

TRANSPORTATION CABINET

DEPARTMENT OF HIGHWAYS

DAVIESS COUNTY

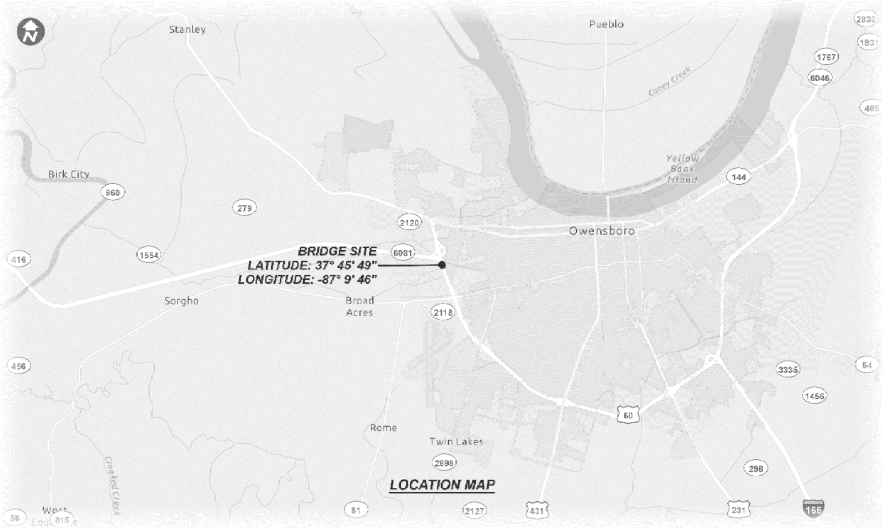
WEST 5TH STREET

OVER WENDELL FORD EXPRESSWAY

STA. 2+00.00

ESTIMATE OF QUANTITIES

ESTIMATE OF QUANTITIES																					
BID ITEM CODE		02403	03299	03304	08104	08151	08160	08170	23378EC	23949EC	24879EC	24879EC	25027ED	25029ED	26233EC						
BID ITEM		Remove Concrete Masonry	Armored Edge for Concrete	Bridge Overlay Approach Pavement	Concrete Class "AA"	Steel Reinforcement, Epoxy Coated	Structural Steel	Shear Connectors	Concrete Sealing	Bridge Cleaning & Preventative Maintenance	Steel Repair - Cover Plate	Steel Repair - CIF Retrofit	Rail System Single Slope 36 Inch	Steel Handrail	Mobilization for Concrete Surface Treatment						
UNIT		④					① ③	②			⑤										
Substructure	Abutment #1	3	38		1.5	131															
	Pier #2																				
	Abutment #3	3	38		1.5	131															
Superstructure		122		823	60.0	25065	1	1	10868	1	1	8	200	200	1						
BRIDGE TOTALS		128	76	823	63.0	25327	1	1	10868	1	1	8	200	200	1						



- ① Approximate weight of Structural Steel:
M-270, Grade 50 = 50,561 lbs.

Approximate Number of Shear Connector Studs = 543
- ② Cost to keep and reattach the Existing Girder 2 Rocker Bearings & Anchor Bolts are included in the Lump Sum Bid for Structural Steel.
- ③
- ④ Cost to remove existing Metal Rail on left barrier and wing and delivery to KYTC Bridge Maintenance Garage in Frankfort shall be incidental to Remove Concrete Masonry.
- ⑤ The unit bid price for Steel Repairs - Cover Plate shall include the cost of all materials, labor, equipment, paint, and incidentals to complete this work.

STATE OF KENTUCKY
DAVID HOLMAN
DE ITZ
21473
OCTOBER 10, 2025
ENGINEER OF RECORD
FOR SHEET S01-S19

INDEX OF SHEETS

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R2	Guardrail & Striping Plan
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SPECIAL NOTES

- Special Note for Concrete Sealing
- Special Note for Preventative Maintenance
- Special Note for Painting Structural Steel Repairs
- Special Note for Placing Bridge Approach Pavement

SPECIAL PROVISIONS

STANDARD DRAWINGS

BGX-006-10	Stencils for Structures
BHS-009	Railing System 36 Inch Single Slope
BHS-016	Steel Handrail
BJE-001-14	Armored Edges

SPECIFICATIONS

- 2019 Standard Specifications for Road and Bridge Construction.
- 2024 AASHTO LRFD Bridge Design Specifications



COMMONWEALTH OF KENTUCKY

DEPARTMENT OF HIGHWAYS



REVISION	DATE

PREPARED BY

Palmer ENGINEERING

DATE:	OCTOBER, 2025	CHECKED BY:	
DESIGNED BY:	E. MILLER	D. DEITZ	
DETAILED BY:	N. WARD	E. MILLER	

TITLE SHEET

CROSSING

WENDELL FORD EXPRESSWAY

ROUTE

WEST 5TH STREET

BRIDGE NO.	030B00071N
SHEET NO.	S01

COUNTY OF	DAVIESS
DRAWING NUMBER	29043

GENERAL NOTES

SPECIFICATIONS:

ALL REFERENCES TO THE STANDARD SPECIFICATIONS ARE TO THE 2019 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 10TH EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS (2024).

LIVE LOAD:

THE NEW COMPONENTS OF THIS BRIDGE ARE DESIGNED FOR KYHL-93 WHICH IS 1.25 TIMES HL-93 LIVE LOAD.

FUTURE WEARING SURFACE:

THE BRIDGE HAS BEEN DESIGNED FOR A FUTURE WEARING SURFACE WEIGHT OF 15 PSF.

MATERIAL DESIGN SPECIFICATIONS:

FOR CLASS "A" REINFORCED CONCRETE: F'C = 3500 P.S.I.
FOR CLASS "AA" REINFORCED CONCRETE: F'C = 4000 P.S.I.
FOR STEEL REINFORCEMENT : FY = 60,000 P.S.I.

CONCRETE:

CLASS "AA" CONCRETE IS TO BE USED THROUGHOUT THE DECK AND BARRIERS. ALL OTHER CONCRETE SHALL BE CLASS "A", EXCEPT AS NOTED.

REINFORCEMENT:

DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE TO CENTER OF BARS UNLESS OTHERWISE NOTED. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS. CLEAR DISTANCE TO FACE OF CONCRETE IS 2" UNLESS OTHERWISE NOTED. ANY REINFORCING BARS DESIGNATED BY SUFFIX (E) IN A BILL OF REINFORCEMENT 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:

ALL EXPOSED EDGES SHALL BE BEVELED ¾" UNLESS OTHERWISE SHOWN.

DIMENSIONS:

DIMENSIONS ARE FOR A NORMAL TEMPERATURE OF 60 DEGREES FAHRENHEIT. LAYOUT DIMENSIONS ARE HORIZONTAL MEASUREMENTS. STATIONS AND ELEVATIONS ARE SHOWN IN FEET. DIMENSIONS RELATED TO THE EXISTING STRUCTURE ARE TAKEN FROM THE ORIGINAL CONSTRUCTION CONTRACT PLANS AND DO NOT NECESSARILY REFLECT REVISIONS MADE DURING CONSTRUCTION OR REPAIRS PREVIOUSLY INSTALLED. THE CONTRACTOR SHALL VERIFY ELEVATIONS AND DIMENSIONS, WITH FIELD MEASUREMENTS PRIOR TO ORDERING MATERIALS OR BEGINNING FABRICATION.

BRIDGE PLANS:

A COPY OF AVAILABLE EXISTING BRIDGE PLANS WILL BE MADE AVAILABLE TO THE SUCCESSFUL BIDDER UPON WRITTEN REQUEST. THE ORIGINAL DRAWING NUMBER FOR THIS BRIDGE IS 17515.

VERIFYING FIELD CONDITIONS:

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE THE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK; HOWEVER THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

STAY-IN-PLACE METAL FORMS:

THE USE OF STAY-IN-PLACE METAL FORMWORK FOR THE BRIDGE DECK IS PERMITTED PROVIDED THE CORRUGATIONS ARE FILLED WITH STYROFOAM.

POURING SEQUENCE:

THE POURING SEQUENCE OF THE DECK MAY NOT BE CHANGED WITHOUT THE WRITTEN APPROVAL OF THE DESIGN ENGINEER. IF THE CONTRACTOR CHOOSES TO REVISE THE POURING SEQUENCE, THE DESIGN ENGINEER RESPONSIBLE FOR THE CONTRACT PLANS SHALL VERIFY THAT THE PROPOSED POUR SEQUENCE DOES NOT OVERSTRESS THE BEAMS. THE CONTRACTOR SHALL COMPENSATE THE DESIGN ENGINEER FOR THE WORK.

TEMPORARY SUPPORTS:

TEMPORARY SUPPORTS OR SHORING WILL NOT BE PERMITTED UNDER THE GIRDERS WHEN POURING THE CONCRETE FLOOR SLAB OR WHEN TAKING "TOP OF BEAM" ELEVATIONS.

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 NOT BE HONORED BY THE DEPARTMENT OF HIGHWAYS.

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 DIRECTLY TO THE CONSULTANT. WHEN ANY CHANGES IN THE DESIGN PLANS ARE PROPOSED BY THE FABRICATOR OR SUPPLIER, SUBMIT THOSE CHANGES TO THE CONSULTANT.

SUBMIT FINAL APPROVED SHOP DRAWINGS TO THE DIVISION OF STRUCTURAL DESIGN.

RESIDUAL LEAD:

RESIDUAL LEAD PAINT MAY STILL BE ON THE BRIDGE. THE CONTRACTOR IS ADVISED TO TAKE ALL NECESSARY PROTECTIVE MEASURES INCLUDING WORKER SAFETY AND ENVIRONMENTAL REGULATIONS WHEN PERFORMING SURFACE PREPARATION AND OTHER WORK. THE DEPARTMENT WILL NOT CONSIDER ANY CLAIMS BASED ON RESIDUAL LEAD PAINT.

DISPOSAL OF MATERIALS:

ALL MATERIALS AND DEBRIS REMOVED FROM OR BENEATH THE BRIDGE OR APPROACHES SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE RIGHT-OF-WAY.

CONSTRUCTION IDENTIFICATION:

THE NAMES OF THE PRIME CONTRACTOR AND THE SUB-CONTRACTOR SHALL BE IMPRINTED IN THE CONCRETE WITH 1" LETTERS AT A LOCATION DESIGNATED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ALL PLANS, EQUIPMENT AND LABOR NECESSARY TO DO THE WORK FOR WHICH NO DIRECT PAYMENT WILL BE MADE.

CONCRETE SEALING:

APPLY CONCRETE SEALER IN ACCORDANCE WITH THE SPECIAL NOTE FOR CONCRETE SEALING AND LIMITS SHOWN ON S15.

MECHANICAL REINFORCEMENT COUPLERS:

MECHANICAL BUTT SPLICE COUPLERS SHALL DEVELOP A MINIMUM TENSILE STRENGTH OF 125 PERCENT OF SPECIFIED YIELD STRENGTH OF THE REINFORCING STEEL. THE CONTRACTOR SHALL SUBMIT, WITH THE REQUIRED SHOP DRAWINGS, DETAILS AND/OR CATALOG CUTS FOR THE PARTICULAR MECHANICAL COUPLER THAT WILL BE USED. SEE SECTION 602.03.06 FOR COUPLER TEST REQUIREMENTS. THE COST FOR FURNISHING AND INSTALLING THE MECHANICAL COUPLERS WILL BE AT THE UNIT BID PRICE FOR EACH MECHANICAL REINFORCEMENT COUPLERS.

CLEARING BRIDGE SITE:

REMOVE ALL VEGETATION FROM EXISTING BRIDGE ELEMENTS TO REMAIN IN THE FINAL STRUCTURE. PERFORM THIS WORK IN ACCORDANCE WITH THE SPECIAL NOTE FOR CLEARING BRIDGE SITE.

CONSTRUCTION PHASING AND MAINTENANCE OF TRAFFIC:

THIS BRIDGE SHALL BE CONSTRUCTED IN PHASES COINCIDING WITH THE MAINTENANCE OF TRAFFIC AND CONSTRUCTION PHASING SCHEME.

THE CONTRACTOR SHALL ARRANGE TO DO THE WORK IN ACCORDANCE WITH THE PLANS AND MAINTENANCE OF TRAFFIC NOTES AS SHOWN ON THE ROADWAY PLANS DURING CONSTRUCTION OF THIS PROJECT.

THE CONTRACTOR IN RESPONSIBLE FOR THE STABILITY OF THE EXISTING STRUCTURE. ANY DAMAGE TO THE TRAFFIC CARRYING PORTION OF THE EXISTING STRUCTURE SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

BONDING OF CONCRETE TO PREVIOUSLY POURED OR EXISTING CONCRETE:

BLAST CLEAN ALL AREAS OF PREVIOUSLY POURED OR EXISTING CONCRETE TO COME INTO CONTACT WITH THE NEW CONCRETE UNTIL FREE OF ALL LAITANCE AND DELETERIOUS SUBSTANCES IMMEDIATELY PRIOR TO APPLYING EPOXY RESIN. BOND CONCRETE TO PREVIOUSLY POURED OR EXISTING CONCRETE, WHERE INDICATED ON THE PLANS, WITH A TWO COMPONENT EPOXY RESIN SYSTEM CONFORMING TO SECTION 826 OF THE SPECIFICATIONS. THE COST OF THIS WORK, INCLUDING ALL LABOR, EQUIPMENT, AND MATERIALS, IS TO BE INCIDENTAL TO THE UNIT PRICE BID FOR THE CLASS OF THE CONCRETE BEING BONDED.

JOINT FILLER:

JOINT FILLER MATERIAL SHALL BE AASHTO M153 TYPE-I SPONGE RUBBER. ALL MATERIALS, LABOR, AND ANY OTHER ITEMS NECESSARY TO PROVIDE AND INSTALL THE JOINT FILLER IS INCIDENTAL TO CLASS "AA" CONCRETE.

STABILITY OF THE STRUCTURE:

THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE FROM THE TIME OF MOBILIZATION UNTIL AFTER THE BRIDGE HAS BEEN REOPENED TO NORMAL TRAFFIC FOLLOWING COMPLETION OF ALL WORK REQUIRED IN THE CONTRACT.

DAMAGE TO THE STRUCTURE:

THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY AND EXPENSE FOR REPAIR OF ANY AND ALL DAMAGES TO THE STRUCTURE, SHOULD SUCH DAMAGE RESULT FROM THE CONTRACTOR'S ACTIONS. AFTER COMPLETION OF ALL OPERATIONS, THE STRUCTURE AND SITE SHALL BE LEFT IN A CONDITION THAT IS IN ACCORDANCE WITH SECTION 105.12 OF THE SPECIFICATIONS.

CONSTRUCTION LOAD:

THE CONTRACTOR SHALL ABIDE BY THE BRIDGE POSTING LIMITS. STORAGE OF MATERIAL ON THE BRIDGE IS PROHIBITED.

 COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS 	REVISION	DATE	PREPARED BY 	DATE: OCTOBER, 2025	CHECKED BY:	GENERAL NOTES	ROUTE WEST 5TH STREET	BRIDGE NO. 030B00071N	COUNTY OF DAVIESS
				DESIGNED BY: D. DEITZ	A. THOMAS			SHEET NO. S02	DRAWING NUMBER 29043
				DETAILED BY: N. WARD	D. DEITZ	WENDELL FORD EXPRESSWAY			

STRUCTURAL STEEL NOTES

HIGH STRENGTH BOLT CONNECTORS:

UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL BOLTED CONNECTIONS SHALL BE MECHANICALLY GALVANIZED
ASTM F3125, GRADE A325, TYPE 7/8" INCH DIAMETER HIGH STRENGTH BOLTS, NUTS, AND WASHERS. ALL HIGH
STRENGTH BOLTED FIELD CONNECTIONS ARE TO BE INSTALLED USING "DIRECT TENSION INDICATORS" (DTI'S)
IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND ASTM F959. ALL DTI'S SHALL BE HOT-DIP-GALVANIZED.
INSTALLATION DETAILS OF THE DTI'S SHALL BE SHOWN ON THE SHOP PLANS.

MATERIALS:

ASTM OR AASHTO SPECIFICATIONS AS DESIGNATED BELOW SHALL GOVERN THE MATERIALS FURNISHED.

MATERIAL	ASTM/AASHTO
STRUCTURAL STEEL	M-270 GRADE 36 (MISC. COMPONENTS)
PINTLES AND STUD SHEAR CONNECTORS	UNS G 1015 M-169
HIGH STRENGTH BOLTS, NUTS AND WASHERS	ASTM F3125 A325 AASHTO M-164 TYPE 1
HIGH STRENGTH LOW ALLOY STRUCTURAL STEEL	M-270 GRADE 50 (GIRDERS AND DIAPHRAGMS)
SHEET LEAD AND PIG LEAD	B29-79
ANCHOR BOLTS/DOWELS	F1554 GRADE 55 GALVANIZED

ALL FLANGE AND WEB MATERIAL, INCLUDING SPLICE PLATES, IN LONGITUDINAL PLATE GIRDERS
DESIGNATED CVN SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TOUGHNESS TEST APPLICABLE
TO ZONE 2 IN ACCORDANCE WITH THE FOLLOWING:

M270 GRADE 50 - (UP TO 2" THICKNESS)	25 FT.-LBS. AT 40 DEG. F.
M270 GRADE 50 - (OVER 2" TO 4" THICKNESS)	30 FT.-LBS. AT 40 DEG. F.

ALL NON MAIN LOAD CARRYING MEMBERS INCLUDING CROSSFRAMES, AND CROSSFRAME GUSSET PLATES
SHALL MEET THE REQUIREMENTS FOR NON FRACTURE CRITICAL STEEL IN TEMPERATURE ZONE 2.

M270 GRADE 50 - (UP TO 2" THICKNESS)	15 FT.-LBS. AT 40 DEG. F.
--------------------------------------	---------------------------

SAMPLING AND TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO T243,
CURRENT EDITION, UTILIZING (H) FREQUENCY TESTING. WHEN PLATE THICKNESS
EXCEEDS 1½", FREQUENCY OF TESTING SHALL BE (P).

PAYMENT FOR STRUCTURAL STEEL:

THE LUMP SUM BID FOR STRUCTURAL STEEL SHALL BE FULL PAYMENT FOR ALL STRUCTURAL
STEEL, BOLTS, WASHERS, CAST IRON, LEAD PLATES, MOLTEN LEAD, WELDING AND WELDING
MATERIALS, FLOOR DRAINS, PAINT AND ALL LABOR AND MATERIALS NECESSARY TO ERECT THE
STEEL IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE APPROXIMATE WEIGHT
OF STRUCTURAL STEEL SHOWN IN THE ESTIMATE OF QUANTITIES DOES NOT INCLUDE OVERRUN OR
WELD MATERIAL.

MILL TEST REPORTS:

NOTARIZED MILL TEST REPORTS SHALL BE FURNISHED IN TRIPLICATE TO THE
DEPARTMENT, SHOWING THAT ALL MATERIALS USED IN THE STRUCTURAL STEEL
CONFORM TO THE REQUIREMENTS OF THE SPECIFICATIONS.

WELDING PROCEDURE:

QUALIFICATION TESTS OF ALL WELDING PROCEDURES SHALL BE COMPLETED BY THE
CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO THE FINAL APPROVAL OF
THE SHOP DRAWINGS AND WELDING PROCEDURE AND THE START OF FABRICATION.

WELDING SPECIFICATIONS:

ALL WELDING AND WELDING MATERIALS EXCEPT FOR REINFORCEMENT, SHALL CONFORM TO
"JOINT SPECIFICATION ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE". MODIFICATION
AND ADDITIONS AS STATED ON THE PLANS SHALL SUPERSEDE THE JOINT SPECIFICATIONS.

SHEAR CONNECTORS:

THE MINIMUM LENGTH OF STUDS IS 5½". PROVIDE THE NECESSARY LENGTH TO PENETRATE AT LEAST
2" ABOVE BOTTOM OF DECK.

THE "LUMP SUM BID" FOR SHEAR CONNECTORS SHALL BE FULL PAYMENT FOR ALL SHEAR CONNECTORS,
WELDING AND WELDING MATERIAL, AND MATERIALS NECESSARY TO FIELD WELD OR SHOP WELD THE
SHEAR CONNECTORS IN PLACE ACCORDING TO THE PLANS AND SPECIFICATIONS.

IF THE CONTRACTOR WISHES TO USE OTHER THAN THE STUD SHEAR CONNECTORS SHOWN ON THE
PLANS, THE PROPOSED ARRANGEMENT SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP PLANS.

STUDS SHALL BE WELDED IN ACCORDANCE WITH AWS SPECIFICATIONS.

PROHIBITED FIELD WELDING:

EXCEPT AS SHOWN ON THE PLANS, NO WELDING OF ANY NATURE SHALL BE PERFORMED ON THE
LOAD CARRYING MEMBERS OF THE BRIDGE WITHOUT THE WRITTEN CONSENT OF THE DIRECTOR,
DIVISION OF STRUCTURAL DESIGN, AND THEN ONLY IN THE MANNER AND AT THE LOCATION
DESIGNATED IN THE AUTHORIZATION.

CAMBER:

WEB PLATES SHALL BE CUT TO PROVIDE FOR THE CAMBER OF THE GIRDER. PROVIDE
FOR POSSIBLE WARPAGE DUE TO EXTRA HEAT IN TOP FLANGE BY VIRTUE OF SHEAR
CONNECTORS. GIRDERS WHICH DO NOT CONFORM TO PLAN CAMBER AND GRADE IN THE
ERECTED POSITION SHALL BE CONSIDERED AS REQUIRING, AT NO ADDITIONAL COST TO
THE STATE, EITHER AN ADJUSTMENT IN DEPTH OF THE CONCRETE DECK HAUNCH OVER THE
STEEL SUPPORTING MEMBERS OR A REWORKING OF THE GIRDER CAMBER TO MEET THE PLAN
GRADE AND DECK THICKNESS. HOWEVER, IN NO CASE SHALL THE SHEAR CONNECTORS BE
ALLOWED TO PENETRATE THE DECK LESS THAN 2".

CLEANING AND PAINTING:

SECTION 607.03.23 OF THE SPECIFICATIONS APPLIES TO THIS PROJECT; ACCORDINGLY, ALL
STEEL SURFACES ARE TO BE PAINTED, BLAST CLEANED TO NEAR WHITE CONDITION IN
ACCORDANCE WITH SSPC-SP10 IMMEDIATELY PRIOR TO BEING PAINTED WITH THE FIRST
COAT OF PAINT (PRIME COAT). THE PRIME COAT SHALL BE ORGANIC ZINC PRIMER. APPLY
THE PRIME COAT IN THE SHOP. CONTRARY TO THE SPECIFICATIONS, FIELD COATINGS SHALL
ALSO BE APPLIED IN THE SHOP PRIOR TO SHIPPING THE STEEL FROM THE PLANT.

PRIME COATS ON FAYING SURFACES MUST MEET CLASS A REQUIREMENTS FOR SLIP
CRITICAL CONNECTIONS. FIELD COATS SHALL NOT BE APPLIED TO FAYING SURFACES.

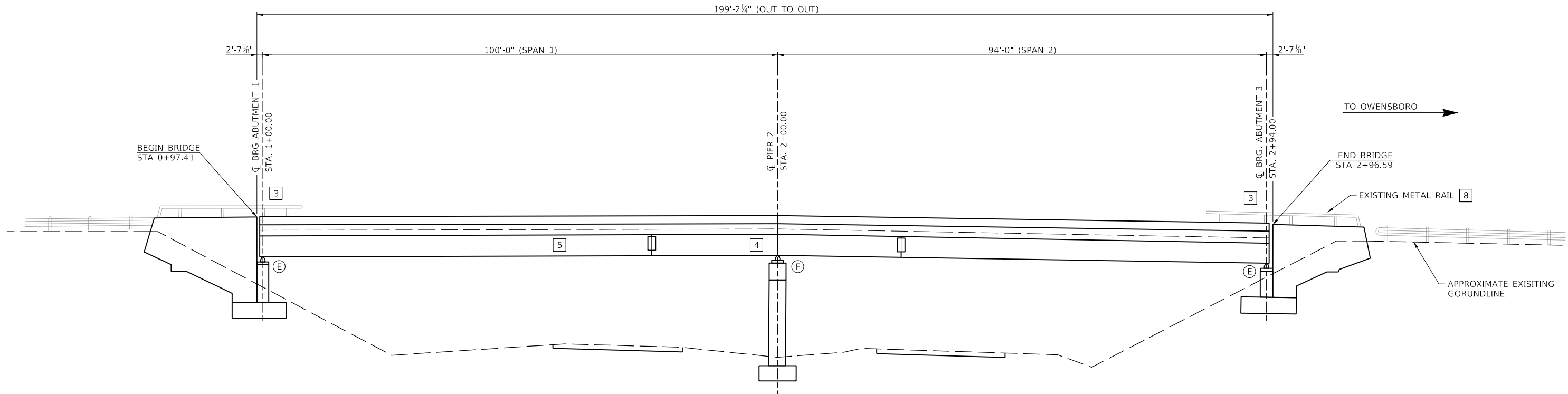
COATINGS SHALL BE REPAIRED IN THE FIELD PER THE SPECIFICATIONS.

REPAIR OF PAINT ON EXISTING GIRDERS:

ANY PAINT DAMAGED AS PART OF CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION
OF THE ENGINEER. THE CONTRACTOR SHALL USE APPROVED METHODS FOR SURFACE
PREPERATION AND APPLICATION. THE CONTRACTOR SHALL SELECT A COLOR FOR USE THAT
MATCHES THE EXISTING.

IDENTIFICATION MARKING OF STEEL MEMBERS:

STEEL MILL AND FABRICATOR IDENTIFICATION MARKINGS FOR STEEL PLATES, SHAPES OR
FABRICATED MEMBERS SHALL BE BY METAL TAGS, SOAPSTONE OR SOME OTHER READILY
REMOVABLE MATERIAL, OR SHALL BE MARKED IN AN AREA OF THE COMPLETED MEMBER
WHICH WILL BE ENCASED OR COVERED WITH CONCRETE. MARKING METHODS AND
LOCATIONS ARE SUBJECT TO THE APPROVAL OF THE ENGINEER. PAINT OR WAX BASED
CRAYONS SHALL NOT BE USED FOR MARKING.



ELEVATION

REPAIR DESCRIPTION

- 1

REMOVE EXISTING GIRDERS 1 AND 2
- 2

REPLACE GIRDER 2
- 3

ELIMINATE EXPANSION JOINTS
- 4

CIF STEEL GIRDER RETROFITS
- 5

STEEL GIRDER REPAIR - EXISTING GIRDER 3
- 6

CLEAN BRIDGE
- 7

CONCRETE SEALING
- 8

CONTRACTOR SHALL REMOVE EXISTING METAL RAIL FROM THE LEFT BARRIER AND DELIVER TO KYTC'S BRIDGE MAINTENANCE GARAGE IN FRANKFORT.

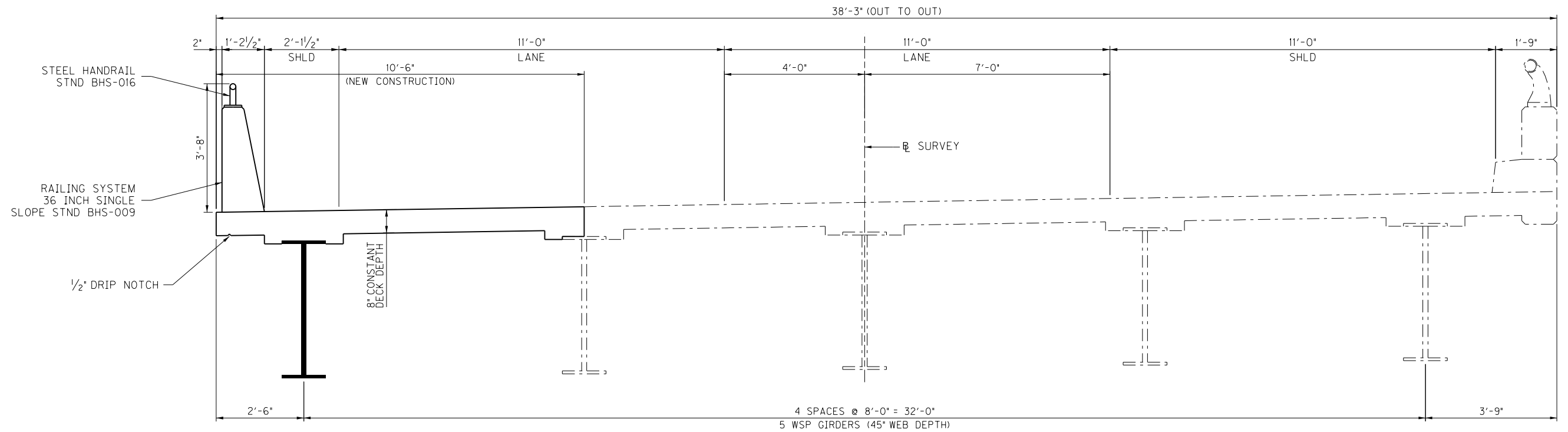
CARE SHALL BE TAKEN TO AVOID DAMAGING EXISTING GIRDER 2 ROCKER BEARINGS, ANCHOR BOLTS AND EXISTING DIAPHRAGMS BETWEEN GIRDER 2 AND 3 TO BE MAINTAINED AND REUSED WITH THE REPLACEMENT OF GIRDER 2.

NOTE: EXISTING VERTICAL CLEARANCE 15.62'
SEE SHEET S16 FOR $\mathbb{E}$ SURVEY AND WORKING POINT INFORMATION

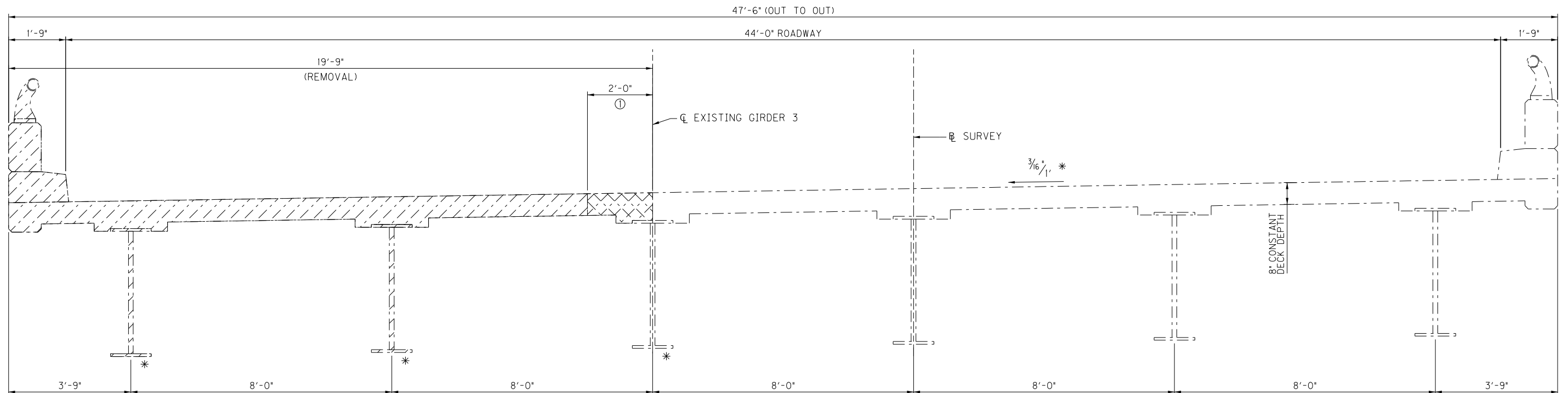
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DENOTES EXPANSION
- F

DENOTES FIXED



FINAL TYPICAL SECTION



STRUCTURE REMOVAL LIMITS

* BASED ON EXISTING PLANS



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: ethan-m

REVISION

DATE

PREPARED BY



DATE: OCTOBER, 2025

CHECKED BY

DESIGNED BY: D. DEITZ

A. THOMAS

DETAILED BY: N. WARD

D. DEITZ

TYPICAL SECTION

CROSSING
WENDELL FORD EXPRESSWAY

ROUTE
WEST 5TH
STREET

BRIDGE NO.
030B00071N

SHEET NO.
S05

COUNTY OF
DAVIESS

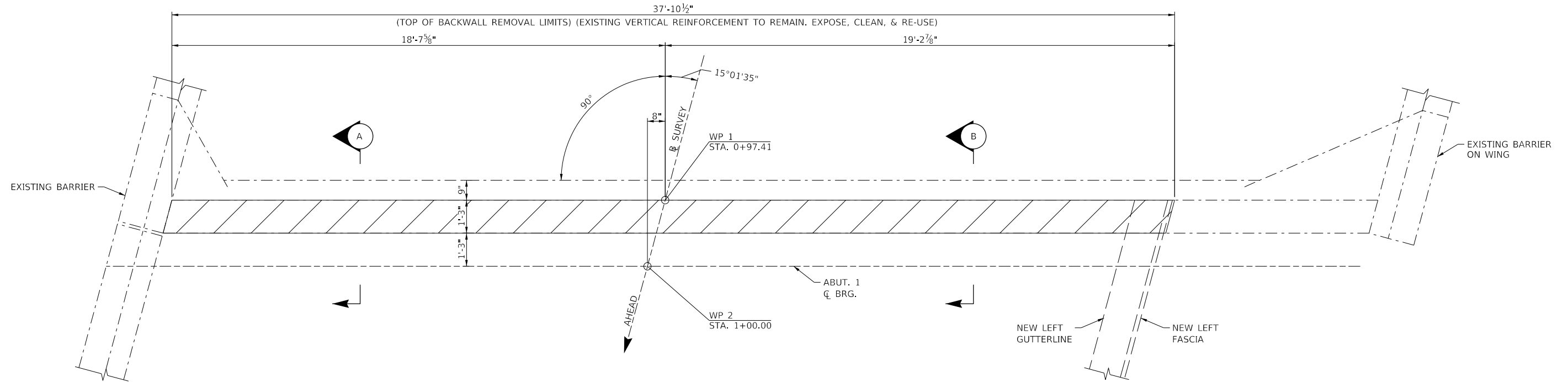
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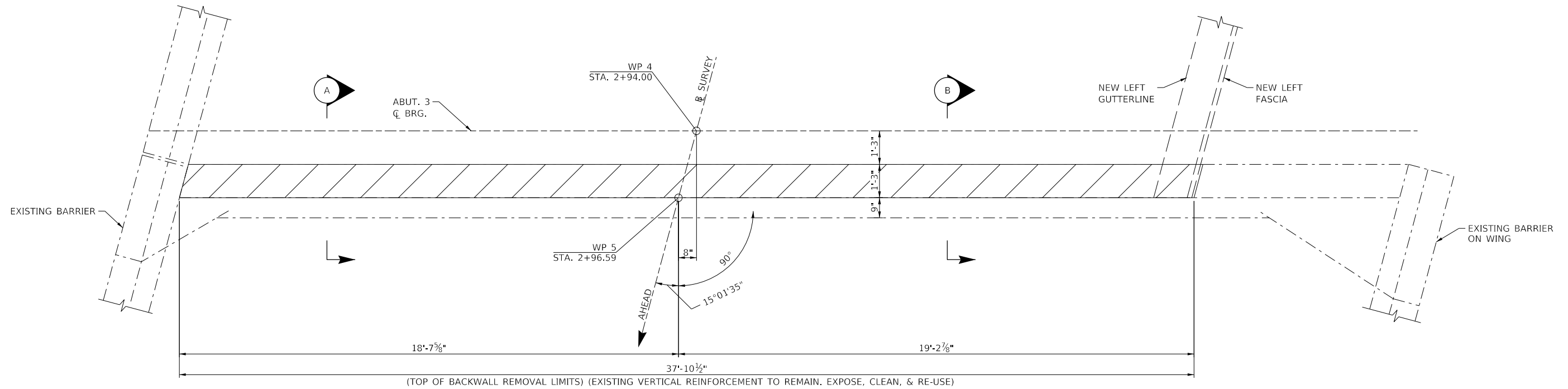
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DATE PLOTTED: 10/10/2025

FILE NAME: pw://PEWINPW-INT01.pewin.private.palmetnet.com:Palmer Engineering/Documents/Kentucky/Trans/D2/Davies/West Fifth Street 030B00071N/Struct/Final_plans/Dgn/West 5th Street_TYPICAL STREET SECTION



ABUTMENT 1 BACKWALL PLAN
(REMOVAL LIMITS)



ABUTMENT 3 BACKWALL PLAN
(REMOVAL LIMITS)

NOTE: SEE SHEET S17 FOR SECTIONS "A" & "B"



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: ethan-m

REVISION

DATE

PREPARED BY



DATE: OCTOBER, 2025

CHECKED BY

DESIGNED BY: D. DEITZ

E. MILLER

DETAILED BY: E. MILLER

D. DEITZ

ABUTMENT BACKWALL REMOVAL

CROSSING
WENDELL FORD EXPRESSWAY

ROUTE
WEST 5TH
STREET

BRIDGE NO.
030B00071N

SHEET NO.
S06

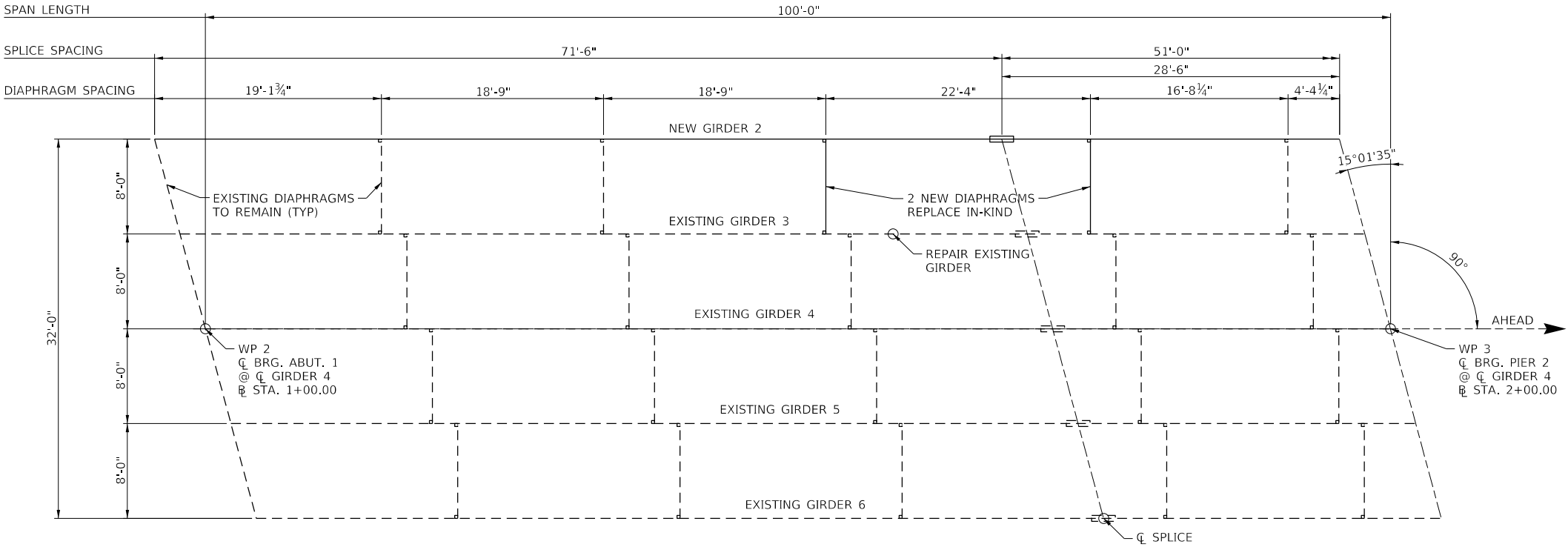
COUNTY OF
DAVISS

DRAWING NUMBER
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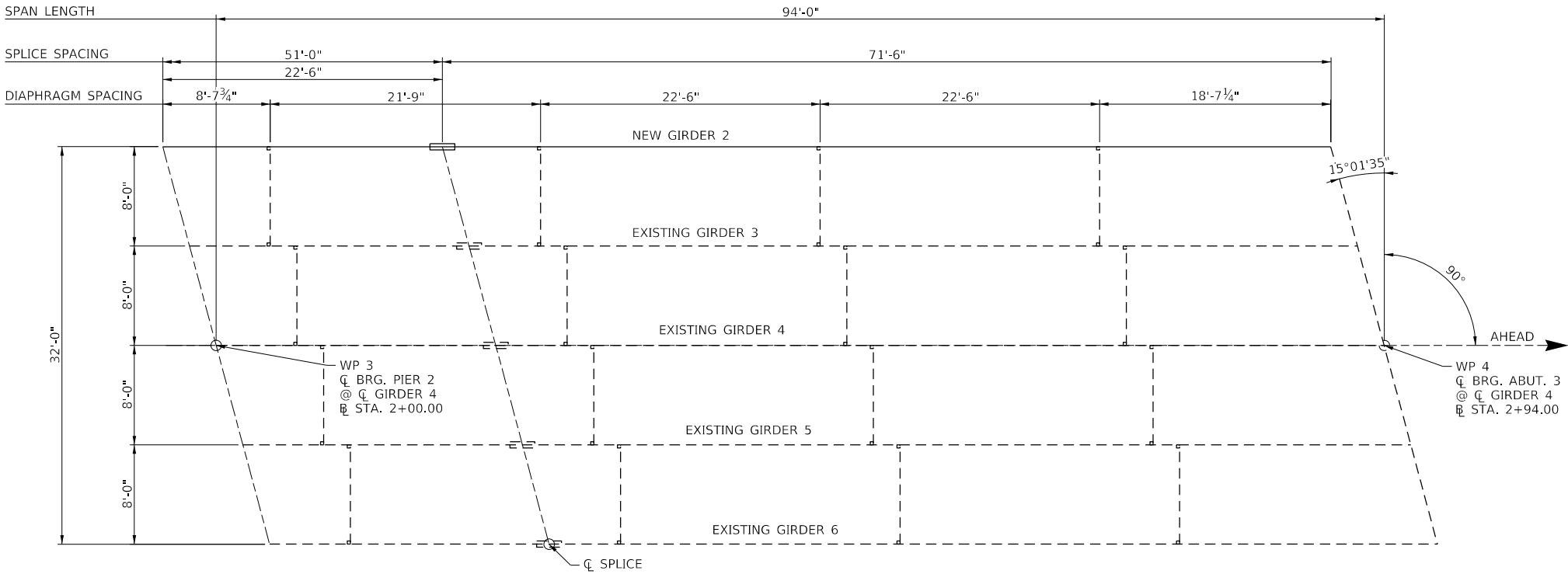
DATE PLOTTED: 10/10/2025

FILE NAME: pw://PEWINPW-INT01.pewin.private.palmer.net.com:Palmer Engineering/Documents/Kentucky/Trans/D2/Davies/West Fifth Street 030B00071N/Struct/Final_plans/Dgn/West 5th Street_ABUT BACKWALL REMOVAL

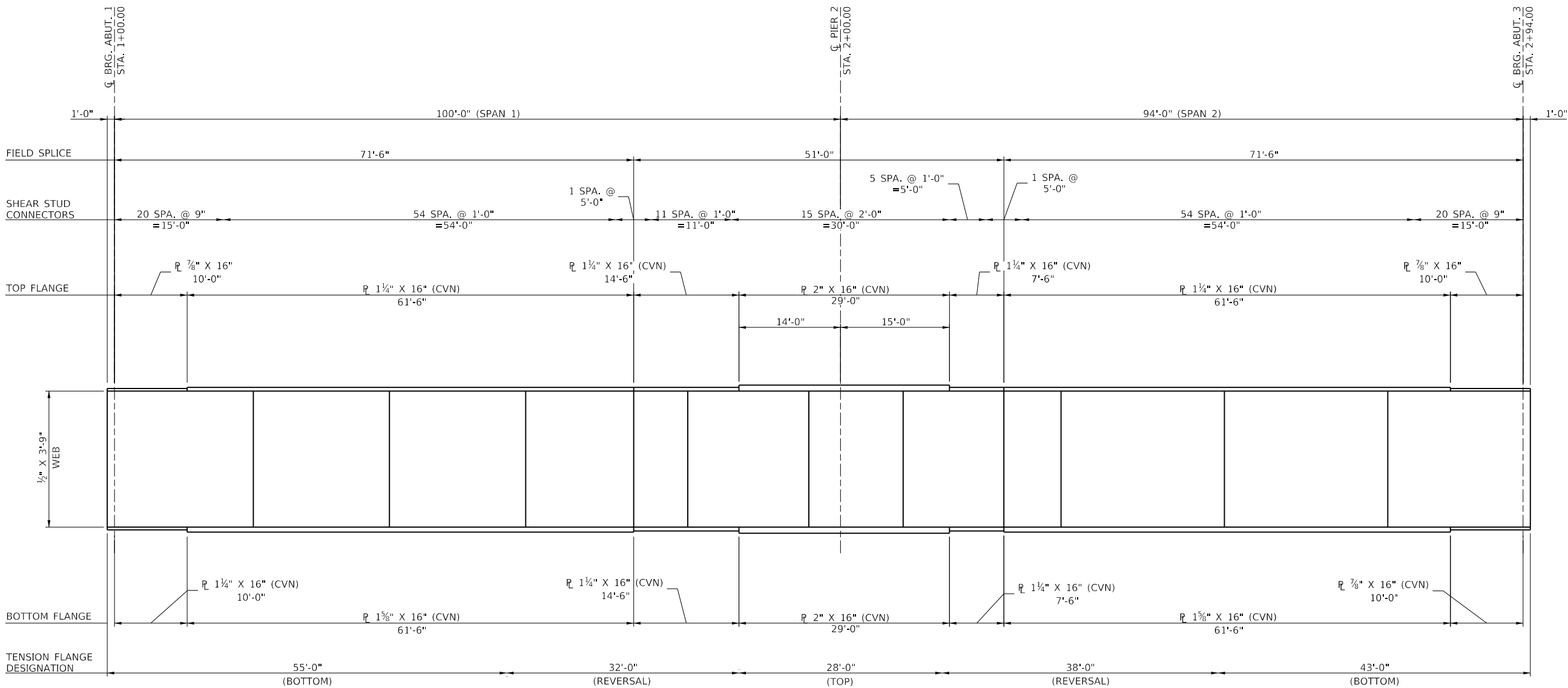


SPAN 1 - FRAMING PLAN
(SHOWING EXISTING GIRDER 1 REMOVED AND NEW GIRDER 2)

- NOTES:
1. NEW DIAPHRAGMS IDENTIFIED IN FRAMING PLAN SHALL BE REPACED IN-KIND. CONTRACTOR SHALL FIELD MEASURE AS NECESSARY TO ESTABLISH GEOMETRY.
 2. NEW 7/8" DIAMETER DIAPHRAGM BOLTS SHALL MEET REQUIREMENTS IN THE STRUCTURAL STEEL NOTES, AND SHALL BE INSTALLED WITH DTIS.
 3. FAYING SURFACES MUST MEET CLASS A REQUIREMENTS FOR SLIP CRITICAL CONNECTIONS.
 4. THREADS SHALL BE EXCLUDED FROM THE SHEAR PLANES.



SPAN 2 - FRAMING PLAN
(SHOWING EXISTING GIRDER 1 REMOVED AND NEW GIRDER 2)

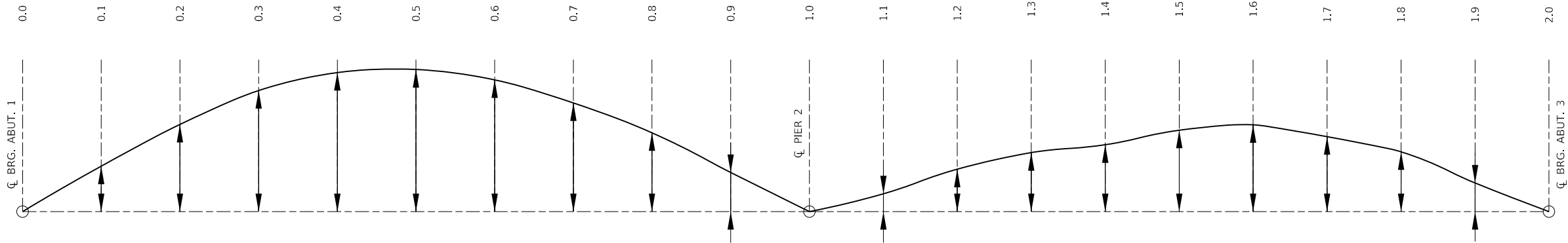


GIRDER ELEVATION

NOTES:
SEE FRAMING PLAN FOR DIAPHRAGM SPACINGS.

	ITEM	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
	STEEL DEAD LOAD	0	1/8	3/16	1/4	5/16	1/4	1/4	3/16	1/16	0	0	0	1/16	1/8	1/8	3/16	3/16	3/16	1/8	1/16	0
①	NON-COMPOSITE DEAD LOAD	0	5/16	5/8	13/16	7/8	13/16	11/16	1/2	5/16	1/8	0	0	1/8	1/4	7/16	1/2	9/16	1/2	3/8	1/4	0
②	COMPOSITE DEAD LOAD	0	1/8	3/16	1/4	5/16	5/16	1/4	3/16	1/8	1/16	0	0	1/16	1/8	1/8	3/16	3/16	3/16	1/8	1/16	0
	TOTAL DEAD LOAD	0	9/16	1	1 5/16	1 7/16	1 3/8	1 3/16	7/8	1/2	3/16	0	1/16	3/16	7/16	11/16	7/8	15/16	7/8	11/16	3/8	0
③	VERTICAL CURVE	0	9/16	1 3/16	1 3/4	2 1/16	2 3/16	2 3/16	1 15/16	1 1/2	13/16	0	7/16	7/8	1 1/16	1	1 3/16	1 1/4	1	13/16	3/8	0
	TOTAL CAMBER	0	1 1/8	2 3/16	3 1/16	3 9/16	3 5/8	3 3/8	2 3/4	2	1	0	7/16	1 1/16	1 1/2	1 11/16	2 1/16	2 3/16	1 15/16	1 1/2	3/4	0

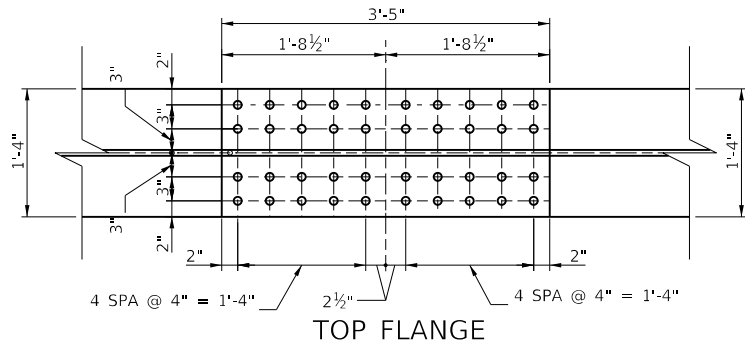
NEW GIRDER 2



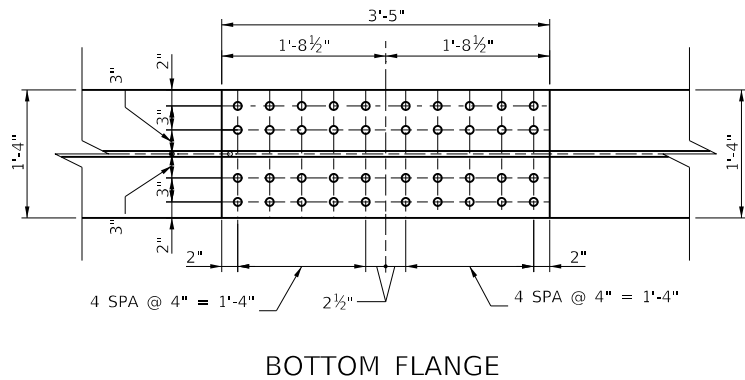
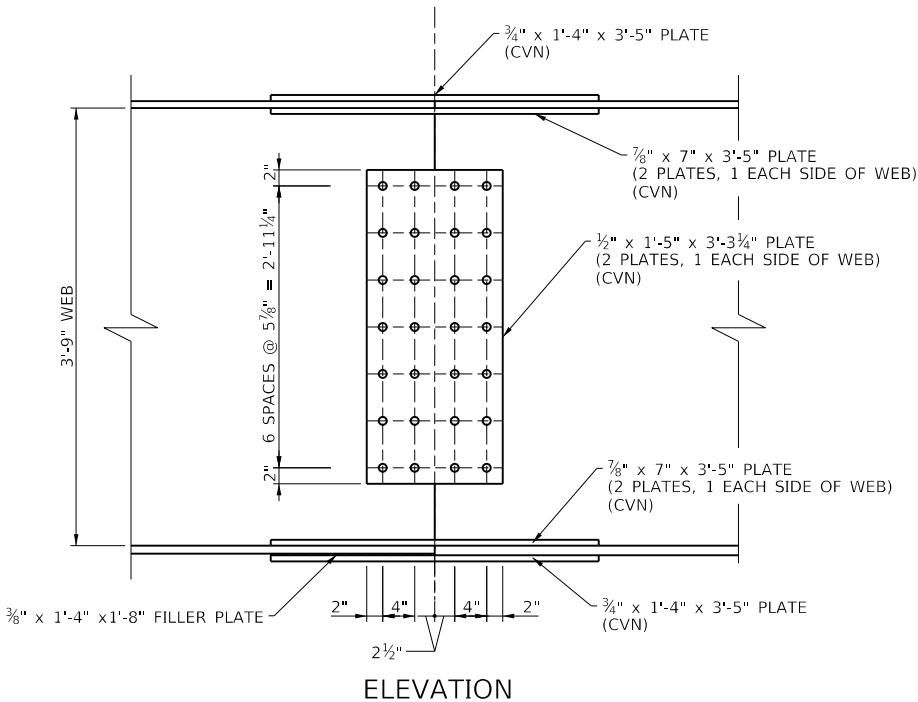
CAMBER DIAGRAM

NOTE: DEFLECTIONS ARE SHOWN IN INCHES.

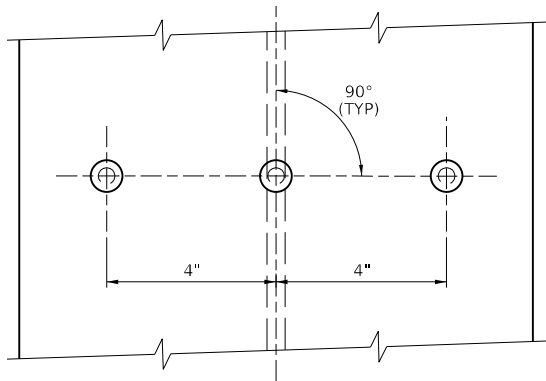
- ①NON-COMPOSITE DEAD LOAD INCLUDES THE WEIGHT OF DECK AND HAUNCHES.
- ②COMPOSITE DEAD LOAD INCLUDES THE WEIGHT OF THE BARRIERS.
CAMBER DEFLECTIONS DO NOT INCLUDE COMPOSITE EFFECTS DUE TO POURING SEQUENCE.
- ③THE CAMBER DUE TO THE VERTICAL CURVE OF THE PROFILE GRADE DETERMINED BY DRAWING
A STRAIGHT LINE BETWEEN SUBSTRUCTURE UNITS.



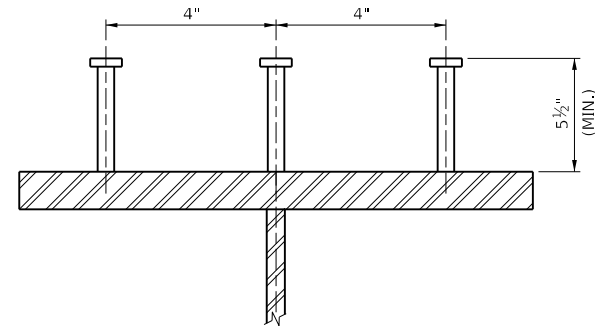
- NOTE:
1. SLIP CRITICAL CONNECTION SLIP COEFFICIENT = 0.30. BOLT THREADS ARE TO BE EXCLUDED FROM THE SHEAR PLANES, USE HEAVY HEX NUTS AND DIRECT TENSION INDICATOR WASHERS.
 2. ALL PARTS OF EACH SPLICE SHALL BE COMPLETELY ASSEMBLED TAKING INTO ACCOUNT THEIR RELATIVE POSITION IN THE FINISHED STRUCTURE DUE TO GRADE, CAMBER, AND CURVATURE. SECTIONS SHALL BE MATCH MARKED WHILE SO ASSEMBLED.
 3. ALL SPLICE PLATES INCLUDING FILLER PLATES SHALL BE M270, GRADE 50 STEEL.
 4. PLATES DESIGNATED (CVN) SHALL MEET MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN STRUCTURAL STEEL NOTES.
 5. BOLT HEAD SHALL BE ON BOTTOM FACE OF BOTTOM FLANGE TO OPTIMIZE VERTICAL CLEARANCE.



FIELD SPLICE

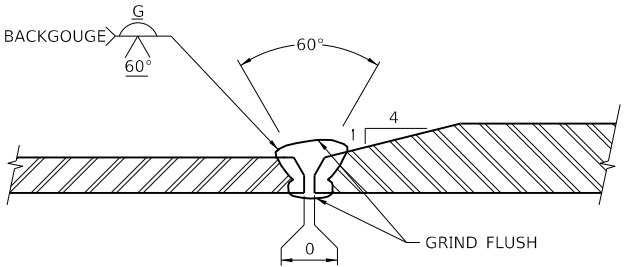


7/8"Ø SHEAR STUDS WELDED TO TOP FLANGE, 3 PER ROW.
(SEE GIRDER ELEVATION FOR ROW SPACING)



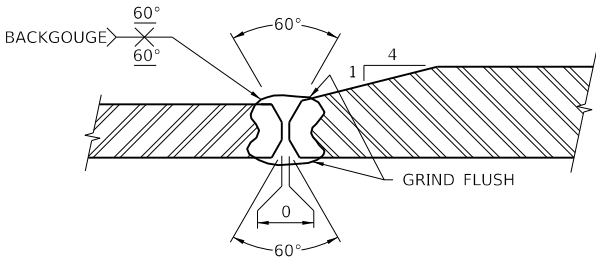
SHEAR CONNECTOR STUDS

USE 7/8"Ø GRANULAR OR SOLID FLUX FILLED



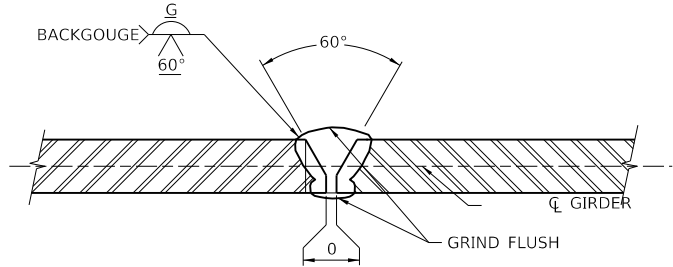
FLANGE BUTT WELD IF $R \leq 2$ "

(SHOP FLANGE SPLICE)



FLANGE BUTT WELD IF $R > 2$ "

(SHOP FLANGE SPLICE)



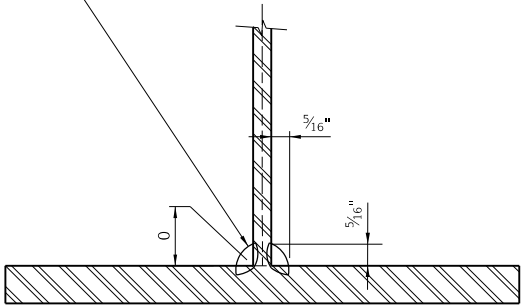
WEB BUTT WELD

(SHOP WEB SPLICE)

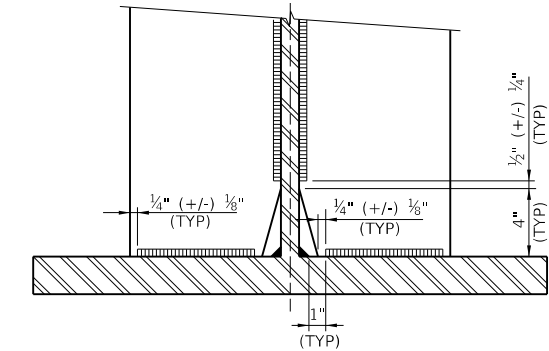
NOTES

1. ALL SHOP SLICES IN FLANGE OR WEB PLATES SHALL BE MADE PRIOR TO WELDING FLANGE PLATES TO WEB PLATES.
2. WELDS SHALL BE GROUND FLUSH ON BOTH SIDES. ALL GRINDING SHALL BE PARALLEL TO THE DIRECTION OF STRESS.
3. WEB SPLICES SHALL BE A MINIMUM OF 6" CLEAR OF SHOP FLANGE SPLICES, CROSS FRAME CONNECTIONS, AND BEARING STIFFENER PLATES.

FLANGE TO WEB WELDS TO BE SINGLE PASS SUBMERGED ARC FILLET WELDS IN THE FLAT POSITION. PARTS ARE TO BE ASSEMBLED WITH EDGE OF WEB PLATE TIGHT AGAINST FLANGE PLATE BEFORE WELDING.



FLANGE TO WEB WELD



TERMINATION OF WELDS FOR STIFFENERS AND GUSSET PLATES

(AT WEB STIFFENERS AND DIAPHRAGMS)



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



REVISION	DATE



DATE:	OCTOBER, 2025	CHECKED BY:
DESIGNED BY:	D. DEITZ	A. THOMAS
DETAILED BY:	N. WARD	D. DEITZ

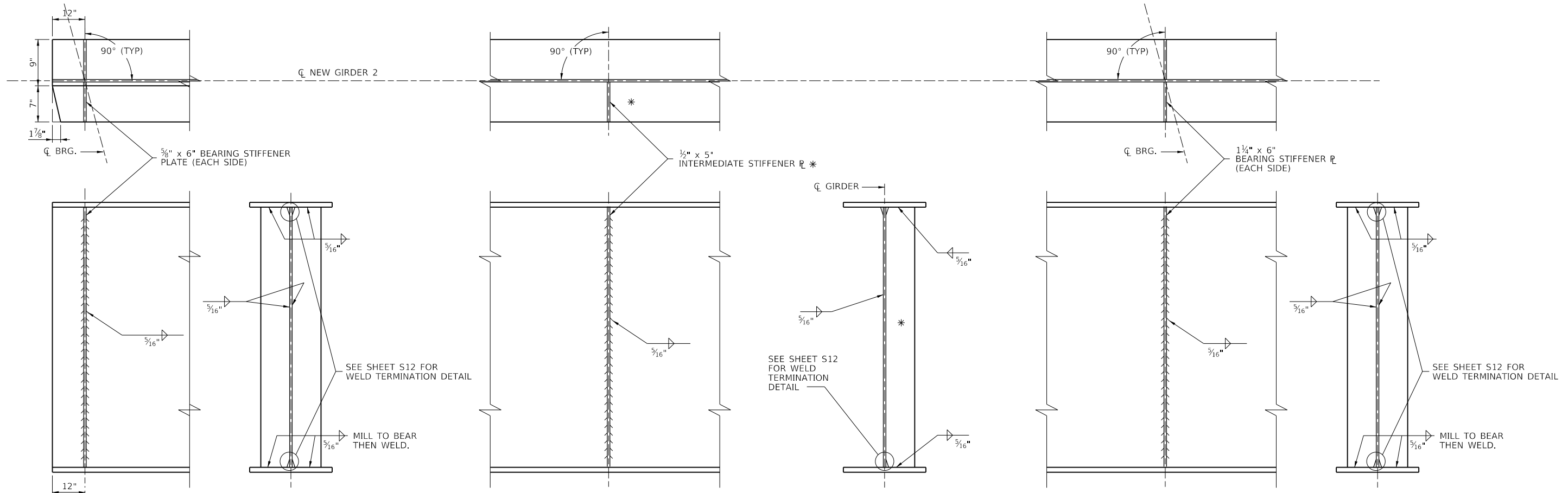
STRUCTURAL STEEL DETAILS 1

CROSSING
WENDELL FORD EXPRESSWAY

ROUTE
WEST 5TH
STREET

BRIDGE NO. 030B00071N
SHEET NO. S12

COUNTY OF DAVIESS
DRAWING NUMBER 29043

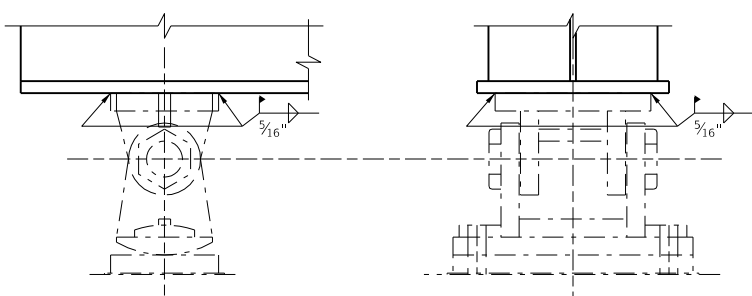


ABUTMENT BEARING STIFFENER

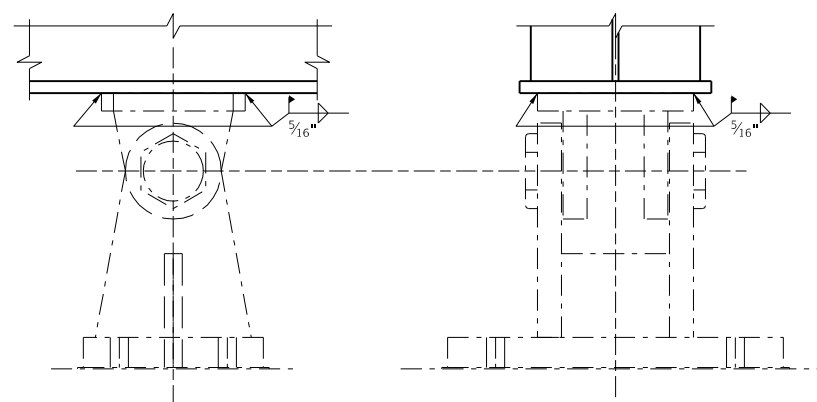
(ABUT. 1 SIDE SHOWN, ABUT. 2 SIMILAR,
BUT OPPOSITE HAND)

INTERMEDIATE STIFFENER

PIER BEARING STIFFENER



**GIRDER 2 EXPANSION ROCKER AT
ABUTMENTS 1 AND 3**



**GIRDER 2 FIXED BEARING AT
PIER 2**

* PLATE WILL BE ON THE SIDE OF THE WEB WHERE THERE IS AN
CROSS FRAME CONNECTION. NO PLATES WILL BE ON THE
OUTSIDE FACE OF THE EXTERIOR GIRDERS.

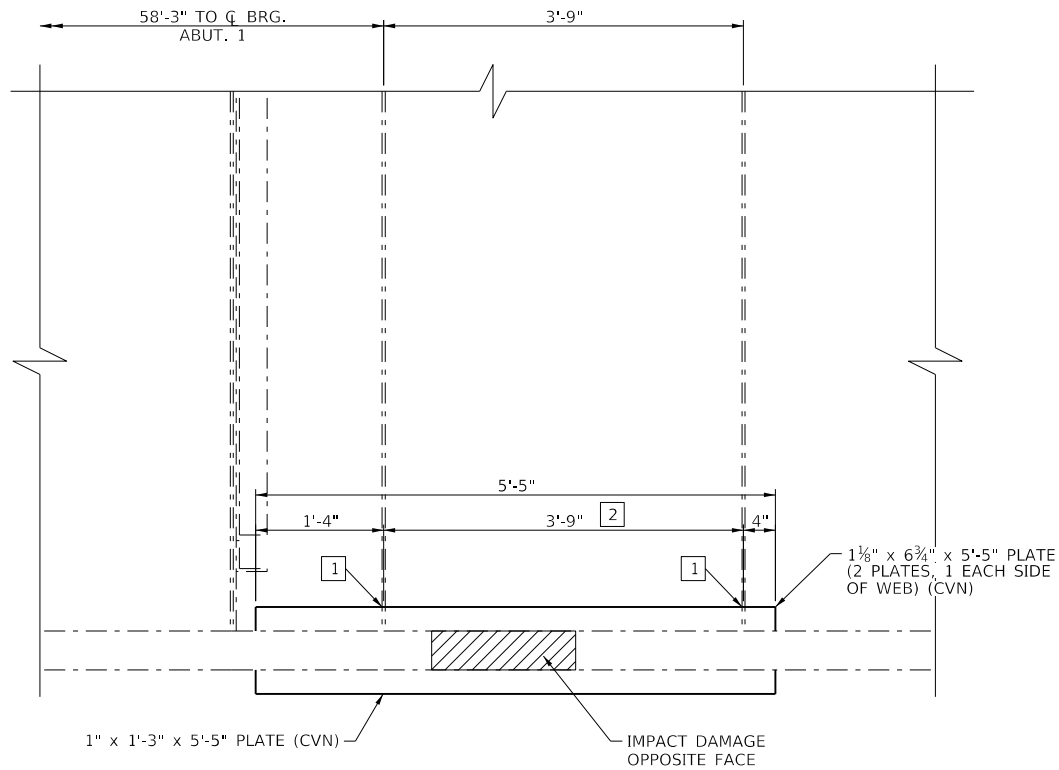
NOTES:

INTERMEDIATE STIFFENERS AT CROSS FRAME LOCATIONS
SHALL BE WELDED TO TOP AND BOTTOM FLANGES.

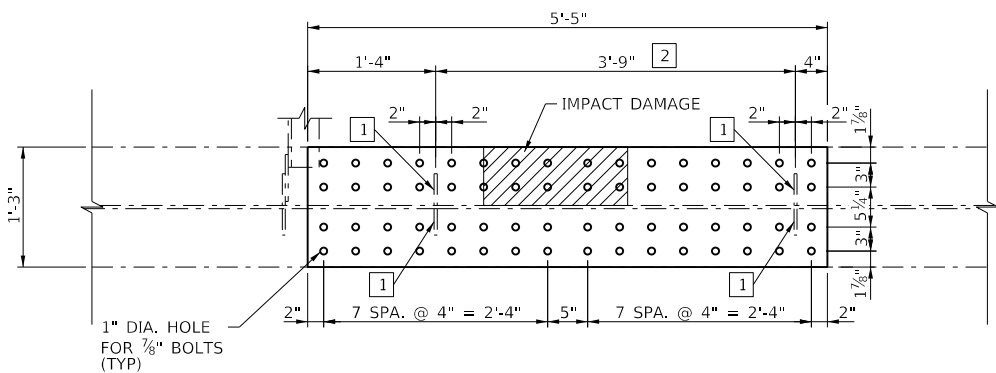
ENDS OF WEB AND ALL BEARING STIFFENERS ARE TO BE
VERTICAL IN THE FINAL ERECTED POSITION. INTERMEDIATE
STIFFENERS ARE TO BE NORMAL TO THE FLANGE.

ALL PLATES AND ANGLES SHALL BE AASHTO M-270 GRADE 50.

EXISTING GIRDER 2 ROCKER BEARINGS AND ANCHOR BOLTS
SHALL BE REUSED WITH NEW GIRDER 2. COST TO MAINTAIN &
ATTACH BEARING TO NEW GIRDER 2 SHALL BE INCIDENTAL TO
STRUCTURAL STEEL.



EXISTING GIRDER 3 COVER PLATE ELEVATION



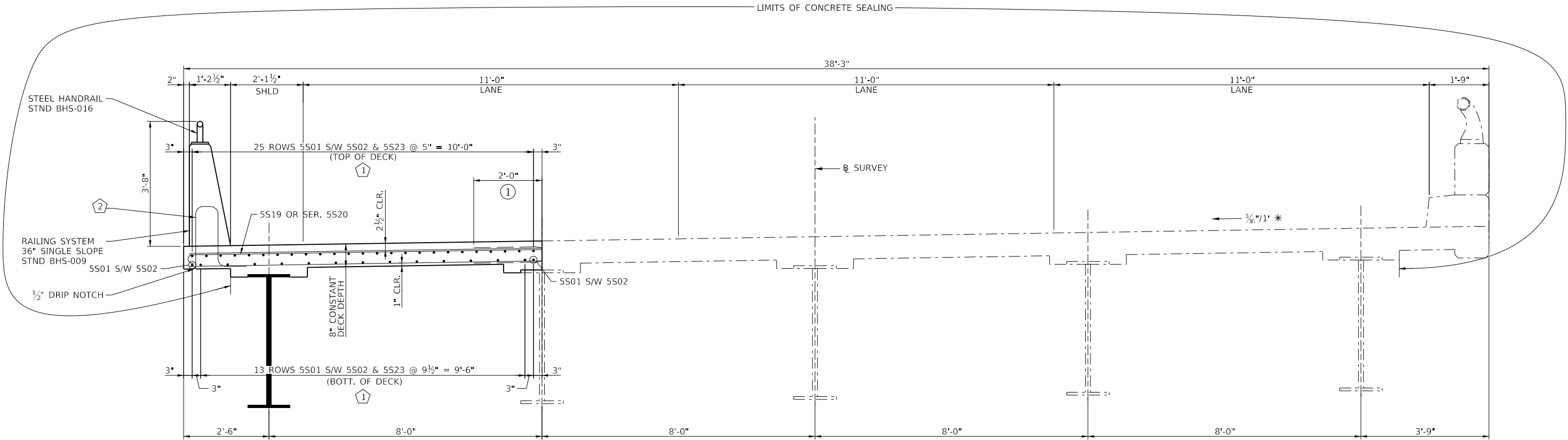
EXISTING GIRDER 3 COVER PLATE PLAN

- NOTES:
1. SEE SPECIAL NOTE FOR PAINTING STRUCTURAL STEEL REPAIRS. CONTRARY TO THE SPECIAL NOTE, NEW GIRDER 3 COVER PLATES SHALL HAVE SAME PAINT SYSTEM AS NEW GIRDER 2. SEE "CLEANING AND PAINTING" NOTE ON SHEET S03.
 2. SLIP CRITICAL CONNECTION SLIP COEFFICIENT = 0.30. BOLT THREADS ARE TO BE EXCLUDED FROM THE SHEAR PLANES. USE HEAVY HEX NUTS AND DIRECT TENSION INDICATOR WASHERS.
 3. ALL PLATES SHALL BE M270, GRADE 50 STEEL.
 4. PLATES DESIGNATED (CVN) SHALL MEET MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN STRUCTURAL STEEL NOTES.
 5. BOLT HEAD SHALL BE ON BOTTOM OF BOTTOM FLANGE TO OPTIMIZE VERTICAL CLEARANCE.
 6. THE UNIT BID PRICE FOR "STEEL REPAIRS - COVER PLATE" SHALL INCLUDE THE COST OF ALL MATERIALS, LABOR, EQUIPMENT, PAINT, AND INCIDENTALS TO COMPLETE THIS WORK.

- TRIM EXISTING STIFFENER TO BEAR ON TOP OF COVER PLATE USING A MECHANICAL CUT OFF WHEEL OR PLASMA TORCH. USE OF OXY-ACETYLENE TORCH WILL NOT BE PERMITTED.
- 1 GRIND SMOOTH THE REMAINING WELD ON THE GIRDER WEB USING A TUNGSTEN CARBIDE ROTARY BURR BIT WITH A DIE GRINDER. CARE SHALL BE TAKEN TO AVOID GOUGING THE GIRDER BASE METAL.
- 2 DIMENSION FROM EXISTING PLANS. FIELD VERIFY PRIOR TO FABRICATION

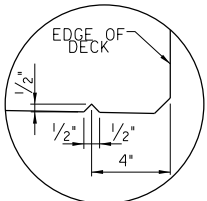


EXISTING GIRDER 3 IMPACT DAMAGE



TYPICAL DECK SECTION

* BASED ON EXISTING PLANS



DRIP NOTCH DETAIL

(TYP. FULL LENGTH BOTH SIDES OF DECK)
(N.T.S.)

- ① EXISTING REINFORCEMENT, EXPOSE REINFORCEMENT CLEAN, AND REUSE
- ① 3 LENGTHS OF 5S01, 1 LENGTH OF 5S02 EA. ROW, AND 2~5S23 @ EA. END OF BRIDGE
- ② X1 BARS ARE INCLUDED IN BID ITEM FOR RAIL SYSTEM 36" SINGLE SLOPE BUT SHALL BE IN PLACE BEFORE DECK CONCRETE IS PLACED.

NOTES:

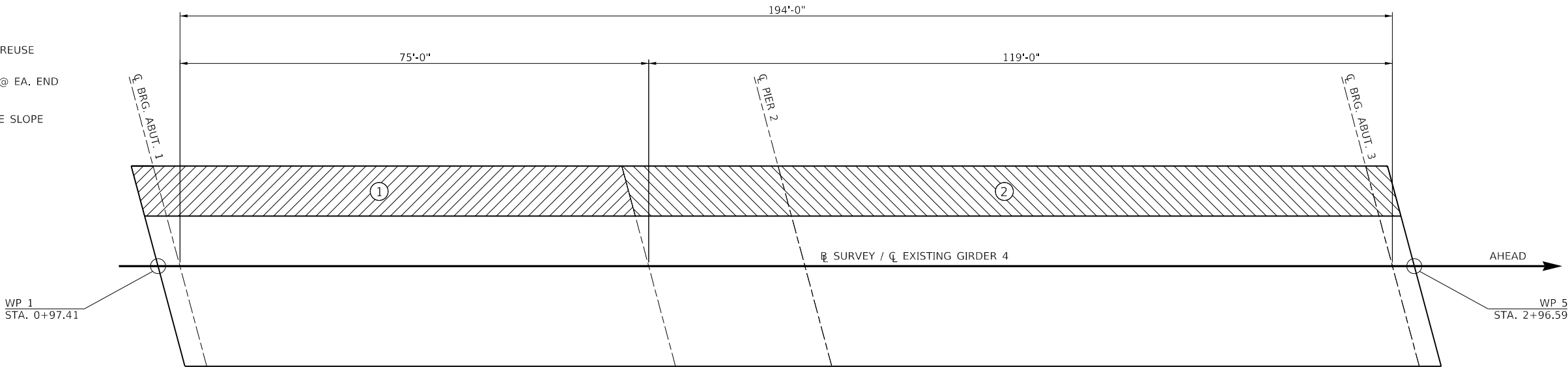
- ALL CONCRETE SHALL BE PLACED IN SEQUENTIAL ORDER OUTLINED ABOVE.
- SLAB CAN BE PLACED AS A SINGLE OPERATION, STARTING AT ABUT. 1 AND PROCEEDING TO ABUT. 3, PROVIDED THE CONCRETE REMAINS PLASTIC THROUGHOUT CONCRETE PLACEMENT.
- NO CHANGES TO THE POURING SEQUENCE SHALL BE MADE WITHOUT THE ENGINEER'S APPROVAL.

MINIMUM LAP SPLICES

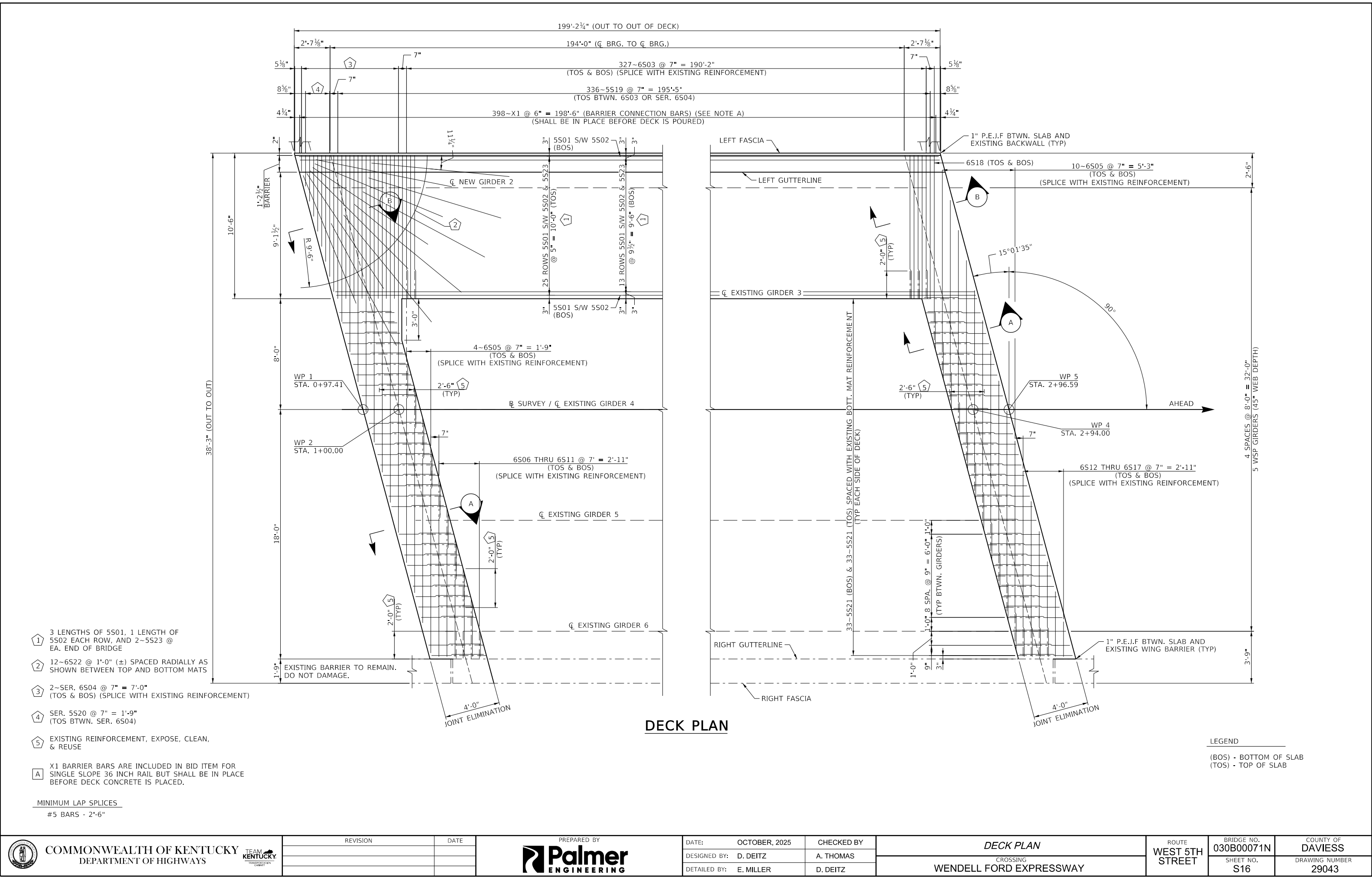
#5 BARS - 2'-6"

LEGEND

S/W = SPICED WITH



DECK POURING SEQUENCE



[illegible][illegible]

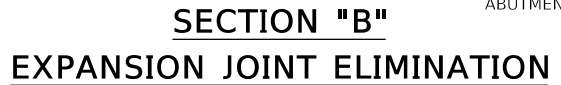
NOTE : REINFORCING BARS DESIGNATED WITH SUFFIX (E) IN PLANS SHALL BE EPOXY COATED IN ACCORDANCE WITH THE SPECIFICATIONS. REINFORCING BARS DESIGNATED WITH THE SUFFIX (S) IN PLANS ARE STIRRUP BARS.



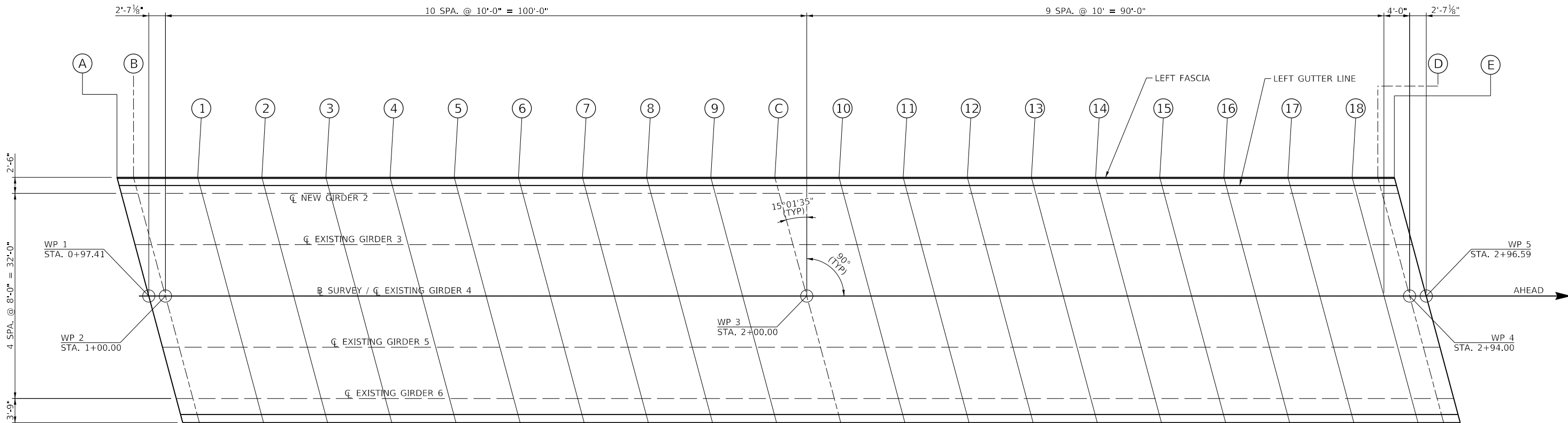
(EXISTING DECK AND JOINT REMOVAL)



(CONSTRUCTION)



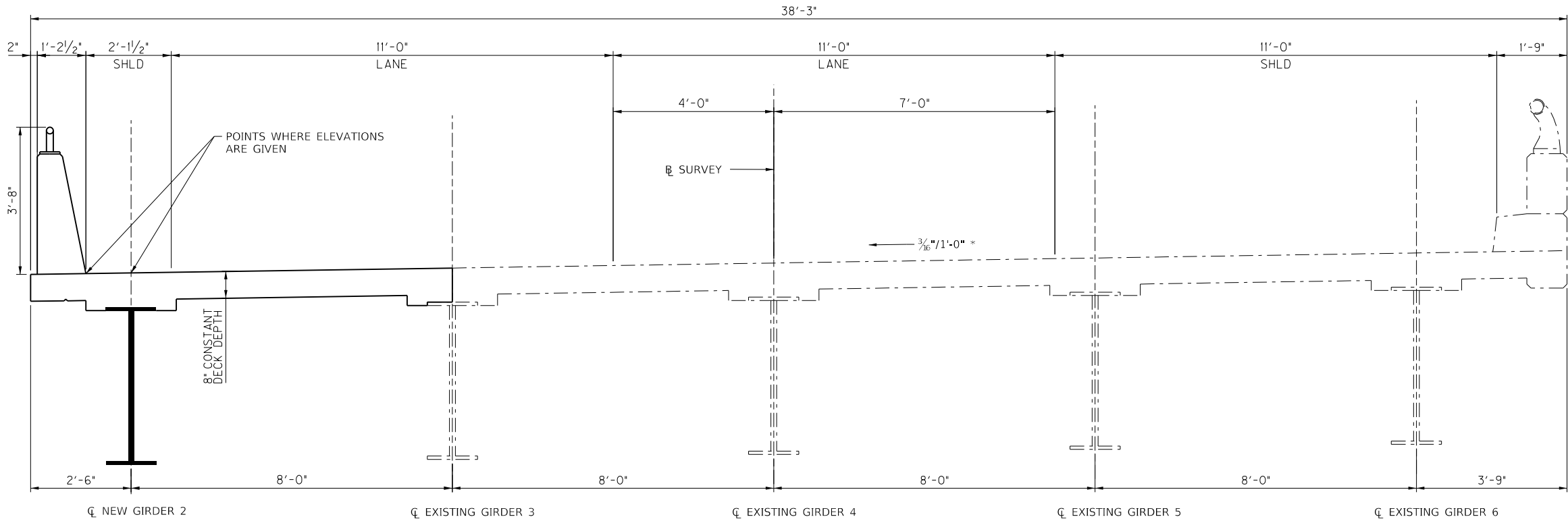
(CONSTRUCTION)



CONSTRUCTION ELEVATION GRID

TABLE OF ELEVATIONS

LINE	LEFT GUTTER LINE	NEW GIRDER #2		
		CONSTR. ELEV.	TOP OF GIRDER	DIM. "X"
A - A	417.168	417.186		
B - B	417.191	417.209		
C - C	417.775	417.790		
D - D	417.302	417.316		
E - E	417.283	417.297		
1 - 1	417.334	417.352		
2 - 2	417.473	417.494		
3 - 3	417.595	417.619		
4 - 4	417.684	417.713		
5 - 5	417.753	417.778		
6 - 6	417.794	417.818		
7 - 7	417.811	417.832		
8 - 8	417.815	417.833		
9 - 9	417.792	417.812		
10 - 10	417.768	417.775		
11 - 11	417.754	417.764		
12 - 12	417.743	417.755		
13 - 13	417.714	417.737		
14 - 14	417.679	417.699		
15 - 15	417.637	417.652		
16 - 16	417.557	417.571		
17 - 17	417.459	417.473		
18 - 18	417.344	417.357		



TYPICAL SECTION

(LOOKING AHEAD)

* BASED ON EXISTING PLANS

NOTES FOR ELEVATIONS TAKEN ON GIRDERS

TAKE ELEVATIONS ON TOP OF GIRDERS AT POINTS INDICATED BY THE GRID LAYOUT. THE GIRDER ELEVATIONS ARE TO BE READ TO THREE DECIMALS, AND ENTERED IN TABLES UNDER "TOP OF GIRDER" ELEVATIONS. COMPUTE DIMENSION "X" AS FOLLOWS:

"CONSTRUCTION ELEVATION" MINUS "TOP OF GIRDER" ELEVATION EQUALS DIMENSION "X". CONSTRUCTION ELEVATIONS INCLUDE CAMBER DUE TO WEIGHT OF CONCRETE SLAB AND BARRIER. MEASURING OF DIMENSION "X" GIVES THE FINAL CHECK ON GIRDER TOLERANCES FOR CAMBER, GIRDER DAMAGE, AND ERRORS IN ERECTION THAT PRODUCE REVERSE CAMBERS, SAGS, AND UNSIGHTLY FASCIA GIRDERS.

FOR SETTING TEMPLATES, MEASURE DIMENSION "X" ABOVE TOP OF GIRDERS 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 GIRDER" ELEVATIONS. CONSTRUCT BARRIER TO ROADWAY GRADE. DO NOT ADD CAMBER TO BARRIER.



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



REVISION	DATE



DATE:	OCTOBER, 2025	CHECKED BY:
DESIGNED BY:	E. MILLER	A. THOMAS
DETAILED BY:	N. WARD	A. THOMAS

CONSTRUCTION ELEVATIONS

CROSSING
WENDELL FORD EXPRESSWAY

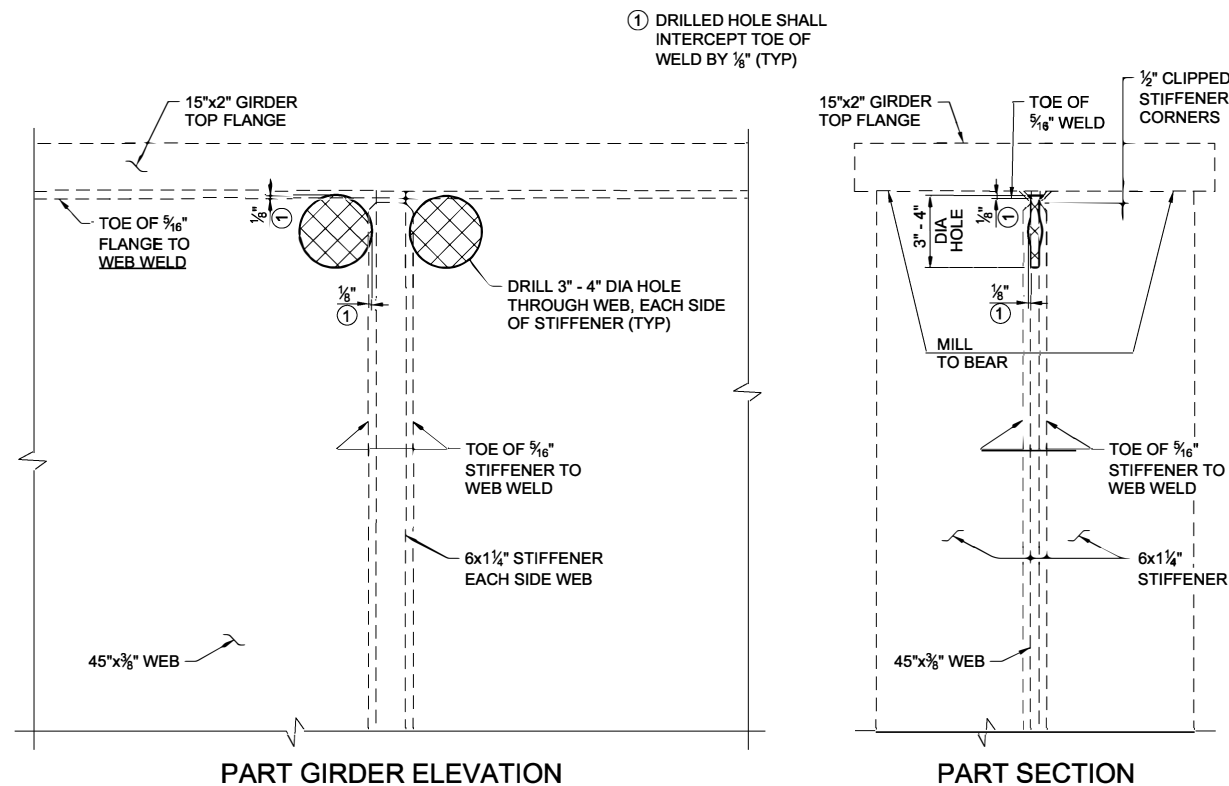
ROUTE
WEST 5TH STREET

BRIDGE NO.
030B00071N

SHEET NO.
S19

COUNTY OF
DAVIESS

DRAWING NUMBER
29043



PART GIRDER ELEVATION

PART SECTION

CIF RETROFIT

AT PIER 2, EXISTING GIRDERS 3, 4, 5 AND 6

NOTES:

1. PLACE A TUNGSTEN CARBIDE TIPPED ANNULAR CUTTER INTO THE CORNER AT THE INTERSECTION OF THE GIRDER TOP FLANGE AND BEARING STIFFENER PLATES. ADJUST THE DRILL SUCH THAT THE DRILLED HOLE WILL INTERCEPT THE TOES OF THE BEARING STIFFENER-TO-GIRDER WEB (VERTICAL) WELD AND GIRDER TOP FLANGE-TO-GIRDER WEB (HORIZONTAL) WELD BY $\frac{1}{8}$ ". DRILL THE HOLE THROUGH THE GIRDER WEB. BE CAREFUL NOT TO GOUGE THE FLANGE AND THE BEARING STIFFENER. IF GOUGING DOES OCCUR, USE FLAP WHEELS TO SMOOTH OUT AND TAPER THE GOUGES TO AVOID STRESS CONCENTRATION.
2. INSPECT THE HOLE PLACEMENT TO CONFIRM THAT IT INTERCEPTS BOTH THE VERTICAL AND HORIZONTAL WELDS BY $\frac{1}{8}$ ". IF THE HOLE MISSES EITHER WELD TOE, USE A TUNGSTEN CARBIDE ROTARY BURR BIT WITH A DIE GRINDER TO WIDEN THE HOLE TOWARD THE MISSED WELD TOE. GRIND UNTIL THE WELD TOE HAS BEEN SUFFICIENTLY DISCONNECTED AND THERE IS NO LONGER A CONTINUOUS PATH FOR A FRACTURE TO BYPASS THE HOLE AND CONTINUE THROUGH THE GIRDER WEB.
3. SAND THE EDGES OF THE DRILLED HOLES. PROGRESS FROM 60, 80 & 100 GRIT. SURFACES SHALL BE SMOOTH AND FREE OF CUTTING MARKS AND GOUGES. THE TRANSITION FROM THE GIRDER WEB TO THE WELDS SHALL BE SMOOTH WITH NO BLUNT EDGES.
4. CLEAN AND PAINT LOCATIONS IN ACCORDANCE WITH THE SPECIAL NOTE FOR PAINTING STRUCTURAL STEEL RERAIRS.
5. ALL WORK SHALL BE PERFORMED TO THE SATISFACTION OF THE ENGINEER. THE FIRST COMPLETED CIF RETROFIT LOCATION SHALL BE APPROVED BY THE ENGINEER BEFORE WORK BEGINS ON SUBSEQUENT LOCATIONS. INTERMITTENT APPROVAL BY THE ENGINEER SHALL BE REQUIRED AFTER EVERY 2 COMPLETED LOCATIONS BEFORE WORK BEGINS ON SUBSEQUENT GIRDERS.
6. THE COST OF ALL LABOR, MATERIALS, PAINT AND EQUIPMENT NECESSARY TO COMPLETE THE CONSTRAINT-INDUCED FRACTURE CRITICAL (CIF) RETROFIT SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR "STEEL REPAIR - CIF RETROFIT". EACH LOCATION FOR "STEEL REPAIR - CIF RETROFIT" INCLUDES ONE DRILLED HOLE THROUGH THE GIRDER WEB ON EITHER SIDE OF THE BEARING STIFFENERS. 2 LOCATIONS PER GIRDER.



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



REVISION	DATE



PREPARED BY
Stantec

DATE:	OCTOBER, 2025	CHECKED BY	
DESIGNED BY:	M. LAWLER	T. PERKINS	
DETAILED BY:	A. FARMER	M. LAWLER	

CIF RETROFIT

CROSSING
WENDELL FORD EXPRESSWAY

ROUTE
WEST 5TH
STREET

BRIDGE NO. 030B00071N
SHEET NO. S20

COUNTY OF DAVIESS
DRAWING NUMBER 29043

GENERAL NOTES, SPECIAL NOTES, & SPECIAL PROVISIONS

GENERAL SUMMARY

BEFORE YOU DIG

THE CONTRACTOR IS INSTRUCTED TO CALL 1-800-752-6007 TO REACH KY 811, THE ONE-CALL SYSTEM FOR INFORMATION ON THE LOCATION OF EXISTING UNDERGROUND UTILITIES. THE CALL IS TO BE PLACED A MINIMUM OF TWO (2) AND NO MORE THAN TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION. THE CONTRACTOR SHOULD BE AWARE THAT OWNERS OF UNDERGROUND FACILITIES ARE NOT REQUIRED TO BE MEMBERS OF THE KY 811 ONE-CALL BEFORE-U-DIG (BUD) SERVICE. THE CONTRACTOR MUST COORDINATE EXCAVATION WITH THE UTILITY OWNERS, INCLUDING THOSE WHOM DO NOT SUBSCRIBE TO KY 811. IT MAY BE NECESSARY FOR THE CONTRACTOR TO CONTACT THE COUNTY COURT CLERK TO DETERMINE WHAT UTILITY COMPANIES HAVE FACILITIES IN THE AREA.

STANDARD DRAWINGS

STANDARD DRAWINGS ARE NOT ATTACHED TO THESE PLANS. A STANDARD DRAWING BOOK AND THE HEADWALL SUPPLEMENTAL BOOK MAY BE OBTAINED FROM THE POLICY SUPPORT BRANCH OF THE DEPARTMENT OF ADMINISTRATIVE SERVICES IN FRANKFORT, KY. AT (502) 564-4610.

RBE-100-11
RBI-001-12
RBI-002-07
RBR-001-13
RBR-005-11
RBR-015-06
RBR-050-08
RBR-005-01
BHS-013

CONTROL OF WORK

THE RIGHT IS RESERVED BY THE DEPARTMENT TO HAVE OTHER WORK PERFORMED BY OTHER CONTRACTORS AND BY ITS OWN FORCES AND TO PERMIT PUBLIC UTILITY COMPANIES AND OTHERS TO DO WORK DURING THE CONSTRUCTION OF, AND WITHIN THE LIMITS OF OR ADJACENT TO, THE PROJECT. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS AND COOPERATE WITH SUCH OTHER PARTIES SO THAT INTERFERENCE WITH SUCH OTHER WORK WILL BE REDUCED TO A MINIMUM. THE CONTRACTOR SHALL AGREE, AND HEREBY DOES AGREE, TO MAKE NO CLAIMS AGAINST THE DEPARTMENT FOR ADDITIONAL COMPENSATION DUE TO DELAYS OR OTHER CONDITIONS CREATED BY THE OPERATIONS OF SUCH OTHER PARTIES. SHOULD A DIFFERENCE OF OPINION ARISE AS TO THE RIGHTS OF THE CONTRACTOR AND OTHERS WORKING WITHIN THE LIMITS OF OR ADJACENT TO THE PROJECT, THE ENGINEER WILL DECIDE AS TO THE RESPECTIVE RIGHTS OF THE VARIOUS PARTIES INVOLVED IN ORDER TO ASSURE THE COMPLETION OF THE DEPARTMENT'S WORK IN GENERAL HARMONY AND IN A SATISFACTORY MANNER AND HIS DECISION SHALL BE FINAL AND BINDING UPON THE CONTRACTOR.

MAINTENANCE OF TRAFFIC

THE LUMP SUM BID FOR MAINTENANCE OF TRAFFIC SHALL INCLUDE BUT NOT BE LIMITED ALL TRAFFIC CONTROL DEVICES (NOT SPECIFICALLY IDENTIFIED OR QUANTIFIED ELSEWHERE IN THE PLANS) FOR CONTROLLING AND MAINTAINING TRAFFIC DURING THE CONSTRUCTION PROJECT AND THE REMOVAL THEREOF WHEN IT IS NO LONGER NEEDED. UNLESS OTHERWISE DIRECTED, ALL SALVAGEABLE TRAFFIC CONTROL ITEMS, DEVICES, MATERIALS AND INCIDENTALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR WHEN NO LONGER NEEDED FOR MAINTAINING AND CONTROLLING TRAFFIC DURING CONSTRUCTION.

REFER TO THE MAINTENANCE OF TRAFFIC DETOUR SHEETS AND TRAFFIC CONTROL PLAN FOR MORE INFORMATION.

PERMANENT STRIPING

KYTC DISTRICT 2 TRAFFIC ENGINEER IS TO BE CONTACTED BEFORE PLACEMENT OF PERMANENT STRIPING.

MOBILIZATION AND DEMOBILIZATION

THE LUMP SUM BID ON THIS PROJECT SHALL INCLUDE PAYMENT IN FULL FOR MOBILIZATION AND DEMOBILIZATION.

SPECIAL NOTES

SN FOR CONTRACT COMPLETION AND LIQUIDATED DAMAGES TRAFFIC CONTROL PLAN

GENERAL SUMARY				
KYTC ITEM	DESCRIPTION	NOTES	UNIT	QUANTITY
1987	DELINEATOR FOR GUARDRAIL B/W		EACH	17
2003	RELOCATE TEMP CONC BARRIER	NOTE 1	LF	400
2014	BARRICADE-TYPE III	NOTE 1	EACH	9
2351	GUARDRAIL-STEEL W BEAM-S FACE		LF	819
2371	GUARDRAIL END TREATMENT TYPE 7		EACH	2
2381	REMOVE GUARDRAIL		LF	890
2562	TEMPORARY SIGNS	NOTE 1	SQFT	712
2568	MOBILIZATION		LS	1
2569	DEMOBILIZATION		LS	1
2650	MAINTAIN & CONTROL TRAFFIC	NOTE 1	LS	1
2671	PORTABLE CHANGEABLE MESSAGE SIGN	NOTE 1	EACH	5
2726	STAKING		LS	1
2775	ARROW PANEL	NOTE 1	EACH	2
2898	RELOCATE CRASH CUSHION	NOTE 1	EACH	2
3171	CONCRETE BARRIER WALL TYPE 9T	NOTE 1	LF	400
6514	PAVE STRIPING-PERM PAINT - 4 IN		LF	2246
6530	PAVE STRIPING REMOVAL - 4 IN		LF	2246
8903	CRASH CUSHION TY VI CLASS BT TL3	NOTE 1	EACH	2
20411ED	LAW ENFORCEMENT OFFICER	NOTE 1,2	HOURL	240
21415ND	EROSION CONTROL		LS	1
25079ED	THRIE BEAM GUARDRAIL TRANSITION TL-2		EACH	2

NOTES:

1.
- FOR MAINTENANCE OF TRAFFIC
2.
- FOR ESTIMATING PURPOSES ONLY



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: GENERAL AND SPECIAL NOTES
GENERAL SUMMARY

BRIDGE NO. 030B00071N COUNTY OF DAVIESS

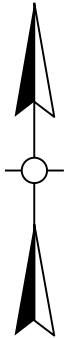
SHEET NO. R1

REMOVE EXISTING GUARDRAIL		
LT OR RT	STATION TO STATION	LF
LT	271+08 - 274+84	376
LT	277+17 - 282+31	514

STEEL "W" BEAM GUARDRAIL CONSTRUCTION CHART					
LT OR RT	STATION TO STATION	SINGLE FACE (ft)	END TREATMENT TY 7 (Ea)	THRIE-BEAM TRANSITION (TL-2) (Ea)	DELINEATORS B/W (Ea)
LT	271+08 - 275+05	341	1	1	7
LT	277+01 - 282+31	478	1	1	10

NOTE: DRILL A HOLE FOR SETTING GUARDRAIL POSTS IN EXISTING PAVEMENT. BACKFILL AROUND POSTS ACCORDING TO STANDARD SPECIFICATIONS SECTION 719.03.01.

STRIPING SUMMERY			
ITEM	DISCRIPTION	UNIT	QUANTITIES
916	PAVE STRIPPING REMOVAL-4 IN	LT	2246
6514	DOUBLE SOLID YELLOW LINE (DSYL)	LF	2246



285+00

PI STA 267+64.88
Δ = 10°24'55" LT
T = 692.68'
L = 1381.54'
R = 7600.00'
E = 31.50'

BEGIN CONST.
STA 271+08

PT 274+53.75

CONNECT GUARDRAIL TO 36 IN SINGLE SLOPE
CONCRETE RAILING USING A THRIE-BEAM
GUARDRAIL CONNECTOR (TL-2)

PC 275+98.94

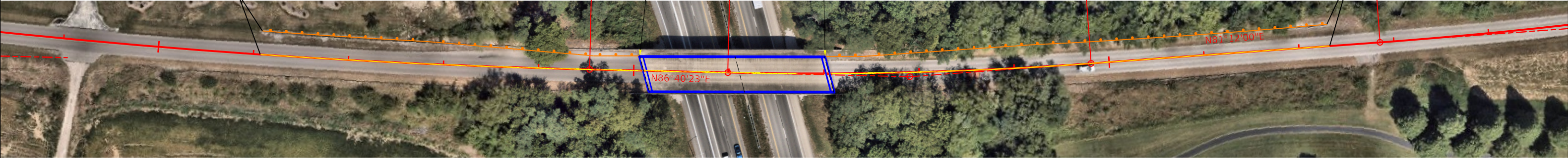
PI STA 277+90.14
Δ = 05°28'23" LT
T = 191.20'
L = 382.10'
R = 4000.00'
E = 4.57'

PT 279+81.04

END CONST.
STA 282+31

PC 282+85.39

PI STA 284+96.57
Δ = 04°50'13" LT
T = 211.17'
L = 422.10'
R = 5000.00'
E = 4.46'

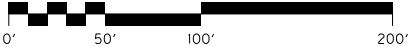


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: WEST 5TH STREET GUARDRAIL AND
STRIPING PLAN SHEET

HORIZONTAL SCALE
SCALE: 1" = 50'



STA 271+08 TO STA 282+31

BRIDGE NO. 030B00071N COUNTY OF DAVIESS

SHEET NO. R2

PORTABLE CHANGEABLE MESSAGE SIGNS
INSTALL AND OPERATE PORTABLE CHANGEABLE
MESSAGE SIGN(S) TO NOTIFY TRAVELERS OF
UPCOMING HIGHWAY CLOSURE.

PCMS #1 AND #5 SHALL BE IN PLACE AT LEAST TWO
(2) WEEKS PRIOR TO THE HIGHWAY CLOSURE AND
SHALL REMAIN IN PLACE UNTIL THE HIGHWAY IS
CLOSED.

* CONTRACTOR SHALL USE SELECTED CLOSURE DATE
**CONTRACTOR SHALL USE PLANNED REOPEN DATE

PCMS #1, #2, #3

MESSAGE DISPLAY	
PHASE 1	PHASE 2
US 60 E TO BE CLOSED	* BEGIN THROUGH **END

MESSAGE DISPLAY	
PHASE 1	PHASE 2
US 60 E CLOSED	DETOUR VIA KY 1554

PCMS #4

MESSAGE DISPLAY	
PHASE 1	PHASE 2
US 60 TO BE CLOSED	* BEGIN THROUGH **END

MESSAGE DISPLAY	
PHASE 1	PHASE 2
US 60 CLOSED	DETOUR VIA KY 81

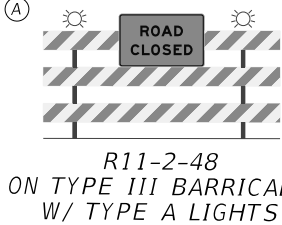
PCMS #5

MESSAGE DISPLAY	
PHASE 1	PHASE 2
US 60 W TO BE CLOSED	* BEGIN THROUGH **END

MESSAGE DISPLAY	
PHASE 1	PHASE 2
US 60 W CLOSED	DETOUR VIA KY 279



M4-8
M3-4
M1-4
M6-3



R11-2-48
ON TYPE III BARRICADE
W/ TYPE A LIGHTS



M4-8
M3-2
M1-4
M5-2



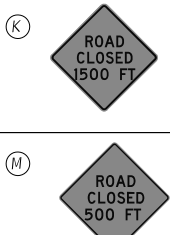
M4-8
M3-2
M1-4
M6-1



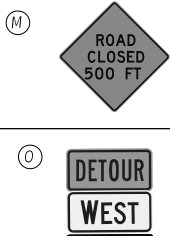
M4-8
M3-4
M1-5
M6-1



M4-8
M3-1
M1-5
M6-1



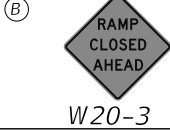
W20-1



W20-1



M4-8
M3-4
M1-4
M6-3



W20-3



M4-8
M3-2
M1-4
M6-2



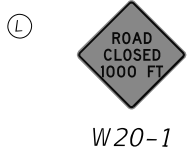
M4-8
M3-2
M1-4
M6-3



M4-8
M3-1
M1-5
M6-3



M4-8
M3-2
M1-4
M6-1



W20-1



M4-8
M3-4
M1-5
M6-3



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: MAINTENANCE OF TRAFFIC
DETOUR MAP - WENDELL FORD

WENDELL FORD EXPRESSWAY

ITEM NO. 030B00071N COUNTY OF DAVIESS

SHEET NO.
R3

