

June 6, 2024

SUBJECT FAP Route607 (US 30/Cass St) Project NHPP-MME4(425) Section 2018-067-BR Will County Contract No. 62M79 Item No. 107, June 14, 2024 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 the Schedule of Prices
- 2. Revised pages ii-iii of the Table of Contents to the Special Provisions
- 3. Revised pages 72, 91, 92, 98, 99, 143, 144, 151, 187, 188 & 205 to the Special Provisions
- 4. Revised sheets 3, 6-8, 13, 35, 36, 68, 83, 88-90, 92, & 95 of the Plans

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,

A.

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

MTS

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The ends of rigid metal conduit to be capped shall be threaded, the threads protected with full galvanizing, and capped with a threaded galvanized steel cap.

The ends of rigid nonmetallic conduit and coilable nonmetallic conduit shall be capped with a rigid PVC cap of not less than 1/8 in. (3 mm) thick. The cap shall be sealed to the conduit using a room-temperature-vulcanizing (RTV) sealant compatible with the material of both the cap and the conduit. A washer or similar metal ring shall be glued to the inside center of the cap with epoxy, and the pull cord shall be tied to this ring."

Revise Article 810.07 of the Standard Specifications to read:

"This work shall be included in the lump sum cost of MISCELLANEOUS ELECTRICAL WORK. Reinforcement will not be paid for separately."

# REMOVAL OF LIGHTING LUMINAIRE, SALVAGE (D-1)

Effective: December 17, 2019

<u>Description</u>. This work shall consist of the removal and salvaging of existing luminaires from existing conventional poles.

# CONSTRUCTION REQUIREMENTS

<u>General.</u> No removal work will be permitted without approval from the Engineer. Removal shall start as soon as the temporary lighting or permanent lighting, as applicable, is placed in approved operation. An inspection and approval by the Engineer will take place before any associated proposed permanent or temporary lighting is approved for operation.

# Removal of luminaires.

The existing luminaire shall be disconnected and removed from the existing pole mast arms. Disconnect any luminaire safety cable assemblies. Any damage resulting from the removal and/or transportation of the lighting luminaire and associated hardware, shall be repaired or replaced in kind. The Engineer will be the sole judge to determine the extent of damage and the suitability of repair and/or replacement. The removal of pole mounted luminaries shall include the luminaries, lamps and associated hardware and appurtenances.

<u>Salvage.</u> When indicated, luminaries, and all associated hardware and appurtenances shall remain the property of the Department and shall be delivered to a Department facility within the District 1 and unloaded and stacked there, as directed by the Engineer. Wood blocking, banding, or other appurtenant items required for proper stacking and protection shall be included. Luminaires shall be removed, boxed in new containers, approved by the Engineer, and delivered to a Department facility, as designated by the Engineer. The contractor shall call IDOT EMC at (708) 524-2145 to schedule the delivery date and location.

IDOT DISTRICT 1 LUMINAIRE PERFORMANCE TABLE 1
ROADWAY UNDERPASS LIGHTING
FOR SIDEWALK

GIVEN CONDITIONS				
ROADWAY DATA	Pavement Width	10	(ft)	
	Number of Lanes	N/A		
	I.E.S. Surface Classification		R3 .07	
	Q-Zero Value			
MOUNTING DATA	Mounting Height	12	(ft)	
	Tilt	0-60	(degrees)	
	Orientation		Perpendicular to sidewalk	
	Set-Back from Edge Of Pavement	0	(ft)	
LUMINAIRE DATA	Lumens	7,250	7,250 – 8,875	
	Total Light Loss Factor	0.65		
LAYOUT DATA	Spacing	55	(ft)	
	Configuration	One	One Sided	
	Luminaire Overhang over EOP	0	(ft)	

**NOTE**: Variations from the above specified I.E.S. distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

#### **PERFORMANCE REQUIREMENTS**

**NOTE**: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ROADWAY	Average Illuminance, E <sub>AVE</sub>	0.5	fc (min.)
LUMINANCE	Uniformity Ratio, E <sub>AVE</sub> /E <sub>MIN</sub>	4.0	(Max)



Revise Article 1066.04 to read:

"Aerial Cable Assembly. The aerial cable shall be an assembly of insulated aluminum conductors according to Section 1066.02 and 1066.03. Unless otherwise indicated, the cable assembly shall be composed of three insulated conductors and a steel reinforced bare aluminum conductor (ACSR) to be used as the ground conductor. Unless otherwise indicated, the code word designation of this cable assembly is "Palomino". The steel reinforced aluminum conductor shall conform to ASTM B-232. The cable shall be assembled according to ANSI/ICEA S-76-474."

Revise the second paragraph of Article 1066.05 to read:

"The tape shall have reinforced metallic detection capabilities consisting of a woven reinforced polyethylene tape with a metallic core or backing."

# REMOVE EXISTING CONDUIT ATTACHED TO STRUCTURE

<u>Description</u>. This work shall consist of the removal and disposal of existing conduits, cables. and junction boxes attached to structure and all associated mounting hardware. This work shall be performed in accordance with the applicable portions of Article 842.03 of the Standard Specifications. Existing electric cable shall be removed from conduit and shall become the property of the Contractor.

#### Method of Measurement.

This work will be measured in feet of existing conduit in place. Measurements will be made in straight lines between changed in direction and to the center of equipment and boxes. Junction boxes attached to structure and cable in conduit will not be measure for payment.

#### Basis Of Payment.

Removal of existing conduit will be paid for at the contract unit price per foot for REMOVE EXISTING CONDUIT ATTACHED TO STRUCTURE.

# LIGHTING UNIT COMPLETE, SPECIAL

<u>Description</u>. This work shall consist of providing and installing light poles with davit arm. This work shall include equipment, hardware, assembly, mounting pad, wiring, mounting, testing, grounding, labor, and other miscellaneous work necessary to complete fully operational installation of the bridge mounted light pole. This work shall be done in accordance with Section 830 of the Standard Specifications as shown on the plans and as specified herein.

#### Basis Of Payment.

The cost of the LIGHTING UNIT COMPLETE, SPECIAL shall be paid for at the Contract Unit Price per EACH, which price includes all labor, material, and equipment necessary to complete this work.

# REMOVAL OF EXISTING NAVIGATION LIGHTING UNIT, NO SALVAGE (DSE)

<u>Description</u>. This work shall consist of removal of existing bridge navigation warning lights with all associated mounting components and hardware as shown on the plans. Existing navigation lights shall remain fully operational on a continuous basis throughout the project until temporary or permanent navigation lighting becomes fully operational. Existing navigation lights and all associated components shall become the property of the Contractor and shall be disposed of according to Article 202.03.

## Basis Of Payment.

This work will be paid for at the contract unit price per Each for REMOVAL OF WATERWAY OBSTRUCTION WARNING LUMINAIRE which shall be payment in full for performing the work specified herein.

# REMOVAL OF UNDERPASS LIGHTING UNIT, NO SALVAGE (DSE)

Description. This work shall consist of the removal and disposal of existing underpass lighting units.

## CONSTRUCTION REQUIREMENTS

#### Removal.

Removal of the existing underpass lighting units shall be performed in accordance with Articles 202.03, 842.02 and 842.03 of the Standard Specifications, as applicable.

#### Method of Measurement.

This work will be measured for payment according to Article 842.05 of the Standard Specifications.

#### Basis Of Payment.

This work will be paid for at the contract unit price each for REMOVAL OF UNDERPASS LIGHTING UNIT, NO SALVAGE which shall be payment in full for the work specified herein.

# **REMOVE AND RE-ERECT EXISTING BRIDGE RAIL**

### Description.

This work consists of removing, storing, inspecting, repairing and re-erecting existing rail sections and rail posts at the locations indicated on the plans and according to the plan details. All work associated with this specification shall be according to applicable requirements of Section 509 of the Standard Specification and as directed by the Engineer.

The removal and disposal of any existing members, bolts or rivets necessary for the installation of the new members as shown in the plans shall be included in this item. Burning of existing rivets will only be allowed near steel surfaces which are to be removed and discarded. Burning of existing rivets will not be allowed for members to remain in place or members that are to be removed and reinstalled. When burning of rivets is not allowed, the head of the rivet shall be sheared off and the shank driven or drilled out. Extreme care shall be taken while removing the rivets so as not to damage the existing structural steel which is to remain. Welds to be removed by grinding shall be removed completely without removing any of the adjacent base metal. Grinding shall be done parallel to the direction of primary stress. All damage to existing members which are to remain shall be repaired or the member replaced to the satisfaction of the Engineer. Repair or replacement of damaged members shall be at the Contractor's expense. All costs of removal and disposal or reinstallation shall be included in the costs of this pay item.

Surface preparation of existing steel in contact with new steel members shall be done according to Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures". The cost of this work is included in the cost of this pay item.

The existing structural steel coating contains lead. The Contractor shall take all appropriate precautions to deal with the presence of lead on this project. The cost of this work is included in a separate pay item CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1.

Basis of Payment. This work will be paid for at the contract unit price per pound for STRUCTURAL STEEL REPAIR.

## Submittals.

The Contractor shall submit to the Engineer for approval the procedures, equipment, and methods to be used for this work. The procedures and methods shall be approved before the work begins.

### Method of Measurement.

The work for LIVE LOAD BEARINGS shall include the cost of all work associated with furnishing all labor, materials, adjusting, cleaning, temporary supports and equipment, temporary operation and maintenance and equipment required including all necessary incidentals for the work herein described, and on the plans, for a complete installation of each live load bearing.

#### Basis of Payment.

This work, as herein specified, will be paid for at the contract unit price per **Lum SUM** for LIVE LOAD BEARINGS.

# COUNTERWEIGHT REPAIR MATERIALS

## Description.

This item shall consist of furnishing all labor, materials, tools and equipment required to repair the counterweight as shown on the plans. Work under this specification shall include the removal and disposal of all unsound concrete from the counterweight, installing formwork for the placement of concrete at repair locations around the counterweight, repairing the counterweight with epoxy crack injection, epoxy concrete, polymer modified Portland cement mortar, welded-wire reinforcement, and anchor bolts and applying a concrete sealer to the top of the counterweight.

#### Materials.

A. The repair material shall meet the following requirements of the Standard Specification and as noted below.

ltem	Article/Section
Polymer Modified Portland Cement Concrete (Note 1)	
Water	1002
Cotton Mats	1022.02
Protective Coat	1023
Epoxy Crack Injection	590
Epoxy Concrete (Note 2)	1025
Concrete Sealer	1026
Anchor Bolts	1006.09
Welded Wire Reinforcement	1006.10
Non-Shrink Grout	584
Reinforcement Bar	1006.10
Mechanical Bar Splicers	508.06(c)
Mechanical Bar Splicers	508.06(c)

C. Alignment of Gearing. In general, the order of assembly and alignment of bridge machinery must start with aligning pinion to existing bore and then aligning colinear. Racks are to be aligned to travel of the pinion through the angle of rotation.

All open gearing must be aligned such that backlash is within tolerance and that at least the center 80% of the face width of each pair of meshing teeth is in contact. The crossmesh must not exceed 0.010" per 6-inch face width. All open gear measurements must be submitted to the Engineer for review and approval. The measurements must include backlash, cross-mesh alignment, tooth valley gap and face contact. The type of bluing or lubricant used for face contact measurements must be submitted to the Engineer for approval prior to any measurements. The measurements must be performed at a minimum of four equally spaced positions per gear or at two location per rack segment, whichever is greater.

All parts of the machinery must be match marked for proper assembly and correct orientation. Before drilling or reaming, all parts must be adjusted to exact alignment by means of shims. Tapered shims must be provided at no additional cost only if required to provide full bearing. After final alignment and bolting, all parts must operate smoothly.

- D. Coatings. Coat threads for turned bolts with anti-seize compound before assembly with nuts to prevent corrosion or galling, and to facilitate future removal, if necessary.
- E. Edges and Corners. Round or chamfer all edges and corners of machinery parts, sheet metal work, bed plates, and fabricated supports that are exposed in the finished work. Remove all burrs or other surface defects that could be injurious to workers erecting or maintaining the bridge machinery.
- F. Personnel and Facilities. Use competent millwrights that are skilled in the type of work involved to erect and adjust the machinery. Provide them with all necessary measuring and leveling instruments, as required.
- G. Lubrication. It is the Contractor's responsibility to maintain all machinery per the lubrication chart, manufacturer's recommendations, and best practices for machinery until acceptance of the bridge machinery rehabilitation.

# COATING SYSTEMS

- A. Main Drive Operating Machinery The main drive machinery shall be painted using a three-coat system conforming to all requirements stated in Special Provision, "Cleaning and Painting Existing Steel Structures" except for the following:
  a) Site glasses.
  - b) Contact surfaces of brakes, shafts, gears, bearings, and couplings.
  - c) Name plates.

- B. All painted surfaces of the machinery components shall be cleaned to bare metal in accordance with SSPC-SP11.
- C. All unfinished machinery surfaces shall be made free of all chips, dirt, rust, scale, sand, grease, and other foreign matter by wire brushing, or other approved means as stated elsewhere.
- D. After proper surface preparation, prime all unfinished machinery surfaces with coats of primer in accordance with the requirements given under **Special Provision**, "Cleaning and Painting Existing Steel Structures". All new machinery shall be given one shop coat of primer. All rubbing surfaces on new machinery shall be protected from the elements with a corrosion preventative compound approved by the Engineer.
- E. After installation is complete, all machinery surfaces remaining exposed to the elements, except rubbing surfaces, shall be thoroughly cleaned and given two field coats of paint prepared as specified elsewhere.
- F. After completion of the operating tests and acceptance of the machinery, all accumulated oil, grease, dirt, and other foreign matter shall be solvent cleaned in accordance with SSPC-SP1 from exposed machinery surfaces, except rubbing surfaces.
- G. Nameplates on all manufacturers' components shall be readable, clean and free of all paint before acceptance of the machinery.
- H. Clean and paint all new machinery per Standard Specifications. Along with the shop drawings, submit an outline of painting materials and methods for review. Galvanize all machinery supports as outlined below in Galvanization, Section K.
- I. Shop Painting. During final preparation, blast clean all external surfaces of unfinished machinery prior to painting. Blast cleaning must comply with the requirements of SSPC-SP6, Commercial Blast Cleaning, with the following exceptions:
  - Flexible couplings
  - Reducers
  - Sleeve bearings with bushings in place
  - Electric motors
  - Brakes
  - Limit switches
  - Other equipment with shaft seals
  - The equipment excepted by the Engineer

Clean the excepted machinery or equipment with solvent and hand tools to meet the requirements of SSPC-SP2, Hand Tool Cleaning as depicted in SSPC VIS 1.

## Contract Requirements.

General

- A. Except for periods when the bridge Is to be temporarily supported, as specified in the Contract documents, keep the spans operable.
- B. Notify the Engineer a minimum of 28 days prior to the date that is anticipated for any balance testing.
- C. The Contractor shall take inventory and document the weight and location of all existing balance material that is within the counterweight pockets and at the toe of each leaf. Results of the inventory shall be submitted as mentioned in this special provision.
- D. Shop drawings for steel fabrication shall show the weight of each component to be added to the bridge and the distance measured in the x (longitudinal) and y (vertical) directions relative to the center of roll.
- E. Initial balance calculations shall be prepared prior to fabrication and construction based on the measured balance condition and approved shop drawings and material tests, and shall be submitted to the Engineer for review and approval.
- F. No construction or movement of the leaves shall proceed on the modification of counterweight blocks until the Contractor's balance calculations, drawings, and/or final details have been reviewed and approved by the Engineer.
- G. Review of the Balance Plan, Balance Reports, balance calculations, counterweight details, and quantity and location of balance materials by the Engineer, shall not relieve the Contractor of the entire responsibility for securing such balance. All work shall be done in accordance with **Special Provision**, "Structural Assessment Reports for Contractor Means and Methods".
- H. The Contractor shall measure the imbalance moment and determine the location of the leaf center of gravity a minimum of three times:
  - Initial Prior to performing any work that would significantly alter the balance of the leaves the Contractor shall perform a balance test on each bascule leaf as outlined elsewhere in this special provision. The Contractor shall submit to the Engineer a Balance Report for the initial measured span imbalance and predicted balance change for the work involved in the subsequent phase of construction.