



CALL NO. 321

CONTRACT ID. 192608

NELSON COUNTY

FED/STATE PROJECT NUMBER FE02 090 9002 B00016LR

DESCRIPTION BG 9002 BRIDGE REPAIRS (MP 21.507).

WORK TYPE BRIDGE REPAIRS

PRIMARY COMPLETION DATE 12/15/2019

LETTING DATE: August 23,2019

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME August 23,2019. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

TABLE OF CONTENTS

PART I	SCOPE OF WORK
	<ul style="list-style-type: none">• PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES• CONTRACT NOTES• STATE CONTRACT NOTES• SPECIAL NOTE(S) APPLICABLE TO PROJECT• LIQUIDATED DAMAGES• TRAFFIC CONTROL PLAN• SKETCH MAP(S)• BRIDGE DRAWINGS
PART II	SPECIFICATIONS AND STANDARD DRAWINGS
	<ul style="list-style-type: none">• SPECIFICATIONS REFERENCE• SUPPLEMENTAL SPECIFICATION• STANDARD DRAWINGS THAT APPLY
PART III	EMPLOYMENT, WAGE AND RECORD REQUIREMENTS
	<ul style="list-style-type: none">• LABOR AND WAGE REQUIREMENTS• EXECUTIVE BRANCH CODE OF ETHICS• KENTUCKY EQUAL EMPLOYMENT OPPORTUNITY ACT OF 1978 LOCALITY / STATE• PROJECT WAGE RATES / STATE
PART IV	INSURANCE
PART V	BID ITEMS

PART I
SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 04

CONTRACT ID - 192608

FE02 090 9002 B00016LR

COUNTY - NELSON

PCN - MB09090021901

FE02 090 9002 B00016LR

BG 9002 BRIDGE REPAIRS (MP 21.507). BRIDGES OVER BEECH FORKBRIDGE REPAIRS

GEOGRAPHIC COORDINATES LATITUDE 37:46:39.00 LONGITUDE 85:28:19.00

COMPLETION DATE(S):

COMPLETED BY 12/15/2019

APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's electronic bidding software. The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. When prescribed in said directives, the contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom shall be contacted through their individual Protection Notification Center. Non-compliance with these directives can result in the enforcement of penalties.

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by [KRS 14A.9-010](#) to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under [KRS 14A.9-030](#) unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in [KRS 14A.9-010](#), the foreign entity should identify the applicable exception. Foreign entity is defined within [KRS 14A.1-070](#).

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at <https://secure.kentucky.gov/sos/ftbr/welcome.aspx>.

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to kytc.projectquestions@ky.gov. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (www.transportation.ky.gov/contract). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

ACCESS TO RECORDS

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially

disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

April 30, 2018

SPECIAL NOTE FOR RECIPROCAL PREFERENCE

RECIPROCAL PREFERENCE TO BE GIVEN BY PUBLIC AGENCIES TO RESIDENT BIDDERS

By reference, KRS 45A.490 to 45A.494 are incorporated herein and in compliance regarding the bidders residency. Bidders who want to claim resident bidder status should complete the Affidavit for Claiming Resident Bidder Status along with their bid in the electronic bidding software. Submittal of the Affidavit should be done along the bid in Bid Express.

April 30, 2018

SPECIAL NOTE FOR JACKING AND SUPPORTING BRIDGE SPAN

- I. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2019 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawing(s). Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment required to for all jacking and supporting operations required on the bridge; (2) Submit for approval jacking plans, procedures, drawings, and details prepared by a Professional Engineer licensed to practice in the Commonwealth of Kentucky; (3) Jack the entire structure or portions as shown on the detail drawings and provide temporary supports for the duration of the remaining work; (4) Remove jacking and temporary supports when no longer required; (5) Maintain and control traffic; and (6) Any other work specified as part of this contract.

II. CONSTRUCTION.

- A. Working Drawings.** Prior to preparation of jacking plans and working drawings, the Contractor shall verify in the field, conditions and dimensions as necessary to perform the work. The Contractor shall submit to the Engineer for approval, jacking plans, jacking system technical data including dimensions, capacity and lockdown capability, working drawings and design calculations for the jacking and temporary supports. Such plans, drawings, and design calculations shall be prepared, sealed, and signed by an engineer who is licensed to practice in the Commonwealth of Kentucky. The content and number of sets of drawings and design calculations and times for review for temporary supports shall be the same as shown in the Standard Specifications for falsework working drawings. The jacking plan is to provide for a jacking scheme that will limit the load in the jacks to the design jacking plan loads plus or minus 5%. Jacks are to be sized to provide a safe working load of 1.5 times the required working or jacking load. In addition to a minimum horizontal force of 2% of the dead load reaction of the structure, the Contractor's jacking plan is to include provisions for resisting horizontal loads that may occur as a result of the jacking operations and clearly show methods to resist those loads. The jacking plan is to take into consideration the longitudinal movement of the centerline of bearings as the superstructure is raised. The jacking locations and loads, if shown on the detail drawings, may be revised by the contractor. If not shown on the detail drawings, the contractor shall select jacking locations and/or loads consistent with his proposed jacking plans and procedures. Jacking loads and jack locations required by the Contractor's jacking method shall be shown on the jacking and supporting plan submitted for approval. The contractor is permitted to temporarily remove existing bracing as necessary and to replace said bracing with contractor provided jacking frames, to install contractor provided jacking stiffeners, or otherwise modify the structure, as necessary to implement his jacking plan, with the written approval of the Engineer. If bearing stiffeners are required by the current *AASHTO LRFD Bridge Design Specification* to transfer jacking and support loads or if the spans are supported at locations other than those already having appropriate stiffeners or as shown in the detail drawings, the contractor shall provide steel plate or angle jacking stiffeners designed by a Professional Engineer which meet current AASHTO requirements for bearing stiffeners

or shall provide an analysis showing that bearing stiffeners are not required. Bearing stiffeners provided by the contractor shall be painted in accordance with this note and remain in place at the conclusion of the construction. Jacking stiffeners may be welded or bolted to the beam webs, but must be milled to bear on the top flange at the piers and may be close fit and welded to the flange at other locations. Jacking schemes which require modifications to the structure shall be considered permanent and shall remain in the structure unless otherwise shown in the contract documents or directed by the Engineer. All steel which will remain in the finished structure shall be painted in accordance with the Specifications and notes excepting that paint coats may be shop applied with touchup as necessary in the field.

Estimated Service Dead Load Beam Reactions are 87,000 lbs per beam.

- B. Jacking and Temporary Support.** The jacking operation is to be performed in such a manner that the vertical position of the members supported by the bearings will remain in approximately the same relative position throughout the jacking operation. A maximum of 1/4" relative difference in position is allowed in a lift between any of the jacks and between jacked and unjacked girders. Traffic shall remain on the portion of the structure to be jacked at all times unless otherwise approved by the Engineer. A redundant system of supports shall be provided during the entire jacking operation for backup should any of the jacks fail. The redundant system shall include stacks of steel plates or other steel sections added as necessary to maintain the redundant supports at each jack location within 1/4" of the jacking sill or corbels.

Each jack shall be equipped with either a pressure gage or a load cell for determining the jacking force. Pressure gages shall have an accurately reading dial at least 6" in diameter. Each jack shall be calibrated by a private laboratory within 6 months prior to use. Each jack and its gage shall be calibrated as a unit with the cylinder extension in the approximate position that it will be in at final jacking force and shall be accompanied by a certified calibration chart. Load cells shall be calibrated and provided with an indicator by which the jacking force is determined.

Vandal-resistant displacement monitoring equipment shall be provided and maintained. Vertical and horizontal displacements of the temporary supports and the existing structure shall be monitored continuously during jacking operations and shall be accurately measured and recorded at least weekly during removal and reconstruction work. As a minimum, elevations shall be taken prior to the start of jacking operations, immediately after jacking is complete, before permanently re-connecting the superstructure to the substructure, and after the temporary supports have been removed. As a minimum, the existing structure shall be monitored at the abutments, piers, and at mid-point of spans. Control points at each location shall be located near the center and the superstructure gutterlines. The records of vertical and horizontal displacement shall be delivered to the Engineer at the completion of the work described herein.

A force equal to the initial jacking load or the dead load shown on the plans or in this Special Note shall be applied to the structure by the temporary support system and the force held until all initial compression and settlement of the system is complete. The structure shall then be lifted by the jacks to the final position and the force held until the

temporary support system is installed and the system is stable, before remaining work at the location being supported is begun.

Jacking operations shall be carefully controlled and monitored to ensure that the jacking loads are applied in a manner to prevent distortion and excessive stresses that would damage the structure. The superstructure shall be jacked as necessary to maintain the total vertical displacements at control points to less than 1/4" from the elevations recorded prior to jacking plus the desired jacking height as shown on the plans or as modified by the Engineer. For bearing replacements and when no other desired jacking height is shown in the plans, detail drawings, or notes, the superstructure shall be jacked only as necessary to facilitate removal and replacement of the bearings and in no case more than 1/4" if traffic is to remain on the structure during the work.

Should unanticipated displacements, cracking or other damage occur, the construction shall be discontinued until corrective measures satisfactory to the Engineer are performed. Damage to the structure as a result of the Contractor's operations shall be repaired by the Contractor at no expense to the Department.

Following completion of the reconstruction, the monitored control points shall not deviate from the vertical position by more than 1/4" from the initial survey elevations or the elevations as modified by the Engineer or detail drawing(s).

IV MEASUREMENT.

A. Jacking and Supporting Bridge Span. The Department will not measure the quantity.

V. PAYMENT.

A. Jacking and Supporting Bridge Span. Payment at the contract lump sum price is for any and all jacking and support operations required by this project unless otherwise noted, including all labor, materials, manufactured assemblies, furnishing and operating jacks, plates, jacking stiffeners, jacking beams, painting, etc. and all incidental items necessary to complete the work in accordance with this Note, the Standard Specifications, and as shown on the attached detail drawing(s) or as directed by the Engineer.

The Department will make payment for the completed and accepted work under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
08435	Jack & Support Bridge Span	Lump Sum

SPECIAL NOTE FOR BEARING REPLACEMENT

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2019 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following:

- (1) Furnish all labor, materials, tools, and equipment.
- (2) Jack and temporarily support the girder(s).
- (3) Remove the existing expansion rockers, masonry plates, and anchor bolts as specified in this note and shown on the attached detail drawings.
- (4) Fill voids left by anchor bolt removal with non-shrink grout.
- (5) Install new bearings and bearing plates as specified in this note and shown on the attached detail drawings.
- (6) Maintain and control traffic.
- (7) Any other work specified as part of this contract.

II. MATERIALS

- A. Structural Steel.** Use new, commercial grade AASHTO M270 Grade 50 (ASTM A709 Grade 50) steel suitable for welding. See Section 812.
- B. Weld Material.** See Section 813.10 All welds shall be E70XX.
- C. Elastomeric Bearing Pads.** Use bearing pads as shown on attached detail drawings. See Section 822. Use low temperature Grade 3 with a durometer hardness of 50 and bearings that conform to the load test requirements corresponding to Design Method A.
- D. Paint.** Unless noted otherwise, match the color of the existing paint. All paint supplied must be contained in the current List of Approved Materials. See Section 821.
- E. Non-Shrink Grout.** Use non-shrink grout. See Section 601.

III. CONSTRUCTION

- A. Existing Dimensions.** The Contractor shall field verify all dimensions prior to ordering any materials or performing any work.
- B. Jacking Plan.** The Contractor shall submit a Jacking Plan, stamped by a professional engineer licensed in the State of Kentucky, for review by the Engineer, prior to starting work. The beams should only be lifted enough to allow for removal and installation of the bearing assemblies, no more than 1/4". At no time shall differential movement between beams exceed 1/4" For each bearing the total estimated beam reactions to be supported are:

090B00016L&R

Dead Load	87,000 lbs / beam
Live Load	jack & support under Dead Load only

- The contractor's jacking system, including jack and any jack supports required, shall be designed to support a minimum of 150% of these loads. See the Special Note for Jacking and Supporting Bridge Span for additional information.
- C. Remove Existing Materials.** Remove the existing bearings and anchor bolts as shown on the attached detailed drawings. Grind welds remaining after removing bearing sole plates smooth. Fill voids left by anchor bolt removal with non-shrink grout to a smooth level bearing surface. Clean the existing seats of debris. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Bearing Replacement".
- D. Field Prepare Existing Surfaces.** Clean surfaces of steel to be welded until free of all corrosion, debris and deleterious substances. Field prepare bottom of bearing plates to insure full bearing contact between existing plates and proposed bearing plates.
- E. Install Bearing Assembly.** Protect the elastomeric pad and vulcanized bonds on the cover plate from heat. Install bearings when the 6-hour average ambient temperature is projected to be $75^{\circ}\text{F} \pm 10^{\circ}\text{F}$.
- F. Welding Specifications.** All welding and welding materials, shall conform to "Joint Specification ANSI/AASHTO/AWS D1.5M-D1.5-2015 Bridge Welding Code" and modification and additions as stated on the plans. Welding procedures shall be submitted to the Engineer and approved prior to the start of fabrication and retrofit. The cost of welding, welding materials, straightening, altering, and burning new or existing steel shall be included in the unit price bid for the appropriate items.
- G. Mill Test Reports.** Notarized test reports shall be furnished in triplicate to the Department showing that all the materials used for these repairs conform to the requirements of the Specifications.
- H. Damage to the Structure.** The Contractor shall bear full responsibility and expense for any and all damage to the structure, should such damage result from the Contractor's actions.
- I. Painting.** Following the installation of the elastomeric bearing pads and pedestals, clean and paint all exposed steel at the bearings in accordance with Section 607.03.23 "Cleaning and Painting Structural Steel Bridges" unless otherwise shown in the contract documents. Apply field coatings to new steel and steel to be overcoated in accordance with Section 614. Shop and field painting of all new and existing structural steel will be considered incidental to "Bearing Replacement".
- J. Shop Plans.** Shop plans will not be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.
- K. Prohibited Field Welding.** No welding of any nature shall be performed on the bridge except as shown on the attached drawings without the written consent of the Director, Division of Bridge Design, and then only in the manner and at the locations designated in the authorization.

IV. MEASUREMENT

- A. Jack and Support Bridge Span.** See the Special Note for Jacking and Supporting Bridge Span
- B. Bearing Replacement.** Measurement will be for each bearing replacement completed and accepted in-place per “Each”.

V. PAYMENT

- A. Jack and Support Bridge Span.** See the Special Note for Jacking and Supporting Bridge Span.
- B. Bearing Replacement.** Payment at the contract unit price, ‘Each’, is full compensation for removal and disposing of specified materials, furnishing and placing non-shrink grout, furnishing and installing steel plates and anchor bolts, welding, furnishing and installing elastomeric bearing pads and all other materials, labor, equipment, tools, and incidentals necessary to complete the work as specified by this note.

The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
21969NN	Bearing Replacement	Each

SPECIAL NOTE FOR REPLACING EXPANSION DAMS OR ARMORED EDGES

I. DESCRIPTION. Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's Standard Specifications for Road and Bridge Construction edition of 2019 with current Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing concrete and expansion device(s) and/or bridge ends; (3) Install armored edges and new concrete as specified and in accordance with the attached detail drawings; (4) Install new joint seals (where required); (5) Maintain and control traffic; and (6) Any other work specified as part of this contract.

II. MATERIALS.

A. Concrete. Class 'AA' See Section 601.

B. Structural Steel. See Section 607, Section 812 and Standard Drawing BJE-001, current edition.

C. Stud Anchors. See Standard Drawing BJE-001 C.E.

D. Steel Reinforcement. Use Grade 60. See Section 602.

E. Epoxy Bond Coat. See Section 511.

F. Preformed Silicone Seal. Use Preformed, Pre-Compressed, Self-Expanding, Sealant System with Silicone Pre-Coated Surface, 'BEJS', as manufactured by EMSEAL JOINT SYSTEMS LTD, 25 Bridle Lane, Westborough, MA 01581, or approved performance equal. Preformed silicone seal shall be cellular polyurethane foam impregnated with hydrophobic 100 percent acrylic, water based emulsion, factory coated with highway-grade, low modulus, fuel resistant silicone and shall not contain any waxes or asphalts. Silicone coating is to be applied to the impregnated foam sealant at a width greater than maximum allowable joint extension and which when cured and compressed will form a bellows. Material shall be capable of movements of +50%, -50% (100% total) of nominal material size. Changes in plane and direction of the seal shall be executed using factory-fabricated transition assemblies. Transitions shall be warranted to be watertight at inside and outside corners through the full movement capabilities of the product. Design, depth of seal, & installation of the seal shall be in accordance with the manufacturer's recommendations. Use a nominal 3" BEJS seal for 2 1/2" expansion joint replacement (2 1/2" gap between armored or concrete edges).

III. EQUIPMENT.

A. Hammers. See Section 606.02.10 B.

B. Sawing Equipment. See Section 606.02.10 C.

C. Hydraulic Impact Equipment. See Section 606.02.10 D.

IV. CONSTRUCTION.

A. Remove Existing Materials. Remove existing Expansion Dam, Deck Concrete, Armored Edges and specified areas of concrete as shown on the attached sketches and in the construction documents. Remove debris and/or expansion joint filler as directed by the Engineer. Clean and leave all existing steel reinforcement encountered in place.

Damaged steel reinforcement will be repaired/replaced as directed by the Engineer at no additional cost to the Department.

Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Expansion Joint Replacement" or "Armored Edge for Concrete".

- B. Place New Concrete and Armored Edges.** After all specified existing materials have been removed; place new armored edges to match the grade of the proposed overlay or to match the original grade (See attached detail drawings). Place the new concrete to the scarified grade and finish to receive the new overlay or place the new concrete to the original grade and finish with broom strokes drawn transversely from curb to curb as directed or shown in the contract documents.

All new structural steel shall be cleaned and painted in accordance with requirements of Section 607.03.23, except that surfaces to come in contact with concrete or with the Preformed Silicone Seal are not to be painted.

Blast clean all areas of existing concrete and structural steel which will come in contact with new concrete until free of all laitance and deleterious substances immediately prior to the placement of the new Concrete. The surface areas of existing concrete to come in contact with the new Concrete are to be coated with an epoxy bond coat immediately prior to placing new concrete in accordance with Section 511. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as practicable.

- C. Additional Steel Reinforcement.** Furnish for replacement, as directed by the Engineer, 200 linear feet of #4 steel reinforcing bars in 20' lengths. Place these bars in areas deemed by the Engineer to require additional or replacement reinforcement. Field cutting and bending is permitted. Do not place any additional steel reinforcement above the height of the top row of Studs on the armored edges. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new concrete. Deliver unused bars to the Local County Maintenance Barn. Payment will be made in accordance with Section 602.
- D. Staged Construction.** Installation of concrete and armored edges in two (or more if specified) stages may be shown in the plans. If necessary, join the armored edges at or near the centerline of the roadway or a lane line, field weld, and grind smooth.
- E. Preformed Silicone Seal.** Just prior to joint seal installation, remove all contaminants by sandblasting or grinding to ensure a thoroughly clean and sound substrate for the full seal depth. Do not use a wire wheel as this will polish the substrate and cause bond failure. Solvent wipe metal surfaces in accordance with the manufacturer's installation recommendations immediately prior to applying epoxy adhesive. Joint seal shall be installed into manufacturer's standard field-applied epoxy adhesive in a manner as recommended by the manufacturer. Joint seal is to be installed recessed from the deck surface such that when the field-applied silicone injection bead is installed between the substrates and the foam-and-silicone-bellows, all parts of the system are 1/2" below the deck surface. Extend the joint seal up into the curbs similar to details shown in Standard Drawing BJE-001 CE or as recommended by the seal manufacturer.

F. Shop Plans. Shop plans will not be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.

V. MEASUREMENT.

A. Expansion Joint Replacement –2 1/2” The Department will measure the quantity in linear feet from gutterline to gutterline along the centerline of the joint.

B. Armored Edge for Concrete. The Department will measure the quantity in linear feet from gutterline to gutterline along the face of the bridge end for armored edges not included in Expansion Joint Replacement as shown on the plans.

C. Steel Reinforcement. See Section 602.

VI. PAYMENT.

A. Expansion Joint Replacement –2 1/2” Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new armored edges, concrete, neoprene strip seal or preformed silicone seal and all incidental items necessary to complete the work within the specified pay limits as specified by this note or as shown on the attached detail drawings.

B. Armored Edge for Concrete. Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new armored edges, concrete and all incidental items necessary to complete the work within the specified pay limits as specified by this note or as shown on the attached detail drawings.

C. Steel Reinforcement. See Section 602.

SPECIAL NOTE FOR JOINT SEAL REPLACEMENT

I. DESCRIPTION. Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's Standard Specifications for Road and Bridge Construction edition of 2019 with current Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing concrete and expansion device(s) and/or bridge ends; (3) Install armored edges and new concrete as specified and in accordance with the attached detail drawings; (4) Install new joint seals (where required); (5) Maintain and control traffic; and (6) Any other work specified as part of this contract.

II. MATERIALS.

A. Preformed Silicone Seal. Use Preformed, Pre-Compressed, Self-Expanding, Sealant System with Silicone Pre-Coated Surface, 'BEJS', as manufactured by EMSEAL JOINT SYSTEMS LTD, 25 Bridle Lane, Westborough, MA 01581, or approved performance equal. Preformed silicone seal shall be cellular polyurethane foam impregnated with hydrophobic 100 percent acrylic, water based emulsion, factory coated with highway-grade, low modulus, fuel resistant silicone and shall not contain any waxes or asphalts. Silicone coating is to be applied to the impregnated foam sealant at a width greater than maximum allowable joint extension and which when cured and compressed will form a bellows. Material shall be capable of movements of +50%, -50% (100% total) of nominal material size. Changes in plane and direction of the seal shall be executed using factory-fabricated transition assemblies. Transitions shall be warranted to be watertight at inside and outside corners through the full movement capabilities of the product. Design, depth of seal, & installation of the seal shall be in accordance with the manufacturer's recommendations. Use a nominal 3" BEJS seal for 2 1/2" expansion joint replacement (2 1/2" gap between armored or concrete edges).

IV. CONSTRUCTION.

A. Remove Existing Materials. Remove existing Expansion Joint Seal as shown on the attached sketches and in the construction documents. Remove debris and/or expansion joint filler as directed by the Engineer. Clean and leave existing concrete or steel armored edges in place and in accordance with the seal manufacturer's recommendations. Damaged steel or concrete will be repaired/replaced as directed by the Engineer at no additional cost to the Department.

Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Joint Seal Replacement"

B. Preformed Silicone Seal. Just prior to joint seal installation, remove all contaminants by sandblasting or grinding to ensure a thoroughly clean and sound substrate for the full seal depth. Do not use a wire wheel as this will polish the substrate and cause bond failure. Solvent wipe metal surfaces in accordance with the manufacturer's installation recommendations immediately prior to applying epoxy adhesive. Joint seal shall be installed into manufacturer's standard field-applied epoxy adhesive in a manner as

recommended by the manufacturer. Joint seal is to be installed recessed from the deck surface such that when the field-applied silicone injection bead is installed between the substrates and the foam-and-silicone-bellows, all parts of the system are ½” below the deck surface. Extend the joint seal up into the curbs similar to details shown in Standard Drawing BJE-001 CE or as recommended by the seal manufacturer.

F. Shop Plans. Shop plans will not be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.

V. MEASUREMENT.

A. Joint Seal Replacement The Department will measure the quantity in linear feet from gutterline to gutterline along the centerline of the joint.

VI. PAYMENT.

A. Joint Seal Replacement Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the preformed silicone seal including extensions into the curbs as applicable and all incidental items necessary to complete the work within the specified pay limits as specified by this note or as shown on the attached detail drawings.

SPECIAL NOTE FOR BEAM REPAIR, TYPE 1 OR TYPE 2

- I. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2019 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawing(s). Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Provide safe access to the beams in accordance with Section 105.01.03 for the Engineer to sound possible repair areas and for workers to complete the construction; (3) Remove the deteriorated concrete from the beams of each structure; (4) Blast clean and prepare the surfaces; (5) Form and prime using an epoxy-grout bonding agent the repair areas immediately prior to patching or reconstruction; (6) Apply the epoxy mortar patches or reconstruct using Class 'M' concrete as necessary ; (7) Finish the patched surface; (8) Apply an epoxy seal coat as directed and in accordance with the manufacturer's instructions; (9) Maintain and control traffic; and (10) Any other work specified as part of this contract.

Furnish to the Engineer copies of the epoxy manufacturer's technical data sheets, installation guidelines, material safety data sheets, and other pertinent data at least two (2) days prior to beginning the beam repairs. All work will be completed in accordance with Section 510 for "Sealing and Patching Concrete with Epoxy Resin" and/or the epoxy resin manufacturer's recommendations as approved by the Engineer.

II. MATERIALS.

- A. Epoxy Resin.** Conform to Section 826.
- B. Mortar Sand.** Conform to Section 804.
- C. Class 'M' Concrete.** Conform to Section 601.
- D. Steel Reinforcement.** Conform to Section 602, use Grade 60.
- E. Structural Steel.** Conform to Section 812, use Grade 36 or Grade 50.

III. CONSTRUCTION.

- A. Repair Types.** In general, Type 1 repairs are located at the fascia beam end indicated on the Layout Sheet. Locations are:

- a. Span 1, Pier 1-N, Girder 4
- b. Span 1, Pier 1-S, Girder 1
- c. Span 1, Pier 1-S, Girder 4
- d. Span 2, Pier 2-N, Girder 4
- e. Span 2, Pier 2-S, Girder 4
- f. Span 5, Pier 5-S, Girder 4
- g. Other locations if designated by the Engineer

Type 2 repairs are located at Span 5, Pier 5-S, Girder 2 only.

- A. Remove Deteriorated Concrete.** Prior to beginning the beam repairs, provide safe access to the beams, in accordance with Section 107.01.01, for the Engineer to sound possible repair areas. The Engineer will sound the beams with a hammer and mark the areas of concrete to be removed and patched. Other areas of deteriorated concrete found on any bridge beam may be included as part of this work at the direction of the

engineer. Final payment for this work will be for each location repaired & completed in accordance with this Note and as designated by the Engineer.

Remove specified areas of deteriorated concrete as shown on the attached detail drawing(s) and/or as directed by the Engineer. The removal of unsound material shall be accomplished with hand tools or pneumatic hammers that do not exceed twenty (20) pounds. Precautions shall be exercised to protect the underlying sound material. Saw, route, or otherwise manipulate the sides of the patch so that the interface between the old concrete and the epoxy mortar are perpendicular and the epoxy mortar is at least one (1) inch thick. Also insure concrete removal in the patch area extends at least three-quarters (3/4) inch beyond any steel reinforcement more than 50 percent exposed but in no case less than 3½". Clean any steel embedments encountered during concrete removal and replace damaged embedments as necessary. Dispose of all removed material entirely away from the job site or as directed by the Engineer.

Clean and leave all existing steel reinforcement encountered in place. Wire brushing may be required to thoroughly clean exposed steel reinforcement. Repair or replace any damaged steel reinforcement as directed by the Engineer at no additional cost to the Department. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to placing the epoxy resin prime or the epoxy mortar.

- B. Prepare Concrete Surfaces.** Prepare concrete surfaces to be repaired or reconstructed in accordance with Section 510.03.01. Final blast cleaning shall be completed within twelve (12) hours prior to placement of the epoxy mortar patch. Concrete must be sound, dry, and clean prior to placement of epoxy resin prime coat. Temporary blockage of the bridge deck drains may be required.
- F. Apply Epoxy Mortar.** For Beam Repair, Type 1 or Type 2, place the epoxy resin prime or bond coat. For Beam Repair, Type 1 place the epoxy mortar repair patch in accordance with Section 510.03.04. For Type 1 and Type 2 repairs, Place epoxy mortar or Class 'M' concrete as applicable to restore the beams to their original dimensions as shown on the detail drawing(s) or as directed by the Engineer. See the "SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS" also.
- D. Apply Epoxy Resin Seal Coat.** After the repair mortar or concrete has hardened for the amount of time specified by the manufacturer or Standard Specifications for curing, apply an additional coat of epoxy resin over the entire patch and on the adjacent old concrete a minimum of two (2) inches from the patch / repair area. Be sure to work the epoxy resin seal coat thoroughly into any cracks that may have developed in the patch or in the interface of the patch and the old concrete. Place masking tape on the old concrete prior to applying this sealing coat of epoxy resin to insure a neat line. Remove tape after the sealing coat has cured.

IV MEASUREMENT.

- A. Repair Beam, Type 1 or Type 2.** The Department will measure the quantity as each location and Type complete and accepted.

V. PAYMENT.

A. Repair Beam, Type 1 or Type 2. Payment at the contract unit price each for Type 1 or Type 2 repairs is full compensation for removal of deteriorated concrete, preparation of the concrete surface, application of the epoxy mortar patches, forming as necessary, concrete Class 'M', steel reinforcement, drilling & grouting reinforcing into exist, application of the epoxy resin seal coat, and all incidental items necessary to complete the work in accordance with this Note and as shown on any attached detail drawing(s).

The Department will consider payment as full compensation for all work required by this note and any attached detail drawings.

August 14, 2019

SPECIAL NOTE FOR CONCRETE COATING

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways current Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. 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 the Engineer to sound possible repair areas and for workers to complete the construction.
3. Repair cracks as applicable in accordance with the Special Note for Epoxy Injection Crack Repair.
4. Repair delaminated or spalled areas as applicable in accordance with the Special Note for Concrete Patching.
5. Apply Ordinary Surface Finish
6. Prepare the surfaces to receive coating.
7. Apply concrete coating.
8. Any other work as specified as part of this contract.

II. MATERIALS

One of the following coating systems shall be used:

<u><i>Manufacturer</i></u>	<u><i>Prime Coat</i></u>	<u><i>Finish Coat</i></u>
Sherwin Williams	Macropoxy 646	Acrolon 218 HS
PPG	Amerlock 2	Devoe Devflex HP
Carboline	Carboguard 890	Carbothane 133 HB
Tnemec	Elastogrip 151	Envirocrete 156

The finish product shall be opaque and satin or semi-gloss. The contractor must apply sufficient coats as required to achieve this goal. The finish coat shall be gray and will meet the following values:

	<u>L*</u>	<u>a*</u>	<u>b*</u>
Gray	74.94	-1.54	3.92

Furnish to the Engineer copies of the manufacturer's technical data sheets, installation guidelines, material safety data sheets, and other pertinent data at least two (2) days prior to beginning the work.

III. CONSTRUCTION

- A. Perform Concrete Repairs.** Repair concrete surface in accordance with the Special Note for Epoxy Injection Crack Repair and/or the Special Note for Concrete Patching Repair if included in the contract documents.
- B. Apply Ordinary Surface Finish.** In addition to new concrete, areas receiving epoxy injection, concrete patching, and other surface imperfections, including areas of minor cracking, should receive Ordinary Surface Finish in accordance with Section 601.03.18 of the Standard Specifications. Use mortar of the same cement and fine aggregate as the concrete patching, or as directed by the Engineer. Payment will be incidental to Concrete Sealing.
- C. Areas to Receive Concrete Coating:**
1. Substructure Units as shown or noted on the plans:
 - a) Abutment and End Bent caps: Exposed surfaces above the existing ground or fill line.
 - b) Piers : Caps & Pedestals, exposed top and sides of caps & pedestals above a line 1'-6" below top of cap or low seat.
 2. Other areas of the bridge as specified in the drawings.
- D. Prepare Concrete Surfaces for Coating.** All areas specified shall be pressure washed. Equip the pressure washers with calibrated gages and pressure regulators to ascertain and regulate water pressure. All equipment for pressure washing shall be operated at a minimum pressure of up 3,500 to 4,500 psi with 0 degree spinner tip and/or fan tips as determined by the engineer at the working location with a minimum flow rate of 3.5 gal/minute provided that these pressures do not damage any components of the structure. Pressure and flow rates shall be reduced to a level satisfactory to the Engineer should any damage occur due to power washing procedures. The washing wand must be approximately perpendicular to the washed surface and within a maximum of 12 inches of the surface. Wand extensions greater than 36 inches will be subject to Division of Construction approval. Pressure washing of any bridge element will proceed from top of wash area to bottom of wash area. Perform all pressure washing at temperatures above 40 degrees Fahrenheit.
- E. Apply Concrete Coating.** All areas specified shall have concrete coating applied to as specified after debris removal and power washing. New concrete shall be allowed to properly cure in accordance with the manufacturer's recommendations prior to application. Use compressed air to remove any loose debris from the surfaces that are to be coated after power washing. All coatings shall be applied within manufacturers recommended dry film thickness range. Comply with KYTC "Standard Specifications for Road and Bridge Construction" Section 614.03.02 and coatings supplier recommended conditions for application. Allow the surfaces to be coated to dry a minimum of 24 hours before any coating is applied. The coating must be applied with 72 hours of pressure washing. The coating must be applied to a clean and dry surface. All coating application shall be executed using brushes, rollers, etc. No spray application will be permitted.

The Department requires acceptance testing of samples obtained on a per-lot basis per-shipment. The Division of Materials shall perform acceptance testing. Test samples shall be taken at the Contractor’s paint storage site. Department personnel shall perform sampling. Allow (10) working days for testing and approval of the sampled paint. It is the Contractor’s responsibility to maintain an adequate inventory of approved paint. The Department shall assume no responsibility for lost work due to rejection of paint or approved paint subsequently found to be defective during the application process. Perform all concrete coating application at temperatures above 40 degrees Fahrenheit or in accordance with manufactures specifications.

IV. MEASUREMENT

The Department will measure the quantity as a lump sum. The Department will not measure preparation of the site for the Engineer’s access or removal and reapplication of coatings that do not satisfy the Engineer’s approval for payment and will consider them incidental to “Concrete Coating”.

V. PAYMENT.

The Department will make payment for the completed and accepted quantities of concrete coating under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24982EC	Concrete Coating	Lump Sum

The plans may show an estimated quantity in square feet. The Department will consider payment as full compensation for all work required as described in this note.

SPECIAL NOTE FOR GEOTECHNICAL INSTRUMENTATION

- I. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2019 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and any attached detail drawing(s). Section references are to the Standard Specifications.

The Department will furnish and install tilt meters and survey targets at both Pier 5-N and Pier 5-S. The contractors shall assist the Department in installing this instrumentation by providing access to the pier caps, piers, and other portions of the bridge. This access shall be provided by a snooper truck, scaffolding, or other safe means of access. The access methods used to perform the pier repairs may be used for this purpose. The instrumentation will be installed by the Department after repairs at the piers have been made but before the Contractor demobilizes so that the installed instrumentation is not damaged during the repairs.

The Department will furnish and install slope inclinometers near the base of both Pier 5-N and Pier 5-S substructures. The Contractor shall provide access for a track mounted drill furnished by the Department to these locations for the installation. This access shall be provided after the repairs to the bridge and site are substantially complete but before the contractor performs reclamation activities and demobilizes from the site. Installation of the slope inclinometers is expected to take approximately one week.

The Contractor shall ensure that care is taken during the site restoration and demobilization process to prevent damage to the instrumentation. Any instrumentation damaged by the Contractor's actions will be replaced at the Contractor's expense and will not be the basis for a delay claim.

II MEASUREMENT.

- A.** No quantity will be measured. The work shall be considered incidental to the Contract.

III. PAYMENT.

- A.** No direct payment for the work required by this Note shall be made. All labor, materials, and incidental items necessary shall be considered incidental to the Contract.

August 14, 2019

SPECIAL NOTE FOR CONCRETE PATCHING REPAIR

- I. DESCRIPTION.** Perform all work in accordance with the Department's 2019 Standard Specifications, and applicable Supplemental Specifications, the attached sketches, and these Notes. Section references are to the Standard Specifications.
- This work consists of: (1) Furnish all labor, materials, tools, and equipment; (2) Jack and support existing during repairs as necessary; (3) Remove existing spalled/delaminated concrete; (4) Prepare the existing surface for concrete patching; (5) Place hook fasteners and welded wire fabric over surfaces to be repaired (where applicable); (6) Apply concrete patching as specified by this note and as shown on the detail drawings; (7) Finish and cure the new Concrete Patches; (8) Maintain & control traffic; and, (9) Any other work specified as part of this contract.
- II. MATERIALS.**
- A. Patching Concrete.** Approved Concrete Product for Vertical and Overhead Repair Patch.
 - B. Concrete Class 'M'.** Use either "M1" or "M2". See Section 601.
 - C. Steel Reinforcement.** Use Grade 60. See Section 602
 - D. Welded Steel Wire Fabric (WWF).** Conform to Section 811
 - E. Hook Fasteners.** Use commercial grade galvanized hook fasteners. Minimum 3/16" diameter.
- III. CONSTRUCTION.**
- A. Concrete Removal and Preparation.** The Contractor, as directed by the Engineer shall locate and remove all loose, spalled, deteriorated and delaminated concrete. Sounding shall be used to locate delaminated areas. Care shall be exercised not to damage areas of sound concrete or reinforcing steel during concrete removal operations. Unless directed by the Engineer or shown in the detailed drawings, depth of removal shall not exceed 6 inches as measured from the nearest original surface. Concrete removal shall be in accordance with a sequence approved by the Engineer. Jack and support parts of the existing structure to accomplish the removal if and as necessary.
- Concrete removal shall be accomplished by chipping with hand picks, chisels or light duty pneumatic or electric chipping hammers (not to exceed 20 lbs.). If sound concrete is encountered before existing reinforcing steel is exposed, the surface shall be prepared and repaired without further removal of the concrete. When reinforcing steel is exposed, concrete removal shall continue until there is a minimum $\frac{3}{4}$ inch clearance around exposed reinforcing bar, and in no case less than $3\frac{1}{2}$ ". Care shall be taken to not damage bond of adjacent unexposed reinforcing steel during the concrete removal processes.
- The perimeter of all areas where concrete is removed shall be tapered at an approximately 90° angle, except that the outer edges of all chipped areas shall be saw cut to minimum depth of $\frac{3}{4}$ inch to prevent featheredging unless otherwise approved by the Engineer.
- After all deteriorated concrete has been removed; the repair surface to receive concrete patching shall be prepared by abrasive blast cleaning. Remove all fractured surface concrete and all traces of unsound material or contaminants such as oil, grease, dirt, slurry, or any materials which could interfere with the bond of

freshly placed concrete. The Contractor shall dispose all removed material off State Right Of Way at an approved site.

- B. Steel Reinforcement.** All reinforcing steel exposed during concrete removal shall have corrosion products removed by abrasive grit blasting or wire brushing whichever is more appropriate. Furnish for replacement, as directed by the Engineer, 200 linear feet of #4 steel reinforcing bars by 20-foot max. lengths. Place these bars in areas deemed by the Engineer to require additional reinforcement. Field cutting and bending is permitted. Bundle and deliver unused bars to the nearest County Maintenance Barn. Bundling and delivery of unused bars considered incidental to the contract.

Existing reinforcing steel displaying deep pitting or loss of more than 20 percent of cross-sectional area shall be removed and replaced. Replacement bars shall be placed in accordance with the recommendations of ACI 506R, Sections 5.4 and 5.5. Specifically, bars shall not be bundled in contact lap splices, but shall be placed with at least 3 times the nominal maximum aggregate size between bars to allow the bar to be fully enveloped by the concrete patching material. Reinforcing including Welded Wire Fabric (WWF) shall be otherwise placed and supported in accordance with Section 602. Welded wire fabric (WWF W4xW4) shall be provided as shown on the attached sketches and if not shown, shall be provided at each repair area larger than 1 square foot if the depth of the repair measured from the original member face exceeds 3 inches. Sheets of adjoining WWF shall be lapped at least one and one-half spaces at all intersections, in both directions, and securely fastened in accordance with Section . WWF fabric shall be supported no closer than ½ inch to the prepared concrete surface and shall have a minimum concrete cover of 1-½ inches.

- C. Hook Fasteners.** Hook fasteners shall be positioned at the spacing as stated above, stated herein, or as directed by the Engineer. Any given area shall have a minimum of four hook fastener anchors. WWF shall not move or deform excessively during concrete patching. Maximum hook fastener spacing shall not exceed 12 inches on a grid pattern over the entire repair area.

Hook fasteners shall be of commercial grade galvanized steel with a 3/16" minimum diameter. They may be mechanically set or grouted, as approved by the Engineer. The Department will randomly select hook fasteners to be tested to verify that the proof load pullout force is 1000 lbs minimum. If any anchor fails to meet the minimum acceptable pullout value, corrective measures shall be taken by the Contractor and further testing will be conducted.

- D. Concrete Patching.** Place and finish the new concrete for the patching area in accordance with the manufacturer's recommendations, as shown on the detail drawings, or as directed by the Engineer to restore the area being patched to its original plan dimensions insofar as practicable. Repairs deeper than 4" may be repaired using formed Class 'M' concrete. Repairs deeper than 6" shall be repaired using formed Class 'M' concrete unless otherwise directed by the Engineer. Epoxy-bond or bond as recommended by the patching product manufacturer the new concrete patching material to the existing concrete. The Engineer shall approve the Contractor's method of bonding, placing, and

consolidating the concrete or patching mortar prior to beginning this work. Pneumatically placed concrete is not permitted.

- E. **Curing.** Immediately on completion of finishing operations, patching concrete shall be wet cured in accordance with Section 601.03.17. Prevent the patch from drying out and cracking by fogging, wetting, and/or any appropriate method approved by the Engineer. Curing shall continue for duration recommended by the patching product manufacturer or the Specifications.

Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall familiarize himself with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence that this inspection has been made. Any claims resulting from site conditions will not be honored by the Department.

Quantities given are approximate. The quantity for "Concrete Patching Repair" shall be bid with the contingency that quantities may be increased, decreased, or eliminated by the Engineer. Dispose of all removed material entirely away from the job site as approved by the Engineer. This work is incidental to the contract unit price for "Concrete Patching Repair".

IV. MEASUREMENT

- A. **Concrete Patching Repair.** The Department will measure the quantity in square feet of repair surface area accepted and in-place for each area restored.
- B. **Steel Reinforcement.** See Section 602.
- C. **Jacking and Supporting Bridge Span.** See the "Special Note for Jacking and Supporting Bridge Span".
- D. **Welded Wire Fabric & Hook Fasteners.** Welded Wire Fabric and Hook Fasteners will not be measured for payment, but shall be considered incidental to "Concrete Patching Repair".

V. PAYMENT

- A. **Concrete Patching Repair.** Payment at the unit price bid per square foot is full compensation for all labor, materials, tools, equipment, and all incidentals items necessary to complete the work in accordance with this Note, the Standard Specifications, and as shown on the detail drawing(s) or as directed by the Engineer.
- B. **Steel Reinforcement.** See Section 602.
- C. **Jacking and Supporting Bridge Span.** For payment, see the 'Special Note for Jack and Support Bridge Span' if included in the contract documents or otherwise, payment shall be incidental to the unit price bid for 'Concrete Patching Repair'.

The Department will make payment for the completed and accepted work under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
22146EN	Concrete Patching Repair	Square Foot
08150	Steel Reinforcement	See Section 602
08435	Jack & Support Bridge Span	See Special Note if present Incidental otherwise

SPECIAL NOTE FOR INLAID PAVEMENT MARKERS

I. DESCRIPTION

Except as provided herein, perform all work in accordance with the Department's Standard and Supplemental Specifications and applicable Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications. This work shall consist of:

(1) Maintain and Control Traffic; (2) Furnish and install Type IV Pavement Markers (lenses) into Type V pavement Markers (casting) in the Westbound lanes only prior to returning traffic to the normal configuration. The lenses have already been removed in the Westbound direction. (3) Remove lenses in the Eastbound direction prior to placing two-way traffic on the Eastbound lanes; and (4) Prior to returning traffic to the normal configuration, furnish and install Type IV Pavement Markers (lenses) into existing inlaid marking grooves.

II. MATERIALS

The Department will sample all materials in accordance with the Department's Sampling Manual. Make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Markers. Provide reflective lenses with depth control breakaway positioning tabs. Before furnishing the markers, provide to the Engineer the manufacturer's current recommendations for adhesives and installation procedures. Use one brand and design throughout the project. Use markers meeting the specifications in the table below.

SPECIFICATIONS FOR HOUSING AND REFLECTOR	
Material:	Polycarbonate Plastic
Weight:	Housing 2.00 oz.
	Reflector 2.00oz.
Housing Size:	5.00" x 3.00" x 0.70" high
Specific Intensity of Reflectivity at 0.2° Observation Angle	
White:	3.0 at 0°entrance angle
	1.2 at 20°entrance angle
Yellow:	60% of white values
Red:	25% of white values

C. Adhesives. Use adhesives that conform to the manufacturer's recommendations.

conditions to be encountered during construction, but consider the types and quantities of work listed as approximate only. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation or extension of Contract time if the conditions encountered are not in accordance with the information shown.

IV. MEASUREMENT

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Inlaid Pavement Markers. "PAVEMENT MARKER TYPE IV-B W/R" shall be measured as each for work on Westbound lanes. One (1) installation of "PAVEMENT MARKER TYPE IV-B W/R" will consist of preheating pavement to remove moisture, adhesives, and installation of two (2) markers with all lenses in accordance with this note. "PAVEMENT MARKER TYPE IV-B W/R" (Inlaid Marker) shall be measured as each for for work on Eastbound lanes. One (1) installation of "PAVEMENT MARKER TYPE IV-B W/R" (Inlaid Marker) will consist of removing asphalt cuttings and debris, preheating pavement to remove moisture, adhesives, and installation of two (2) markers with all lenses in accordance with this note.

Note: Each pay item of Inlaid Pavement Marker will require two markers.

V. PAYMENT

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Inlaid Pavement Markers. The Department will make payment for the completed and accepted quantity of completely installed "PAVEMENT MARKER TYPE IV-B W/R" and "PAVEMENT MARKER TYPE IV-B W/R" (Inlaid Marker) at the Contract unit price, each. Accept payment as full compensation for all labor, equipment, materials, and incidentals to accomplish this work to the satisfaction of the Engineer.

**SPECIAL NOTE FOR CONTRACT COMPLETION DATE AND
LIQUIDATED DAMAGES ON BRIDGE REPAIR CONTRACTS**

- I. COMPLETION DATES.** The Contractor has the option of selecting the starting date for this Contract. Once selected, notify the Department in writing of the date selected at least two weeks prior to beginning work. All work is to be completed by December 15, 2019.
- II. LIQUIDATED DAMAGES.** Liquidated damages will be assessed the Contractor in accordance with the Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction, Section 108.09, when the December 15, 2019 date is exceeded.

Contrary to the Standard Specifications, liquidated damages will be assessed to the Contractor during the months of December, January, February and March when the contract time has expired. Contract time will be charged during these months.

All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

I. TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2012 Standard Specifications, Section 112. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

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

II. TRAFFIC COORDINATOR

Furnish a Traffic Coordinator as per Section 112. The Traffic Coordinator shall inspect the project maintenance of traffic, at least three times daily, or as directed by the Engineer, during the Contractor's operations and at any time a lane closure is in place. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents.

The Traffic Coordinator shall report all incidents throughout the work zone to the Engineer on the project. The Contractor shall furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

III. SIGNS

Contrary to Section 112.04.02, only long term signs (sign intended to be continuously in place for more than 3 days) will be measured for payment; short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

The contractor is to install warning signs for wide loads in advance of the bridge under the direction of the Engineer. The Department will not measure installation, maintenance, or removal for payment, and will consider these incidentals to Maintain and Control Traffic.

IV. TEMPORARY PAVEMENT STRIPING

Skip lines and/or solid lines through the length of the tapers for lane closures and other striping as directed by the Engineer shall be removed through water blasting in accordance with Section 717.03.06. Payment for water blasting will be per linear foot. Temporary pavement striping shall be paid only once per course in accordance with Section 112.04.07. The Contractor shall replace any temporary striping that becomes damaged or fails to adhere to the pavement before dark on the day of the notification. Liquidated damages shall be assessed to the Contractor at a rate of \$500 per day for failing to replace temporary striping within this time limit.

V. PROJECT PHASING & CONSTRUCTION PROCEDURES

The Contractor shall maintain eastbound and westbound traffic on Bluegrass Parkway at all times in accordance with Standard Drawing Nos. TTC-145 & TTC-146.

VI. BARRIER WALL

Payment of the contract unit price per linear foot for "RELOCATE CONCRETE BARRIER WALL" shall be full compensation for relocating, installing, maintaining, adjusting alignment as needed, removing the barrier when no longer needed, delivery of the barrier wall, and all incidental items necessary to complete the work.

Provide one side mounted barrier wall delineator per each section of barrier. See Standard Drawing RBM-020 for types. No direct payment allowed for delineators.

Delivery of the barrier wall shall be to the following address:

**1275 Old Bloomfield Pike
Bardstown, KY 40004**

VII. CRASH CUSHION / END TREATMENTS

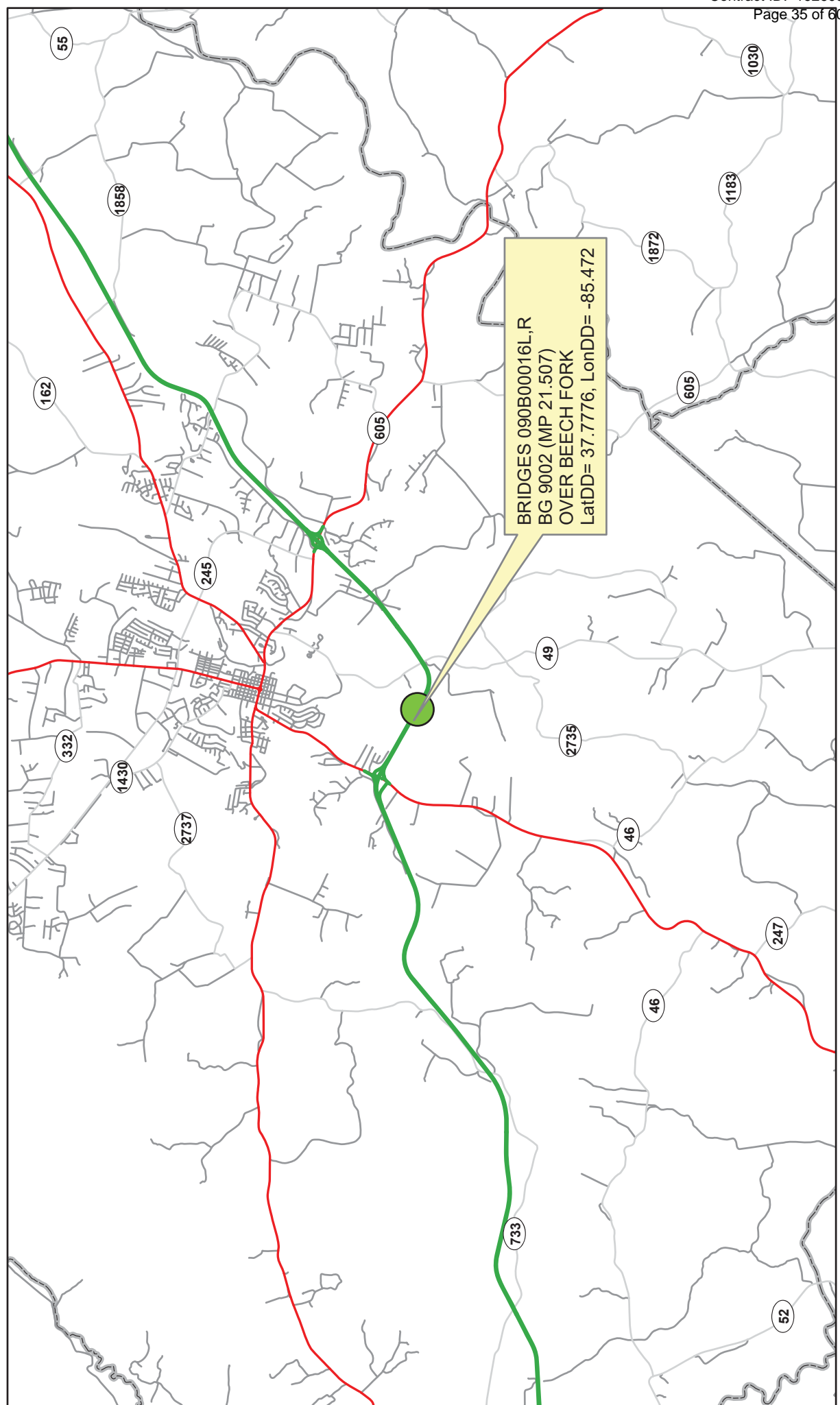
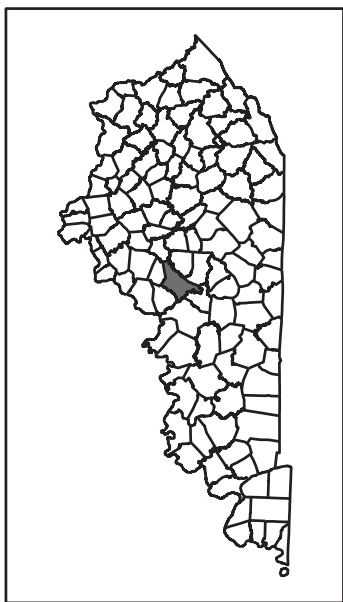
When traffic is switched to the Eastbound Lanes, relocate Type VI Crash Cushion and attach to relocated barrier wall as shown on Standard Drawing TTC-150-03. To the satisfaction of the Engineer extend trailing end of barrier wall out of the clear zone.

When the project is complete, deliver Type VI Crash Cushion to:

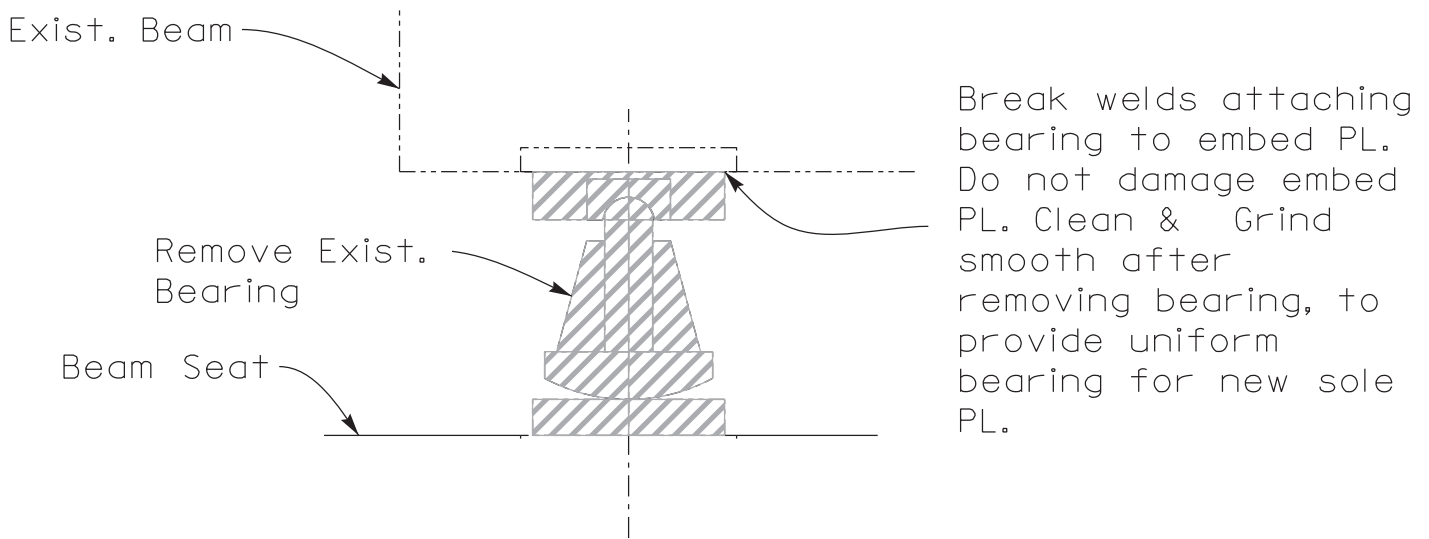
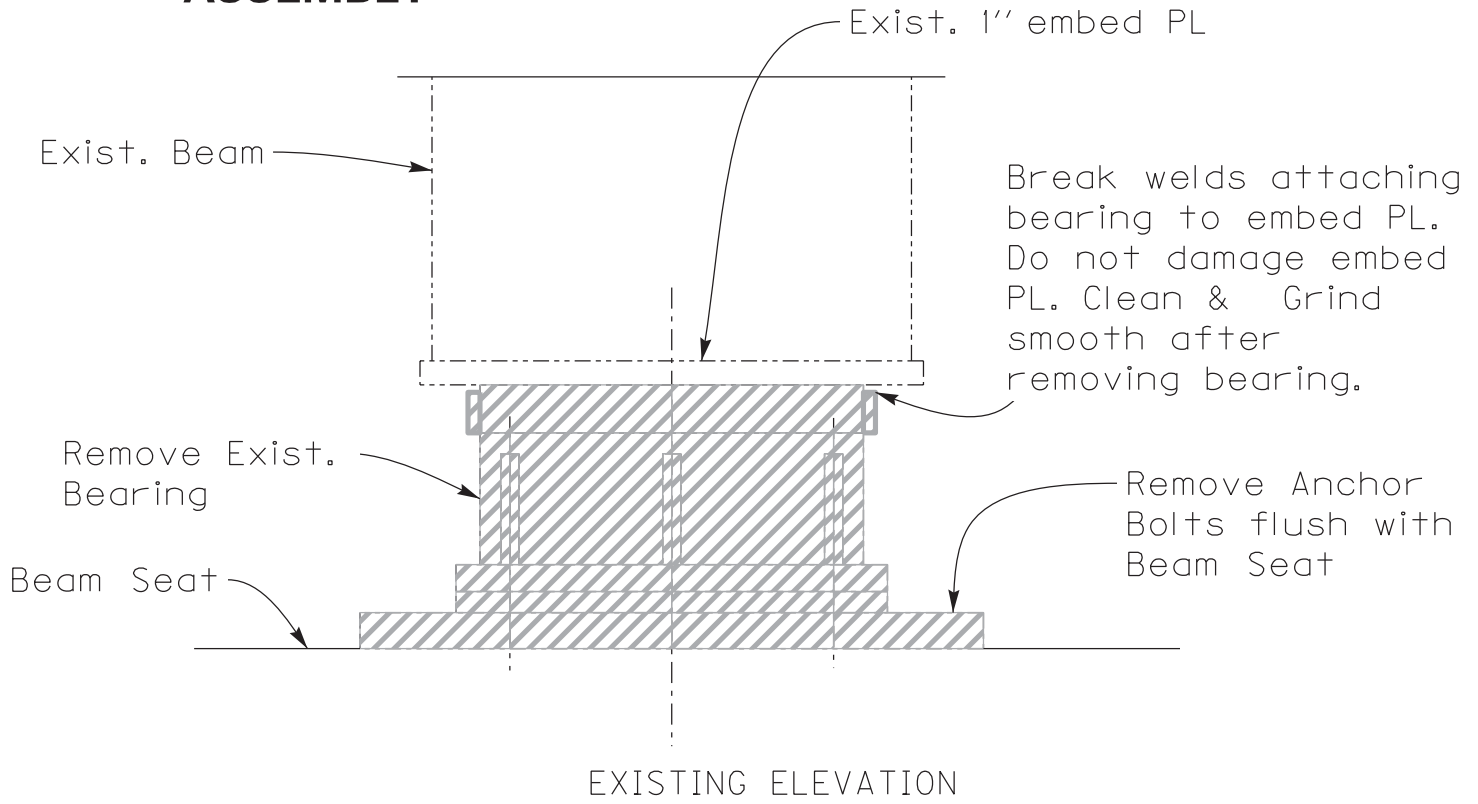
**Kentucky Transportation Cabinet
Building 2
310 Valley Creek Rd.
Elizabethtown, KY 42701**

Delivery of Type VI Crash Cushion shall be incidental to bid item "RELOCATE CRASH CUSHION".

NELSON COUNTY



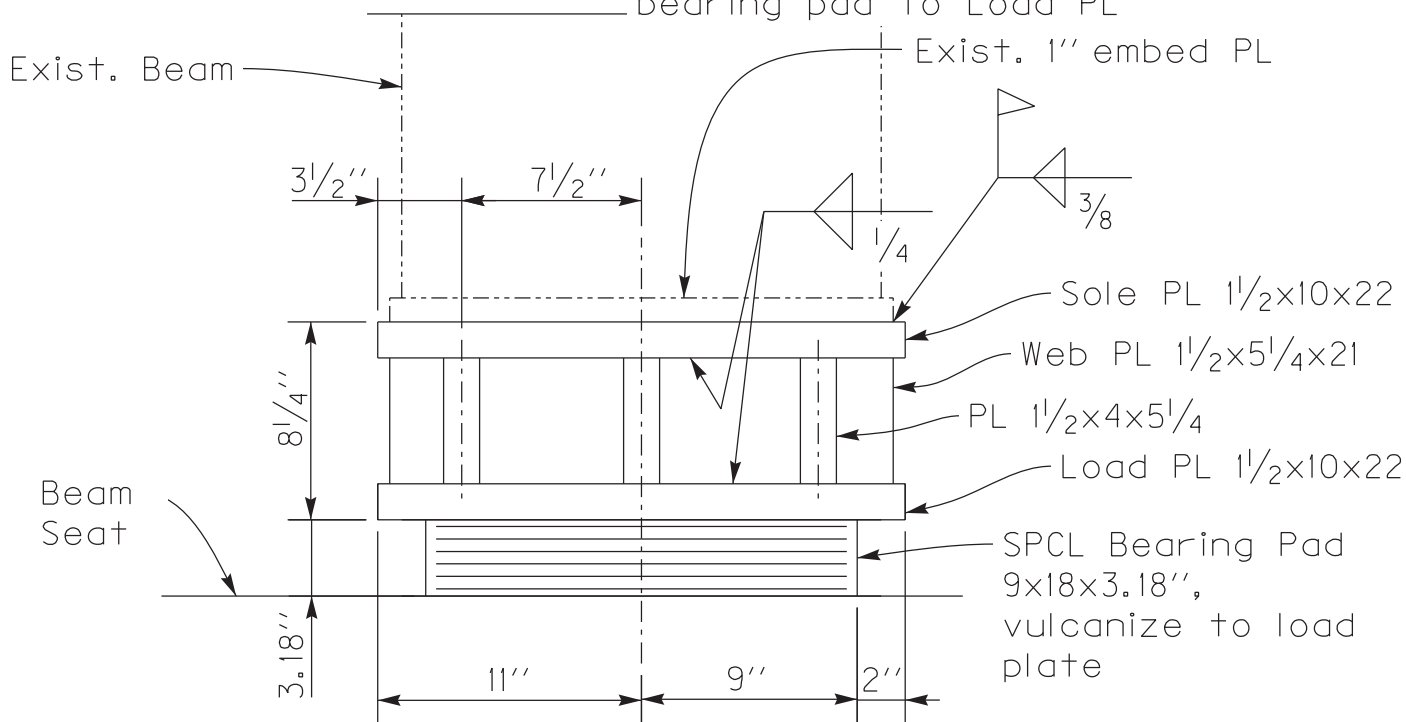
EXISTING BEARING ASSEMBLY



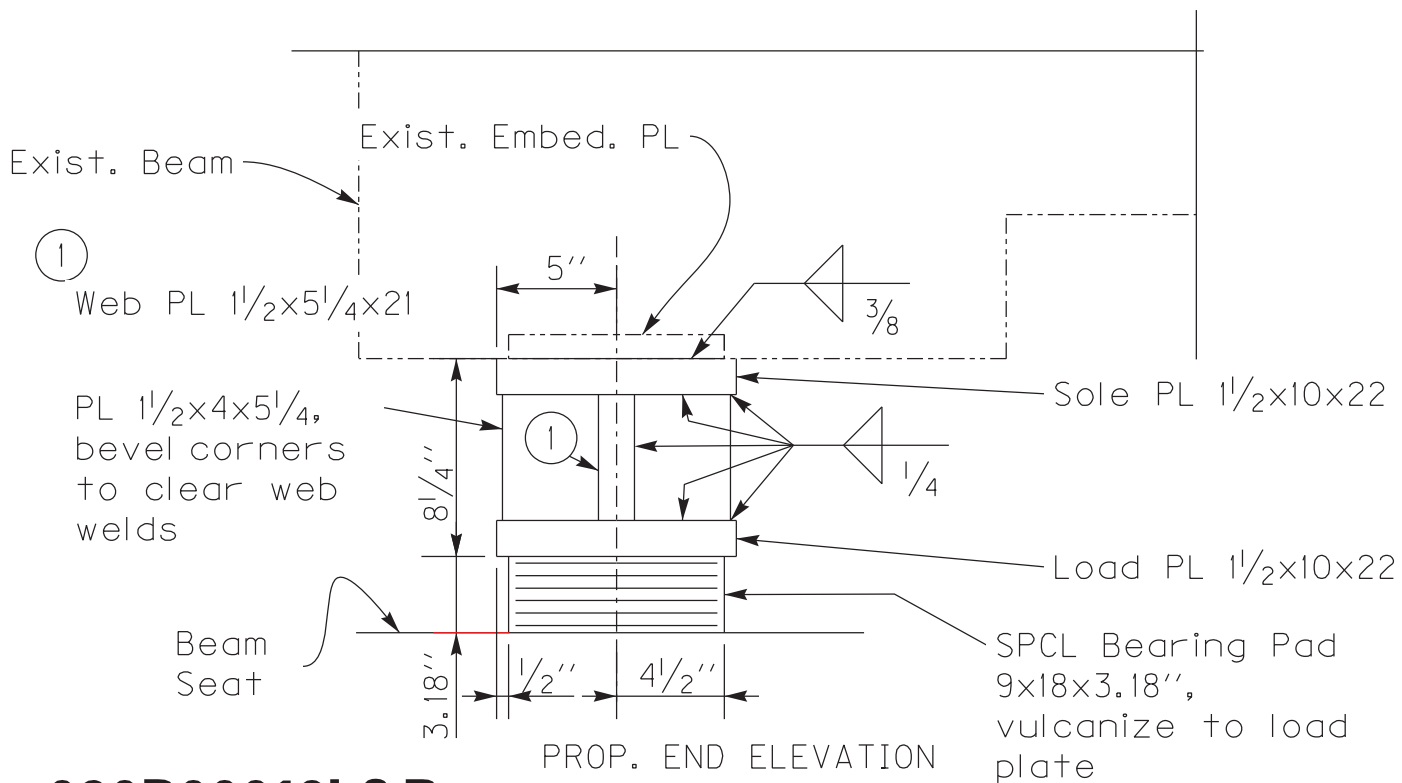
090B00016L&R

BEARING ASSEMBLY

NOTE: Hot Dip Galvanize steel after assembly and before vulcanizing elastomeric bearing pad to Load PL

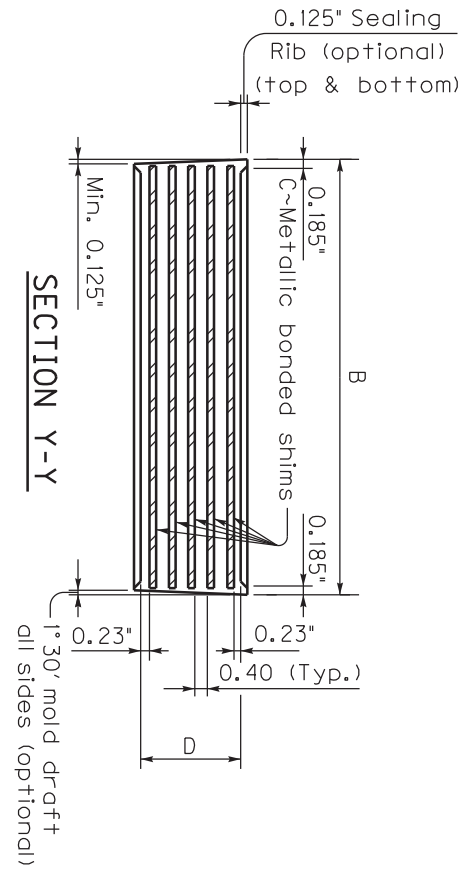
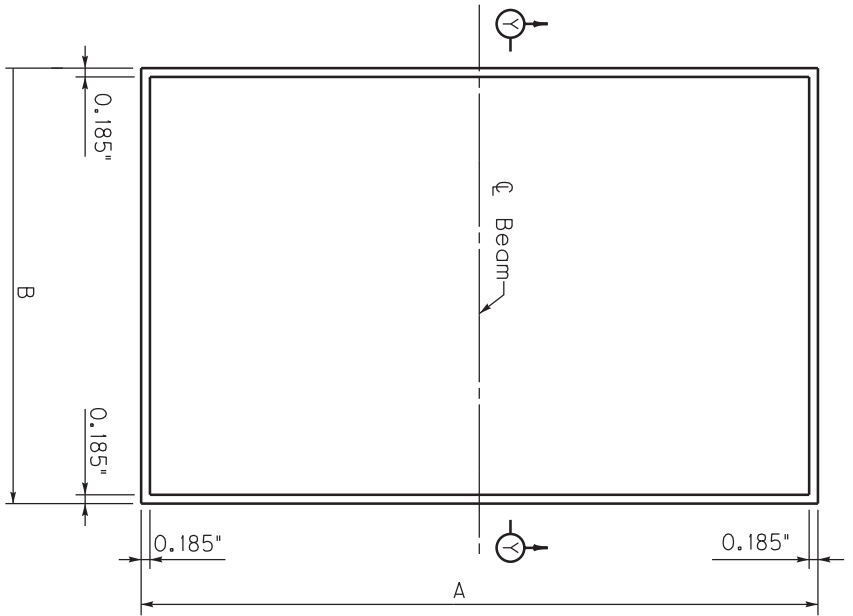


PROPOSED ELEVATION



PROP. END ELEVATION

090B00016L&R



GENERAL NOTES

SPECIFICATIONS: Fabricate the Elastomeric Bearing Pads to the design and dimensions as shown on these drawings, Standard Specifications Section 822, and to AASHTO LRFD Bridge Construction Specifications, current edition, Section 18.

Ensure bearings are low temperature Grade 3 with durometer hardness of 50 and subjected to the load testing requirements corresponding to Design Method A.

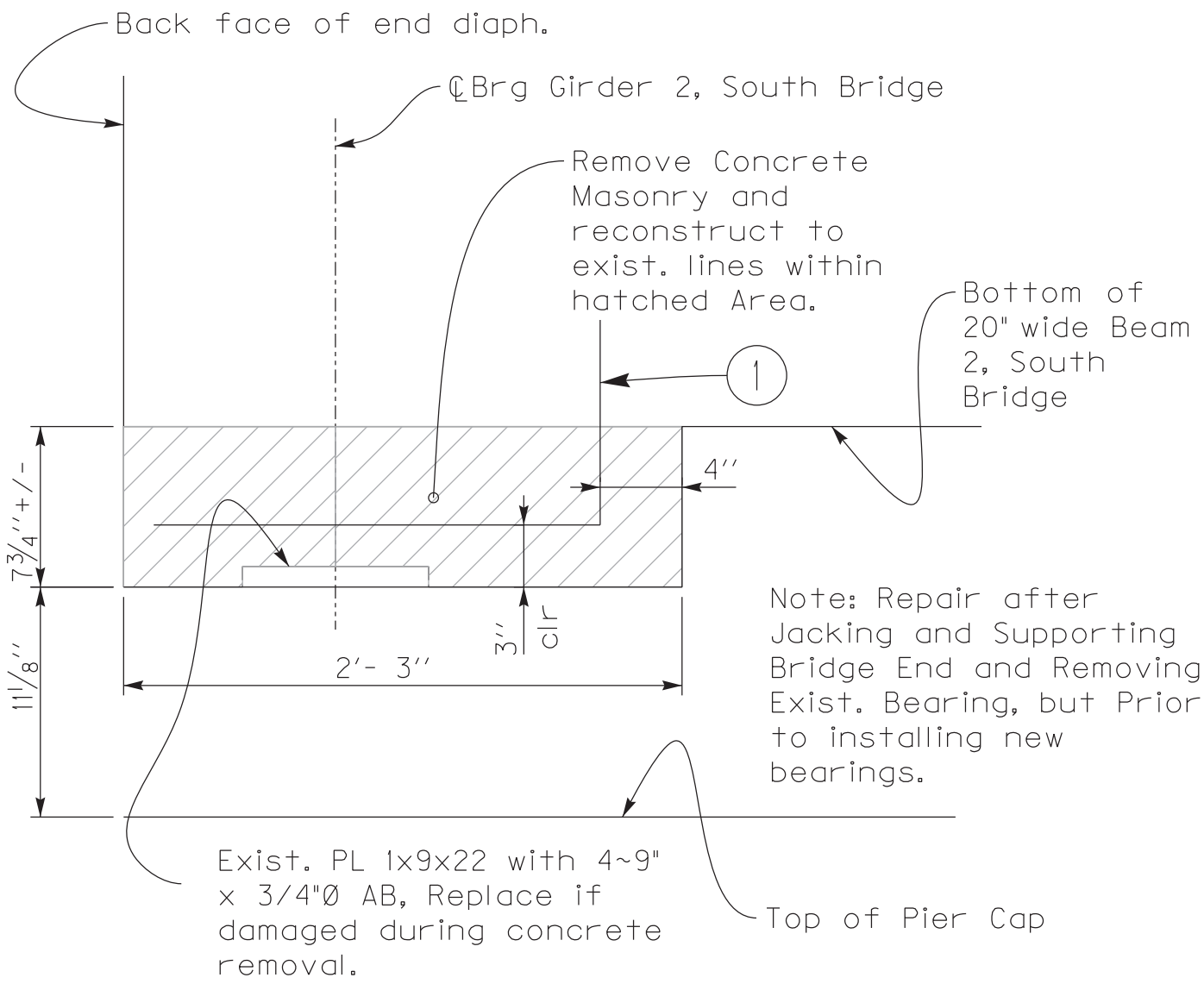
Include the price of bearing pads in the bid for the beams or bearing replacement as applicable.

DIMENSIONS FOR ELASTOMERIC BEARING PADS

Bearing TYPE	A	B	C	D	*MAXIMUM REACTION	MAXIMUM MOVEMENT (One Direction)
SPCL	18"	8"	6'-0.12" x 17.630" x 7.630"	3.18"	159 kips	1.23"

* These reactions are based on service loads.

SPECIAL ELASTOMERIC BEARING PADS



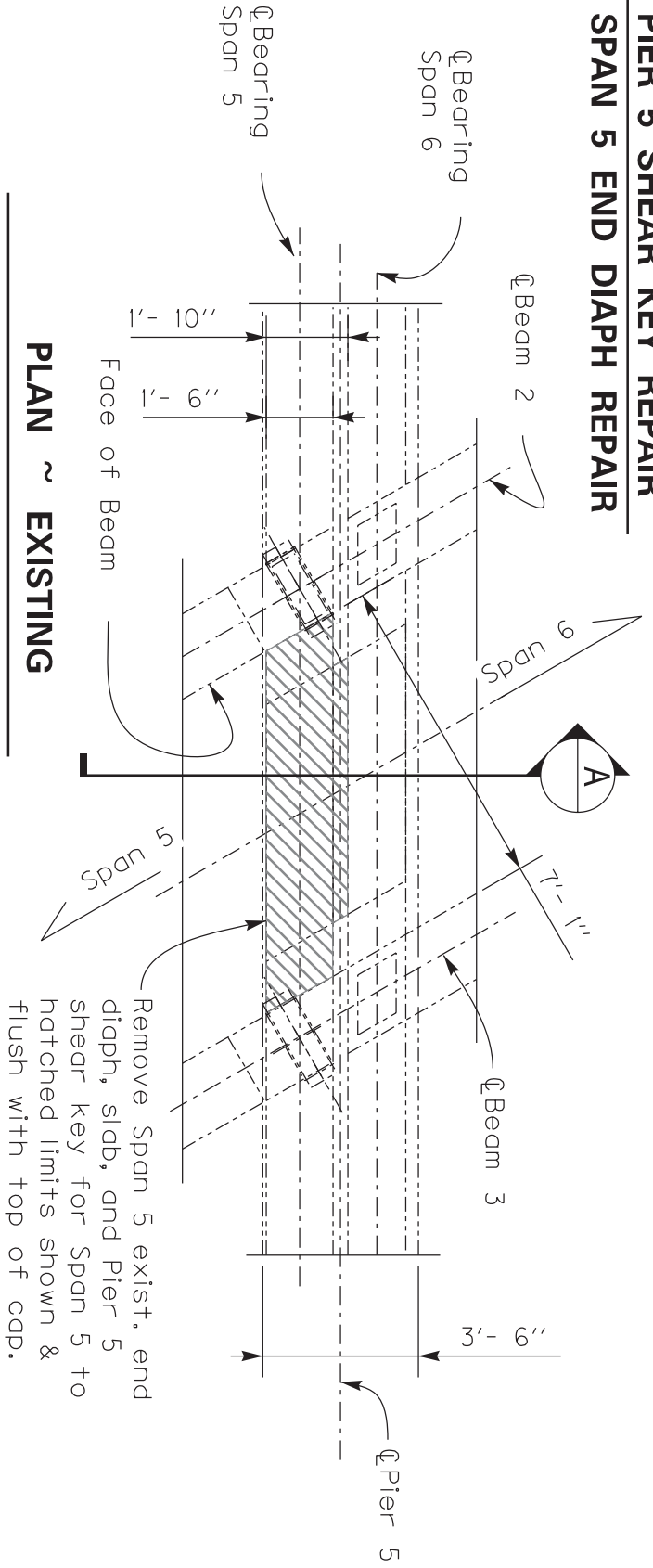
EXISTING END ELEVATION

REPAIR BEAM, TYPE 2

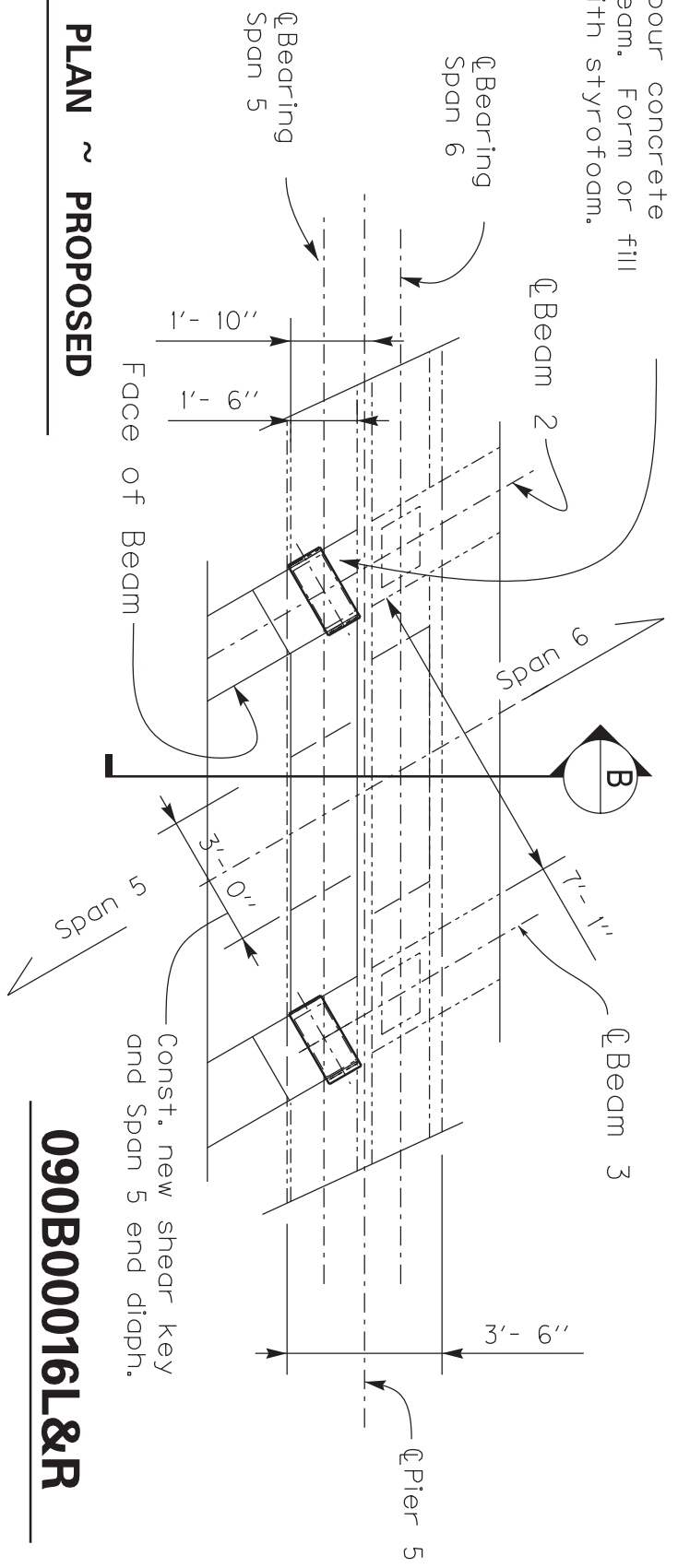
1

Note: Drill & Epoxy-Grout 3 ~ #4 Ls (14" x 21" legs) spaced equally across width of beam.

**PIER 5 SHEAR KEY REPAIR
SPAN 5 END DIAPHH REPAIR**

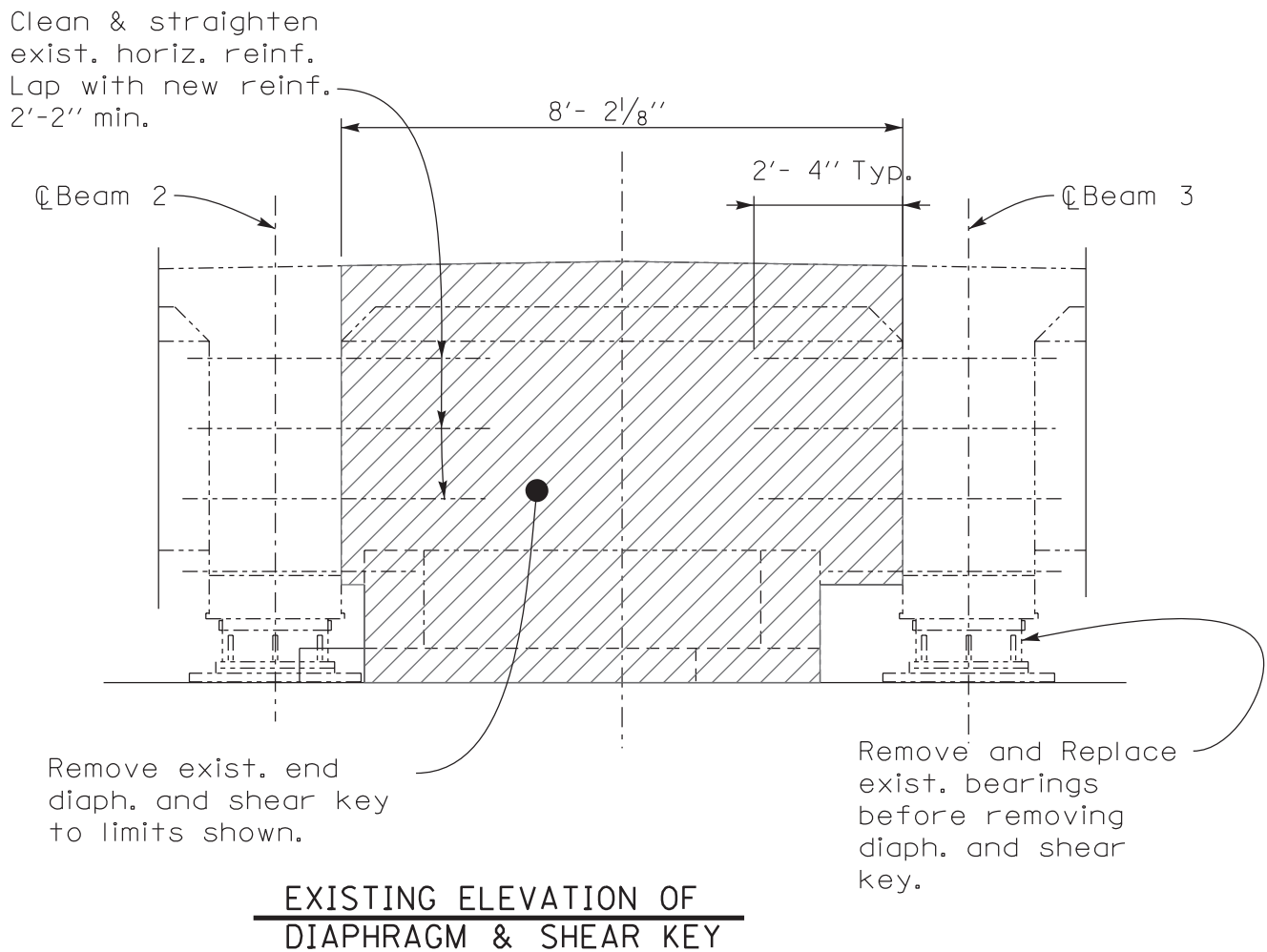
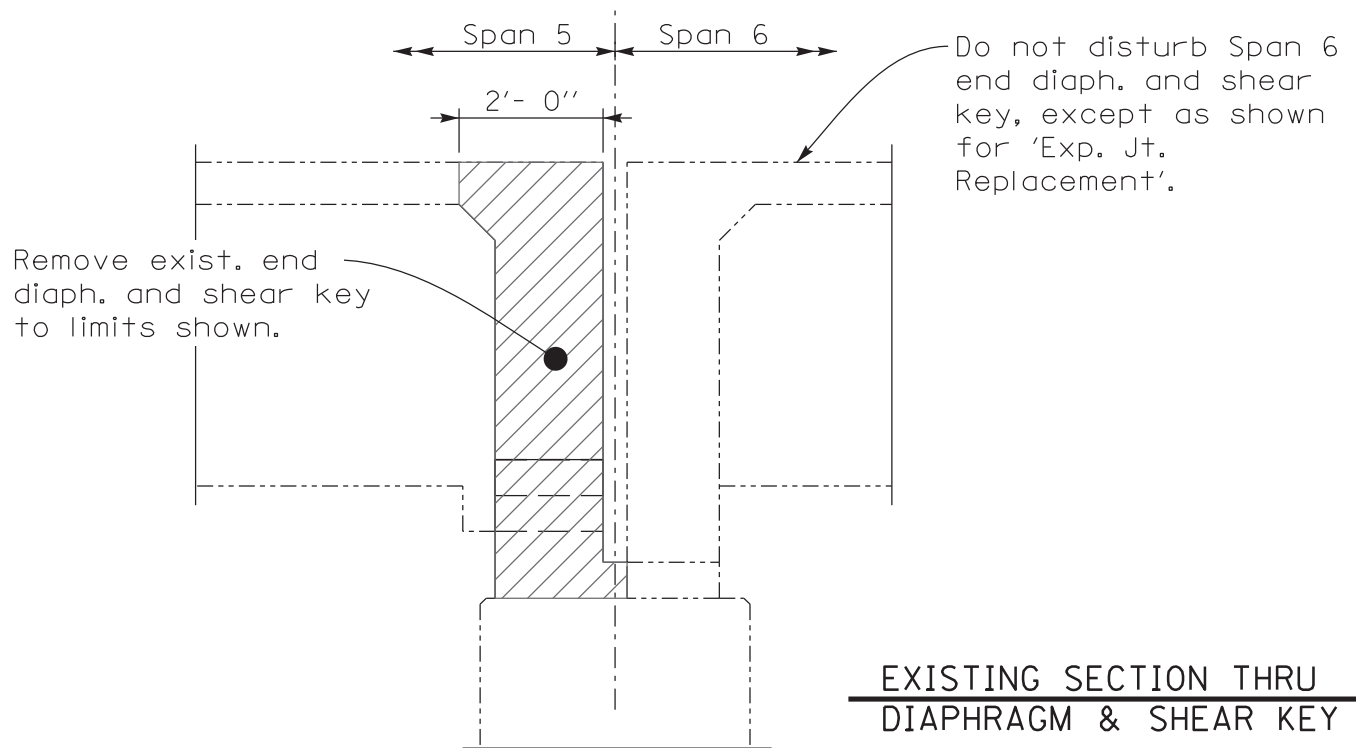


Do not pour concrete under beam. Form or fill space with styrofoam.

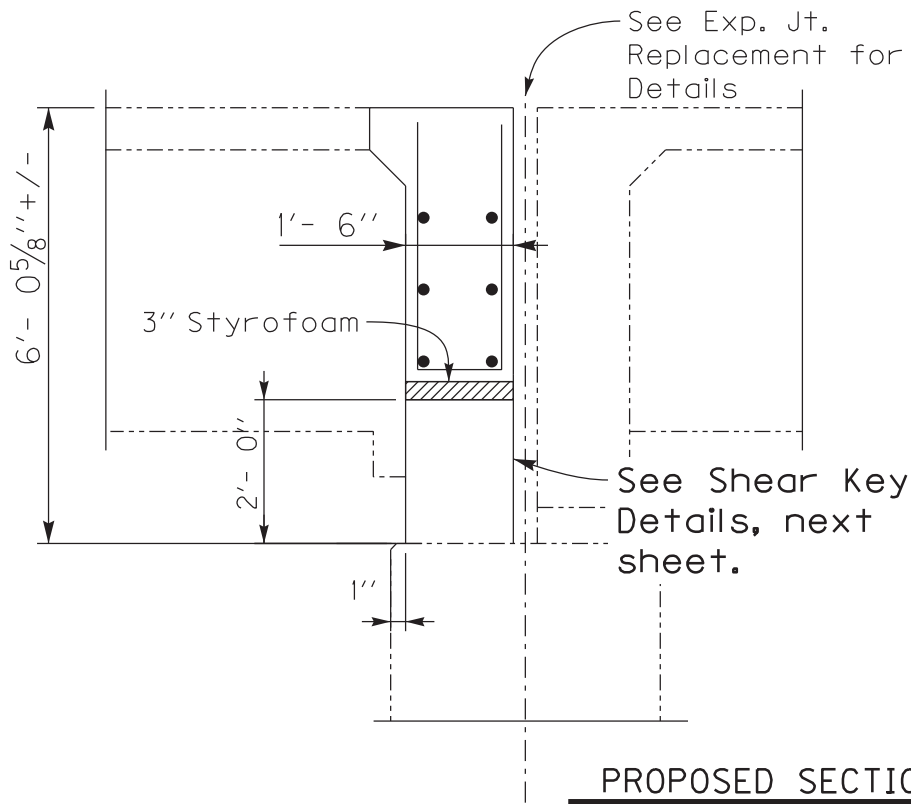


PLAN ~ PROPOSED

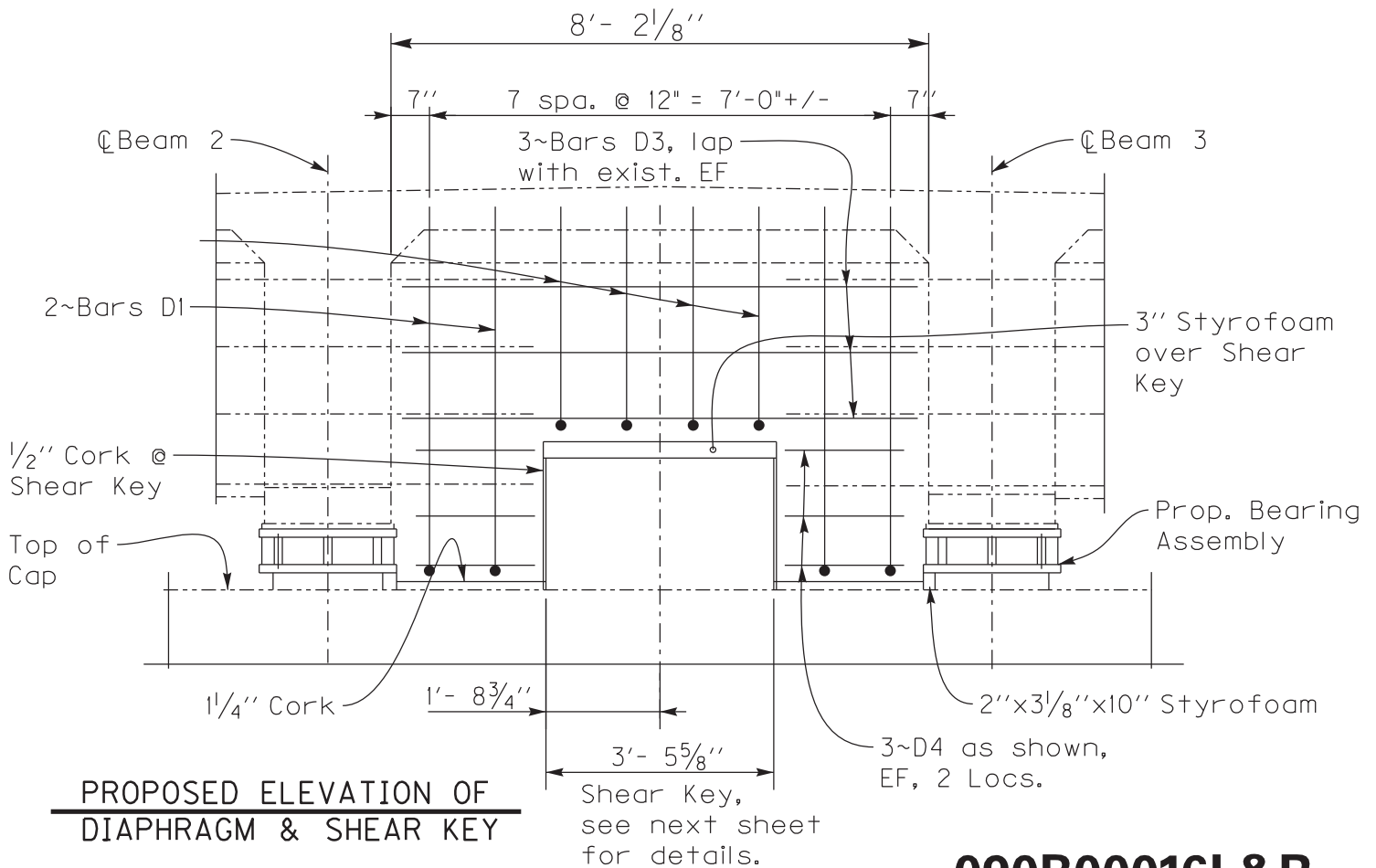
090B00016L&R



090B00016L&R



**PROPOSED SECTION THRU
DIAPHRAGM & SHEAR KEY**



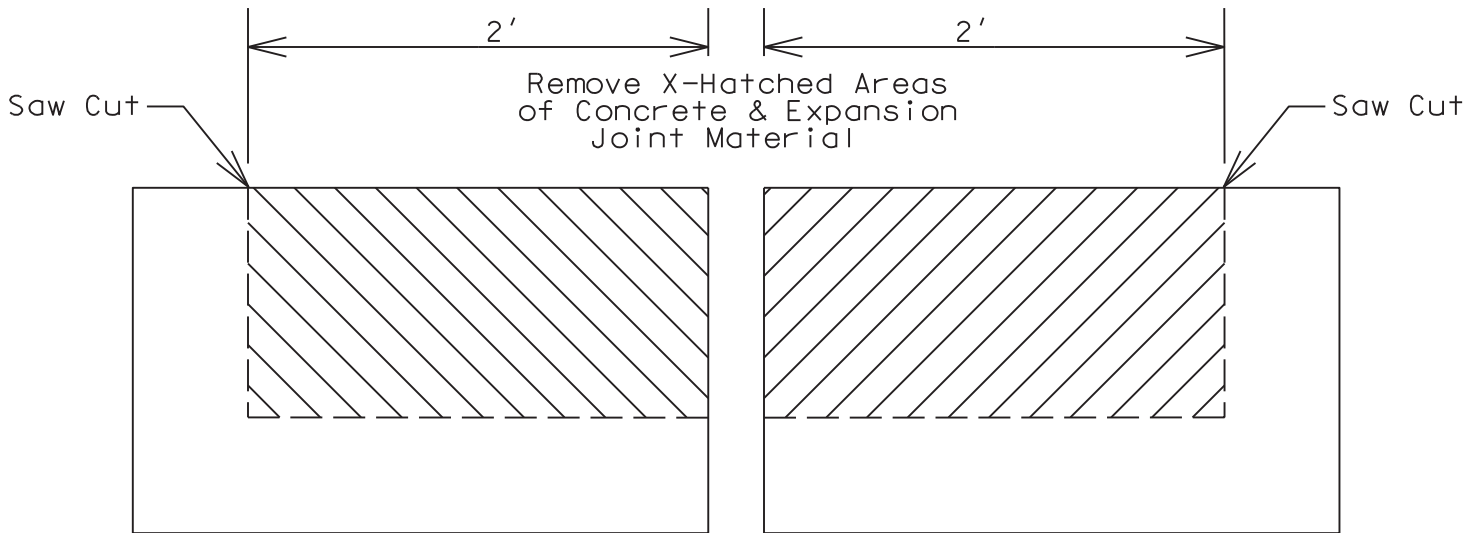
**PROPOSED ELEVATION OF
DIAPHRAGM & SHEAR KEY**

090B00016L&R

090B00016L&R

EXPANSION DAM DETAIL

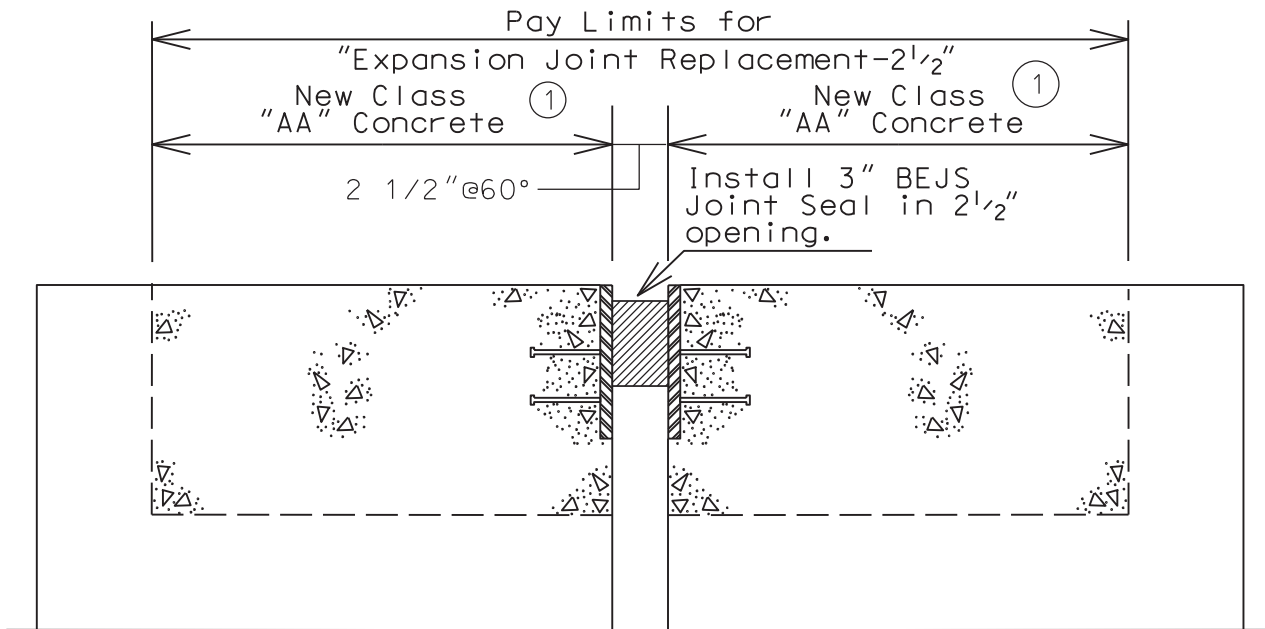
"Expansion Joint Replacement-2 1/2"



Clean & Leave
Steel Reinf.
in place.

EXISTING SECTION

PIER 5-N & PIER 5-S



PROPOSED SECTION

PIER 5-N & PIER 5-S

See Standard Drawing BJE-001 CE for
additional details.

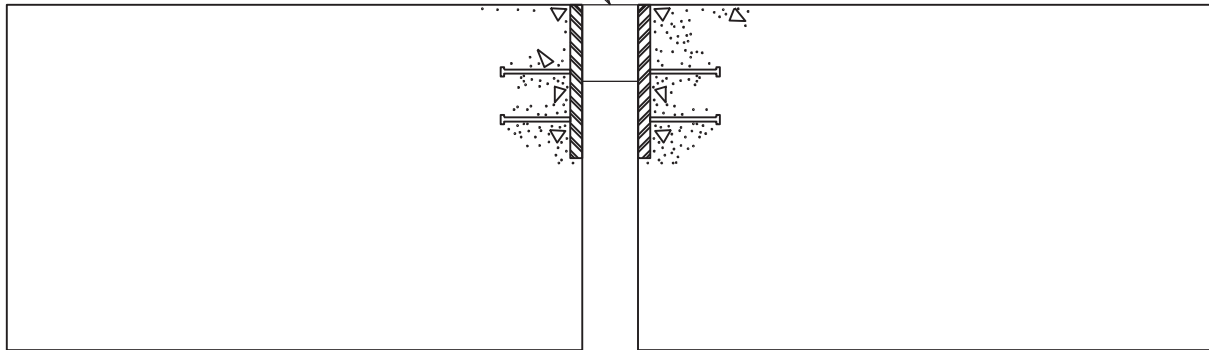
① Note: Coordinate
Concrete Replacement
with End Diaphragm
Reconstruction

090B00016L&R

EXPANSION DAM DETAIL

"Joint Seal Replacement"

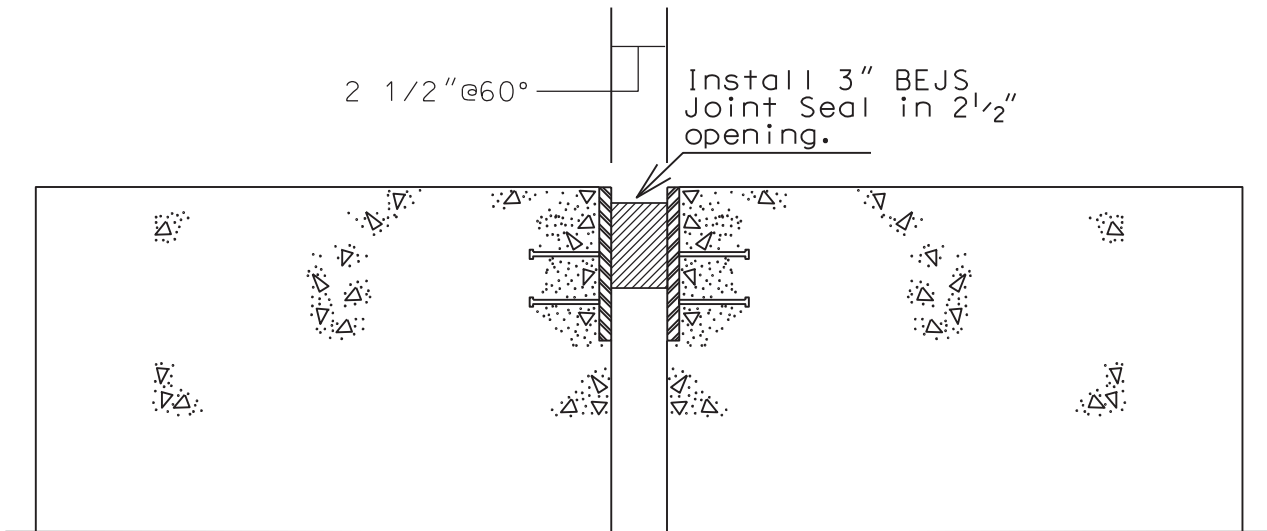
Remove Exist. Joint Seal & Clean Exist Armored Edges



EXISTING SECTION

PIER 1-N & PIER 1-S

Remove existing joint seal, Clean Exist. Armored Edges, Furnish and Install new 3" BEJS Joint Seal, See Special Note for Expansion Joint Seal Replacement.



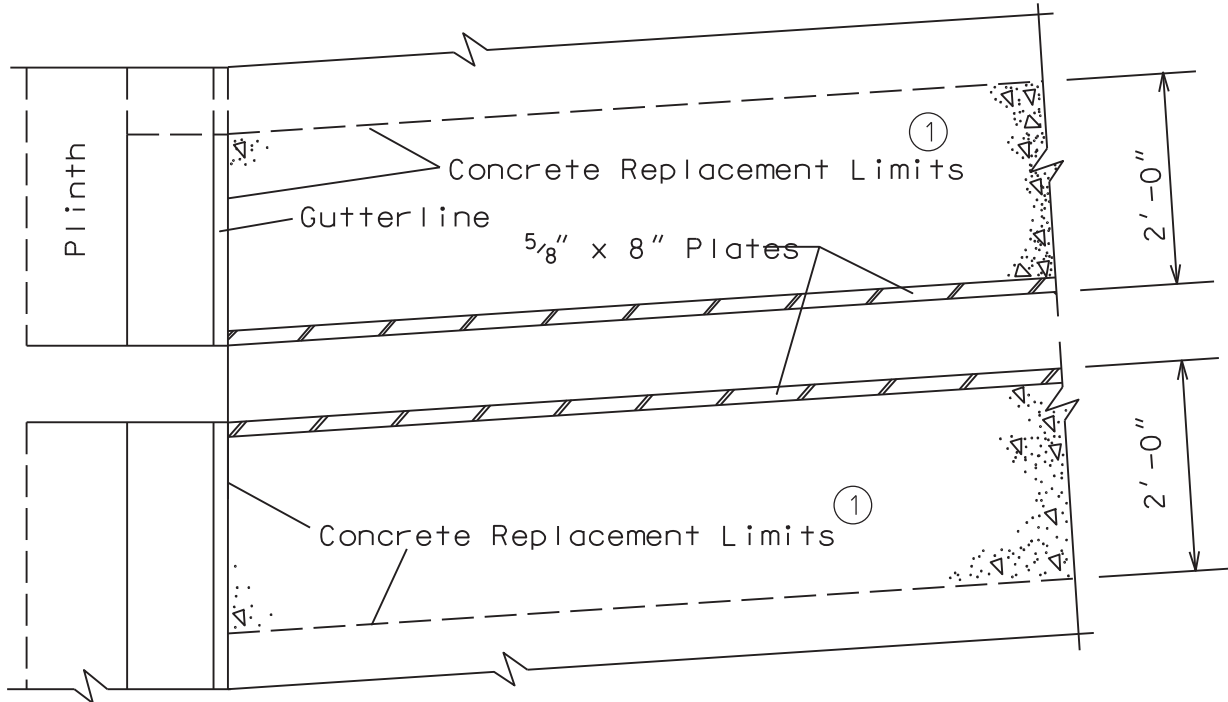
PROPOSED SECTION

PIER 1-N & PIER 1-S

See Standard Drawing BJE-001 CE for additional details.

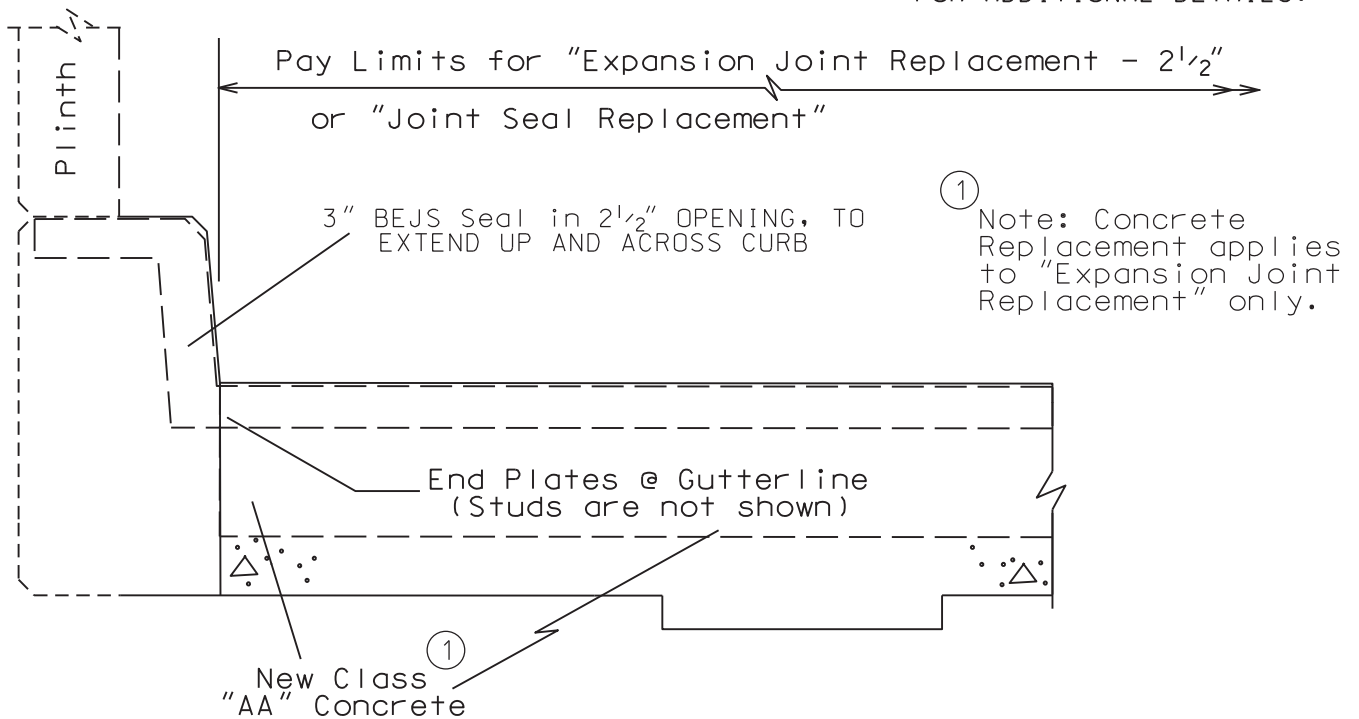
CURB SECTION

Expansion Joint Replacement, Pier 5-N & Pier 5-S
Joint Seal Replacement, Pier 1-N & Pier 1-S



PLAN VIEW @ CURB

SEE STD. DWG BJE-001 CE
FOR ADDITIONAL DETAILS.



PROPOSED SECTION @ CURB

PART II
SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2019* and *Standard Drawings, Edition of 2016*.

SUPPLEMENTAL SPECIFICATIONS

The contractor shall use the Supplemental Specifications that are effective at the time of letting.
The Supplemental Specifications can be found at the following link:

<http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx>

STANDARD DRAWINGS THAT APPLY

ROADWAY

~ BARRIERS ~

CONCRETE MEDIAN BARRIERS

DELINEATORS FOR CONCRETE BARRIERS (Payment Incidental to Barrier Wall 9T)	RBM-020-08
CONCRETE BARRIER WALL 9T	RBM-115-08
CRASH CUSHION IX-T	RBE-100-09

TRAFFIC

~ TEMPORARY ~

TRAFFIC CONTROL

MEDIAN CROSSOVER CASE II	TTC-145-03, 146-03
--------------------------	--------------------

BRIDGES

JOINTS

NEOPRENE EXPANSION DAMS AND ARMORED EDGES	BJE-001-11
---	------------

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

**TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS**

**LABOR AND WAGE REQUIREMENTS
APPLICABLE TO OTHER THAN FEDERAL-AID SYSTEM PROJECTS**

- I. Application
- II. Nondiscrimination of Employees (KRS 344)

I. APPLICATION

1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.

2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.

3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

II. NONDISCRIMINATION OF EMPLOYEES

**AN ACT OF THE KENTUCKY
GENERAL ASSEMBLY TO PREVENT
DISCRIMINATION IN EMPLOYMENT
KRS CHAPTER 344
EFFECTIVE JUNE 16, 1972**

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 3 Fountain Place, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: January 27, 2017

Kentucky Equal Employment Opportunity Act of 1978

The requirements of the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) shall apply to this Contract. The apparent low Bidder will be required to submit EEO forms to the Division of Construction Procurement, which will then forward to the Finance and Administration Cabinet for review and approval. No award will become effective until all forms are submitted and EEO/CC has certified compliance. The required EEO forms are as follows:

- EEO-1: Employer Information Report
- Affidavit of Intent to Comply
- Employee Data Sheet
- Subcontractor Report

These forms are available on the Finance and Administration's web page under ***Vendor Information, Standard Attachments and General Terms*** at the following address:
<https://www.eProcurement.ky.gov>.

Bidders currently certified as being in compliance by the Finance and Administration Cabinet may submit a copy of their approval letter in lieu of the referenced EEO forms.

For questions or assistance please contact the Finance and Administration Cabinet by email at **finance.contractcompliance@ky.gov** or by phone at 502-564-2874.

EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

FEDERAL MINIMUM WAGE

\$7.25 PER HOUR

BEGINNING JULY 24, 2009

OVERTIME PAY At least 1½ times your regular rate of pay for all hours worked over 40 in a workweek.

CHILD LABOR An employee must be at least **16** years old to work in most non-farm jobs and at least **18** to work in non-farm jobs declared hazardous by the Secretary of Labor.

Youths **14** and **15** years old may work outside school hours in various non-manufacturing, non-mining, non-hazardous jobs under the following conditions:

No more than

- **3** hours on a school day or **18** hours in a school week;
- **8** hours on a non-school day or **40** hours in a non-school week.

Also, work may not begin before **7 a.m.** or end after **7 p.m.**, except from June 1 through Labor Day, when evening hours are extended to **9 p.m.** Different rules apply in agricultural employment.

TIP CREDIT Employers of “tipped employees” must pay a cash wage of at least \$2.13 per hour if they claim a tip credit against their minimum wage obligation. If an employee’s tips combined with the employer’s cash wage of at least \$2.13 per hour do not equal the minimum hourly wage, the employer must make up the difference. Certain other conditions must also be met.

ENFORCEMENT The Department of Labor may recover back wages either administratively or through court action, for the employees that have been underpaid in violation of the law. Violations may result in civil or criminal action.

Employers may be assessed civil money penalties of up to \$1,100 for each willful or repeated violation of the minimum wage or overtime pay provisions of the law and up to \$11,000 for each employee who is the subject of a violation of the Act’s child labor provisions. In addition, a civil money penalty of up to \$50,000 may be assessed for each child labor violation that causes the death or serious injury of any minor employee, and such assessments may be doubled, up to \$100,000, when the violations are determined to be willful or repeated. The law also prohibits discriminating against or discharging workers who file a complaint or participate in any proceeding under the Act.

ADDITIONAL INFORMATION

- Certain occupations and establishments are exempt from the minimum wage and/or overtime pay provisions.
- Special provisions apply to workers in American Samoa and the Commonwealth of the Northern Mariana Islands.
- Some state laws provide greater employee protections; employers must comply with both.
- The law requires employers to display this poster where employees can readily see it.
- Employees under 20 years of age may be paid \$4.25 per hour during their first 90 consecutive calendar days of employment with an employer.
- Certain full-time students, student learners, apprentices, and workers with disabilities may be paid less than the minimum wage under special certificates issued by the Department of Labor.

For additional information:



1-866-4-USWAGE

(1-866-487-9243) TTY: 1-877-889-5627



WWW.WAGEHOUR.DOL.GOV

PART IV
INSURANCE

Refer to
Kentucky Standard Specifications for Road and Bridge Construction,
current edition

PART V
BID ITEMS

PROPOSAL BID ITEMS

192608

Page 1 of 1

Report Date 8/16/19

Section: 0001 - BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	02003		RELOCATE TEMP CONC BARRIER	320.00	LF		\$	
0020	02014		BARRICADE-TYPE III	4.00	EACH		\$	
0030	02200		ROADWAY EXCAVATION	960.00	CUYD		\$	
0040	02403		REMOVE CONCRETE MASONRY	3.80	CUYD		\$	
0050	02484		CHANNEL LINING CLASS III	360.00	TON		\$	
0060	02562		TEMPORARY SIGNS	500.00	SQFT		\$	
0070	02610		RETAINING WALL-GABION	180.00	CUYD		\$	
0080	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0090	02653		LANE CLOSURE	2.00	EACH		\$	
0100	02898		RELOCATE CRASH CUSHION	1.00	EACH		\$	
0110	02900		INSTALL TEMP CRASH CUSHION	1.00	EACH		\$	
0120	03225		TUBULAR MARKERS	100.00	EACH		\$	
0130	03296		EXPAN JOINT REPLACE 2 1/2 IN	69.20	LF		\$	
0140	06511		PAVE STRIPING-TEMP PAINT-6 IN	35,000.00	LF		\$	
0150	06515		PAVE STRIPING-PERM PAINT-6 IN	30,000.00	LF		\$	
0160	06556		PAVE STRIPING-DUR TY 1-6 IN W	1,200.00	LF		\$	
0170	06557		PAVE STRIPING-DUR TY 1-6 IN Y	1,900.00	LF		\$	
0180	06582		PAVEMENT MARKER TYPE IV-BY	125.00	EACH		\$	
0190	06582		PAVEMENT MARKER TYPE IV-BY INLAID MARKER	125.00	EACH		\$	
0200	08001		STRUCTURE EXCAVATION-COMMON	155.00	CUYD		\$	
0210	08104		CONCRETE-CLASS AA	4.60	CUYD		\$	
0220	08150		STEEL REINFORCEMENT	611.00	LB		\$	
0230	08435		JACK & SUPPORT BRIDGE SPAN	1.00	LS		\$	
0240	21969NN		BEARING REPLACEMENT	16.00	EACH		\$	
0250	22146EN		CONCRETE PATCHING REPAIR	175.00	SQFT		\$	
0260	22664EN		WATER BLASTING EXISTING STRIPE	65,000.00	LF		\$	
0270	23386EC		JOINT SEAL REPLACEMENT	69.20	LF		\$	
0280	24093EC		BEAM REPAIR TYPE 1	6.00	EACH		\$	
0290	24093EC		BEAM REPAIR TYPE 2	1.00	EACH		\$	
0300	24982EC		CONCRETE COATING APPLIES TO BOTH 090B00016L,R	1.00	LS		\$	

Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0310	02569		DEMOBILIZATION	1.00	LS		\$	