

June 4, 2018

SUBJECT: FAP Route 331 (IL 13) Project NHPP-0331(075) Section (5-3)R-1,N-1,B-5,BR-1,B-6,BR-2 Jackson County Contract No. 78295 Item No. 89, June 15, 2018 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 Table of Contents to the Special Provisions
- 2. Revised pages 12-14 of the Special Provisions
- 3. Added page 12A to 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,

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

Setter aluchbyon AE.

By: Ted B. Walschleger, P. E. Engineer of Project Management

cc: Jeffery Keirn, Region 5, District 9; D. Carl Puzey; Tim Kell

CWR/cr

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**Materials:** Railing posts, decorative railing panels, cross railing, splices, anchor devices, bent plates, and accessories shall be painted following the appropriate paint system requirements indicated for structural steel Section 506. The coating system for structural steel and metal surfaces shall be an IDOT prequalified manufacturer such as Carboline or Tnemec.

Decorative panel inserts shall consist of laser or water jet cut perforated metal panels. Support sizes, structural connections and locations shall be coordinated with the railing components. Shop drawings, including plan elevations, sections and details indicating materials, components sizes, dimensions, tolerances, hardware, fasteners, finishes, options, accessories and installation methods, with details of attaching metal panels to supports shall be provided. Fabrication shall be coordinated such that the decorative panels shall conform to guaranteed openings in the railing frame. The manufacturer of laser or water jet cut decorative metal panels shall have completed projects of similar scope for more than five (5) years and shall meet all of the specification requirements. The manufacturer must be capable of producing the design intent of the panels as shown in the drawings while meeting structural and local code requirements. Incompatible materials shall be separated to prevent galvanic corrosion. Panel thickness shall be sufficient to meet structural loading requirements, but not be less than  $\frac{1}{4}$ " thick. The manufacturer shall use the conceptual image for the panels shown in the drawings to produce a design for approval by the Engineer as part of the shop drawing submittal process. The manufacturer shall limit opening sizes to meet local code requirements and ensure the panel meets structural requirements. The manufacturer shall provide two panel designs, as shown on the drawings.

Color for all bridge fence railing components shall be determined by the District. Before beginning fabrication, the Contractor shall submit samples to the Engineer according to Sections 505, 506 and 509 at least 30 days prior to beginning shop coating and painting of the railing posts, railing, splices, anchor devices, bent plates and accessories. The contractor shall submit for the Engineer's review and acceptance up to three mock up panels for approval demonstrating the color for the Decorative Steel Railing. The mock up panel shall consist of a minimum of two posts, rail panel, anchor devices, bent plates, and accessories. Panel size shall be approximately 3'-1" high by 6'-10" wide (width of one decorative railing panel). During manufacture, transport and erection, Decorative Steel Railing shall be protected from scratching, denting or other defects that may affect durability or appearance.

**Method of Measurement.** This work will be measured for payment in place in linear feet for DECORATIVE STEEL RAILING. The measurement will be the overall length along the top longitudinal railing member through all posts and gaps.

Ducks



Deer



Added 6/4/18

## APPROACH SLAB REPAIR

Effective: March 13, 1997

Revised: September 25, 2009

## Description.

This work shall consist of hot-mix asphalt surface removal, when required, the removal and disposal of all loose and deteriorated concrete and the replacement with new concrete to the original top of approach slab. The work shall be done according to the applicable requirements of Sections 501, 503 and 1020 of the Standard Specifications and this Special Provision.

Approach slab repairs will be classified as follows:

- (a) Partial-Depth. Partial-depth repairs shall consist of removing the loose and unsound approach slab concrete, disposing of the concrete removed and replacing with new concrete. The removal may be performed by chipping with power driven hand tools or by hydro-equipment. The depth shall be measured from the original concrete surface, at least 3/4 inch (20 mm) but not more than 5 1/2 inches (140 mm) unless otherwise specified on the plans.
- (b) Full-Depth. Full-depth repairs shall consist of removing concrete full-depth of the slab, disposing of the concrete removed, and replacing with new concrete to the original approach slab surface. The removal may be performed with power driven hand tools or by hydro-equipment.

## Materials.

All materials shall be according to Article 1020.02.

Portland cement concrete for partial and full-depth repairs shall be according to Section 1020. Class PP-1, PP-2, PP-3, or PP-4 concrete shall be used at the Contractor's option.

Grout. The grout for bonding new concrete to old concrete shall be proportioned by mass (weight) and mixed at the job site, or it may be ready-mixed if agitated while at the job site. The bonding grout shall consist of one part portland cement\_and one part\_sand, mixed with sufficient water to form a slurry. The bonding grout shall have a consistency allowing it to be scrubbed onto the prepared surface with a stiff brush or broom leaving a thin, uniform coating that will not run or puddle in low spots. Grout that can not be easily and evenly applied or has lost its consistency may be rejected by the Engineer. Grout that is more than two hours old shall not be used.

### Equipment:

The equipment used shall be subject to the approval of the Engineer and shall meet the following requirements:

- (a) Surface Preparation Equipment. Surface preparation and concrete removal equipment shall comply with the applicable portions of Section 1100 of the Standard Specifications and the following:
  - (1) Sawing Equipment. Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth.

- (2) Blast Cleaning Equipment. The blast cleaning may be performed by wet sandblasting, high-pressure waterblasting, abrasive blasting, or other methods approved by the Engineer. Blast cleaning equipment shall be capable of removing rust and old concrete from exposed reinforcement bars. Oil traps will be required.
- (3) Power-Driven Hand Tools. Power-driven hand tools will be permitted including jackhammers lighter than the nominal 45 pound (20 kg.) class. Chipping hammers heavier than a nominal 15 pound (6.8 kg.) class shall not be used for removing concrete from below any reinforcing bar for partial depth repairs or final removal at the boundary of full-depth repairs. Jackhammers or chipping hammers shall not be operated at an angle in excess of 45 degrees measured from the surface of the slab.
- (4) Hydro-Scarification Systems. The hydro-scarification equipment shall consist of filtering and pumping units operating with a remote-controlled robotic device. The equipment may use river, stream or lake water. Operation of the equipment shall be performed and supervised by qualified personnel certified by the equipment manufacturer. Evidence of certification shall be presented to the Engineer. The equipment shall be capable of removing concrete to the specified depth and removing rust and concrete particles from exposed reinforcing bars. Hydro-scarification equipment shall be calibrated before being used and shall operate at a minimum of 18,000 psi (124 MPa).
- (b) Concrete Equipment: Equipment for proportioning and mixing the concrete shall comply with the applicable requirements of Section 1103 of the Standard Specifications.
- (c) Placing and Finishing Equipment: Placing and finishing equipment shall be according to Article 1103.17 of the Standard Specifications. Adequate hand tools will be permitted for placing and consolidating concrete in the patch areas and for finishing small patches.

### **Construction Requirements:**

Sidewalks, curbs, drains, reinforcement and/or existing transverse and longitudinal joints which are to remain in place shall be protected from damage during removal and cleaning operations. All damage caused by the Contractor shall be corrected, at the Contractor's expense, to the satisfaction of the Engineer.

The Contractor shall control the runoff water generated by the various construction activities in such a manner as to minimize, to the maximum extent practicable, the discharge of construction debris into adjacent waters, and shall properly dispose of the solids generated according to Article 202.03. Runoff water will not be allowed to constitute a hazard on adjacent or underlying roadways, waterways, drainage areas or railroads nor be allowed to erode existing slopes.

(a) Hot-Mix Asphalt Surface Removal.

The hot-mix asphalt surface course shall be removed and disposed of according to applicable portions of Articles 440.04 and 440.06 of the Standard Specifications. If the overlay contains asbestos fibers, removal shall be according to the Special Provision for "Asbestos Waterproofing Membrane or Asbestos Bituminous Concrete Surface Removal". Removal of the hot-mix asphalt surface by the use of radiant or direct heat will not be permitted.