire reinforcement.

A 1/2 inch (13 mm) thick preformed joint filler shall be placed at the junction of paved ditch with any other structure. Due to the short lengths of the paved ditch, it shall be anchored to the adjacent retaining walls.

The paved ditch shall be constructed to match the plans to provide storage and positive drainage.

This work will be paid for at the contract unit price per FOOT (meter) for PAVED DITCH (SPECIAL).

#### TRENCH DRAIN

This work consists of furnishing and installing a trench drain at the locations shown in the plans.

Trench drain shall be reinforced concrete conforming with the details shown in the plans and as described herein.

The grate and lid assemblies shall be made from structural steel suitably welded to form either the closed lid or the open slot and shall be hot-dip galvanized to meet the provisions of AASHTO M 111.

The trench drain shall be installed in a trench excavated to the required grade, wide enough to accommodate the reinforcement and specified width. If the trench is excavated too deep, the additional depth shall be filled with approved fine aggregate and compacted to the satisfaction of the Engineer.

The trench drain shall be constructed to match the plans to provide storage and positive drainage.

This work will be paid for at the contract unit price per FOOT (meter) for TRENCH DRAIN, which price shall be payment in full for all labor, materials, handling and incidental work necessary to install the grates and lids to the trench drain structure as indicated on the Plans or in these Specifications and as directed by the Engineer. All excavation, concrete, and reinforcement bars will be paid for according to Article 502, Article 503, and Article 508 respectively, unless otherwise provided for in the contract.

#### **EXISTING SIGNING**

Existing street signs and traffic signs that are within the construction limits shall be removed and reset by the contractor in accordance with article 107.25. The contractor shall take care to protect all signs along the route of construction. Signs shall be removed if they conflict with proposed work and approved by engineer. The contractor shall notify the engineer of any existing damage to a sign Prior to removal. The contractor shall replace all signs and posts damaged during removal. The cost of all materials required and all labor necessary to comply with the relocation of signs shall be according to article 107.25, unless marked on plans. All signs that are removed and not relocated within the project limits shall be delivered to the village of Rockdale public works for storage. The village of Rockdale public works address is 811 Larkin Avenue, Rockdale, IL 60436.

#### CHAIN LINK FENCE TO BE REMOVED AND RE-ERECTED

This work shall consist of the removal and re-erection of the existing chain link fence from approximate Stations 200+45 to 202+53 along Moen Avenue on the east side of the ROW as shown on the drawings.

The chain link fence shall be removed from the fence posts and stored for future use. The fence posts shall be removed. Fence posts shall be constructed and the chain link fence shall be reerected along the location shown in the plans. The chain link fence shall be attached to the existing and unchanged fence section. Additional fence shall be removed from the re-erected fence and disposed from the site.

The work shall be done in accordance with Section 664 of the Standard Specifications as adopted April 1, 2016 and as amended by these Special Provisions.

The work will be paid for at the unit cost per FOOT (meter) for CHAIN LINK FENCE TO BE REMOVED AND RE-ERECTED which also includes disposal of additional fence from the site.

#### TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

Specific traffic control plan details and Special Provisions have been prepared for this contract. This work shall include all labor, materials, transportation, handling and incidental work necessary to furnish, install, maintain, and remove all traffic control devices required as indicated in the plans and as approved by the Engineer.

When traffic is to be directed over a detour route, the Contractor shall furnish, erect, maintain and remove all applicable traffic control devices along the detour route according to the details shown in the plans.

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

Signs: No bracing shall be allowed on post-mounted signs.

Post-mounted signs shall be installed using specified standards, or on any other "break away" connection if accepted by the FHWA and corresponding letter is provided to the resident.

When covering existing Department signs, no tape shall be used on the reflective portion of the sign. Contact the District sign shop for covering techniques.

<u>Devices:</u> A minimum of 3 drums spaced at 1.2 meters (4 feet) shall be placed at each return for local traffic when the side road is open.

<u>Flaggers:</u> Flaggers shall comply with all requirements contained in the Department's "Flagger Handbook" with the following exception: The ANSII Class 2 vest will not be supplied by the Department.

In addition to the flaggers shown on applicable standards, on major side roads listed below, flaggers shall be required on all legs of the intersection.

When the road is closed to through traffic and it is necessary to provide access for local traffic, all flaggers as shown on the applicable standards will be required. No reduction in the number of flaggers shall be allowed.

<u>Maintenance of Traffic:</u> The Contractor shall provide 24-hour notice (via verbal communication or a flier notice) to any business that will be inconvenienced during construction. This notification should be conducted but not limited to any time a business will lose access to driveways or parking on the street during construction.

Approximate times of this inconvenience shall be given to the residents.

All streets and driveway entrances shall be kept in a condition satisfactory to the Engineer to allow continuous access for all commercial businesses and emergency vehicles. Aggregate for temporary access shall be considered as included in the unit bid price of Traffic Control and Protection (Special) and no additional compensation will be allowed.

Dust control during construction operations shall be considered a part of the maintenance and shall be done to the satisfaction of the Engineer.

The Contractor will be required to remove all traffic control devices which were furnished, installed, or maintained by him under this contract and such devices shall remain the property of the Contractor upon said removal. All traffic control devices must remain in place until specific authorization for removal is received from the Engineer.

At the preconstruction meeting, the Contractor shall furnish the name of the individual in his direct employ who is to be responsible for the installation and maintenance of the traffic control for this project. If the actual installation and maintenance are to be accomplished by a subcontractor, consent shall be requested of the Engineer at the time of the preconstruction meeting in accordance with Article 108.01 of the Standard Specifications. This shall not relieve the Contractor of the requirement to have a responsible individual in his direct employ supervise this work.

<u>Method of Measurement</u>: All traffic control and detours (except "Traffic Control and Protection (Expressways)" and temporary pavement markings) indicated on the traffic control plan details and specified in the Special Provisions will be measured for payment on a lump sum basis.

<u>Basis of Payment:</u> All traffic control and protection will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL), which price shall be payment in full for all labor, materials, transportation, handling, and incidental work necessary to furnish, install, maintain, and remove all traffic control devices and aggregate for temporary access as indicated on the Plans or in these Specifications and as directed by the Engineer.

Temporary pavement markings will be paid for separately unless shown on a Standard.

#### **DUCTILE IRON WATERMAIN, SIZE SPECIFIED**

This item shall be constructed in accordance with Sections 40 and 41 of the Standard Specifications for Water and Sewer Main Construction in Illinois.

The Contractor shall take special precautions for meeting the sewer pipe and watermain separation requirements as set forth in Sections 41-2.01B through 41-2.01F.

Acceptable pipe material for watermain construction is as follows: Ductile Iron Pipe (AWWA C-151), Thickness Class 53 (AWWA C-150), cement lined (AWWA C-104) push-on type joints, and elastomeric seals (gaskets) (ASTM F477).

Unless otherwise designated on the plans, there shall be a minimum cover of 5.5 feet above all watermains.

All ductile iron pipe and fittings shall be wrapped in a polyethylene encasement for use with ductile iron pipe and fitting system shall consist of three layers of co-extruded linear low-density polyethylene, fused into a single thickness of not less than 8 mils. Polyethylene encasement shall meet all of the requirements for ANSI/AWWA C015/A21.5, Polyethylene Encasement for Ductile Iron Pipe Systems. The inside surface of the polyethylene wrap to be in contact with the pipe or fitting exterior shall be infused with a blend of anti-microbial biocide to mitigate microbiologically influenced corrosion and a volatile corrosion inhibitor to control galvanic corrosion. Ductile iron pipe and the polyethylene encasement used to protect it shall be installed in accordance with AWWA C600 and ANSI/AWWA C105/A21.5, and also, in accordance with all recommendations and practices of the AWWA M41, Manual of Water Supply Practices – Ductile Iron Pipe and Fittings. Specifically, the wrap shall be overlapped one foot in each direction at joints and secured in place around the pipe and any wrap at tap locations shall be taped tightly prior to tapping and inspected for any needed repairs following the tap.

Pressure testing of water mains, including the new water services from the main to the curb, stop & box, is required. The water mains shall be tested to 1.5 times the operating pressure or 100 psi, whichever is greater. The allowable leakage shall be calculated using the following formula:

- L = S x D x (P)1/2 / 148,000 where
- L = Allowable leakage in gallons per hour
- S = Length of pipe tested, in feet
- D = Nominal diameter of the pipe in inches
- P = Average test pressure during leakage test in pounds per square inch

Disinfection of watermains is required. The Contractor must obtain two (2) satisfactory bacteriological test. Cost for disinfection and obtaining the satisfactory test results shall be included in the unit price bid for watermain, with no additional compensation being allowed.

Corrosion Protection: All piping, fittings, hydrant barrels, and valves shall be wrapped in Polyethylene Encasement (Polywrap) at 8 mil thickness per AWWA C105-10.

All testing costs shall be considered included in the unit price bid for the watermain construction.

#### CASING (WATERMAIN REQUIREMENTS), 16" DIA.

Watermain quality casing pipe is scheduled on the construction drawings where the proposed watermain crosses over the top of an existing sanitary sewer, sanitary sewer service or a storm sewer with less than 18" vertical separation, and when it crosses underneath an existing sanitary sewer, sanitary sewer service, or a storm sewer unless the sanitary sewer, sanitary sewer service, or a storm sewer unless the sanitary sewer, sanitary sewer service, or storm sewer is being replaced with watermain quality pipe to meet the water and sewer separation requirements in Sections 41-2.01 of the Standard Specification for Water and Sewer Main Construction in Illinois.

Acceptable pipe material for Watermain Quality Casing Pipe, 16" is: Polyvinyl Chloride (PVC) (AWWA C-900), Class 150, DR25 with Push-On Type Joints (ASTM D3139), and Elastomeric Gaskets (ASTM F477).

Ductile Iron Pipe (AWWA C-151), Pressure Class 350 (AWWA C-150), cement lined (AWWA C-104) push-on type joints, and elastomeric seals (gaskets) (ASTM F477).

The ends of the casing pipe shall be sealed in a manner satisfactory with the Engineer. The watermain installed in the 16" diameter casing pipe shall be installed with casing spacers to center the main in the casing and to provide support along the length of the watermain throughout the length of the casing piping. Casing spacers shall be located at each end of the casing piping and on each side of the bell joint.

This work will be paid for at the contract unit price per FOOT (meter) for CASING (WATERMAIN REQUIREMENTS), 16" DIA.



#### WATER SERVICE LINE, SIZE SPECIFIED

These items shall be constructed in accordance with Section 41-2.12 and 41-2.13 of the Standard Specifications for Water and Sewer Main Construction in Illinois.

The Contractor shall take special precautions for meeting the sewer pipe and watermain separation requirements as set forth in Sections 41-2.01.

Water service pipe shall meet ASTM D2737, AWWA C901, and meet Copper Tubing Size Standards. Tubing shall be high-density polyethelene conforming with requirements defined in ASTM D3350. Tubing shall be Pressure Rated at 200 psi and be BLUE in color. The Contractor shall furnish all necessary fittings and couplings to connect the existing water service which may differ in size. Fittings for the service pipe shall be brass and of the compression type.

All service piping shall be buried a minimum of 5.5 feet in the ground unless conditions dictate this unfeasible by the judgement of the engineer.

#### **DUCTILE IRON WATERMAIN FITTINGS**

This work shall be in accordance with Section 40-2.05A of the Standard Specification for Water and Sewer Main Construction in Illinois.

Pipe fittings shall be cast iron or ductile iron conforming to AWWA C110 and/or AWWA C153 and shall be manufactured in the United States of America. All fittings shall be equipped with Mega-Lug thrust restraints.

Blocking to prevent movement of lines under pressure at bends, tee, caps, valves, and hydrants shall be Portland Cement Concrete, a minimum of twelve (12) inches thick, placed between solid ground and the fittings, and shall be anchored in such a manner that pipe and fitting joints will be accessible for repairs. All bends of eleven and one-fourth (11¼) degrees or greater, and all tees and plugs shall be thrust protected to prevent movement of the lines under pressure.

Where conditions prevent the use of concrete thrust blocks, tied joints, or restrained joints of a type approved by the Engineer shall be used.

Corrosion Protection: All piping, fittings, hydrant barrels, and valves shall be wrapped in Polyethylene Encasement (Polywrap) at 8 mil thickness per AWWA C105-10.

Cost for thrust blocking, Mega-Lugs, and various ductile iron fittings shall be included in the cost of the unit price bid for watermain piping. This work will be paid for at the contract unit price per POUND for DUCTILE IRON WATERMAIN FITTINGS.

#### WATER VALVE, SIZE SPECIFIED

This work shall be in accordance with Section 42 of the Standard Specification for Water and Sewer Main Construction in Illinois.

Gate Valves shall be resilient wedge Model 2360 as manufactured by Mueller.

Valve boxes shall be screw type adjustable cast iron valve boxes extending to the ground surface with "Water" on the lid as manufactured by Tyler Model 6645. The valve boxes shall be manufactured in the United States of America. Valve boxes shall be installed with a rubber valve box adapter to center the valve box on the valve.

Corrosion Protection: All piping, fittings, hydrant barrels, and valves shall be wrapped in Polyethylene Encasement (Polywrap) at 8 mil thickness per AWWA C105-10.

#### TAPPING VALVE AND SLEEVES, 12" DIA

This work shall be in accordance with Section 40-2.07 of the Standard Specification for Water and Sewer Main Construction in Illinois. The entire assembly shall be made of heavy wall highdensity polyethelene or ductile iron. All exterior components shall be joined with stainless steel bolts.

The tapping valve shall meet the requirements detailed in the WATER VALVE, SIZE SPECIFIED section above.

#### FIRE HYDRANT WITH AUXILIARY VALVE AND BOX

This work shall be in accordance with Section 45 of the Standard Specifications for Water and Sewer Main Construction in Illinois.

The fire hydrants shall be Clow 1900 series with two (2) 2-1/2" diameter hose nozzles and one (1) 4-1/2" pumper nozzle; 1-1/2" pentagon operating nut open right; one (1) pumper nozzle; two (2) hose nozzles; national standard thread. All bolts below grade to be stainless steel. Hydrant color shall be red.

All hydrants must be set so that the center of the nozzle shall be not less than eighteen inches (18") from finished ground level. Hydrants shall have extensions added to the barrel sections where the watermain depth of cover is greater than 5.5 feet.

The fire hydrant complete shall include the ductile iron tee, 6" gate valve with valve box, and 6" lead piping from the main to the fire hydrant.

The fire hydrant lead piping shall be made of the same pipe material as the watermain.

The ductile iron tee shall be as specified in the technical specification section for DUCTILE IRON WATERMAIN FITTINGS.

Corrosion Protection: All piping, fittings, hydrant barrels, and valves shall be wrapped in Polyethylene Encasement (Polywrap) at 8 mil thickness per AWWA C105-10.

#### **CORPORATION STOPS, SIZE SPECIFIED**

These items shall be constructed in accordance with Section 40 and 41 of the Standard Specifications for Water and Sewer Main Construction in Illinois.

Corporation Stops shall be Mueller 300 Model B-25008 ball type valve with a Mueller "CC" threaded inlet and a Mueller 110 conductive compression connection outlet. The curb stop shall be a Mueller 300 Model H-15150 and curb box shall be a Mueller Model H-10300 with a Minneapolis pattern base. The saddles shall be double strap epoxy coated or bronze.

This work will be paid for at the contract unit price per EACH for CORPORATION STOPS, SIZE SPECIFIED.

#### WATER MAIN LINE STOP, SIZE SPECIFIED

The Contractor shall furnish all labor, equipment and materials to install and operate line stops on the existing 8" and 10" diameter water mains as indicated on the construction drawings to make the connections to the new water mains. The Contractor shall coordinate the water system isolation with the Village.

This work will be paid for at the contract unit price per EACH for WATER MAIN LINE STOP, SIZE SPECIFIED.

<u>ROUTE:</u>	MOEN AVENUE
SECTION:	12-00029-00-PV
MUNICIPALITY: VILL	AGE OF ROCKDALE

#### **BEDDING AND HAUNCHING (GRANULAR CRADLE) AND INITIAL BACKFILL**

This work shall be in accordance with Section 20 of the Standard Specifications for Water and Sewer Main Construction in Illinois. All pipe shall be installed in accordance with ASTM D-2321 with at least a four (4) inch deep Granular Cradle and with Granular Backfill to one (1) foot above the top of the pipe. Acceptable materials for bedding and initial backfill is CA-7, ¼"-3/4" chips.

Surplus excavated material not needed for Granular Cradle and Initial Backfill shall be promptly removed from the site to locations provided by the Contractor. All bedding haunching and initial backfill work shall be considered incidental to the unit price bid for the watermain construction.

#### **GRANULAR SELECT BACKFILL, SPECIAL**

This final backfill work shall be in accordance with Section 20 of the Standard Specifications for Water and Sewer Main Construction in Illinois. Granular Select Backfill, Special is being required wherever the pipe is constructed within existing or proposed dust free driving and/or parking surfaces. Acceptable materials for Select Backfill are CA-6 and CA-10.

All trenches, unless directed otherwise by the Engineer, shall be mechanically compacted. Surplus excavated material not needed for Granular Select Backfill, Special shall be promptly removed from the site to locations provided by the Contractor.

Payment quantities for Granular Select Backfill, Special shall be for a theoretical trench width of the pipe diameter plus 1.5 feet on either side of the pipe. The Granular Select Backfill, Special depth is from one (1) foot above the top of the pipe and to 18 inches below the existing ground surface. Where excavated material is suitable for use as Granular Select Backfill, Special, as determined by the Engineer, it shall be used, and no payment will be made for Granular Select Backfill, Special.

This work will be paid for at the contract unit price per CUBIC YARD for GRANULAR SELECT BACKFILL, SPECIAL.

#### **MOBILIZATION FOR SUB-SURFACE EXPLORATION**

This item shall be in accordance with Section 671 of the Standard Specifications and shall pertain only to mobilization required to perform sub-surface exploration. No other mobilization will be paid.

This item shall be paid for at the contract LUMP SUM price for MOBILIZATION FOR SUB-SURFACE EXPLORATION, for which payment in full will be made upon completion of the sub-surface exploration.

#### SUB-SURFACE EXPLORATION

This item shall consist of furnishing all labor, materials, and equipment necessary to perform sub-surface exploration at locations shown on the general plan and elevation sheet. Borings shall be drilled by a firm experienced in performing sub-surface exploration, for the purpose of

verifying the rock elevation and determining the rock type and Rock Quality Designation (RQD) at the abutments of the structure at Station 212+82.45 as shown.

This work shall be paid for at the contract unit price per FOOT for SUB-SURFACE EXPLORATION.

#### SUB-SURFACE EXPLORATION REPORT

This work shall consist of furnishing all labor, materials, and equipment necessary to provide a report on the sub-surface exploration borings. The report shall, at a minimum, include boring logs for each boring drilled, noting locations, a brief description of the conditions encountered in those borings, Rock Quality Designation (RQD), and a recommendation of pile embedment for piles set in rock. A copy of this report shall be provided to the Engineer and a final decision made on pile type for length required prior to the Contractor ordering any pile for the structure at Station 212+82.45.

This work shall be paid for at the contract LUMP SUM price for SUB-SURFACE EXPLORATION REPORT.

#### **AVAILABLE REPORTS**

□ No project specific reports were prepared.

When applicable, the following checked reports and record information is available for Bidders' reference upon request:

- □ Record structural plans
- ☑ Preliminary Site Investigation (PSI)
- Preliminary Environmental Site Assessment (PESA)
- Soils/Geotechnical Report
- $\boxtimes$  Boring Logs
- ☑ Pavement Cores
- □ Location Drainage Study (LDS)
- □ Hydraulic Report
- □ Noise Analysis
- ☑ Other: \_IEPA LPC-663 Certification with Full Report and Attachments\_\_

Those seeking these reports should request access from: Willett Hofmann & Associates, Inc. 1000 Essington Road Joliet, IL 60435 815-729-2229 Monday through Friday, 9 AM to 4 PM

#### COMED REQUIREMENTS

Property owned by Commonwealth Edison (ComEd) will be impacted by the construction and temporary construction easements have been acquired, PIN 30-07-19-100-010-0010 and 30-07-19-100-010-0020. The location of the properties can be found on plan sheet 188. Exhibit C, found on page 96 in the special provisions, shall also be reviewed and followed by the Contractor. Below are requirements that shall be followed while construction occurs on ComEd properties. Exhibit C shall be held over the ComEd Requirements Special Provision in the hierarchy of the contract documents.

- No hazardous materials, including petroleum products, may be stored, used, or transferred on ComEd property.
- All construction equipment must be free of leaks and any leaks of oils or chemicals that occur must be cleaned up and reported to the appropriate agencies as needed.
- In the event of a leak or spill on ComEd property, the Contractor must notify ComEd within 24 hours and provide a written report within 5 business days. The ComEd contact is Misael Hernandez, 815-724-5010.
- Daily equipment inspections must be conducted to verify proper working condition before equipment use on ComEd property. Written records of equipment inspection will be available to ComEd upon request.
- Concrete washout activities are not permitted on ComEd property.
- A spill kit of appropriate size must be present and accessible always during construction activities on ComEd property.
- Excavation dewatering activities must be conducted in accordance with the Illinois Urban Manual guidelines.
- If drain tiles are damaged, the Contractor will repair or replace, as appropriate, the damaged drain tiles.
- If the project requires removal of soil or waste from ComEd property, this must be managed by a ComEd Environmental Contractor of Choice and taken to a ComEd approved landfill. Clean construction or demolition debris disposal is not permitted.
- Grading of excess soil is not permitted on ComEd property.
- If the project requires additional gravel, only IDOT certified fill shall be used. A certificate of virgin material from the quarry for aggregate shall be documented and provided to ComEd upon request.
- If the project requires additional soil, only IDOT certified fill shall be used. The source of
  the fill must be agreed to by ComEd. Documentation shall be provided to ComEd upon
  request. One analytical sample for every 500 cubic yards of soil to be placed on ComEd
  property shall be completed by the Contractor to find the total compound list of the soil.
  ComEd shall be contracted before the analytical sample is tested and the results shall
  be provided to ComEd upon request. It is anticipated that under 500 cubic yards of fill
  shall be used on ComEd properties; therefore, one analytical sample of the soil is
  anticipated.
- All soil must be managed in accordance with the Illinois Urban Manual guidelines.
- No construction debris, soil, fill material, or spoils may be stored on ComEd property.
- Environmental sampling is not permitted on ComEd property without written approval and guidance by ComEd.
- Written records of environmental inspections must be available to ComEd upon request.
- Discharging from excavation dewatering activities on ComEd property is not permitted within 100 feet of a wetland or waterway.

- The proposed grading and construction work must remain within the designated temporary easement.
- The Contractor shall contact Tina Kowalczyk at 224-244-1826 or Larry Mayhall at 630-995-6256 for a ComEd T&S individual shall contact prior to construction.
- The Contractor shall contact JULIE prior to excavation on ComEd property.
- Subsurface utility installations and excavations shall be a minimum of fifteen (15) feet away from any transmission structure.
- Any damage to ComEd's equipment caused by the Contractor shall be repaired at the Contractor's expense.
- The Contractor shall place temporary barriers if any excavated area must remain open overnight. Also, the contractor can not place obstructions on ComEd's property that will restrict ComEd's ability to access, operate, and maintain existing and future transmission and distribution facilities.
- The Contractor's equipment can not exceed fourteen (14) feet in height on ComEd rightof-way.
- The Contractor cannot leave construction equipment and materials on ComEd property when there is no work activity.
- When working in the vicinity of ComEd's electric transmission lines during the installation, OSHA requirements shall be followed. Under no circumstances should truck beds be raised under the transmission lines.
- If a line outage will be required to safely work within the vicinity of the existing overhead transmission facilities, a minimum of a 16-week prior notification will be required. The outage dates can not be guaranteed due to system concerns and/or weather conditions. Outages on the overhead transmission facilities will not be permitted between May 15 and September 15.

The cost of all materials and labor necessary to comply with the above provisions will not be paid for separately but shall be considered as included in the unit bid prices of the contract and no additional compensation will be allowed.

#### TRAFFIC CONTROL PLAN (D-1)

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: 701006, 701011, 701301, 701311, 701501, 701502, 701901, and 704001

DETAILS:

STAGES OF CONSTRUCTION AND TRAFFIC CONTROL GENERAL NOTES STAGES OF CONSTRUCTION AND TRAFFIC CONTROL TYPICAL SECTIONS STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLANS STAGES OF CONSTRUCTION AND TRAFFIC CONTROL CROSS SECTIONS STAGES OF CONSTRUCTION AND TRAFFIC CONTROL DETOUR PLAN STRUCTURAL PLANS DISTRICT ONE DETAIL TC-10: TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS. INTERSECTIONS, AND DRIVEWAYS DISTRICT ONE DETAIL TC-11: TYPICAL APPLICATIONS FOR RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) DISTRICT ONE DETAIL TC-13: TYPICAL PAVEMENT MARKINGS DISTRICT ONE DETAIL TC-16: SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS DISTRICT ONE DETAIL TC-21: DETOUR SIGNING FOR CLOSING STATE HIGHWAYS DISTRICT ONE DETAIL TC-22: ARTERIAL ROAD INFORMATION SIGN DISTRICT ONE DETAIL TC-26: DRIVEWAY ENTRANCE SIGNING SPECIAL PROVISIONS:

TRAFFIC CONTROL & PROTECTION (SPECIAL) MAINTENANCE OF ROADWAYS (D-1) PUBLIC CONVENIENCE AND SAFETY (D-1) TEMPORARY INFORMATION SIGN (D-1) PAVEMENT MARKING REMOVAL (BDE) PORTABLE CHANGEABLE MESSAGE SIGNS (BDE)

<u>RECURRING SPECIAL PROVISIONS</u> WORK ZONE TRAFFIC CONTROL SURVEILLANCE (LRS 3)

#### **EMBANKMENT II (D-1)**

Effective: March 1, 2011 Revised: November 1, 2013

<u>Description</u>. This work shall be according to Section 205 of the Standard Specifications except for the following.

<u>Material</u>. Reclaimed asphalt shall not be used within the ground water table or as a fill if ground water is present. The RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications". Gradation deleterious count shall not exceed 10% of total RAP and 5% of other by total weight.

#### CONSTRUCTION REQUIREMENTS

<u>Samples</u>. Embankment material shall be sampled and tested before use. The contractor shall identify embankment sources, and provide equipment as the Engineer requires, for the collection of samples from those sources. Samples will be furnished to the Geotechnical Engineer a minimum of three weeks prior to use in order that laboratory tests for compaction can be performed. Embankment material placement cannot begin until tests are completed.

<u>Placing Material</u>. In addition to Article 202.03, broken concrete, reclaimed asphalt with no expansive aggregate, or uncontaminated dirt and sand generated from construction or demolition activities shall be placed in 6 inches (150 mm) lifts and disked with the underlying lift until a uniform homogenous material is formed. This process also applies to the overlaying lifts. The disk must have a minimum blade diameter of 24 inches (600 mm).

When embankments are to be constructed on hillsides or existing slopes that are steeper than 3H:1V, steps shall be keyed into the existing slope by stepping and benching as shown in the plans or as directed by the Engineer.

<u>Compaction</u>. Soils classification for moisture content control will be determined by the Soils Inspector using visual field examination techniques and the IDH Textural Classification Chart.

When tested for density in place each lift shall have a maximum moisture content as follows.

- a) A maximum of 110 percent of the optimum moisture for all forms of clay soils.
- b) A maximum of 105 percent of the optimum moisture for all forms of clay loam soils.

<u>Stability</u>. The requirement for embankment stability in article 205.04 will be measured with a Dynamic Cone Penetrometer (DCP) according to the test method in the IDOT Geotechnical Manual. The penetration rate must be equal or less than 1.5 inches (38 mm) per blow.

<u>Basis of Payment</u>. This work will not be paid separately but will be considered as included in the various items of excavation.

#### FRICTION AGGREGATE (D-1)

Effective January 1, 2011 Revised April 29, 2016

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

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

Use	Mixture	Aggregates Allowed	
Class A	Seal or Cover	Allowed Alone or in Combination <sup>5/</sup> :	
		Gravel	
		Crushed Gravel	
		Carbonate Crushed Stone	
		Crystalline Crushed Stone	
		Crushed Sandstone	
		Crushed Slag (ACBF)	
		Crushed Steel Slag	
		Crushed Concrete	
HMA	Stabilized Subbase or	Allowed Alone or in Combination <sup>5/</sup> :	
Low ESAL	Shoulders	Gravel	
		Crushed Gravel Carbonate	
		Crushed Stone Crystalline	
		Crushed Stone	
		Crushed Sandstone Crushed Slag (ACBF)	
		Crushed Steel Slag <sup>1/</sup>	
		Crushed Concrete	
HMA	Binder IL-19.0 or IL-	Allowed Alone or in Combination <sup>5/6/</sup> :	
High ESAL	19.0L	Crushed Gravel Carbonate	
Low ESAL		Crushed Stone <sup>2/</sup>	
	SMA Binder	Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF)	
		Crushed Concrete <sup>3/</sup>	
HMA	C Surface and Leveling	Allowed Alone or in Combination <sup>5/</sup> :	
High ESAL	Binder IL-9.5 or IL-9.5L	Crushed Gravel Carbonate	
Low ESAL		Crushed Stone <sup>2/</sup>	
SMA Ndesign 50 Surfac		Crystalline Crushed Stone	
		Crushed Sandstone Crushed Slag (ACBF)	
		Crushed Steel Slag <sup>4/</sup>	
1 18 4 4		Crushed Concrete <sup>3/</sup>	
HMA	D Surface and Leveling	Allowed Alone or in Combination <sup>5/</sup> : Crushed Gravel Carbonate	
High ESAL	Binder IL-9.5		
	SMA Nelosian EO Surface	Crushed Stone (other than Limestone) <sup>2/</sup>	
	SMA Ndesign 50 Surface	Crystalline Crushed Stone Crushed Sandstone	
		Crushed Slag (ACBF)	
		Crushed Steel Slag <sup>4/</sup>	

	-	-		
		Crushed Concrete <sup>3/</sup>		
		Other Combinations Allowed:		
		Up To	With	
		25% Limestone	Dolomite	
		50% Limestone	Any Mixture D aggregate	
			other than Dolomite	
		75% Limestone	Crushed Slag (ACBF) or	
			Crushed Sandstone	
Use	Mixture	Aggregates Allowed		
HMA High	E Surface IL-9.5	Allowed Alone or in Combination <sup>5/6/</sup> : Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone Other Combinations Allowed:		
ESAL				
	SMA Ndesign 80 Surface			
		Up to	With	
		50% Dolomite <sup>2/</sup>	Any Mixture E aggregate	
		75% Dolomite <sup>2/</sup>	Crushed Sandstone,	
			Crushed Slag (ACBF),	
			Crushed Steel Slag, or	
			Crystalline Crushed Stone	
		75% Crushed Gravel <sup>2/</sup>	Crushed Sandstone,	
		or Crushed Concrete <sup>3/</sup>	Crystalline Crushed	
			Stone,	
			Crushed Slag (ACBF), or	
	<b>50</b> ( <b>11</b> 0.5		Crushed Steel Slag	
HMA	F Surface IL-9.5	Allowed Alone or in Combination <sup>5/6/</sup> :		
High ESAL			rystalline Crushed Stone	
	SMA Ndesign 80 Surface	Crushed Sandstone Crushed Slag (ACBF)		
		Crushed Steel Slag No Limestone		
		Other Combinations Allowed:		
		Up to	With	
		50% Crushed Gravel <sup>2/</sup> ,	Crushed Sandstone,	
		Crushed Concrete <sup>3/</sup> , or	Crushed Slag (ACBF),	
		Dolomite <sup>2/</sup>	Crushed Steel Slag, or	
L			Crystalline Crushed Stone	

1/ Crushed steel slag allowed in shoulder surface only.

2/ Carbonate crushed stone (limestone) and/or crushed gravel shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface. 3/ Crushed concrete will not be permitted in SMA mixes.

4/ Crushed steel slag shall not be used as leveling binder.

5/ When combinations of aggregates are used, the blend percent measurements shall be by volume.

6/ Combining different types of aggregate will not be permitted in SMA Ndesign 80."

#### COARSE AGGREGATE FOR BACKFILL, TRENCH BACKFILL AND BEDDING (D-1)

Effective: November 1, 2011 Revised November 1, 2013

This work shall be according to Section 1004.05 of the Standard Specifications except for the following:

Reclaimed Asphalt Pavement (RAP) may be blended with gravel, crushed gravel, crushed stone crushed concrete, crushed slag, chats, crushed sand stone or wet bottom boiler slag. The RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications". The RAP shall be uniformly graded and shall pass the 1.0 in. (25 mm) screen. When RAP is blended with any of the coarse aggregate listed above, the blending shall be done mechanically with calibrated feeders. The feeders shall have an accuracy of + 2.0 percent of the actual quantity of material delivered. The final blended product shall not contain more than 40 percent by weight RAP.

The coarse aggregate listed above shall meet CA 6 and CA 10 gradations prior to being blended with the processed and uniformly graded RAP. Gradation deleterious count shall not exceed 10% of total RAP and 5% of other by total weight.

#### STORM SEWER ADJACENT TO OR CROSSING WATER MAIN (D-1)

Effective: February 1, 1996 Revised: January 1, 2007

This work consists of constructing storm sewer adjacent to or crossing a water main, at the locations shown on the plans. The material and installation requirements shall be according to the latest edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", and the applicable portions of Section 550 of the Standard Specifications; which may include concrete collars and encasing pipe with seals if required.

Pipe materials shall meet the requirements of Sections 40 and 41-2.01 of the "Standard Specifications for Water and Sewer Main Construction in Illinois", except PVC pipe will not be allowed. Ductile-Iron pipe shall meet the minimum requirements for Thickness Class 50.

Encasing of standard type storm sewer, according to the details for "Water and Sewer Separation Requirements (Vertical Separation)" in the "STANDARD DRAWINGS" Division of the "Standard Specifications for Water and Sewer Main Construction in Illinois", may be used for storm sewers crossing water mains.

Basis of Payment: This work will be paid according to Article 550.10 of the Standard Specifications, except the pay item shall be STORM SEWER (WATER MAIN REQUIREMENTS), of the diameter specified.

#### MAINTENANCE OF ROADWAYS (D-1)

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

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

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

#### 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."

#### MAINTENANCE OF EXISTING TRAFFIC SIGNAL AND FLASHING BEACON INSTALLATION (D-1)

Effective: May 22, 2002 Revised: July 1, 2015 850.01TS

#### General.

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

#### Maintenance.

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

- 2. The Contractor is advised that the existing and/or span wire traffic signal installation must remain in operation during all construction stages, except for the most essential down time. Any shutdown of the traffic signal installation, which exceeds fifteen (15) minutes, must have prior approval of the Engineer. Approval to shut down the traffic signal installation will only be granted during the period extending from 10:00 a.m. to 3:00 p.m. on weekdays. Shutdowns shall not be allowed during inclement weather or holiday periods.
- 3. The Contractor shall provide immediate corrective action when any part or parts of the system fail to function properly. Two far side heads facing each approach shall be considered the minimum acceptable signal operation pending permanent repairs. When repairs at a signalized intersection require that the controller be disconnected or otherwise removed from normal operation, and power is available, the Contractor shall place the traffic signal installation on flashing operation. The signals shall flash RED for all directions unless a different indication has been specified by the Engineer. The Contractor shall be required to place stop signs (R1-1-36) at each approach of the intersection as a temporary means of regulating traffic. When the signals operate in flash, the Contractor shall furnish and equip all their vehicles assigned to the maintenance of traffic signal installations with a sufficient number of stop signs as specified herein. The Contractor shall maintain a sufficient number of spare stop signs in stock at all times to replace stop signs which may be damaged or stolen.
- 4. The Contractor shall provide the Engineer with 2 (two) 24 hour telephone numbers for the maintenance of the traffic signal installation and for emergency calls by the Engineer.
- 5. Traffic signal equipment which is lost or not returned to the Department for any reason shall be replaced with new equipment meeting the requirements of the Standard Specifications and these special provisions.
- 6. The Contractor shall respond to all emergency calls from the Department or others within one (1) hour after notification and provide immediate corrective action. When equipment has been damaged or becomes faulty beyond repair, the Contractor shall replace it with new and identical equipment. The cost of furnishing and installing the replaced equipment shall be borne by the Contractor at no additional charge to the contract. The Contractor may institute action to recover damages from a responsible third party. If at any time the Contractor fails to perform all work as specified herein to keep the traffic signal installation in proper operating condition or if the Engineer cannot contact the Contractor's designated personnel, the Engineer shall have the State's Electrical Maintenance Contractor perform the maintenance work. The Contractor shall be responsible for all of the State's Electrical Maintenance Contractor's costs and liquidated damages of \$1000 per day per occurrence. The State's Electrical Maintenance Contractor shall bill the Contractor for the total cost of the work. The Contractor shall pay this bill within thirty (30) days of the date of receipt of the invoice or the cost of such work will be deducted from the amount due the Contractor. The Contractor shall allow the Electrical Maintenance Contractor to make reviews of the Existing Traffic Signal Installation that has been transferred to the Contractor for Maintenance.

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

#### Basis of Payment.

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

#### HMA MIXTURE DESIGN REQUIREMENTS (D-1)

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

#### 1) Design Composition and Volumetric Requirements

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

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

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

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

1/ CA 16 or CA 13 may be blended with the gradations listed.
2/ The coarse aggregates used shall be capable of being combined with stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.
3/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve.

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

"(e) Absorption. For SMA the coarse aggregate shall also have water absorption ≤ 2.0 percent."

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

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

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

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

1/ Uses 19.0L binder mix.

2/ Uses 19.0L for lower lifts and 9.5L for surface lift."

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

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

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

Note 1. Slaked quicklime shall be according to ASTM C 5.

Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a fulldepth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be an Elvaloy or SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.

Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed

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with an SBA polymer modifier as a fiber additive if the mix design with RAS included meets AASHTO T305 requirements. The RAS shall be from a certified source that produces either Type I or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

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

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

	High ESAL, MIXTURE COMPOSITION (% PASSING) 1/									
Sieve Size	IL-19.	.0 mm		/IA <sup>4/</sup> .5 mm	-	1A <sup>4/</sup> 5 mm	IL-9.	5 mm	IL-4.7	5 mm
	min	max	min	max	min	max	min	max	min	max
1 1/2 in (37.5 mm)										
1 in. (25 mm)		100								
3/4 in. (19 mm)	90	100		100						
1/2 in. (12.5 mm)	75	89	80	100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	90	100
#8 (2.36 mm)	20	42	16	24 <sup>5/</sup>	16	325/	34 <sup>6/</sup>	52 <sup>2/</sup>	70	90
#16 (1.18 mm)	15	30					10	32	50	65
#30 (600 μm)			12	16	12	18				
#50 (300 μm)	6	15					4	15	15	30
#100 (150 μm)	4	9					3	10	10	18
#200 (75 μm)	3	6	7.0	9.0 <sup>3/</sup>	7.5	9.5 <sup>3/</sup>	4	6	7	9 <sup>3/</sup>
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

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

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

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

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

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

	VOLUMETRIC REQUIREMENTS High ESAL				
	Voids in the Mineral Aggregate Voids Filled				
		(VMA),		with Asphalt	
	% minimum Binder				
Ndesign	IL-4.75 <sup>1/</sup>			(VFA),	
_	IL-19.0	IL-9.5		%	
50			18.5	65 – 78 <sup>2/</sup>	
70	13.5	15.0		65 75	
90	13.5 15.0 65 - 75			05 - 75	

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

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

"(3) SMA Mixtures.

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

1/ Maximum draindown shall be 0.3 percent. The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30 °F.

- 2/ Applies when specific gravity of coarse aggregate is  $\geq$  2.760.
- 3/ Applies when specific gravity of coarse aggregate is < 2.760.
- 4/ Blending of different types of aggregate will not be permitted. For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone, or crushed sandstone. For binder course, coarse aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone.

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

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

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

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

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

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

#### 2) Design Verification and Production

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

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

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

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

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

### Illinois Modified AASHTO T 324 Requirements <sup>1/</sup>

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

- Note: For SMA Designs (N-80) the maximum rut depth is 6.0 mm at 20,000 repetitions.
   For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000 repetitions.
- (2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 60 psi (415 kPa) for non-polymer modified performance graded (PG) asphalt binder and 80 psi (550 kPa) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 200 psi (1380 kPa)."

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

"(a) High ESAL, IL-4.75, WMA, and SMA Mixtures. For each contract, a 300 ton (275 metric tons) test strip, except for SMA mixtures it will be 400 ton (363 metric ton), will be required at the beginning of HMA production for each mixture at the beginning of each construction year according to the Manual of Test Procedures for Materials "Hot Mix Asphalt Test Strip Procedures". At the request of the Producer, the Engineer may waive the test strip if previous construction during the current construction year has demonstrated the constructability of the mix using Department test results."

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

"The Hamburg Wheel test shall also be conducted on all HMA mixtures from a sample taken within the first 500 tons (450 metric tons) on the first day of production or during start up with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T 324 and shall meet the requirements specified herein. Mix production shall not exceed 1500 tons (1350 metric tons) or one day's production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the plant produced mixture demonstrates conformance prior to start of mix production for a contract. If the mixture fails to meet the Hamburg Wheel criteria, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria"

#### Method of Measurement:

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

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

#### Basis of Payment.

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

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

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

Effective: June 29, 2006 Revised: April 1, 2016

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

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

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

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

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

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

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

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

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

Add the following note to 1030.02 of the Standard Specifications:

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

#### **RECLAIMED ASPHALT PAVEMENT AND RECLAIMED APHALT SHINGLES (D-1)**

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

Revise Section 1031 of the Standard Specifications to read:

### "SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

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

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

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

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

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crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mix the FRAP will be used in.

- (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, HMA (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 in. (75 mm) single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or HMA (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP or FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, plant cleanout etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

(b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall be sufficiently separated to prevent intermingling at the base. Each stockpile shall be signed indicating what type of RAS is present.

However, a RAS source may submit a written request to the Department for approval to blend mechanically a specified ratio of Type 1 RAS with Type 2 RAS. The source will not be permitted to change the ratio of the blend without the Department prior written approval. The Engineer's written approval will be required, to mechanically blend RAS with any fine aggregate produced under the AGCS, up to an equal weight of RAS, to improve workability. The fine aggregate shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The fine aggregate shall be one that is

approved for use in the HMA mixture and accounted for in the mix design and during HMA production.

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

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

- (a) FRAP Testing. When used in HMA, the FRAP shall be sampled and tested either during processing or after stockpiling. It shall also be sampled during HMA production .
  - (1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).
  - (2) Incoming Material. For testing as incoming material, washed extraction samples shall be run at a minimum frequency of one sample per 2000 tons (1800 metric tons) or once per week, whichever comes first.
  - (3) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

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

- (b) RAS Testing. RAS shall be sampled and tested during stockpiling according to Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources". The Contractor shall also sample as incoming material at the HMA plant.
  - (1) During Stockpiling. Washed extraction and testing for unacceptable materials shall be run at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 1000 tons (900 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS shall be in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

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

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

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

- **1031.04 Evaluation of Tests.** Evaluation of test results shall be according to the following.
- (a) Evaluation of FRAP Test Results. All test results shall be compiled to include asphalt binder content, gradation and, when applicable (for slag), Gmm. A five test average of results from the original pile will be used in the mix designs. Individual extraction test results run thereafter, shall be compared to the average used for the mix design, and will be accepted if within the tolerances listed below.

Parameter	FRAP
No. 4 (4.75 mm)	± 6 %
No. 8 (2.36 mm)	± 5 %
No. 30 (600 μm)	± 5 %
No. 200 (75 μm)	$\pm$ 2.0 %
Asphalt Binder	$\pm$ 0.3 %
G <sub>mm</sub>	$\pm$ 0.03 <sup>1/</sup>

1/ For stockpile with slag or steel slag present as determined in the current Manual of Test Procedures Appendix B 21, "Determination of Reclaimed Asphalt Pavement Aggregate Bulk Specific Gravity".

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the FRAP stockpile shall not be used in Hot-Mix Asphalt unless the FRAP representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

The Contractor shall maintain a representative moving average of five tests to be used for Hot-Mix Asphalt production.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the ITP, "Calibration of the Ignition Oven for the Purpose of Characterizing

Reclaimed Asphalt Pavement (RAP)" or Illinois Modified AASHTO T-164-11, Test Method A.

(b) Evaluation of RAS Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. A five test average of results from the original pile will be used in the mix designs. Individual test results run thereafter, when compared to the average used for the mix design, will be accepted if within the tolerances listed below.

Parameter	RAS
No. 8 (2.36 mm)	±5%
No. 16 (1.18 mm)	±5%
No. 30 (600 µm)	±4%
No. 200 (75 µm)	± 2.5 %
Asphalt Binder Content	± 2.0 %

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the RAS shall not be used in Hot-Mix Asphalt unless the RAS representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

(c) Quality Assurance by the Engineer. The Engineer may witness the sampling and splitting conduct assurance tests on split samples taken by the Contractor for quality control testing a minimum of once a month.

The overall testing frequency will be performed over the entire range of Contractor samples for asphalt binder content and gradation. The Engineer may select any or all split samples for assurance testing. The test results will be made available to the Contractor as soon as they become available.

The Engineer will notify the Contractor of observed deficiencies.

Differences between the Contractor's and the Engineer's split sample test results will be considered acceptable if within the following limits.

Test Parameter	Acceptable Limits of Precision	
% Passing:1/	FRAP	RAS
1/2 in.	5.0%	
No. 4	5.0%	
No. 8	3.0%	4.0%
No. 30	2.0%	4.0%
No. 200	2.2%	4.0%
Asphalt Binder Content	0.3%	3.0%
G <sub>mm</sub>	0.030	

1/ Based on washed extraction.

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

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

#### 1031.05 Quality Designation of Aggregate in RAP and FRAP.

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

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

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

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

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

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

HMA Mixtures <sup>1/2/4/</sup>	M	aximum % ABR	
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified <sup>3/</sup>
30L	50	40	30
50	40	35	30
70	40	30	30
90	40	30	30
4.75 mm N-50			40
SMA N-80			30

Max Asphalt Binder Replacement for FRAP with RAS Combination

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the percent asphalt binder replacement shall not exceed 50 % of the total asphalt binder in the mixture.
- 2/ When the binder replacement exceeds 15 % for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 % binder replacement using a virgin asphalt binder grade of PG64-22 will be reduced to a PG58-28). When constructing full depth HMA and the ABR is less than 15 %, the required virgin asphalt binder grade shall be PG64-28.
- 3/ When the ABR for SMA or IL-4.75 is 15 % or less, the required virgin asphalt binder shall be SBS PG76-22 and the elastic recovery shall be a minimum of 80. When the ABR for SMA or IL-4.75 exceeds 15%, the virgin asphalt binder grade shall be SBS PG70-28 and the elastic recovery shall be a minimum of 80.
- 4/ When FRAP or RAS is used alone, the maximum percent asphalt binder replacement designated on the table shall be reduced by 10 %.

**1031.07 HMA Mix Designs.** At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP and/or RAS material meeting the detailed requirements specified herein.

(a) FRAP and/or RAS. FRAP and /or RAS mix designs shall be submitted for verification. If additional FRAP or RAS stockpiles are tested and found to be within tolerance, as defined under "Evaluation of Tests" herein, and meet all requirements herein, the additional FRAP or RAS stockpiles may be used in the original design at the percent previously verified.

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

The RAP, FRAP and RAS stone specific gravities (Gsb) shall be according to the "Determination of Aggregate Bulk (Dry) Specific Gravity (Gsb) or Reclaimed Asphalt

Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)" procedure in the Department's Manual of Test Procedures for Materials.

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

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

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

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

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

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

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

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

#### **TEMPORARY PAVEMENT (D-1)**

Effective: March 1, 2003 Revised: April 10, 2008

<u>Description</u>. This work shall consist of constructing a temporary pavement at the locations shown on the plans or as directed by the engineer.

The contractor shall use either Portland cement concrete according to Sections 353 and 354 of the Standard Specifications or HMA according to Sections 355, 356, 406 of the Standard Specifications, and other applicable HMA special provisions as contained herein. The HMA mixtures to be used shall be specified in the plans. The thickness of the Temporary Pavement shall be as described in the plans. The contractor shall have the option of constructing either material type if both Portland cement concrete and HMA are shown in the plans.

Articles 355.08 and 406.11 of the Standard Specifications shall not apply.

The removal of the Temporary Pavement, if required, shall conform to Section 440 of the Standard Specification.

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

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

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

#### ADJUSTMENTS AND RECONSTRUCTIONS (D-1)

Effective: March 15, 2011

Revise the first paragraph of Article 602.04 to read:

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

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

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

Revise Article 603.05 to read:

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

Revise Article 603.06 to read:

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

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

Revise the first sentence of Article 603.07 to read:

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

#### AGGREGATE SUBGRADE IMPROVEMENT (D-1)

Effective: February 22, 2012 Revised: April 1, 2016

Add the following Section to the Standard Specifications:

#### **"SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT**

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

**303.02 Materials.** Materials shall be according to the following.

Item Article/Section

- (a) Coarse Aggregate 1004.07
- (b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2 and 3) 1031

Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradation CS 01 but shall not exceed 40 percent by weight of the total product. The top size of the Coarse RAP shall be less than 4 in. (100 mm) and well graded.

Note 2. RAP having 100 percent passing the 1 1/2 in (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradation CS 01 is used in lower lifts. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders. The final product shall not contain more than 40 percent by weight of RAP.

Note 3. The RAP used for aggregate subgrade improvement shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".

**303.03 Equipment.** The vibratory machine shall be according to Article 1101.01, or as approved by the Engineer. The calibration for the mechanical feeders shall have an accuracy of  $\pm 2.0$  percent of the actual quantity of material delivered.

**303.04 Soil Preparation.** The stability of the soil shall be according to the Department's Subgrade Stability Manual for the aggregate thickness specified.

**303.05 Placing Aggregate.** The maximum nominal lift thickness of aggregate gradation CS 01 shall be 24 in. (600 mm).

**303.06 Capping Aggregate.** The top surface of the aggregate subgrade shall consist of a minimum 3 in. (75 mm) of aggregate gradations CA 06 or CA 10. When Reclaimed Asphalt Pavement (RAP) is used, it shall be crushed and screened where 100 percent is passing the 1 1/2 in. (37.5 mm) sieve and being well graded. RAP that has been fractionated to size will not be permitted for use in capping. Capping aggregate will not be required when the aggregate subgrade improvement is used as a cubic yard pay item for undercut applications. When RAP is

blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders.

**303.07 Compaction.** All aggregate lifts shall be compacted to the satisfaction of the Engineer. If the moisture content of the material is such that compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.

**303.08 Finishing and Maintenance of Aggregate Subgrade Improvement.** The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.

**303.09 Method of Measurement.** This work will be measured for payment according to Article 311.08.

**303.10 Basis of Payment.** This work will be paid for at the contract unit price per cubic yard (cubic meter) for AGGREGATE SUBGRADE IMPROVEMENT or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified.

Add the following to Section 1004 of the Standard Specifications:

"**1004.07 Coarse Aggregate for Aggregate Subgrade Improvement.** The aggregate shall be according to Article 1004.01 and the following.

- (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. The top 12 inches of the aggregate subgrade improvement shall be 3 inches of capping material and 9 inches of crushed gravel, crushed stone or crushed concrete. In applications where greater than 36 inches of subgrade material is required, rounded gravel, meeting the CS01 gradation, may be used beginning at a depth of 12 inches below the bottom of pavement.
- (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials. Non-mechanically blended RAP may be allowed up to a maximum of 5.0 percent.

- (c) Gradation.
  - (1) The coarse aggregate gradation for total subgrade thicknesses of 12 in. (300 mm) or greater shall be CS 01.

	COARSE AGGREGATE SUBGRADE GRADATIONS				
Grad No.	Sieve Size and Percent Passing				
	8" 6" 4" 2" #4				
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20

	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)				
Grad No.	Sieve Size and Percent Passing				
	200 mm 150 mm 100 mm 50 mm 4.75 mm				4.75 mm
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20

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

#### DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (D-1)

Effective: April 1, 2011 Revised: April 2, 2011

Add the following to Article 603.02 of the Standard Specifications:

- (i) Temporary Hot-Mix Asphalt (HMA) Ramp (Note 1) ......1030
- (j) Temporary Rubber Ramps (Note 2)

Note 1. The HMA shall have maximum aggregate size of 3/8 in. (95 mm).

Note 2. The rubber material shall be according to the following.

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

Revise Article 603.07 of the Standard Specifications to read:

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

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

(a) Temporary Asphalt Ramps. Temporary hot-mix asphalt ramps shall be placed around the casting, flush with its surface and decreasing to a featheredge in a distance of 2 ft (600 mm) around the entire surface of the casting.

(b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with permanent posted speeds of 40 mph or less and when the height of the casting to be protected meets the proper sizing requirements for the rubber ramps as shown below.

Dimension	Requirement
Inside Opening	Outside dimensions of casting + 1 in. (25 mm)
Thickness at inside edge	Height of casting $\pm$ 1/4 in. (6 mm)
Thickness at outside edge	1/4 in. (6 mm) max.
Width, measured from inside opening to outside edge	8 1/2 in. (215 mm) min

Placement shall be according to the manufacturer's specifications.

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

#### **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>	Article/Section
a.)	Sign Base (Notes 1 & 2)	1090
b.)	Sign Face (Note 3)	1091
c.)	Sign Legends	1092
d.)	Sign Supports	1093
e.)	Overlay Panels (Note 4)	1090.02
Note 1.	The Contractor may use 5/8 inch (16 mm) in thick plywood.	nstead of 3/4 inch (19 mm)
Note 2.	Type A sheeting can be used on the plywoo	od base.
Note 3.	All sign faces shall be Type A except all ora requirements of Article 1106.01.	nge signs shall meet the

Note 4. The overlay panels shall be 0.08 inch (2 mm) thick.

#### **GENERAL CONSTRUCTION REQUIRMENTS**

#### Installation.

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

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

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

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

#### Method of Measurement.

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

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

Basis of Payment.

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

#### **COMPLETION DATE PLUS WORKING DAYS (D-1)**

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

Revise Article 108.05 (b) of the Standard Specifications as follows:

"When a completion date plus working days is specified, the Contractor shall complete all contract items and safely open all roadways to traffic by 11:59 PM on **November 20, 2019** except as specified herein.

The Contractor will be allowed to complete all clean-up work and punch list items within <u>5</u> working days after the completion date for opening the roadway to traffic. Under extenuating circumstances the Engineer may direct that certain items of work, not affecting the safe opening of the roadway to traffic, may be completed within the working days allowed for clean up work and punch list items. Temporary lane closures for this work may be allowed at the discretion of the Engineer.

The completion date for all concrete and hot-mix asphalt items shall be November 1, 2019."

Article 108.09 or the Special Provision for "Failure to Complete the Work on Time", if included in this contract, shall apply to both the completion date and the number of working days.

### STATUS OF UTILITIES TO BE ADJUSTED (D-1)

Effective: June 1, 2016

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

#### UTILITIES TO BE ADJUSTED

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

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	ACTION
AT&T	Fiber optic cables	Underground cables conflict with roadway items.	AT&T	Relocate utilities prior to roadway construction ground breaking.
ComEd	Service and transmission lines	Utility poles conflicts with roadway items.	ComEd	Relocate utilities and coordinate with Comcast prior to roadway construction ground breaking.
G4S	Fiber optic cables	Underground cables conflict with roadway items.	ComEd	Relocate utilities prior to roadway construction ground breaking.
Nicor	Service lines	Underground pipes conflict with roadway items.	Nicor	Relocate utilities prior to roadway construction ground breaking.
Comcast	Service cables	Underground cables conflict with storm sewer near Station 231+25 and 248+10. Cables attached to ComEd poles with conflicts.	Comcast	Relocate utilities and coordinate with ComEd prior to roadway construction ground breaking.
Village of Rockdale	Water main and sanitary sewers	Water main crossing Moen Avenue conflicts with roadway items.	Contractor	Relocate and adjust water main and valves prior to roadway construction ground breaking.

#### Pre-Stage

#### Stage 2

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	ACTION
Village of Rockdale	Water main and sanitary sewers	Water main conflicts with roadway items crossing Moen Avenue.	Contractor	Relocate and adjust water main and valves.

### Stage 4

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	ACTION
Village of Rockdale	Water main and sanitary sewers	Water main conflicts with roadway items crossing and on south side of Moen Avenue.	Contractor	Relocate and adjust water main and hydrant.

### Stage 6

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	ACTION
Village of Rockdale	Water main and sanitary sewers	Water main conflicts with roadway items on north side of Moen Avenue.	Contractor	Relocate and adjust water main and hydrant.

Pre-Stage: Estimated 30 Days Total Installation, relocation, and coordination is to be completed prior to roadway construction ground breaking, which is to commence in Stage 1.

Stage 1: 0 Days Total Installation

Stage 2: Estimated 1 Day Total Installation (Completed by contractor within construction stage) Stage 3: 0 Days Total Installation

Stage 4: Estimated 2 Day Total Installation (Completed by contractor within construction stage) Stage 5: 0 Days Total Installation

Stage 6: Estimated 1 Day Total Installation (Completed by contractor within construction stage)

The following contact information is what was used during the preparation of the plans as provided by the Agency/Company responsible for resolution of the conflict.

Agency/ Company Responsible to Resolve Conflict	Name of contact	Address	Phone	e-mail address
AT&T	Steve Pesola	1000 Commerce Dr, Oak Brook, IL 60523	630-573-5703	sp9653@ att.com
ComEd	Misael Hernandez Tina Kowalczyk Larry Mayhall		815-724-5010 224-244-1826 630-995-6256	misael.hernandez@ exeloncorp.com
G4S	Doug Gones	565 Willowbrook Centre Pkwy, Willowbrook, IL 60527	630-343-2826	douglas.gones@ usa.g4s.com
Nicor	Bruce Koppang	1844 Ferry Rd, Naperville, IL 60563	630-388-3046	bkoppan@ southernco.com
Comcast	Tony Delvaux		224-229-6589	
Natural Gas Pipeline Company	Patrick McCarthy	2 North Nevada Ave, Colorado Springs, CO 80903	719-520-4734	patrick_mccarthy@ kindermorgan.com
Village of Rockdale	James Planinsek	79 Moen Ave, Rockdale, IL 60436	630-954-5149	smokey_rock@ aol.com

### UTILITIES TO BE WATCHED AND PROTECTED

The areas of concern noted below have been identified by following 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.

### All Stages

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	ACTION
AT&T	Fiber optic cables	Underground cables	ComEd	Watch and protect utilities not relocated or adjusted.
ComEd	Service and transmission lines	Aerial lines	ComEd	Watch and protect utilities not relocated or adjusted.
G4S	Fiber optic cables	Underground cables	ComEd	Watch and protect utilities not relocated or adjusted.
Nicor	Service lines	Underground service lines	Nicor	Watch and protect utilities not relocated or adjusted. 1.5-foot vertical and 2- foot horizontal clearance between storm sewer pipes and gas mains. 4-foot horizontal clearance between concrete structures and gas mains. 1-foot vertical clearance between water mains and gas mains. 3-foot vertical clearance between box culverts and gas mains.
Comcast	Service cables	Underground cables	Comcast	Watch and protect utilities not relocated or adjusted.
Natural Gas Pipeline Company	High pressure gas lines	Two pipes cross Moen Avenue between Station 238+00 and 239+00	Kinder Morgan	Watch and protect. 2-foot vertical clearance and company representative on site.
Village of Rockdale	Water main and sanitary sewers	Underground pipes	Village of Rockdale	Watch and protect utilities not relocated or adjusted.

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	Steve Pesola	1000 Commerce Dr, Oak Brook, IL 60523	630-573-5703	sp9653@ att.com
ComEd	Misael Hernandez Tina Kowalczyk Larry Mayhall		815-724-5010 224-244-1826 630-995-6256	misael.hernandez@ exeloncorp.com
G4S	Doug Gones	565 Willowbrook Centre Pkwy, Willowbrook, IL 60527	630-343-2826	douglas.gones@ usa.g4s.com
Nicor	Bruce Koppang	1844 Ferry Rd, Naperville, IL 60563	630-388-3046	bkoppan@ southernco.com
Comcast	Tony Delvaux		224-229-6589	
Natural Gas Pipeline Company	Patrick McCarthy	2 North Nevada Ave, Colorado Springs, CO 80903	719-520-4734	patrick_mccarthy@ kindermorgan.com
Village of Rockdale	James Planinsek	79 Moen Ave, Rockdale, IL 60436	630-954-5149	smokey_rock@ aol.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 taken into account in the bid as this information has also been factored into the timeline identified for the project when setting the completion date. The applicable portions of the Standard Specifications for Road and Bridge Construction shall apply.

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

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

### 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.

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  $\underline{2}$ . 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's general liability insurance policy in accordance with Article 107.27:

Village of Rockdale

Troy Township

Joliet Township

City of Joliet

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





Route		Marked Route	Section
FAU 3795		Moen Avenue / Mound Road	12-00029-00-PV
Project Number		County	Contract Number
<del>M-4003 (102)</del>	FIU5 (430)	Will	61E00

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

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

Print Name		Title		Agency
Sam Wyke		Village President	-12 	Village of Rockdale
Signature				Date ,
Sam	Wyler			4/21/17
I. Site Description	ð			

A. Provide a description of the project location (include latitude and longitude):

Moen Avenue/Mound Road from approximately 500' west of the Village of Rockdale limits to approximately 400' west of Larkin Avenue (IL Route 7) Section 19 and 24, T 35 N, R 10 E Approximately 41.5007, -88.1417 to 41.5048, -88.1256

B. Provide a description of the construction activity which is subject of this plan:
 Road reconstruction that includes widening of the existing two lane roadway to a three lane cross section, reconstruction of private driveways, proposed culverts and storm sewer, and ditch regrading.

C. Provide the estimated duration of this project:

1 year

D. The total area of the construction site is estimated to be 9.75 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 9.70 acres.

E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

Cweighted = 0.5

F. List all soils found within project boundaries. Include map unit name, slope information and erosivity:

802B - Orthents, loamy, undulating 865 - Pits, gravel 369A - Waupecan silt loam, 0 to 2 percent slopes G. Provide an aerial extent of wetland acreage at the site:

Due to proposed culvert extensions and grading, 0.038 acres of WOUS and wetlands will be permanently impacted. Temporary impacts due to grading include 0.062 acres and 0.005 acres to WOUS and wetland sites, respectively.

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

Foreslopes, backslopes, and ditches throughout the project limits. See Typical Section sheets, and Plan and Profile sheets for the location and slopes of the multiple ditches which have mostly 802B and 369A soil types.

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

Pre-Stage: Utility relocation and new culvert placement - Localized disturbances and minimal slopes Stage 1: Temporary pavement on north and west sides of the roadway - Minimal slopes Stage 2: Construction of southern and eastern sides of proposed improvements - See Typical Section sheets for slopes

Stage 3: Construction of northern and western sides of the proposed improvements from Gould Court to the western project limits. Construction of a middle section of the roadway from Gould Court to the eastern project limits. - See Typical Section sheets for slopes

Stage 4: Construction of the northern side of the proposed improvements from Gould Court to the eastern project limits. - See Typical Section sheets for slopes

Stage 5: Construction of the HMA surface and pavement markings - No disturbance anticipated

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

Village of Rockdale

- L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located. Village of Rockdale Troy Township Joliet Township
- M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the receiving waters can be found on the erosion and sediment control plans:

The Illinois and Michigan Canal which drains into the Des Plaines River

- N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.
   All areas outside the construction limits shall remain undisturbed.
- O. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:
  - Floodplain
  - Wetland Riparian
  - Threatened and Endangered Species
  - Historic Preservation
  - 303(d) Listed receiving waters for suspended solids, turbidity, or siltation
  - Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity, or siltation
  - Applicable Federal, Tribal, State or Local Programs
  - Other

- 1. 303(d) Listed receiving waters (fill out this section if checked above):
  - a. The name(s) of the listed water body, and identification of all pollutants causing impairment:
  - b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:
  - c. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:
  - d. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:
- 2. TMDL (fill out this section if checked above)
  - a. The name(s) of the listed water body:
  - b. Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:
  - c. If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet the allocation:

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

$\boxtimes$	Soil Sediment	$\boxtimes$	Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)
$\boxtimes$	Concrete	$\boxtimes$	Antifreeze / Coolants
$\boxtimes$	Concrete Truck waste	$\boxtimes$	Waste water from cleaning construction equipment
$\boxtimes$	Concrete Curing Compounds		Other (specify)
$\boxtimes$	Solid waste Debris		Other (specify)
	Paints		Other (specify)
$\boxtimes$	Solvents		Other (specify)
$\boxtimes$	Fertilizers / Pesticides		Other (specify)
Printed 4/21/17		Pa	age 3 of 9 BDE 2342 (Rev. 09/29/15)

## II. Controls

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

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

The following stabilization practices will be used for this project:

$\boxtimes$	Preservation of Mature Vegetation	$\boxtimes$	Erosion Control Blanket / Mulching
	Vegetated Buffer Strips		Sodding
$\boxtimes$	Protection of Trees		Geotextiles
$\boxtimes$	Temporary Erosion Control Seeding		Other (specify)
	Temporary Turf (Seeding, Class 7)		Other (specify)
	Temporary Mulching		Other (specify)
$\boxtimes$	Permanent Seeding		Other (specify)

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

Preservation of mature vegetation will act as both a soil erosion preventative and a sediment control measure in areas that see runoff from disturbed soil.

Erosion control blankets will stabilize exposed soils before and during establishment of vegetation. Temporary erosion control seeding will be used in disturbed areas where no construction is planned for seven (7) days.

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

Once final grading is complete, all disturbed areas shall be permanently seeded and covered with erosion control blanket as soon as possible to prevent erosion on the newly graded soil.

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

The following stabilization practices will be used for this project:

Perimeter Erosion Barrier	Rock Outlet Protection
I Temporary Ditch Check	🛛 Riprap
Storm Drain Inlet Protection	Gabions
Sediment Trap	Stope Mattress
Temporary Pipe Slope Drain	🛛 Retaining Walls
Temporary Sediment Basin	Slope Walls
Temporary Stream Crossing	Concrete Revetment Mats
Stabilized Construction Exits	Level Spreaders
Turf Reinforcement Mats	Other (specify)
Permanent Check Dams	Other (specify)
Permanent Sediment Basin	Other (specify)
X Aggregate Ditch	Other (specify)
A Paved Ditch	Other (specify)

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

Temporary ditch checks and erosion control barrier will be used to collect sediment before it reaches the receiving waters.

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

Once the temporary measures are no longer needed, they will be removed. Riprap will be placed and remain in place in order to prevent erosion of the ditches in certain locations within the project limits.

Aggregate ditches will collect sediment before conveying the drainage to the roadway ditches. Retaining walls and slope walls are proposed to reduce the number of steep grades within the project limits, which reduce the number of locations that erosion is anticipated.

### D. Treatment Chemicals

Will polymer flocculents or treatment chemicals be utilized on this project: 
Yes No

If yes above, identify where and how polymer flocculents or treatment chemicals will be utilized on this project. N/A

- E. **Permanent Storm Water Management Controls:** Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water act.
  - 1. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design & Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

2. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

### Description of permanent storm water management controls:

Permanent seeding and erosion control blanket will be installed to provide permanent vegetation within the construction limits to protect the area from future erosion during storm water discharges. In addition, riprap will be installed around pipe ends to protect ditches from erosion.

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

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

The Local Agency requires SWPPP to be approved by the Will/South Cook Soil & Water Conservation District.

- G. Contractor Required Submittals: Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.
  - 1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
    - Approximate duration of the project, including each stage of the project
    - Rainy season, dry season, and winter shutdown dates
    - Temporary stabilization measures to be employed by contract phases
    - Mobilization time frame
    - Mass clearing and grubbing/roadside clearing dates
    - Deployment of Erosion Control Practices
    - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
    - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
    - · Paving, saw-cutting, and any other pavement related operations
    - Major planned stockpiling operations
    - Time frame for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
    - · Permanent stabilization activities for each area of the project
  - 2. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:

- Vehicle Entrances and Exits Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
- Material delivery, Storage, and Use Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
- Stockpile Management Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
- Waste Disposal Discuss methods of waste disposal that will be used for this project.
- Spill Prevention and Control Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.).
- Concrete Residuals and Washout Wastes Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
- Litter Management Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
- Vehicle and Equipment Cleaning and Maintenance Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Dewatering Activities Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
- Polymer Flocculants and Treatment Chemicals Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
- Additional measures indicated in the plan.

### III. Maintenance

When requested by the Contractor, the Resident Engineer will provide general maintenance guides to the Contractor for the practices associated with this project. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

The construction site will be inspected weekly and after 1/2" of rain or more by the Engineer on site and the Will/South Cook Soil & Water Conservation representative. Sediment buildup shall be sidposed of at an approved location.

## **IV.** Inspections

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

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

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

The Incidence of Non-Compliance shall be mailed to the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Attn: Compliance Assurance Section 1021 North Grand East Post Office Box 19276 Springfield, Illinois 62794-9276

Additional Inspections Required:

IDOT "Erosion and Sediment Control Field Guide for Construction Inspection" (July 1, 2010)

### V. Failure to Comply

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





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

Route	Marked Route	Section
FAU 3795	Moen Avenue / Mound Road	12-00029-00-PV
Project Number	County	Contract Number
M-4003(102) FIU5 (430)	Will	61E00

This certification statement is a part of SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the Permit No. ILR10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

In addition, I have read and understand all of the information and requirements stated in SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

Print Name	Signature	
Fitle	Date	-
lame of Firm	Telephone	
Street Address	City/State/Zip	



**Illinois Environmental Protection Agency** 

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

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

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the PermitSection at the above address.For Office Use Only

OWNER INFORMATION				Г	Permit No. ILR	10
Company/Owner Name: Village of Rocke	lale			L		
Mailing Address: 79 Moen Avenue				Phone: 8	15-725-8937	
City: Rockdale	State: IL	Zip: <u>60436</u>	I	=ax:		
Contact Person: Sam Wyke			E-mail: wyke	@rockda	leillinois.org	
Owner Type (select one) City						
CONTRACTOR INFORMATION			MS	4 Commi	unity: 🖉 Yes	O No
Contractor Name:						
Mailing Address:				Phone:		
City:				Fax:		
CONSTRUCTION SITE INFORMAT	ION					
Select One:      New      Change	of informatio	n for: ILR10				
Project Name: Moen Avenue Roadway	Improvements	5	(	County:	Will	
Street Address: Moen Avenue/Mound	Road	_ City: Rockda	ale	IL	Zip: <u>60436</u>	
Latitude: <u>41 <u>30</u><u>16</u></u>	Longitude:	<u>-88 8</u>	3	<u>19&amp;24</u>	<u>35N</u>	<u>10E</u>
(Deg) (Min) (Sec)		(Deg) (Mi	n) (Sec)	Sectio	on Township	Range
Approximate Construction Start Date	Oct 2, 2017	Approxi	mate Construct	ion End I	Date Oct 31	, 2018
Total size of construction site in acres: 10 Fee Schedule for Construction Sites:						
If less than 1 acre, is the site part of a larger common plan of development?						
○ Yes ○ No				5 or n	nore acres - \$7	50
STORM WATER POLLUTION PREV	ENTION PL	AN (SWPPP)				
Has the SWPPP been submitted to the A	Number of the second second second		⊘ Ye	s ()	No	
(Submit SWPPP electronically to: epa.co						
Location of SWPPP for viewing: Address					City: Rockdale	
SWPPP contact information:					nspector qualific	ations:
Contact Name: Daniel Malinowski				÷	P.E.	
Phone: <u>815-729-2229</u> Fa	x: <u>815-744-16</u>	581	_ E-mail: dn	nalinows	ki@willetthofmai	nn.com
Project inspector, if different from above Inspector qualifications:						
Inspector's Name:						
Phone: Fax			E-mail:			
This Agency is authorized to	require this informat	ion under Section 4 an	d Title X of the Enviro	nmental Prot	ection Act (415 ILCS 5	/4, 5/39). Failure to

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result int; a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/4, 2) and may also prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

### TYPE OF CONSTRUCTION (select one)

Construction Type Transportation

#### SIC Code:

Type a detailed description of the project:

The proposed improvements widen the existing east-west section of Moen Avenue from two lanes to three lanes with one lane in each direction and a center median for turning traffic. Mound Road and the north-south section of Moen Avenue are to be widened to two lanes in each direction with 14 and 16 feet lane widths, respectively. The proposed improvements include curb and gutter, storm sewer roadside ditches, culvert replacements, utility adjustments, and driveway reconstruction.

## HISTORIC PRESERVATION AND ENDANGERED SPECIES COMPLIANCE

Has the project been submitted to the following state agencies to satisfy applicable requirements for compliance with Illinois law on:

Historic Preservation Agency	🔿 Yes	🕢 No					
Endangered Species	⊖ Yes	🕢 No					
RECEIVING WATER INFORMATION							
Does your storm water discharge directly to: 📝 Waters of the State or 🗌 Storm Sewer							
Owner of storm sewer system:							
Name of closest receiving water body	to which you	u discharge:	Unnamed tribu	taries to I&M C	anal to Des Plaine	s River	
Mail completed form to: Illinois Enviro Division of W	ater Pollution						

Attn: Permit Section Post Office Box 19276 Springfield, Illinois 62794-9276 or call (217) 782-0610 FAX: (217) 782-9891

Or submit electronically to: epa.constilr10swppp@illinois.gov

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that gualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.

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

**Owner Signature:** 

## INSTRUCTIONS FOR COMPLETION OF CONSTRUCTION ACTIVITY NOTICE OF INTENT (NOI) FORM

Submit original, electronic or facsimile copies. Facsimile and/or electronic copies should be followed-up with submission of an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the upper right hand corner of the first page.

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

Illinois Environmental Protection Agency Division of Water Pollution Control Permit Section Post Office Box 19276 Springfield, Illinois 62794-9276 or call (217) 782-0610

FAX: (217) 782-9891

Or submit electronically to: epa.constilr10swppp@illinois.gov

#### Reports must be typed or printed legibly and signed.

Any facility that is not presently covered by the General NPDES Permit for Storm Water Discharges From Construction Site Activities is considered a new facility.

If this is a change in your facility information, renewal, etc., please fill in your permit number on the appropriate line, changes of information or permit renewal notifications do not require a fee.

## NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.

Use the formats given in the following examples for correct form completion.

	Example	Format
Section Township	12 12N	1 or 2 numerical digits 1 or 2 numerical digits followed by "N" or "S"
Range	12W	1 or 2 numerical digits followed by "E" or "W"

For the Name of Closest Receiving Waters, do not use terms such as ditch or channel. For unnamed tributaries, use terms which include at least a named main tributary such as "Unnamed Tributary to Sugar Creek to Sangamon River."

Submission of initial fee and an electronic submission of Storm Water Pollution Prevention Plan (SWPPP) for Initial Permit prior to the Notice of Intent being considered complete for coverage by the ILR10 General Permits. Please make checks payable to: Illinois EPA at the above address.

Construction sites with less than 5 acres of land disturbance - fee is \$250.

Construction sites with 5 or more acres of land disturbance - fee is \$750.

SWPPP should be submitted electronically to: <u>epa.constilr10swppp@illinois.gov</u>. When submitting electronically, use Project Name and City as indicated on NOI form.



March 15, 2017

Village of Rockdale Attn: Mr. Sam Wyke 79 Moen Avenue Rockdale, Illinois 60436

#### Leadership in Resource Management Since 1946.

1201 S. GOUGAR ROAD • NEW LENOX, ILLINOIS 60451 (815) 462-3106 • FAX (815) 462-3176 www.will-scookswcd.org

## **RE:** Erosion Control Plan Review

Project Name: Moen Avenue Roadway Improvements ACOE # LRC-2016-00932 WSCSWCD# 17-384

Dear Mr. Wyke:

I have determined that there are adequate measures for controlling soil erosion and sediment control for the project shown on the plans entitled "Moen Avenue Roadway Improvements". This letter is to notify you that the Soil Erosion and Sediment Control Plan, (SESC) for the project meets the technical standards of the Will-South Cook Soil and Water Conservation District for SESCs. If the contractor will have more details dealing with the project's dewatering plan they need to be provided to us for our review.

Enclosed you will find a copy of the Soil Erosion and Sediment Control Plans that are stamped and signed, as approved. Please keep this copy on site at all times when requested by Will-South Cook SWCD or any other authorized agency.

<u>Please notify us of the date of the pre-construction meeting for the project.</u> We would appreciate at least seven (7) days of notice prior to the meeting date.

If you have any questions or concerns please feel free to contact me by calling (815) 462-3106 Ext. 3.

Respectfully,

Hal Melnam

Neil Pellmann, P.E., CPESC Resource Conservationist

Enclosure

cc: Joshua Harris, Willet, Hofmann & Associates, Inc. w/o encl Stasi Brown, US Army of Engineers, Chicago District w/o encl

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All programs and services of the Will-South Cook SWCD are offered on a nondiscriminatory basis, without regard to race, color, national origin, religion, sex, age, marital status, or handicap.

## LOCATION MAP



<b>Routes:</b>	<b>Moen Avenue and Mound Road</b>
Limits:	Approximately 500' west of the
	Village of Rockdale limits to
	approximately 400' west of
	IL Route 7 (Larkin Avenue – FAP-856)
<b>County:</b>	Will
Section:	12-00029-00-PV
Job No.:	D-91-072-13





Leadership in Resource Management Since 1946 SESC #17- 384 Burtow & an approved by Meil Pellmonn P.E., CPESC

3115117



## **DEPARTMENT OF THE ARMY**

CHICAGO DISTRICT, CORPS OF ENGINEERS 231 SOUTH LA SALLE STREET CHICAGO, ILLINOIS 60604-1437

REPLY TO ATTENTION OF:

March 29, 2017

Technical Services Division Regulatory Branch LRC-2016-00932

SUBJECT: Authorization for Moen Avenue Roadway Improvements between Illinois State Road 7 and Joyce Avenue in the Village of Rockdale, Will County, Illinois

Sam Wyke Village of Rockdale 79 Moen Avenue Rockdale, Illinois 60436

Dear Mr. Wyke:

This office has verified that your proposed activity complies with the terms and conditions of Regional Permit RP3 – Transportation Activities and the General Conditions for all activities authorized under the Regional Permit Program.

This verification expires three (3) years from the date of this letter and covers only your activity as described in your notification and as shown on the plans entitled "Village of Rockdale Moen Avenue Road Improvement Plans 2017" dated February 2017, prepared by Willett Hofmann & Associates, Inc. Caution must be taken to prevent construction materials and activities from impacting waters of the United States beyond the scope of this authorization. If you anticipate changing the design or location of the activity, you should contact this office to determine the need for further authorization.

The activity may be completed without further authorization from this office provided the activity is conducted in compliance with the terms and conditions of the RPP, including conditions of water quality certification issued under Section 401 of the Clean Water Act by the Illinois Environmental Protection Agency (IEPA). If the design, location, or purpose of the project is changed, you should contact this office to determine the need for further authorization.

1. This authorization is contingent upon implementing and maintaining soil erosion and sediment controls in a serviceable condition throughout the duration of the project. You shall comply with the Will South Cook Soil and Water Conservation District's (SWCD) written and verbal recommendations regarding the soil erosion and sediment control (SESC) plan and the installation and maintenance requirements of the SESC practices onsite.

- a. You shall schedule a preconstruction meeting with SWCD to discuss the SESC plan and the installation and maintenance requirements of the SESC practices on the site. You shall contact the SWCD at least 10 calendar days prior to the preconstruction meeting so that a representative may attend.
- b. You shall notify the SWCD of any changes or modifications to the approved plan set. Field conditions during project construction may require the implementation of additional SESC measures. If you fail to implement corrective measures, this office may require more frequent site inspections to ensure the installed SESC measures are acceptable.
- c. Prior to commencement of any in-stream work, you shall submit constructions plans and a detailed narrative to the SWCD that disclose the contractor's preferred method of cofferdam and dewatering method. Work in the waterway shall NOT commence until the SWCD notifies you, in writing, that the plans have been approved.
- 2. Under no circumstances shall the Contractor prolong final grading and shaping so that the entire project can be permanently seeded at one time. Permanent stabilization within the wetland and stream buffers identified in the plans shall be initiated immediately following the completion of work. Final stabilization of these areas should not be delayed due to utility work to be performed by others.
- 3. This site is within the aboriginal homelands of several American Indian Tribes. If any human remains, Native American cultural items or archaeological evidence are discovered during any phase of this project, interested Tribes request immediate consultation with the entity of jurisdiction for the location of discovery. In such case, please contact Stasi Brown by telephone at (312) 846-5544, or email at stasi.f.brown@usace.army.mil.
- 4. You are responsible for all work authorized herein and for ensuring that all contractors are aware of the terms and conditions of this authorization.
- 5. A copy of this authorization must be present at the project site during all phases of construction.
- 6. You shall notify this office of any proposed modifications to the project, including revisions to any of the plans or documents cited in this authorization. You must receive approval from this office before work affected by the proposed modification is performed.
- 7. You shall notify this office prior to the transfer of this authorization and liabilities associated with compliance with its terms and conditions.
- 8. Work in the waterway should be timed to take place during low or no-flow conditions. Low flow conditions are flow at or below the normal water elevation.

- 9. Water shall be isolated from the in-stream work area using a cofferdam constructed of non-erodible materials (steel sheets, aqua barriers, rip rap and geotextile liner, etc.). Earthen cofferdams are not permissible.
- 10. If bypass pumping is necessary, the intake hose shall be placed on a stable surface or floated to prevent sediment from entering the hose. The bypass discharge shall be placed on a non-erodible, energy dissipating surface prior to rejoining the stream flow and shall not cause erosion. Filtering of bypass water is not necessary unless the bypass water has become sediment-laden as a result of the current construction activities.
- 11. During dewatering of the coffered work area, all sediment-laden water must be filtered to remove sediment. Possible options for sediment removal include baffle systems, anionic polymers systems, dewatering bags, or other appropriate methods. Water shall have sediment removed prior to being re-introduced to the downstream waterway. A stabilized conveyance from the dewatering device to the waterway must be identified in the plan. Discharge water is considered clean if it does not result in a visually identifiable degradation of water clarity.
- 12. The portion of the side slope that is above the observed water elevation shall be stabilized as specified in the plans prior to accepting flows. The substrate and toe of slope that has been disturbed due to construction activities shall be restored to proposed or preconstruction conditions and fully stabilized prior to accepting flows.

The authorization is without force and effect until all other permits or authorizations from local, state, or other Federal agencies are secured. Please note that IEPA has issued Section 401 Water Quality Certification for this RP. These conditions are included in the enclosed fact sheet. If you have any questions regarding Section 401 certification, please contact Mr. Dan Heacock at IEPA's Division of Water Pollution Control, Permit Section #15, by telephone at (217) 782-3362.

Once you have completed the authorized activity, please sign and return the enclosed compliance certification. If you have any questions, please contact Stasi Brown of my staff by telephone at (312) 846-5544, or email at stasi.f.brown@usace.army.mil.

Sincerely,

Hung Wyniac

Keith L. Wozniak Chief, West Section Regulatory Branch

Enclosures

Copy Furnished:

Will County Land Use Department (Jim Song) Will-South Cook SWCD (Neil Pellmann) Willett Hofmann & Associates, Inc. (Josh Harris)

## PERMIT COMPLIANCE



## CERTIFICATION

Permit Number:	LRC-2016-00932
Permittee:	Sam Wyke Village of Rockdale
Date:	March 29, 2017

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of said permit and if applicable, compensatory wetland mitigation was completed in accordance with the approved mitigation plan.<sup>1</sup>

## PERMITTEE

DATE

Upon completion of the activity authorized by this permit and any mitigation required by the permit, this certification must be signed and returned to the following address:

U.S. Army Corps of Engineers Chicago District, Regulatory Branch 231 South LaSalle Street, Suite 1500 Chicago, Illinois 60604-1437

Please note that your permitted activity is subject to compliance inspections by Corps of Engineers representatives. If you fail to comply with this permit, you may be subject to permit suspension, modification, or revocation.

<sup>&</sup>lt;sup>1</sup> If compensatory mitigation was required as part of your authorization, you are certifying that the mitigation area has been graded and planted in accordance with the approved plan. You are acknowledging that the maintenance and monitoring period will begin after a site inspection by a Corps of Engineers representative or after thirty days of the Corps'receipt of this certification. You agree to comply with all permit terms and conditions, including additional reporting requirements, for the duration of the maintenance and monitoring period.



#### US Army Corps of Engineers<sup>®</sup> Chicago District

## GENERAL CONDITIONS APPLICABLE TO THE 2012 REGIONAL PERMIT PROGRAM

The permittee shall comply with the terms and conditions of the Regional Permits and the following general conditions for all activities authorized under the RPP:

1. <u>State 401 Water Quality Certification</u> - Water quality certification under Section 401 of the Clean Water Act may be required from the Illinois Environmental Protection Agency (IEPA). The District may consider water quality, among other factors, in determining whether to exercise discretionary authority and require an Individual Permit. Please note that Section 401 Water Quality Certification is a requirement for projects carried out in accordance with Section 404 of the Clean Water Act. Projects carried out in accordance with Section 10 of the Rivers and Harbors Act of 1899 do not require Section 401 Water Quality Certification

On March 2, 2012, the IEPA granted Section 401 certification, with conditions, for all Regional Permits, except for activities in certain waterways noted under RPs 4 and 8. The following conditions of the certification are hereby made conditions of the RPP:

- 1. The applicant shall not cause:
  - a) a violation of applicable water quality standards of the Illinois Pollution Control Board Title 35, Subtitle C: Water Pollution Rules and Regulations;
  - b) water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - c) interference with water use practices near public recreation areas or water supply intakes;
  - d) a violation of applicable provisions of the Illinois Environmental Protection Act.
- 2. The applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- 3. Except as allowed under condition 9, any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all State statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent soil erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining a NPDES Stormwater Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of (1) one or more acres, total land area. A NPDES Stormwater Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Illinois EPA's Division of Water Pollution Control, Permit Section.
- 5. The applicant shall implement erosion control measures consistent with the Illinois Urban Manual (IEPA/USDA, NRCS; 2011, http://aiswcd.org/IUM/index.html).
- 6. The applicant is advised that the following permits(s) must be obtained from the Illinois EPA: The applicant must obtain permits to construct sanitary sewers, water mains, and related facilities prior to construction.
- 7. Backfill used in the stream-crossing trench shall be predominantly sand or larger size material, with less than 20% passing a #230 U.S. sieve.
- 8. Any channel relocation shall be constructed under dry conditions and stabilized to prevent erosion prior to the diversion of flow.
- 9. Backfill used within trenches passing through surface waters of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material may be used only if:
  - a) particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using #230 U.S. sieve; or
  - b) excavation and backfilling are done under dry conditions.
- 10. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
- 11. Any applicant proposing activities in a mined area or previously mined area shall provide to the IEPA a written determination regarding the sediment and materials used which are considered "acid-producing material" as defined in 35 II. Adm. Code,

Subtitle D. If considered "acid-producing material," the applicant shall obtain a permit to construct pursuant to 35 Il. Adm. Code 404.101.

- 12. Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/stream banks, or 3) placed in waters of the State.
- 13. Applicants that use site dewatering techniques in order to perform work in waterways for construction activities approved under Regional Permits 1 (Residential, Commercial and Institutional Developments), 2 (Recreation Projects), 3 (Transportation Projects), 7 (Temporary Construction Activities), 9 (Maintenance) or 12 (Bridge Scour Protection) shall maintain flow in the stream during such construction activity by utilizing dam and pumping, fluming, culverts or other such techniques.
- 14. In addition to any action required of the Regional Permit 13 (Cleanup of Toxic and Hazardous Materials Projects) applicant with respect to the "Notification" General Condition 22, the applicant shall notify the Illinois EPA Bureau of Water, of the specific activity. This notification shall include information concerning the orders and approvals that have been or will be obtained from the Illinois EPA Bureau of Land (BOL) for all cleanup activities under BOL jurisdiction, or for which authorization or approval is sought from BOL for no further remediation. This Regional Permit is not valid for activities that do not require or will not receive authorization or approval from the BOL.

2. <u>Threatened and Endangered Species</u> - If the District determines that the activity may affect Federally listed species or critical habitat, the District will initiate section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with the Endangered Species Act of 1973, as amended (Act). Applicants shall provide additional information that would enable the District to conclude that the proposed action will have no effect on federally listed species.

The application packet shall indicate whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Act, may be present within areas affected (directly or indirectly) by the proposed project. Applicants shall provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at www.fws.gov/midwest/Endangered. Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Review all documentation pertaining to the species list, provide the rationale for your effects determination for each species, and send the information to this office for review.

If no species, their suitable habitats, or critical habitat are listed, then a "no effect" determination can be made, and section 7 consultation is not warranted. If species or critical habitat appear on the list or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have "no effect" or "may effect" the species or suitable habitat. The District will request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effect determinations in the biological assessment or biological evaluation. If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit process.

Projects in Will, DuPage, or Cook Counties that are located in the recharge zones for Hine's emerald dragonfly critical habitat units may be reviewed under the RPP, with careful consideration due to the potential impacts to the species. All projects reviewed that are located within 3.25 miles of a critical habitat unit will be reviewed under Category II of the RPP. Please visit the following website for the locations of the Hine's emerald dragonfly critical habitat units in Illinois. http://www.fws.gov/midwest/endangered/insects/hed/FRHinesFinalRevisedCH.html

3. <u>Historic Properties</u> - In cases where the District determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity may require an Individual Permit. A determination of whether the activity may be authorized under the RPP instead of an Individual Permit will not be made until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the District with the appropriate documentation to demonstrate compliance with those requirements.

Non-Federal permittees must include notification to the District if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the permit application must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic Places (see 33 CFR 330.4(g)). When reviewing permit submittals, the District will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. Based on the information submitted and these efforts, the District shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

2 84 The District will take into account the effects on such properties in accordance with 33 CFR Part 325, Appendix C, and 36 CFR 800. If all issues pertaining to historic properties have been resolved through the consultation process to the satisfaction of the District, Illinois Historic Preservation Agency (IHPA) and Advisory Council on Historic Preservation, the District may, at its discretion, authorize the activity under the RPP instead of an Individual Permit.

Applicants are encouraged to obtain information on historic properties from the IHPA and the National Register of Historic Places at the earliest stages of project planning. For information, contact:

Illinois Historic Preservation Agency 1 Old State Capitol Plaza Springfield, IL 62701-1507 (217) 782-4836 www.illinoishistory.gov

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity, you must immediately notify this office of what you have found, and to the maximum extent practicable, stop activities that would adversely affect those remains and artifacts until the required coordination has been completed. We will initiate the Federal, Tribal and State coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. <u>Soil Erosion and Sediment Control</u> - Measures shall be taken to control soil erosion and sedimentation at the project site to ensure that sediment is not transported to waters of the U.S. during construction. Soil erosion and sediment control measures shall be implemented before initiating any clearing, grading, excavating or filling activities. All temporary and permanent soil erosion and sediment control measures shall be maintained throughout the construction period and until the site is stabilized. All exposed soil and other fills, and any work below the ordinary high water mark shall be permanently stabilized at the earliest practicable date.

Applicants are required to prepare a soil erosion and sediment control (SESC) plan including temporary BMPs. The plan shall be designed in accordance with the Illinois Urban Manual, 2011 (http://aiswcd.org/IUM/index.html). Practice standards and specifications for measures outlined in the soil erosion and sediment control plans will follow the latest edition of the "Illinois Urban Manual: A Technical Manual Designed for Urban Ecosystem Protection and Enhancement." Additional Soil Erosion and Sediment Control (SESC) measures not identified in the Illinois Urban Manual may also be utilized upon District approval.

At the District's discretion, an applicant may be required to submit the SESC plan to the local Soil and Water Conservation District (SWCD), or the Lake County Stormwater Management Commission (SMC) for review. When the District requires submission of an SESC plan, the following applies: An activity may not commence until the SESC plan for the project site has been approved; The SWCD/SMC will review the plan and provide a written evaluation of its adequacy; A SESC plan is considered acceptable when the SWCD/SMC has found that it meets technical standards. Once a determination has been made, the authorized work may commence unless the SWCD/SMC has requested that they be notified prior to commencement of the approved plans. The SWCD/SMC may attend pre-construction meetings with the permittee and conduct inspections during construction to determine compliance with the plans. Applicants are encouraged to begin coordinating with the appropriate SWCD/SMC office at the earliest stages of project planning. For information, contact:

Kane-DuPage SWCD	McHenry-Lake County SWCD
2315 Dean Street, Suite 100 1	1648 South Eastwood Dr.
St. Charles, IL 60174	Woodstock, IL 60098
(630) 584-7961 ext.3 (1	(815) 338-0099 ext.3
www.kanedupageswcd.org v	www.mchenryswcd.org
North Cook SWCD	Lake County SMC
899 Jay Street 5	500 W. Winchester Rd, Suite 201
Elgin, IL 60120	Libertyville, IL 60048
(847) 468-0071 (3	(847) 377-7700
www.northcookswcd.org v	www.lakecountyil.gov/stormwater

5. <u>Total Maximum Daily Load</u> - For projects that include a discharge of pollutant(s) to waters for which there is an approved Total Maximum Daily Load (TMDL) allocation for any parameter, the applicant shall develop plans and BMPs that are consistent with the assumptions and requirements in the approved TMDL. The applicant must incorporate into their plans and BMPs any conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within any timeframes established in the TMDL. The applicant must carefully document the justifications for all BMPs and plans, and install, implement and maintain practices and BMPs that are consistent with all relevant TMDL allocations and with all relevant conditions in an implementation plan. Information regarding the TMDL program, including approved TMDL allocations, can be found at the following website: www.epa.state.il.us/water/tmdl/

6. <u>Floodplain</u> - Discharges of dredged or fill material into waters of the United States within the 100-year floodplain (as defined by the Federal Emergency Management Agency) resulting in permanent above-grade fills shall be avoided and minimized to the maximum extent practicable. When such an above-grade fill would occur, the applicant may need to obtain approval from the Illinois

Department of Natural Resources, Office of Water Resources, (IDNR-OWR) which regulates activities affecting the floodway and the local governing agency (e.g., Village or County) with jurisdiction over activities in the floodplain. Compensatory storage may be required for fill within the floodplain. Applicants are encouraged to obtain information from the IDNR-OWR and the local governing agency with jurisdiction at the earliest stages of project planning. For information on floodway construction, contact:

IDNR/OWR 2050 Stearns Road Bartlett, IL 60103 (847) 608-3100 http://dnr.state.il.us/owr/

For information on floodplain construction, please contact the local government and/or the Federal Emergency Management Agency. Pursuant to 33 CFR 320.4(j), the District will consider the likelihood of the applicant obtaining approval for above-ground permanent fills in floodplains in determining whether to issue authorization under the RPP.

7. <u>Navigation</u> - No activity may cause more than a minimal adverse effect on navigation. Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

8. Proper Maintenance - Any authorized structure or fill shall be properly maintained, including that necessary to ensure public safety.

9. <u>Aquatic Life Movements</u> - No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including species that normally migrate through the area, unless the activity's primary purpose is to impound water.

10. <u>Equipment</u> - Soil disturbance and compaction shall be minimized through the use of matting for heavy equipment, low ground pressure equipment, or other measures as approved by the District.

11. <u>Wild and Scenic Rivers</u> - No activity may occur in a component of the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status. Information on Wild and Scenic Rivers may be obtained from the appropriate land management agency in the area, such as the National Park Service and the U.S. Forest Service.

12. <u>Tribal Rights</u> - No activity or its operation may impair reserved tribal rights, such as reserved water rights, treaty fishing and hunting rights.

13. <u>Water Supply Intakes</u> - No discharge of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structures or adjacent bank stabilization.

14. Shellfish Production - No discharge of dredged or fill material may occur in areas of concentrated shellfish production.

15. <u>Suitable Material</u> - No discharge of dredged or fill material may consist of unsuitable material and material discharged shall be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act). Unsuitable material includes trash, debris, car bodies, asphalt, and creosote treated wood.

16. <u>Spawning Areas</u> - Discharges in spawning areas during spawning seasons shall be avoided to the maximum extent practicable.

17. <u>Obstruction of High Flows</u> - Discharges shall not permanently restrict or impede the passage of normal or expected high flows. All crossings shall be culverted, bridged or otherwise designed to prevent the restriction of expected high water flows, and shall be designed so as not to impede low water flows or the movement of aquatic organisms.

18. <u>Impacts From Impoundments</u> - If the discharge creates an impoundment of water, adverse impacts on aquatic resources caused by the accelerated passage of water and/or the restriction of its flow shall be avoided to the maximum extent practicable.

19. <u>Waterfowl Breeding Areas</u> - Discharges into breeding areas for migratory waterfowl shall be avoided to the maximum extent practicable.

20. <u>Removal of Temporary Fills</u> - Any temporary fill material shall be removed in its entirety and the affected area returned to its preexisting condition.

21. <u>Mitigation</u> - All appropriate and practicable steps must first be taken to avoid and minimize impacts to aquatic resources. For unavoidable impacts, compensatory mitigation is required to replace the loss of wetland, stream, and/or other aquatic resource functions (33 CFR 332). The proposed compensatory mitigation shall utilize a watershed approach and fully consider the ecological needs of the watershed. Where an appropriate watershed plan is available, mitigation site selection should consider recommendations in the plan. The applicant shall describe in detail how the mitigation site was chosen and will be developed, based on the specific

4 86 resource need of the impacted watershed. Permit applicants are responsible for proposing an appropriate compensatory mitigation option to offset unavoidable impacts. However, the District is responsible for determining the appropriate form and amount of compensatory mitigation required when evaluating compensatory mitigation options, and determining the type of mitigation that would be environmentally preferable. In making this determination, the District will assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed. Methods of providing compensatory mitigation include aquatic resource restoration, establishment, enhancement, and in certain circumstances, preservation. Compensatory mitigation will be accomplished by establishing a minimum ratio of 1.5 acres of mitigation for every 1.0 acre of impact to waters of the U.S. Furthermore, the District has the discretion to require additional mitigation to ensure that the impacts are no more than minimal. Further information is available at www.lrc.usace.army.mil/Missions/Regulatory/Illinois/Mitigation.aspx

22. <u>Notification</u> - The applicant shall provide written notification (i.e., a complete application) for a proposed activity to be authorized under the RPP prior to commencing a proposed activity. The District's receipt of the complete application is the date when the District receives all required notification information from the applicant (see below). If the District informs the applicant within 60 calendar days that the notification is incomplete (i.e., not a complete application), the applicant shall submit to the District, in writing, the requested information to be considered for review under the Regional Permit Program. A new 60 day review period will commence when the District receives the requested information. Applications that involve unauthorized activities that are completed or partially completed by the applicant are not subject to the 60-day review period.

For all activities, notification shall include:

- a. A cover letter providing a detailed narrative of the proposed activity describing all work to be performed, a clear project purpose and need statement, the Regional Permit(s) to be used for the activity, the area (in acres) of waters of the U.S. to be impacted (be sure to specify if the impact is permanent or temporary, and identify which area it affects), and a statement that the terms and conditions of the RPP will be followed.
- b. A completed joint application form for Illinois signed by the applicant or agent. The application form is available at www.lrc.usace.army.mil/Portals/36/docs/regulatory/forms/appform.pdf. If the applicant does not sign the joint application form, notification shall include a signed, written statement from the applicant designating the agent as their representative.
- c. A delineation of waters of the U.S., including wetlands, for the project area, and for areas adjacent to the project site (off-site wetlands shall be identified through the use of reference materials including review of local wetland inventories, soil surveys and the most recent available aerial photography), shall be prepared in accordance with the current U.S. Army Corps of Engineers methodology (www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/reg\_supp.aspx) and generally conducted during the growing season.\* Our wetland delineation standards are available at www.lrc.usace.army.mil/Portals/36/docs/regulatory/pdf/Delineations.pdf. For sites supporting wetlands, the delineation shall include a Floristic Quality Assessment (Swink and Wilhelm. 1994, latest edition, Plants of the Chicago Region). The delineation shall also include information on the occurrence of any high-quality aquatic resources (see Appendix A), and a listing of waterfowl, reptile and amphibian species observed while at the project area. The District reserves the right to exercise judgment when reviewing submitted wetland delineations. Flexibility of the requirements may be determined by the District on a case-by-case basis only.
- d. A street map showing the location of the project area.
- e. Latitude and longitude for the project in decimal degrees format (i.e. 41.88377N, -87.63960W).
- f. Preliminary engineering drawings sized 11" by 17" (full-sized may be requested by the project manager and you may also submit plans in PDF format on a disc) showing all aspects of the proposed activity and the location of waters of the U.S. to be impacted and not impacted. The plans shall include grading contours, proposed and existing structures such as buildings footprints, roadways, road crossings, stormwater management facilities, utilities, construction access areas and details of water conveyance structures. The plans shall also depict buffer areas, outlots or open space designations, best management practices, deed restricted areas and restoration areas, if required under the specific RP.
- g. Submittal of soil erosion and sediment control (SESC) plans that identify all SESC measures to be utilized during construction of the project.
- h. The application packet shall indicate whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Endangered Species Act of 1973, as amended, may be present within areas affected (directly or indirectly) by the proposed project. Applicants shall provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at www.fws.gov/midwest/Endangered. Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Print all documentation pertaining to the species list, include the rationale for your effects determination for each species, and forward the information to this office for review.

<sup>&</sup>lt;sup>\*</sup> If a wetland delineation is conducted outside of the growing season, the District will determine on a case-by-case basis whether sufficient evidence is available to make an accurate determination. If the District finds that the delineation lacks sufficient evidence, the application will not be considered complete until the information is provided. This may involve re-delineating the project site during the growing season.

In the event there are no species, their suitable habitats, or critical habitat, then a "no effect" determination can be made and section 7 consultation is not warranted. If species or critical habitat appear on the list, or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have "no effect" or "may effect" on the species or suitable habitat. The District will request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effect determinations in the biological assessment or biological evaluation. If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit process.

- i. A determination of the presence or absence of any State threatened or endangered species. Please contact the Illinois Department of Natural Resources (IDNR) to determine if any State threatened and endangered species could be in the project area. You can access the IDNR's Ecological Compliance Assessment Tool (EcoCAT) at the following website: http://dnrecocat.state.il.us/ecopublic/. Once you complete the EcoCAT and consultation process, forward all resulting information to this office for consideration. The report shall also include recommended methods as required by the IDNR for minimizing potential adverse effects of the project.
- j. A statement about the knowledge of the presence or absence of Historic Properties, which includes properties listed, or properties eligible to be listed in the National Register of Historic Places. A letter from the Illinois Historic Preservation Agency (IHPA) can be obtained indicating whether your project is in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. The permittee shall provide all pertinent correspondence with the IHPA documenting compliance. The IHPA has a checklist of documentation required for their review located here: www.illinoishistory.gov/PS/rcdocument.htm.
- k. Where an appropriate watershed plan is available, the applicant shall address in writing how the proposed activity is aligned with the relevant water quality, hydrologic, and aquatic resource protection recommendations in the watershed plan.
- 1. A discussion of measures taken to avoid and/or minimize impacts to aquatic resources on the project site.
- m. A compensatory mitigation plan for all impacts to waters of the U.S. (if compensatory mitigation is required under the specific RP).
- n. A written narrative addressing all items listed under the specific RP.

For Category II activities, the District will provide an Agency Request for Comments (ARC) which describes the proposed activity. The ARC will be sent to the following agencies: United States Fish & Wildlife Service (USFWS), United States Environmental Protection Agency (USEPA), Illinois Department of Natural Resources (IDNR), Illinois Department of Natural Resources (IDNR), Illinois Historic Preservation Agency (IHPA), Illinois Nature Preserves Commission (INPC) and U.S. Coast Guard (Section 10 activities only). Additional entities may also be notified as needed. These agencies have ten (10) calendar days from the date of the ARC to contact the District and either provide comments or request an extension not to exceed fifteen (15) calendar days. The District will fully consider agency comments received within the specified time frame. If the District determines the activity complies with the terms and conditions of the RPP and impacts on aquatic resources are minimal, the District will notify the applicant in writing and include special conditions if deemed necessary. If the District determines that the impacts of the proposed activity are more than minimal, the District will notify the applicant that the project does not qualify for authorization under the RPP and instruct the applicant on the procedures to seek authorization under an Individual Permit.

23. <u>Compliance Certification</u> - Any permittee who has received authorization under the RPP from the District shall submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the District with the authorization letter and will include: a) a statement that the authorized work was done in accordance with the District's authorization, including any general or specific conditions; b) a statement that any required mitigation was completed in accordance with the permit conditions and; c) the signature of the permittee certifying the completion of the work and mitigation.

24. <u>Multiple use of Regional Permits</u> - In any case where a Regional Permit is combined with any other Regional Permit to cover a single and complete project (except where prohibited under specific Regional Permits), the applicant shall notify the District in accordance with General Condition 22. If multiple Regional Permits are used, the total impact may not exceed the maximum allowed by the Regional Permit with the greatest impact threshold.

25. <u>Other Restrictions</u> - Authorization under the RPP does not obviate the need to obtain other Federal, State or local permits, approvals, or authorizations required by law nor does it grant any property rights or exclusive privileges, authorize any injury to the property or rights of others or authorize interference with any existing or proposed Federal project.

Approved by:

//ORIGINAL SIGNED// Frederic A. Drummond, Jr. Colonel, U.S. Army District Commander February 24, 2012 Date

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## 3. TRANSPORTATION PROJECTS

RP3 authorizes the construction or replacement of public transportation projects, including roads, bridges, runways and taxiways, and railroads. Authorization under RP3 is subject to the following requirements which shall be addressed in writing and submitted with the notification:

- a. The impact to waters of the U.S. shall not exceed 0.25 acres for any single crossing. For projects that involve multiple crossings of waters of the U.S., the cumulative impact cannot exceed 1.0 acre. For purposes of this RP only, a single crossing is defined as an act or instance of crossing over, or an activity that facilitates transportation from one side to the other.
- b. For projects that impact greater than 0.10 acres of waters of the U.S., the permittee is required to provide compensatory mitigation.
- c. Projects that impact no more than 0.5 acres of waters of the U.S. and do not impact high-quality aquatic resources will be processed under Category I.
- d. Projects that impact over 0.5 acres up to 1.0 acre of waters of the U.S., impact a high quality aquatic resource, or cross a Section 10 Waterway (www.lrc.usace.army.mil/Missions/Regulatory/NavigableWaters.aspx), will be processed under Category II.
- e. The discharge shall be limited to the minimum width necessary to complete the authorized work.
- f. Crossings of waterways and/or wetlands shall be culverted, bridged or otherwise designed to prevent the restriction of expected high water flows. They shall be designed so as not to impede low water flows or the safe passage of fish and aquatic organisms. Additional guidance for the planning and installation of stream crossings can be found at: www.fws.gov/midwest/Fisheries/StreamCrossings/index.htm .
  Additional conditions may be required for streams determined to be a high quality fisheries resource such as designing the bottom of the culvert to include "roughness" to reduce flow velocities.
  "Roughness" can include cemented-in stone, baffles, or the placement of rock along the bottom of the culvert wall. Embedding the culvert to a depth of greater than 12 inches may also be required.
  - 1) An alternatives analysis shall be prepared for perennial stream crossings where a culvert is proposed. The analysis shall document why the use of an arch-span, bottomless culvert or bridging would not be a practicable alternative. If use of a multi-barrel pipe culvert is proposed, document why a single box-culvert system cannot be used.
  - 2) For culverts, the upstream and downstream invert shall be embedded 6 to 12 inches below the streambed elevation. This will allow the natural substrate to colonize the structure's bottom, encourage fish movement and maintain the existing channel slope. Culvert slope should match adjacent elevations. The width of the base flow culvert shall be approximately equal to the average channel width to promote the safe passage of fish and other aquatic organisms. Culvert(s) shall not permanently widen /constrict the channel or reduce/increase stream depth. Multiple pipe culverts may not be used to receive base flows.
- g. The permittee shall clearly label the construction drawings to include existing and proposed grading contours, all structures associated with the installation of the crossing such as wing walls, rock and concrete protection measures, existing and proposed utilities lines, outfalls and associated structures. A detailed narrative shall accompany the construction plans and describe all work to be performed as indicated on the plans.

- h. All in-stream work, such as the installation of cofferdams or water diversion devices, the removal of accumulated sediments, and any demolition work, shall be clearly labeled on the construction drawings and explained in detail in project narrative.
- i. If dewatering of the site is required in order to perform work in waterways, the site shall be dewatered for work in the dry and dewatering shall be temporary only. No in-stream work will be authorized unless soil erosion and sediment control measures are deemed acceptable by the District.
- j. All temporary construction activities shall adhere to the requirements of items c through i of Regional Permit 7 (Temporary Construction Activities) and shall be addressed in writing and submitted with the notification.
- k. This permit shall not be used to authorize structural bank stabilization methods such as retaining walls, gabion baskets, riprap, etc., other than those structures necessary to assure the integrity of the stream and stream bank immediately adjacent to the crossing.
- 1. The permittee shall establish and maintain a protective upland buffer composed of native plants (or other appropriate vegetation approved by the District) within the right-of-way adjacent to all waters of the U.S.
- m. The project shall employ permanent Best Management Practices (BMPs) to protect water quality, preserve natural hydrology and minimize the overall impacts of the project on aquatic resources. BMPs shall be considered at the earliest planning stages of the project.

The applicant shall design the project to include the avoidance of natural resource features such as floodplains, streams, lakes, significant wildlife areas, wetlands, and drainageways. To the greatest extent possible, the activity should be designed such that surface water does not directly discharge into waters of the U.S.

BMPs may be used independently or in concert to achieve the required water quality enhancement and resource protection. Water should be infiltrated or detained and treated prior to discharging into waters of the U.S. Possible BMPs include, but are not limited to: native vegetated swales, bioswales, rain gardens, filter strips, infiltration trenches, naturalized detention basins, and permeable pavement.

A written narrative shall be included with the notification which describes how the water quality protection practices were selected for the project site. The narrative shall thoroughly describe the BMPs that will be utilized. A management and monitoring plan will be required on a case-by-case basis and shall include performance standards such as the BMPs ability to function as designed, percent coverage of vegetation, stabilization of soils, and corrective measures to bring areas into compliance.

- n. This permit specifically excludes discharges into jurisdictional areas for the construction associated with building pads or equipment storage areas.
- o. For a project site adjacent to a conservation area, the permittee shall request a letter from the organization responsible for management of the area. The response letter should identify recommended measures to protect the area from impacts that may occur as a result of the development. A copy of the request and any response received from the organization shall be submitted to the District with the notification.
- p. This permit cannot be used to authorize the installation of road crossings associated with residential, commercial or institutional developments.



**Illinois Environmental Protection Agency** 

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

## Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 III. Adm. Code 1100, as

amended by PCB R2012-009 (eff. Aug. 27, 2012)

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

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

## I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: Moen Avenue Improvements Proj	ect Office Phone Number, if available:					
Physical Site Location (address, inclduding numb	er and street):					
Includes Moen Ave from Larkin Ave to Joyce Rd	; Joyce Rd from Moen Ave to Mound Rd; and Mound Rd from Joyce Rd to					
Rockdale     State:     IL     Zip Code:     60436						
County: Will	Township: Joliet Township (35N)					
Lat/Long of approximate center of site in decimal	degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):					
Latitude: 41.5048833 Longitude: -88	.1240881					
(Decimal Degrees) (-D	Decimal Degrees)					
Identify how the lat/long data were determined						
GPS Map Interpolation Photo	o Interpolation 😰 Survey 🗌 Other					
ISGS Public Land Survey System						
IEPA Site Number(s), if assigned: BOL: BOW: BOA:						
II. Owner/Operator Information for So	urce Site					
Site Owner	Site Operator					
Name: Village of Rockdale	Name:					
Street Address: 811 S Larkin Avenue	Street Address:					
PO Box:	PO Box:					
City: Rockdale Stat	e: <u>IL</u> City: State:					
Zip Code: 60436 Phone: (815)	725-8937 Zip Code: Phone:					
Contact: Mike Joutras	Contact:					
Email, if available: Joutras@RockdaleIllinois.org	Email, if available:					

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms IL 532-2922 LPC 663 Rev. 8/2012 Management Center.

Project Name: Moen Avenue Improvements Project

Latitude: <u>41.5048833</u> Longitude: -88.1240881

## Uncontaminated Site Certification

## III. Basis for Certification and Attachments

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

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

Ten potentially impacted properties (PIPs) were identified in connection with the planned improvements. Therefore, fourteen soil borings were advanced to assess soil conditions within the Project Corridor. Refer to the attachments for a map depicting the Project Corridor, PIPs, and soil sample locations; a photo log of the Project; database listings; and the analytical lab report.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 III. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 III. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

Fourteen soil borings were advanced to assess soil conditions within the Project Corridor for the contaminants of concern identified in connection with the PIPs. The soil analyses include: VOCs, BTEX, MTBE, SVOCs, PNAs, total lead, cyanide and soil pH. All results achieve the MACs. Soil pH ranges from 6.39 to 8.34. Refer to the attachments for more information.

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

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

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

Company Name:	Huff & Huff, Inc. A Subsidiary o	of GZA Geo	oEnviron	mental, Inc	).		
Street Address:	915 Harger Road Suite 330						
City:	Oak Brook	State: IL		Zip Code:	60523		
Phone:	630-684-9100					OFESSIONAL	
Jeremy J. Reynolds, P.G. Printed Name: Licensed Professional E Licensed Professional G	Ingineer or		15/16	Date:	LICENSED,	JEREMY J. REYNOLDS 196-001170	GEOLO GIBY



## Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation. LPC-663 Owner: Village of Rockdale, IL

## Project Name: Moen Avenue Improvements Project

## III. Basis for Certification and Attachments

## Explain the basis upon which you are certifying that the soil from this site is uncontaminated soil.

This form pertains to soils excavated from the Moen Avenue Improvements Project Area. The Project limits include Moen Avenue (between Larkin Avenue and Joyce Road), Joyce Road (between Moen Avenue and Mound Road), and Mound Road (between Joyce Road to approximately 650 feet west of Joyce Road) in Rockdale, IL (approximately 1.15 linear miles). Specifically, the planned improvements include roadway widening and culvert improvements. The typical depth of excavation is anticipated to be approximately four feet below ground surface, except where drainage improvements are planned where it will 8 feet. A map depicting the Project Area location, identified sites, and sample locations is included in **Attachment A**, and a photo log of site reconnaissance is included in **Attachment B**.

A *Preliminary Environmental Site Assessment* (PESA) was completed for the Project in September 2016. The following information presents a summary of the findings from the PESA, including the records review and the identified potentially impacted properties (PIPs) along the Project Corridor. Database excerpts are included in **Attachment C**. The analyses conducted and results are summarized at the end of this narrative. The laboratory analytical report is included in **Attachment D**.

## **Historic Aerials**

Aerial photographs of the project area were provided by Historical Information Gatherers (HIG). The earliest photograph available is dated 1939. Photographs from 1946, 1956, 1962, 1973, 1978, 1983, 1988, 1998, 2004, 2005, 2006, 2007, 2009, 2010, 2011, 2012, 2014, and 2015 were also reviewed. A general discussion of the aerials is provided below. The aerial photographs are included in **Attachment A**.

<u>1939</u> Moen Avenue and Larkin Avenue are present in 1939, the earliest available historic aerial photograph provided by HIG. Joyce Road and Mound Road are not present. There is a railroad corridor which transects the approximate center of the Moen Avenue Project Corridor with a general northwest-southeast alignment, and a creek which transects the Project Corridor just west of the railroad. A large industrial facility is present near the northwest corner of the Project Corridor where Moen Avenue terminates at Joyce Road. Another industrial facility is present south of Moen Avenue near the southeastern portion of the Project Corridor (non-adjacent). There two additional railroad corridors to the south of Moen Avenue. The surrounding area consists of primarily undeveloped farmland and forested areas, with sparse residential houses.



<u>1946</u> The 1946 aerial photograph depicts further developments to the industrial property located at the northwest portion of the Project Corridor where Moen Avenue terminates at Joyce Road. There is little additional change to the Project Corridor in 1946 from the previous aerial photograph.

<u>1956</u> The 1956 aerial photograph depicts the initial stages of development along Moen Avenue, including ongoing construction activities along Moen Avenue west of the railroad corridor on the north and south sides of the road. There is little further change to the immediate Project Corridor in 1956. In the surrounding area, a residential neighborhood is present northeast of the Project Corridor along present-day Larkin Avenue not previously developed in 1946, and a large industrial complex is present approximately 2,000 feet south of Moen Avenue.

<u>1962</u> The 1962 aerial photograph depicts apparent changes to surface cover and drainage south of Moen Avenue where a creek was previously observed. The location of the creek where it intersects Moen Avenue just west of the railroad corridor appears to be flooded in 1962, and the trees previously depicted are no longer present along the banks of the creek. Conditions in the 1962 aerial photograph are otherwise consistent with the previous 1956 aerial photograph.

<u>1973</u> The 1973 aerial photograph depicts large-scale industrial developments along Moen Avenue, including new structures at the northeast portion of the Project Corridor near Larkin Avenue, and to the south along Moen Avenue west of the intersection of the railroad corridor. The 1973 aerial photograph also depicts the construction of Joyce Road (which connects Moen Avenue to Mound Road) within the Project Corridor limits. Excavation activities are evident along Joyce Road to the east, and south along Mound Road just west of Joyce Road. In addition, a large facility is present in 1973 at the northwest corner of the Project Corridor where Moen Avenue terminates at Joyce Road. There is an access road connecting an apparent building to an area with evidence of land disturbance. There are additional industrial developments in the surrounding area to the north and south of the Project Corridor, as well as residential developments to the east along Moen Avenue past Larkin Avenue. Present-day configuration of Larkin Avenue and I-80 is apparent in 1973.

<u>1978</u> There is little discernible change to the Project Corridor in 1978 compared to the previous 1973 aerial photograph. This is partially due to the poor quality of the 1978 aerial photograph; however, there are no major changes in land use between the two photographs.

<u>1983</u> Maxim Drive is present in 1983, not depicted in previous aerial photographs. There are no other discernible changes to the Project Corridor in 1983 compared to the 1978 aerial photograph.

<u>1988</u> The 1988 aerial photograph depicts the development of the property located at the northwest corner of the intersection of Larkin Avenue and Moen Avenue, formerly unoccupied. The property at the southwest corner of the intersection of Larkin Avenue and Moen Avenue also appears to be under redevelopment with significant changes to the property, though no new structures are present in 1988. There is little further change to the Project Corridor or surrounding areas.

<u>1998</u> The 1998 aerial photograph depicts the first appearance of the LaFarge Quarry located at the northwest corner of the Project Corridor, west of Moen Avenue and Joyce Road, and north of Mound Road. The properties along the east side of Joyce Road also have new developments not present in previous aerial photographs, including an outdoor storage area and a new structure at the intersection of Joyce Road and Moen Avenue. There



is a large industrial-commercial building south of Moen Avenue where the railroad corridor intersects the Project Corridor also not previously present, and another new structure along the north side of Moen Avenue just west of Larkin Avenue. There is little further change to the Project Corridor from previous aerial photographs.

<u>2004</u> The 2004 aerial photograph depicts present-day site configuration of the Project Corridor, including complete redevelopment of the former industrial property at the southwest corner of the intersection of Moen Avenue and Larkin Avenue, which was divided and is now occupied by nine different buildings. There are additional new structures present along the south side of Moen Avenue west of Maxim Drive.

<u>2005</u> There is no apparent change to the Project Corridor or the surrounding areas in 2005 compared to the previous 2004 aerial photograph.

<u>2006</u> There is no apparent change to the Project Corridor or the surrounding areas in 2006 compared to the previous 2005 aerial photograph.

<u>2007</u> There is little change to the Project Corridor and surrounding areas in 2007 compared to 2006. However, minor developments are apparent, including the construction of a new building on the north side of a property along Larkin Avenue (north of Moen Avenue), as well as the development of a property adjacent to and south of I-80 and just east of the utility corridor (with a north-south alignment transecting the center of the Project Corridor). Little further change is depicted in 2007 from the previous 2006 aerial photograph.

The 2009, 2010, 2011, 2012, 2014, and 2015 aerial photographs depict no change in land use within the Project Corridor, and little change in the surrounding areas from the 2007 aerial photograph, and are therefore not further discussed in this Report.

## **Records Search**

A Preliminary Environmental Site Assessment (PESA) was conducted by Huff & Huff, Inc. in September 2016 for the Project Corridor, including a database search by ERS dated August 26, 2016. The database report is included in **Attachment C** of this report. The following table summarizes the identified PIPs from the PESA report.

See special provision Available Reports on page 13 for remainder of attachments.

### EXHIBIT C TO ACCESS EASEMENT AGREEMENT ADDITIONAL REQUIREMENTS

## **Environmental (ESD)**

## Note: The items in red must be submitted to ESD for review and approval as indicated.

**Grantee is responsible for all costs** associated with any of the noted requirements (consulting, permitting, clean-up, sampling, audit, etc.).

## **Easement Requirements**

- The property may be used only for the stated purpose of temporary grading and construction, as submitted in the State of Illinois Department of Transportation Plans for Proposed Federal Aid Highway FAU 3795 (Moen Avenue) Mound Road to FAP 856 (IL Route 7) (Larkin Avenue) Reconstruction Section 12-00029-00-PV Project No. F1U5(430) Village of Rockdale Will County C-91-072-13, dated 7/13/2017 and stated to have been revised April, 2018. Any revision to the plans inside the temporary easement must be submitted to ESD for review and approval.
- 2. No hazardous materials, including petroleum products, may be stored, used, or transferred on Grantor property.
- 3. Grantee will be held responsible for future maintenance of the drainage structures. Grantor anticipates that any overflow or similar will be addressed by the Grantee at their expense, including any adverse impacts to the surrounding Grantor right of way and adjoining properties.
- 4. Grantee is not permitted to change the grading of the property without prior authorization from ESD. This includes activities of adding gravel or other fill-in activities to the surface of ComEd property.
- 5. Grantee shall provide a kmz file of any newly installed structures on ComEd owned property.

### **Construction Project Requirements**

- 6. All construction equipment must be free of leaks and any leaks of oils or chemicals that occur must be cleaned up and reported to the appropriate agencies as needed.
- 7. In the event of a leak/spill on ComEd property, Grantee must notify ComEd within 24 hours and provide a written report within 5 business days.
- 8. Daily equipment inspections must be conducted to verify proper working condition before equipment use on ComEd property. Written records of equipment inspections must be available to ESD upon request. 9. Concrete washout activities are not permitted on ComEd property.
- 10. A spill kit of appropriate size must be present and accessible always during construction activities on Grantor property.
- 11. Excavation dewatering activities must be conducted in accordance with the Illinois Urban Manual guidelines.
- 12. In the event that drain tiles are damaged, Grantee shall repair or replace, as appropriate, the damaged drain tiles and accept responsibility for any adverse drainage issues and related damages that may arise.

### **Excavation, Spoils and Materials**

- 13. If the project requires removal of soil or waste from grantor property, this must be managed by a Grantor Environmental Contractor of Choice (ECOC) and taken to a Grantor approved landfill. Clean construction or demolition debris (CCDD) disposal is not permitted.
- 14. Grading of excess soil is not permitted on Grantor property.
- 15. If the project requires additional soil and gravel, only certified "clean" fill shall be used. The source of the clean fill must be approved by ESD.
- 16. All soil must be managed in accordance with the Illinois Urban Manual guidelines.
- 17. No construction debris, soil, fill material, or spoils may be stored on Grantor property.

## 18. Environmental sampling is not permitted on ComEd property without written approval and guidance by ESD.

## Wetlands Requirements

- 19. According to a review of ESD resources, wetlands are present within the project area. Grantee must provide ESD with a Wetland Delineation Report and a kmz file of any wetlands delineated on Grantor property.
- 20. Where wetlands are identified on Grantor property, ESD requires that environmental oversight of the project and inspections are conducted, at the Grantee's expense, by a contractor that is approved by ESD after review of qualifications. Written records of environmental inspections must be available to ESD upon request.
- 21. Discharging from excavation dewatering activities on ComEd property is not permitted within 100 feet of a wetland or waterway.
- 22. ESD recommends the use of timber or composite matting over wetland areas that will be crossed during construction and maintenance activities.
- 23. Grantee must follow all federal, state, and local wetlands requirements, including United States Army Corps of Engineers and Will County regulations and guidelines, as applicable.

### **Environmental Regulations and Permits**

- 24. All applicable regulations must be followed including implementation of a Storm Water Pollution Prevention Plan (SWPPP) and a Soil Erosion and Sediment Control Plan (SESC) to minimize sediment pollution in storm water runoff as well as any other required practices.
- 25. All applicable environmental permits must be obtained including Wetlands and NPDES stormwater permits, as required under the Clean Water Act as well as any other applicable environmental permits.
- 26. Grantee must submit copies of all required environmental permits and plans to ESD prior to project start.
- 27. Requirements of all permits must be followed which could include site monitoring, reporting and restoration extending well beyond the construction time period.
- 28. Grantee must follow all applicable environmental laws and regulations including those not specifically mentioned herein.

### **Condition of Property**

- 29. Grantee must provide documentation of current property conditions before improvements are started (e.g. Phase I, topographic maps, surveys, photographs).
- 30. Any damage to ComEd's property caused by the Grantee will be repaired at the Grantee's expense.
- 31. Grantee must provide full restoration of the site to the original condition when the project is complete, including seeding as necessary.
- 32. Grantee must provide documentation (including photographs) that the property is returned to its original condition after completion of the project and restoration.

# Should ComEd request additional information in the future, Grantee must be prepared to provide the following information pertaining to the temporary easement to ComEd (please reference Project Code SR 4752429 in any communications with Grantor :

- 33. A letter that summarizes the results of their analysis of what types of environmental permits, plans, and controls are required (e.g. wetlands, SWPPP, SESCP, and endangered species impacts).
- 34. A copy of the environmental permit applications for the project.
- 35. A copy of any environmental reports required by the permits.
- 36. Copies of certificates of clean fill.
- 37. Inspection records.

### Please contact Courtney Crenshaw 630.576.6379

### Transmission:

- Approval is for three temporary construction easements, each less than 5 feet wide and totaling no more than 190 feet in length, two north and one south of Moen road in Rockdale, IL.
- 2) The grading and construction work must remain within the designated temporary easement.
- 3) It should be noted that no plans were provided for the installation of benches, fences, gates, lighting, or vegetation. Therefore, no approval is given for the installation of any benches, fencing, gates, lighting or vegetation. ComEd Engineering must be contacted for written approval of said appurtenances.
- 4) A ComEd T&S individual will be provided as a single point of contact during the duration of the construction period. The Grantee shall contact Grantor representative Tina Kowalczyk at 224-244-1826 or Larry Mayhall at 630-995-6256.
- 5) The Grantee must contact JULIE prior to any excavation.
- 6) The Grantee may not raise grade on the Grantor Right-of-Way without providing full plan and profile drawings. In addition, the Grantee must verify that that the existing drainage is not affected; water does not pool on Grantor property or adjacent properties and verify that safety clearances are not violated.
- 7) Subsurface utility installations and excavations shall be a minimum of fifteen (15) feet away from any transmission structure. The Grantee's plans appear to accommodate this.
- 8) Any damage to Grantor's equipment caused by the Grantee and/or its contractor will be repaired at the Grantee's expense.
- 9) The Grantee and/or its contractor must place temporary barriers if any excavated area must remain open overnight. Also, the Grantee and/or its contractor cannot place obstructions on Grantor property that will restrict our ability to access, operate and maintain existing and future transmission and distribution facilities.
- 10) The Grantee's equipment cannot exceed fourteen (14) feet in height on the right-of• way.
- 11) The Grantee and/or its contractor cannot leave construction equipment and materials on Granotr Property when there is no work activity.
- 12) The Grantee's facilities on Grantor's property should be designed for HS20 axle loading per AASHTO highway specifications in order to withstand Grantor construction traffic.
- 13) When working in the vicinity of Grantor's electric transmission lines during the installation, OSHA requirements shall be followed. Under no circumstances should truck beds be raised under the Transmission Lines. This note should be added to any construction drawings.
- 14) If the Grantee determines a line outage will be required to safely work within the vicinity of the existing Overhead Transmission facilities a minimum of a 16-week prior notifications will be required. The outage dates cannot be guaranteed due to system concerns and/or weather conditions. However, every effort will be made to accommodate the contractors need date. Outages on the overhead transmission facilities will not be permitted between the months of May 15 and September 15.
- 15) The Grantee must be made aware that the Grantor does use heavy equipment and cannot be responsible for any damage to the Grantee's facilities that may occur due to the Grantor's right to access our property to operate and maintain new and existing transmission and distribution facilities.

16) Upon completion of the Grantee's project, the Grantee must remove any equipment, construction debris and material from the right-of-way and restore any other disturbed areas of the right-of-way to their pre-construction condition

# ADJUSTING FRAMES AND GRATES (BDE)

Effective: April 1, 2017

Add the following to Article 602.02 of the Standard Specifications:

"(s) High Density Expanded Polystyrene Adjusting Rings	
with Polyurea Coating (Note 4)	1043.04
(t) Expanded Delymony Jane (EDD) Adjusting Dings (Nate E)	1012 05

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

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

Add the following to Section 1043 of the Standard Specifications:

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

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

Tensile Strength	ASTM D 1623	70 - 90 130 - 140		
Water Vapor Transmission	ASTM C 355	0.82 – 0.86	6 perm – in.	

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

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

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

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

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

#### BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)

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

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

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

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

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

Where: CA = Cost Adjustment, \$.

- BPI₽ = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).
- BPI = Bituminous Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/ton (\$/metric ton).
- %ACv = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the %  $AC_{V}$  will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% ACv and undiluted emulsified asphalt will be considered to be 65% AC<sub>V</sub>.
- Q = Authorized construction Quantity, tons (metric tons) (see below).

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

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

Where: A

- = Area of the HMA mixture, sq yd (sq m). D
  - = Depth of the HMA mixture, in. (mm).
- $G_{mb}$  = Average bulk specific gravity of the mixture, from the approved mix design.

- V = Volume of the bituminous material, gal (L).
- SG = Specific Gravity of bituminous material as shown on the bill of lading.

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

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

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

# BUTT JOINTS (BDE)

#### Effective: July 1, 2016

Add the following to Article 406.08 of the Standard Specifications.

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

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

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

#### 1/ Crosshead speed -2 in./minute

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

# COMPENSABLE DELAY COSTS (BDE)

Effective: June 2, 2017

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

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

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

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

Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).

(2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the Contractor's yard or another job and the cost to re-mobilize, whichever is less.

Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

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

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

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

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

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

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

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

Add the following to Section 109 of the Standard Specifications.

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

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

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

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

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

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

- (2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.
- (c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid. For working day contracts the payment will be made according to Article 109.04. For completion date contracts, an adjustment will be determined as follows.

Extended Traffic Control occurs between April 1 and November 30:

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

Extended Traffic Control occurs between December 1 and March 31:

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

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

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

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

OCT = Original contract time in calendar days.

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

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

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

# CONCRETE BOX CULVERTS WITH SKEWS > 30 DEGREES AND DESIGN FILLS ≤ 5 FEET (BDE)

Effective: April 1, 2012 Revised: July 1, 2016

Revise the second paragraph of Article 540.04 of the Standard Specifications to read:

"Unless otherwise noted on the plans, the Contractor shall have the option, when a cast-inplace concrete box culvert is specified, of constructing the box culvert using precast box culvert sections when the design cover is 6 in. (150 mm) minimum. The precast box culvert sections shall be designed for the same design cover shown on the plans for cast-in-place box culvert; shall be of equal or larger size opening, and shall satisfy the design requirements of ASTM C 1577."

Add the following after the seventh paragraph of Article 540.06 of the Standard Specifications:

"Precast concrete box culverts with skews greater than 30 degrees and having design covers less than or equal to 5 ft are not covered by the standard design table shown in ASTM C 1577. The design table provided herein is provided to address this design range. The same notes, reinforcement configurations, clearances, and requirements of ASTM C 1577 apply to this special design table. A box designated 7 x 6 x 8 indicates a span of 7 ft, a rise of 6 ft, and top slab, bottom slab, walls and haunches of 8 in. unless otherwise noted on the tables.

3 ft x 2 ft x 4 in.									
Design									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2*	0.17	1.10	0.30	0.10	0.28	0.17	0.92	0.14	
2<3	0.14	0.18	0.19	0.10					31
3-5	0.10	0.12	0.12	0.10					29

\*top slab 7.0 in., bottom slab 6.0 in.

3 ft x 3 ft x 4 in.									
Design									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2*	0.17	1.17	0.33	0.10	0.31	0.17	0.92	0.14	
2<3	0.10	0.22	0.22	0.10					31
3-5	0.10	0.14	0.14	0.10					31

\*top slab 7.0 in., bottom slab 6.0 in.

4 ft x 2 ft x 5 in.									
Design	Circumferential Reinforcement Areas, sq in./ ft								
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2*	0.21	0.88	0.26	0.12	0.28	0.18	0.89	0.14	
2<3	0.20	0.21	0.20	0.12					33
3-5	0.13	0.13	0.14	0.12					32

\*top slab 7.5 in., bottom slab 6.0 in.

	4 ft x 3 ft x 5 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2*	0.18	1.02	0.31	0.12	0.32	0.18	0.87	0.14			
2<3	0.16	0.25	0.24	0.12					38		
3-5	0.12	0.16	0.17	0.12					34		

\*top slab 7.5 in., bottom slab 6.0 in.

4 ft x 4 ft x 5 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2*	0.18	1.08	0.34	0.12	0.34	0.18	0.86	0.14			
2<3	0.13	0.28	0.27	0.12					38		
3-5	0.12	0.18	0.19	0.12					38		

\*top slab 7.5 in., bottom slab 6.0 in.

5 ft x 2 ft x 6 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2*	0.27	0.63	0.23	0.14	0.24	0.19	0.19	0.17			
2<3	0.25	0.22	0.20	0.14					37		
3-5	0.17	0.15	0.15	0.14					35		

\*top slab 8.0 in., bottom slab 7.0 in.

	5 ft x 3 ft x 6 in.											
Design	Circumferential Reinforcement Areas, sq in./ ft											
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2*	0.20	0.72	0.27	0.14	0.29	0.19	.0.71	0.17				
2<3	0.21	0.26	0.25	0.14					37			
3-5	0.14	0.18	0.18	0.14					35			

\*top slab 8.0 in., bottom slab 7.0 in.

	5 ft x 4 ft x 6 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2*	0.19	0.78	0.30	0.14	0.31	0.19	0.70	0.17				
2<3	0.18	0.30	0.28	0.14					45			
3-5	0.14	0.20	0.21	0.14					40			

\*top slab 8.0 in., bottom slab 7.0 in.

5 ft x 5 ft x 6 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2*	0.19	0.82	0.33	0.14	0.34	0.19	0.69	0.17			
2<3	0.16	0.33	0.32	0.14					45		
3-5	0.14	0.22	0.23	0.14					45		

\*top slab 8.0 in., bottom slab 7.0 in.

6 ft x 2 ft x 7 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2*	0.33	0.51	0.21	0.17	0.23	0.19	0.61	0.17			
2<3	0.31	0.22	0.22	0.17					42		
3-5	0.22	0.17	0.17	0.17					41		

\*top slab 8.0 in.

	6 ft x 3 ft x 7 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2*	0.27	0.58	0.26	0.17	0.27	0.19	0.58	0.17				
2<3	0.26	0.27	0.27	0.17					41			
3-5	0.18	0.19	0.20	0.17					39			

\*top slab 8.0 in.

	6 ft x 4 ft x 7 in.										
Design	Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2*	0.25	0.64	0.30	0.17	0.30	0.19	0.57	0.17			
2<3	0.23	0.31	0.31	0.17					42		
3-5	0.17	0.22	0.23	0.17					41		

\*top slab 8.0 in.

6 ft x 5 ft x 7 in.											
Design	Circumferential Reinforcement Areas, sq in. / ft										
Earth Cover, ft	As1	As1 As2 As3 As4 As5 As6 As7 As8 "M", in.									
0<2*	0.23	0.68	0.33	0.17	0.32	0.19	0.56	0.17			
2<3	0.20	0.34	0.35	0.17					52		
3-5	0.17	0.24	0.25	0.17					48		

\*top slab 8.0 in.

	6 ft x 6 ft x 7 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2*	0.21	0.72	0.37	0.17	0.34	0.19	0.55	0.17				
2<3	0.18	0.37	0.38	0.17					52			
3-5	0.17	0.26	0.28	0.17					52			

\*top slab 8.0 in.

	7 ft x 2 ft x 8 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.38	0.60	0.26	0.19	0.22	0.19	0.75	0.19				
2<3	0.38	0.24	0.24	0.19					46			
3-5	0.27	0.19	0.19	0.19					44			

	7 ft x 3 ft x 8 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.36	0.57	0.32	0.19	0.25	0.19	0.71	0.19			
2<3	0.33	0.29	0.30	0.19					44		
3-5	0.23	0.21	0.21	0.19					42		

				7 ft x 4 ft	x 8 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.34	0.61	0.37	0.19	0.27	0.19	0.70	0.19			
2<3	0.29	0.34	0.34	0.19					44		
3-5	0.21	0.24	0.25	0.19					42		

	7 ft x 5 ft x 8 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.32	0.65	0.42	0.19	0.30	0.19	0.69	0.19				
2<3	0.26	0.37	0.38	0.19					49			
3-5	0.19	0.27	0.28	0.19					46			

	7 ft x 6 ft x 8 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.29	0.69	0.46	0.19	0.32	0.19	0.67	0.19			
2<3	0.23	0.40	0.42	0.19					59		
3-5	0.19	0.29	0.30	0.19					55		

	7 ft x 7 ft x 8 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.27	0.73	0.50	0.19	0.34	0.19	0.65	0.19			
2<3	0.21	0.43	0.45	0.19					59		
3-5	0.19	0.31	0.33	0.19					59		

	8 ft x 2 ft x 8 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.47	0.50	0.29	0.19	0.23	0.19	0.61	0.19				
2<3	0.51	0.30	0.31	0.19					50			
3-5	0.36	0.22	0.22	0.19					48			

	8 ft x 3 ft x 8 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.43	0.49	0.35	0.19	0.26	0.19	0.58	0.19			
2<3	0.45	0.36	0.37	0.19					48		
3-5	0.32	0.26	0.27	0.19					45		

	8 ft x 4 ft x 8 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.40	0.52	0.40	0.19	0.29	0.19	0.57	0.19			
2<3	0.40	0.42	0.43	0.19					45		
3-5	0.28	0.30	0.31	0.19					45		

			8	3 ft x 5 ft x	: 8 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.37	0.56	0.45	0.19	0.31	0.19	0.56	0.19			
2<3	0.36	0.46	0.47	0.19					48		
3-5	0.26	0.33	0.34	0.19					45		

	8 ft x 6 ft x 8 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.34	0.61	0.49	0.19	0.33	0.19	0.56	0.19			
2<3	0.33	0.50	0.52	0.19					56		
3-5	0.24	0.36	0.37	0.19					50		

	8 ft x 7 ft x 8 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.32	0.65	0.53	0.19	0.35	0.19	0.56	0.19			
2<3	0.30	0.53	0.56	0.19					65		
3-5	0.22	0.38	0.40	0.19					61		

	8 ft x 8 ft x 8 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.30	0.69	0.57	0.19	0.36	0.19	0.55	0.19				
2<3	0.28	0.56	0.59	0.19					65			
3-5	0.20	0.40	0.43	0.19					65			

	9 ft x 2 ft x 9 in.									
Design		Circumferential Reinforcement Areas, sq in./ ft								
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
0<2	0.46	0.35	0.26	0.22	0.22	0.22	0.47	0.22		
2<3	0.58	0.32	0.32	0.22					55	
3-5	0.41	0.23	0.23	0.22					52	

			ļ	9 ft x 3 ft	x 9 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.42	0.35	0.32	0.22	0.23	0.22	0.47	0.22			
2<3	0.52	0.38	0.39	0.22					52		
3-5	0.37	0.27	0.28	0.22					49		

			9	9 ft x 4 ft	x 9 in.							
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.38	0.38	0.36	0.22	0.25	0.22	0.47	0.22				
2<3	0.47	0.44	0.45	0.22					52			
3-5	0.33	0.31	0.32	0.22					49			

			(	9 ft x 5 ft :	x 9 in.					
Design		Circumferential Reinforcement Areas, sq in./ ft								
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
0<2	0.35	0.41	0.41	0.22	0.28	0.22	0.47	0.22		
2<3	0.43	0.49	0.50	0.22					49	
3-5	0.30	0.35	0.36	0.22					49	

9 ft x 6 ft x 9 in.												
Design		Circumferential Reinforcement Areas, sq in. / ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.32	0.44	0.44	0.22	0.29	0.22	0.47	0.22				
2<3	0.39	0.53	0.54	0.22					55			
3-5	0.28	0.38	0.39	0.22					52			

		9 ft x 7 ft x 9 in.									
Design		Circumferential Reinforcement Areas, sq in. / ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.30	0.46	0.48	0.22	0.31	0.22	0.45	0.22			
2<3	0.36	0.56	0.59	0.22					64		
3-5	0.26	0.40	0.42	0.22					58		

	9 ft x 8 ft x 9 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.28	0.49	0.52	0.22	0.33	0.22	0.45	0.22			
2<3	0.33	0.60	0.63	0.22					72		
3-5	0.24	0.43	0.45	0.22					72		

			9	ft x 9 ft x	9 in.					
Design		Circumferential Reinforcement Areas, sq in./ ft								
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
0<2	0.27	0.51	0.55	0.22	0.34	0.22	0.45	0.22		
2<3	0.31	0.63	0.66	0.22					72	
3-5	0.23	0.45	0.48	0.22					72	

			1(	O ft x 2 ft	x 10 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.46	0.29	0.24	0.24	0.24	0.24	0.34	0.24			
2<3	0.66	0.33	0.34	0.24					59		
3-5	0.46	0.24	0.24	0.24					59		

	10 ft x 3 ft x 10 in.									
Design		Circumferential Reinforcement Areas, sq in./ ft								
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
0<2	0.44	0.33	0.30	0.24	0.24	0.24	0.24	0.24		
2<3	0.59	0.40	0.41	0.24					59	
3-5	0.42	0.29	0.29	0.24					56	

			1(	Oft x 4 ft	x 10 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.40	0.36	0.35	0.24	0.24	0.24	0.24	0.24			
2<3	0.54	0.46	0.47	0.24					56		
3-5	0.38	0.33	0.34	0.24					52		

			10	ft x 5 ft x	10 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.37	0.39	0.39	0.24	0.26	0.24	0.24	0.24			
2<3	0.49	0.51	0.52	0.24					52		
3-5	0.35	0.36	0.38	0.24					52		

			10	ft x 6 ft x	10 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.34	0.42	0.43	0.24	0.28	0.24	0.42	0.24			
2<3	0.45	0.55	0.57	0.24					56		
3-5	0.33	0.40	0.41	0.24					52		

			10	ft x 7 ft x	10 in.				
Design			Circumfer	ential Rei	nforceme	nt Areas,	sq in./ ft		
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.32	0.44	0.46	0.24	0.30	0.24	0.24	0.24	
2<3	0.42	0.59	0.62	0.24					59
3-5	0.31	0.42	0.45	0.24					56

			10	ft x 8 ft x	10 in.						
Design		Circumferential Reinforcement Areas, sq in. / ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.30	0.47	0.50	0.24	0.31	0.24	0.24	0.24			
2<3	0.39	0.63	0.66	0.24					75		
3-5	0.29	0.45	0.48	0.24					66		

			10	ft x 9 ft x	10 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.28	0.49	0.53	0.24	0.33	0.24	0.24	0.24			
2<3	0.37	0.66	0.70	0.24					79		
3-5	0.27	0.47	0.51	0.24					79		

			10	ft x 10 ft x	: 10 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.27	0.51	0.56	0.24	0.34	0.24	0.24	0.24			
2<3	0.35	0.69	0.74	0.24					79		
3-5	0.26	0.50	0.54	0.24					79		

			1	1 ft x 2 ft :	x 11 in.							
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.50	0.27	0.26	0.26	0.26	0.26	0.26	0.26				
2<3	0.73	0.35	0.35	0.26					67			
3-5	0.52	0.26	0.26	0.26					63			

			1	1 ft x 3 ft :	x 11 in.				
Design			Circumfe	rential Re	einforcem	ent Areas	s, sq in./ f	t	
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.45	0.31	0.29	0.26	0.26	0.26	0.26	0.26	
2<3	0.67	0.42	0.43	0.26					63
3-5	0.47	0.30	0.31	0.26					60

			11	ft x 4 ft x	11 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.41	0.34	0.33	0.26	0.26	0.26	0.26	0.26			
2<3	0.61	0.48	0.49	0.26					60		
3-5	0.43	0.35	0.35	0.26					56		

			11	ft x 5 ft x	11 in.							
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.38	0.37	0.37	0.26	0.26	0.26	0.26	0.26				
2<3	0.56	0.53	0.54	0.26					56			
3-5	0.40	0.38	0.39	0.26					56			

			11	ft x 6 ft x	11 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.35	0.40	0.40	0.26	0.26	0.26	0.26	0.26			
2<3	0.52	0.58	0.60	0.26					56		
3-5	0.37	0.42	0.43	0.26					56		

11 ft x 7 ft x 11 in.												
Design		Circumferential Reinforcement Areas, sq in./ ft										
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.33	0.42	0.43	0.26	0.28	0.26	0.26	0.26				
2<3	0.48	0.62	0.64	0.26					60			
3-5	0.35	0.44	0.47	0.26					56			

			11	ft x 8 ft x	11 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.31	0.45	0.47	0.26	0.30	0.26	0.26	0.26			
2<3	0.45	0.66	0.69	0.26					67		
3-5	0.33	0.47	0.50	0.26					63		

11 ft x 9 ft x 11 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.30	0.47	0.50	0.26	0.31	0.26	0.26	0.26			
2<3	0.43	0.69	0.73	0.26					85		
3-5	0.31	0.49	0.53	0.26					70		

			11	ft x 10 ft x	: 11 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.28	0.49	0.53	0.26	0.33	0.26	0.26	0.26			
2<3	0.41	0.73	0.77	0.26					86		
3-5	0.30	0.52	0.56	0.26					86		

			11	ft x 11 ft x	: 11 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.27	0.51	0.56	0.26	0.34	0.26	0.26	0.26			
2<3	0.39	0.76	0.81	0.26					86		
3-5	0.29	0.55	0.59	0.26					86		

	12 ft x 2 ft x 12 in.									
Design			Circumfe	rential Re	einforcem	ent Areas	s, sq in./ f	t		
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
0<2	0.51	0.29	0.29	0.29	0.29	0.29	0.29	0.29		
2<3	0.81	0.37	0.37	0.29					71	
3-5	0.57	0.29	0.29	0.29					68	

			1:	2 ft x 3 ft :	x 12 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.46	0.29	0.29	0.29	0.29	0.29	0.29	0.29			
2<3	0.74	0.44	0.44	0.29					68		
3-5	0.53	0.32	0.32	0.29					64		

			12	ft x 4 ft x	12 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.42	0.33	0.31	0.29	0.29	0.29	0.29	0.29			
2<3	0.68	0.50	0.51	0.29					64		
3-5	0.49	0.36	0.37	0.29					60		

	12 ft x 5 ft x 12 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.39	0.35	0.34	0.29	0.29	0.29	0.29	0.29			
2<3	0.63	0.55	0.56	0.29					64		
3-5	0.45	0.40	0.41	0.29					60		

			12	ft x 6 ft x	12 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.36	0.38	0.38	0.29	0.29	0.29	0.29	0.29			
2<3	0.59	0.60	0.62	0.29					60		
3-5	0.42	0.44	0.45	0.29					56		

			12	ft x 7 ft x	11 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.34	0.41	0.42	0.29	0.29	0.29	0.29	0.29			
2<3	0.55	0.65	0.67	0.29					60		
3-5	0.40	0.47	0.49	0.29					60		

			12	ft x 8 ft x	12 in.						
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.32	0.43	0.45	0.29	0.29	0.29	0.29	0.29			
2<3	0.52	0.69	0.72	0.29					67		
3-5	0.38	0.50	0.52	0.29					64		

12 ft x 9 ft x 12 in.											
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.30	0.45	0.47	0.29	0.29	0.29	0.29	0.29			
2<3	0.49	0.73	0.76	0.29					75		
3-5	0.36	0.52	0.56	0.29					68		

	12 ft x 10 ft x 12 in.										
Design		Circumferential Reinforcement Areas, sq in./ ft									
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.29	0.48	0.50	0.29	0.30	0.29	0.29	0.29			
2<3	0.46	0.76	0.80	0.29					93		
3-5	0.34	0.55	0.59	0.29					79		

12 ft x 11 ft x 12 in.									
Design	Circumferential Reinforcement Areas, sq in./ ft								
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.29	0.50	0.53	0.29	0.32	0.29	0.29	0.29	
2<3	0.44	0.79	0.85	0.29					91
3-5	0.33	0.57	0.62	0.29					79

12 ft x 12 ft x 12 in.									
Design	Circumferential Reinforcement Areas, sq in./ ft								
Earth Cover, ft	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.29	0.52	0.56	0.29	0.33	0.29	0.29	0.29	
2<3	0.43	0.83	0.89	0.29					93
3-5	0.32	0.60	0.65	0.29					93"

# 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 <sup>1/</sup>	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		

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

2/ Effective dates apply to Contractor and subcontractor 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* (<u>http://www.epa.gov/cleandiesel/verification/verif-list.htm</u>), or verified by the California Air Resources Board (CARB) (<u>http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm</u>); 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

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: April 2, 2018

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

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

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

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

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

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

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

<u>CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR</u>. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform <u>19.00</u>% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

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

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

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

<u>BIDDING PROCEDURES</u>. Compliance with this Special Provision is required prior to the award of the contract and the failure of the low bidder to comply will render the bid not responsive.

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

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

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

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

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

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

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

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

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

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

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

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

- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons for the determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period in order to cure the deficiency.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217) 785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the

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

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

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

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

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

- (a) <u>NO AMENDMENT</u>. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) <u>CHANGES TO WORK</u>. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

- (c) <u>SUBCONTRACT</u>. The Contractor must provide DBE subcontracts to IDOT upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
- (d) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractorinitiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
  - (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
  - (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
  - (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) <u>TERMINATION AND REPLACEMENT PROCEDURES</u>. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor,

with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

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

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.
- (6) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime Contractor can substitute another DBE or non-DBE contractor after contract award.

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

- (f) <u>FINAL PAYMENT</u>. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <u>ENFORCEMENT</u>. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor my request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

## EQUIPMENT PARKING AND STORAGE (BDE)

Effective: November 1, 2017

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

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

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

#### FUEL COST ADJUSTMENT (BDE)

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

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

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

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

modified standard or nonstandard items where the character of the work to be performed is considered PCC base, pavement or shoulder. The cumulative total of all applicable item plan quantities shall exceed 7500 sq yd (6000 sq m). Included in the fuel usage factor is 1.20 gal/cu yd (5.94 liters/cu m) factor for trucking.

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

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

(c) Quantity Conversion Factors.

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

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

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

Where:	CA	=	Cost A	Adjustment,	\$
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- FPI<sub>P</sub> = Fuel Price Index, as published by the Department for the month the work is performed, \$/gal (\$/liter)
- FPI<sub>L</sub> = Fuel Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/gal (\$/liter)
- FUF = Fuel Usage Factor in the pay item(s) being adjusted
- Q = Authorized construction Quantity, tons (metric tons) or cu yd (cu m)

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

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

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

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

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

Effective: January 1, 2010 Revised: August 1, 2018

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

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

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

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

- a. Confined Edge. Each confined edge density shall be represented by a oneminute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) apart longitudinally along the unconfined pavement edge and centered at the random density test location.

When a longitudinal joint sealant (LJS) is applied, longitudinal joint density testing will not be required on the joint(s) sealed."

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

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

0144			0.1.00(1)
SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%"

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

#### Effective: August 1, 2018

Add the following to Article 406.02 of the Standard Specifications.

"(d) Longitudinal Joint Sealant (LJS) ......1032"

Add the following to Article 406.03 of the Standard Specifications.

- "(k) Longitudinal Joint Sealant (LJS) Pressure Distributor (Note 2)
- (I) Longitudinal Joint Sealant (LJS) Melter Kettle (Note 3)

Note 2. When a pressure distributor is used to apply the LJS, the distributor shall be equipped with a heating and recirculating system along with a functioning auger agitating system or vertical shaft mixer in the hauling tank to prevent localized overheating. The distributor shall be equipped with a guide or laser system to aid in proper placement of the LJS application.

Note 3. When a melter kettle is used to transport and apply the LJS, the melter kettle shall be an oil jacketed double-boiler with agitating and recirculating systems. Material from the kettle may be dispensed through a pressure feed wand with an applicator shoe or through a pressure feed wand into a hand-operated thermal push cart."

Revise Article 406.06(g)(2) of the Standard Specifications to read:

"(2) Longitudinal Joints. Unless prohibited by stage construction, any HMA lift shall be complete before construction of the subsequent lift. The longitudinal joint in all lifts shall be at the centerline of the pavement if the roadway comprises two lanes in width, or at lane width if the roadway is more than two lanes in width.

When stage construction prohibits the total completion of a particular lift, the longitudinal joint in one lift shall be offset from the longitudinal joint in the preceding lift by not less than 3 in. (75 mm). The longitudinal joint in the surface course shall be at the centerline of the pavement if the roadway comprises two lanes in width, or at lane width if the roadway is more than two lanes in width.

A notched wedge longitudinal joint shall be used between successive passes of HMA binder course that has a difference in elevation of greater than 2 in. (50 mm) between lanes on pavement that is open to traffic.

The notched wedge longitudinal joint shall consist of a 1 to 1 1/2 in. (25 to 38 mm) vertical notch at the lane line, a 9 to 12 in. (230 to 300 mm) wide uniform taper sloped toward and extending into the open lane, and a second 1 to 1 1/2 in. (25 to 38 mm) vertical notch at the outside edge.

The notched wedge longitudinal joint shall be formed by the strike off device on the paver. The wedge shall then be compacted by the joint roller.

Tack coat shall be applied to the entire surface of the notched wedge joint immediately prior to placing the adjacent lift of binder. The material shall be uniformly applied at a rate of 0.05 to 0.1 gal/sq yd (0.2 to 0.5 L/sq m).

When the use of LJS is specified, it shall be applied for the lift(s) of paving as shown on the plans. The surface to which the LJS is applied shall be dry and cleaned of all dust, debris, and any substances that will prevent the LJS from adhering. Cleaning shall be accomplished by means of a sweeper/vacuum truck, power broom, air compressor or by hand. The LJS may be placed before or after the tack or prime coat. When placed after the tack or prime coat, the tack or prime shall be fully cured prior to placement of the LJS.

The LJS shall be centered  $\pm 2$  in. ( $\pm 50$  mm) under the joint of the next HMA lift to be constructed.

The width and minimum application rate of LJS shall be according to the following table.

LJS Application Table			
Overlay Thickness in. (mm)	LJS Width in. (mm)	Application Rate <sup>1/</sup> Ib/ft (kg/m)	
	HMA Mixture	S	
3/4 (19)	18 (450)	0.88 (1.31)	
1 (25)	18 (450)	1.15 (1.71)	
1 1/4 (32)	18 (450)	1.31 (1.95)	
1 1/2 (38)	18 (450)	1.47 (2.19)	
1 3/4 (44)	18 (450)	1.63 (2.43)	
2 (50)	18 (450)	1.80 (2.68)	
2 1/4 (60)	18 (450)	1.96 (2.92)	
2 1/2 (63)	18 (450)	2.12 (3.16)	
2 3/4 (70)	18 (450)	2.29 (3.41)	
3 (75)	18 (450)	2.45 (3.65)	
3 1/4 (83)	18 (450)	2.61 (3.89)	
3 1/2 (90)	3 1/2 (90) 18 (450)		
3 3/4 (95)	18 (450)	2.94 (4.38)	
4 (100)	18 (450)	3.10 (4.62)	
SMA Mixtures			
1 1/2 (38)	18 (450)	1.26 (1.88)	
1 3/4 (44)	18 (450)	1.38 (2.06)	
2 (50)	18 (450)	1.51 (2.25)	

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

The Contractor shall furnish to the Engineer a bill of lading for each tanker supplying material to the project. The application rate of LJS shall be verified within the first 1000 ft (300 m) of the day's scheduled application length and every 12,000 ft (3600 m) the remainder of the day. For projects less than 3000 ft (900 m), the rate shall be verified once. A suitable paper or pan shall be placed at a random location in the path of the LJS. After application of the LJS, the paper or pan shall be picked up, weighed, and the application rate calculated. The tolerance between the application rate shown in the LJS Application Table and the calculated rate shall be  $\pm$  15 percent. The Contractor shall replace the LJS in the area where the sample was taken.

A 1 qt (1 L) sample shall be taken from the pressure distributor or melting kettle at the jobsite once for each contract and sent to the Central Bureau of Materials.

The LJS shall be applied in a single pass with a pressure distributor, melter kettle, or hand applied from a roll for HMA lifts up to 2 in. (50 mm) in thickness. The LJS shall be applied in two passes for HMA lifts between 2 and 4 in. (50 and 100 mm) in thickness. At the time of installation, the pavement surface temperature and the ambient temperature shall be a minimum of 40 °F (4 °C) and rising.

The LJS shall be applied at a width of not less than or greater than 1 1/2 in. (38 mm) of the width specified. If the LJS flows more than 2 in. (50 mm) from the initial placement width, LJS placement shall stop and remedial action shall be taken.

When starting another run of LJS placement, suitable release paper shall be placed over the previous application of LJS to prevent doubling up of thickness of LJS.

The LJS shall be suitable for construction traffic to drive on without pickup or tracking of the LJS within 30 minutes of placement. If pickup or tracking occurs, LJS placement shall stop and damaged areas shall be repaired.

Prior to paving, the Contractor shall ensure the paver end plate and grade control device is adequately raised above the finished height of the LJS.

The LJS shall not flush to the final surface of the HMA pavement."

Add the following paragraph after the second paragraph of Article 406.13(b) of the Standard Specifications.

"Application of longitudinal joint sealant (LJS) will be measured for payment in place in feet (meters)."

Add the following paragraph after the first paragraph of Article 406.14 of the Standard Specifications.

"Longitudinal joint sealant will be paid for at the contract unit price per foot (meter) for LONGITUDINAL JOINT SEALANT."

Add the following to Section 1032 of the Standard Specifications.

"1032.12 Longitudinal Joint Sealant (LJS). Longitudinal joint sealant (LJS) will be accepted according to the current Bureau of Materials and Physical Research Policy Memorandum, "Performance Graded Asphalt Binder Acceptance Procedure" with the following exceptions: Article 3.1.9 and 3.4.1.4 of the policy memorandum will be excluded. The bituminous material used for the LJS shall be according to the following table. Elastomers shall be added to a base asphalt and shall be either a styrene-butadiene diblock or triblock copolymer without oil extension, or a styrene-butadiene rubber. Air blown asphalt, acid modification, or other modifiers will not be allowed. LJS in the form of pre-formed rollout banding may also be used.

Test	Test Requirement	Test Method
Dynamic shear @ 82°C (unaged), G*/sin δ, kPa	1.00 min.	AASHTO T 315
Creep stiffness @ -18°C (unaged), Stiffness (S), MPa m-value	300 max. 0.300 min.	AASHTO T 313
Ash, %	1.0 - 4.0	AASHTO T 111
Elastic Recovery, 100 mm elongation, cut immediately, 25°C, %	70 min.	ASTM D 6084 (Procedure A)
Separation of Polymer, Difference in °C of the softening point (ring and ball)	3 max.	ITP Separation of Polymer from Asphalt Binder"

## HOT-MIX ASPHALT – OSCILLATORY ROLLER (BDE)

Effective: August 1, 2018

Add the following to Article 406.03 of the Standard Specifications:

Revise Table 1 and Note 3/ of Table 1 in Article 406.07(a) of the Standard Specifications to read:

"TABI	<b>"TABLE 1 - MINIMUM ROLLER REQUIREMENTS FOR HMA</b>				
	Breakdown Roller (one of the following)	Intermediate Roller	Final Roller (one or more of the following)	Density Requirement	
Level Binder: (When the density requirements of Article 406.05(c) do not apply.)	P <sup>3/</sup>		V <sub>S</sub> , P <sup>3/</sup> , T <sub>B</sub> , T <sub>F</sub> , 3W, O <sub>T</sub>	To the satisfaction of the Engineer.	
Binder and Surface <sup>1/</sup> Level Binder <sup>1/</sup> : (When the density requirements of Article 406.05(c) apply.)	V <sub>D</sub> , P <sup>3/</sup> , T <sub>B</sub> , 3W, O <sub>T</sub> , O <sub>B</sub>	Р <sup>3/</sup> , О <sub>Т</sub> , О <sub>В</sub>	Vs, Tb, T <sub>F</sub> , Ot	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).	
IL-4.75 and SMA 4/5/	Т <sub>в,</sub> 3W, От		$T_F$ , 3W, $O_T$		
Bridge Decks <sup>2/</sup>	Тв		T <sub>F</sub>	As specified in Articles 582.05 and 582.06.	

3/ A vibratory roller ( $V_D$ ) or oscillatory roller ( $O_T$  or  $O_B$ ) may be used in lieu of the pneumatictired roller on mixtures containing polymer modified asphalt binder."

Add the following to EQUIPMENT DEFINITION in Article 406.07(a) contained in the Errata of the Supplemental Specifications:

- "O<sub>T</sub> Oscillatory roller, tangential impact mode. Maximum speed is 3.0 mph (4.8 km/h) or 264 ft/min (80 m/min).
- O<sub>B</sub> Oscillatory roller, tangential and vertical impact mode, operated at a speed to produce not less than 10 vertical impacts/ft (30 impacts/m)."

Add the following to Article 1101.01 of the Standard Specifications:

- "(h) Oscillatory Roller. The oscillatory roller shall be self-propelled and provide a smooth operation when starting, stopping, or reversing directions. The oscillatory roller shall be able to operate in a mode that will provide tangential impact force with or without vertical impact force by using at least one drum. The oscillatory roller shall be equipped with water tanks and sprinkling devices, or other approved methods, which shall be used to wet the drums to prevent material pickup. The drum(s) amplitude and frequency of the tangential and vertical impact force shall be approximately the same in each direction and meet the following requirements:
  - (1) The minimum diameter of the drum(s) shall be 48 in. (1200 mm);
  - (2) The minimum length of the drum(s) shall be 66 in. (1650 mm);
  - (3) The minimum unit static force on the drum(s) shall be 125 lb/in. (22 N/m);
  - (4) The minimum force on the oscillatory drum shall be 18,000 lb (80 kN); and
  - (5) Self-adjusting eccentrics, and reversible eccentrics on non-driven drum(s)."

# HOT-MIX ASPHALT – TACK COAT (BDE)

Effective: November 1, 2016

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

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

## LIGHTS ON BARRICADES (BDE)

Effective: January 1, 2018

Revise Article 701.16 of the Standard Specifications to read:

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

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

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

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

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

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

#### MANHOLES, VALVE VAULTS, AND FLAT SLAB TOPS (BDE)

Effective: January 1, 2018 Revised: March 2, 2018

<u>Description</u>. Manholes, valve vaults, and flat slab tops manufactured according to the current or previous Highway Standards listed below will be accepted on this contract:

Product	Current Standard	Previous Standard
Precast Manhole Type A, 4' (1.22 m) Diameter	602401-04	602401-03
Precast Manhole Type A, 5' (1.52 m) Diameter	602402	602401-03
Precast Manhole Type A, 6' (1.83 m) Diameter	602406-08	602406-07
Precast Manhole Type A, 7' (2.13 m) Diameter	602411-06	602411-05
Precast Manhole Type A, 8' (2.44 m) Diameter	602416-06	602416-05
Precast Manhole Type A, 9' (2.74 m) Diameter	602421-06	602421-05
Precast Manhole Type A, 10' (3.05 m) Diameter	602426	n/a
Precast Valve Vault Type A, 4' (1.22 m) Diameter	602501-03	602501-02
Precast Valve Vault Type A, 5' (1.52 m) Diameter	602506	602501-02
Precast Reinforced Concrete Flat Slab Top	602601-05	602601-04

When manufacturing to the current standards, the following revisions to the Standard Specifications shall apply:

Revise Article 602.02(g) of the Standard Specifications to read:

Note 4. All components of the manhole joint splice shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable."

Add the following to Article 602.02 of the Standard Specifications:

"(s) Anchor Bolts and Rods (Note 5) ......1006.09

Note 5. The threaded rods for the manhole joint splice shall be according to the requirements of ASTM F 1554, Grade 55, (Grade 380)."

Add the following paragraph after the first paragraph of Article 602.07 of the Standard Specifications:

"Threaded rods connecting precast sections shall be brought to a snug tight condition."

Revise the second paragraph of Article 1042.10 of the Standard Specifications to read:

"Catch basin Types A, B, C, and D; Manhole Type A; Inlet Types A and B; Drainage Structures Types 1, 2, 3, 4, 5, and 6; Valve Vault Type A; and reinforced concrete flat slab top

(Highway Standard 602601) shall be according to AASHTO M 199 (M 199M), except the minimum wall thickness shall be 3 in. (75 mm). Additionally, catch basins, inlets, and drainage structures shall have a minimum concrete compressive strength of 4500 psi (31,000 kPa) at 28 days and manholes, valve vaults, and reinforced concrete flat slab tops shall have a minimum concrete compressive strength of 5000 psi (34,500 kPa) at 28 days."

### PAVEMENT MARKING REMOVAL (BDE)

Effective: July 1, 2016

Revise Article 783.02 of the Standard Specifications to read:

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

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

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

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

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

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

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

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

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

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

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

Delete Article 1101.13 from the Standard Specifications.

#### PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: November 2, 2017

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

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

#### PORTABLE CHANGEABLE MESSAGE SIGNS (BDE)

Effective: November 1, 2016 Revised: April 1, 2017

Revise the second paragraph of Article 701.20(h) of the Standard Specifications to read:

"For all other portable changeable message signs, this work will be paid for at the contract unit price per calendar day for each sign as CHANGEABLE MESSAGE SIGN."

Revise this second sentence of the first paragraph of Article 1106.02(i) of the Standard Specifications to read:

"The message panel shall be a minimum of 7 ft (2.1 m) above the edge of pavement in urban areas and a minimum of 5 ft (1.5 m) above the edge of pavement in rural areas, present a level appearance, and be capable of displaying up to eight characters in each of three lines at a time."

# 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	4.0 - 8.0"
	PP-4	
	PP-5	

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

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

### 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."

#### 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)

 $D = MPI_M - MPI_L$ 

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

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

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

Attachment	
Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights
	(masses)
Reinforcing Steel	See plans for weights
	(masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Mesh Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail	<b></b>
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."

80397

# SUBCONTRACTOR MOBILILATION PAYMENTS (BDE)

Effective: November 2, 2017

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

"This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

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

80391

**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 2 . 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 gualify 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.

<u>METHOD OF MEASUREMENT</u> 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.

20338

# WARM MIX ASPHALT (BDE)

Effective: January 1, 2012 Revised: April 1, 2016

<u>Description</u>. This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

### Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

"1102.01 Hot-Mix Asphalt Plant. The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, "Approval of Hot-Mix Asphalt Plants and Equipment". Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements."

Add the following to Article 1102.01(a) of the Standard Specifications.

- "(11) Equipment for Warm Mix Technologies.
  - a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ± 2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

### Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

"(e) Warm Mix Technologies.

- (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
- (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

### Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C). WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

### Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

80288

# 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.

80302

### SETTING PILES IN ROCK

Effective: November 14, 1996 Revised: April 1, 2016

This work shall consist of making shaft excavations through soil and rock, setting piles in rock and backfilling the shaft excavation.

The excavations for each pile shall be made by drilling through the overburden soils and into rock to satisfy the diameter and embedment depth in rock as indicated on the plans. All excavated material shall be disposed of by the Contractor.

The actual top of rock will be considered as the point where rock, defined as bedded deposits and conglomerate deposits exhibiting the physical characteristics and difficulty of rock removal as determined by the Engineer, is encountered which cannot be drilled with earth augers and/or underreaming tools configured to be effective in the soils indicated in the contract documents, and requires the use of special rock augers, core barrels, air tools, blasting, or other methods of hand excavation. When the top of rock encountered is above or below the estimated elevation indicated on the plans, the piles shall be cut or spliced per Article 512.05(a) to satisfy the required embedment in rock.

The Contractor shall be responsible for hole stability by using accepted drilling methods and temporary casing where site conditions warrant, no permanent casings or side forms will be allowed. All loose rock, earth, debris and water shall be removed from the hole prior to placing concrete. If the flow of water into the hole is excessive or if pumping operations are likely to cause hole instability, the level of water in the hole shall be allowed to stabilize and the concrete placed by tremie methods according to Article 503.08 of the Standard Specifications.

The bottom of each hole shall be filled with Class SI Concrete to a depth of at least 6 inches (150 mm) and then the piles shall be placed in the hole and properly located. The piles shall be securely braced and held in position prior to and during the placing and curing of the remainder of the Class SI Concrete until test specimens show that a modulus of rupture of 650 psi (4.5 MPa) has been attained. Any operations that might damage the concrete around the piles shall be deferred until the concrete attains the required strength. The hole shall be filled with Class SI Concrete up to at least 6 inches (150 mm) above the top of rock. The remainder of the hole, to the bottom of encasement, footing or abutment, shall be filled with Class SI Concrete or porous granular embankment at the option of the Contractor unless otherwise detailed in the plans.

Obstructions. An obstruction is an unknown isolated object that causes the shaft excavation method to experience a significant decrease in the actual production rate and requires the Contractor to core, break up, push aside, or use other means to mitigate the obstruction. Subsurface conditions such as boulders, cobbles, or logs and buried infrastructure such as footings, piling, or abandoned utilities, when shown on the plans, shall not constitute an obstruction. When an obstruction is encountered, the Contractor shall notify the Engineer immediately and upon concurrence of the Engineer, the Contractor shall mitigate the obstruction with an approved method.

This work will be paid for at the contract unit price each for SETTING PILES IN ROCK. The Class SI Concrete and any porous granular embankment backfilled around each pile shall not be paid for separately but shall be included in this item. The furnishing of piles is not included in this item but will be paid for elsewhere in this contract.

Obstruction mitigation shall be paid for according to Article 109.04.

# WEEP HOLE DRAINS FOR ABUTMENTS, WINGWALLS, RETAINING WALLS AND CULVERTS

Effective: April 19, 2012 Revised: October 22, 2013

Delete the last paragraphs of Articles 205.05 and 502.10 and replace with the following.

"If a geocomposite wall drain according to Section 591 is not specified, a prefabricated geocomposite strip drain according to Section 1040.07 shall be placed at the back of each drain hole. The strip drain shall be 24 inches (600 mm) wide and 48 inches (1.220 m) tall. The strip drain shall be centered over the drain hole with the bottom located 12 inches (300 mm) below the bottom of the drain hole. All form boards or other obstructions shall be removed from the drain holes before placing any geocomposite strip drain."

Revise the last sentence of the first paragraph of Article 503.11 to read as follows.

"Drain holes shall be covered to prevent the leakage of backfill material according to Article 502.10."

Revise the title of Article 1040.07 to Geocomposite Wall Drains and Strip Drains.

# MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES

Effective: October 4, 2016 Revised: April 13, 2018

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

All membrane waterproofing systems shall be supplied by qualified producers. The Department will maintain a list of qualified producers.

Materials. The materials used in the waterproofing system shall consist of the following.

(a) Cold-applied, self-adhering rubberized asphalt/polyethylene membrane sheet with the following properties:

Physical Properties	
Thickness ASTM D 1777 or D 3767	60 mils (1.500 mm) min.
Width	36 inches (914 mm) min.
Tensile Strength, Membrane ASTM D 412 (Die C)	325 lb./in² (2240 kPa)
	min.
Tensile Strength, Film ASTM D 882	5000 lb./in² (34.5 MPa)
	min.
Elongation (Ultimate Failure of Rubberized Asphalt) ASTM D 412	300% min.
Pliability [180° bend over 1" inch (25 mm) mandrel @ -20 °F (-29 °C)] ASTM D 146 (Modified) or D1970	No Effect
Puncture Resistance-Membrane ASTM E 154	40 lb. (178 N) min.
Permeability (Perms) ASTM E 96, Method B	0.1 max.
Water Absorption (% by Weight) ASTM D 570	0.2 max.
Peel Strength ASTM D 903	9 lb./in (1576 N/m) min.

(b) Protective geocomposite drainage sheet composed of a woven monofilament or nonwoven geotextile fabric bonded to a dimpled/ridged drainage core with a smooth backing film providing cushioning for the membrane sheet. The protective drainage sheet shall be suitable for horizontal applications with heavy loads and vehicular traffic with the following properties:

Physical Properties	
Core	
Compressive Strength ASTM D 1621	18,000 (862 kPa) psf Min
Flow Rate ASTM D 4716	17 gal/min./ft. (211 L/min./m²) min.
Geotextile Fabric	
Woven Monofilament Fabric	
Water Flow Rate ASTM D 4491	145 gal/min./ft2 (5907 L/Min./m min.
Grab tensile Strength ASTM D 4632 (MARV - Weakest Principal Direction)	200 lb. (890 N) min.
CBR Puncture Strength ASTM D 6241 (MARV)	675 lb. (3004 N) min
Apparent Opening Size	Sieve No. 40 (0.430 mm) or Smaller Opening
Nonwoven fabric	
Water Flow Rate ASTM D 4491	90 gal/min./ft2 (3668 L/Min./m min
Grab tensile Strength ASTM D 4632 (MARV – Weakest Principal Direction)	205 lb. (912 N) min.
CBR Puncture Strength ASTM D 6241 (MARV)	500 lb. (2224 N) min
Apparent Opening Size	Sieve No. 80 (0.180 mm) or Smaller Opening

(c) Ancillary Materials: Adhesives, Conditioners, Primers, Mastic, Two-Part Liquid Membranes, and Sealing Tapes as required by the manufacturer for use with the respective membrane waterproofing system.

<u>Construction.</u> The areas requiring waterproofing shall be prepared and the waterproofing shall be installed in accordance with the manufacturer's instructions. The Contractor shall not install any part of a membrane waterproofing system in wet conditions, or if the ambient or concrete surface temperature is below  $40^{\circ}$  ( $4^{\circ}$  C), unless allowed by the Engineer.

Surfaces to be waterproofed shall be smooth and free from projections which might damage the membrane sheet. Projections or depressions on the surface that may cause damage to the membrane shall be removed or filled as directed by the Engineer. The surface shall be power washed and cleaned of dust, dirt, grease, and loose particles, and shall be dry before the waterproofing is applied.

The Contractor shall uniformly apply primer to the entire area to be waterproofed, at the rate stated in the manufacturer's instructions, by brush, or roller. The Contractor shall brush out primer that tends to puddle in low spots to allow complete drying. The primer shall be cured according to the manufacturer's instructions. Primed areas shall not stand uncovered overnight. If membrane sheets are not placed over primer within the time recommended by the manufacturer, the Contractor shall recoat the surfaces at no additional cost to the Department.

The installation of the membrane sheet to primed surfaces shall be such that all joints are shingled to shed water by commencing from the lowest elevation of the buried structure's top slab and progress towards the highest elevation. The membrane sheets shall be overlapped as required by the manufacturer. The Contractor shall seal with mastic any laps that were not thoroughly sealed. The membrane shall be smooth and free of wrinkles and there shall be no depressions in horizontal surfaces of the finished waterproofing. After placement, exposed edges of membrane sheets shall be sealed with a troweled bead of a manufacturer's recommended mastic, or two-part liquid membrane, or with sealing tape.

The Contractor shall install protective geocomposite drainage sheet after application of the membrane sheet per the manufacturer's instructions.

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

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

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

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

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

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

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

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

#### ATTACHMENTS

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

#### I. GENERAL

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

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

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

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

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor

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

#### **II. NONDISCRIMINATION**

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

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

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

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

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

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

 b. The contractor will accept as its operating policy the following statement:

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

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

#### 6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information. d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

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

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

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

#### **III. NONSEGREGATED FACILITIES**

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

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

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

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

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

#### 1. Minimum wages

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

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

#### 2. Withholding

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

#### 3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (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, fringe shall be paid in accordance with that determination.

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

b. Trainees (programs of the USDOL).

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

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

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

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

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

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

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

#### 10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

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

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

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

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

#### VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

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

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

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

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

\* \* \* \* \*

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

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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

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

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

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

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

# XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

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

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

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

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.