



Andy Beshear  
GOVERNOR

## TRANSPORTATION CABINET

200 Mero Street  
Frankfort, Kentucky 40601

Jim Gray  
SECRETARY

October 20, 2023

CALL NO. 200  
CONTRACT ID NO. 232953  
ADDENDUM # 2

Subject: Marshall County, 079GR23M050  
Letting October 26, 2023

- (1) Revised - Special Notes - Pages 23-27A, 42-42, 49-53, 60 & 62 of 149
- (2) Revised - Material Summary - Pages 100-100a of 149
- (3) Revised - Proposal Bid Items - Pages 147-149 of 149
- (4) Revised Plans Sheets from Project Related Information S01A, S01B, S12, S20 and S29

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

Rachel Mills,

A handwritten signature in black ink that reads "Rachel Mills".

Rachel Mills, P.E.  
Director  
Division of Construction Procurement

RM:mr  
Enclosures



## SPECIAL NOTE FOR STEEL REPAIR

### I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways 2019 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Plans. Section references are to the Standard Specifications.

This work consists of the following:

1. Furnish all labor, materials, tools, equipment, and incidental items necessary to complete the work.
2. Provide safe access to the bridge, in accordance with Section 107.01.01, for workers to complete the construction and for the Engineer to approve the work.
3. Contain all debris.
4. Prepare surfaces.
5. Install steel repairs in accordance with this note and the attached Contract Plans.
6. Clean and Paint the structural steel.
7. Any other work as specified as part of this contract.

### II. MATERIALS

**A. Structural Steel.** See Section 812 and the attached Contract Plans.

**B. High Strength Bolts.** See Section 813 and the attached Contract Plans.

**C. Smooth Metal Pipe.** See Section 810.05 and the attached Contract Plans.

### III. CONSTRUCTION

**A. Locate Repairs.** Prior to beginning the steel repairs, provide safe access to all steel repair locations, in accordance with Section 107.01.01, for the Engineer and Contractor to confirm or adjust the number of repairs.

**B. Contain all Debris.** Care shall be taken to contain and collect all debris. The Engineer shall approve the Contractor's containment/collection plan before work commences.

**C. Surface Preparation.** Wherever new steel is to be in contact with existing steel, clean and prime the existing surface in accordance with the "Special Note for Painting Structural Steel Repairs".

**D. Install Steel Repairs.** Install new steel repairs as specified in the attached Contract Plans, in accordance with the Specifications and as specified in this note:

- i. Drill Crack Arrest Hole.** At the locations shown in the attached framing plan, identify the tip of the crack using Magnetic Particle testing or an approved equivalent. Mark the tip of the crack with a center punch. Drill a 2” diameter hole using an annular drill bit ensuring that the tip of the crack is removed. If crack is in the weld material, drill arrest hole so that the crack tip is captured and at least 1/8” of the weld is intersected. If the hole does not extend deep enough into the weld, use a grinder and rotary burr bit to grind from the inside of the hole into the weld until the hole is extended sufficiently while maintaining a round and gradual profile. No more than two existing bolts in the floorbeam top flange connection may be removed at a time to facilitate the drilling of the crack arrest hole. All bolts removed shall be replaced with new high strength bolts per Section J of this note. After drilling, grind the surfaces around the holes smooth with an 80-100 grit sandpaper, or finer. Paint the repair area and touch up any painted areas damaged during repair operations in accordance with the “Special Note for Painting Steel Repairs” and as directed by the Engineer.
- ii. Floor Beam Top Flange Cope.** At the locations shown in the attached framing plan, use a thermal cutting process to modify the top flange cope and install web stiffening angles. Work shall be performed as specified in the attached Contract Plans and in accordance with the Specifications. Coat the repair area and touch up any painted areas damaged during repair operations in accordance with the “Special Note for Painting Steel Repairs” and as directed by the Engineer.
- iii. Tri-Axial Constraint Retrofit.** Modify tri-axial constraint details as specified in the attached Contract Plans and in accordance with the Specifications. Coat the repair area and touch up any painted areas damaged during repair operations in accordance with the “Special Note for Painting Steel Repairs” and as directed by the Engineer.
- iv. Girder Weld Crack Repair.** Perform girder weld crack repairs as specified in the attached Contract Plans and in accordance with the Specifications. Coat the repair area and touch up any painted areas damaged during repair operations in accordance with the “Special Note for Painting Steel Repairs” and as directed by the Engineer.
- v. Inspection Catwalk Repairs.** Remove and replace heavily corroded walkway support channels and walkway connection bolts. Work shall be performed as specified in the attached Contract Plans and in accordance with the Specifications. Touch up painted areas damaged during repair operations in accordance with the “Special Note for Painting Structural Steel Repairs” and as directed by the Engineer.
- vi. Stringer Bearing Anchor Bolt Replacement.** Remove and replace the stringer bearing anchor bolts as specified in the attached Contract Plans and in accordance with the Specifications. Touch up painted areas damaged during repair operations in accordance with the “Special Note for Painting Structural Steel Repairs” and as directed by the Engineer.

- vii. Steel Diaphragm Replacement.** Repair the steel diaphragms by removing and replacing the existing diaphragms as specified in the attached Contract Plans and in accordance with Specifications. Newly installed diaphragms shall be installed with the top flange in contact with the bottom of the reinforced concrete deck. Touch up painted areas damaged during repair operations in accordance with the “Special Note for Painting Structural Steel Repairs” and as directed by the Engineer.
  - viii. Deck Drain Flange Gasket Replacement.** At the locations shown in the attached Contract Plans, remove and replace corroded deck drain bolts while installing the specified gasket. Touch up painted areas damaged during repair operations in accordance with the “Special Note for Painting Structural Steel Repairs” and as directed by the Engineer.
  - ix. Install High Strength Bolt.** At the locations identified in the attached framing plan, install high strength bolts in locations as specified by the attached Contract Plans and as directed by the Engineer. Bolts shall be pretensioned per the Specifications. Touch up painted areas damaged during repair operations in accordance with the “Special Note for Painting Structural Steel Repairs” and as directed by the Engineer.
  - x. Bird Screen.** At the locations shown in the attached Contract Plans and as directed by the Engineer, install bird screens. Touch up painted areas damaged during repair operations in accordance with the “Special Note for Painting Structural Steel Repairs” and as directed by the Engineer.
  - xi. Junction Box Cover Replacement.** At the locations shown in the attached Contract Plans and as directed by the Engineer, install new junction box covers.
  - xii. Railing Repair.** At the locations shown in the attached Contract Plans, remove and replace corroded steel railing. Paint the railing in accordance with the “Special Note for Painting Structural Steel Repairs” and as directed by the Engineer.
  - xiii. Wire Rope Suspender / Hanger Modification.** At the location shown in the attached Contract Plans and as directed by the Engineer, modify the wire rope suspenders and hangers. Touch up painted areas damaged during repair operations in accordance with the “Special Note for Painting Structural Steel Repairs” and as directed by the Engineer.
- E. Clean and Paint Structural Steel.** All structural steel shall be cleaned and painted in accordance with the “Special Note for Bridge Cleaning and Painting.”
- F. Sequencing.** All work required for steel repairs specified in this Contract must be completed prior to any cleaning and painting production operations commencing in that adjacent area.

#### IV. MEASUREMENT

- A. Drill Holes in Steel Members.** The Department will measure the quantity as the number of Crack Arrest Holes drilled in floorbeam webs as designated by the attached Contract Plans. This work shall be bid with the contingency that quantities noted in the Contract Plans may be modified by the Engineer.
- B. Floor Beam Retrofit.** The Department will measure the quantity as the number of floorbeam top flange cope retrofit locations as designated by the attached Contract Plans.
- C. Steel Repair *Tri-Axial Constraint Retrofit*.** The Department will measure the quantity as the number of tri-axial constraint retrofit locations as designated by the attached Contract Plans. This work shall be bid with the contingency that quantities noted in the Contract Plans may be modified by the Engineer.
- D. Girder Repair.** The Department will measure the quantity as the number of weld repair locations. The locations shall be designated by the attached Contract Plans. This work shall be bid with the contingency that quantities noted in the Contract Plans may be modified by the Engineer.

- E. Catwalk Repair.** The Department will measure the quantity as one lump sum to perform the catwalk repairs, including bolt replacement, as specified in the attached Contract Plans. The quantity for each catwalk repair as detailed in the Contract Plans to be considered for the scope of the catwalk repair is:

Repair #	079B00118R	079B00118L
Catwalk Repair #1	2	2
Catwalk Repair #2	15	15

- F. Bolt/Rivet Replacement.** The Department will measure the quantity as the number of high strength bolts to replace the missing high strength bolt locations, stringer bearing anchor bolt locations, and rail post anchors as designated by the attached Contract Plans. This work shall be bid with the contingency that quantities noted in the Contract Plans may be modified by the Engineer.
- G. Replace Steel Diaphragm.** The Department will measure the quantity as the number of steel diaphragms replaced as designated by the attached Contract Plans.
- H. Deck Drain Flange Gasket Replacement.** The Department will measure the quantity as the number flange gaskets replaced. This work shall be bid with the contingency that quantities noted in the Contract Plans may be modified by the

Engineer.

- I. Bird Screen.** The Department will measure the quantity as the number of arch tie bird screens installed as designated by the attached Contract Plans. This work shall be bid with the contingency that quantities noted in the Contract Plans may be modified by the Engineer.
- J. Junction Box Repair.** The Department will measure the quantity as the number of junction box covers installed. This work shall be bid with the contingency that quantities noted in the Contract Plans may be modified by the Engineer.
- K. Steel Repair Railing Repair.** The Department will measure the quantity as the number of steel rail repairs installed as detailed in the attached Contract Plans.
- L. Steel Repair Cable Anchorage Retrofit.** The Department will measure the quantity as the number of cable end anchorages retrofitted. "Each" cable end anchorage retrofit involves the installation of four (4) HSS Cable Restraints as designated by the attached Contract Plans.

## V. PAYMENT

- A. Drill Holes in Steel Members (24409EC).** Payment at the contract unit price per "Each" completed and accepted repair is full compensation for drilling the crack arrest hole and all incidental items necessary to complete the appropriate work.
- B. Floorbeam Retrofit (24422EC).** Payment at the contract unit price per "Each" completed and accepted repair is full compensation for the floorbeam top flange cope retrofit and all incidental items necessary to complete the appropriate work.
- C. Steel Repair Tri-Axial Constraint Retrofit (24879EC).** Payment at the contract unit price per "Each" completed and accepted repair is full compensation for the tri-axial constraint retrofit, and all incidental items necessary to complete the appropriate work.
- D. Girder Repair (23070NN).** Payment at the contract unit price per "Each" completed and accepted repair is full compensation for the girder weld crack repair and all incidental items necessary to complete the appropriate work.
- E. Catwalk Repair (23220EC).** Payment at the contract unit price per "Lump Sum" is full compensation for all catwalk repairs and all incidental items necessary to complete the appropriate work.
- F. Bolt/Rivet Replacement (21650NN).** Payment at the contract unit price per "Each" completed and accepted repair is full compensation for the replacement of the missing high strength bolt locations, stringer bearing anchor bolt locations, rail post anchors, and all incidental items necessary to complete the appropriate work.
- G. Replace Steel Diaphragm (23173EC).** Payment at the contract unit price per "Each" completed and accepted repair is full compensation for the replacement of the deteriorated steel diaphragms, and all incidental items necessary to complete the appropriate work.

- H. Deck Drain Retrofit (24692EC).** Payment at the contract unit price per “Each” completed and accepted repair is full compensation for the replacement of the deck drain bolts, the installation of the rubber flange gasket, and all incidental items necessary to complete the appropriate work.
- I. Portal Modification (Arch Tie Bird Screen Installation) (24253EC).** Payment at the contract unit price per “Each” completed and accepted repair is full compensation for the fabrication, installation, and all incidental items necessary to install arch tie bird screens as specified by this note and on the attached Contract Plans.
- J. Junction Box Repair (24933EC).** Payment at the contract unit price per “Each” completed and accepted repair is full compensation for the fabrication, installation, and all incidental items necessary to complete the appropriate work.
- K. Steel Repair *Railing Repair* (24879EC).** Payment at the contract unit price per “Each” completed and accepted repair is full compensation for the steel railing repairs, and all incidental items necessary to complete the appropriate work.
- L. Steel Repair *Cable Anchorage Retrofit* (24879EC).** Payment at the contract unit price per “Each” completed and accepted repair is full compensation for the wire rope suspender/hanger retrofit, and all incidental items necessary to complete the appropriate work.

The Department will consider payment as full compensation for all work required.

## SPECIAL NOTE BRIDGE CLEANING AND PAINTING

### 1. DESCRIPTION.

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, (current editions), this Note and Attached Detailed Drawings. Section references are to the Standard Specifications. This work consists of the following: (1) Furnish all labor, materials, tools, and equipment, (2) Cleaning and Painting and (3) Any other work specified as part of this contract.

### 2. CONSTRUCTION.

#### A. Structural Steel.

All structural steel shall be cleaned and painted in accordance with the Kentucky Transportation Cabinet, Department of Highways Standard Specifications for Road and Bridge Construction (current edition) Section 614.

All structural steel shall be Abrasive Blast Cleaned and Painted. See Section 614.03.09 for Abrasive Blast Cleaning and Painting.

#### B. Structural Steel Cables.

##### Cleaning.

**Contrary to Section 614.03.09** abrasive blast and clean all structural steel cables to a SSPC SP 6/NACE 3 "Commercial Blast Cleaning". Provide abrasive that meets SSPC AB-1 (Mineral and Slag Abrasives), Type I, Grade 2 that is sized to produce an anchor pattern profile height of 1 mils to 2.5 mils.

##### Painting.

**Contrary to Section 614.03.09** paint all structure steel cables with the following paint system from Sherwin Williams.

##### Prime:

One Coat Macropoxy® 920 Pre-Prime Penetrating Epoxy – B58T101/B58V10.

##### Intermediate:

One Coat Epoxy Mastic Aluminum II – B62S100/B60V100 at 4 to 6 mils dft.

##### Finish:

One Coat Acrolon 218 HS DOT Acrylic Polyurethane - at 3 to 6 mils dft.

**3. PRIMER FOR STEEL REPAIRS.** The primer required for the faying surfaces in the repair specification shall be from the Class I paint system listed on the Division of Material's list of approved products.

**4. SEQUENCING.** All work required for bridge repairs (not paint related) specified in this must be completed prior to any cleaning and painting production operations commence in that adjacent area.



**5. RECYCABLE MATERIAL.** Contrary to Section 614.03.09 section 5 transport and recycling the Contractor shall send all recyclable debris and complete their supplier profile form to the recycler listed below instead of the supplier profile form from the Division of Construction's website given.

The recycler is: The Doe Run Company: Resource Recycling Division, HC1 Box 1395, HWY 10K, Boss, MO 65440, phone (573) 626-4813, fax (573) 626-3304, email [www.doerun.com](http://www.doerun.com). The contractor will complete the Doe Run Supplier Profile Form and provide copies of it to both Doe Run and the Engineer prior to transporting the surface preparation debris.

The Contractor shall confirm that Doe Run will be accepting the recyclable debris before preparing their bid. Should Doe Run not be accepting the recyclable debris, the Contractor shall be responsible for classification of the recyclable debris. If the recyclable debris is determined to be hazardous material, the Contractor shall dispose of the material as addressed in section 614.03.09 under "**Hazardous Waste**". If the recyclable debris is determined to be non-hazardous material, it shall be disposed of as construction debris as addressed in section 614.03.09 under "**Industrial Waste**".

**6. DAMAGE TO STRUCTURE.**

The Contractor shall bear all responsibility and expense for any and all damage to the structure during the painting work, even to the removal and replacement of a fallen span, should the fallen span result from the Contractors actions.

## **SPECIAL NOTE FOR TRAFFIC CONTROL**

All lane closures on this project shall be in accordance with Kentucky Department of Highways Standard Drawings No. **TTC-115, TTC-120, TTC-135, TTD-120, TTD-130, RBM-115 and the FHWA Manual for Uniform Traffic Control Devices (current editions) unless otherwise specified.** Lane closures should be used only when absolutely necessary and kept to the shortest duration possible in order to minimize disruption to the traveling public. No work will be conducted over unprotected traffic at any location. At the discretion of the Engineer, lane closures may be restricted on holiday weekends. The contractor must submit a traffic control plan for review and approval by the KYTC Engineer 14 days prior to the Pre-Construction Conference.

### **1. EMERGENCY REPAIRS AND COORDINATION WITH OTHER CONTRACTS**

In the event it becomes necessary to make emergency repairs at this project by state forces or by other outside contractors, the (painting) contractor agrees to alter his work pattern as directed by the engineer so as not to interfere with the emergency work. The contractor shall be required to coordinate his efforts with those of any other contractor in the construction area.

### **2. TRAFFIC CONTROL DEVICES**

The contractor will be required to furnish all traffic control devices whenever his operations endanger or interfere with vehicular traffic as determined by the engineer. The contractor shall furnish any additional traffic control devices necessary to protect traffic and his workmen. Any costs associated with the added traffic control devices (including arrow boards) shall be incidental to the contract lump sum amount for "maintain and control traffic." Placement of all devices for lane closures shall start and proceed in the direction of flow of traffic. Removal of devices shall start at the end of the construction area and proceed toward oncoming traffic. The contractor shall provide for the installation of all necessary traffic control devices before beginning work and their immediate removal as soon as work is suspended or completed. During the fully operational periods, when no lane closures are permitted, all equipment shall be totally removed from the job site. Traffic control signs shall be removed or covered if lane closure is not in place.

### **3. VEHICLES**

The contractor's vehicles shall always move with and not across or against the flow of traffic. Vehicles shall enter or leave work areas in a manner that will not be hazardous to or interfere with normal roadway traffic. Vehicles shall not park or stop except within designated work areas. Personal vehicles will not be permitted to park within the state right-of-way. The contractor's vehicles will be prohibited from crossing the roadway and all pedestrian movement of the contractor's personnel on the roadway will be limited to within the closed work areas.

### **4. POLICE OFFICER WITH VEHICLE**

A "police officer with vehicle" will be used for installation of and removal of all lane closures and deployment of rolling roadblocks. The Contractor will be responsible for all coordination with the local law enforcement and the KYTC engineer. Payment for this item will be included in the lump sum bid for Maintain and Control Traffic.

## **5. TRUCK MOUNTED ATTENUATOR**

Any lane or shoulder closure will include the use of a Truck Mounted Attenuator placed between oncoming traffic and equipment or vehicles.

## **6. MINIMUM VERTICAL AND HORIZONTAL CLEARANCES**

A minimum vertical clearance of **16'-6"** shall be maintained for any rigging and containment materials left in place above traffic. This minimum vertical clearance must be signed. The Contractor shall notify the following for height and width restrictions when any rigging and containment is in place with minimal clearance:

**Kentucky Transportation Cabinet's Department of Motor Carriers Oversize Permits Section:**

<https://drive.ky.gov/motor-carriers/Pages/OWOD-Services.aspx>

## **7. ROLLING ROAD BLOCKS**

Rolling roadblocks will be permitted during the hours 12:00 AM to 4:00 AM for rigging and containment installation/removal. When using rolling road blocks the Contractor shall employ one vehicle per lane including ramps as necessary, in one direction at a predetermined time and predetermined speed as directed by the Engineer. There shall be no stopping of the rolling roadblock. Prior to instituting such the roadway ahead shall be cleared of traffic as directed by the Engineer. The area of influence shall be sealed off (all on-ramps or access intersection closed) by use of flaggers and/or Contractor's vehicles. The purpose is to seal off a certain work area and/or work function as designated in the notes so that the Contractor can perform certain work without any hazard to traffic. The rolling roadblock shall prevent any other vehicles at a slower speed than normal and forcing all vehicles to follow behind the Contractor's vehicles at their predetermined speed. Rolling roadblock will be used during specified hours for each bridge as directed by the Engineer. See links below for additional requirements.

**Kentucky Transportation Cabinet's Permits Branch:**

**Form-TC 99-210 Rolling Road Block for Permitted Work Full Controlled Highways**

<https://transportation.ky.gov/OrganizationalResources/Forms/TC%2099-210.pdf>

## **8. STAGING IN THE MEDIAN AND RIGHT OF WAY AREAS**

The Contractor shall be responsible for any base material to park equipment on in median and right of way areas. This material must be removed and site restored to original condition as directed by the Engineer upon completion of the project.

## **9. TEMPORARY CONCRETE BARRIERS.**

All long term lane closures specified shall require temporary Concrete Barrier Walls Type 9T (**NO ALTERNATIVES ALLOWED**). Temporary Concrete Barriers shall remain the Contractor's property and shall be removed from the construction site upon completion of construction.

## **10. VEHICULAR PLATFORM USE.**

Should the use any vehicular platform methods and equipment to complete work with specified maintenance of traffic, the Contractor must submit their deployment plan to the using vehicular platform with the required traffic control plan submittal.

## **11. TEMORARY LANE CLOSURES.**

Temporary Shoulder and Single closures will be permitted on I-24 before and after the Phase 1 lane closures, Phase 2 lane closures, and Phase 3 lane shift are in place for rigging and containment installation and repair work that can be accessed. All closures shall be in accordance with Standard Drawing TTC-115. The closures will be determined by the Engineer. All closures shall be removed when not working. Contrary to section 112, lane closures will NOT be measured for payment, but are considered incidental to "Maintain and Control Traffic".

## **12. MOT PHASE 1 – 20 CALENDAR DAYS MAXIMUM DURATION.**

Remove centerline and edgeline striping that does not conform to the traffic control scheme in use, or as directed by the Engineer. Removal of striping shall be considered incidental to the item "Maintain and Control Traffic".

Construct lane closure in the inside lane of the eastbound and westbound directions, as detailed in the plans and in accordance with the MUTCD and KYTC Standard Drawings. Concrete Barrier wall shall comply to all Standards Drawings and Specifications.

## **13. MOT PHASE 2 – 20 CALENDAR DAYS MAXIMUM DURATION.**

Remove centerline and edgeline striping that does not conform to the traffic control scheme in use, or as directed by the Engineer. Removal of striping shall be considered incidental to the item "Maintain and Control Traffic".

Construct lane closure in the outside lane of the eastbound and westbound directions, as detailed in the plans and in accordance with the MUTCD and KYTC Standard Drawings. Concrete Barrier wall shall comply to all Standards Drawings and Specifications.

## **14. TEMORARY LANE CLOSURES FOR MOT PHASE 3.**

Temporary Single closures will be permitted on I-24. All closures shall be in accordance with Standard Drawing TTC-115. The closures will be determined by the Engineer. All closures shall be removed when not working. Contrary to section 112, lane closures will NOT be measured for payment, but are considered incidental to "Maintain and Control Traffic". Time restrictions for lane closures as follows:

**Week Days ~ 6:00 PM to 6:00 AM Monday-Friday**

**Weekend Days ~ No restrictions**

## **15. TRAFFIC CONTROL GENERAL NOTES.**

Except as provided herein, "Maintain and Control Traffic" shall be in accordance with the 2019 Standard Specifications and the 2020 Standard Drawings, current editions. Except for the roadway and traffic control bid items included in the project, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic". All lane closures used on the Project will be in compliance with the appropriate Standard Drawings and the Manual on Uniform Traffic Control Devices (MUTCD), current edition.

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition at the beginning of the work and maintained in like new condition until completion of the work. Traffic control devices will conform to current MUTCD specifications.

The Contractor shall reduce the speed limit to 55 MPH in accordance with Standard Drawing TTD-120. The use of Double Fine Zones may be used at the Contractor's discretion in accordance with Standard Drawing TTD-130. The extent of these areas within the project limits will be restricted to the proximity of actual work areas as determined by the Engineer. Notify the Engineer a minimum of 12 hours prior to using the double fine signs. At the beginning of the work zone, the "WARNING FINE DOUBLED IN WORK ZONE" signs will be dual mounted. At the end of the work zone, the "END DOUBLE FINE" signs will be dual mounted as well. Remove or cover the signs when the highway work zone does not have workers present for more than a two-hour period of time. Payment for the signs will be at the unit bid price for temporary signs.

## **16. SIGNS.**

Additional traffic control signs in addition to normal lane closure signing detailed on the Standard Drawings may be required by the Engineer. Additional signs needed for lane closures may include, but are not limited to, dual mounted LEFT/RIGHT LANE CLOSED 1 MILE, LEFT/RIGHT LANE CLOSED 2 MILE, LEFT/RIGHT LANE CLOSED 3 MILE, SLOWED/STOPPED TRAFFIC AHEAD. Signage for reduced speed limits and double fine work zones will be furnished, relocated, and maintained by the Contractor.

Contrary to section 112, individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged signs or signs directed to be replaced by the Engineer due to poor legibility or reflectivity will not be measured for payment.

## **17. PORTABLE CHANGEABLE MESSAGE SIGNS**

Provide portable changeable message signs (PCMS) in advance of and within the project at locations to be determined by the Engineer. If work is in progress concurrently in both directions, provide additional PCMS. Place PCMS one mile in advance of the anticipated queue at each lane closure.

As the actual queue lengthens and/or shortens, relocate or provide additional PCMS so that traffic has warning of slowed or stopped traffic at least one mile but not more than two miles before reaching the end of the actual queue. The locations designated may vary as the work progresses. The messages required to be provided will be designated by the Engineer.

The PCMS will be in operation at all times. In the event of damage or mechanical/electrical failure, the contractor will repair or replace the PCMS immediately. PCMS will be paid for once, no matter how many times they are moved or relocated. The Department WILL NOT take possession of the PCMS upon completion of the work.

Queue Protection Vehicles are not required.

## 18. PAVEMENT MARKINGS

If lane closures are in place during nighttime hours, remove or cover the lenses of raised pavement markers that do not conform to the traffic control scheme in use, or as directed by the Engineer. Replace or uncover lenses before a closed lane is reopened to traffic. No direct payment will be made for removing and replacing or covering and uncovering the lenses, but will be incidental to "Maintain and Control Traffic," lump sum.

Any striping removal (temporary or permanent) shall be removed by waterblasting. Waterblasting and removal of temporary tape will be considered incidental to the "Maintain and Control Traffic" bid item.

Temporary striping will be paid for by the appropriate bid item shown in the General Summary. Place temporary striping in accordance with Section 112, except that:

- 1) Temporary markings will be 6" in width.
- 2) If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved removable lane tape will be used.
- 3) Edge lines will be required for temporary striping.
- 4) Existing, temporary, or permanent striping will be in place before a lane is opened to traffic.

Should the Contractor change the existing striping pattern, the Contractor is to restripe the roadway back to its original configuration after a certain period of time especially if no work is anticipated for a period of time (i.e. Winter shutdown).

After all work is completed, or when approved by the Engineer, remove temporary striping, place permanent striping, and repair any damaged inlaid pavement markers. Mobile operations may be utilized. Any necessary placement of permanent striping or repair of damaged inlaid pavement markers shall be considered incidental to the "Maintain and Control Traffic" bid item.

## ***SPECIAL NOTE***

### **For Minimization of Impacts to Osprey**

#### **Marshall County Repair and Paint I-24 Bridges over the Tennessee River Item No. 1-10178.00 and 1-10179.00**

Osprey have historically been documented at the top of the arch rib near connection R7 and at the navigational light box on the downstream arch on bridge 079B00118L. Breeding, nesting, laying of eggs and care for hatchlings typically occurs between March 1 and August 31, referred to herein as the nesting period. Osprey are protected under the Migratory Bird Treaty Act and the project must be advanced in a manner that minimizes impacts to the species.

The contractor should be aware that the most crucial time for nesting ospreys occurs between April and July. During this period, there is an increased likelihood that nesting osprey will be present and greater potential that construction activities may disrupt the nesting cycle. Osprey have extremely high site fidelity and are sometimes difficult to dissuade from nesting in locations that have been previously used.

Prior to and during the nesting period, osprey nests from either the current or previous years may be removed, provided that they do not include any eggs or hatchlings. The contractor will be responsible for inspecting nests prior to removal to ensure that no eggs or hatchlings are present. Documentation of the inspection shall be provided to the Resident Engineer prior to further action. A nest shall include any location where eggs have or may have been laid, including locations where eggs are laid on the truss. If a nest is established and eggs or chicks are present, the contractor will notify the Resident Engineer and confer to identify measures that are to be implemented to minimize impacts to the osprey nest. At a minimum, this shall include establishing a 75 foot buffer zone surrounding the nest location. Construction activities shall be halted within the buffer until such time as the nest is vacated. Should construction activities be determined to be adversely affecting the nest or altering the behavior of the osprey, the buffer shall be expanded by the Resident Engineer to a distance at which impacts are no longer occurring.

The buffer requirement may be terminated when the young osprey have fledged from the nest and left the area.

**If there are any questions regarding this note, please contact Danny Peake, Director, Division of Environmental Analysis, 200 Mero Street, Frankfort, KY 40601, Phone: (502) 564-7250.**

**SPECIAL NOTES  
DISTRICT NO. 1  
BRIDGE CLEANING AND PAINTING WITH REPAIRS  
MARSHALL COUNTY  
ITEM NUMBERS 1-10178.00 & 1-10179.00  
STP BRO 0103 (377) & STP BRO 0102 (378)  
CID 232953 ~ 079GR23M050**

The Department will conduct a Mandatory Pre-Bid Conference and Site Visit for the subject project on **Thursday October 12, 2023 at 11:00 AM Central Time at;**

**Department of Highways, District 1 Office  
5501 Kentucky Dam Road  
Paducah, KY. 42003  
Phone: (270) 898-2431**

Any company that is interested in bidding on the subject project or being part of a joint venture shall be represented at both the pre-bid conference and the field review. No individual can represent more than one company. At the conference and during the mandatory field review of the subject project, a roster will be taken of the representatives present. **Only companies represented at the conference and during the field review will be eligible to have their bids opened at the date of letting.**

During the field review, the company representatives and The Department of Highways officials will travel to the project location. The site visit is not intended for bid estimation. **The Contractor shall be required to furnish approved High Visibility Apparel for all of their representatives present at the site visit.**

The purpose of the conference and field review is to familiarize all prospective bidders with the contract requirements and the location and condition of the structures within the scope of the contract.

Department of Highways officials present at the conference will answer questions concerning the project. No questions will be taken during site visit. Any questions concerning the site visit are to be submitted through the Kentucky Transportation Cabinet's Division of Construction Procurement's web site question and answer link or e-mail at [KYTC.projectquestions@ky.gov](mailto:KYTC.projectquestions@ky.gov).



# MATERIAL SUMMARY

**CONTRACT ID: 232953**

**079GR23M050**

**MB07900242301**

LUTHER DRAFFIN BRIDGE WB (I-24) BRIDGE 079B00118L OVER TENNESSEE RIVER AT MP 29.24 BRIDGE PAINTING & CLEANING.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	08434	CLEAN & PAINT STRUCTURAL STEEL	1.00	LS
0010	21650NN	BOLT/RIVET REPLACEMENT - REPLACE BRIDGE RAIL POST ANCHOR BOLT HEX NUT	2.00	EACH
0015	21650NN	BOLT/RIVET REPLACEMENT - REPLACE MISSING HIGH STRENGTH BOLT	1.00	EACH
0020	21650NN	BOLT/RIVET REPLACEMENT - STRINGER BEARING ANCHOR BOLT REPLACEMENT	76.00	EACH
0025	23070NN	GIRDER REPAIR - GIRDER WELD CRACK	1.00	EACH
0030	23173EC	REPLACE/REPAIR STEEL DIAPHRAGM	24.00	EACH
0035	23220EC	CATWALK REPAIR	1.00	LS
0040	23386EC	JOINT SEAL REPLACEMENT	198.00	LF
0045	23580EC	HANDRAIL CONNECTION REPAIR - ALUMINUM BRIDGE RAIL POST REPAIR	3.00	EACH
0055	24253EC	PORTAL MODIFICATIONS - ARCH TIE BIRD SCREEN INSTALLATION	8.00	EACH
0060	24409EC	DRILL HOLES IN STEEL MEMBERS - CRACK ARREST HOLE	11.00	EACH
0065	24422EC	FLOOR BEAM RETROFIT - FLOORBEAM TOP LACNGE COPE	26.00	EACH
0070	24692EC	DECK DRAIN RETROFIT - DECK DRAIN FLANGE GASKET REPLACEMENT	10.00	EACH
0075	24879EC	STEEL REPAIR - CABLE ANCHORAGE RETROFIT	52.00	EACH
0080	24879EC	STEEL REPAIR - TRIAXIAL CONSTRAINT RETROFIT	88.00	EACH
0085	24933EC	JUNCTION BOX REPAIRED - JUNCTION BOX COVER REPLACEMENT	2.00	EACH
0090	24981EC	BRIDGE CLEANING - -	1.00	LS
0095	24982EC	CONCRETE COATING - -	1.00	LS
0100	25030ED	ALUMINUM HANDRAIL - REPLACE DAMAGED ALUMINUM BRIDGE RAIL SECTION	40.00	LF
0105	02003	RELOCATE TEMP CONC BARRIER	4,832.00	LF
0110	02562	TEMPORARY SIGNS	224.00	SQFT
0115	02650	MAINTAIN & CONTROL TRAFFIC - BRIDGE 079B00118L	1.00	LS
0120	02671	PORTABLE CHANGEABLE MESSAGE SIGN	1.00	EACH
0125	02775	ARROW PANEL	1.00	EACH
0130	02898	RELOCATE CRASH CUSHION	2.00	EACH
0135	03171	CONCRETE BARRIER WALL TYPE 9T	2,466.00	LF
0140	06511	PAVE STRIPING-TEMP PAINT-6 IN	20,397.00	LF
0145	08903	CRASH CUSHION TY VI CLASS BT TL3	1.00	EACH
0150	26136EC	PORTABLE QUEUE WARNING ALERT SYSTEM - APPLIES TO ENTIRE PROJECT ~ BOTH DIRECTIONS (REVISED 10-20-2023)	13.00	MONT
0155	26137EC	QUEUE WARNING PCMS	39.00	MONT
0160	26138EC	QUEUE WARNING PORTABLE RADAR SENSORS	39.00	MONT
0165	02568	MOBILIZATION	1.00	LS
0170	02569	DEMOBILIZATION	1.00	LS

## MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0175	24879EC	STEEL REPAIR - REPLACE RAILING (REVISED 10/20/2023)	1.00	EACH

**CONTRACT ID: 232953**

**079GR23M050**

**MB07900242302**

LUTHER DRAFFIN BRIDGE EB (I-24) BRIDGE 079B00118R OVER TENNESSEE RIVER AT MP 29.24 BRIDGE PAINTING & CLEANING.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0175	03297	EXPAN JOINT REPLACE 3 IN	79.00	LF
0180	08434	CLEAN & PAINT STRUCTURAL STEEL	1.00	LS
0185	21650NN	BOLT/RIVET REPLACEMENT - REPLACE BRIDGE RAIL POST ANCHOR BOLT HEX NUT	5.00	EACH
0190	21650NN	BOLT/RIVET REPLACEMENT - REPLACE MISSING HIGH STRENGTH BOLT	1.00	EACH
0195	21650NN	BOLT/RIVET REPLACEMENT - STRINGER BEARING ANCHOR BOLT REPLACEMENT	83.00	EACH
0200	23070NN	GIRDER REPAIR - GIRDER WELD CRACK	2.00	EACH
0205	23173EC	REPLACE/REPAIR STEEL DIAPHRAGM - PIER 9	24.00	EACH
0210	23220EC	CATWALK REPAIR	1.00	LS
0215	23386EC	JOINT SEAL REPLACEMENT	119.00	LF
0220	23580EC	HANDRAIL CONNECTION REPAIR - ALUMINUM BRIDGE RAIL POST REPAIR	4.00	EACH
0225	23853EC	BEARING REPAIR - BEARING COTTER PIN REPLACEMENT	1.00	EACH
0230	24253EC	PORTAL MODIFICATIONS - ARCH TIE BIRD SCREEN INSTALLATION	8.00	EACH
0235	24409EC	DRILL HOLES IN STEEL MEMBERS - CRACK ARREST HOLE	4.00	EACH
0240	24422EC	FLOOR BEAM RETROFIT - FLOORBEAM TOP LACNGE COPE	26.00	EACH
0245	24692EC	DECK DRAIN RETROFIT - DECK DRAIN FLANGE GASKET REPLACEMENT	10.00	EACH
0250	24879EC	STEEL REPAIR - CABLE ANCHORAGE RETROFIT	52.00	EACH
0255	24879EC	STEEL REPAIR - TRIAXIAL CONSTRAINT RETROFIT	88.00	EACH
0260	24933EC	JUNCTION BOX REPAIRED - JUNCTION BOX COVER REPLACEMENT	2.00	EACH
0265	24981EC	BRIDGE CLEANING - -	1.00	LS
0270	24982EC	CONCRETE COATING - -	1.00	LS
0275	25030ED	ALUMINUM HANDRAIL - REPLACE DAMAGED ALUMINUM BRIDGE RAIL SECTION	40.00	LF
0280	02003	RELOCATE TEMP CONC BARRIER	4,834.00	LF
0285	02562	TEMPORARY SIGNS	224.00	SQFT
0290	02650	MAINTAIN & CONTROL TRAFFIC - BRIDGE 079B00118R	1.00	LS
0295	02671	PORTABLE CHANGEABLE MESSAGE SIGN	1.00	EACH
0300	02775	ARROW PANEL	1.00	EACH
0305	02898	RELOCATE CRASH CUSHION	2.00	EACH
0310	03171	CONCRETE BARRIER WALL TYPE 9T	2,466.00	LF
0315	06511	PAVE STRIPING-TEMP PAINT-6 IN	20,397.00	LF

# MATERIAL SUMMARY

<b>Project Line No</b>	<b>Bid Code</b>	<b>DESCRIPTION</b>	<b>Quantity</b>	<b>Unit</b>
0320	08903	CRASH CUSHION TY VI CLASS BT TL3	1.00	EACH
0330	26137EC	QUEUE WARNING PCMS	39.00	MONT
0335	26138EC	QUEUE WARNING PORTABLE RADAR SENSORS	39.00	MONT
0340	02568	MOBILIZATION	1.00	LS
0345	02569	DEMOBILIZATION	1.00	LS
0355	24879EC	STEEL REPAIR - REPLACE RAILING (ADDED 10/20/2023)	1.00	EACH

**PROPOSAL BID ITEMS**

Report Date 10/20/23

**Section: 0001 - ROADWAY**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	02003		RELOCATE TEMP CONC BARRIER	9,666.00	LF		\$	
0020	02562		TEMPORARY SIGNS	448.00	SQFT		\$	
0030	02650		MAINTAIN & CONTROL TRAFFIC BRIDGE 079B00118L	1.00	LS		\$	
0040	02650		MAINTAIN & CONTROL TRAFFIC BRIDGE 079B00118R	1.00	LS		\$	
0050	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0060	02775		ARROW PANEL	2.00	EACH		\$	
0070	02898		RELOCATE CRASH CUSHION	4.00	EACH		\$	
0080	03171		CONCRETE BARRIER WALL TYPE 9T	2,466.00	LF		\$	
0090	03171		CONCRETE BARRIER WALL TYPE 9T	2,466.00	LF		\$	
0100	06511		PAVE STRIPING-TEMP PAINT-6 IN	40,794.00	LF		\$	
0110	08903		CRASH CUSHION TY VI CLASS BT TL3	2.00	EACH		\$	
0120	26136EC		PORTABLE QUEUE WARNING ALERT SYSTEM APPLIES TO ENTIRE PROJECT ~ BOTH DIRECTIONS (REVISED 10-20-2023)	13.00	MONT		\$	
0130	26137EC		QUEUE WARNING PCMS	78.00	MONT		\$	
0140	26138EC		QUEUE WARNING PORTABLE RADAR SENSORS	78.00	MONT		\$	

**Section: 0002 - BRIDGE 079B00118L**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0150	08434		CLEAN & PAINT STRUCTURAL STEEL	1.00	LS		\$	
0160	21650NN		BOLT/RIVET REPLACEMENT REPLACE BRIDGE RAIL POST ANCHOR BOLT HEX NUT	2.00	EACH		\$	
0170	21650NN		BOLT/RIVET REPLACEMENT REPLACE MISSING HIGH STRENGTH BOLT	1.00	EACH		\$	
0180	21650NN		BOLT/RIVET REPLACEMENT STRINGER BEARING ANCHOR BOLT REPLACEMENT	76.00	EACH		\$	
0190	23070NN		GIRDER REPAIR GIRDER WELD CRACK	1.00	EACH		\$	
0200	23173EC		REPLACE/REPAIR STEEL DIAPHRAGM	24.00	EACH		\$	
0210	23220EC		CATWALK REPAIR	1.00	LS		\$	
0220	23386EC		JOINT SEAL REPLACEMENT	198.00	LF		\$	
0230	23580EC		HANDRAIL CONNECTION REPAIR ALUMINUM BRIDGE RAIL POST REPAIR	3.00	EACH		\$	
0240	24879EC		STEEL REPAIR REPLACE RAILING (REVISED 10/20/2023)	1.00	EACH		\$	
0250	24253EC		PORTAL MODIFICATIONS ARCH TIE BIRD SCREEN INSTALLATION	8.00	EACH		\$	
0260	24409EC		DRILL HOLES IN STEEL MEMBERS CRACK ARREST HOLE	11.00	EACH		\$	
0270	24422EC		FLOOR BEAM RETROFIT FLOORBEAM TOP LACNGE COPE	26.00	EACH		\$	

**PROPOSAL BID ITEMS**

Report Date 10/20/23

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0280	24692EC		DECK DRAIN RETROFIT DECK DRAIN FLANGE GASKET REPLACEMENT	10.00	EACH		\$	
0290	24879EC		STEEL REPAIR CABLE ANCHORAGE RETROFIT	52.00	EACH		\$	
0300	24879EC		STEEL REPAIR TRIAXIAL CONSTRAINT RETROFIT	88.00	EACH		\$	
0310	24933EC		JUNCTION BOX REPAIRED JUNCTION BOX COVER REPLACEMENT	2.00	EACH		\$	
0320	24981EC		BRIDGE CLEANING -	1.00	LS		\$	
0330	24982EC		CONCRETE COATING -	1.00	LS		\$	
0340	25030ED		ALUMINUM HANDRAIL REPLACE DAMAGED ALUMINUM BRIDGE RAIL SECTION	40.00	LF		\$	

**Section: 0003 - BRIDGE 079B00118R**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0350	03297		EXPAN JOINT REPLACE 3 IN	79.00	LF		\$	
0360	08434		CLEAN & PAINT STRUCTURAL STEEL	1.00	LS		\$	
0370	21650NN		BOLT/RIVET REPLACEMENT REPLACE BRIDGE RAIL POST ANCHOR BOLT HEX NUT	5.00	EACH		\$	
0380	21650NN		BOLT/RIVET REPLACEMENT REPLACE MISSING HIGH STRENGTH BOLT	1.00	EACH		\$	
0390	21650NN		BOLT/RIVET REPLACEMENT STRINGER BEARING ANCHOR BOLT REPLACEMENT	83.00	EACH		\$	
0400	23070NN		GIRDER REPAIR GIRDER WELD CRACK	2.00	EACH		\$	
0410	23173EC		REPLACE/REPAIR STEEL DIAPHRAGM PIER 9	24.00	EACH		\$	
0420	23220EC		CATWALK REPAIR	1.00	LS		\$	
0430	23386EC		JOINT SEAL REPLACEMENT	119.00	LF		\$	
0440	23580EC		HANDRAIL CONNECTION REPAIR ALUMINUM BRIDGE RAIL POST REPAIR	4.00	EACH		\$	
0450	23853EC		BEARING REPAIR BEARING COTTER PIN REPLACEMENT	1.00	EACH		\$	
0460	24253EC		PORTAL MODIFICATIONS ARCH TIE BIRD SCREEN INSTALLATION	8.00	EACH		\$	
0470	24409EC		DRILL HOLES IN STEEL MEMBERS CRACK ARREST HOLE	4.00	EACH		\$	
0480	24422EC		FLOOR BEAM RETROFIT FLOORBEAM TOP LACNGE COPE	26.00	EACH		\$	
0490	24692EC		DECK DRAIN RETROFIT DECK DRAIN FLANGE GASKET REPLACEMENT	10.00	EACH		\$	
0500	24879EC		STEEL REPAIR CABLE ANCHORAGE RETROFIT	52.00	EACH		\$	
0510	24879EC		STEEL REPAIR TRIAXIAL CONSTRAINT RETROFIT	88.00	EACH		\$	

## PROPOSAL BID ITEMS

Report Date 10/20/23

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0515	24879EC		STEEL REPAIR REPLACE RAILING (ADDED 10/20/2023)	1.00	EACH		\$	
0520	24933EC		JUNCTION BOX REPAIRED JUNCTION BOX COVER REPLACEMENT	2.00	EACH		\$	
0530	24981EC		BRIDGE CLEANING -	1.00	LS		\$	
0540	24982EC		CONCRETE COATING -	1.00	LS		\$	
0550	25030ED		ALUMINUM HANDRAIL REPLACE DAMAGED ALUMINUM BRIDGE RAIL SECTION	40.00	LF		\$	

### Section: 0004 - MOBILZATION & DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0560	02568		MOBILIZATION	1.00	LS		\$	
0570	02569		DEMOBILIZATION	1.00	LS		\$	

# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

## MARSHALL COUNTY

### LUTHER DRAFFEN BRIDGE (079B00118L)

### WB I-24 OVER TENNESSEE RIVER REPAIR PLANS

#### INDEX OF SHEETS

Sheet No.	Description
SIA	Title Sheet 079B00118L
SIB	Title Sheet 079B00118R
S2	General Notes
S3	Bridge Layout - West Approach
S4	Bridge Layout - Arch Span
S5	Bridge Layout - East Approach
S6-11	Framing Plan
S12	MOT Phasing
S13	Floorbeam Top Flange Cope Modification
S14	Tri-Axial Constraint Retrofit
S15	Girder Weld Crack Repair 1
S16	Girder Weld Crack Repair 2
S17	Girder Weld Crack Repair 3
S18-19	Catwalk Repair 1
S20	Catwalk Repair 2
S21	Replace Expansion Joints and Seals
S22	Stringer Bearing Anchor Bolt Replacement
S23	Steel Diaphragm Replacement
S24	Deck Drain Flange Gasket Replacement
S25	Arch Tie Bird Screen Replacement
S26	Bearing Cotter Pin Replacement
S27	Junction Box Cover Replacement
S28	Aluminum Bridge Rolling & Post Repair
S29	Concrete Coating
S30	Pier Cap Railing Repair
S31	Wire Rope Suspender / Hanger Modification
ROI-R15	Maintenance of Traffic
E01	Environmentally Cleared Area

#### SPECIAL NOTES

Special Note for Bidding Pre-qualification and Staffing  
 Special Note for Completion Date and Penalties  
 Special Note for Steel Repair  
 Special Note for Joint Seal Replacement  
 Special Note for Replacing Expansion Joints  
 Special Note for Concrete Patching  
 Special Note for Aluminum Bridge Railing Repairs  
 Special Note for Cleaning and Preventative Maintenance  
 Special Note for Bridge Cleaning and Painting  
 Special Note for Painting Structural Steel Repairs  
 Special Note for Utilities and Signs  
 Special Note for Weight Limits on Structure  
 Special Note for Traffic Control  
 Special Note for Portable Queue Warning Alert System Protection  
 Special Note for Avoiding Stream Impacts to Potential Endangered Mussel Habitat  
 Special Note for Minimization of Impacts to Osprey  
 Special Note for Bridge Plans  
 Special Note for Pre-Bid Conference

#### SPECIAL PROVISIONS

#### STANDARD DRAWINGS

BJE-001	Neoprene Expansion Joints & Armored Edge
BJE-002	Expansion Joints
BJE-003	Expansion Joint Replacement 1" - 3"
BJE-005	Expansion Joint Replacement General Notes
TTC-120	Lane Closure Multi-Lane Hwy. Case II
RBM-115	Concrete Barrier Wall Type 91 (Temp.)
RBE-100	Crash Cushion Type VI-BT
RBM-020	Delimiters for Concrete Barriers
TTC-160	Temporary Pavement Marker Arrangements for Lane Closures
TTS-115	Mobile Operation for Paint Striping Case IV

#### SPECIFICATIONS

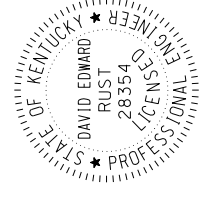
2019 Standard Specifications for Road and Bridge Construction, with current supplemental specifications.  
 2002 AASHTO Standard Specifications for Highway Bridges.

ROUTE	ITEM NO.	COUNTY OF
I-24	1-10178	MARSHALL
	S01A	DRAWING NUMBER
		28836

#### ESTIMATE OF BRIDGE QUANTITIES

BID ITEM CODE	UNIT	02569	24409EC	24422EC	24879EC	23070NN	23220EC	23386EC	03297	21650NN	23173EC	24692EC	24253EC	23853EC	24983EC	23590EC	25030ED	24982EC	24981EC	24879EC	06434	02003	02562	02850	02671	02775	02898	03171	06511	08903	
		L.S.	EACH	EACH	EACH	EACH	EACH	L.F.	Expansion Joint Replacement 3"	Bot/Rivet Replacement	Replace Steel Diaphragm	Deck Drain Retrofit	Portal Modification	Bearing Repair	Junction Box Repair	Handrail Connection Repair	Aluminum Handrail	Concrete Coating	Bridge Cleaning	Steel Repair	Clean and Paint Structural Steel	Relocate Temp. Conc. Barrier	Temporary Signs	Maintain and Control Traffic	Portable Changeable Message Sign	Arrow Panel	Relocate Crash Cushion	Concrete Barrier Wall Type 91	Pave Striping Temporary Paint - 6in	Crash Cushion Type VI Class BT TL3	
GENERAL		1																				4834	224	1	1	1	1	2466	20397	1	
REPAIR #1 CRACK ARREST HOLE																															
REPAIR #2 FLOORBEAM TOP FLANGE COPE				26																											
REPAIR #3 TRI-AXIAL CONSTRAINT					88																										
REPAIR #4 GIRDER WELD CRACK					1																										
REPAIR #5 CATWALK REPAIRS																															
REPAIR #6 EXPANSION JOINT SEAL																															
REPAIR #7 EXPANSION JOINT REPLACEMENT - 3"								198																							
REPAIR #8 STRINGER BEARING ANCHOR BOLTS																															
REPAIR #9 STEEL DIAPHRAGM REPLACEMENT																															
REPAIR #10 DECK DRAIN FLANGE GASKETS																															
REPAIR #11 ARCH TIE BIRD SCREENS																															
REPAIR #12 BEARING COTTER PINS																															
REPAIR #13 JUNCTION BOX COVERS										76																					
REPAIR #14 ALUMINUM BRIDGE RAIL POSTS											24																				
REPAIR #15 DAMAGED ALUMINUM BRIDGE RAIL												10																			
REPAIR #16 RAIL POST ANCHOR BOLT HEX NUT															2																
REPAIR #17 CONCRETE COATING																															
REPAIR #18 BRIDGE CLEANING & PAINTING																															
REPAIR #19 MISSING HIGH STRENGTH BOLT																															
REPAIR #20 RAILING REPAIR																															
REPAIR #21 WIRE ROPE SUSPENDER/HANGER																															
<b>BRIDGE TOTALS</b>		1	11	26	140	1	1	198		79	24	10	8		2	3	40	1	1	1											

SUPPLEMENTAL DESCRIPTION  
 ① ARCH TIE BIRD SCREEN INSTALLATION  
 ② TRI-AXIAL CONSTRAINT RETROFIT  
 ③ ~~CABLE ANCHORAGE~~ RETROFIT  
 ④ RAILING REPAIR



COMMONWEALTH OF KENTUCKY  
 DEPARTMENT OF HIGHWAYS

REVISION: **Changed Bid Item and Added Note 10-20-2023**

DATE: 10-20-2023

DESIGNED BY: L.M. SALLEE  
 CHECKED BY: D.E. RUST

DATE: SEPTEMBER 2023  
 CHECKED BY: D.E. RUST

PREPARED BY: **Palmer ENGINEERING**

TITLE SHEET  
 CROSSING: TENNESSEE RIVER



# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

## MARSHALL COUNTY

### LUTHER DRAFFEN BRIDGE (079B00118R)

### EB I-24 OVER TENNESSEE RIVER REPAIR PLANS

#### INDEX OF SHEETS

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S23	Steel Diaphragm Replacement
S24	Deck Drain Flange Gasket Replacement
S25	Arch Tie Bird Screen Replacement
S26	Bearing Cotter Pin Replacement
S27	Junction Box Cover Replacement
S28	Aluminum Bridge Rolling & Post Repair
S29	Concrete Coating
S30	Pier Cap Railing Repair
S31	Wire Rope Suspender / Hanger Modification
ROI-R15	Maintenance of Traffic
E01	Environmentally Cleared Area

#### SPECIAL NOTES

Special Note for Bidding Pre-qualification and Staffing

Special Note for Completion Date and Penalties

Special Note for Steel Repair

Special Note for Joint Seal Replacement

Special Note for Replacing Expansion Joints

Special Note for Concrete Patching

Special Note for Aluminum Bridge Railing Repairs

Special Note for Cleaning and Preventative Maintenance

Special Note for Bridge Cleaning and Painting

Special Note for Painting Structural Steel Repairs

Special Note for Utilities and Signs

Special Note for Weight Limits on Structure

Special Note for Traffic Control

Special Note for Portable Queue Warning Alert System Protection

Special Note for Avoiding Stream Impacts to Potential Endangered Mussel Habitat

Special Note for Minimization of Impacts to Osprey

Special Note for Bridge Plans

Special Note for Pre-Bid Conference

#### SPECIAL PROVISIONS

#### STANDARD DRAWINGS

BJE-001 Neoprene Expansion Joints & Armored Edge

BJE-002 Expansion Joints

BJE-003 Expansion Joint Replacement 1" - 3"

BJE-005 Expansion Joint Replacement General Notes

TTC-120 Lane Closure Multi-Lane Hwy. Case II

RBM-115 Concrete Barrier Wall Type 91 (Temp.)

RBE-100 Crush Cushion Type VI-BT

RBM-020 Delimiters for Concrete Barriers

TTC-160 Temporary Pavement Marker Arrangements for Lane Closures

TTS-115 Mobile Operation for Paint Striping Case IV

#### SPECIFICATIONS

2019 Standard Specifications for Road and Bridge Construction, with current supplemental specifications.

2002 AASHTO Standard Specifications for Highway Bridges.

ROUTE	I-24	COUNTY OF	MARSHALL
ITEM NO.	1-10179	SHEET NO.	S01B
DRAWING NUMBER	28836		

#### ESTIMATE OF BRIDGE QUANTITIES

BID ITEM CODE	UNIT	02569	24409EC	24422EC	24879EC	23070NN	23220EC	23386EC	03297	21650NN	23173EC	24692EC	24253EC	23853EC	24983EC	23590EC	25030ED	24982EC	24981EC	24879EC	08434	02003	02562	02850	02671	02775	02898	03171	06511	08903		
		L.S.	EACH	EACH	EACH	EACH	EACH	L.F.	Expansion Joint Replacement 3"	Bot/Rivet Replacement	Replace Steel Diaphragm	Deck Drain Retrofit	Portal Modification	Bearing Repair	Junction Box Repair	Handrail Connection Repair	Aluminum Handrail	Concrete Coating	Bridge Cleaning	Steel Repair	Clean and Paint Structural Steel	Relocate Temp. Conc. Barrier	Temporary Signs	Maintain and Control Traffic	Portable Changeable Message Sign	Arrow Panel	Relocate Crash Cushion	Concrete Barrier Wall Type 91	Pave Striping Temporary Paint - 6in	Crash Cushion Type VI Class BT TL3		
GENERAL		1																				4834	224					2466	20397	1		
REPAIR #1 CRACK ARREST HOLE																																
REPAIR #2 FLOORBEAM TOP FLANGE COPE		4		26																												
REPAIR #3 TRI-AXIAL CONSTRAINT					88																											
REPAIR #4 GIRDER WELD CRACK					2																											
REPAIR #5 CATWALK REPAIRS																																
REPAIR #6 EXPANSION JOINT SEAL																																
REPAIR #7 EXPANSION JOINT REPLACEMENT - 3"								119	79																							
REPAIR #8 STRINGER BEARING ANCHOR BOLTS										83																						
REPAIR #9 STEEL DIAPHRAGM REPLACEMENT											24																					
REPAIR #10 DECK DRAIN FLANGE GASKETS												10																				
REPAIR #11 ARCH TIE BIRD SCREENS																																
REPAIR #12 BEARING COTTER PINS																																
REPAIR #13 JUNCTION BOX COVERS																																
REPAIR #14 ALUMINUM BRIDGE RAIL POSTS																																
REPAIR #15 DAMAGED ALUMINUM BRIDGE RAIL																	40															
REPAIR #16 RAIL POST ANCHOR BOLT HEX NUT																																
REPAIR #17 CONCRETE COATING																																
REPAIR #18 BRIDGE CLEANING & PAINTING																																
REPAIR #19 MISSING HIGH STRENGTH BOLT																																
REPAIR #20 RAILING REPAIR																																
REPAIR #21 WIRE ROPE SUSPENDER/HANGER																																
<b>BRIDGE TOTALS</b>		1	4	26	140	2	1	119	79	89	24	10	8	1	2	4	40	1	1	1		4834	224				2466	20397	1			

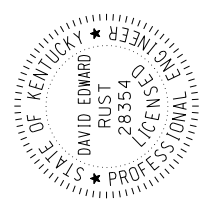
SUPPLEMENTAL DESCRIPTION

① ARCH TIE BIRD SCREEN INSTALLATION

② TRI-AXIAL CONSTRAINT RETROFIT

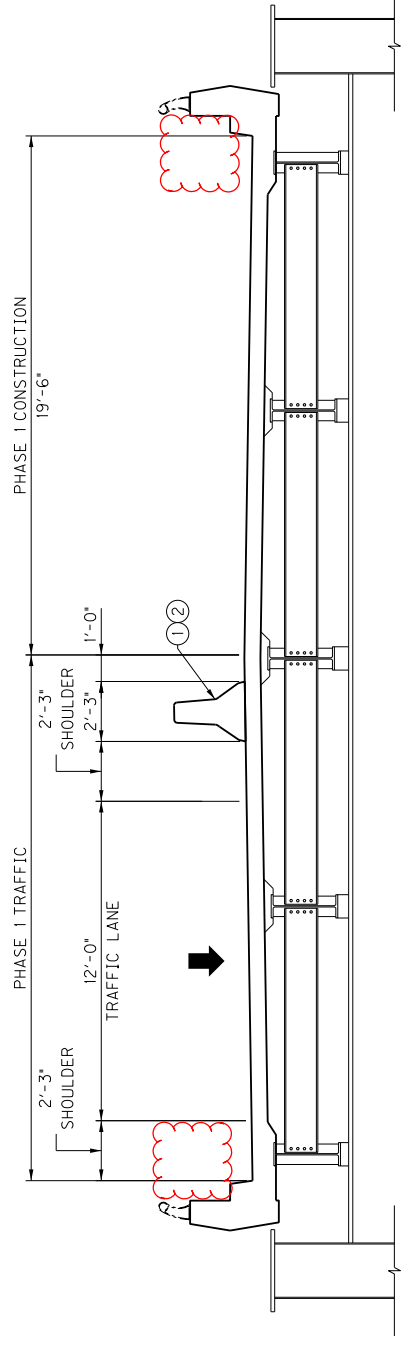
③ CABLE ANCHORAGE RETROFIT

④ RAILING REPAIR



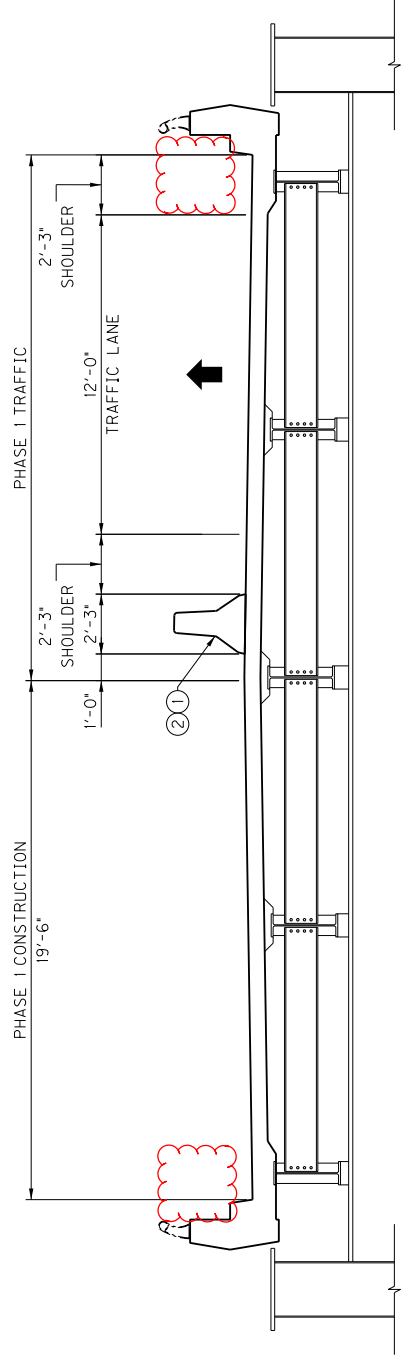
DATE: SEPTEMBER 2023	CHECKED BY: D.E. RUST	DESIGNED BY: L.M. SALLEE	DETAILED BY: M.B. HAGGARD	DATE: 10-20-2023	REVISION: Changed Bid Item and Added Note	COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	TRANSPORTATION CABINET
TITLE SHEET				CROSSING			
TENNESSEE RIVER				TENNESSEE RIVER			



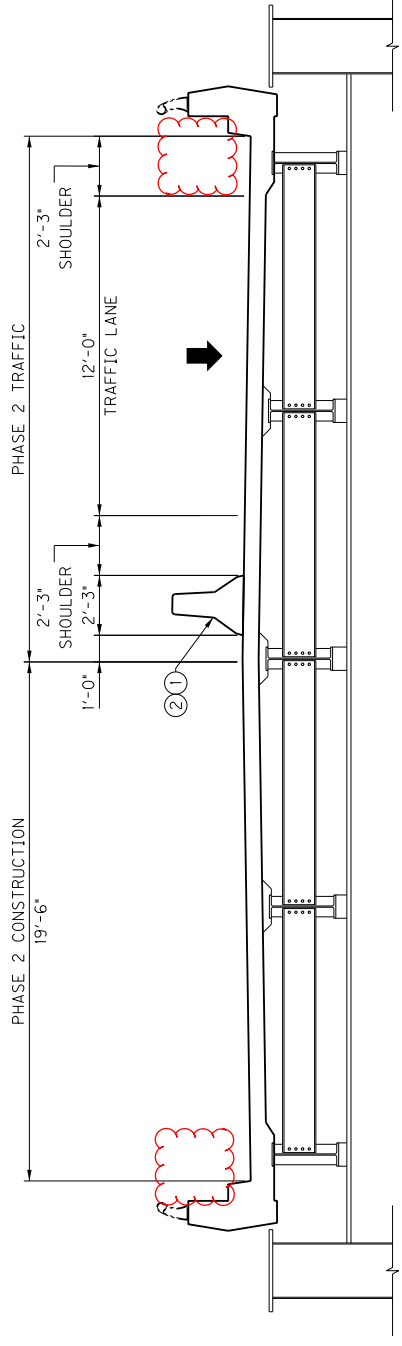


(079B00118L)

**MOT PHASE 1**  
(LOOKING AHEAD)

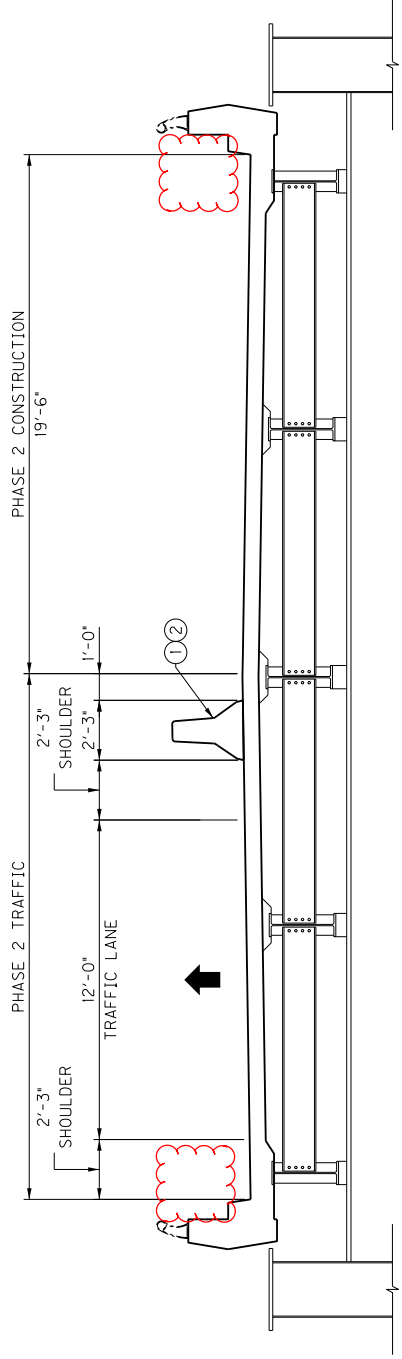


(079B00118R)

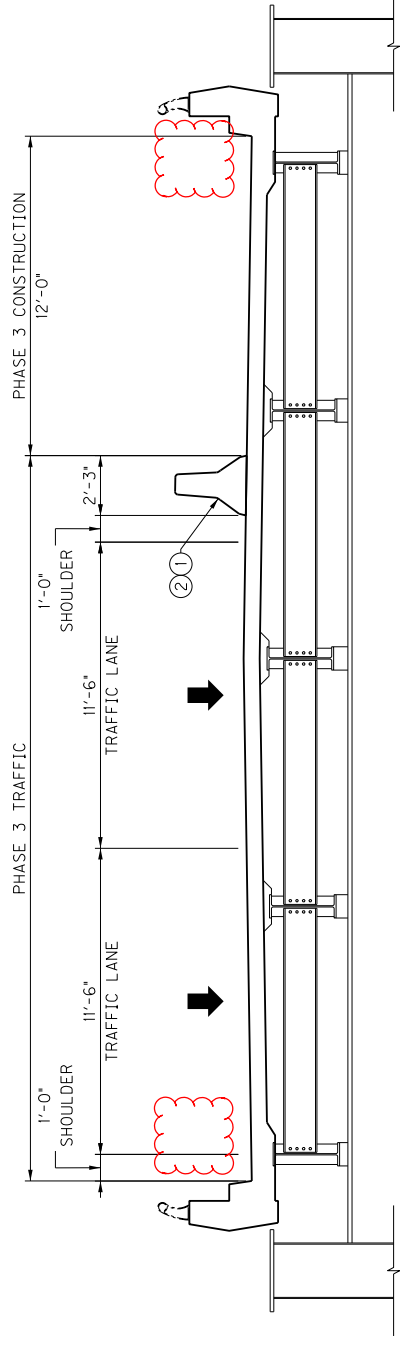


(079B00118L)

**MOT PHASE 2**  
(LOOKING AHEAD)

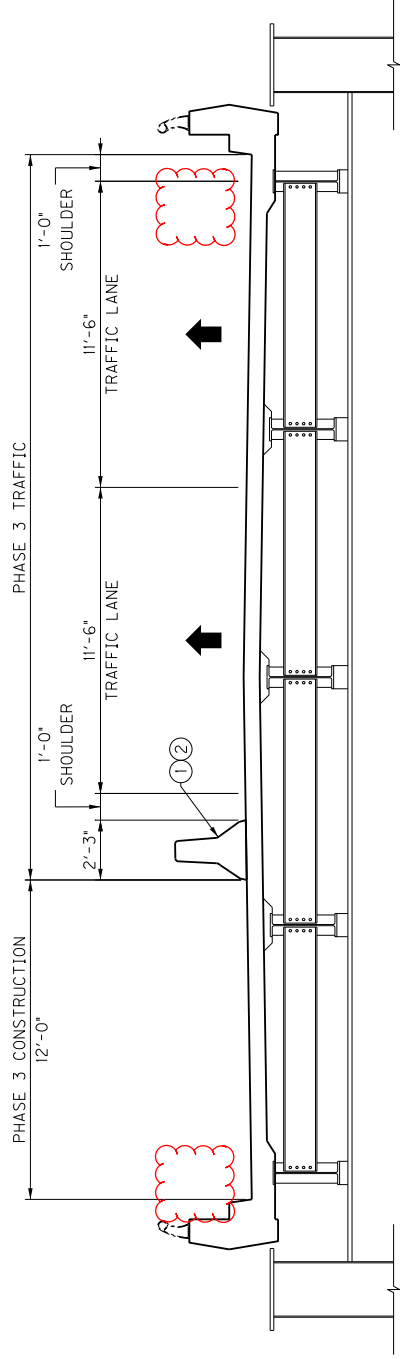


(079B00118R)



(079B00118L)

**MOT PHASE 3**  
(LOOKING AHEAD)



(079B00118R)

- NOTES:
- ① TEMPORARY CONCRETE BARRIER, TYPE 9T  
SEE STANDARD DRAWING RBM-115, C.E.
  - ② APPLY BOX BEAM STIFFENING OF THE  
TEMPORARY CONCRETE BARRIER PER STANDARD  
DRAWING RBM-120, C.E. FOR 25'-0" ON EACH SIDE  
OF THE BENT REPLACEMENT



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



REVISION  
Removed Note and Call Outs  
DATE  
10-20-2023



PREPARED BY  
Palmer  
ENGINEERING

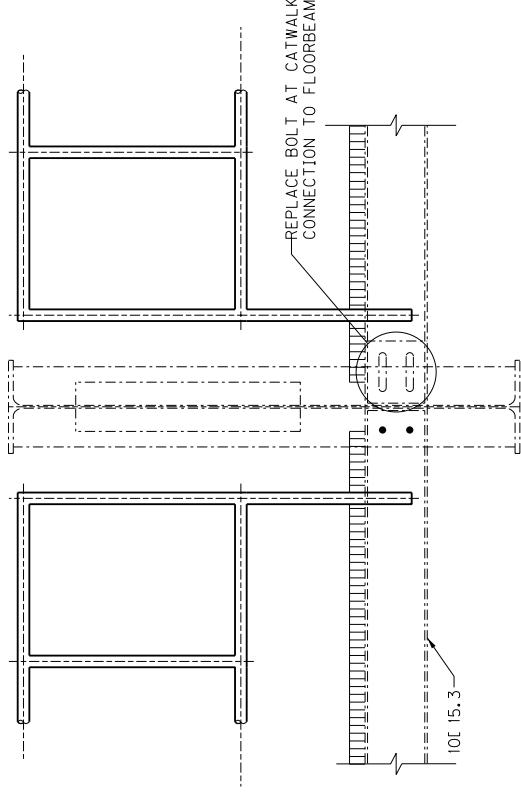
DATE: SEPTEMBER 2023  
DESIGNED BY: L.M. SALLEE  
CHECKED BY: D.E. RUST

MOT PHASING  
CROSSING  
TENNESSEE RIVER

ROUTE  
I-24

ITEM NO.  
1-10178 & 1-10179  
SHEET NO.  
S12

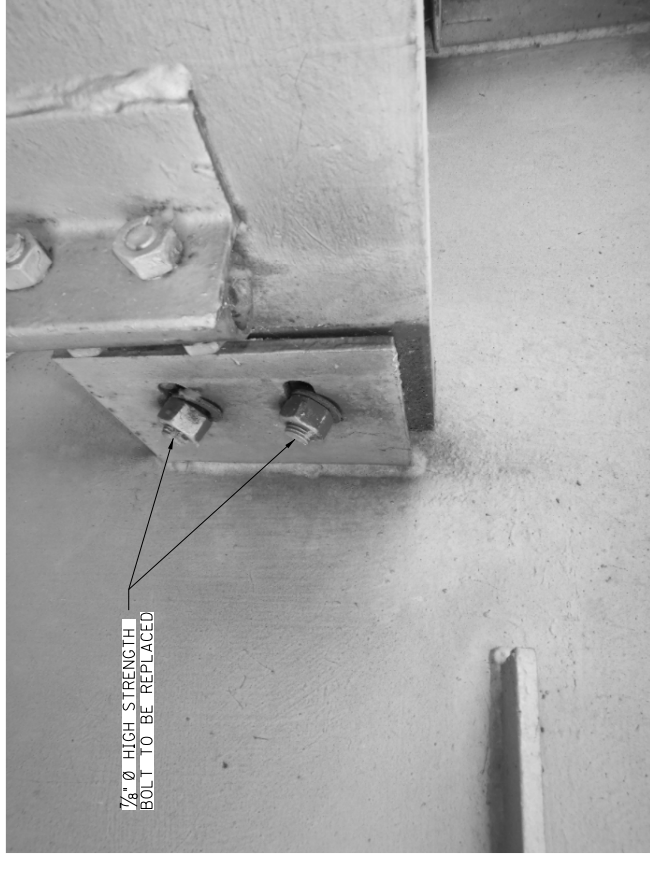
COUNTY OF  
MARSHALL  
DRAWING NUMBER  
28836



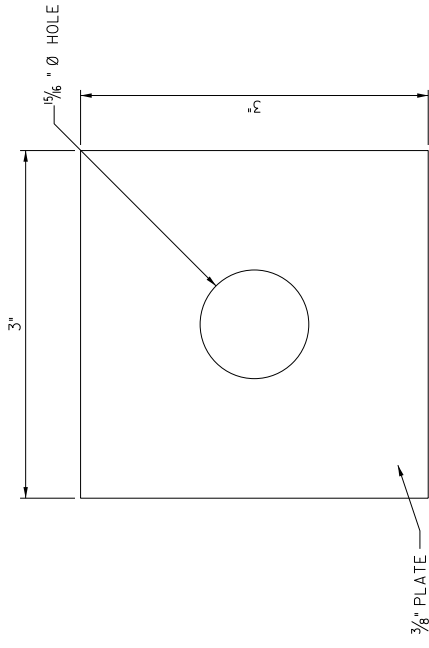
**EXISTING CATWALK CONNECTION**  
(FB T1-T13)



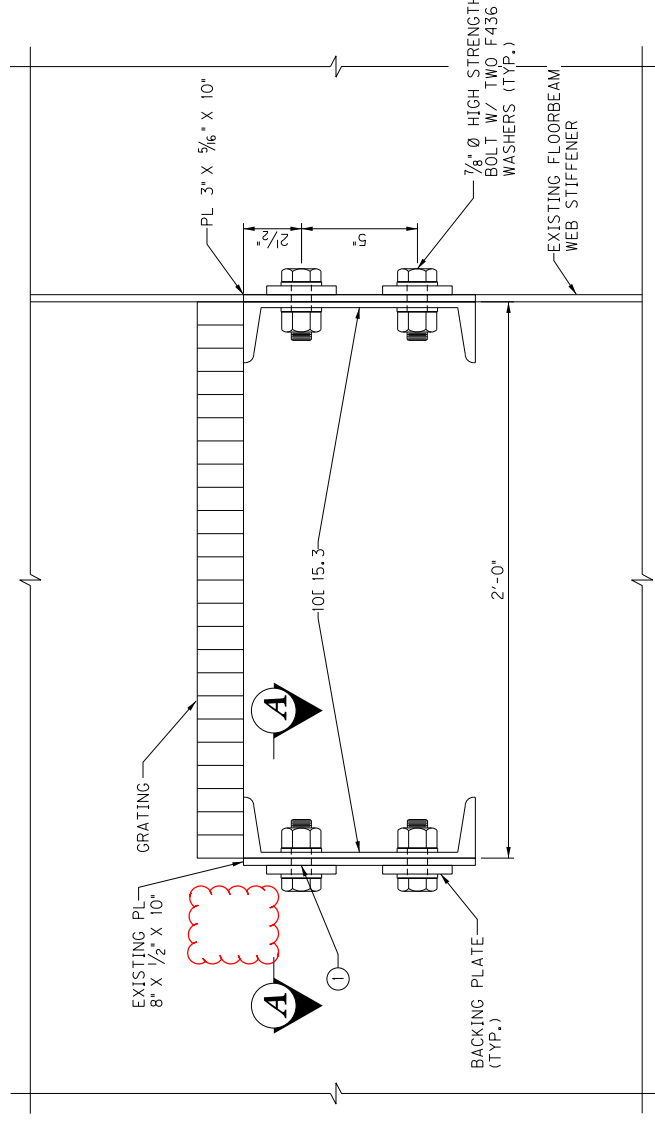
**EXISTING CATWALK CONNECTION AT FB T1-T13**  
(STIFFENER PLATE CONNECTION)



**EXISTING CATWALK CONNECTION AT FB T1-T13**  
(WELDED PLATE CONNECTION)

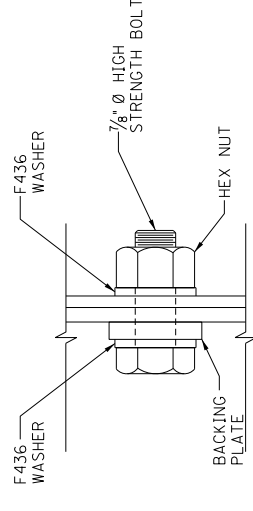


**BACKING PLATE**



**SECTION THRU SPLICE**

EXISTING BOLT HOLE SHALL BE REALIGNED PRIOR TO THE INSTALLATION OF NEW CONNECTION BOLTS.  
NOTE: SEE \*SPECIAL NOTE FOR STEEL REPAIR\* FOR ADDITIONAL DETAILS AND PAINT THE REPAIR AREA PER THE \*SPECIAL NOTE FOR PAINTING STRUCTURAL STEEL REPAIRS\*.



**SECTION A-A**



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



REVISION  
Removed Note and Call Out

DATE  
10-20-2023



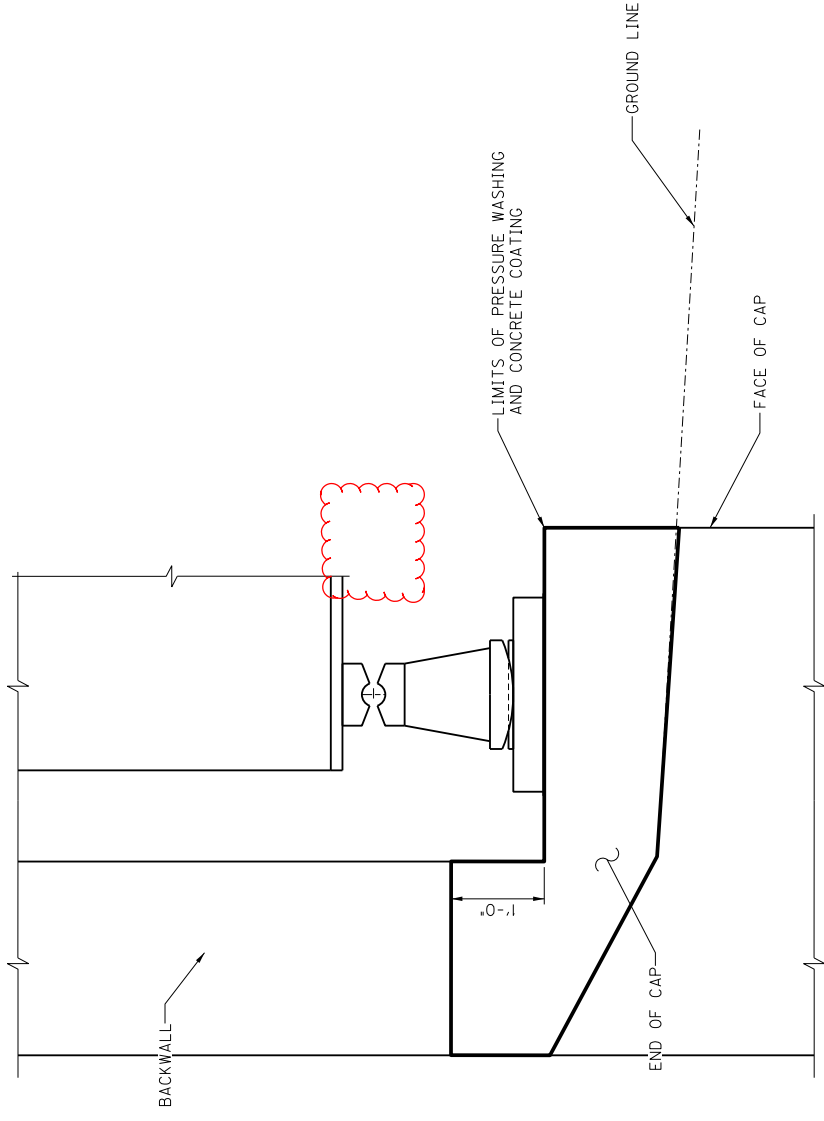
PREPARED BY  
DESIGNED BY: L.M. SALLEE  
DATE: SEPTEMBER 2023  
CHECKED BY: D.E. RUST  
DETAILED BY: M.B. HAGGARD  
L.M. SALLEE

CATWALK REPAIR #2  
CROSSING  
TENNESSEE RIVER

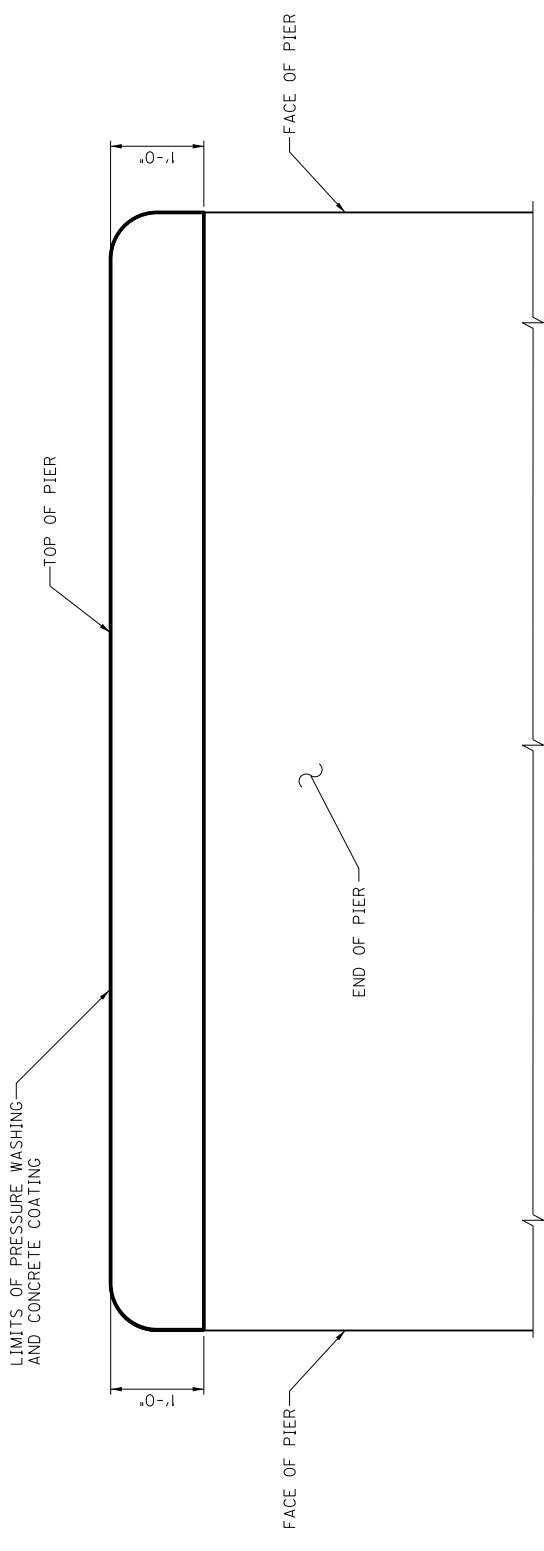
ROUTE  
I-24

ITEM NO.  
1-10178 & 1-10179  
SHEET NO.  
S20

COUNTY OF  
MARSHALL  
DRAWING NUMBER  
28836



**SECTION THRU ABUTMENTS**  
(END BENT 1 AND END BENT 10)



**SECTION THRU PIER CAP**  
(PIER 1 - PIER 8)

NOTE: SUPERSTRUCTURE NOT SHOWN FOR CLARITY.

NOTE: THE ENTIRE LENGTH OF THE TOP, FACE, AND ENDS OF THE PIER/ABUTMENT CAPS AND THE FRONT FACE OF ABUTMENT BACKWALL SHALL HAVE DEBRIS REMOVED AND BE PRESSURE WASHED PRIOR TO CONCRETE COATING. CONCRETE COATING SHALL BE APPLIED WITHIN THE LIMITS AS SPECIFIED. LUBRICATE BEARINGS AS SPECIFIED. SEE SPECIAL NOTE FOR PREVENTATIVE MAINTENANCE FOR ADDITIONAL INFORMATION. QUANTITIES ARE GIVEN BELOW.

TOTAL QUANTITIES:  
 REMOVE DEBRIS = 347 SQ. YDS.  
 PRESSURE WASHING = 468 SQ. YDS.  
 CONCRETE COATING = 468 SQ. YDS.

 COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	 PREPARED BY <b>Palmer</b> ENGINEERING	DATE: SEPTEMBER 2023 DESIGNED BY: L.M. SALLEE DETAILED BY: M.B. HAGGARD	CHECKED BY: D.E. RUST L.M. SALLEE	ROUTE <b>I-24</b>	ITEM NO. 1-10178 & 1-10179 SHEET NO. <b>S29</b>	COUNTY OF <b>MARSHALL</b> DRAWING NUMBER <b>28836</b>
		CROSSING <b>TENNESSEE RIVER</b>		CONCRETE COATING		