LETTING DATE

CONSTRUCTION PROJECT NO.

TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS

BULLITT COUNTY
BELLS MILL ROAD
KY 1526 OVER FLOYDS FORK
STA. 101+60.00

ESTIMATE OF QUANTITIES

BID ITEM CODE		08100	08104	08150	08151	08672	23378EC	02998	02403	03299	25028ED	02231	23813EC	8301	21741NC	2585	2383	25078ED	2569	2726	26233EC	00001	00301	00221	02562	06556	06557	21415ND	02545
BID ITEM		Concrete Class "A"	Concrete Class "AA"	Steel Reinforcement	Steel Reinforcement, Epoxy Coated	PPC Box Beam SB42	Concrete Sealing	Masonry Coating	Remove Concrete Masonry	Armored Edge for Concrete	Rail System Single Slope 40 Inch	Structure Granular Backfill	Deck Drains	Remove Superstructure	Maintain and Control Traffic	Edge Key	Remove and Reset Guardrail	Thrie Beam Guardrail Connector TL3	Demobilization	Staking	Mobilization for Concrete Sealing	DGA Base ③	CL2 Asph Surf ① 0.38D PG64-22	CL2 Asph Base ② 0.75D PG64-22	Temporary Signs	Pave Striping -DUR TY 1-6 IN W	Pave Striping -DUR TY 1-6 IN Y	Erosion Control	Clearing and Grubbing
UNIT		C.Y.	C.Y.	LBS.	LBS.	L.F.	S.F.	S.Y.	C.Y.	L.F.	L.F.	C.Y.	EA.	LS	EA	LF	LF	EA	LS	LS	LS	TON	TON	TON	S.F.	L.F.	L.F.	LS	LS
Substructure	End Bent #1	9.2			2014			35	6.5			83																	
	Pier #1	29.5		5491				108	14.3																				
	Pier #2	29.8		5458				110	16.1																				
	End Bent #2	9.2			2014			35	6.6			83																	
Superstructure			247.6		77663	1117.3	17076			50	626		10	1	1		100	4	1	1	1								
BRIDGE TOTALS		77.7	247.6	10949	81691	1117.3	17076	288	43.4	50	626	166	10	1	1	50	100	4	1	1	1	94	84	90	229	1160	580	1	1

① Quantity is figured for 150 linear feet of 1.25" thick pavement overlay at each end of bridge.

② Quantity is figured for 25 linear feet of full depth roadway replacement at each end of bridge, 2 lifts of 4" and 4".

③ Quantity is figured for 25 linear feet of 8" deep full depth roadway replacement at each end of bridge.

INDEX OF SHEETS

SPECIAL NOTES

Special Note for Concrete Sealing

SPECIAL PROVISIONS

69 Embankment at Bridge End Bent Structures

STANDARD DRAWINGS

BBP-003-02	Elastomeric Bearing Pads for Box Beams
BBP-002-04	Bearing Details
BGX-006-10	Stencils for Structures
BHS-010	Railing System 40 Inch Single Slope
BGX-015-04	Bridge Drains
BJE-001-14	Armored Edges

SPECIFICATIONS

2019 Standard Specifications for Road and Bridge Construction.

2020 AASHTO LRFD Bridge Design Specifications

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY TRANSPORTATION CABINET

REVISION	DATE
Add Erosion Control Bid Item	6/11/2025
Add Webwall Quantities	6/13/2025
Add Clearing and Grubbing Quantity	6/23/2025

PREPARED BY
Division of Structural Design

DATE: August 2023 | CHECKED BY
DESIGNED BY: L. Likins | W. Deaton
DETAILED BY: L. Likins | W. Deaton

TITLE SHEET

CROSSING: Floyds Fork

ROUTE	ITEM NO.	COUNTY OF
KY 1526	5-10035	BULLITT
	SHEET NO. S1	DRAWING NUMBER 28807

GENERAL NOTES

SPECIFICATIONS: All references to the Specifications are to the current edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction with current Supplemental Specifications. All references to the AASHTO Specifications are to the current edition of the AASHTO LRFD Bridge Design Specs, with interims.

DESIGN LOAD: This bridge is designed for a KYHL-93 live load. The KYHL-93 live load is arrived at by increasing the standard HL-93 truck and lane loads as specified in the AASHTO Specifications by 25%.

FUTURE WEARING SURFACE: This structure is designed for a 15 PSF future wearing surface load.

DESIGN STRESSES:

Concrete Class "A"	~	f'c = 3500 psi
Concrete Class "AA"	~	f'c = 4000 psi
Steel Reinforcement	~	Fy = 60,000 psi
Structural Steel Yield Strength	~	Fy = 50,000 psi

DESIGN METHOD: All reinforced concrete members are designed by the load and resistance factor method as specified in the current AASHTO Specifications.

WIND LOAD: This bridge is designed for a wind load based on a wind velocity of 100 mph.

REINFORCEMENT: Dimensions shown from the face of concrete to bars are to center of bars unless otherwise shown. Spacing of bars is from center to center of bars. Clear distance to face of concrete is 2", unless otherwise noted. Any reinforcement bars designed be suffix (e) in the plans shall be epoxy coated in accordance with section 811.10 of the Standard Specifications. Any reinforcing bars designated by suffix (s) in a bill of reinforcement shall be considered a stirrup for purposes of bend diameters.

BEVELED EDGES: Bevel all exposed edges ¾" unless otherwise noted.

COMPLETION OF THE STRUCTURE: The Contractor is required to complete the structure in accordance with the plans and specifications. Material, labor or construction operations, not otherwise specified, are to be included in the bid item most appropriate to the work involved. This may include cofferdams, shoring, excavations, backfilling, removal of all or parts of existing structures, phase construction, incidental materials, labor or anything else required to complete the structure.

SHOP DRAWINGS: Submit shop drawings that are required by the plans and specifications directly to the Division of Structural Design. Is any changes in the design plans are proposed by a fabricator or supplier, submit those changes to the Department through the Contractor.

DIMENSIONS: Dimensions are for a normal temperature of 60 degrees Fahrenheit. Layout dimensions are horizontal dimensions.

SUPERSTRUCTURE SLAB: Ensure the entire superstructure slab is poured continuously, out to out, before allowing any concrete to set.

MASONRY COATING: Apply masonry coating to substructures according to the Specifications.
See Sections 601.03.18 Surface Finish of the Standard Specifications for loactions of application.
Do not apply masonry coating where Concrete Sealer is called out in these plans on the superstructure.

CONCRETE SEALER: The superstructure deck, barriers and overhangs shall also be sealed as shown herein these plans. Concrete surfaces (except the deck) shall receive the ordinary surface finish as described in section 601.03.18(A) prior to being sealed.

CONCRETE: Class "AA" is to be used throughout the new superstructure. Class "A" is to be used on the End Bents and Piers.

ORIGINAL DRAWING NUMBER: Refer to Drawing Number 17586 for original plans.

FORM WEIGHT: Design includes 16 psf for stay in place form weight and allows for concrete filling the voids.

ON-SITE INSPECTION: Each contractor submitting a bid for this work shall make a thorough inspection of the project site prior to submitting a bid and shall be thoroughly familiarized with existing conditions so that work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will be be honored be the Department of Highways.

DAMAGE TO THE SUBSTRUCTURE: The contractor is responsible for any and all damages to the existing substructures during reconstruction even to the replacement of the entire substructure, should they be damaged due to their actions.

CONCRETE REMOVAL: The pier columns and other concrete where the existing reinforcement is to be reused, the contractor shall use hand held jack hammers or hydro-demolition techniques to remove concrete without damaging the existing reinforcement that is to remain in place. Any concrete removal outside the detailed limits shall be replaced at the contractor's expense. The contractor shall make a saw cut at the removal limits to form a neat construction joint. All costs of this procedure are included in the price bid for "Remove Concrete Masonry".

DRILLING AND GROUTING: In accordance with Section 826 of the specifications, drill holes to a depth as shown herein these plans and apply a Type IV epoxy bonding adhesive in the holes. Also apply a Type V epoxy bonding material to the interface between the existing concrete and the new concrete prior to placing the new concrete. All costs associated with this work shall be incidental to the unit price bid for Class "A" Concrete.

EXISTING REINFORCING STEEL: The costs of cutting, bending and cleaning existing reinforcing steel is to be incidental to the lump sum bid for "Remove Superstructure".

REMOVE SUPERSTRUCTURE: Include in the lump sum bid for "Remove Superstructure" all costs (materials, labor, equipment, etc.) associated with removing and disposing of the existing superstructure as detailed herein in accordance with Section 203 of the Specifications. Also include in this lump sum bid the cost of any required excavation and subsequent backfilling (including materials, labor, equipment, etc.) behind the end bents. The cost of removing portions of the end bents and piers shall be included in the unit price bid for "Remove Concrete Masonry".

DIMENSIONS AND ELEVATIONS: All dimensions and elevations given in these plans are based on field surveyed data and dimensions from the old plans. Prior to beginning work or ordering any materials, the contractor shall verify all dimensions and elevations. No claim shall be honored by KYTC regarding site conditions.

EXISTING HANDRAIL: Remove and relocate the existing aluminum handrail as directed by the Engineer. All costs to remove, deliver to a location as specified by the Engineer, or disposal fees shall be incidental to the lump sum for "Remove Superstructure".

STRUCTURE GRANULAR BACKFILL: Excavation into existing pavement or ground behind end bent that may be required for end bent construction shall be backfilled with Structure Granular Backfill in accordance with Special Provision 69. Wrap all rock in Geotextile Fabric Class 2. All geotextile fabric shall be incidental to the unit price bid for "Structure Granular Backfill".

MASTIC TAPE: Mastic tape application is required at the end bents as shown in the Joint Waterproofing Detail on sheet S13. See sheet S13 for all mastic tape requirements. The cost of labor, materials, and incidental items for furnishing and installing Mastic Tape shall be considered incidental to the unit price bid for Concrete Class "AA" and no separate measurement or payment shall be made.

MAINTAIN AND CONTROL TRAFFIC: Contractor will be responsible for all traffic control, signs, detours, type 3 barriers, etc. All costs shall be incidental to maintain and control traffic.

PAVEMENT: The area in the estimate of quantities for pavement includes all areas on the approaches shown in the plans.
The contractor shall provide a minimum 8" of DGA, two 4" lifts of asphalt base, and a minimum of 1¼" asphalt surface.
The price bid for the DGA and pavement quantities includes all materials, labor, and equipment necessary to place full depth pavement where necessary, and an overlay where the existing pavement structure is not removed.
Construction shall be done in accordance with the plans, specifications, and as the Engineer directs.
Begin overlay 150' before begin bridge station and extend to 150' after end bridge station, not including bridge deck.

The following abbreviations may have been used in the preparation of these plans:

bet.	between
b.f.	Back Face
BOF	Bottom of Footing
BOS	Bottom of Slab
bot.	Bottom
Brg.	Bearing
C to C	Center to Center
c.e.	Current Edition
C.Y.	Cubic Yards
Chd.	Chord
CL	Center Line
Clr.	Clear
Conc.	Concrete
CubicCu.	
DrawingDwg.	
e.f.	Each Face
El.	Elevation
eq.	Equal
Est.	Estimate
ExteriorExt.	
F to F	Face to Face
f.f.	Front Face
f.s.	Far Side
fr.	Front
ft.	Feet
I.D.	Inside Diameter
in.	Inch
Int.	Interior
L	Left
LBS	Low Bridge Seat
LBS.	Pounds
M	Meter
MPH	Miles Per Hour
n.s.	Near Side
O.D.	Outside Diameter
Opp.	Opposite
PC	Point of Curvature
Perp.	Perpendicular
PI	Point of Intersection
PPC	Precast Prestressed Concrete
PPCDU	Precast Prestressed Deck Unit
PSI	Pounds per Square Inch
PT	Point of Tangency
R	Radius
R	Right
RCBC	Reinforced Concrete Box Culvert
RCDG	Reinforced Concrete Deck Girder
Req'd	Required
RR	Railroad
ShId.	Shoulder
spa.	Spaces
Sta.	Station
Std.	Standard
Str.	Straight
Tan	Tangent
Thru	Through
TOF	Top of Footing
TOS	Top of Slab
Tot.	Total
Typ.	Typical
Vert.	Vertical
W.P.	Working Point
Yd.	Yard

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

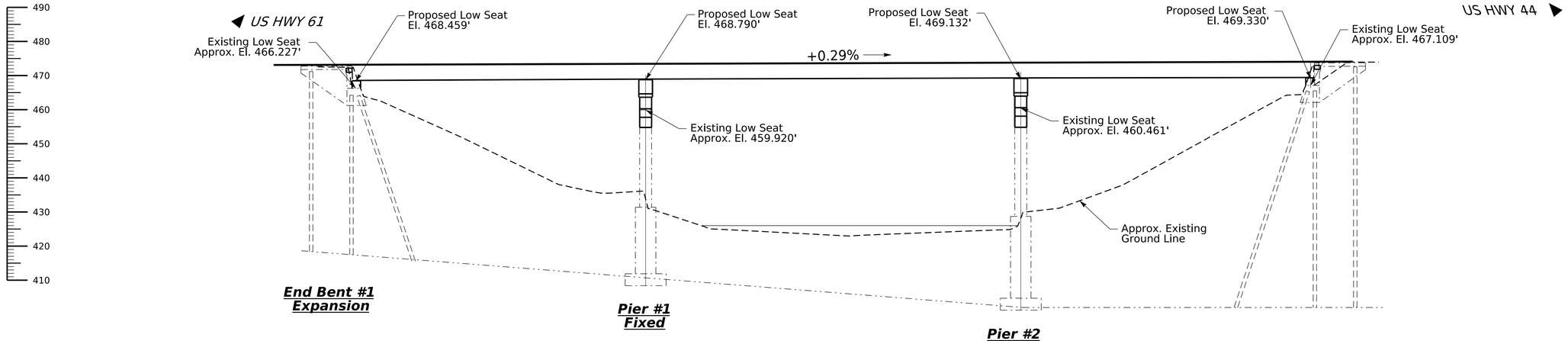
REVISION	DATE
Add Form Weight Note	6/17/2025

PREPARED BY
Division of Structural Design

DATE: August 2023	CHECKED BY	
DESIGNED BY: L. Likins	W. Deaton	
DETAILED BY: E. Downey	L. Likins	

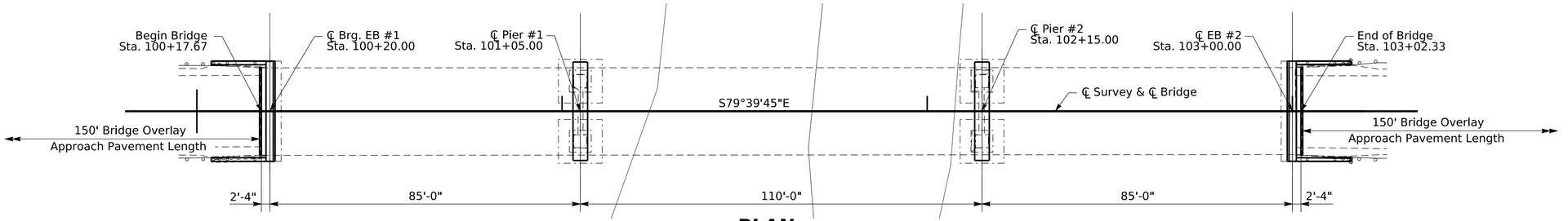
GENERAL NOTES
CROSSING: Floyds Fork

ROUTE	ITEM NO.	COUNTY OF
KY 1526	5-10035	BULLITT
	SHEET NO. S2	DRAWING NUMBER 28807



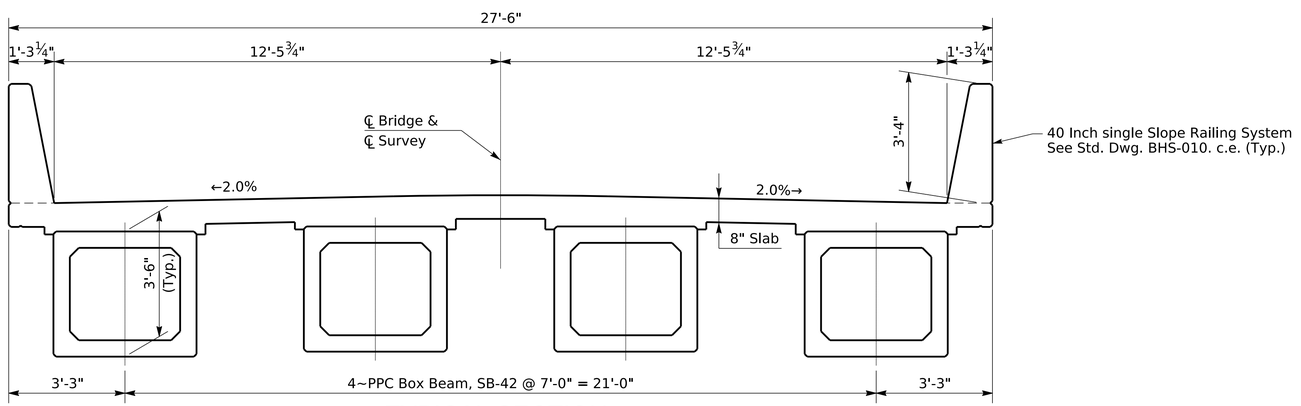
ELEVATION

85'-0" x 110'-0" x 85'-0" PPC Box Beam, SB42, Continuous for Live Load
KY-HL 93 Live Load ~ 36'-6" Shoulder Width @ Bridge
0° Skew ~ 24'-11 ½" Bridge Roadway Width ~ 2:1 Fill Slopes

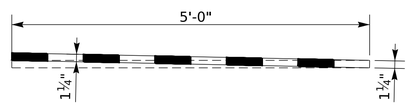


PLAN

~New Superstructure in Place
over Existing Modified Substructures~



TYPICAL SECTION



Edge Key requires milling existing pavement
to receive full depth asphalt pavement.

EDGE KEY DETAIL

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY
Division of
Structural Design

DATE: August 2023	CHECKED BY
DESIGNED BY: L. Likins	W. Deaton
DETAILED BY: E. Downey	L. Likins

LAYOUT

CROSSING
Floyds Fork

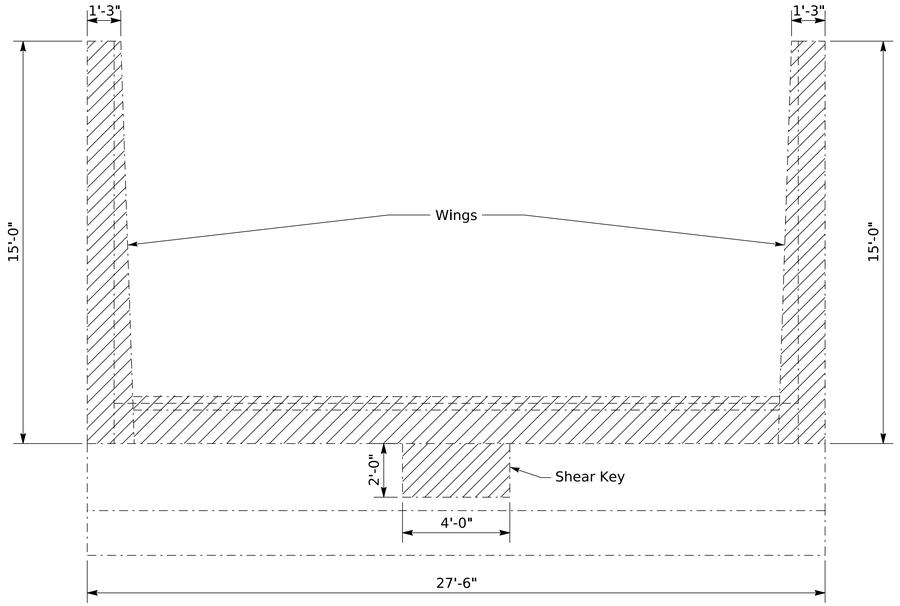
ROUTE
KY 1526

ITEM NO.
5-10035

SHEET NO.
S3

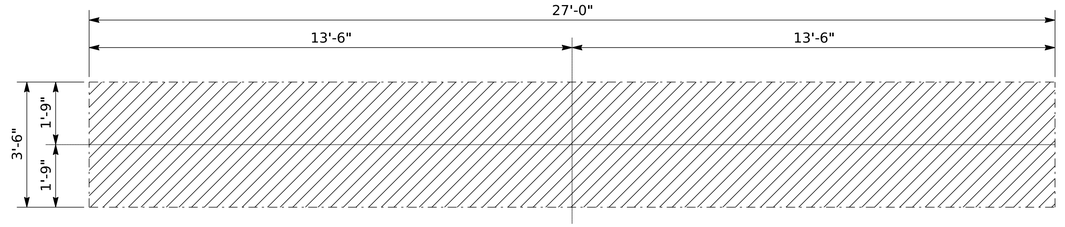
COUNTY OF
BULLITT

DRAWING NUMBER
28807



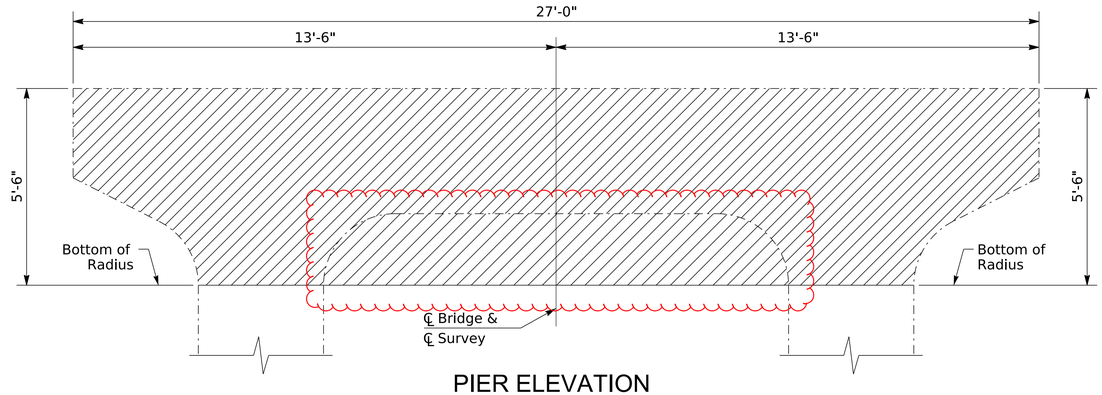
END BENT PLAN

(Showing typ. removal at End Bent 1 & 2)



PIER PLAN

(Showing typ. removal at Pier Caps 1 & 2)



PIER ELEVATION

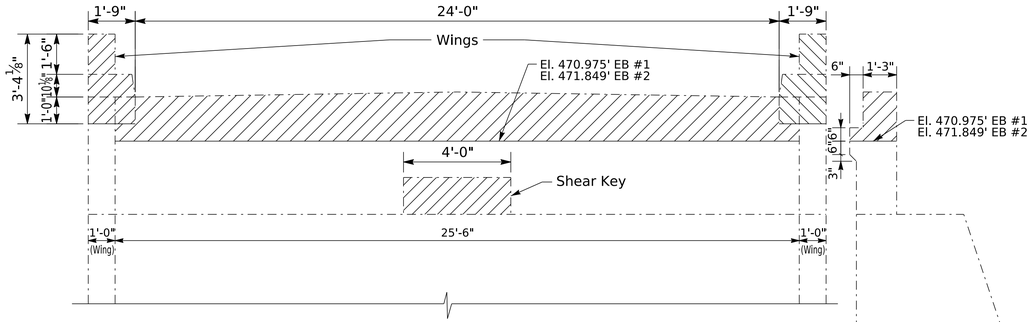
(Showing typ. removal at Pier Caps 1 & 2)

Note: Remove cross-hatched portion of existing concrete as detailed for existing wings on the End Bents and the columns on the Piers. Take care to not cut/damage existing vertical reinforcement in the piers and the wings on the end bents. This reinforcement must be cleaned, straightened, and embedded in the new concrete as detailed in these plans.

All dimensions are from Original Bridge Plans Drawing 17586. It is the contractor's responsibility to measure dimensions in the field and verify they match dimensions in these plans and Drawing 17586.

WING SECTION

(Showing typ. removal at End Bent 1 & 2, both Left & Right Wings)

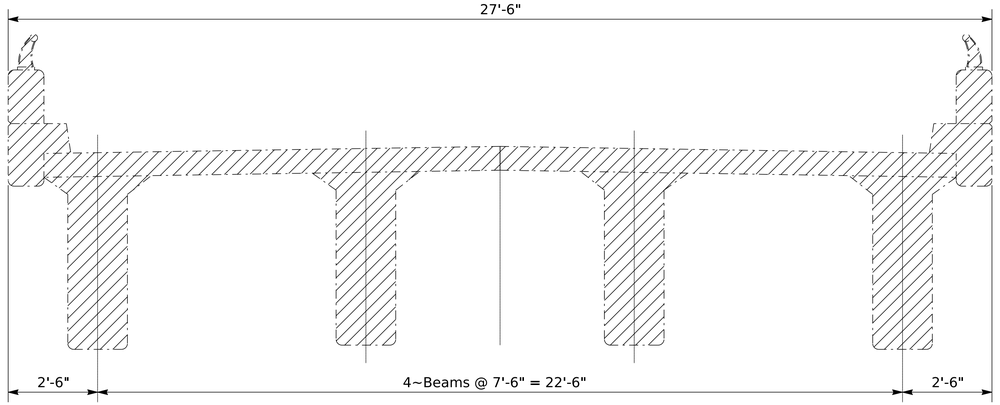


END BENT ELEVATION

(Showing typ. removal at End Bent 1 & 2)

END BENT SECTION with BACKWALL

(Showing typ. removal at End Bent 1 & 2)



SUPERSTRUCTURE ELEVATION

(Remove Existing Superstructure)

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY TRANSPORTATION CABINET

REVISION	DATE
Add Webwall Removal Limit	6/13/2025

PREPARED BY
Division of Structural Design

DATE: August 2023	CHECKED BY
DESIGNED BY: L. Likins	W. Deaton
DETAILED BY: E. Downey	L. Likins

REMOVAL DETAILS

CROSSING: Floyds Fork

ROUTE	ITEM NO.	COUNTY OF
KY 1526	5-10035	BULLITT
	SHEET NO.	DRAWING NUMBER
	S4	28807

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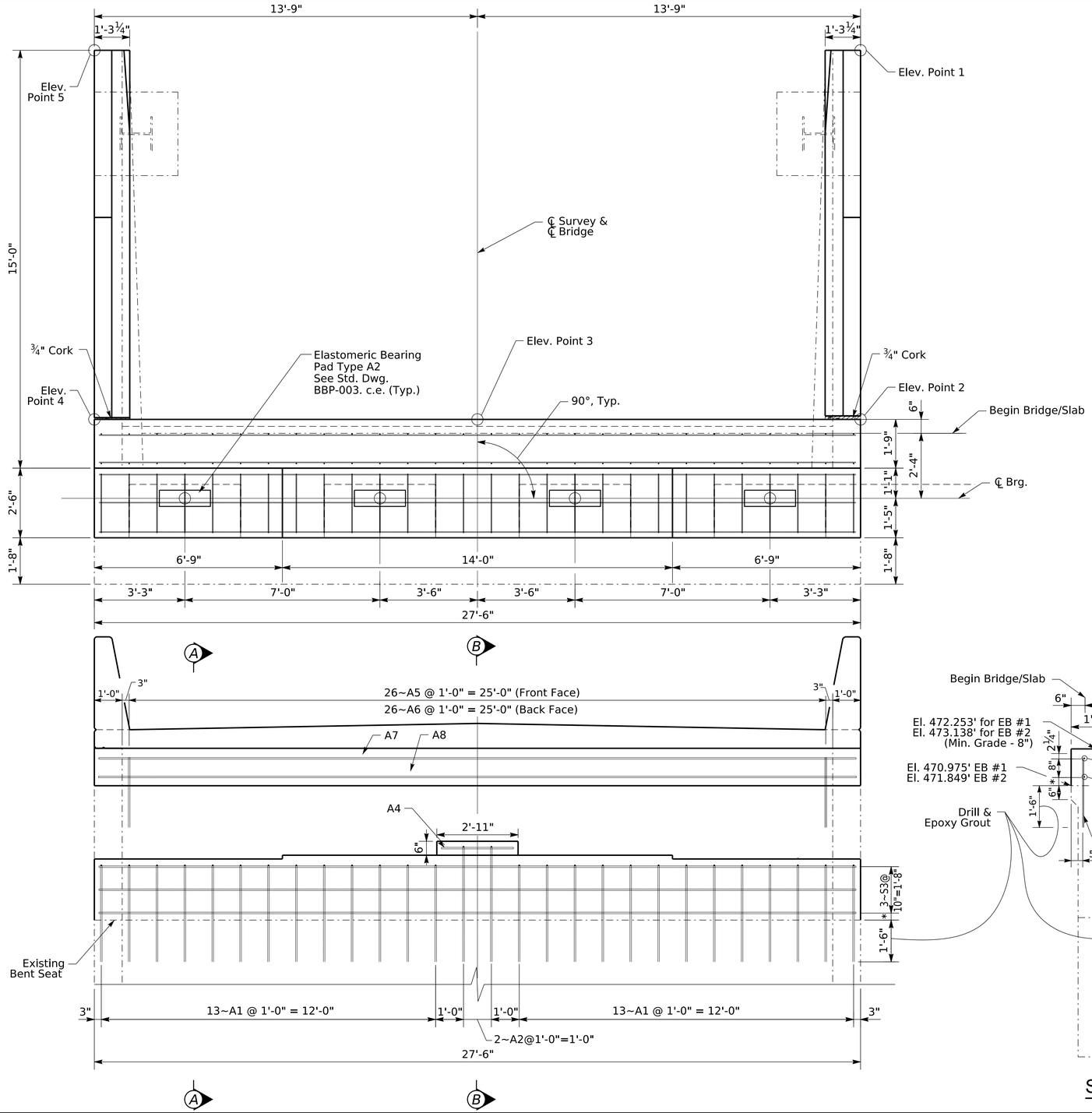
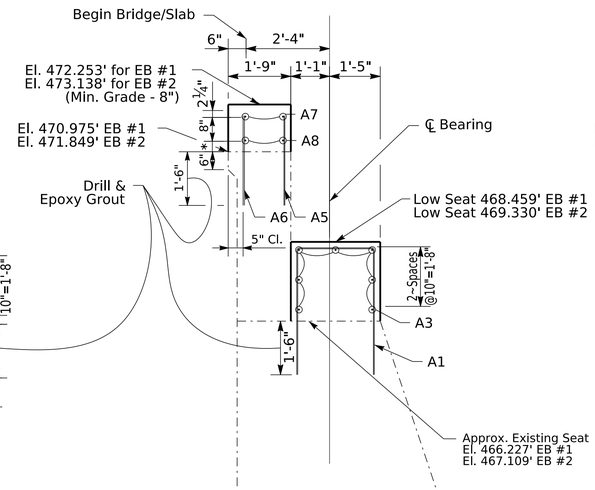


Beam Seat Elevations				
	Beam 1	Beam 2	Beam 3	Beam 4
EB #1	468.459	468.599	468.599	468.459
EB #2	469.330	469.470	469.470	469.330

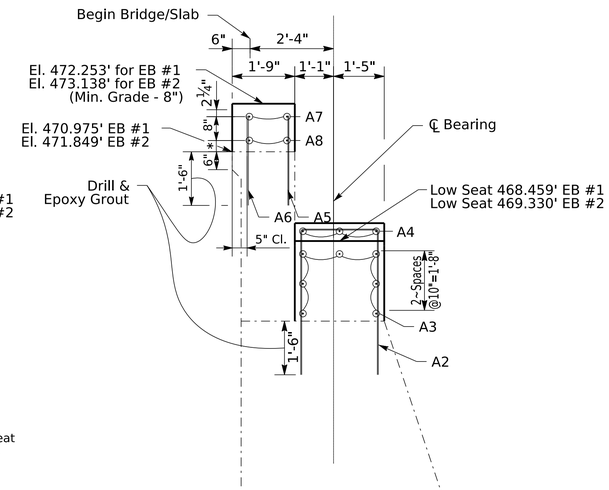
Grade Point Elevations at End Bents					
	Point 1	Point 2	Point 3	Point 4	Point 5
EB. #1	472.852	472.893	473.138	472.893	472.852
EB. #2	473.823	473.782	474.027	473.782	473.823

*Note: Dimenions varies. Set by elevations given on previous sheet.

NOTE: Any vertical steel in existing structure where concrete is to be removed shall be cleaned and straightened and shall project into proposed bent concrete.

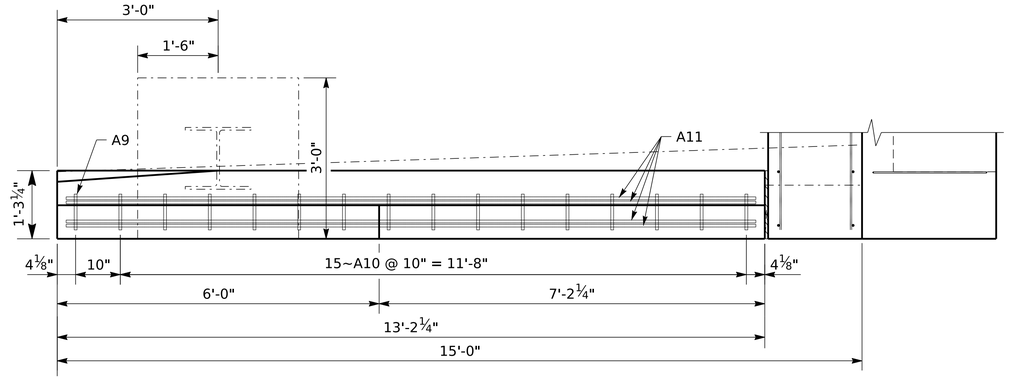


SECTION A-A



SECTION B-B

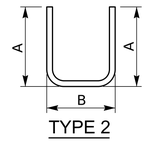
COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY Division of Structural Design	DATE: August 2023	CHECKED BY	END BENTS	ROUTE	ITEM NO.	COUNTY OF
				DESIGNED BY: L. Likins	W. Deaton	CROSSING Floyds Fork	KY 1526	5-10035	BULLITT
				DETAILED BY: L. Likins	W. Deaton			SHEET NO. S5	DRAWING NUMBER 28807



NOTE: Any vertical steel in existing structure where concrete is to be removed shall be cleaned and straightened and shall project into proposed bent concrete.

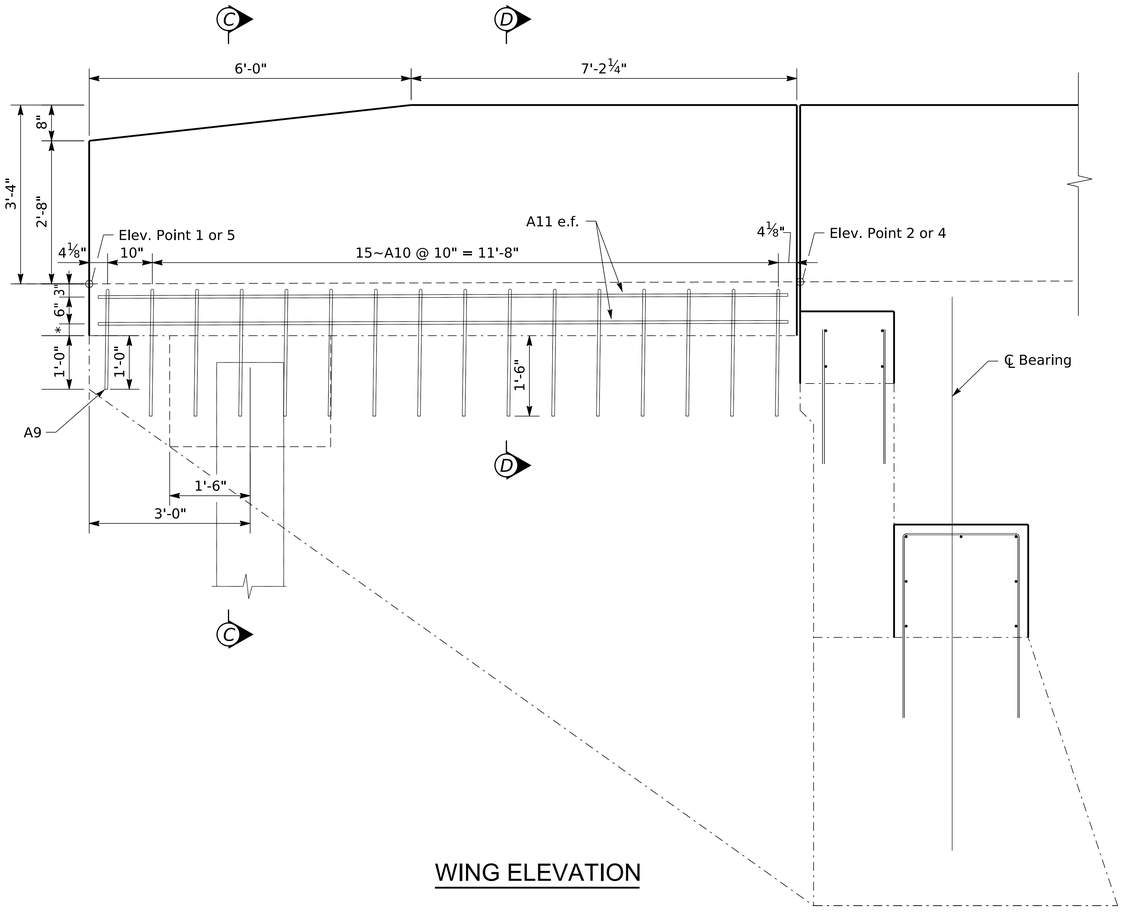
BILL OF REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B
A1e	2s	52	5	9- 1	Cap Stirrup	3- 6 ⅝	2- 2
A2e	2s	4	5	10- 5	Cap Stirrup	4- 2 ⅝	2- 2
A3e	Str.	14	5	27- 2	Cap Horizontal		
A4e	Str.	6	5	2- 7	Top of Shear Key		
A5e	Str.	52	5	2- 6	Backwall Front Face Vertical		
A6e	Str.	52	5	2- 6	Backwall Back Face Vertical		
A7e	Str.	4	5	27- 2	Backwall Top Horizontal		
A8e	Str.	4	5	27- 2	Backwall Horizontal		
A9e	2s	4	5	4- 2	Wing Stirrup	1-10 ⅜	0- 8
A10e	2s	60	5	5- 2	Wing Stirrup	2- 4 ⅜	0- 8
A11e	Str.	16	5	12-10	Wing Horizontal		

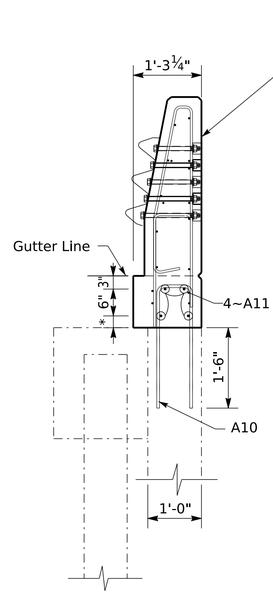


TYPE 2

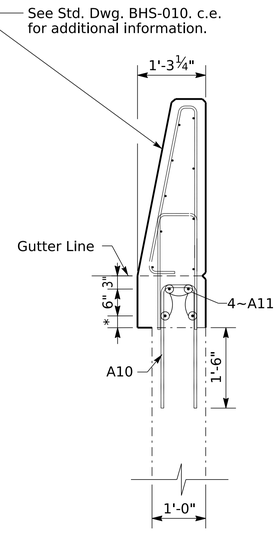
*Note: Dimenions may vary. Set by elevations given on previous sheet.



WING ELEVATION

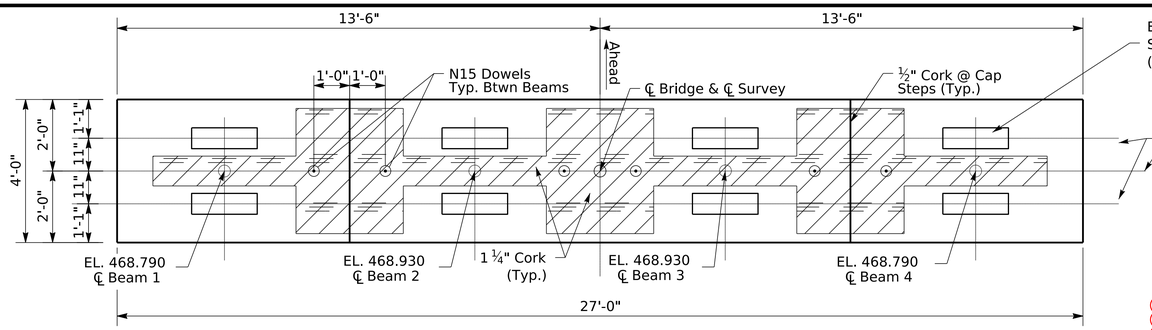


SECTION C-C



SECTION D-D

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY Division of Structural Design	DATE: August 2023	CHECKED BY	*END BENTS*	ROUTE	ITEM NO. 5-10035	COUNTY OF BULLITT
				DESIGNED BY: L. Likins	W. Deaton	CROSSING Floyds Fork	KY 1526	SHEET NO. S6	DRAWING NUMBER 28807
				DETAILED BY: L. Likins	W. Deaton				



Elastomeric Bearing Pad
See Std. Dwg. BBP-003 C.E.
(Type A1 Typ.)

℄ Bearing
℄ Pier

NOTES:

See removal details sheet for details regarding removal of existing concrete.

Beam elevations are given at the top of concrete.

For bearing and dowel details see Std. Dwg. BBP-002 C.E.

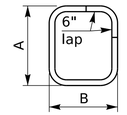
Clean and straighten all vertical rebar in existing webwall and incorporate into proposed webwall.

Proposed rebar shall be embedded 1'-0" minimum into existing concrete where shown in these plans. Use a Type IV Epoxy resin in accordance with Section 826 of the Specifications, c.e. on all such embedments. This work shall be incidental to the bid item Concrete Class "A".

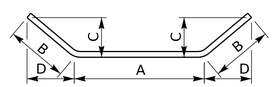
BILL OF REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B	C	D
N1	Str.	32	8	13- 6	Column Vertical				
N2	14s	36	4	13- 3	Column Ties	3- 2	3- 2		
N3	6	10	9	26-11	Cap Bottom Bars	20- 3 3/8	3- 3 3/4	0-10 5/8	3- 2 1/4
N4	Str.	12	5	27- 2	Cap Side				
N5	Str.	2	5	22- 6	Cap Sides				
N6	1	7	10	30- 5	Cap Top Bars	26- 0 3/4	2- 2	1- 1 1/4	27- 2
N7	14s	4	5	13- 4	Cap Stirrup	3-10 3/8	2- 6 5/8		
N8	14s	4	5	13- 7	Cap Stirrup	4- 0	2- 6 5/8		
N9	14s	4	5	13-10	Cap Stirrup	4- 1 5/8	2- 6 5/8		
N10	14s	4	5	14- 2	Cap Stirrup	4- 3 3/8	2- 6 5/8		
N11	14s	4	5	14- 5	Cap Stirrup	4- 5	2- 6 5/8		
N12	14s	4	5	14- 8	Cap Stirrup	4- 6 3/4	2- 6 5/8		
N13	14s	4	5	14-11	Cap Stirrup	4- 8	2- 6 5/8		
N14	14s	46	5	14-11	Cap Stirrup	4- 8	2- 6 5/8		
N15	Str.	6	*	2- 0	Cap Dowels				
N16	Str.	18	5	15- 6	Webwall Horizontal				
N17	Str.	26	5	11- 2	Webwall Vertical				

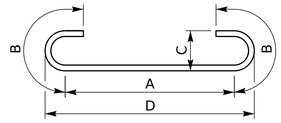
* 1 ½" Diameter Dowels may be commercial grade steel



TYPE 14



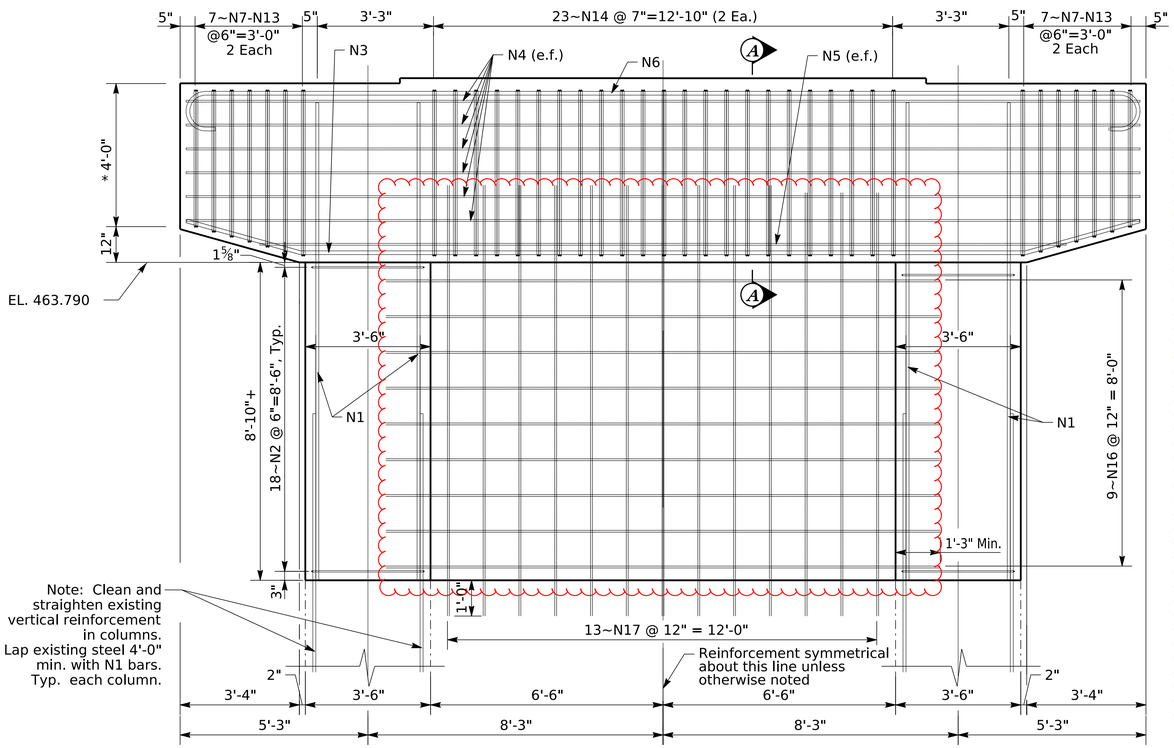
TYPE 6



TYPE 1

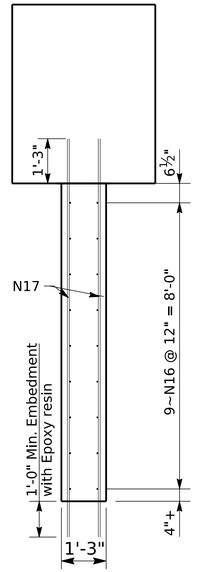
* Measured @ Low Bridge Seat

PLAN OF CAP

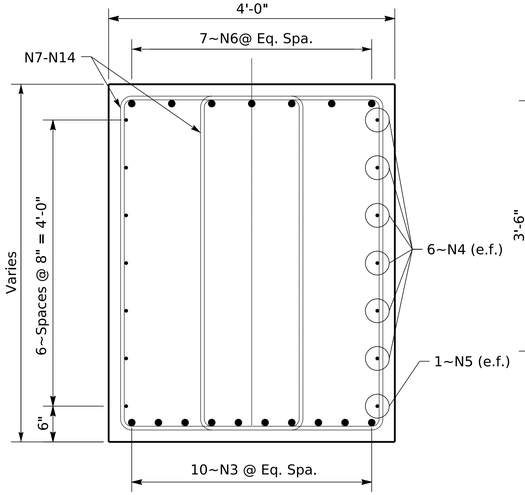


Note: Clean and straighten existing vertical reinforcement in columns. Lap existing steel 4'-0" min. with N1 bars. Typ. each column.

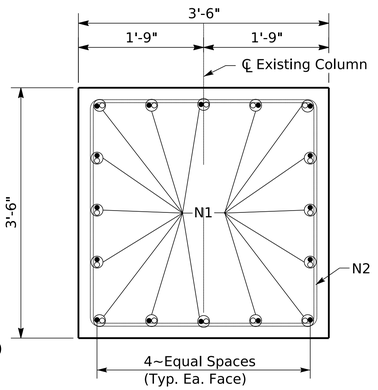
ELEVATION



WEBWALL SECTION



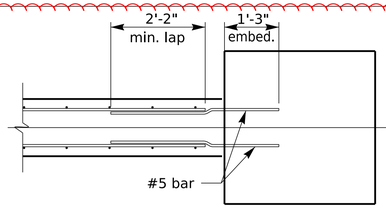
SECTION A-A



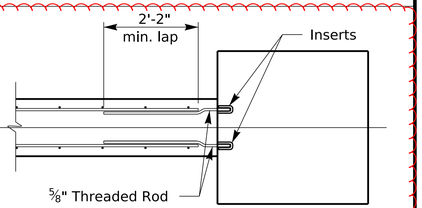
SECTION THROUGH PIER COLUMN

Permissible Webwall Reinforcement Options

These options may be used in lieu of detailed webwall reinforcement, however, payment will be based on the Steel Reinforcement quantity shown on the Title Sheet. Threaded inserts are to develop a safe load, in tension, of 9.3 kips with a safety factor of 3. Ensure threaded rods have a minimum 60 ksi yield strength, threaded to fit inserts, and have an effective tensile stress area equal to or greater than that of the reinforcing bars.



Embedded Bar Option



Threaded Rod - Insert Option

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

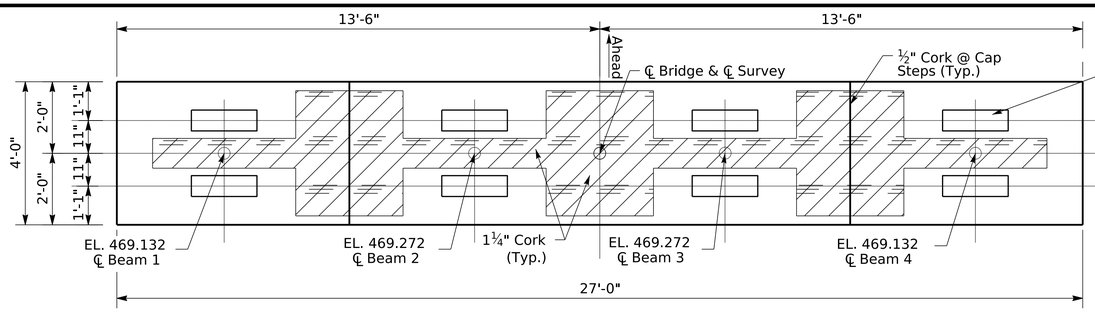
REVISION	DATE
Add Webwall Details	6/13/2025

PREPARED BY
Division of Structural Design

DATE: August 2023	CHECKED BY	
DESIGNED BY: L. Likins	W. Deaton	
DETAILED BY: L. Likins	W. Deaton	

PIER 1
CROSSING
Floyds Fork

ROUTE	ITEM NO.	COUNTY OF
KY 1526	5-10035	BULLITT
	SHEET NO.	DRAWING NUMBER
	S7	28807



Elastomeric Bearing Pad
See Std. Dwg. BBP-003 C.E.
(Type A1 Typ.)

℄ Bearing
℄ Pier

NOTES:

See removal details sheet for details regarding removal of existing concrete.

Beam elevations are given at the top of concrete.

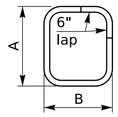
For bearing and dowel details see Std. Dwg. BBP-002, c.e.

Clean and straighten all vertical rebar in existing webwall and incorporate into proposed webwall.

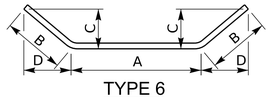
Proposed rebar shall be embedded 1'-0" minimum into existing concrete where shown in these plans. Use a Type IV Epoxy resin in accordance with Section 826 of the Specifications, c.e. on all such embedments. This work shall be incidental to the bid item Concrete Class "A".

BILL OF REINFORCEMENT

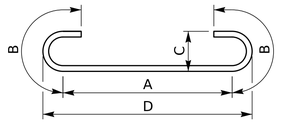
MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B	C	D
P1	Str.	32	8	13- 9	Column Vertical				
P2	14s	36	4	13- 3	Column Ties	3- 2	3- 2		
P3	6	10	9	26-11	Cap Bottom Bars	20- 3 3/8	3- 3 3/4	0-10 5/8	3- 2 1/4
P4	Str.	12	5	27- 2	Cap Side				
P5	Str.	2	5	22- 6	Cap Sides				
P6	1	7	10	30- 5	Cap Top Bars	26- 0 3/4	2- 2	1- 1 1/4	27- 2
P7	14s	4	5	13- 4	Cap Stirrup	3-10 3/8	2- 6 5/8		
P8	14s	4	5	13- 7	Cap Stirrup	4- 0	2- 6 5/8		
P9	14s	4	5	13-10	Cap Stirrup	4- 1 5/8	2- 6 5/8		
P10	14s	4	5	14- 2	Cap Stirrup	4- 3 3/8	2- 6 5/8		
P11	14s	4	5	14- 5	Cap Stirrup	4- 5	2- 6 5/8		
P12	14s	4	5	14- 8	Cap Stirrup	4- 6 3/4	2- 6 5/8		
P13	14s	4	5	14-11	Cap Stirrup	4- 8	2- 6 5/8		
P14	14s	46	5	14-11	Cap Stirrup	4- 8	2- 6 5/8		
P15	Str.	18	5	15- 6	Webwall Horizontal				
P16	Str.	26	5	11-10	Webwall Vertical				



TYPE 14



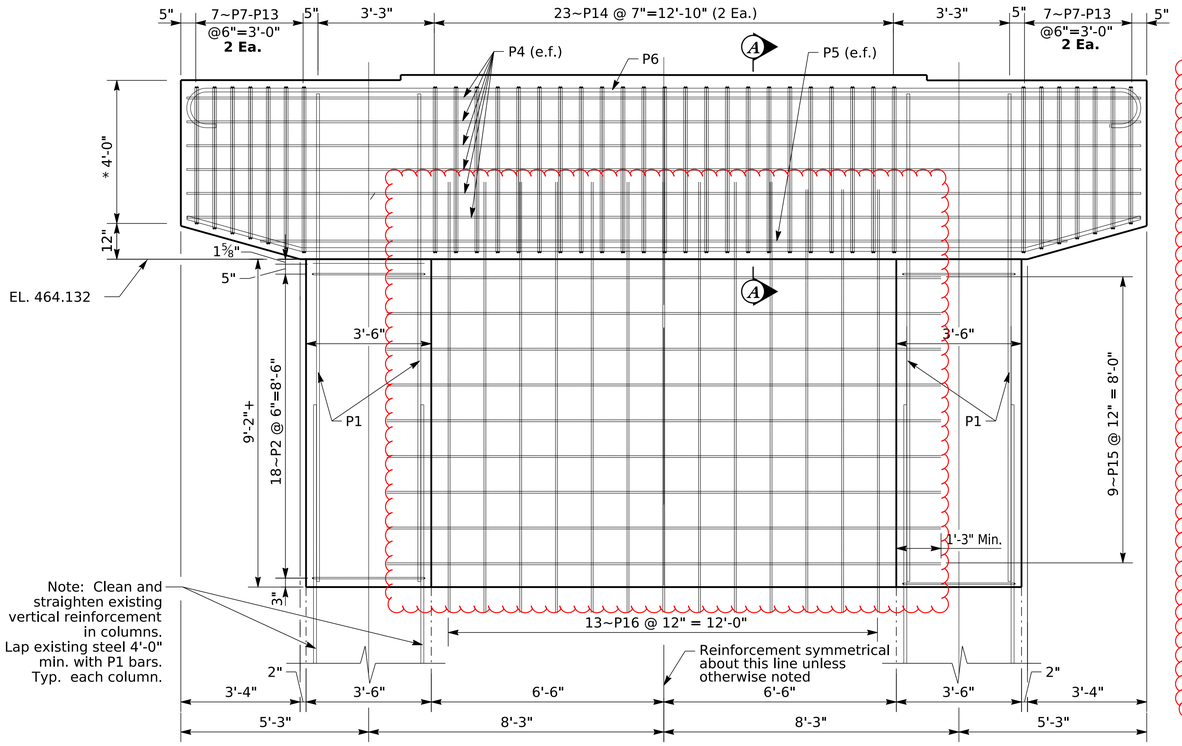
TYPE 6



TYPE 1

PLAN OF CAP

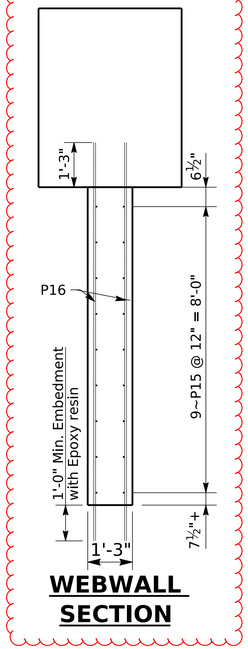
* Measured @ Low Bridge Seat



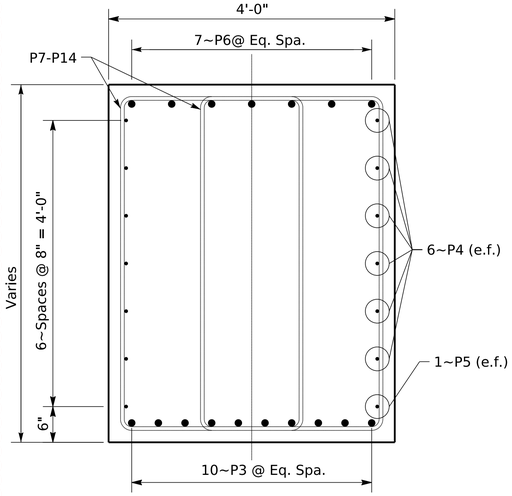
Note: Clean and straighten existing vertical reinforcement in columns. Lap existing steel 4'-0" min. with P1 bars. Typ. each column.

Reinforcement symmetrical about this line unless otherwise noted

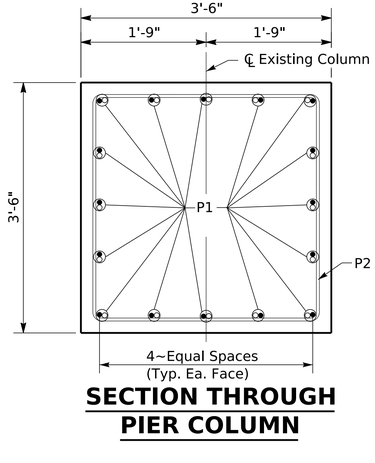
ELEVATION



WEBWALL SECTION



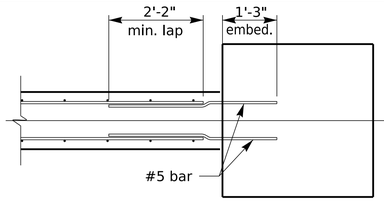
SECTION A-A



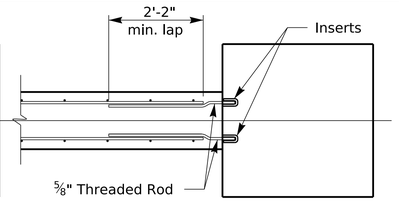
SECTION THROUGH PIER COLUMN

Permissible Webwall Reinforcement Options

These options may be used in lieu of detailed webwall reinforcement, however, payment will be based on the Steel Reinforcement quantity shown on the Title Sheet. Threaded inserts are to develop a safe load, in tension, of 9.3 kips with a safety factor of 3. Ensure threaded rods have a minimum 60 ksi yield strength, threaded to fit inserts, and have an effective tensile stress area equal to or greater than that of the reinforcing bars.



Embedded Bar Option



Threaded Rod - Insert Option

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY Transportation Cabinet

REVISION	DATE
Add Webwall Details	6/13/2025

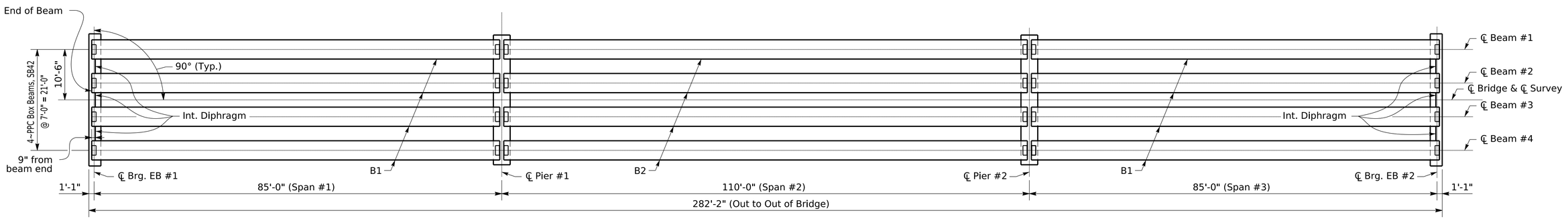
PREPARED BY
Division of Structural Design

DATE: August 2023	CHECKED BY
DESIGNED BY: L. Likins	W. Deaton
DETAILED BY: L. Likins	W. Deaton

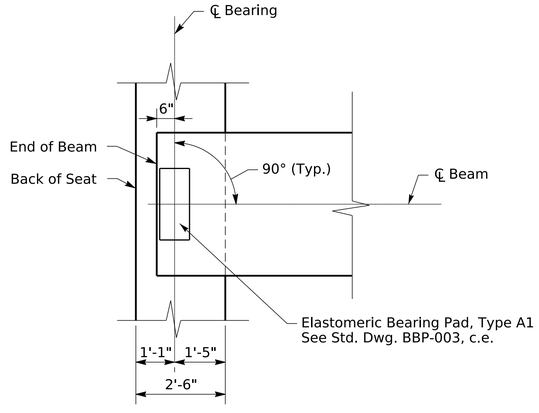
PIER 2
CROSSING
Floyds Fork

ROUTE	ITEM NO.	COUNTY OF
KY 1526	5-10035	BULLITT
	SHEET NO.	DRAWING NUMBER
	S8	28807

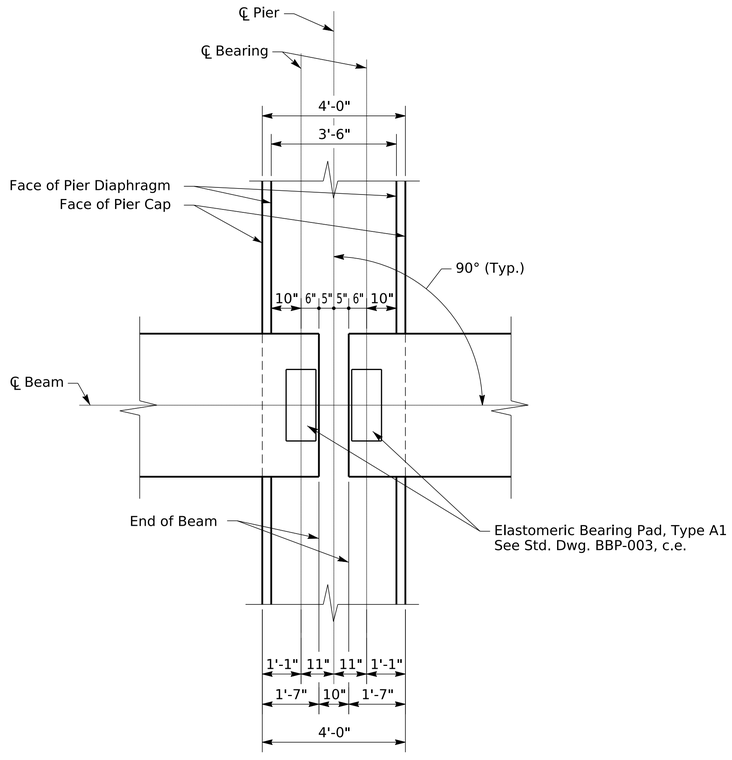
MicroStation v24.00.00.170 USER: Brian.Miller DATE PLOTTED: 23-JUN-2025 FILE NAME: \\eas.ds.ky.gov\dfs\KYTCB00R01P\Active_Projects\District05\RS&M\Bullitt 5-10035 Super replacement\5-10035\DETAILS\28807.dgn



FRAMING PLAN



END OF BEAM DETAILS @ END BENTS



END OF BEAM DETAILS @ PIERS

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

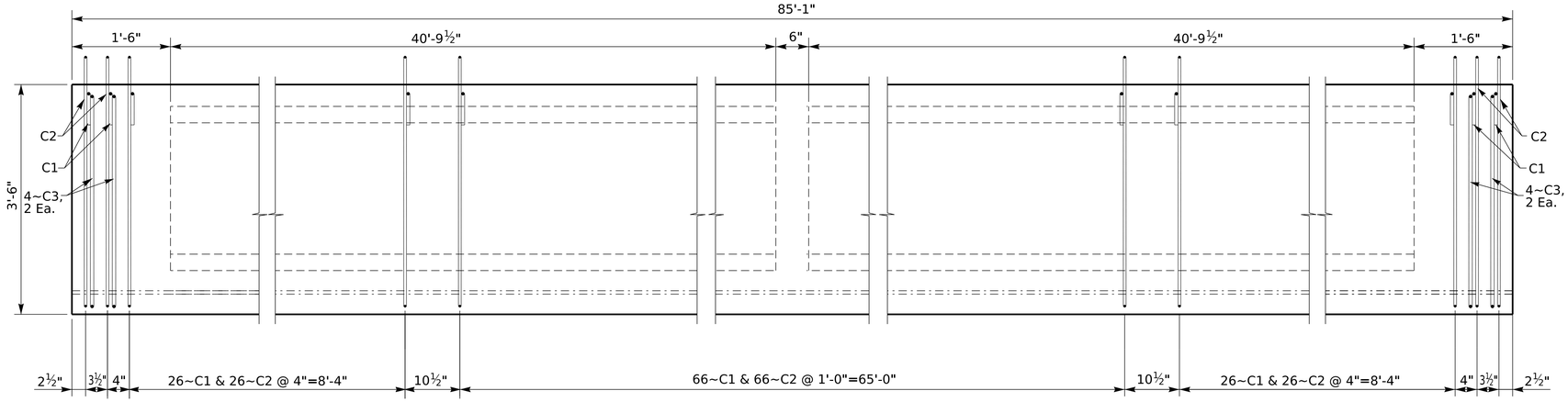
REVISION	DATE

PREPARED BY
Division of Structural Design

DATE: August 2023	CHECKED BY
DESIGNED BY: L. Likins	W. Deaton
DETAILED BY: E. Downey	L. Likins

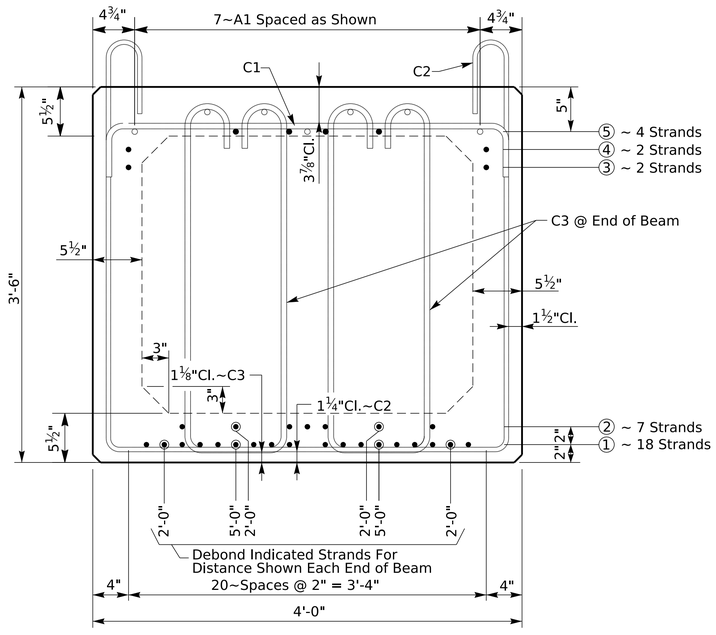
FRAMING PLAN
CROSSING
Floyds Fork

ROUTE	ITEM NO.	COUNTY OF
KY 1526	5-10035	BULLITT
	SHEET NO. S9	DRAWING NUMBER 28807

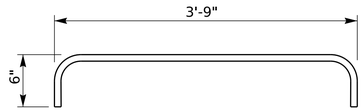


ELEVATION - Showing Dimensions and Reinforcement

(Measured along ℄ Beam)

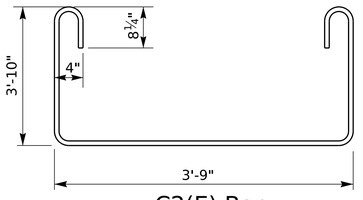


SECTION THROUGH BOX BEAM ~ SB42



C1 Bar

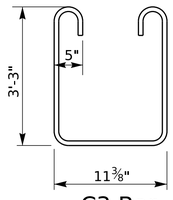
#5 Top Slab Bar



C2(E) Bar

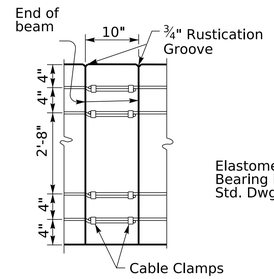
#4 Stirrup Bar

NOTE: This bar size is different than B2.

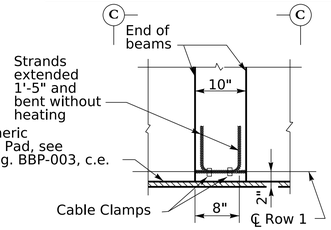


C3 Bar

#5 Stirrup Bar



Section C-C

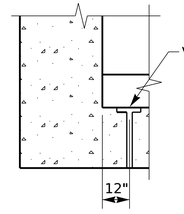


Strand Splicing Detail

~Typical at Pier~

Strand Data with number indicated in rows													Box Beam Data						Straight Reinforcement			Maximum Allowable Camber
Mark	Midspan Fully Stressed						End Fully Stressed						Total # of Strands	Concrete Stress (psi)		Total # of Beams	Approx. Weight (lbs)	No. of C Bars				
	1	2	3	4	5		1	2	3	4	5			f'ci	f'c			C1	C2	C3				
B1	18	7	2	2	4		18	7	2	2	4		33	9,000	10,000	8	78,613	122	122	8	A1	#5	43'-6"	2½"

Note: A1 Bars~2 Lengths, 2'-2" Min. Lap
C1 and C3 bars are #5. C2 bars are #4



Two drains are to be located at each end of each void. Drains shall be 1"∅ of a type approved by the Department's Division of Materials.

VOID DRAIN DETAIL

General Notes

CONCRETE: Ensure prestressed girder concrete is in accordance with these plans and the specifications.

MATERIALS DESIGN SPECIFICATIONS: For prestressed beams:
FY = 60,000 psi F'S = 270,000 psi

PRESTRESSING REINFORCEMENT: Ensure that strands are 0.6" (nominal diameter, 0.217 sq. in.), uncoated seven-wire stress relieved, low-relaxation conforming to AASHTO M 203, Grade 270. Billing of the cost for redesign of beam and subsequent plan modifications will be made for any request of alternate strand type or arrangement. The designer of the original plans is responsible for the billing and work.

CONSTRUCTION METHOD: Pretension all beams. Ensure concrete has attained f'ci (shown in the table) in standard test cylinders that are made and cured identically with the beams without bond stresses being transferred to the concrete or releasing the end anchors. Attain f'c (shown in the table) at or prior to 28 days. Apply an initial force of 43,943 lbs. per low-relaxation strand to develop a stress of 202,500 psi. No beam will be accepted that is honeycombed to the extent that strength of the beam or resistance to deterioration has been affected. An allowance of 0.0005L is made for shortening of beams due to shrinkage and elastic change. Show a detensioning plan by sequential numbering of the strand pattern on the shop plans.

LIFTING DEVICES: Detail lifting devices on the shop plans. Loads are to be distributed equally to each device.

BEARING DEVICES: Include the price for lead plates and/or bearing pads and any necessary galvanized metal shims in the bid for precast beams.

FABRICATION: The "Maximum Allowable Camber" shown on the beam sheet is the amount of camber, measured prior to casting the deck, above which the beam will begin to encroach into the slab. If the measured camber is greater than the "Maximum Allowable Camber" the contractor will be responsible for any necessary adjustments to assure a minimum slab thickness of eight (8) inches as shown in the plans. This work will be considered incidental to the completion of the structure and have the approval of the Engineer.

REINFORCEMENT: Dimensions shown from the face of concrete to reinforcement are clear distances. Spacing of reinforcement is from center to center of reinforcement. Epoxy Coated Reinforcement shall be in accordance with Section 811.10 of the Specifications. All bars marked "C" shall be considered a stirrup for purposes of bend diameters.

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

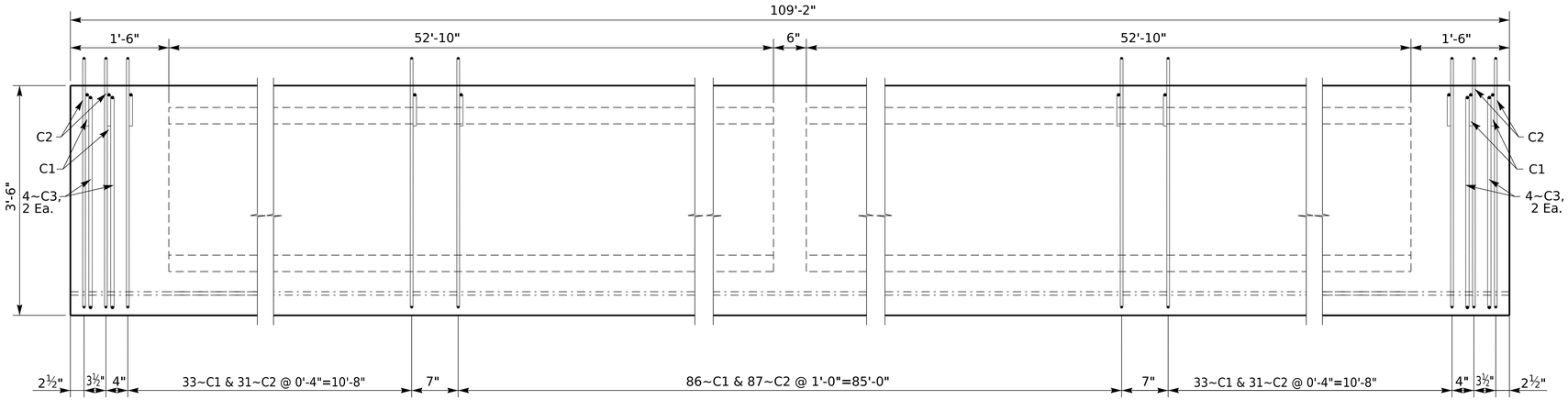
PREPARED BY
Division of Structural Design

DATE: August 2023	CHECKED BY
DESIGNED BY: L. Likins	W. Deaton
DETAILED BY: B. Miller	L. Likins

PPC BOX BEAM SB42 DETAILS

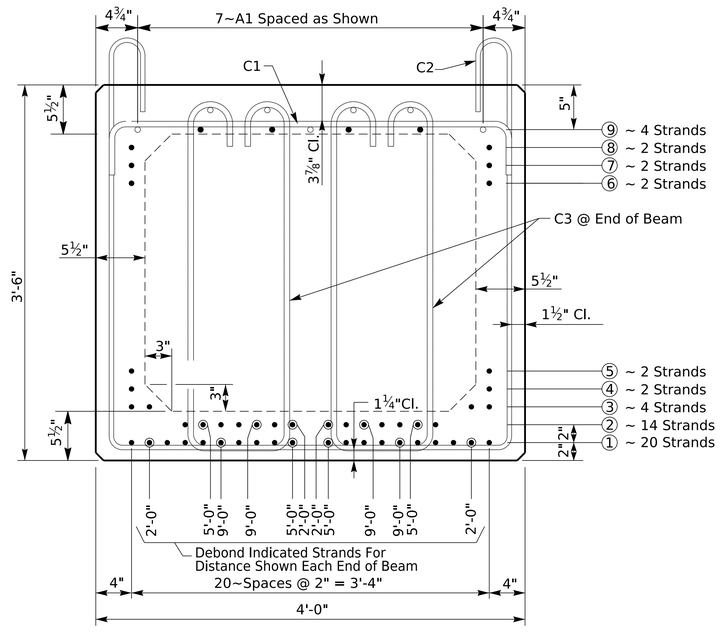
CROSSING
Floyds Fork

ROUTE	ITEM NO.	COUNTY OF
KY 1526	5-10035	BULLITT
	SHEET NO.	DRAWING NUMBER
	S10	28807

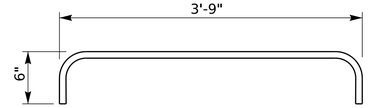


ELEVATION - Showing Dimensions and Reinforcement

(Measured along ℄ Beam)

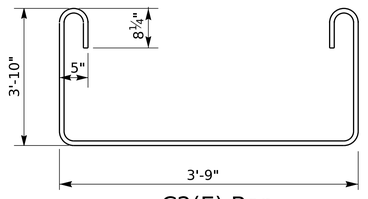


SECTION THROUGH BOX BEAM ~ SB42



C1 Bar

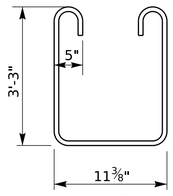
#5 Top Slab Bar



C2(E) Bar

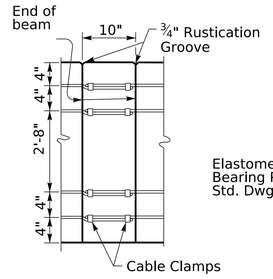
#5 Stirrup Bar

NOTE: This bar size is different than B1.

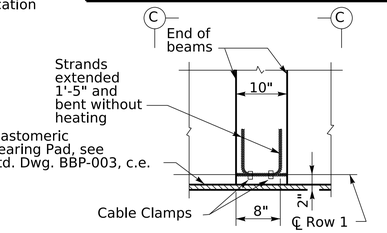


C3 Bar

#5 Stirrup Bar



Section C-C

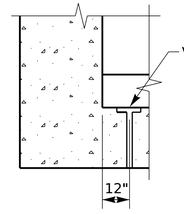


Strand Splicing Detail

~Typical at Pier~

Strand Data with number indicated in rows																	Total # of Strands	Box Beam Data						Straight Reinforcement			Maximum Allowable Camber
Mark	Midspan Fully Stressed								End Fully Stressed									Concrete Stress (psi)		Total # of Beams	Approx. Weight (lbs)	No. of C Bars						
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9		f'ci	f'c			C1	C2	C3	Mark	Size	Length	
B2	20	14	4	2	2	2	2	2	4	20	14	4	2	2	2	2	2	4	52	9,000	10,000	4	100,865	156	156	8	A1	#5	55'-6"	4¼"

Note: A1 Bars~2 Lengths, 2'-2" Min. Lap.
All C bars are #5 for B2



Two drains are to be located at each end of each void. Drains shall be 1"∅ of a type approved by the Department's Division of Materials.

VOID DRAIN DETAIL

General Notes

CONCRETE: Ensure prestressed girder concrete is in accordance with these plans and the specifications.

MATERIALS DESIGN SPECIFICATIONS: For prestressed beams:
FY = 60,000 psi F'S = 270,000 psi

PRESTRESSING REINFORCEMENT: Ensure that strands are 0.6" (nominal diameter, 0.217 sq. in.), uncoated seven-wire stress relieved, low-relaxation conforming to AASHTO M 203, Grade 270. Billing of the cost for redesign of beam and subsequent plan modifications will be made for any request of alternate strand type or arrangement. The designer of the original plans is responsible for the billing and work.

CONSTRUCTION METHOD: Pretension all beams. Ensure concrete has attained f'ci (shown in the table) in standard test cylinders that are made and cured identically with the beams without bond stresses being transferred to the concrete or releasing the end anchors. Attain f'c (shown in the table) at or prior to 28 days. Apply an initial force of 43,943 lbs. per low-relaxation strand to develop a stress of 202,500 psi. No beam will be accepted that is honeycombed to the extent that strength of the beam or resistance to deterioration has been affected. An allowance of 0.0005L is made for shortening of beams due to shrinkage and elastic change. Show a detensioning plan by sequential numbering of the strand pattern on the shop plans.

LIFTING DEVICES: Detail lifting devices on the shop plans. Loads are to be distributed equally to each device.

BEARING DEVICES: Include the price for lead plates and/or bearing pads and any necessary galvanized metal shims in the bid for precast beams.

FABRICATION: The "Maximum Allowable Camber" shown on the beam sheet is the amount of camber, measured prior to casting the deck, above which the beam will begin to encroach into the slab. If the measured camber is greater than the "Maximum Allowable Camber" the contractor will be responsible for any necessary adjustments to assure a minimum slab thickness of eight (8) inches as shown in the plans. This work will be considered incidental to the completion of the structure and have the approval of the Engineer.

REINFORCEMENT: Dimensions shown from the face of concrete to reinforcement are clear distances. Spacing of reinforcement is from center to center of reinforcement. Epoxy Coated Reinforcement shall be in accordance with Section 811.10 of the Specifications. All bars marked "C" shall be considered a stirrup for purposes of bend diameters.

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

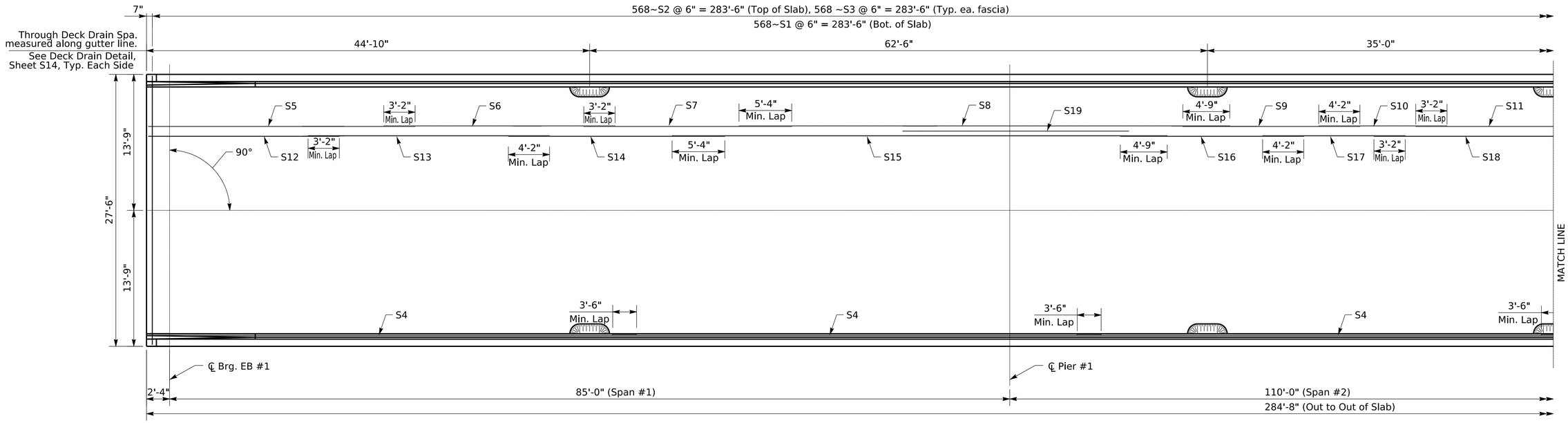
PREPARED BY
Division of Structural Design

DATE: August 2023	CHECKED BY
DESIGNED BY: L. Likins	W. Deaton
DETAILED BY: B. Miller	L. Likins

PPC BOX BEAM SB42 DETAILS

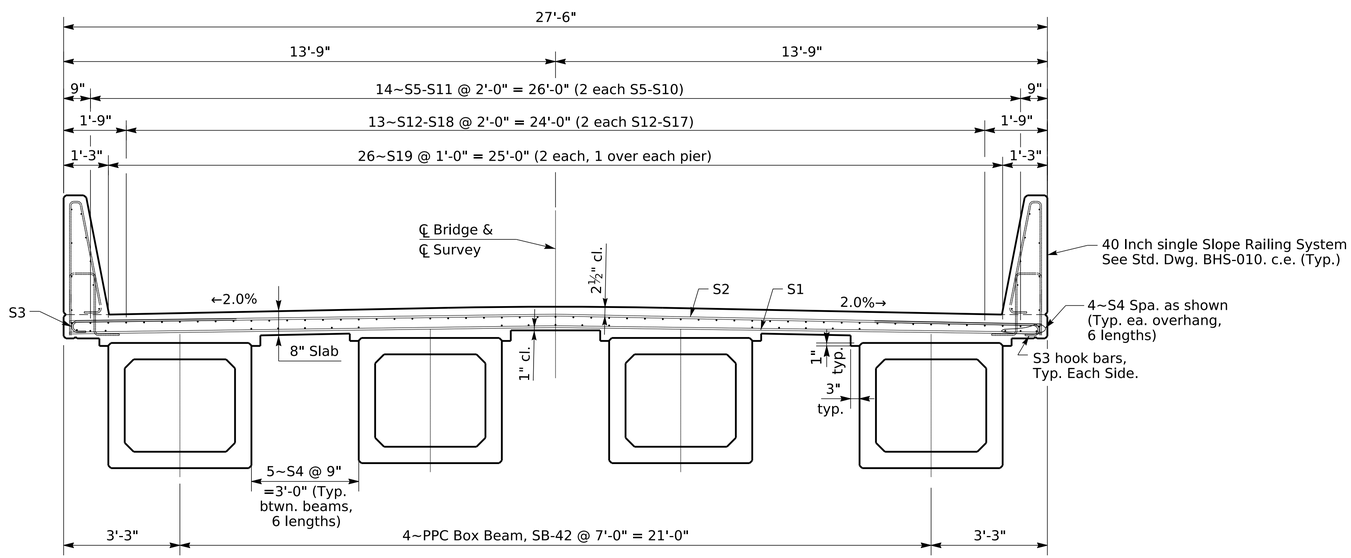
CROSSING
Floyds Fork

ROUTE	ITEM NO.	COUNTY OF
KY 1526	5-10035	BULLITT
	SHEET NO.	DRAWING NUMBER
	S11	28807



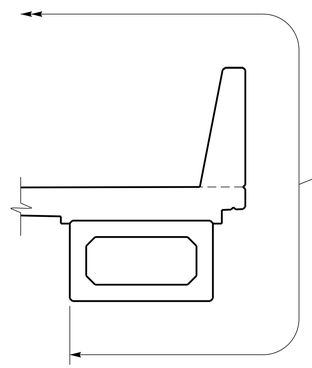
PLAN OF SLAB

(Span 1 and 2)



TYPICAL SECTION

NOTE: S4~6 Lengths, Min. Lap 2'-5"



CONCRETE SEALING

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY
Division of Structural Design

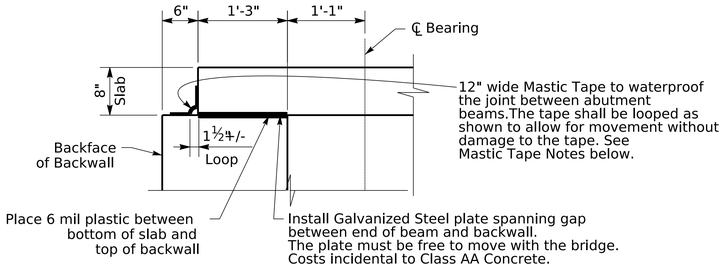
DATE: August 2023	CHECKED BY
DESIGNED BY: L. Likins	W. Deaton
DETAILED BY: E. Downey	W. Deaton

SUPERSTRUCTURE

CROSSING
Floyds Fork

ROUTE	ITEM NO.	COUNTY OF
KY 1526	5-10035	BULLITT
	SHEET NO. S12	DRAWING NUMBER 28807

MicroStation v24.00.00.170 USER: Brian.Miller DATE PLOTTED: 23-JUN-2025 FILE NAME: \\eas.ds.ky.gov\dfs\KYTCB00R01P\Active_Projects\District05\RS&M\Bullitt 5-10035 Super replacement\5-10035\DETAILS\28807.dgn



SLAB OVER BACKWALL DETAIL

(measured perpendicular to backwall)

MASTIC TAPE NOTES

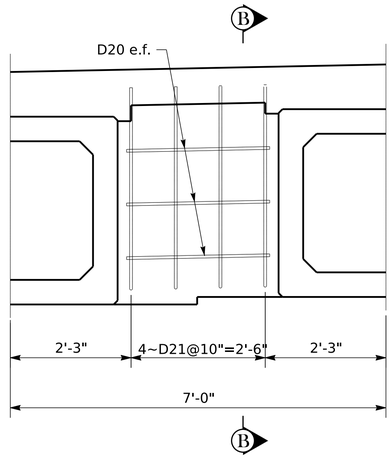
MASTIC TAPE: Mastic Tape used to seal joints is to meet the requirements of ASTM C-877 Type I, II, or III. The joint is to be covered with 12-inch wide mastic tape. Prior to application, the joint surface shall be clean and free of dirt, debris, or deleterious material. Primer, if required by the tape mfgr., shall be applied for a minimum width of nine inches on each side of the joint.

Mastic Tape shall be either:

EZ-WRAP RUBBER by PRESS-SEAL GASKET CORPORATION,
SEAL WRAP by MAR MAC MANUFACTURING CO. INC. ,
CADILLOC by the UP RUBBER CO. INC.
or approved equal.

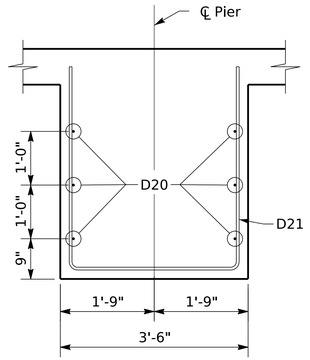
Mastic Tape shall cover the joint continuously unless otherwise shown in the plans. Mastic Tape shall be spliced by lapping a minimum of six inches and in accordance with the mfgrs. recommendations with the overlap running downhill.

The cost of labor, materials, and incidental items for furnishing and installing Mastic Tape shall be considered incidental to the unit price bid for Concrete Class "AA" and no separate measurement or payment shall be made.



PIER DIAPHRAGM

(Typ. Between Beams)

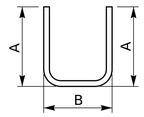


SECTION B-B

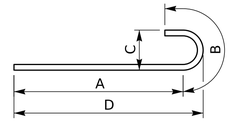
(Typ. Between Beams)

BILL OF REINFORCEMENT

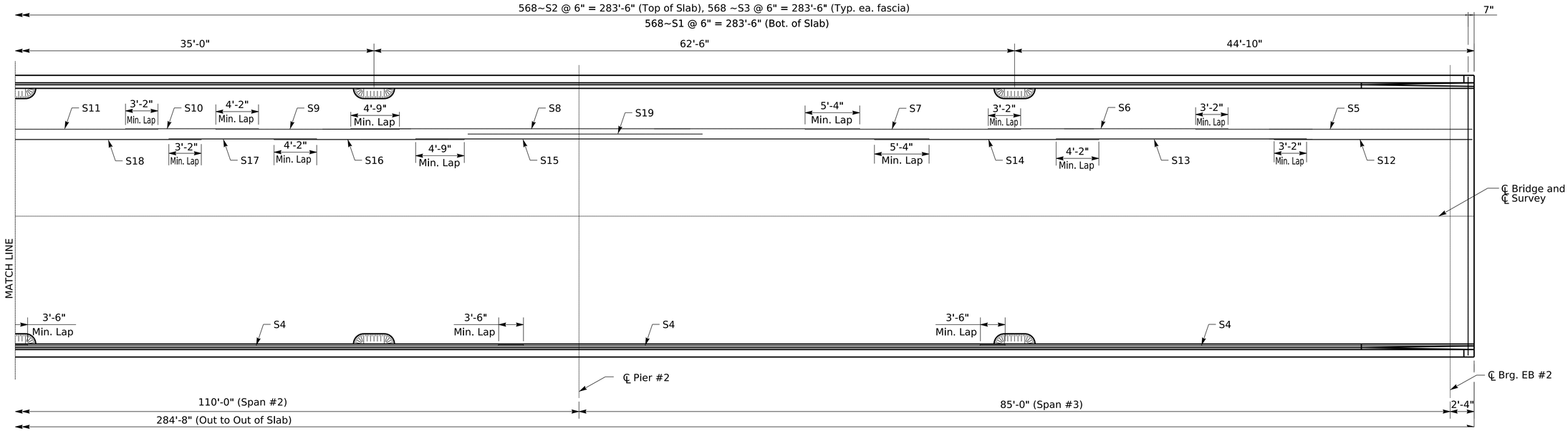
MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B	C	D
S1e	Str.	568	5	27- 2	Bottom of Slab Transverse				
S2e	Str.	568	6	27- 2	Top of Slab Transverse				
S3e	4	1136	4	4-11	Top Slab Transverse Hooks	4- 3	0- 8	0- 4	4- 5
S4e	Str.	138	5	50- 4	Bottom of Slab Longitudinal				
S5e	Str.	28	5	27- 0	Top of Slab Longitudinal				
S6e	Str.	28	7	23- 5	Top of Slab Longitudinal				
S7e	Str.	28	9	21- 0	Top of Slab Longitudinal				
S8e	Str.	28	10	49- 8	Top of Slab Longitudinal				
S9e	Str.	28	8	17-11	Top of Slab Longitudinal				
S10e	Str.	28	7	13- 0	Top of Slab Longitudinal				
S11e	Str.	14	5	27-10	Top of Slab Longitudinal				
S12e	Str.	26	5	19- 5	Top of Slab Longitudinal				
S13e	Str.	26	7	24- 6	Top of Slab Longitudinal				
S14e	Str.	26	9	21-11	Top of Slab Longitudinal				
S15e	Str.	26	10	50- 2	Top of Slab Longitudinal				
S16e	Str.	26	8	18- 7	Top of Slab Longitudinal				
S17e	Str.	26	7	14- 6	Top of Slab Longitudinal				
S18e	Str.	13	5	36- 4	Top of Slab Longitudinal				
S19e	Str.	52	7	22-11	Top of Slab over Piers and at Barrier				
D20e	Str.	36	5	2- 8	Pier Diaphragm				
D21e	2	24	5	10- 6	Pier Diaphragm	3- 9½	3- 2		



TYPE 2



TYPE 4



PLAN OF SLAB

(Span 2 and 3)

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

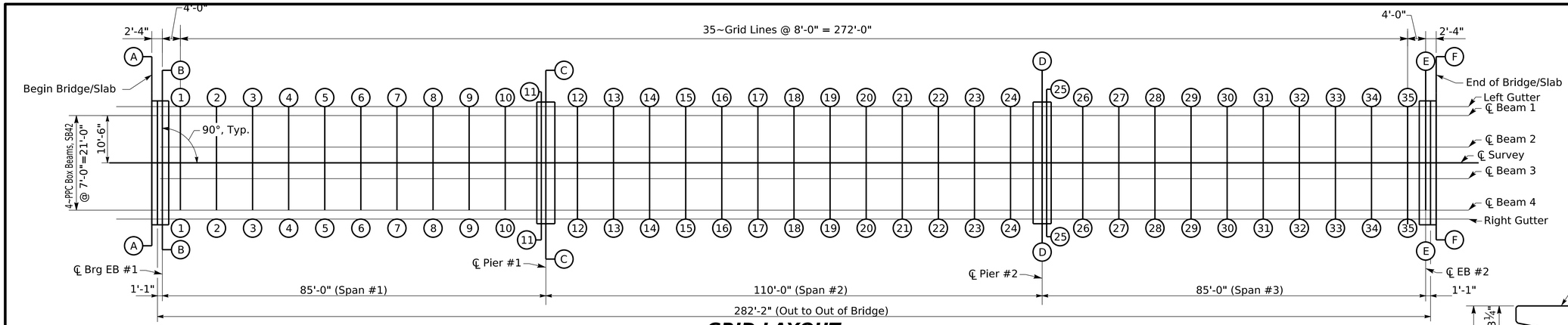
REVISION	DATE

PREPARED BY
Division of Structural Design

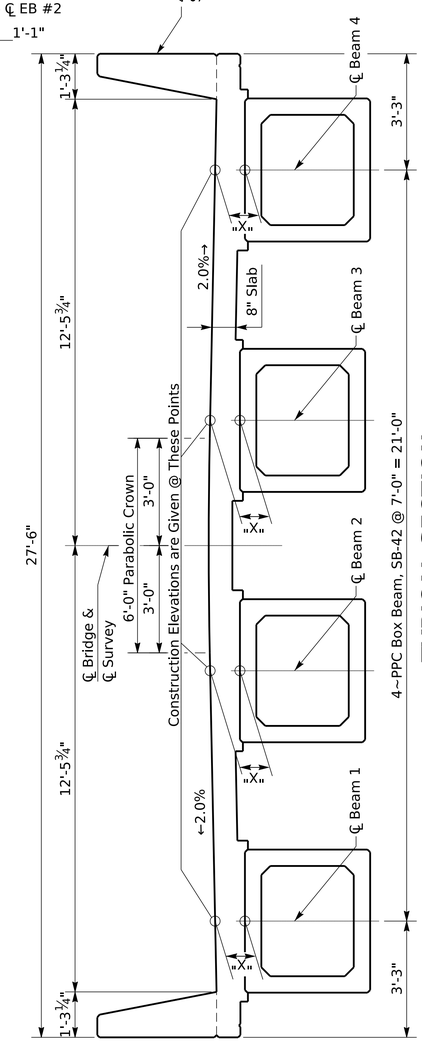
DATE: July 2023	CHECKED BY	
DESIGNED BY: L. Likins	W. Deaton	
DETAILED BY: E. Downey	L. Likins	

SUPERSTRUCTURE
CROSSING
Floyds Fork

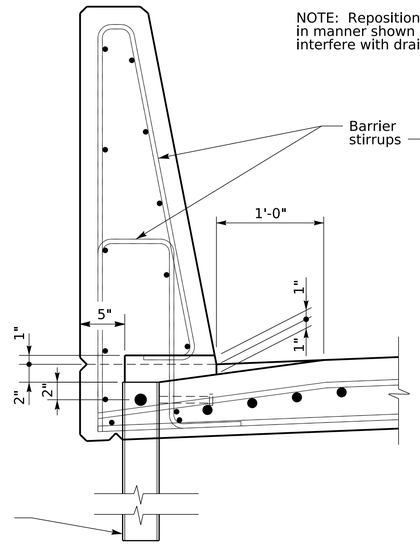
ROUTE	ITEM NO.	COUNTY OF
KY 1526	5-10035	BULLITT
	SHEET NO. S13	DRAWING NUMBER 28807



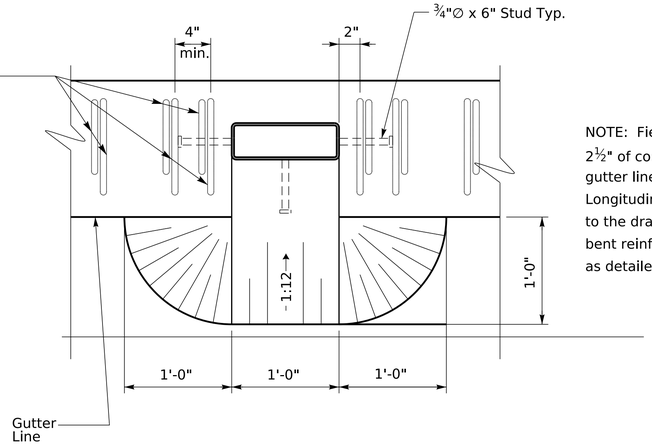
GRID LAYOUT



TYPICAL SECTION



SECTION THROUGH DRAIN



PLAN OF DRAIN (Barrier not in place)

NOTE: Field bend top transverse slab reinforcement in the area of the drain to maintain 2½" of concrete cover through the drain. Bend reinforcement approximately 1'-0" from the gutter line. Transverse slab reinforcement adjacent to the opening is not to be bent. Longitudinal reinforcement is not to be tied to the transverse reinforcement adjacent to the drain for a distance sufficient to allow the reinforcement to sag under the bent reinforcement in the drain area. Include all costs to fabricate and install the drain as detailed in the unit price bid for "Deck Drain".

DRAIN DETAILS

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

REVISION	DATE

PREPARED BY
Division of
Structural Design

DATE: August 2023	CHECKED BY	
DESIGNED BY: L. LIKINS	W. Deaton	
DETAILED BY: L. LIKINS	W. Deaton	

CONSTRUCTION ELEVATIONS
CROSSING
Floyds Fork

ROUTE	ITEM NO.	COUNTY OF
KY 1526	5-10035	BULLITT
	SHEET NO.	DRAWING NUMBER
	S14	28807

CONSTRUCTION ELEVATIONS

LOCATION	LEFT GUTTER	¡ BEAM 1			¡ BEAM 2			¡	¡ BEAM 3			¡ BEAM 4			RIGHT GUTTER
		CONSTR. ELEV.	TOP OF BEAM	DIM. "X"	CONSTR. ELEV.	TOP OF BEAM	DIM. "X"		CONSTR. ELEV.	TOP OF BEAM	DIM. "X"	CONSTR. ELEV.	TOP OF BEAM	DIM. "X"	
Skew Line AA	472.920	472.960			473.100			473.140	473.100			472.960			472.920
Skew Line BB	472.927	472.967			473.107			473.147	473.107			472.967			472.927
Skew Line CC	473.192	473.231			473.371			473.411	473.371			473.231			473.192
Skew Line DD	473.534	473.573			473.713			473.753	473.713			473.573			473.534
Skew Line EE	473.798	473.837			473.977			474.017	473.977			473.837			473.798
Skew Line FF	473.805	473.845			473.985			474.025	473.985			473.845			473.805
Grid Line 1	472.952	472.992			473.132			473.172	473.132			472.992			472.952
Grid Line 2	473.001	473.041			473.181			473.221	473.181			473.041			473.001
Grid Line 3	473.047	473.087			473.227			473.267	473.227			473.087			473.047
Grid Line 4	473.087	473.127			473.267			473.307	473.267			473.127			473.087
Grid Line 5	473.121	473.161			473.301			473.341	473.301			473.161			473.121
Grid Line 6	473.149	473.188			473.328			473.368	473.328			473.188			473.149
Grid Line 7	473.169	473.208			473.348			473.388	473.348			473.208			473.169
Grid Line 8	473.182	473.221			473.361			473.401	473.361			473.221			473.182
Grid Line 9	473.189	473.229			473.369			473.409	473.369			473.229			473.189
Grid Line 10	473.192	473.231			473.371			473.411	473.371			473.231			473.192
Grid Line 11	473.192	473.231			473.371			473.411	473.371			473.231			473.192
Grid Line 12	473.260	473.300			473.440			473.480	473.440			473.300			473.260
Grid Line 13	473.336	473.376			473.516			473.556	473.516			473.376			473.336
Grid Line 14	473.406	473.446			473.586			473.626	473.586			473.446			473.406
Grid Line 15	473.469	473.509			473.649			473.689	473.649			473.509			473.469
Grid Line 16	473.522	473.562			473.702			473.742	473.702			473.562			473.522
Grid Line 17	473.564	473.604			473.744			473.784	473.744			473.604			473.564
Grid Line 18	473.595	473.635			473.775			473.815	473.775			473.635			473.595
Grid Line 19	473.614	473.654			473.794			473.834	473.794			473.654			473.614
Grid Line 20	473.621	473.661			473.801			473.841	473.801			473.661			473.621
Grid Line 21	473.618	473.658			473.798			473.838	473.798			473.658			473.618
Grid Line 22	473.605	473.645			473.785			473.825	473.785			473.645			473.605
Grid Line 23	473.585	473.624			473.764			473.804	473.764			473.624			473.585
Grid Line 24	473.559	473.598			473.738			473.778	473.738			473.598			473.559
Grid Line 25	473.540	473.579			473.719			473.759	473.719			473.579			473.540
Grid Line 26	473.590	473.629			473.769			473.809	473.769			473.629			473.590
Grid Line 27	473.637	473.676			473.816			473.856	473.816			473.676			473.637
Grid Line 28	473.679	473.719			473.859			473.899	473.859			473.719			473.679
Grid Line 29	473.716	473.755			473.895			473.935	473.895			473.755			473.716
Grid Line 30	473.746	473.785			473.925			473.965	473.925			473.785			473.746
Grid Line 31	473.768	473.808			473.948			473.988	473.948			473.808			473.768
Grid Line 32	473.784	473.823			473.963			474.003	473.963			473.823			473.784
Grid Line 33	473.793	473.833			473.973			474.013	473.973			473.833			473.793
Grid Line 34	473.797	473.837			473.977			474.017	473.977			473.837			473.797
Grid Line 35	473.798	473.838			473.978			474.018	473.978			473.838			473.798

NOTES FOR ELEVATIONS TAKEN ON PRESTRESSED CONCRETE BEAMS

Take elevations on top of beam at points indicated by the grid layout. The beam elevations are to be read to three decimals, and entered in tables under "Top of Beam" elevations.

Compute dimension "X" as follows: "Construction Elevation" minus "Top of Beam" elevation equals dimension "X". Construction Elevations include camber due to weight of the concrete slab and barrier. Measuring of dimension "X" gives the final check on beam tolerances for camber, beam damage, and errors in erection that produce reverse cambers, sags, and unsightly fascia beams.

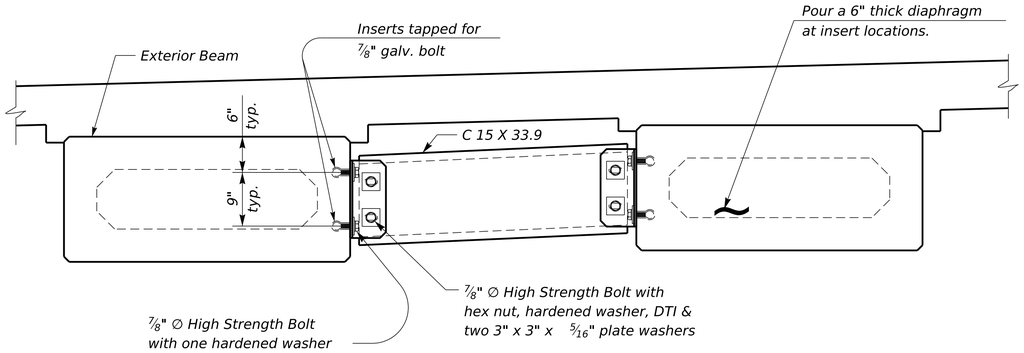
For setting templates, measure dimension "X" above top of beams for top of template. Do not set template by elevations.

Temporary supports or shoring will not be permitted under the girders when pouring the concrete floor slab or when taking "Top of Beam" elevations.

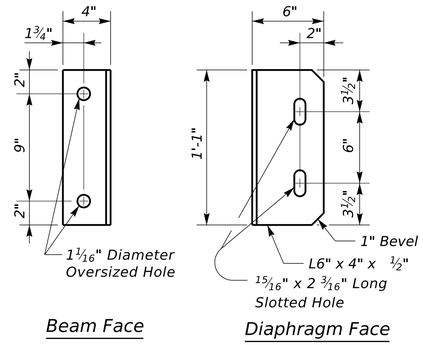
Construct barrier to roadway grade. Do not add camber to the barrier.

Note to Resident: The "Maximum Allowable Camber" shown on the beam sheet is the amount of camber, measured prior to casting the deck, above which the beam will begin to encroach into the slab. If the measured camber is greater than the "Maximum Allowable Camber" the contractor will be responsible for any necessary adjustments to assure a minimum slab thickness as shown in the plans. This work will be considered incidental to the completion of the structure and must have the approval of the Engineer.

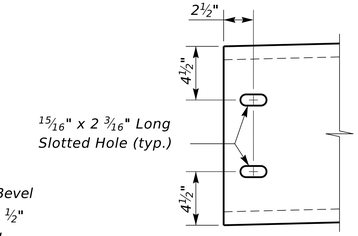
The minimum allowable X-Dimension on a beam is that which results in the design deck thickness (8") at the edge of the beam flange. This is calculated as the deck thickness + (half the top flange width x cross slope of the bridge). For example 8" + 24"x0.02 = 8.48" = 0.706'.
Any necessary modifications to some or all of the X-dimensions must meet approval of the Engineer.



INTERMEDIATE DIAPHRAGM



CLIP ANGLE



CHANNEL END

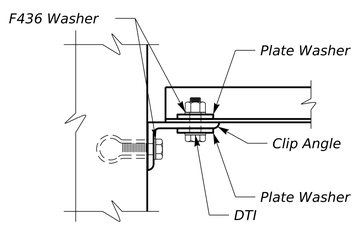
Diaphragm Notes

CONNECTIONS: *Ensure all bolted connections are ASTM A325, 7/8 inch diameter high strength bolts, nuts, and washers, mechanically zinc coated in accordance with AASHTO M298, for Class 50. Install all high strength bolted field connections using "direct tension indicators" (DTI's) in accordance with the Standard Specifications and ASTM F959. Ensure all DTI's are mechanically zinc coated. Show installation details of the DTI's on the shop plans. Place DTI's under the bolt head.*

STRUCTURAL STEEL: *Ensure plates, angles, and channels conform to ASTM A36 or A572 and galvanized after fabrication.*

SHOP DRAWINGS: *Show the location of all inserts and holes on the precast beam shop drawings. Submit shop drawings for the steel diaphragms to the Division of Structural Design for approval.*

DIAPHRAGMS: *Erect the diaphragms the same day that the precast beams are placed on the substructure. Include the cost of all materials and labor required to fabricate and erect the diaphragms in the bid for Precast Beams.*



CONNECTION DETAILS

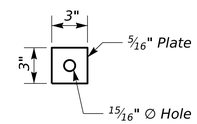


PLATE WASHER

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

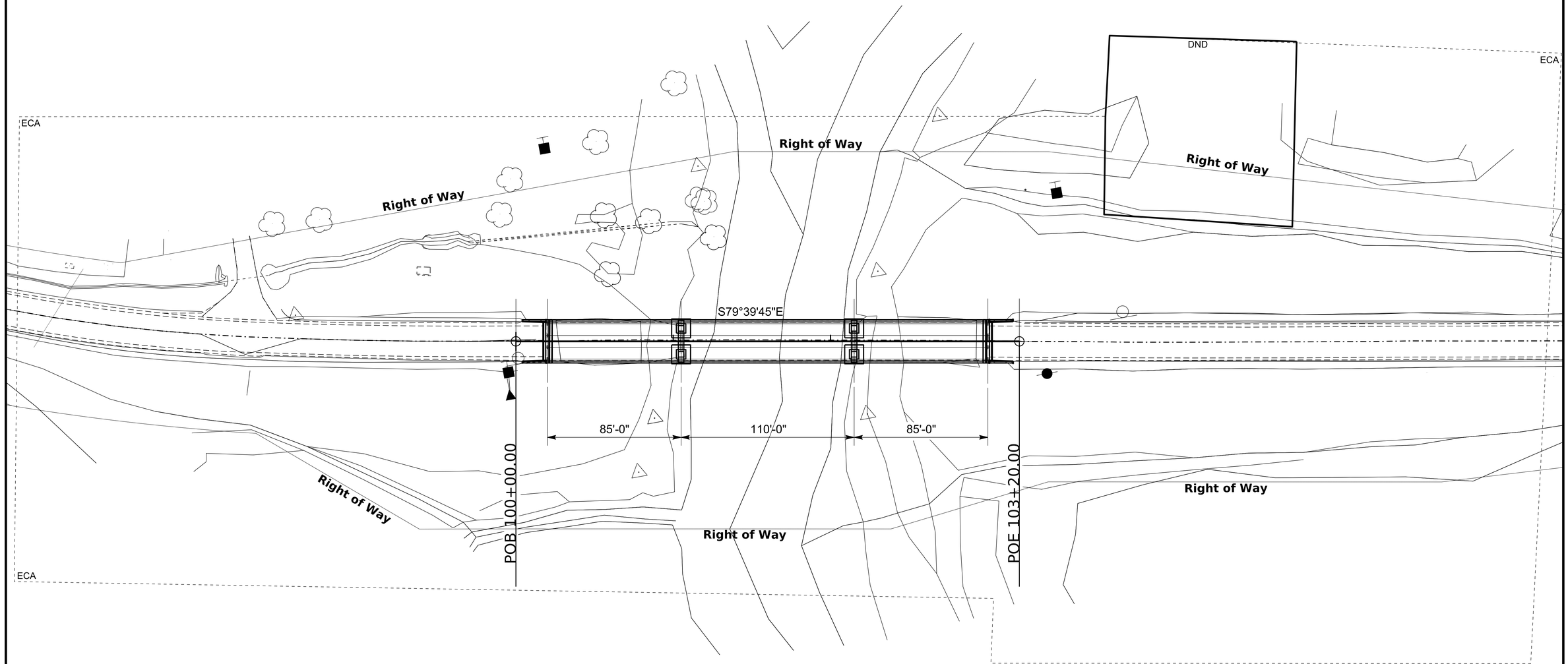
REVISION	DATE

PREPARED BY
Division of Structural Design

DATE: August 2023	CHECKED BY	
DESIGNED BY: C. Van Zee	L. Likins	
DETAILED BY: M. Bawithawng	L. Likins	

INTERMEDIATE DIAPHRAGMS
CROSSING
Floyds Fork

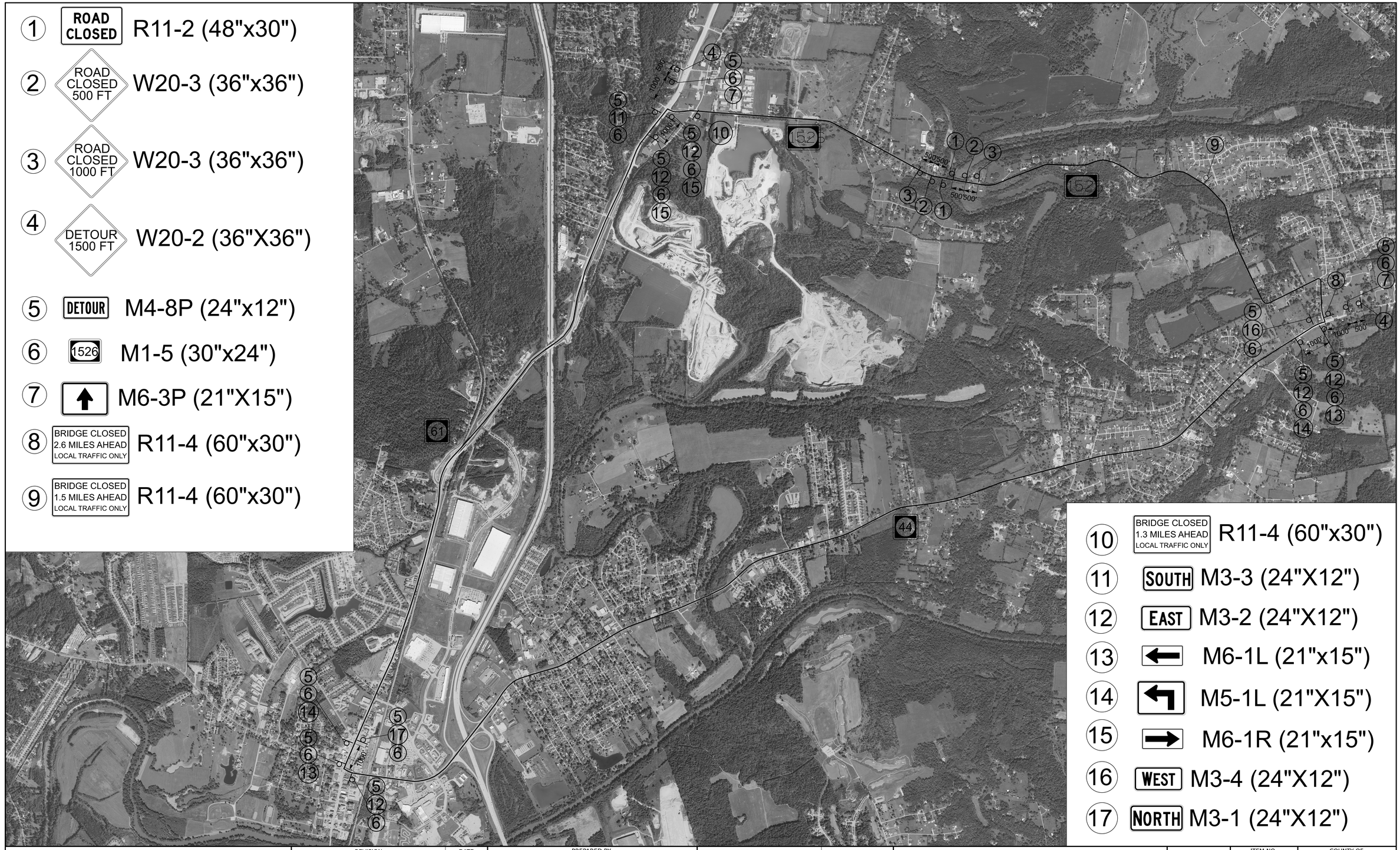
ROUTE	ITEM NO.	COUNTY OF
KY 1526	5-10035	BULLITT
	SHEET NO.	DRAWING NUMBER
	S16	28807



COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY Division of Structural Design	DATE: August 2023	CHECKED BY	*ECA AND DND AND R/W LINES*	ROUTE	ITEM NO. 5-10035 / COUNTY OF BULLITT
				DESIGNED BY: C. Van Zee	L. Likins	CROSSING Floyds Fork	KY 1526	SHEET NO. S17 / DRAWING NUMBER 28807
				DETAILED BY: M. Bawithawng	L. Likins			

MicroStation v24.00.00.170 USER: Brian.Miller DATE PLOTTED: 23-JUN-2025 FILE NAME: \\eas.ds.ky.gov\dfs\KYTCB00R01P\Active_Projects\District05\RS&M\Bullitt 5-10035 Super replacement\5-10035\DETAILS\28807.dgn

1. ROAD CLOSED — R11-2 (48"x30")
2. ROAD CLOSED 500 FT — W20-3 (36"x36")
3. ROAD CLOSED 1000 FT — W20-3 (36"x36")
4. DETOUR 1500 FT — W20-2 (36"X36")
5. DETOUR — M4-8P (24"x12")
6. 1526 — M1-5 (30"x24")
7. ↑ — M6-3P (21"X15")
8. BRIDGE CLOSED 2.6 MILES AHEAD LOCAL TRAFFIC ONLY — R11-4 (60"x30")
9. BRIDGE CLOSED 1.5 MILES AHEAD LOCAL TRAFFIC ONLY — R11-4 (60"x30")



10. BRIDGE CLOSED 1.3 MILES AHEAD LOCAL TRAFFIC ONLY — R11-4 (60"x30")
11. SOUTH — M3-3 (24"X12")
12. EAST — M3-2 (24"X12")
13. ← — M6-1L (21"x15")
14. ↰ — M5-1L (21"X15")
15. → — M6-1R (21"x15")
16. WEST — M3-4 (24"X12")
17. NORTH — M3-1 (24"X12")

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY
Division of Structural Design

DATE: July 2024	CHECKED BY
DESIGNED BY: L. Likins	
DETAILED BY:	

DETOUR
CROSSING
Floyds Fork

ROUTE	ITEM NO.	COUNTY OF
KY 1526	5-10035	BULLITT
	SHEET NO. S18	DRAWING NUMBER 28807

MicroStation v10.17.02.61 USER: $$$$USER$$$$ DATE PLOTTED: $$$$DATE$$$$ FILE NAME: $$$$design$file$specification$$$$