



TRANSPORTATION CABINET

Frankfort, Kentucky 40622
www.transportation.ky.gov/

Steven L. Beshear
Governor

Michael W. Hancock, P.E.
Secretary

April 20, 2015

CALL NO. 106
CONTRACT ID NO. 152955
ADDENDUM # 2

Subject: Breathitt County, STP BRH 1003 (254)
Letting April 24, 2015

- (1) Revised - Plan Sheets - S1, S2, S5, & S7
- (2) Revised - Note - Page 27 of 136
- (3) Revised - Special Note - Pages 34-36 of 136
- (4) Added - Notes - Pages 39(a)-39(d) of 136
- (5) Revised - Bid Items - Page 136 of 136

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

Plan revisions are available at <http://www.lynnimaging.com/kytransportation/>.

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

Sincerely,

A handwritten signature in cursive script that reads "Robert C. Lewis".

Robert C. Lewis, P.E.
Acting Director
Division of Construction Procurement

RL:ks
Enclosures



An Equal Opportunity Employer M/F/D

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

BREATHITT COUNTY

KY3193 OVER NORTH FORK KENTUCKY RIVER AT FROZEN CREEK

ESTIMATE OF QUANTITIES

BID ITEM CODE	2231	08019	40101	24776EC	08435	03305	03305		24421EC	24421EC	24421EC	24418EC	24419EC	24420EC	08550	08549	08504	08526	24094EC	08534	03294	08540	08150	03304	08434	02351	02355	02360	02371	02650	02568	02569
BID ITEM	Structure Granular Backfill	Cyclopean Stone Rip Rap	Concrete Patching	Repoint Stone Masonry	Jack and Support * Bridge Span	Reset Bearing Shoe Type A	Reset Bearing Shoe Type B		Stringer Retrofit Type A	Stringer Retrofit Type B	Stringer Retrofit Type C	Diagonal Eye-Bar Retrofit	Truss Pin * Replacement	Truss Pin * Plate Retrofit	Hydrodemolition	Blast Cleaning	Epoxy Sand Slurry	Concrete Class M Full Depth Patch	Partial Depth Patching	Concrete Overlay-Laytex	Replace Expansion Joint 1 1/2"	Joint Sealing	Steel Reinforcement	Bridge Overlay Approach Pavement	Clean & Paint Structural Steel	Guardrail-Steel W Beam-S Face	Guardrail-Steel W Beam-S Face A	Guardrail Terminal Section No 1	Guardrail Treatment Type 7	Maintain & Control Traffic	Mobilization	Demobilization
UNIT	C.Y.	Tons	S.F.	S.F.	L.S.	Each	Each		Each	Each	Each	Each	Each	Each	S.Y.	S.Y.	S.Y.	C.Y.	C.Y.	C.Y.	L.F.	L.F.	Lbs.	S.Y.	L.S.	L.F.	L.F.	Each	Each	L.S.	L.S.	L.S.
TOTALS	2	2485	40	5040	1	6	2		2	4	2	1	1	2	569	815	246	2.2	10	19.4	32	189	394	178	1	550	75	1	2	1	1	1

* Conditional Repair, See Special Notes

GENERAL NOTES

SPECIFICATIONS: References to the Specifications are to the 2012 edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction including any current Supplemental Specifications. All references to the AASHTO Specifications are to the AASHTO Standard Specifications for Highway Bridges, 17th Edition.

DESIGN STRESSES: Minimum Structural Steel Yield Strength ~ 50,000 psi.
Class "M" Concrete ~ F'c = 4,000 PSI.

HIGH STRENGTH BOLTED CONNECTIONS: Ensure that all bolted connections are ASTM A325 high strength bolts, nuts and washers. Diameter as noted in plans. Diameter of open holes is 1/16" greater than the bolt diameter noted in plans. Furnish Type 1 bolts as described in AASHTO M164. Install all high strength bolted field connections using "direct tension indicators" (DTI's) in accordance with the Standard Specifications and ASTM F959 or with "turn-of-the-nut" tightening unless otherwise noted. Install DTI's in accordance with the Specifications unless otherwise noted.

STRUCTURAL STEEL MATERIALS: Use steel materials conforming to the following ASTM Specifications.

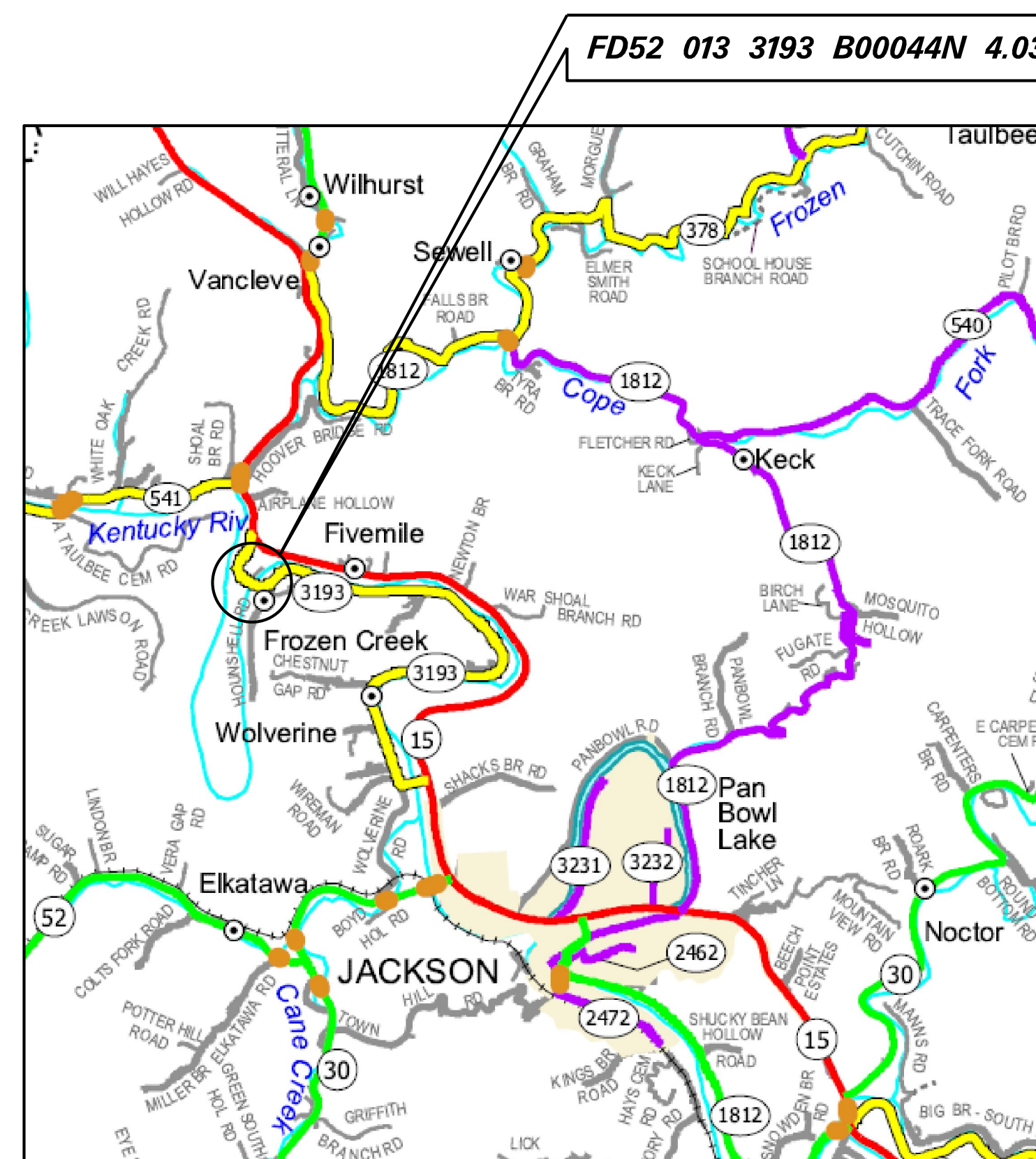
ASTM	MATERIAL
A709	Grade 50 Structural Steel Plates and Shapes
A615	Grade 100W Structural Bars (H.S. Bars)
A325	High Strength Anchor Bolts, Bolts, Nuts, and Washers

DESIGN LIVE LOAD: Repairs are designed for an H-20-44 Truck only Live Load plus Impact. (Lane Load not Considered)

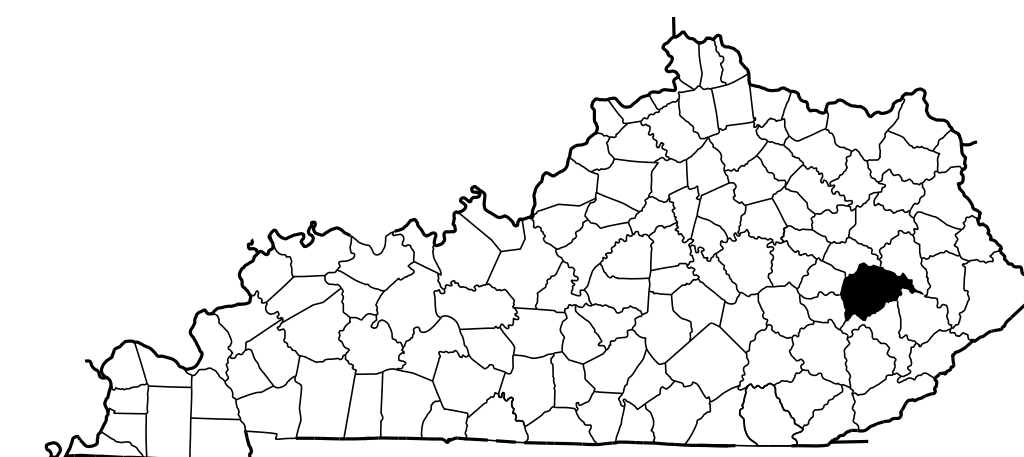
VERIFYING FIELD CONDITIONS: The Contractor shall field verify all existing concrete, plate and shape dimensions, bolt patterns, locations, etc. before ordering material. New material that is unsuitable because of variations in the existing structure shall be replaced at the contractor's expense. Modify construction as necessary to meet field conditions.

DAMAGE TO THE STRUCTURE: The Contractor shall bear all responsibility and expense for any and all damage to the structure during the repair work, even to the removal and replacement of a fallen span, should the fallen span result from the Contractor's actions.

LEAD PAINT: Lead paint is present on this bridge. The Contractor is advised to take all necessary protective measures when removing, cutting or performing any other action on the existing steel. The Department will not consider any claims based on lead paint in this contract.



LOCATION MAP



INDEX OF SHEETS

Sheet No.	Description
S1	Title Sheet & General Notes
S2	Layout
S3	Typical Sections
S4	Concrete Patching Details
S5	Repair Locations
S6	Diagonal Eye Bar Retrofit
S7	Reset Bearing Shoe ~ Type B and C
S8-S9	Repair Details
S10	Truss Forces
S11	Guardrail Details
S12	Maintenance of Traffic

SPECIAL NOTES for

Cyclopean Stone Slope Protection
Concrete Patching
Repointing Stone Masonry
Diagonal Eye-bar Retrofit
Jack and Support Bridge Span
Reset Bearing Shoes
Stringer Retrofit
Conditional Repairs
Truss Pin Replacement
Truss Pin Plate Retrofit
Steel Repair Surface Preparation and Paint Application
Hydrodemolition
Bridge Restoration and Waterproofing with Concrete Overlays
Replacing Expansion Dams and or Installing Armored Edges for Concrete on Bridges
Resealing Bridge Deck Joints
Placing Bridge Overlay Approach Pavement
Surface Preparation and Paint Application
Waste Management
Recyclable Surface Preparation Residue Management
Quality Control
Paint
Environmental and Worker Safety Regulations
Stenciling
Maintain and Control Traffic
Tree Clearing
Historic Resource Rehabilitation Standards

STANDARD DRAWINGS

BJE-001-12	Neoprene Expansion Dams and Armored Edges
RBR-001	Steel Beam Guardrail ("W" Beam)
RBR-005	Guardrail Components
RBR-010-05	Guardrail Terminal Sections
RBR-015	Guardrail Post
RBR-016-04	Guardrail Post
RBR-050-06	Guardrail End Treatment Type 7

SPECIFICATIONS

2012 Standard Specifications for Road and Bridge Construction.
AASHTO Standard Specification for Highway Bridges 17th Edition

REVISION	DATE

DATE: _____ CHECKED BY: _____
 DESIGNED BY: J.C. Pyles
 DETAILED BY: W.T. Mathews J.C. Pyles

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
 COUNTY
BREATHITT

ROUTE KY3193	CROSSING N.FORK KENTUCKY RIVER
TITLE SHEET & GENERAL NOTES	
ITEM NUMBER 10-1089.00	PREPARED BY SHEET NO. S1 DRAWING NO. 27191

Division of Structural Design

FD52 017 3193 B00044N

ITEM NUMBER

10-1089.00

LETTING DATE

CONSTRUCTION PROJECT NO.

FILE NAME: U:\Bridges\Projects\DISTRICT 10\CID152955_Breathitt\ADGN\27191.dgn

USER: Tom.mathews
DATE PLOTTED: 17-APR-2015

E-SHEET NAME:

MicroStation v8.11.7.180

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

BREATHITT COUNTY

KY3193 OVER NORTH FORK KENTUCKY RIVER AT FROZEN CREEK

REMOVED
BID ITEM

ADDED
SPECIAL
NOTES

ESTIMATE OF QUANTITIES

BID ITEM CODE	2231	08019	40101	24776EC	08435	03305	03305	24421EC	24421EC	24421EC	24418EC	24419EC	24420EC	08550	08549	08504	08526	24094EC	08534	03294	08540	08150	03304	08434	02351	02355	02360	02371	02650	02568	02569
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UNIT	C.Y.	Tons	S.F.	S.F.	L.S.	Each	Each	Each	Each	Each	Each	Each	S.Y.	S.Y.	S.Y.	C.Y.	C.Y.	C.Y.	L.F.	L.F.	Lbs.	S.Y.	L.S.	L.F.	L.F.	Each	Each	L.S.	L.S.	L.S.	
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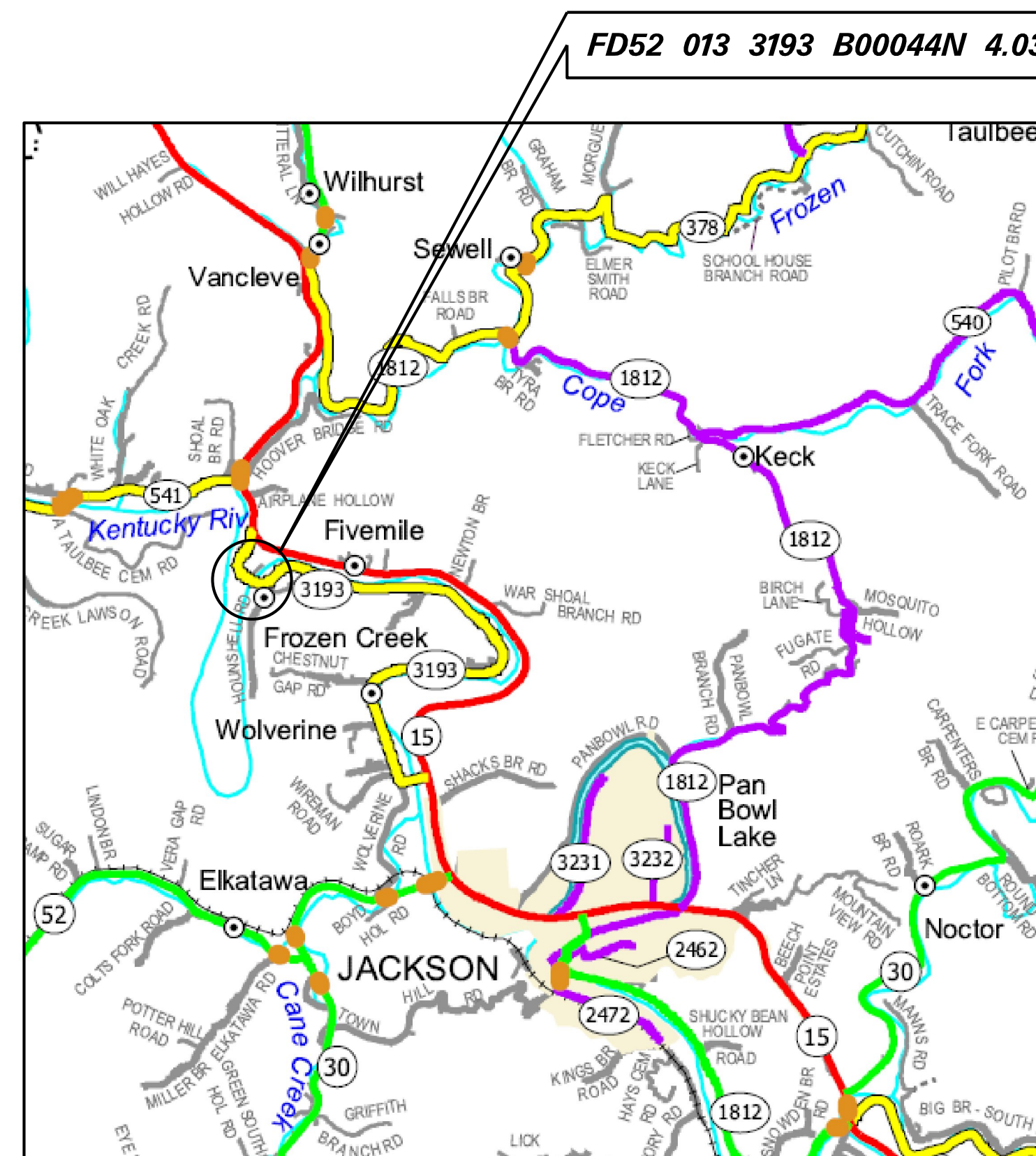
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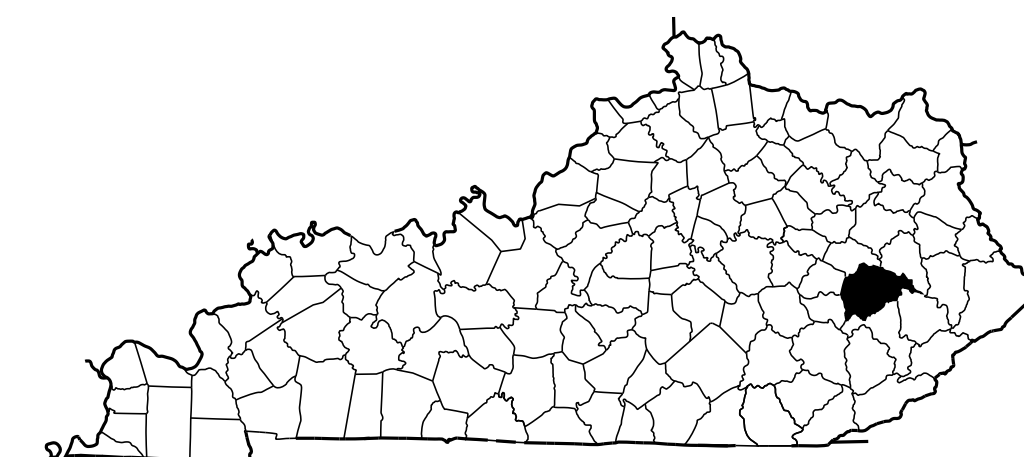
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LOCATION MAP



REVISED 04-17-2015

FD52 017 3193 B00044N

ITEM NUMBER
10-1089.00

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RBR-016-04	Guardrail Post
RBR-050-06	Guardrail End Treatment Type 7

SPECIFICATIONS

2012 Standard Specifications for Road and Bridge Construction.
AASHTO Standard Specification for Highway Bridges 17th Edition

DATE:	CHECKED BY:
DESIGNED BY: J.C. Pyles	
DETAILED BY: W.T. Mathews	J.C. Pyles

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

BREATHITT

ROUTE	CROSSING
KY3193	N.FORK KENTUCKY RIVER

TITLE SHEET & GENERAL NOTES

PREPARED BY	SHEET NO.
Division of Structural Design	S1
	DRAWING NO. 27191

LETTING DATE

CONSTRUCTION PROJECT NO.

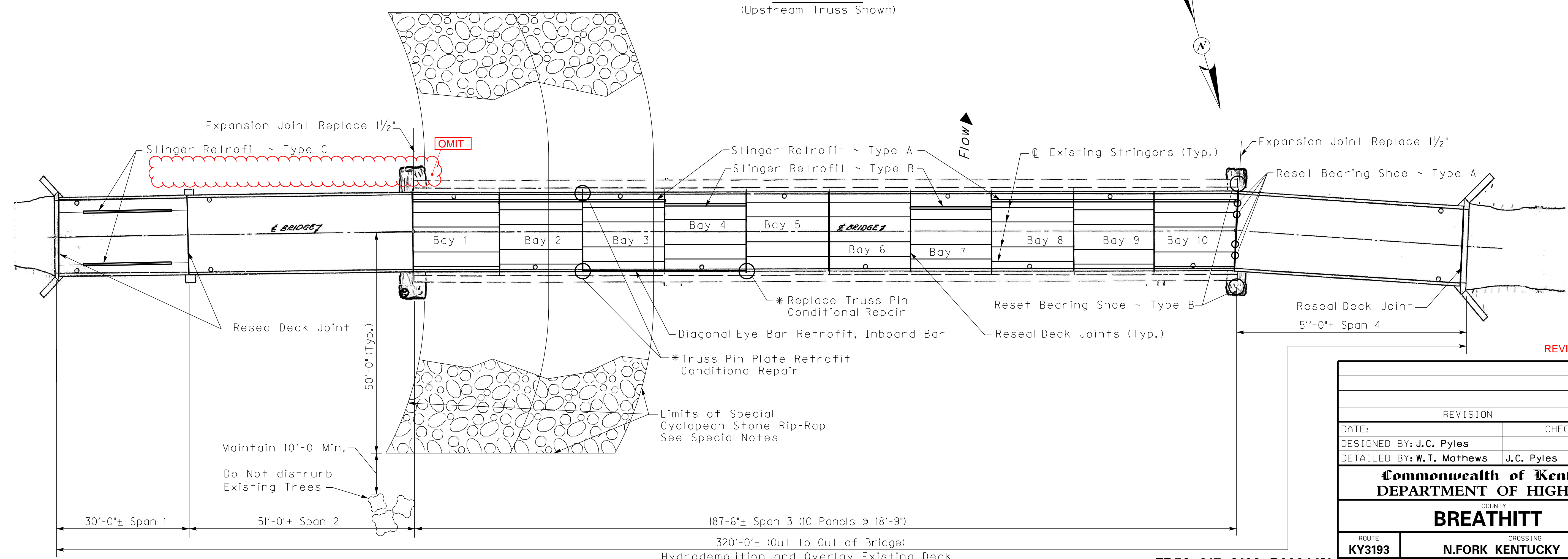
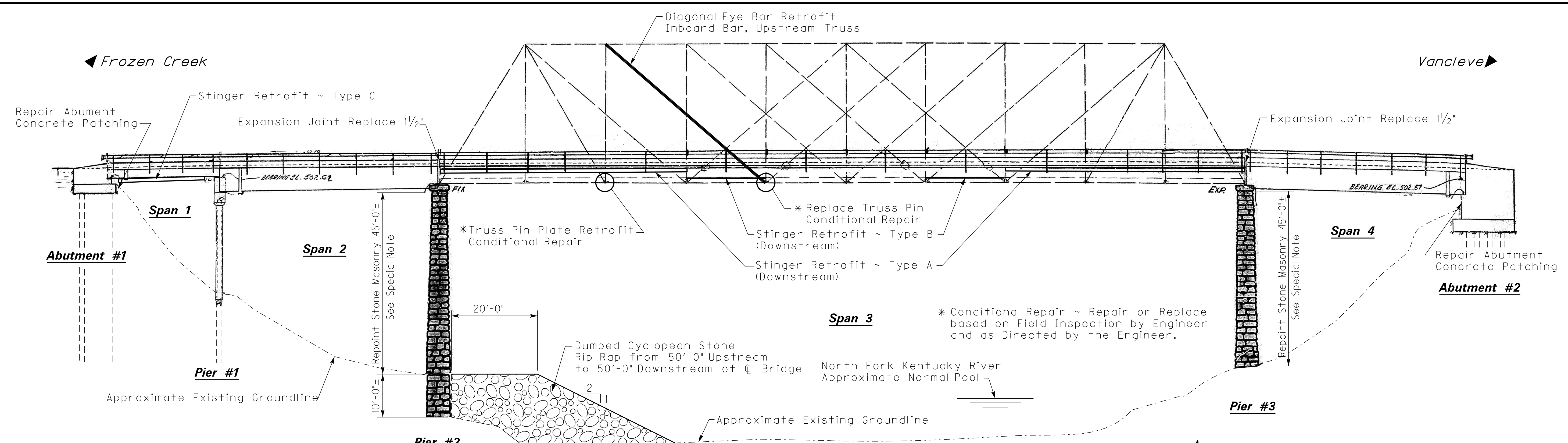
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USER: Tom.mathews
DATE PLOTTED: 17-APR-2015

E-SHEET NAME:

MicroStation v8.11.7.180

FILE NAME: U:\bridges\Projects\DISTRICT 10\CID152955_Breathitt\27191.dgn
 USER: Tom Mathews
 DATE PLOTTED: 17-APR-2015
 E-SHEET NAME:
 MicroStation v8.11.7.180

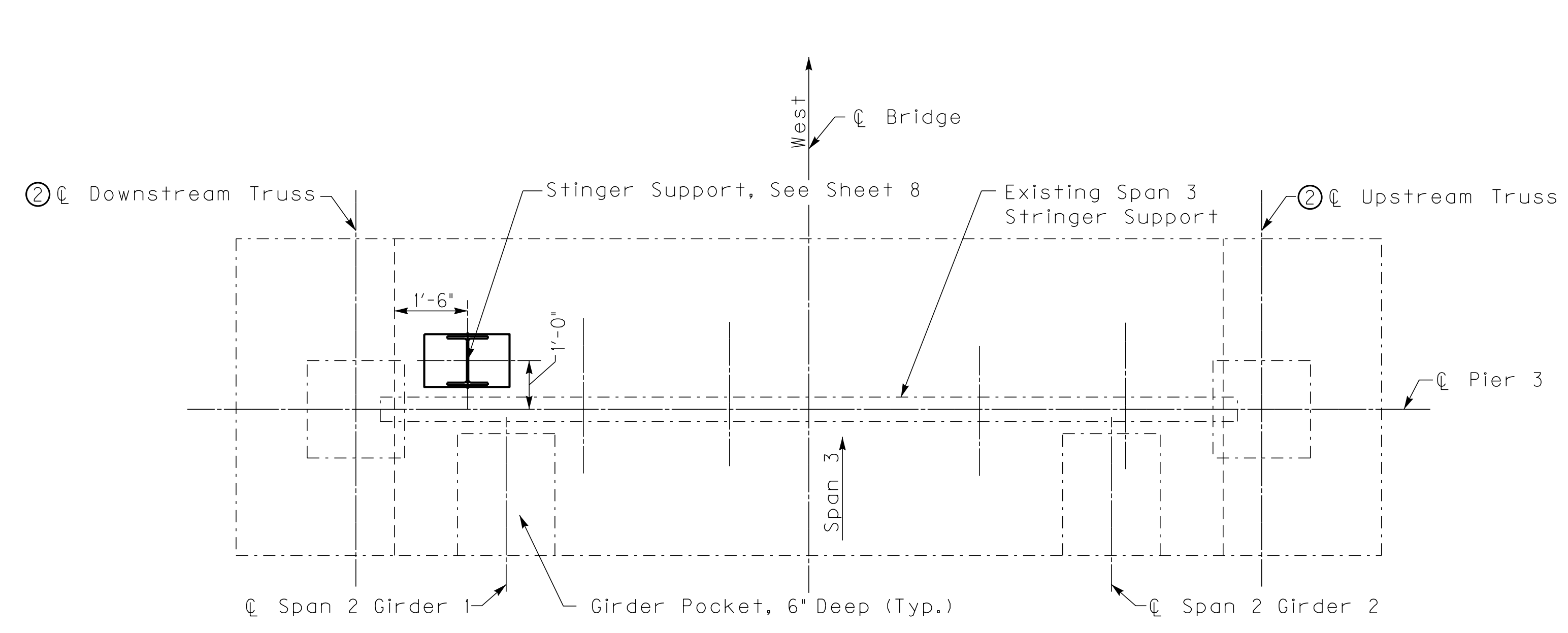


REVISED 04-17-2015

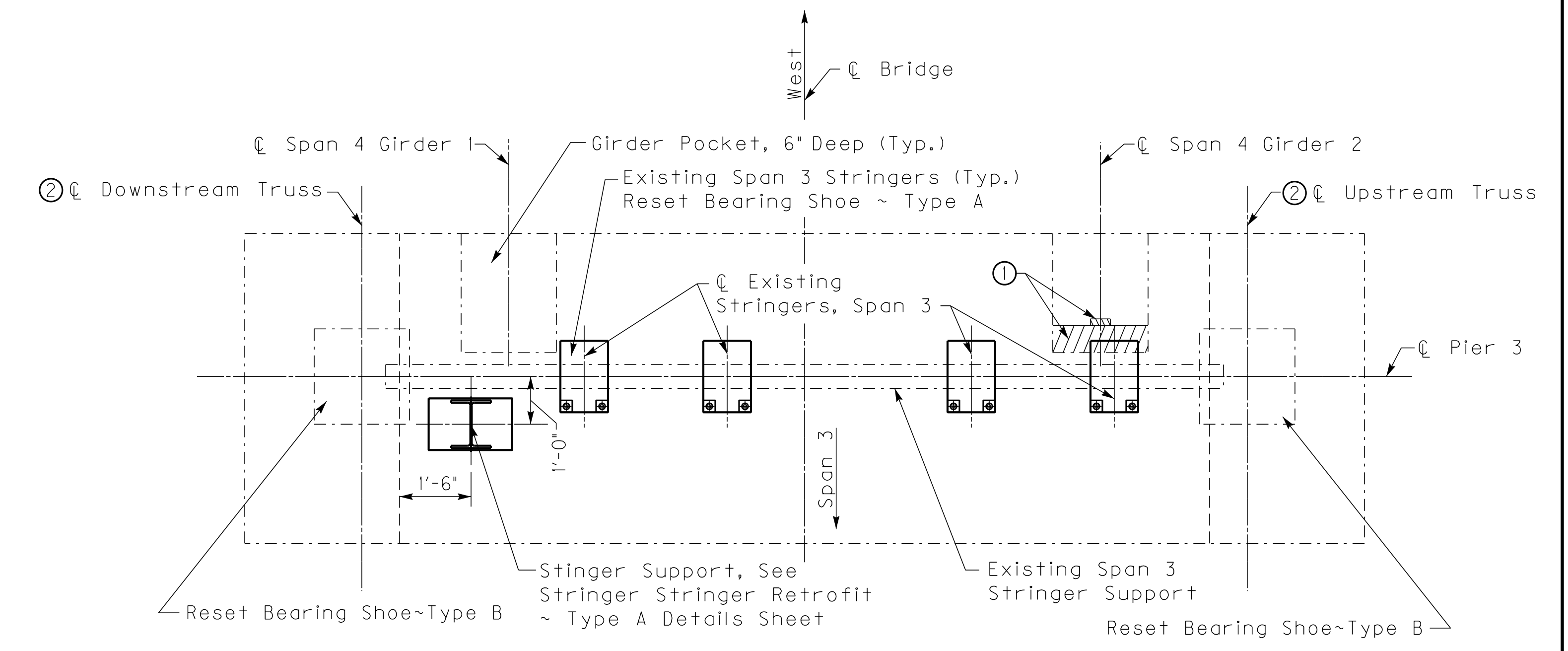
REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: J.C. Pyles		
DETAILED BY: W.T. Mathews	J.C. Pyles	
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
BREATHITT		
ROUTE	CROSSING	
KY3193	N.FORK KENTUCKY RIVER	
LAYOUT		
PREPARED BY		SHEET NO.
Division of Structural Design		S2
ITEM NUMBER		DRAWING NO.
10-1089.00		27191

FD52 017 3193 B00044N

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 DATE PLOTTED: 17-APR-2015
 E-SHEET NAME:
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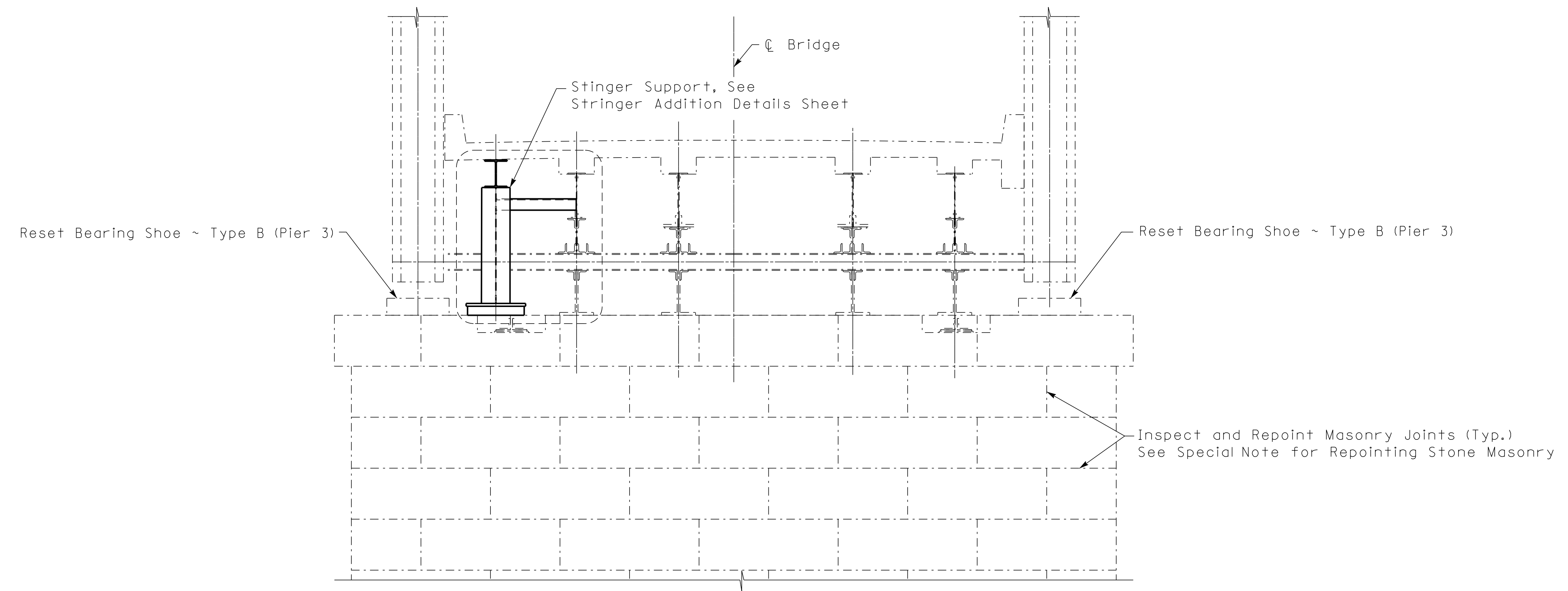


PLAN OF CAP ~ PIER 2



PLAN OF CAP ~ PIER 3

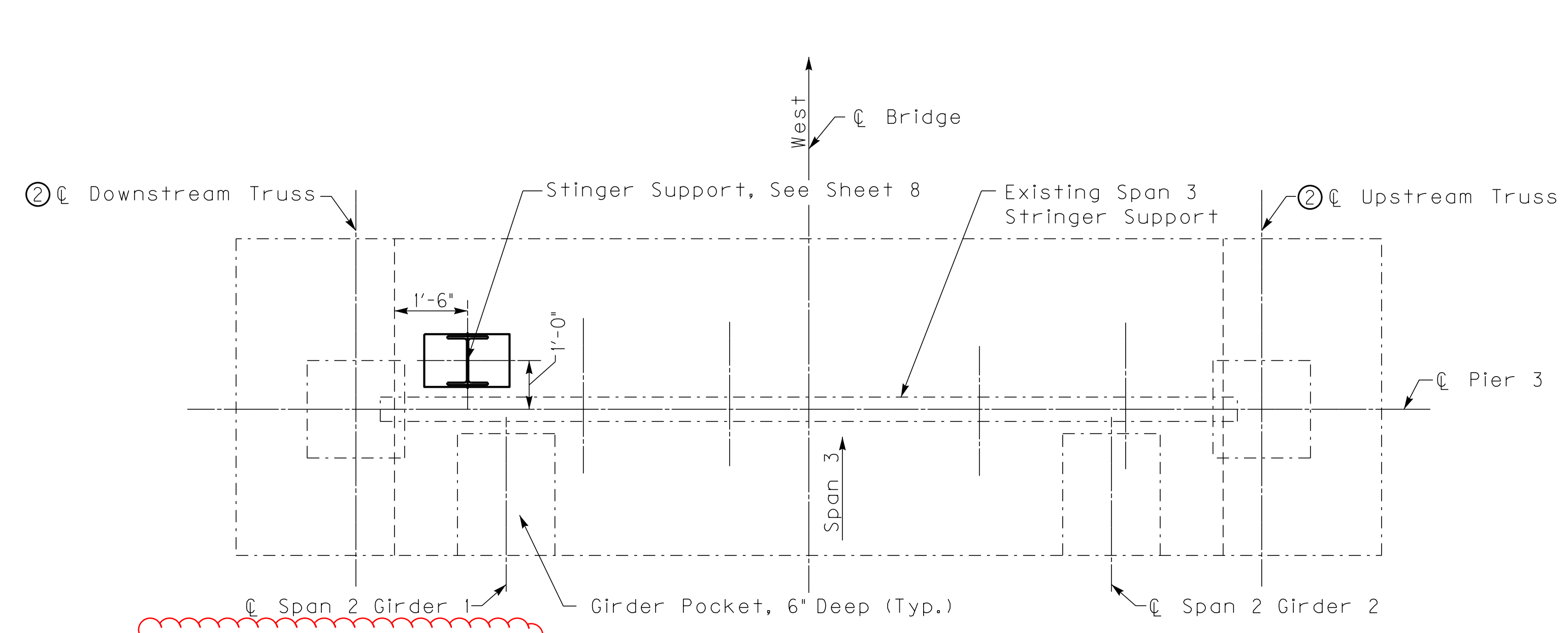
- ① If necessary to provide bearing area for span 3 stringer bearing supports, affix 1/2" expansion joint material to end of span 4 girder, clean girder pocket and fill with Class M Concrete to limits as shown. Level as necessary to provide stringer bearing seat. Incidental to Reset Bearing Shoe ~ Type A
- ② Jack and Support Truss End Post
See Jack and Support Details Sheet



ELEVATION @ L10
(L0 Similar, Looking Ahead)

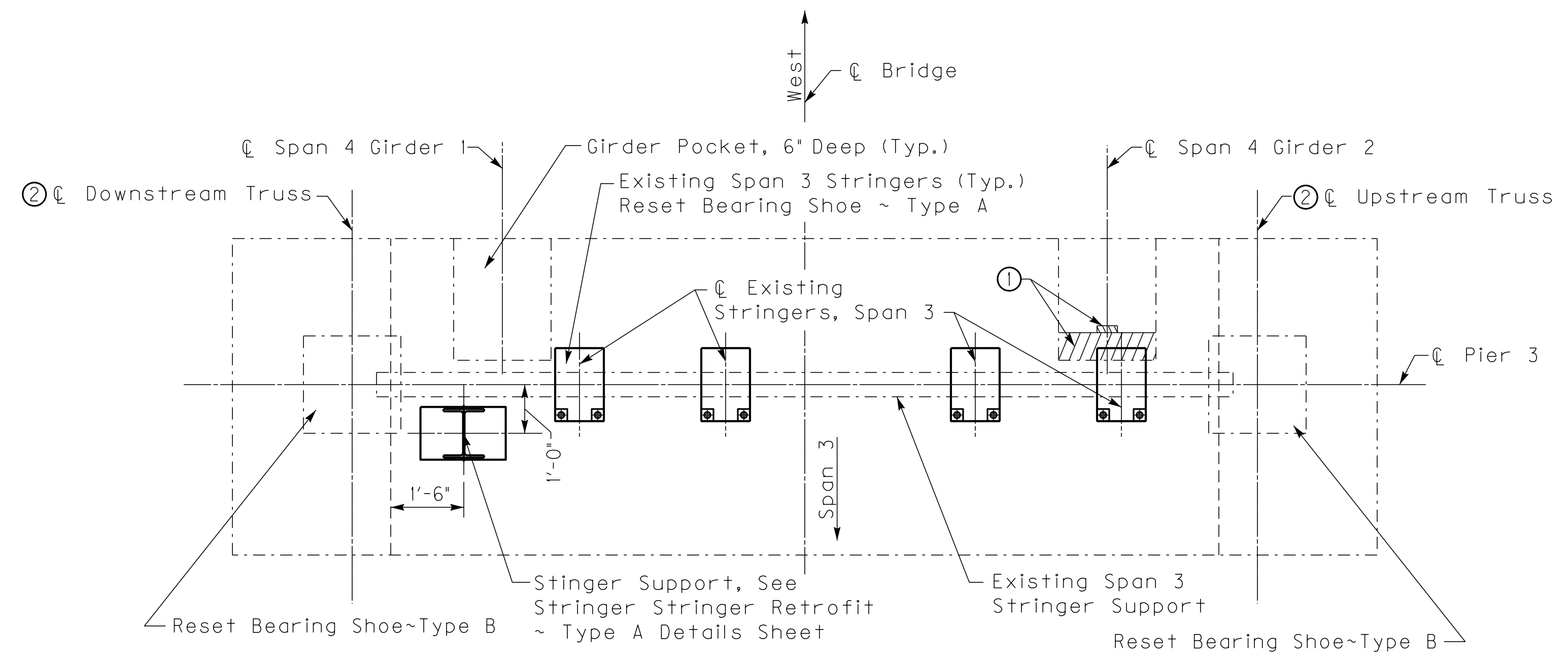
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DESIGNED BY: J.C. Pyles		
DETAILED BY: W.T. Mathews	J.C. Pyles	
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
BREATHITT		
ROUTE	CROSSING	
KY3193	N.FORK KENTUCKY RIVER	
REPAIR LOCATIONS		
ITEM NUMBER	PREPARED BY	SHEET NO.
10-1089.00	Division of Structural Design	S5
		DRAWING NO.
		27191

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 USER: Tom Mathews
 DATE PLOTTED: 17-APR-2015
 E-SHEET NAME:
 MicroStation v8.11.7.180



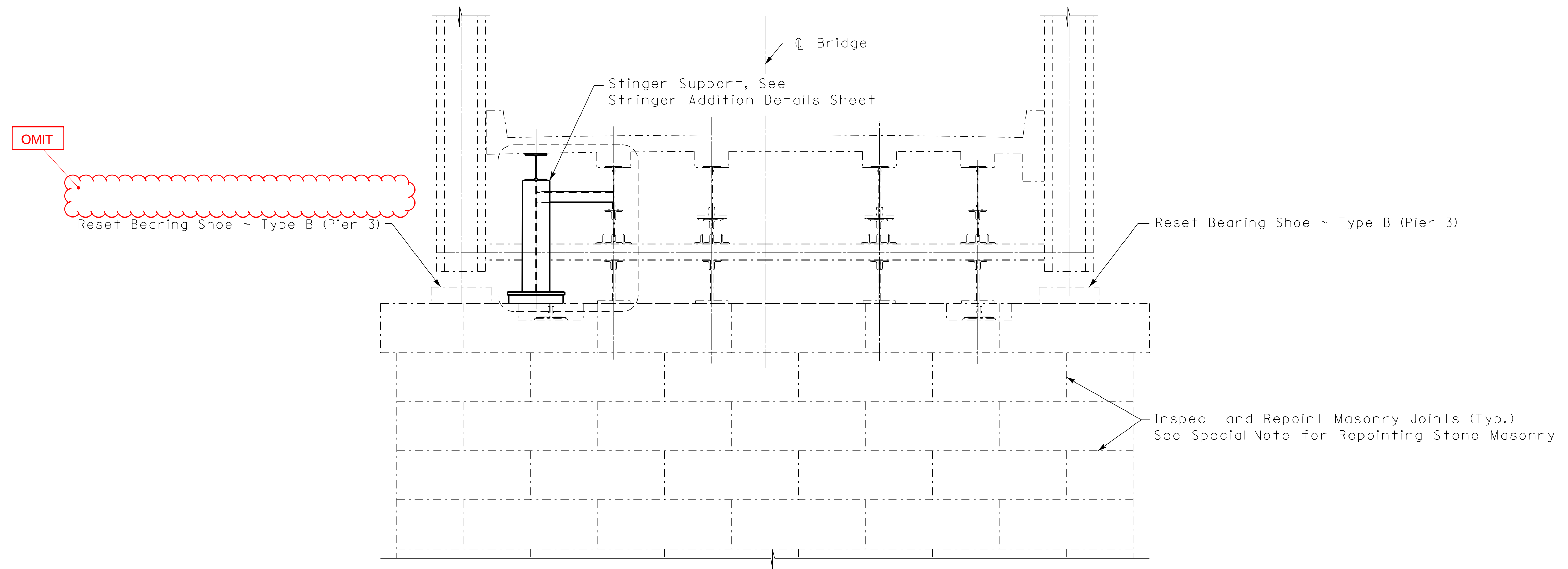
PLAN OF CAP ~ PIER 2

OMIT



PLAN OF CAP ~ PIER 3

- ① If necessary to provide bearing area for span 3 stringer bearing supports, affix 1/2" expansion joint material to end of span 4 girder, clean girder pocket and fill with Class M Concrete to limits as shown. Level as necessary to provide stringer bearing seat. Incidental to Reset Bearing Shoe ~ Type A
- ② Jack and Support Truss End Post
See Jack and Support Details Sheet



ELEVATION @ L10
(L0 Similar, Looking Ahead)

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: J.C. Pyles		
DETAILED BY: W.T. Mathews	J.C. Pyles	
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
BREATHITT		
ROUTE	CROSSING	
KY3193	N.FORK KENTUCKY RIVER	
REPAIR LOCATIONS		
ITEM NUMBER	PREPARED BY	SHEET NO.
10-1089.00	Division of Structural Design	S5
		DRAWING NO.
		27191

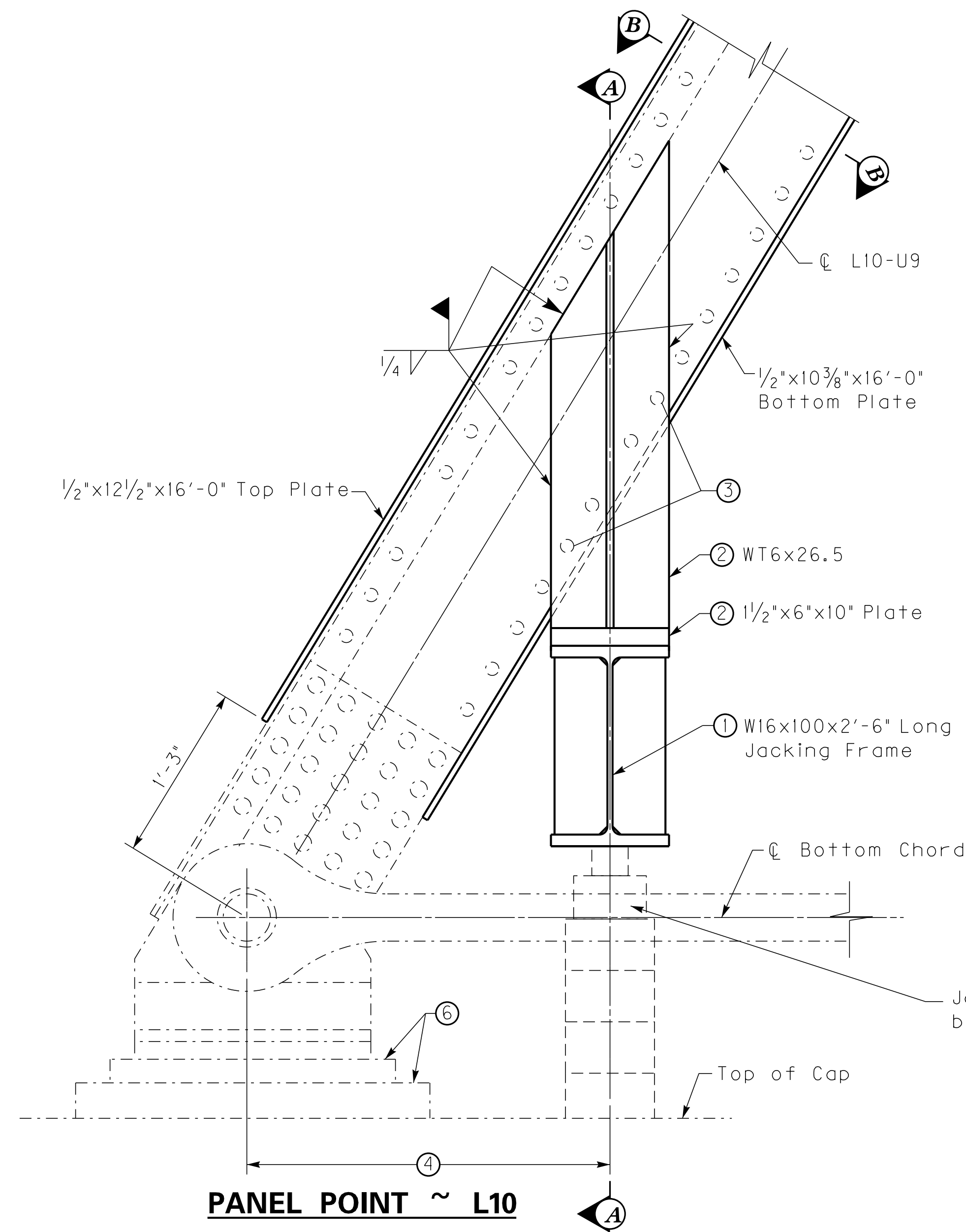
REVISED 04-17-2015

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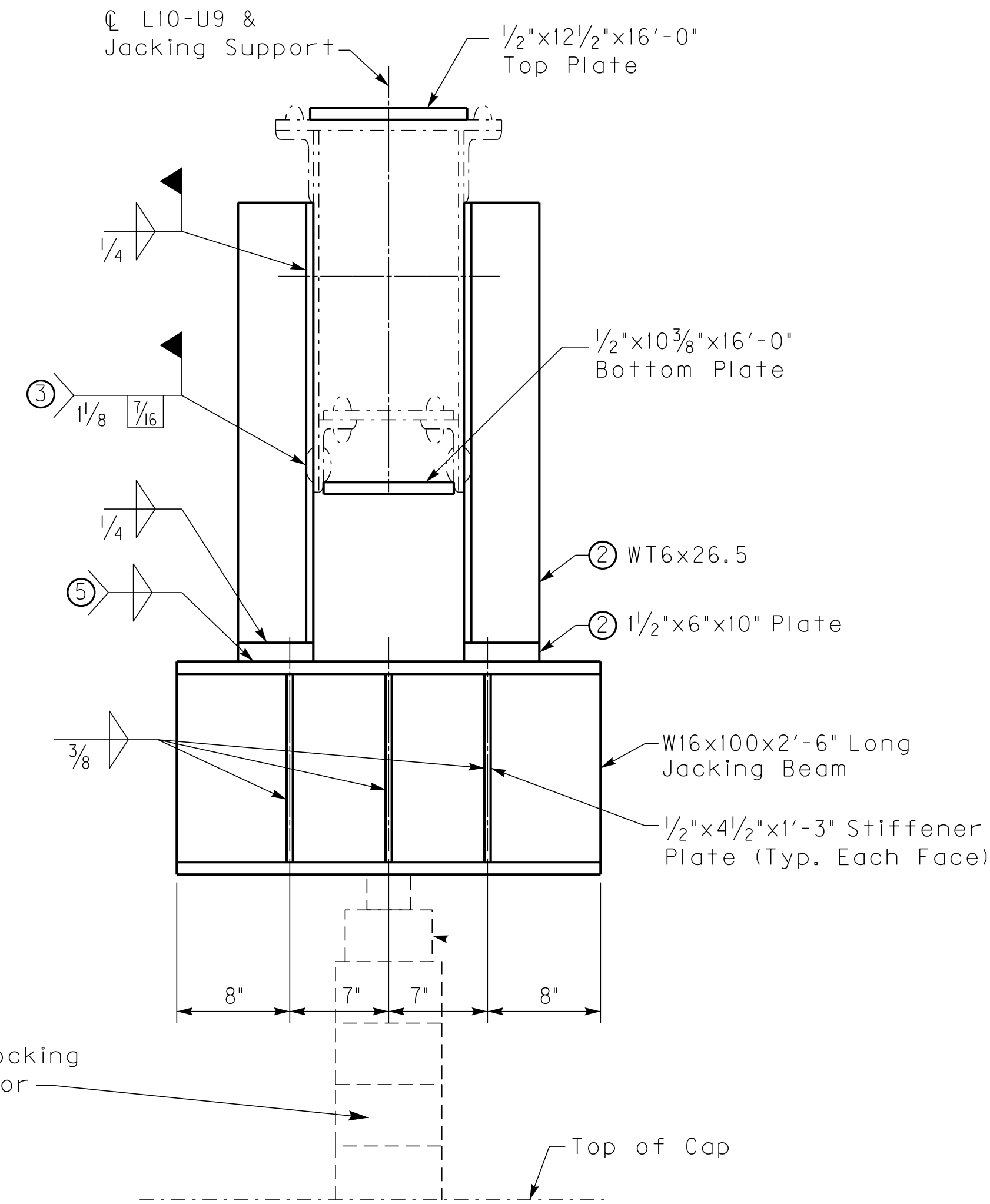
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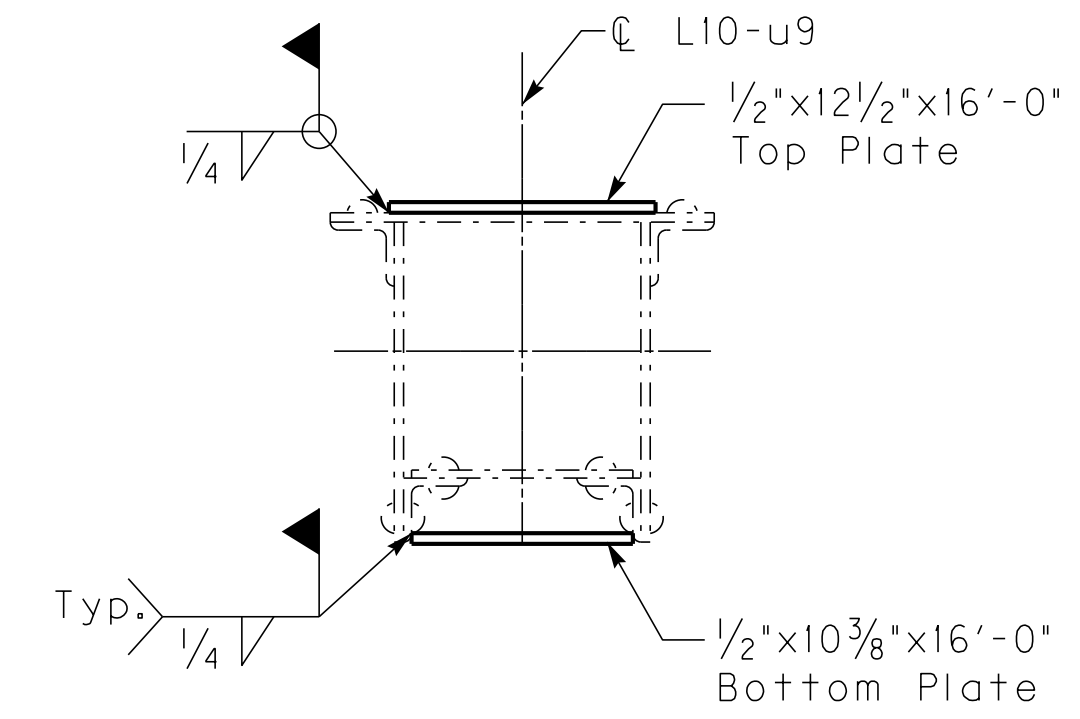
MicroStation v8.11.7.180



PANEL POINT ~ L10



SECTION A-A
JACK AND SUPPORT FRAME
(Pier 3 Shown, Pier 2 Similar)



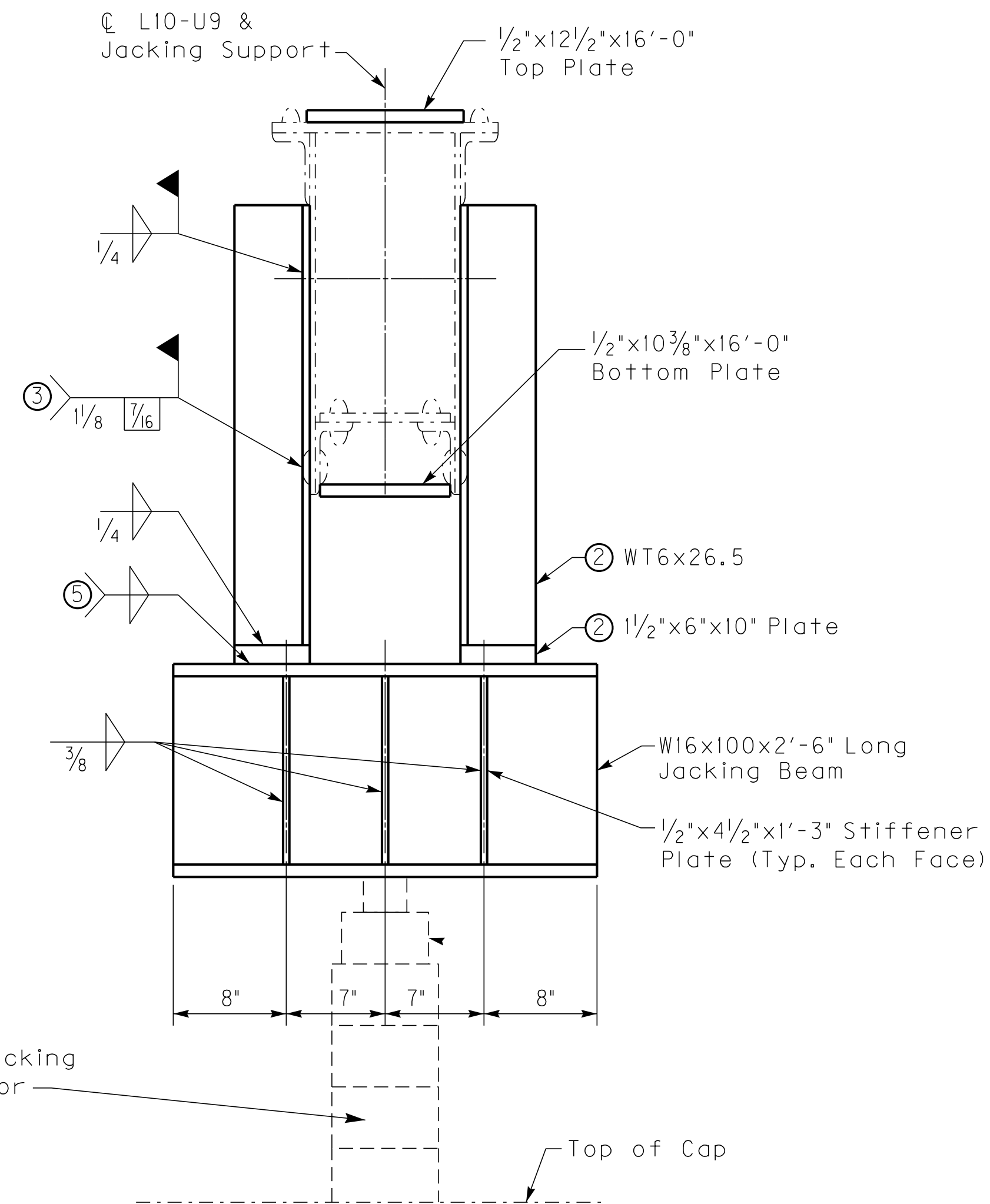
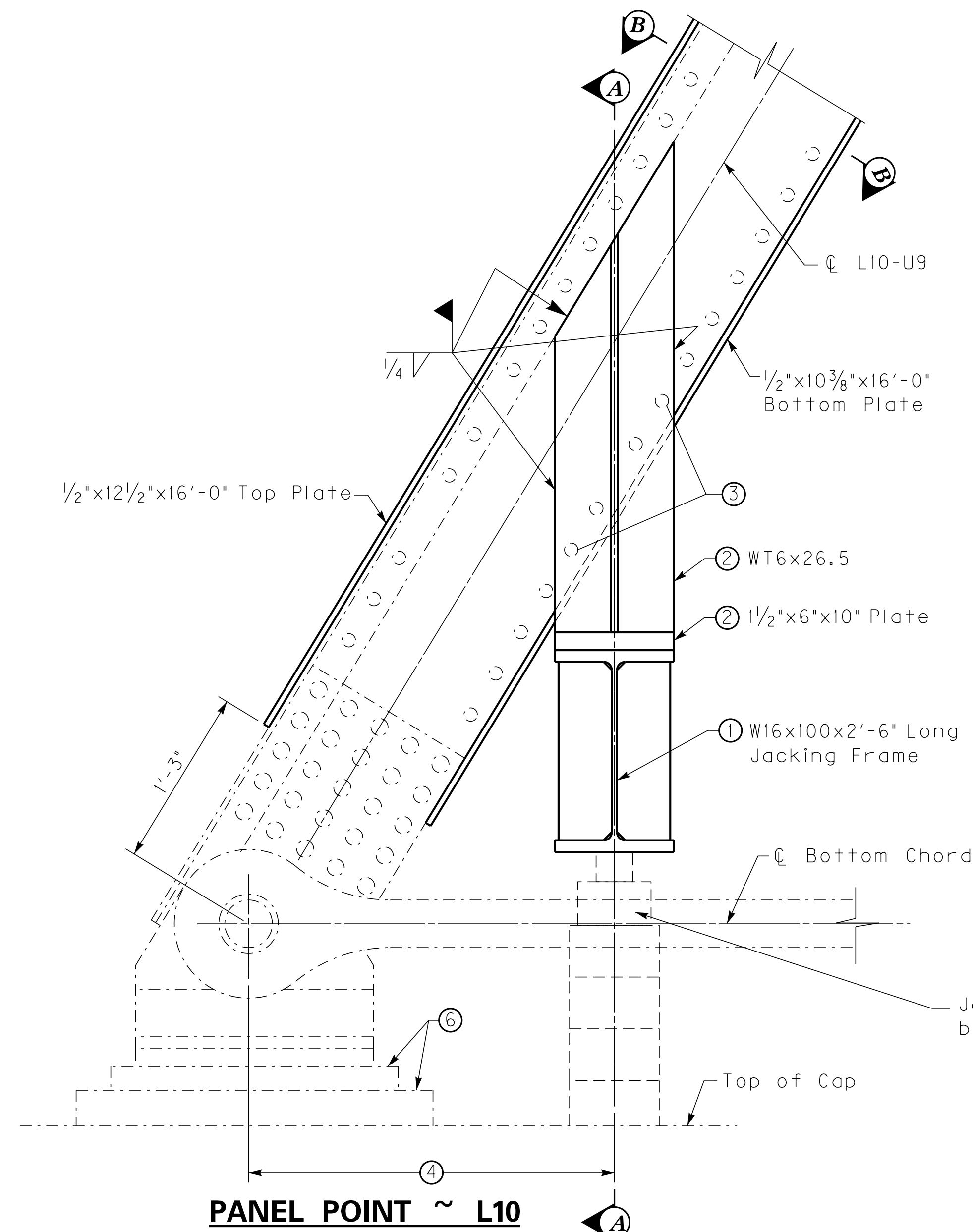
SECTION B-B

NOTES

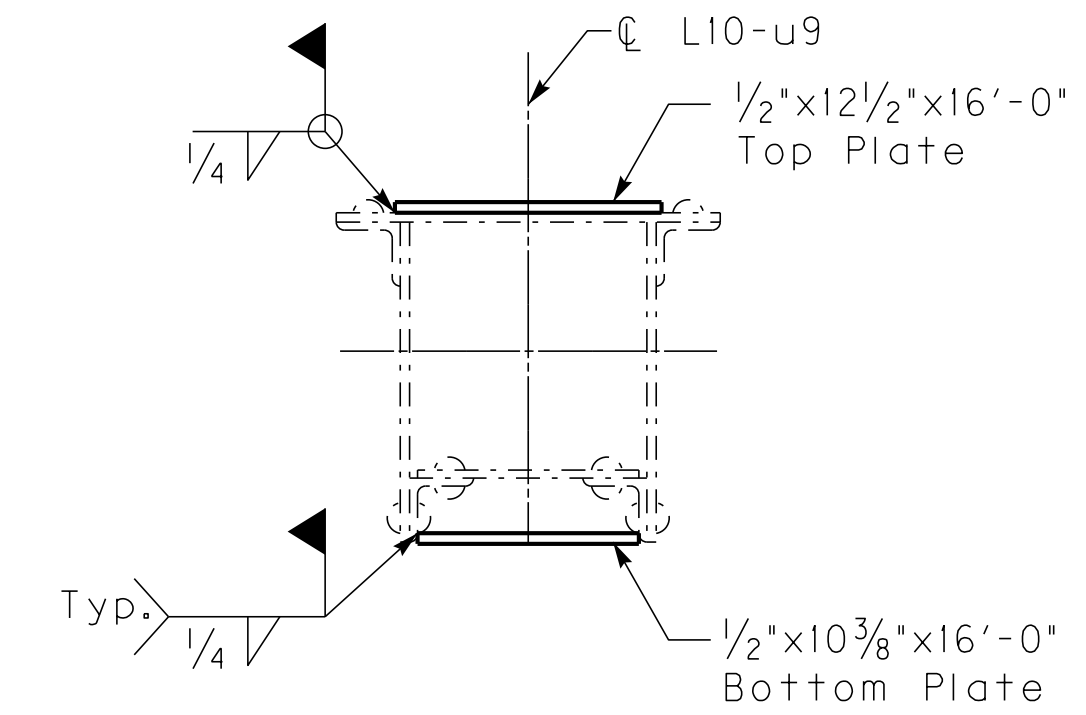
- ① Remove jacking beam when jacking and support is complete.
- ② Jack supports are to remain as shown.
- ③ Grind rivets flush within jack support limits. Provide plug weld as shown for rivets more than 1/4" from edge.
- ④ 2'-3" maximum unless contractor provides alternate jacking frame and endpost strengthening design.
- ⑤ Fillet weld, clamp or bolt securely before commencing jacking operations.
- ⑥ Reset existing masonry plate and roller nest. Center plate and roller nest under pin. Masonry plate and rollers shall be cleaned, painted and lubricated. See Special Note for Repair Surface Preparation and Paint Application. All cost to reset the masonry plate and rollers shall be included in the unit price bid 'Each' for Reset Bearing Shoe - Type B.

Note: See Special Note for Jack and Support Bridge Span and Reset Bearing Shoes

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: J.C. Pyles		
DETAILED BY: W.T. Mathews	J.C. Pyles	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY BREATHITT		
ROUTE KY3193	CROSSING N.FORK KENTUCKY RIVER	
FD52 017 3193 B00044N RESET BEARING SHOE ~ TYPE B		
ITEM NUMBER	PREPARED BY	SHEET NO.
10-1089.00	Division of Structural Design	S7
		DRAWING NO. 27191



SECTION A-A
JACK AND SUPPORT FRAME
 (Pier 3 Shown, Pier 2 Similar)



SECTION B-B

NOTES

- ① Remove jacking beam when jacking and support is complete.
- ② Jack supports are to remain as shown.
- ③ Grind rivets flush within jack support limits. Provide plug weld as shown for rivets more than 1/4" from edge.
- ④ 2'-3" maximum unless contractor provides alternate jacking frame and endpost strengthening design.
- ⑤ Fillet weld, clamp or bolt securely before commencing jacking operations.
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OMIT NOTE

OMIT DETAILS FOR RESET BEARING TYPE C

Note: See Special Note for Jack and Support Bridge Span and Reset Bearing Shoes

REVISION		DATE
DATE:	CHECKED BY	
DESIGNED BY: J.C. Pyles		
DETAILED BY: W.T. Mathews	J.C. Pyles	
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
BREATHITT		
ROUTE	CROSSING	
KY3193	N.FORK KENTUCKY RIVER	
RESET BEARING SHOE ~ TYPE B		
ITEM NUMBER	PREPARED BY	SHEET NO.
10-1089.00	Division of Structural Design	S7
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REVISED 04-17-2015
 FD52 017 3193 B00044N

At the completion of the project, masonry surfaces shall be cleaned using plain water and natural bristle or nylon brushes as directed by the Engineer. Use of chemical detergents will not be permitted for cleaning masonry.

IV. MEASUREMENT

This work will be measured by the number of square feet measured along the plane of the exposed vertical surfaces of the stone masonry from top of masonry to 6” below finished grade. Exposed horizontal surfaces will not be considered in computing the payment area for this item. Any areas, greater than 50 sq.ft. bounded by horizontal and vertical lines equidistant between masonry joint lines, which contain less than 25% repointed joints by length shall be deducted from the measured quantity.

No measurement will be made for areas of rejected repointing samples.

V. PAYMENT

The Department will consider payment as full compensation for all work and materials required in this note. The Department will make Payment for the completed and accepted quantity under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24776EC	Repoint Stone Masonry	SQFT

SPECIAL NOTE FOR RESET BEARING SHOE

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 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 truss.
- (3) Remove the existing masonry plates, swedge bolts, and other bearing components as specified in this note and shown on the attached detail drawings.
- (4) Fill voids left by anchor bolt removal with non-shrink grout, recondition and level bearing seats.
- (5) Install new components as specified in this note and shown on the attached detail drawings.
- (6) Reset bearings to positions shown on the attached detail drawings.
- (7) Maintain and control traffic.
- (8) 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 unless other electrodes are determined to be more suitable for welding the existing steel.
- E. Non-Shrink Grout.** Use non-shrink grout. See Section 601.
- F. Anchor Bolts.** See Section 813.

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 must submit a Jacking Plan, stamped by a professional engineer licensed in the State of Kentucky, for review by the Engineer, prior to starting work. Details for jacking supports are shown in the detail drawings for selected locations. These details may be used by the contractor or the contractor may develop his own details to complement the jacking scheme being used. Jacking support details provided by the Contractor must be included in the Jacking Plan for approval. The truss should only be lifted enough to allow for removal and installation of the bearing assemblies, and in no case more than 1/4". At no time shall differential movement between trusses exceed 1/8". For each bearing the total estimated design loads to be supported are:

Dead Load	140 kips
Live Load	15 kips (est. construction load allowance)
Total	155 kips (78 tons for each bearing, TYPE B)

Dead Load	7kips (3.5 tons for each bearing, TYPE A)
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- The contractor's jacking system shall be designed to support a minimum of 150% of these loads. Jacking and supporting required to reset or repair bearing shoes is considered incidental to the bid item "Reset Bearing Shoe" of each Type and no separate measurement or payment will be made. Strengthening and supporting modifications made to existing steel shall remain as part of the finished structure unless directed otherwise by the Engineer and are included in the unit price bid for "Reset Bearing Shoe".
- C. Remove Existing Materials.** Remove any existing bearing components to be replaced. Fill voids left by anchor bolt removal with non-shrink grout to a smooth level bearing surface. If required to accommodate new components, chip existing bearing seats to the required depth and use epoxy-grout to restore the seats as necessary to true, level, and smooth planes. Clean all debris from bearing seats and pier cap. Dispose of all removed material entirely away from the job site. . This work is incidental to the contract unit price for "Reset Bearing Shoe" of the given Type.
 - D. Field Prepare Existing Surfaces.** Clean existing surfaces of bearings 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. Paint surfaces of bearings which will become inaccessible at the completion of "Reset Bearing Shoe" in accordance with the Specifications and Contract Documents. Lubricate surfaces of bearings which will become inaccessible at the completion of "Reset Bearing Shoe" in accordance with the Contract Documents
 - E. Welding Specifications.** All welding and welding materials, shall conform to the "AASHTO/AWS D1.5M/D1.5 Bridge Welding Code, current edition" and modifications 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. Contractor shall verify that the weld procedures proposed are suitable for producing quality welds in the existing material. 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.
 - F. 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.
 - G. 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.
 - H. Painting.** Since the bridge is to be painted and all bearings lubricated after all repairs have been made, while bearings are disassembled for repair or resetting, all surfaces

which will be inaccessible after the work is complete shall be painted in accordance with the specifications.

- I. Shop Plans.** Shop plans will not be required for the items covered by this Special Note. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.
- J. 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

Reset Bearing Shoe . Measurement will be for each bearing reset of a given Type.

V. PAYMENT

- A. Reset Bearing Shoe.** Payment at the contract unit price is full compensation for removal and disposing of specified materials, furnishing and placing non-shrink grout, jacking and supporting required to reset or repair the bearings, furnishing and installing steel plates and anchor bolts, welding, and all other materials, labor, equipment, tools, and incidentals necessary to complete the work as specified by this note. Payment shall be made under:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
03305	Reset Bearing Shoe, Type A	Each
03305	Reset Bearing Shoe, Type B	Each

SPECIAL NOTE FOR TRUSS PIN REPLACEMENT

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings.

This work consists of the following:

- (1) Furnish all labor, materials, tools, and equipment
- (2) Replace truss pin in accordance with the detail drawings and this Special Note.
- (3) Maintain and control traffic as necessary
- (4) Any other work specified as part of this contract

II. MATERIALS

- A. Steel.** Use new, AASHTO M270 Grade 50 (ASTM A709 Grade 50) steel. The Engineer will base acceptance on visual inspection. See Section 812.
- B. High Strength Bolts, Nuts, and Washers.** Ensure all bolted connections are AASHTO M164 or ASTM A325 high strength bolts, nuts, and washers.
- C. Pins.** Conform to ASTM A108 or ASTM A688 steel in accordance with Section 813. Finish pins in accordance with the Section 607.03.09. Provide pin nuts, washers, etc. as required and in accordance with the specifications.

III. CONSTRUCTION

- A. Truss Pin Replacement**
 1. This repair is a Conditional Repair. Do not construct this repair unless directed by the Engineer.
 2. Field measure pin and fabricate to match field measurements. Adjust plan dimensions to match field conditions.
 3. Install pin as shown on the detail drawings.
 4. Paint new structural steel and retouch existing structural steel damaged by the repair operations in accordance with the specifications using a color similar to existing unless otherwise shown on the plans or directed by the Engineer.
- B. Dimensions.** Dimensions shown on these plans are taken from available plans and do not necessarily reflect revisions made during construction. The Contractor shall verify elevations, and dimensions, including thickness of parts, in the field prior to ordering materials or fabricating steel.
- C. Shop Drawings.** Shop drawings will not be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.

- D. Prohibited Field Welding.** Field welding shown in the detail drawings is permitted. No other welding shall be performed on the load carrying members of the bridge without the written consent of the Director, Division of Structural Design.
- E. 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.
- F. Lead Paint.** Lead based paint may be on the bridge. The Contractor is advised to take all necessary protective measures when removing, cutting, or performing any other actions on the existing steel. The Department will not entertain any claims dealing with lead base paint contamination.
- G. 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.
- H. Conditional Repair :** The quantity for "Truss Pin Replacement" shall be bid with the contingency that quantities may be increased, decreased, or eliminated by the Engineer

IV. MEASUREMENT

- A. Truss Pin Replacement.** The Department will measure the quantity as each location repaired.

V. PAYMENT

- A. Truss Pin Replacement.** Payment at the contract unit price is full compensation for all materials, labor, equipment, tools and incidentals necessary to complete the work as shown on the attached detail drawings or as described in this Special Note. Payment shall be made under:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24419EC	Truss Pin Replacement	Each

SPECIAL NOTE FOR TRUSS PIN PLATE RETROFIT

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings.

This work consists of the following:

- (1) Furnish all labor, materials, tools, and equipment
- (2) Repair, modify, or retrofit truss pin plates in accordance with the detail drawings and this Special Note.
- (3) Maintain and control traffic as necessary
- (4) Any other work specified as part of this contract

II. MATERIALS

- A. Steel.** Use new, commercial grade AASHTO M270 Grade 50 (ASTM A709 Grade 50) steel. The Engineer will base acceptance on visual inspection. See Section 812.
- B. High Strength Bolts, Nuts, and Washers.** Ensure all bolted connections are AASHTO M164 or ASTM A325 high strength bolts, nuts, and washers.
- C. Weld Electrodes** in accordance with AWS D1.5

III. CONSTRUCTION

A. Truss Pin Plate Retrofit

1. This repair is a conditional repair. Do not construct this repair unless directed by the Engineer.
 2. Field measure pin and fabricate steel plates to match field measurements. Adjust plan dimensions to match field conditions.
 3. Install pin plate retrofit as shown on the detail drawings .
 4. Grind existing support angle fillet to permit a close fit between new reinforcing angle and existing and expose extent of crack in the support angle.
 5. Paint new structural steel and retouch existing structural steel damaged by the repair operations in accordance with the specifications using a color similar to existing unless otherwise shown on the plans or directed by the Engineer.
- B. Dimensions.** Dimensions shown on these plans are taken from available plans and do not necessarily reflect revisions made during construction. The Contractor shall verify elevations, and dimensions, including thickness of parts, in the field prior to ordering materials or fabricating steel.

- C. Shop Drawings.** Shop drawings will not be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.
- D. Prohibited Field Welding.** Field welding shown in the detail drawings is permitted. No other welding shall be performed on the load carrying members of the bridge without the written consent of the Director, Division of Structural Design.
- E. 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.
- F. Lead Paint.** Lead based paint may be on the bridge. The Contractor is advised to take all necessary protective measures when removing, cutting, or performing any other actions on the existing steel. The Department will not entertain any claims dealing with lead base paint contamination.
- G. 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.
- H. Conditional Repair :** The quantity for "Truss Pin Plate Retrofit" shall be bid with the contingency that quantities may be increased, decreased, or eliminated by the Engineer

IV. MEASUREMENT

- A. Truss Pin Plate Retrofit.** The Department will measure the quantity as each location repaired.

V. PAYMENT

- A. Truss Pin Plate Retrofit.** Payment at the contract unit price is full compensation for all materials, labor, equipment, tools and incidentals necessary to complete the work as shown on the attached detail drawings or as described in this Special Note. Payment shall be made under:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24420EC	Truss Pin Plate Retrofit	Each

PROPOSAL BID ITEMS

152955

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Report Date 4/20/15

Section: 0001 - BRIDGES

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	02231		STRUCTURE GRANULAR BACKFILL	2.00	CUYD		\$	
0020	02351		GUARDRAIL-STEEL W BEAM-S FACE	550.00	LF		\$	
0030	02355		GUARDRAIL-STEEL W BEAM-S FACE A	75.00	LF		\$	
0040	02360		GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH		\$	
0050	02371		GUARDRAIL END TREATMENT TYPE 7	2.00	EACH		\$	
0060	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0070	03294		EXPAN JOINT REPLACE 1 1/2 IN	32.00	LF		\$	
0080	03304		BRIDGE OVERLAY APPROACH PAVEMENT	178.00	SQYD		\$	
0100	03305		RESET BEARING SHOE - TYPE B	2.00	EACH		\$	
0110	03305		RESET BEARING SHOE - TYPE A	4.00	EACH		\$	
0120	08019		CYCLOPEAN STONE RIP RAP	2,485.00	TON		\$	
0130	08150		STEEL REINFORCEMENT	394.00	LB		\$	
0140	08434		CLEAN & PAINT STRUCTURAL STEEL	1.00	LS		\$	
0150	08435		JACK & SUPPORT BRIDGE SPAN	1.00	LS		\$	
0160	08504		EPOXY SAND SLURRY	246.00	SQYD		\$	
0170	08526		CONC CLASS M FULL DEPTH PATCH	2.20	CUYD		\$	
0180	08534		CONCRETE OVERLAY-LATEX	19.40	CUYD		\$	
0190	08540		JOINT SEALING	189.00	LF		\$	
0200	08549		BLAST CLEANING	815.00	SQYD		\$	
0210	08550		HYDRODEMOLITION	569.00	SQYD		\$	
0220	24094EC		PARTIAL DEPTH PATCHING	10.00	CUYD		\$	
0230	24418EC		DIAGONAL EYE BAR RETROFIT	1.00	EACH		\$	
0240	24419EC		TRUSS PIN REPLACEMENT - CONDITIONAL REPAIR	1.00	EACH		\$	
0250	24420EC		TRUSS PIN PLATE RETROFIT - CONDITIONAL REPAIR	2.00	EACH		\$	
0260	24421EC		STRINGER RETROFIT - TYPE C	2.00	EACH		\$	
0270	24421EC		STRINGER RETROFIT - TYPE B	2.00	EACH		\$	
0280	24421EC		STRINGER RETROFIT - TYPE A	6.00	EACH		\$	
0290	24776EC		REPOINT STONE MASONRY - PIERS 2 & 3	5,040.00	SQFT		\$	
0300	40101		CONCRETE PATCHING	40.00	SQFT		\$	

Section: 0002 - DEMOB

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0310	02568		MOBILIZATION	1.00	LS		\$	
0320	02569		DEMOBILIZATION	1.00	LS		\$	