

September 14, 2022

SUBJECT: Route FAU 3579 (Montgomery Road) Section 20-00524-01-SP Kane County Contract No. 61H97 Item 052 September 23, 2022 Letting Addendum A

## NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

- 1. Revised sheet 7 of the Plans.
- 2. Revised the BDE Special Provisions Check Sheet.
- 3. Deleted pages 61 66 from the Special Provisions.

Prime contractors must utilize the enclosed material when preparing their bid and must include any changes to the Schedule of Prices in their bid.

Very truly yours,

SLEG

Jack A. Elston, P.E. Bureau Chief, Design and Environment

#### **BDE SPECIAL PROVISIONS**

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

<u>File</u> Name	Pg.		Special Provision Title	Effective	<u>Revised</u>
8009	-		Accessible Pedestrian Signals (APS)	April 1 2003	Jan 1 2022
8027	4 36	X	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
8019	2		Automated Flagger Assistance Device	Jan. 1, 2008	
8017	3		Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
8024	6	<u> </u>	Bituminous Surface Treatment with Fog Seal	Jan. 1. 2020	Jan. 1, 2022
8043	6 39	X	Blended Finely Divided Minerals	April 1, 2021	
8024	1		Bridge Demolition Debris	July 1, 2009	
* 5053		1.1.1.1.1	Building Removal	Sept. 1, 1990	Aug. 1, 2022
* 5026	l		Building Removal with Asbestos Abatement	Sept. 1, 1990	Aug. 1, 2022
8038	4 40	X	Compensable Delay Costs	June 2, 2017	April 1, 2019
8019	8		Completion Date (via calendar days)	April 1, 2008	• •
8019	9		Completion Date (via calendar days) Plus Working Days	April 1, 2008	
8029	3		Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤	April 1, 2012	July 1, 2016
			5 Feet	•	<b>-</b> .
8031	1		Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
8026	1 44	X	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
8043	4		Corrugated Plastic Pipe (Culvert and Storm Sewer)	Jan. 1, 2021	
80029	9 47	X	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
80229	9		Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
8043	3	L	Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
80422	2	<u> </u>	High Tension Cable Median Barrier	Jan. 1, 2020	Jan. 1, 2022
8044:	3		High Tension Cable Median Barrier Removal	April 1, 2022	
* 8044:	2		Hot-Mix Asphalt	Jan. 1, 2022	Aug. 1, 2022
80444	4 57	<u>X</u>	Hot-Mix Asphalt – Patching	April 1, 2022	
80438	3	<u> </u>	Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	Sept. 2, 2021
80411	1		Luminaires, LED	April 1, 2019	Jan. 1, 2022
8004	5		Material Transfer Device	June 15, 1999	Jan. 1, 2022
80418	3	ļ	Mechanically Stabilized Earth Retaining Walls	Nov. 1, 2019	Nov. 1, 2020
80430	) 58	<u>X</u>	Portland Cement Concrete – Haul Time	July 1, 2020	
34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
80395	5		Sloped Metal End Section for Pipe Culverts	Jan. 1, 2018	
80340	)		Speed Display Trailer	April 2, 2014	Jan. 1, 2022
80127	7		Steel Cost Adjustment	April 2, 2014	Jan. 1, 2022 🕐
80397	7 59	<u>X</u>	Subcontractor and DBE Payment Reporting	April 2, 2018	
80391	60	X	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
80437	5	$\sim$	Submission of Payroll Records	April 1, 2021	
80435	j		Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2022
80410	5		Traffic Spotters	Jan. 1, 2019	$\sim$
20338	3		Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
80318	3 [		Traversable Pipe Grate for Concrete End Sections	Jan. 1, 2013	Jan. 1, 2018
80429			Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
80440	) [		Waterproofing Membrane System	Nov. 1, 2021	
80302	67	Х	Weekly DBE Trucking Reports	June 2, 2012	Nov. 1, 2021
80427	' 68 [	Х	Work Zone Traffic Control Devices	Mar. 2, 2020	
80071	70 [	X	Working Days	Jan. 1, 2002	

# SURFACE TESTING OF PAVEMENTS - IRI (BDE)

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

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

## Hot-Mix Asphalt (HMA) Overlays

Add Article 406.03(n) to the Standard Specifications:

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

Revise Article 406.11 of the Standard Specifications to read:

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

- (a) Test Sections
  - (1) High-Speed Mainline Pavement. High-speed mainline pavement shall consist of pavements, ramps, and loops with a posted speed limit greater than 45 mph. These sections shall be tested with an inertial profiling system (IPS).
  - (2) Low-Speed Mainline Pavement. Low-speed mainline pavement shall consist of pavements, ramps, and loops with a posted speed limit of 45 mph or less. These sections shall be tested with an IPS and will be analyzed using the rolling 16 ft (5 m) straightedge simulation in ProVAL.
  - (3) Miscellaneous Pavement. Miscellaneous pavement includes segments that either cannot readily be tested by an IPS or conditions beyond the control of the contractor preclude the achievement of smoothness levels typically achievable with mainline pavement construction. This may include the following examples or as determined by the Engineer.
    - (a) Pavement on horizontal curves with a centerline radius of curvature of less than or equal to 1,000 ft (300 m) and the pavement within the superelevation transition of such curves;

Deleted 9/13/2022

- (b) Pavement on vertical curves having a length less than or equal to 200 ft (60 m) in combination with an algebraic change in tangent grade greater than or equal to 3 percent as may occur on urban ramps or other constricted-space facilities;
- (c) The first and last 50 ft (15 m) of a pavement section where the Contractor is not responsible for the adjoining surface;
- (d) Intersections and the 25 ft (7.6 m) before and after an intersection or end of radius return;
- (e) Variable width pavements;
- (f) Side street returns to the end of radius return;
- (g) Crossovers;
- (h) Connector pavement from the mainline pavement expansion joint to the bridge approach slab;
- (i) Bridge approach slab;
- (j) Pavement that must be constructed in multiple short segments, typically defined as 600 ft (180 m) or less;
- (k) Pavement within 25 ft (7.6 m) of manholes, utility structures, or other appurtenances;
- (I) Turn lanes; and
- (m) Pavement within 5 ft (1.5 m) of jobsite sampling locations for HMA volumetric testing that fall within the wheel path.

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

- (4) International Roughness Index (IRI). An index computed from a longitudinal profile measurement using a quarter-car simulation at a simulation speed of 50 mph (80 km/h).
- (5) Mean Roughness Index (MRI). The average of the IRI values for the right and left wheel tracks.
- (6) Areas of Localized Roughness (ALR). Isolated areas of roughness, which can cause significant increase in the calculated MRI for a given sublot.

- 7) Lot. A lot will be defined as a continuous strip of pavement 1 mile (1,600 m) long and one lane wide. When the length of a continuous strip of pavement is less than 1 mile (1,600 m), that pavement will be included in an adjacent lot. Structures will be omitted when measuring pavement length, but will not be considered as a discontinuity and the numbering of sublots will not restart. The limits of the structure shall include the entire length between the outside ends of both connector pavements.
- (8) Sublot. Lots will be divided into 0.1 mile (160 m) sublots. A partial sublot greater than or equal to 264 ft (80 m) resulting from an interruption in the pavement will be subject to the same evaluation as a whole sublot. Partial sublots less than 264 ft (80 m) shall be included with the previous sublot for evaluation purposes.
- (b) Corrective Work. Corrective work shall be completed according to the following.
  - (1) High-Speed Mainline Pavement. For high-speed mainline pavement, any 25 ft (7.6 m) interval with an ALR in excess of 150 in./mile (2,400 mm/km) will be identified by the Engineer and shall be corrected by the Contractor. Any sublot having a MRI greater than MRI<sub>D</sub>, including ALR, shall be corrected to reduce the MRI to the MRI<sub>F</sub>, or replaced at the Contractor's option.
  - (2) Low-Speed Mainline Pavement. Bumps in low-speed mainline pavement which exceed the 5/16 in. (8 mm) tolerance using a simulated 16 ft (5 m) straightedge will be identified by the Engineer and shall be corrected by the Contractor.
  - (3) Miscellaneous Pavements. Bumps in miscellaneous pavement which exceed the 5/16 in. (8 mm) tolerance on a 16 ft (5 m) straightedge will be identified by the Engineer and shall be corrected by the Contractor.

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

Upon completion of the corrective work, the surface of the sublot(s) shall be retested. The Contractor shall furnish the data and reports to the Engineer within 2 working days after corrections are made. If the MRI and/or ALR still do not meet the requirements, additional corrective work shall be performed.

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

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

The upper MRI thresholds for high-speed mainline pavement are dependent on the MRI of the existing pavement before construction (MRI<sub>0</sub>) and shall be determined as follows.

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

1/ MRIo, MRI, MRIF, and MRID shall be in in./mile for calculation.

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

SMOOTHNESS ASSESSMENT SCH	EDULE (High-Speed, HMA Overlay)
Mainline Pavement MRI Range	Assessment Per Sublot <sup>1/</sup>
MRI ≤ MRI	+ (MRI <sub>i</sub> – MRI) × \$33.00 <sup>-2/</sup>
MRI₁ < MRI ≤ MRI <sub>F</sub>	+ \$0.00
MRI⊧ < MRI ≤ MRI∕	– (MRI – MRI <sub>F</sub> ) × \$20.00
MRI > MRI <sub>P</sub>	- \$500.00

1/ MRI, MRI, MRIF, and MRID shall be in in./mile for calculation.

2/ The maximum incentive amount shall not exceed \$500.00.

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

#### Hot-Mix Aspbalt (HMA) Pavement (Full-Depth)

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

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

Revise Article 407.09 of the Standard Specifications to read:

"407.09 Surface Tests. The finished surface of the pavement shall be tested for smoothness"

according to Article 406.11, except as follows:

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

SMOOTHNESS ASSESSMENT SCHEDULI	E (High-Speed, Full-Depth HMA)
Mainline Pavement MRI, in./mile (mm/km)	Assessment Per Subiot <sup>1/</sup>
≤ ¥(5.0 (710)	+ (45 – MRI) × \$80.00 <sup>2/</sup>
> 45.0 (710) to 75.0 (1,190)	+ \$0.00
> 75.0 (1,190) to 100.0 (1,580)	- (MR/-75) × \$30.00
> 100.0 (1,580)	- \$750.00
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1/ MRI shall be in in./mile for calculation.

2/ The maximum incentive amount shall not exceed \$1,200.00."

#### Portland Cement Concrete Pavement

Delete Article 420.03(i) of the Standard Specifications.

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

"(i) Coring Machine (Note 1)"

Revise Article 420.10 of the Standard Specifications to read:

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

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

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

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

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

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

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

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

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

### Removal of Existing Pavement and Appurtenances

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

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

80435