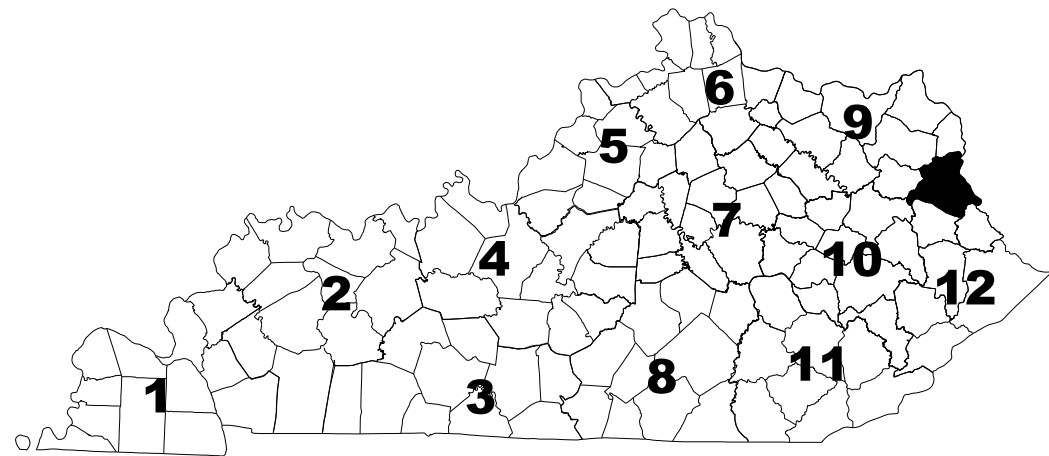


COMMONWEALTH OF KENTUCKY

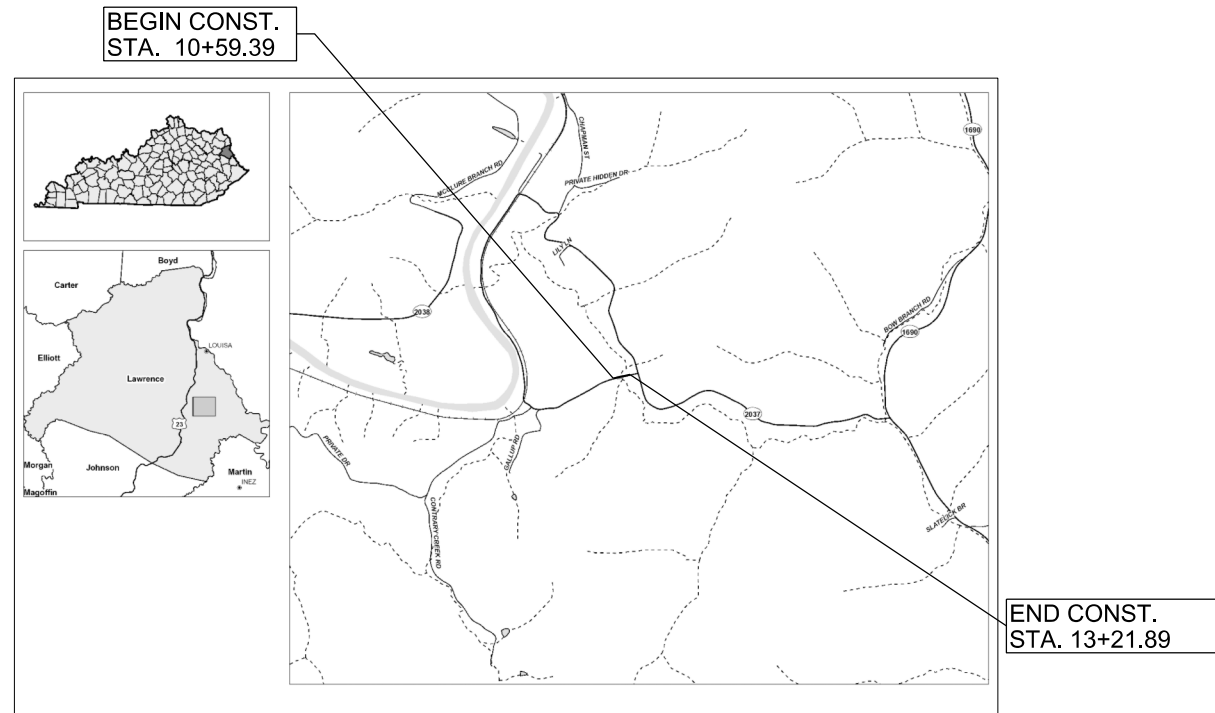
DEPARTMENT OF HIGHWAYS

PLANS OF PROPOSED PROJECT LAWRENCE COUNTY

KY 2037 OVER GRIFFIN CREEK
STA. 10+59.39 TO STA. 13+21.89



THIS PROJECT IS OFF THE NH SYSTEM



LAYOUT MAP

THE CONTROL OF ACCESS ON THIS
PROJECT SHALL BE BY PERMIT

REV. NO.	SHEETS REVISED	DATE
TABLE OF REVISIONS		
DESIGN CRITERIA		
CLASS OF HIGHWAY	RURAL LOCAL	
TYPE OF TERRAIN	ROLLING	
DESIGN SPEED	NA	
REQUIRED NPSD	NA	
REQUIRED PSD	NA	
LEVEL OF SERVICE	NA	
ADT PRESENT (2021)	384	
ADT FUTURE (NA)	NA	
DHV	NA	
D %	NA	
T %	NA	
GEOGRAPHIC COORDINATES		
LATITUDE	38 DEGREES 00 MINUTES 57 SECONDS NORTH	
LONGITUDE	82 DEGREES 36 MINUTES 50 SECONDS WEST	
DESIGNED		
% RESTRICTED SD	NA	
LEVEL OF SERVICE	NA	
MAX. DISTANCE W/O PASSING	NA	

INDEX OF SHEETS

R1 LAYOUT SHEET
R2 TYP. SECTIONS AND COORD. CONTROL
R3 GENERAL, MOT AND SPECIAL NOTES
R4 - R5 LEGEND
S1 ROADWAY PLAN AND PROFILE SHEETS
S2 GENERAL NOTES
S3 LAYOUT
S4 TYPICAL SECTION
S5 SUBSTRUCTURE DETAILS
S6 SUPERSTRUCTURE CONSTRUCTION ELEVATIONS

SPECIFICATIONS

Standard Specifications for Road and Bridge Construction, Current Edition
AASHTO LRFD Bridge Construction Specifications With Current Interims

STANDARD DRAWINGS		ACTIVE SEPIAS		SPECIAL NOTES	SPECIAL PROVISIONS
BDP-001-06	Beam General Notes and References			Concrete Sealing	69 Embankment at Bridge End Bent Structures
BDP-002-03	Box Beam Bearing Details			Concrete Patching Repair	
BDP-003-03	Box Beam Miscellaneous Details			Epoxy Injection Crack Repair	
BDP-004-04	Box Beam Tension Rod Details			Over the Side Drainage and MGS Railing	
BDP-006-05	Box Beam B12 & CB12 Details			Traffic Control on Bridge Repair Contracts	
BDP-007-05	Box Beam B17 & CB17 Details			Sediment Prevention and Erosion Control	
BGX-006-10	Stencils for Structure			Foundation Preparation	
BHS-011	Railing System Side Mounted MGS Details			Seasonal Tree Clearing Restriction	
BJE-001-14	Armored Edges	RBR-001-13	Steel Beam Guardrail ("W" Beam)	Additional Environmental Commitments	
BGX-012-02	Geotechnical Legend	RBR-005-11	Guardrail Components	Contract Completion Date and Liquefied Damages	
BGX-022	Joint Waterproofing	RBR-010-06	Guardrail Terminal Sections	on Bridge Repair Contracts	
RGX-100-07	Treatment of Embankments at End-Bents	RBR-015-06	Steel Guardrail Posts	Concrete Coating	
RGX-105-09	Treatment of Embankments at End-Bents - Details	RBR-018	Guardrail System Transition		
RBI-001-12	Typical Guardrail Installations	RBR-055-01	Delineators for Guardrail		
RBI-002-07	Typical Guardrail Installations				

PROJECT NUMBER: VM D12 064B00069N

EXISTING BRIDGE ID #: 064B00069N

DRAWING NO:

RECOMMENDED BY: PROJECT MANAGER DATE:

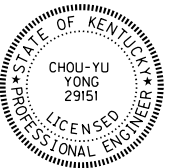
PLAN APPROVED BY: STATE HIGHWAY ENGINEER DATE:

Michael Baker
INTERNATIONAL



FOR ROADWAY SHEETS

Michael Baker
INTERNATIONAL

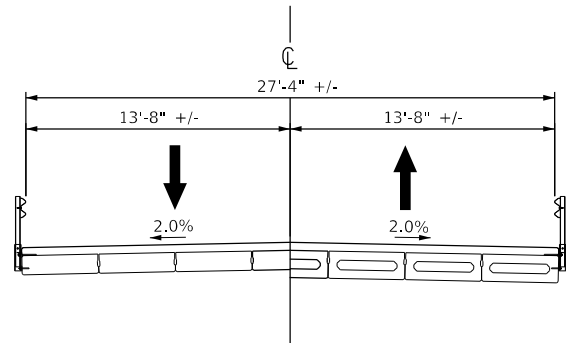


FOR BRIDGE SHEETS

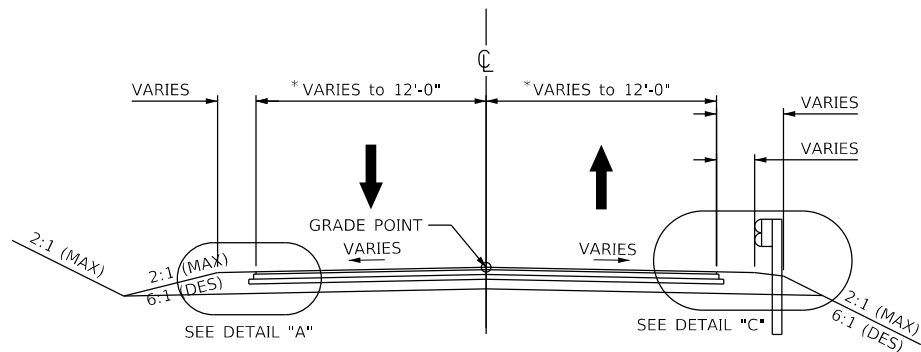
LETTING DATE: 2/23/2023

ITEM NO. 12-10115 COUNTY OF LAWRENCE

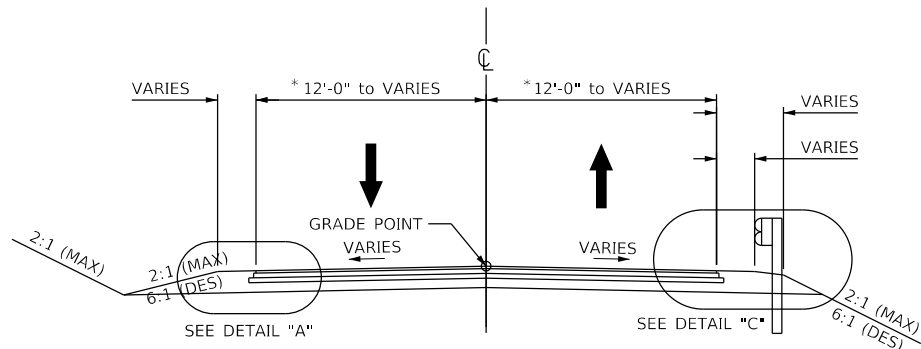
SHEET NO. R1



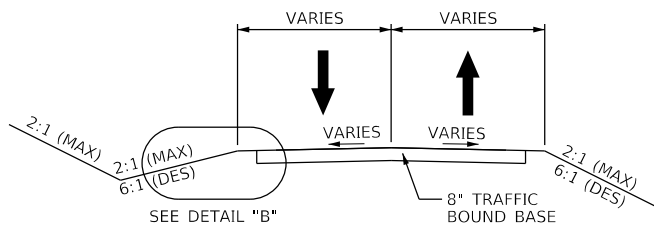
KY 2037
STA 11+39.56 TO STA 12+41.72



KY 2037
STA 10+90.00 TO 11+39.56
* MATCHES PAVEMENT WIDTH AT TIE-IN TO EXISTING

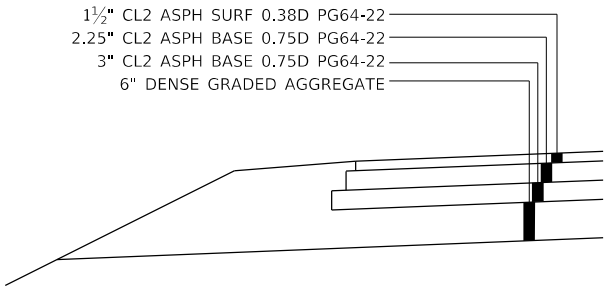


KY 2037
STA 12+41.72 TO 12+83.00
* MATCHES PAVEMENT WIDTH AT TIE-IN TO EXISTING



ENTRANCE TYPICAL SECTION

COORDINATE CONTROL POINTS						
CP NUMBER	TYPE	Northing (Y)	Easting (X)	Elevation (Z)	Station	Offset
1	CP (PK Nail & Washer)	3,908,591.34	5,824,335.59	571.177	10+28.70	10.72 RT
2	CP (PK Nail & Washer)	3,908,721.28	5,824,793.23	588.826	15+03.75	14.68 LT

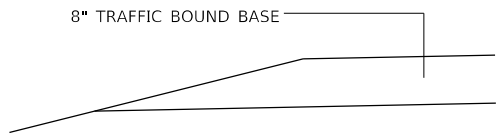


KY 2037			
NAME	Station	Northing (Y)	Easting (X)
START	10+00.00	3,908,595.440	5,824,305.226
END	13+80.67	3,908,679.714	5,824,676.449

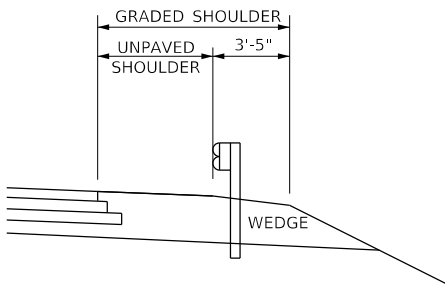
DETAIL "A" - KY 2037 PAVEMENT DESIGN

ASPHALT SEAL REQUIRED FROM EDGE OF PAVEMENT TO A POINT 2' DOWN THE DITCH OR FILL SLOPE.

BITUMINOUS SEAL-TWO APPLICATIONS OF THE FOLLOWING:
ASPHALT SEAL COAT 2.4 LB/SY
ASPHALT SEAL AGGREGATE 20 LB/SY



DETAIL "B"



DETAIL "C" - GUARDRAIL INSTALLATION

SHOULDERS SHALL BE WIDENED 3 FEET 5 INCHES WHERE GUARDRAIL IS TO BE INSTALLED ALLOWING FOR 2 FEET OF FILL BEHIND THE POSTS. IF IT IS NOT PRACTICAL TO WIDEN SHOULDER BY 2 FEET, THEN LONGER POSTS MAY BE USED.

ASPHALT SEAL REQUIRED FROM EDGE OF PAVEMENT TO A POINT 2' DOWN THE DITCH OR FILL SLOPE.

BITUMINOUS SEAL-TWO APPLICATIONS OF THE FOLLOWING:
ASPHALT SEAL COAT 2.4 LB/SY
ASPHALT SEAL AGGREGATE 20 LB/SY

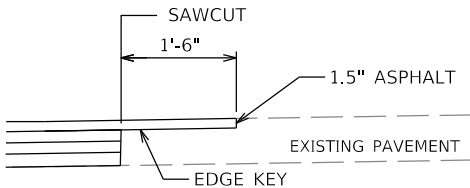
BASIS OF ELEVATIONS

Elevations were derived from GPS methods and are adjusted to the NAVD88 Vertical Datum. Geoid model used was Geoid18.

COORDINATE SYSTEM

Coordinates for horizontal control were obtained from GPS methods and adjusted to the National NAD83/FBN System.

Coordinates are based on State Plane Coordinate System Single Zone and in U.S. Survey Feet.



DETAIL "D" - EDGE KEY



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: RHolbert

DRAWING TITLE: TYPICAL SECTIONS AND COORDINATE CONTROL

ITEM NO. 12-10115 COUNTY OF LAWRENCE

SHEET NO. R2

OpenRoads Designer v10.16.2.267

FILE NAME: C:\PW\WORKING\JMT\D0529680\064B00069N_PLAN BORDER.DGN

GENERAL NOTES

DIVISION 100 -- GENERAL PROVISIONS

165 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 FAVILITIES 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.

DIVISION 400 -- ASPHALT PAVEMENTS

448 COMPACTION OF ASPHALT MIXTURES

WILL ACCEPT THE COMPACTION OF ASPHALT MIXTURES FURNISHED ON THIS PROJECT BY OPTION B ACCORDING TO SUBSECTIONS 402.03.02 AND 403.03.10 OF THE STANDARD SPECIFICATIONS.

448 EDGE KEY

THIS WORK INCLUDES CUTTING OUT THE EXISTING ASPHALT SURFACE TO A MINIMUM DEPTH AND WIDTH AS DETAILED IN THE PLANS SO THAT THE NEW SURFACE MAY HEEL INTO THE EXISTING SURFACE. THE CONTRACT UNIT PRICE BID LINEAR FOOT FOR "EDGE KEY" INCLUDES ALL NECESSARY MATERIALS, LABOR AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND DISPOSE OF THE REMOVED ASPHALT MATERIAL.

DIVISION 600 -- STRUCTURES AND CONCRETE

650 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 ADMINSTRATIVE SERVICES IN FRANKFORT, KY. AT (502)564-4610

SPECIAL MAINTENANCE OF TRAFFIC NOTES

SEE SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS.

A DETOUR IS TO BE UTILIZED WITH THE CLOSING OF KY 2037 FOR THE SUPERSTRUCTURE REPLACEMENT. KY 2037 IS A LOOP ROAD THAT CONTAINS THE BRIDGE. DETOUR FROM EITHER SIDE OF THE BRIDGE WILL BE VIA KY 2037.

ROAD CLOSURES WILL OCCUR EAST AND WEST OF THE BRIDGE.

DETOUR AND SIGNING PLAN SHALL BE COMPLETED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

ROAD CLOSURE DURATION IS 60 DAYS.

THE CONTRACTOR SHALL COORDINATE WITH LAWRENCE COUNTY PUBLIC SCHOOLS, LOCAL FIRST RESPONDERS, AND THE KYTC DISTRICT 12 PUBLIC INFORMATION OFFICER PRIOR TO SCHEDULING THE ROAD CLOSURE. EVIDENCE OF COORDINATION SHALL BE PROVIDED IN WRITING TO THE ENGINEER.

MOT GENERAL NOTES

1. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE STANDARD DRAWINGS, CURRENT EDITIONS.
2. EXCEPT FOR THE ROADWAY AND TRAFFIC CONTROL BID ITEMS LISTED, ALL ITEMS OF WORK NECESSARY TO MAINTAIN AND CONTROL TRAFFIC WILL BE PAID AT THE LUMP SUM BID PRICE TO "MAINTAIN AND CONTROL TRAFFIC" AS SET FORTH IN THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE LUMP SUM BID TO "MAINTAIN AND CONTROL TRAFFIC" SHALL ALSO INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS AND OPERATIONS:

A. ALL LABOR AND MATERIALS NECESSARY FOR CONSTRUCTION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES.

B. ALL TRAFFIC CONTROL DEVICES SUCH AS, BUT NOT LIMITED TO, FLASHERS, SIGNS AND VERTICAL PANELS, PLASTIC DRUMS (STEEL DRUMS WILL NOT BE PERMITTED) AND CONES NECESSARY FOR THE CONTROL AND PROTECTION OF VEHICULAR TRAFFIC AS SPECIFIED IN THESE NOTES, THE PLANS, THE MUTCD OR THE ENGINEER.
3. ANY TEMPORARY TRAFFIC CONTROL ITEMS, DEVICES, MATERIALS AND INCIDENTALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR WHEN NO LONGER NEEDED.
4. ALL SIGNS NECESSARY FOR A MARKED DETOUR WILL BE PROVIDED BY THE CONTRACTOR AS REQUIRED BY STANDARD DRAWINGS AND THE MUTCD.

SPECIAL NOTES

THE CONTRACTOR IS ADVISED THAT THE EARTHWORK CALCULATIONS SHOWN BELOW ARE FOR INFORMATION ONLY. ASSUMPTIONS FOR SHRINKAGE AND SWELL FACTORS ARE THE CONTRACTOR'S RESPONSIBILITY.

TOTAL EXCAVATION: 108 CY
TOTAL EMBANKMENT: 14 CY



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: GENERAL, MOT AND SPECIAL NOTES

ITEM NO. 12-10115	COUNTY OF LAWRENCE
SHEET NO. R2A	

Corporate Limits			Main Water Marker		Crash Cushion TY 9		Point (Misc)		Telephone Pedestal	
County Line			Main Water Greater Than 12 Marker		Cross Notch		Pole		Telephone Pole	
Easement			Sewer Sanitary Marker		Curb Box Inlet		Pole (Light)		Temporary Benchmark	
Fence COA			Sewer Sanitary Force Main Marker		Curb Notch		Post		Traffic Light	
Mineral Parcel			Sewer Storm Marker		Combination Pole		Power Pole		Traffic Signal Control Box	
Property Line			Multi Utility Bank Marker		Delineator Post		Quarry		Traffic Signal Junction Box	
Right of Way Line			Oil Line Marker		Drop Box		Random (Ground Shot)		Traffic Signal Pole	
All Overhead Utility Lines			Steam Line Marker		Existing Spring		Railroad Mile Marker		Traverse Point	
Cable Underground Electric With Quality Levels			Cable Guardrail		Electric Manhole		Railroad Spike		Tree	
Duct Underground Electric With Quality Levels			Ditch		Electric Meter		Right of Way Marker		TV Junction Box	
Cable Underground Fiber With Quality Levels			Edge of Water		Electric Pedestal		RR Traffic Signal Pole		Utility Pole	
Cable Underground Telephone With Quality Levels			Fence Hedge		Electric Junction Box		RW Parcel		Underground Storage Tank	
Duct Underground Telephone With Quality Levels			Fence		Fire Hydrant		Sanitary Cleanout		Utility Test Hole	
Cable Underground TV With Quality Levels			Flow Line/Thalweg/ Int. Stream or Ditch		Flag Pole		Sanitary Manhole		Water Line Marker	
Main Gas With Quality Levels			Guardrail		Force Main Sewer Valve		Satellite Dish		Water Meter	
Main Water With Quality Levels			Railroad		Fuel Tank Inlet		Septic Tank Cleanout		Water Spigot	
Main Water Greater Than 12 With Quality Levels			Shrub Line		Fuel Tank Vent		Service Pole		Water Valve	
Sewer Sanitary With Quality Levels			Sink Hole		Gas Meter		Sewer Air Release Valve		Water Well	
Sewer Sanitary Force Main With Quality Levels			Tree Line		Gas Monitoring Well		Shrub		Yard Light	
Sewer Storm With Quality Levels			Wall (WSM or DSM)		Gas Valve		Sign		Yard Sprinkler	
Multi Utility Bank Quality Levels			Blue Line Stream		Gas Vent		Sign Post (Single)		Yard Sprinkler Water Valve	
Oil Line Quality Levels			Lakes and Ponds Regulated Floodway		Gas Well		Sign with 2 posts			
Steam Line Quality Levels			RDZ Line		Guidewires & Anchors		Sign group (4)			
Cable Underground Electric Marker			ADA Ramp		Headstone		Station Stamp			
Duct Underground Electric Marker			Anchor Pole		Interstate Shield		Storm Manhole			
Cable Underground Fiber Marker			Benchmark		Iron Pin		Stub Power			
Cable Underground Telephone Marker			Bike Lane Symbol		Light Pole		Stub Telephone			
Duct Underground Telephone Marker			Bollard		Low Wire		Survey Cross Notch			
Cable Underground TV Marker			Centerline		Mailbox		Survey Curb Notch			
Main Gas Marker			Centerline Stationing		Manhole		Survey Nail			
			Control Monument		Mile Marker Post		Survey Spike			
			Control Point		Mineral Parcel		Survey Stone Marker			
			Core Hole		Misc Location Point		Swamp			
			Crash Cushion TY 6 D		Monitoring Well		Telephone Booth			
			Crash Cushion TY 6 A		Parking Meter		Telephone Junction Box			
			Crash Cushion TY 9A		Pedestrian Signal		Telephone Line Overhead			
					Pins/Pipes		Telephone Manhole			
					PK Nail					

Utility Owners

Big Sandy Water District

18211 State Rt. 3

Catletsburg, KY 41129

Contact: James Blanton

Cell: 606-831-1223

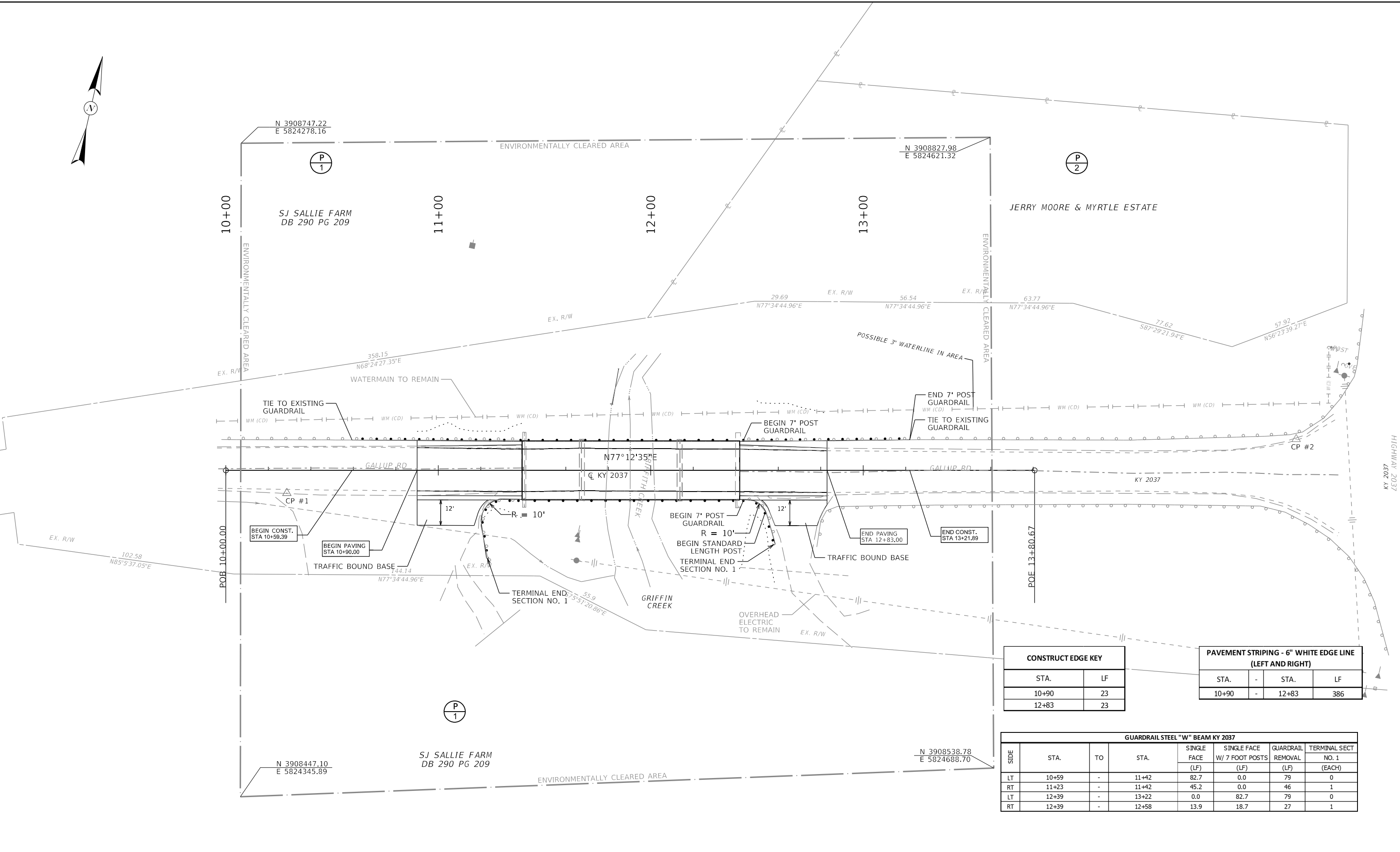
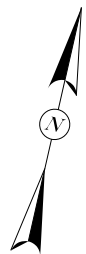
Kentucky Power Company

1(800) 572-1113

Bruin Exploration LLC

421 West Main St

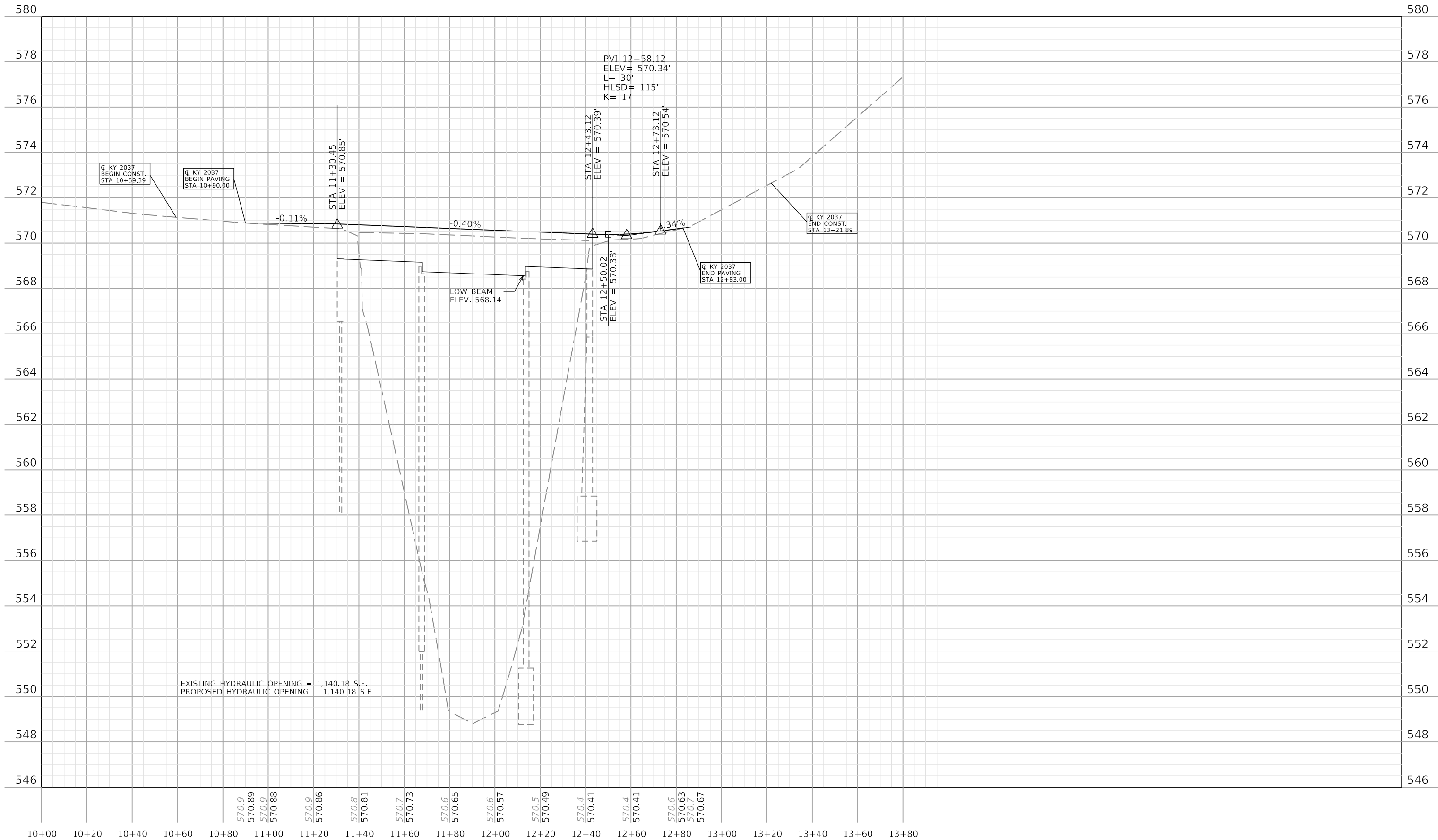
Frankfort, KY 40601



CONSTRUCT EDGE KEY	
STA.	LF
10+90	23
12+83	23

PAVEMENT STRIPING - 6" WHITE EDGE LINE (LEFT AND RIGHT)			
STA.	-	STA.	LF
10+90	-	12+83	386

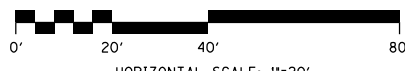
GUARDRAIL STEEL "W" BEAM KY 2037							
SIDE	STA.	TO	STA.	SINGLE FACE	SINGLE FACE	GUARDRAIL	TERMINAL SECT
				(LF)	W/ 7 FOOT POSTS (LF)	REMOVAL (LF)	NO. 1 (EACH)
LT	10+59	-	11+42	82.7	0.0	79	0
RT	11+23	-	11+42	45.2	0.0	46	1
LT	12+39	-	13+22	0.0	82.7	79	0
RT	12+39	-	12+58	13.9	18.7	27	1



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: KY 2037 PROFILE SHEET



HORIZONTAL SCALE: 1"=20'



VERTICAL SCALE: 1"=2'

KY 2037
STA 10+59.39 TO STA 13+21.89

ITEM NO. 12-10115 COUNTY OF LAWRENCE
SHEET NO. R5

GENERAL NOTES

SPECIFICATIONS: References to the Specifications are to the current Edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction including any current supplemental Specifications. All references to the AASHTO Specifications are to the current edition of the AASHTO LRFD Bridge Construction Specifications, with Interims.

DESIGN LOAD: This superstructure is designed for KY HL-93 Live Load, (i.e. 1.25x AASHTO HL-93 live load). This bridge is designed for a future wearing surface of 15 psf.

DESIGN METHOD: All New reinforced concrete members are designed to be equivalent or greater than the load and resistance factor design method as specified in the current AASHTO Specifications.

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 expeditiously performed after a Contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. All claims resulting from the site conditions will not be honored by the Department of Highways.

VERIFYING FIELD CONDITIONS: The Contractor is not to order any materials, produce any shop drawings, or begin any construction activities until after verifying dimensions and conditions in the field. Dimensions and details shown on these Plans in relation to the existing structure shall be considered approximate. Existing plans, if available, shall not be considered accurate. It shall be the Contractor's responsibility to verify such dimensions and details in the field and to notify the Project Engineer and the Designer of any differences. Failure to notify either may delay drawing and other approvals. Thereafter make the necessary approved adjustments prior to construction or ordering materials. All Specifications requirements shall remain in effect. Any variations shall not be cause for additional compensation for a change in scope of work; however, the Contractor will be paid for the quantity furnished at the unit price bid for the work. In addition, the overrun and underrun formulas may be applied to appropriate repairs provided that the requirement of Article 104.02.02 of the Standard Specifications is satisfied. The cost of all labor, equipment, surveying, and materials necessary to verify field dimensions shall be included in the lump sum price for "Staking".

PLANS OF EXISTING STRUCTURE: Plans of the existing structure are available as an aid to the contractor and shall be used to supplement details not shown on the plans. The completeness of these drawings is not guaranteed and no responsibility is assumed by KYTC for their accuracy. Originals plans included: KY 2037 over Griffin Creek Drawing Number 20832.

CONSTRUCTION LOAD: The Contractor shall abide by the posted bridge limits. Storage of material on the bridge is prohibited.

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.

UTILITIES: Before beginning work, locate all existing utilities. Consider location of utilities shown on the drawings to be approximate and for informational purposes only. The Department does not warrant the locations and assumes no responsibility for the accuracy or completeness. The Contractor must make his own determination. Except as shown on the Plans, work around and do not disturb existing utilities.

DAMAGE OUTSIDE CONSTRUCTION LIMITS: Any area used outside the archaeology cleared area shall obtain full environmental approvals prior to use. Once cleared, any area that is disturbed outside of the limits of the construction during the life of the project shall be repaired by the Contractor at his expense, should any damage result from the Contractor's actions.

DAMAGE TO THE STRUCTURE: The Contractor shall bear full responsibility and expense for repair of any and all damage to the structure, should such damage result from the Contractor's actions. 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. 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.

STAKING: Construction staking, if required, shall be incidental to the project.

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

REMOVE SUPERSTRUCTURE: This pay item for "Remove Superstructure" shall consist of the removal of the superstructure (beams) and partial removal of the cheekwalls. The existing abutment, pier, intermediate bent, end bent and cheekwalls shall remain in place to be reused in the rehabilitated structure. Care shall be exercised not to damage areas of remaining concrete or reinforcing steel during concrete removal operations.

Remove concrete by means of approved pneumatic hammers employing pointed and blunt chisel tools. Hydraulic hoe-ram type hammers will not be permitted. The weight of the hammer shall not be more than 35 pounds for removal within 18 inches of portions to be preserved. Outside the 18 inch limit, the Contractor may use hammers not exceeding 90 pounds upon the approval of the Engineer. Do not place pneumatic hammers in direct contact with reinforcing steel that is to be retained. Care shall be taken to not damage bond to adjacent non-exposed reinforcing steel during concrete removal processes. The perimeter of all areas where concrete is removed shall be tapered at an approximately 45° angle, except that the outer edges of all chipped areas shall be saw cut to minimum depth of 1 inch to prevent feather edging unless otherwise approved by the Engineer. After all concrete has been removed, the repair surface shall be prepared by abrasive blast cleaning. Abrasive blast cleaning shall remove all fractured surface concrete and all traces of any unsound material or contaminants such as oil, grease, dirt, slurry, or any materials which could interfere with the bond of freshly placed concrete. The Contractor shall dispose all removed material off state right of way in an approved site.

DISPOSAL OF MATERIALS: All materials and debris removed from or beneath the bridge shall become the property of the Contractor and shall be removed from the right-of-way.

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 for the work involved and otherwise considered incidental to the Contract. This may include cofferdams, shoring, excavations, backfilling, removal of all or parts of the existing structure, phase construction, incidental materials, labor, or anything else required to complete the structure.

BEFORE YOU DIG: The Contractor shall be responsible for all requirements and conformation with the Underground Facility Damage Prevention Act of 1994. The Contractor will be responsible for locating any utilities on this project. All underground utilities shall be located prior to construction. Any utilities disturbed or damaged as a result of the Contractor's operations will be repaired to the satisfaction of the utility owner at the Contractor's expense. The Contractor is advised to call (800) 752-6007 a minimum of two working days prior to excavation for information on the location of some, but not necessarily all underground utilities.

MATERIALS FOR DESIGN SPECIFICATIONS:
For Class "AA" Concrete: F'C = 4,000 psi
For Steel Reinforcement: FY = 60,000 psi

The Specifications, Current Edition, as designated below shall govern the following materials furnished:

Material	Specification
Grout	ASTM C1107

CONCRETE: Class "AA" Concrete is to be used throughout the superstructure and in the portions of the substructure above the tops of caps. Prestressed beam concrete shall be in accordance with the plans and specifications.

SUPERSTRUCTURE SLAB: The superstructure slab shall be poured continuously from end to end of slab before the concrete is allowed to set.

REINFORCEMENT: Dimensions shown from the face of concrete to bars are to center of bars unless otherwise shown. Clear distance to face of concrete is 2" unless otherwise noted. Spacing of bars is from center to center of bars. Any reinforcing bars designated by 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.

EXISTING STEEL REINFORCEMENT: The cost of cutting, bending, and cleaning existing steel reinforcement shall be incidental to the repair item being completed.

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

CONCRETE SEALER: Apply concrete sealer in accordance with the Special Note for Concrete Sealing.

CONCRETE COATING: Apply concrete coating in accordance with the Special Note for Concrete Coating. Concrete coating is estimated at 292 SF. It is the responsibility of the Contractor to verify this estimate and bid accordingly. no payment adjustments will be had if the actual quantity is different than the estimate.

DRIP STRIP: When metal bridge rail is proposed without a curb, install drip strips in accordance with the Special Note for Structures With Over the Side Drainage and MGS Railing.

TEMPORARY SUPPORTS: Temporary Supports or shoring will not be permitted under the beams when pouring the concrete deck slab or when taking "top of beam" elevations.

ARMORED EDGE: Fabricate armored edge to match cross slope and parabolic crown at each end of bridge.

PREFORMED CORK EXPANSION JOINT MATERIAL: Preformed Cork Expansion Joint Material shall conform to subsection 807.04.02 (Type II) of the Kentucky Department of Highways Standard Specifications.

PAYMENT FOR PRECAST CONCRETE BEAMS: The basis of payment for the Prestressed Concrete Beams shall be at the contract unit price per linear foot of beam, in accordance with the specifications.

WORKING DRAWINGS: Working drawings for temporary work shall follow the same procedures as outline for shop drawings.

SHOP DRAWINGS: The fabricator shall submit all required shop plans, by e-mail to SHOP_064B00069N@docs.e-Builder.net, for review. These submissions shall depict the shop plans in .PDF format, as either 11"x17" or 22"x36" sheets. When any changes to the design plans are proposed, the shop drawings shall identify the proposed changes with revision clouds and notes. Designers will make review comments on these electronic submissions as needed and, if required, shall return them to the fabricator for corrections and resubmittal. Upon acceptable reconciliation of all comments, files shall be sent to the Bridge Program GEC Shop Plan Coordinator for distribution. Only plans submitted directly to the Shop Plan Coordinator will be distributed. Additionally, only plans electronically stamped "Distributed by The Bridge Program GEC Team" are to be used for fabrication.

MASTIC TAPE: Apply mastic tape at bridge in accordance with Standard Drawing BGX-022, c.e. The Contractor shall furnish all plans, equipment, and labor necessary to do the work for which no direct payment will be made.

STRUCTURE GRANULAR BACKFILL: Materials for Structure Granular Backfill shall be in accordance with Section 805 of the Specifications.

FOUNDATION PREPARATION: Foundation Preparation shall be in accordance with the Special Note for Foundation Preparation.

Foundation excavations should be properly braced/shored to provide adequate safety to persons working in or around excavations. Bracing should be performed in accordance with applicable federal, state and local guidelines. Temporary shoring, sheeting, cofferdams, and/or dewatering methods may be required to facilitate foundation construction. It should be anticipated that groundwater will be encountered at foundation locations within the flood plain.

Temporary shoring, bracing, sheeting, cofferdams and dewatering shall be included in the Lump Sum Bid for Foundation Preparation.

SAWCUTTING EXISTING CONCRETE: Prior to the removal of the existing concrete masonry, cut the surface with a concrete saw to a depth of one inch to facilitate a neat line. The cost of cutting concrete shall be included in the unit price bid for "Remove Superstructure" per Roadway Quantities.

SUBSTRUCTURE REPAIR: If Substructure repairs are required, repairs shall be made in accordance with the Special Note for Concrete Patching and the Special Note for Epoxy Injection Crack Repair.

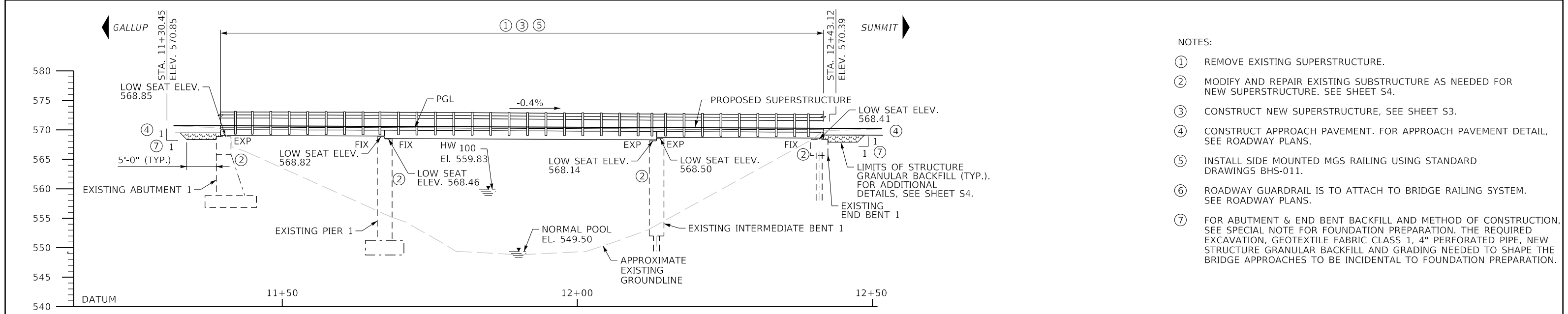
COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	<div>PREPARED BY Michael Baker INTERNATIONAL</div> <div>1650 Lyndon Farm Ct, Suite 101 Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM</div>	DATE:	CHECKED BY:	GENERAL NOTES	ROUTE KY 2037	ITEM NO. 12-10115	COUNTY OF LAWRENCE
				DESIGNED BY: C.Y. YONG	C. LARKIN			SHEET NO. S1	DRAWING NUMBER 28662
				DETAILED BY: R. HOLLEY	C.Y. YONG	CROSSING GRIFFIN CREEK			

OpenRoads Designer v10.16.2.267

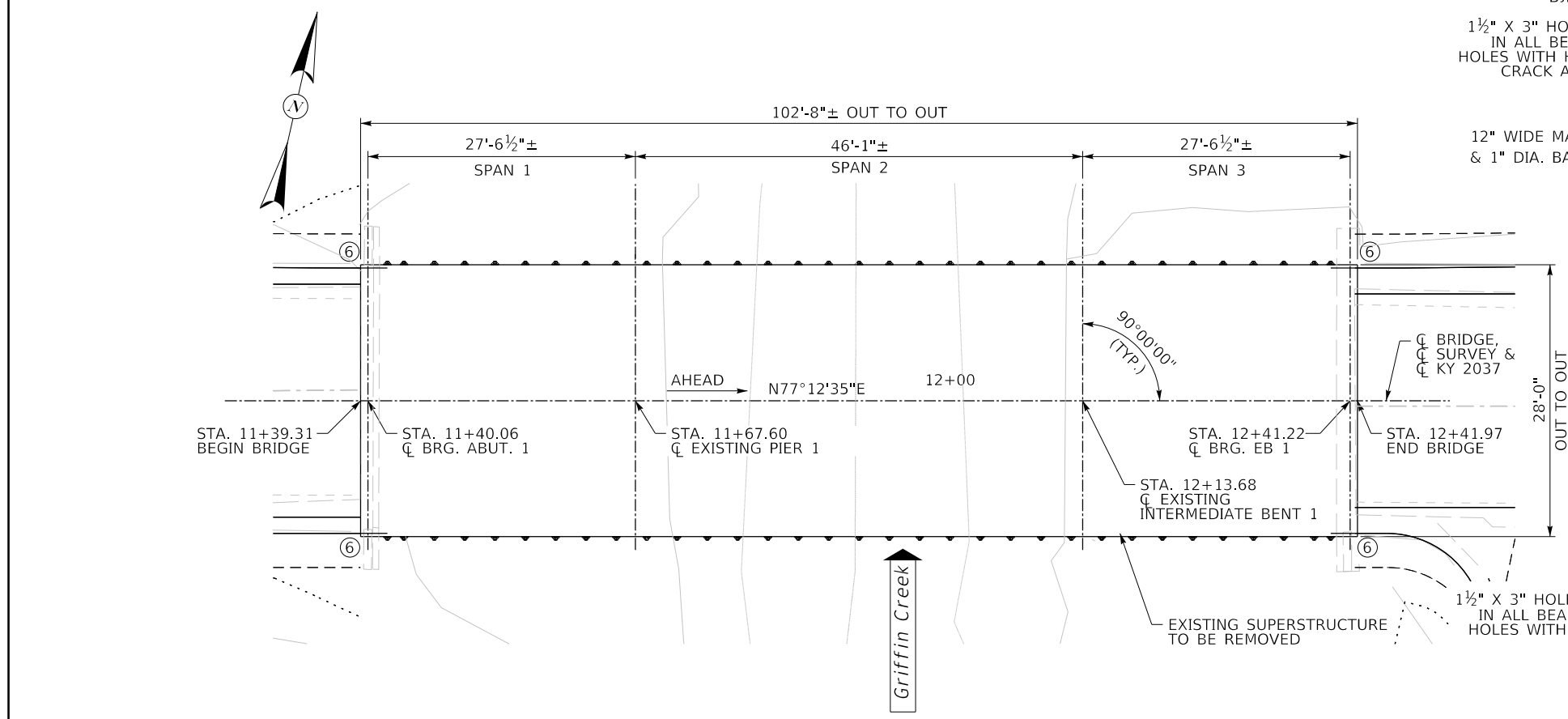
USER: Ricky.Holley

DATE PLOTTED: 15-DEC-2022

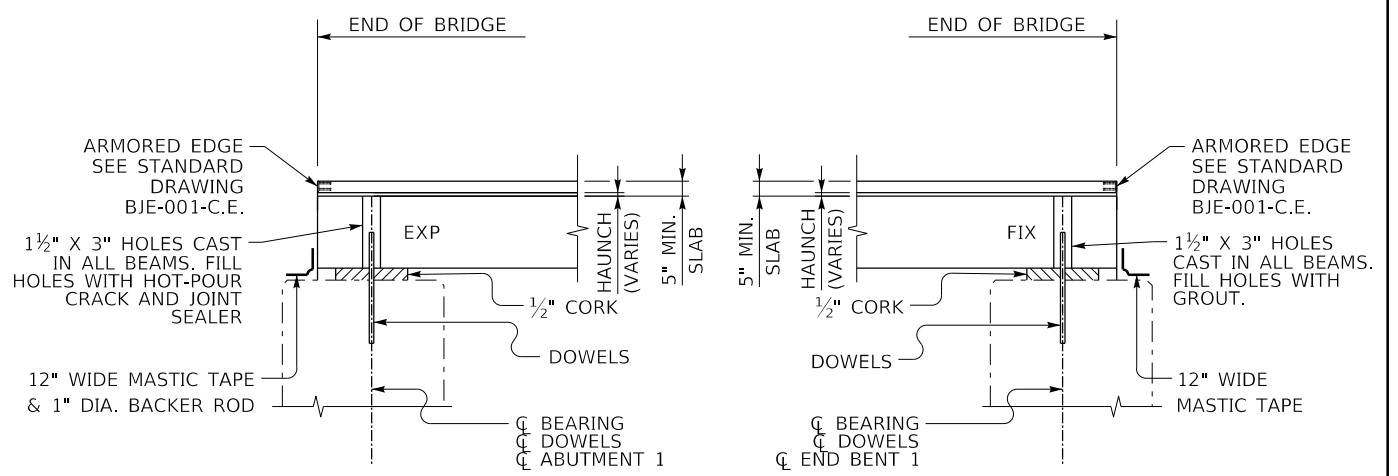
FILE NAME: pw://jmt-pw.bentley.com:jmt-pw-01/Documents/Projects/2022/22-01580-001/012230-04/064B00069N/Structures/2D Drawing/General Notes.dgn



ELEVATION
(FIELD VERIFY ALL DIMENSIONS)
(GUARDRAIL OFF BRIDGE NOT SHOWN)
3 SIMPLE SPAN 27'-6½", 46'-1", 27'-6½" CB12X48 (SPAN 1 & 3),
CB17X48 (SPAN 2) KY HL-93 LOADING
0° SKEW, 27'-4" BRIDGE ROADWAY WIDTH

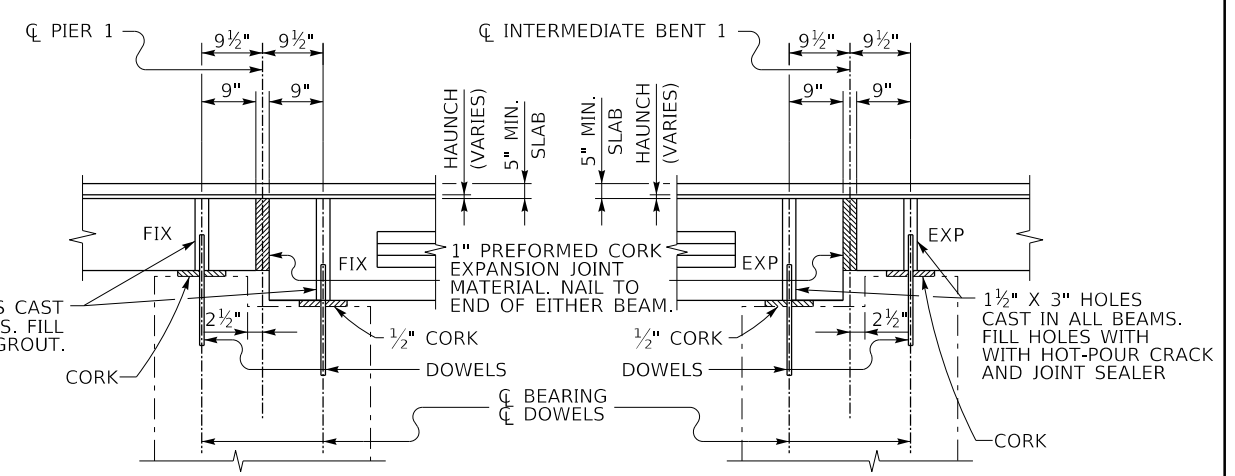


PLAN
(FIELD VERIFY ALL DIMENSIONS)



ABUTMENT 1 BEARING DETAIL
(NOT TO SCALE)

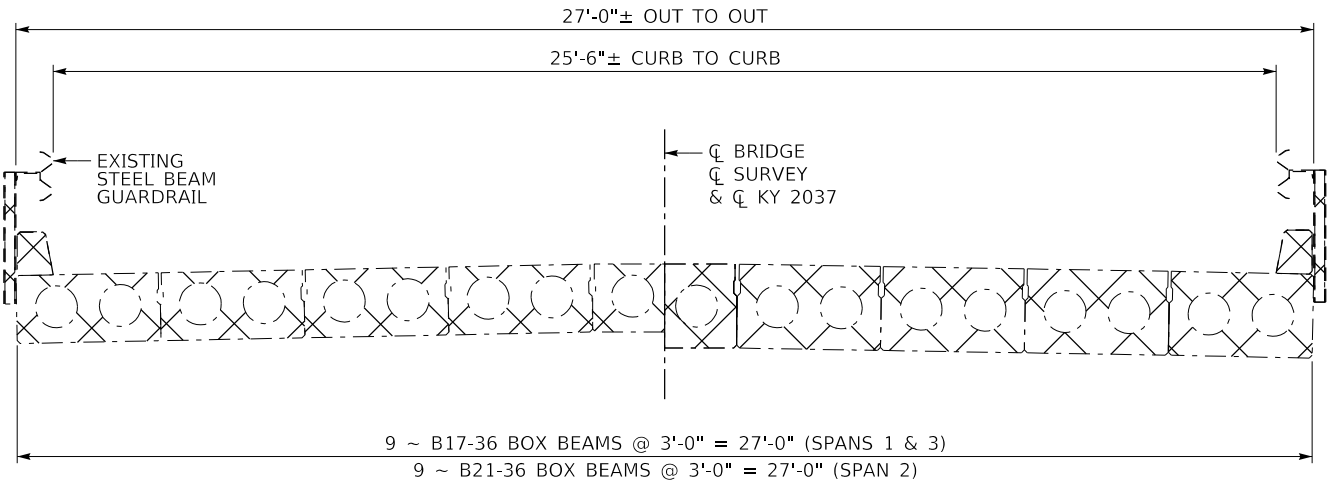
END BENT 1 BEARING DETAIL
(NOT TO SCALE)



PIER 1 BEARING DETAIL
(NOT TO SCALE)

INTERMEDIATE BENT 1 BEARING DETAIL
(NOT TO SCALE)

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY Michael Baker INTERNATIONAL 1650 Lyndon Farm Ct, Suite 101 Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DATE:	CHECKED BY	LAYOUT CROSSING GRIFFIN CREEK	ROUTE KY 2037	ITEM NO. 12-10115	COUNTY OF LAWRENCE
				DESIGNED BY: C.Y. YONG	C. LARKIN			SHEET NO. S2	DRAWING NUMBER 28662
				DETAILED BY: R. HOLLEY	C.Y. YONG				



EXISTING TYPICAL SECTION
(FIELD VERIFY ALL DIMENSIONS)

NOTES:

1. REPLACE EXISTING SUPERSTRUCTURE WITH (7) PRECAST BOX BEAMS AND REINFORCED CONCRETE SLAB.
2. APPLY CONCRETE SEALING TO PROPOSED BEAMS AND SLAB PER SPECIAL NOTE.
3. CONTRACTOR INSTALL DRIP STRIPS ALONG BOTH SIDES OF THE BRIDGE, PER SPECIAL NOTE.

BOX BEAM NOTES:

1. FOR SPAN 1 AND 3, BOX BEAMS SHALL BE FABRICATED IN ACCORDANCE WITH STANDARD DRAWING BDP-006-C.E., AS TABULATED FOR A 30'-0". THE SPAN LENGTH SHALL MATCH THE EXISTING CONDITIONS.

ESTIMATED PRECAST LENGTH = 28'-3"

ESTIMATED BEARING TO BEARING LENGTH = 26'-9".


2. FOR SPAN 2, BOX BEAMS SHALL BE FABRICATED IN ACCORDANCE WITH STANDARD DRAWING BDP-007-C.E., AS TABULATED FOR A 46'-0". THE SPAN LENGTH SHALL MATCH THE EXISTING CONDITIONS.

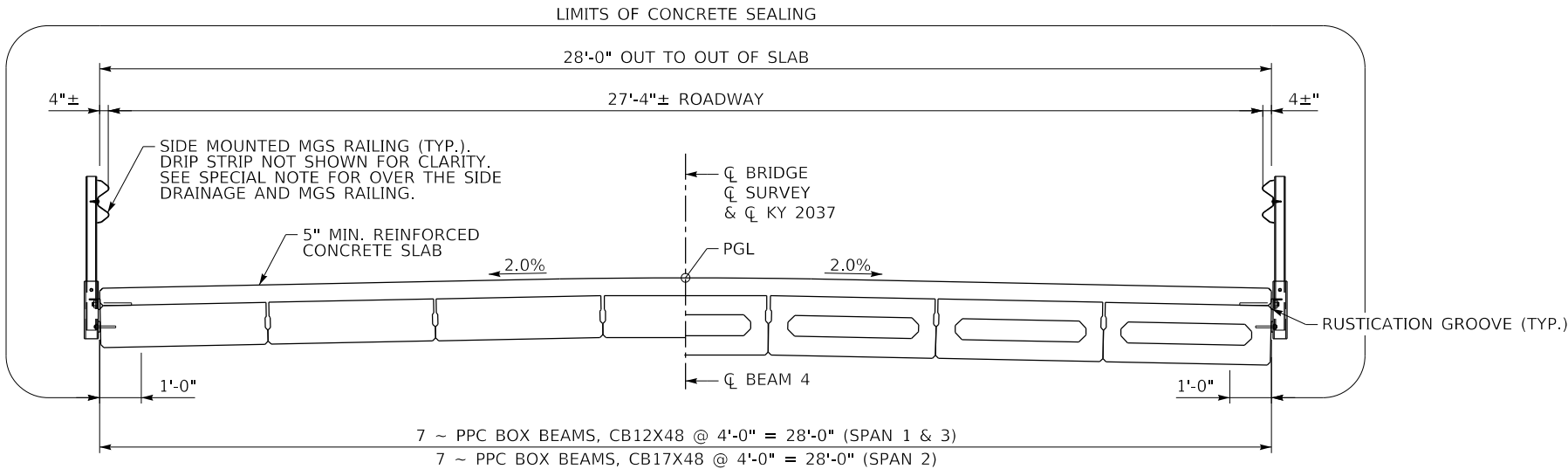
ESTIMATED PRECAST LENGTH = 46'-0"

ESTIMATED BEARING TO BEARING LENGTH = 44'-6".

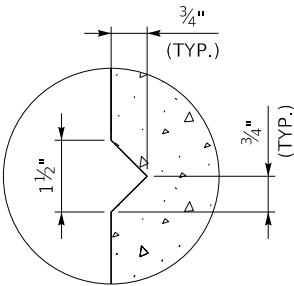
3. BOX BEAMS SHALL BE INSTALLED AS SHOWN AND IN COMPLIANCE WITH STANDARD DRAWINGS BDP-001-C.E., BDP-002-C.E., BDP-003-C.E., BDP-004-C.E., BDP-006-C.E. AND BDP-007-C.E.

LEGEND:

 REMOVAL AREA

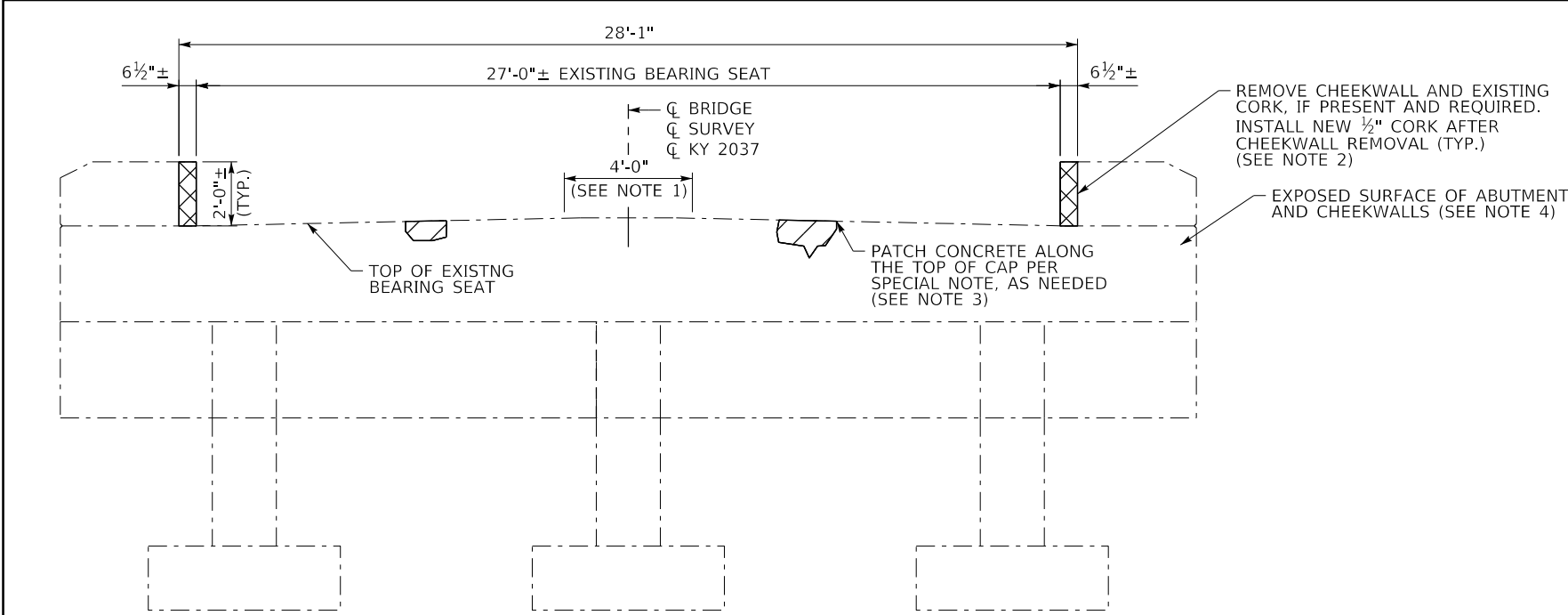


TYPICAL SECTION
(LOOKING AHEAD STATION)



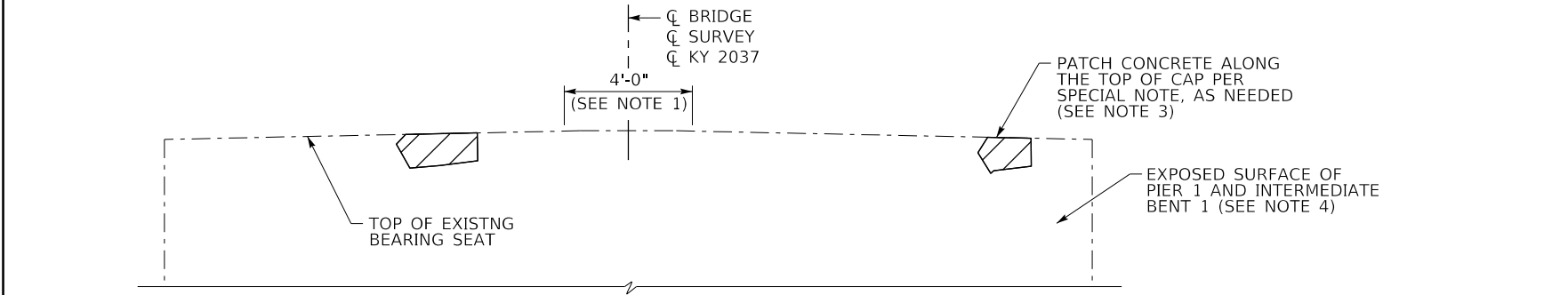
RUSTICATION GROOVE

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY 1650 Lyndon Farm Ct, Suite 101 Michael Baker Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM INTERNATIONAL	DATE:	CHECKED BY:	TYPICAL SECTION	ROUTE KY 2037	ITEM NO. 12-10115	COUNTY OF LAWRENCE
				DESIGNED BY: C.Y. YONG	C. LARKIN			SHEET NO. S3	DRAWING NUMBER 28662
					DETAILED BY: R. HOLLEY	C.Y. YONG	CROSSING GRIFFIN CREEK		

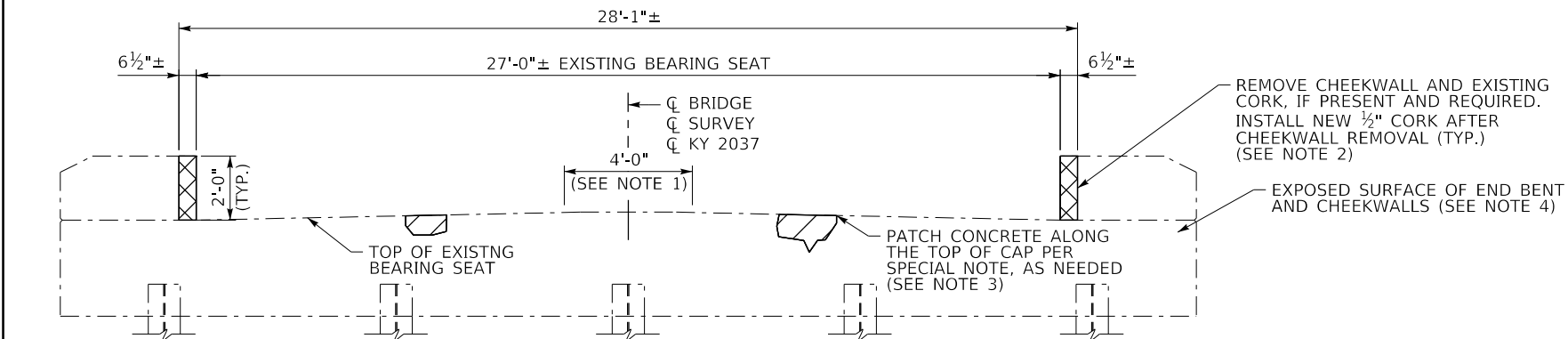


ABUTMENT 1 - ELEVATION

(FIELD VERIFY ALL DIMENSIONS)
(SUPERSTRUCTURE NOT SHOWN FOR CLARITY)



PIER 1 AND INTERMEDIATE BENT 1 - ELEVATION

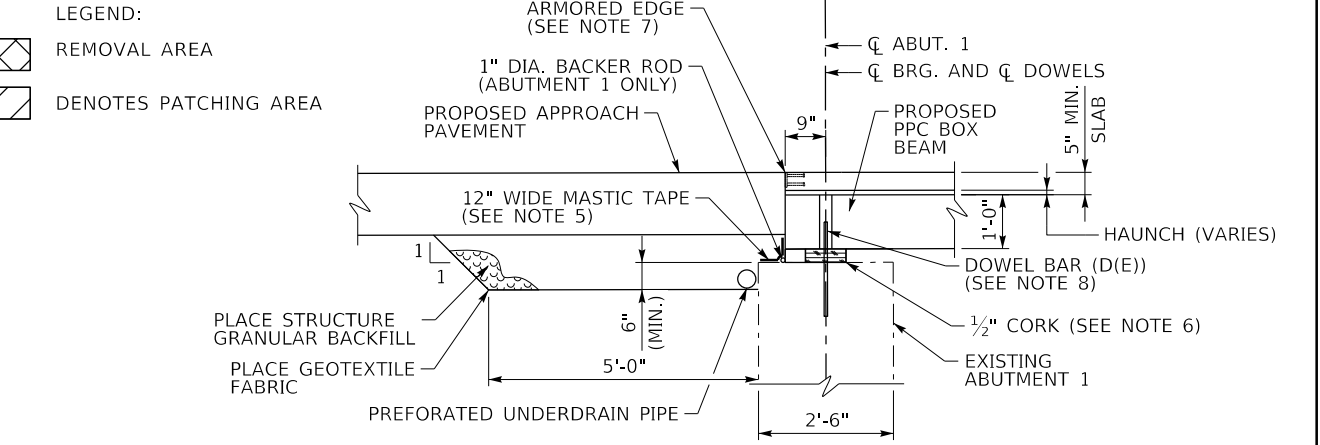


END BENT 1 - ELEVATION

(FIELD VERIFY ALL DIMENSIONS)
(SUPERSTRUCTURE NOT SHOWN FOR CLARITY)

NOTES:

- EXISTING SUBSTRUCTURE TO REMAIN. CONTRACTOR SHALL GRIND CONCRETE LEVEL OVER CENTER 4'-0" OF BRIDGE SEAT FOR NEW LEVEL BEAM 4 PLACEMENT. GRINDING SHALL BE INCIDENTAL TO BID ITEM PRECAST PC BOX BEAM CB12-48 AND PRECAST PC BOX BEAM CB17-48.
- REMOVE EXISTING SUPERSTRUCTURE. EXCAVATE IN FRONT OF ABUTMENT 1 AND END BENT 1 AS NEEDED TO REMOVE CHEEKWALLS AND CORK, IF PRESENT AND REQUIRED. INSTALL NEW ½" CORK AFTER CHEEKWALL REMOVAL.
- THE SUBSTRUCTURES APPEAR TO BE IN GOOD CONDITION BUT THE TOPS OF ALL CAPS ARE CURRENTLY NOT ABLE TO BE INSPECTED. ONCE THE EXISTING BEAMS HAVE BEEN REMOVED, THE CONTRACTOR SHALL INSPECT THE CAPS FOR SPALLS, DELAMINATIONS, AND CRACKING. IF DEFECTS ARE FOUND, WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL PATCH OR EPOXY INJECT THE DEFECT. EPOXY INJECTION SHALL BE PER THE SPECIAL NOTE FOR EPOXY INJECTION CRACK REPAIR AND PATCHING SHALL BE PER THE SPECIAL NOTE FOR CONCRETE PATCHING REPAIR. ASSUMED PATCHING QUANTITIES ARE FOR 5 PERCENT OF THE CAP SURFACE FOR EACH SUBSTRUCTURE AND CRACK INJECTION IS ASSUMED FOR 6 LINEAR FEET PER SUBSTRUCTURE.
- APPLY CONCRETE COATING AT PIER 1 AND INT. BENT 1 ONLY. CONCRETE COATING SHALL BE APPLIED TO THE TOPS, PEDESTALS AND 1 FT. UNDER ON THE FACES. DO NOT APPLY COATING UNDER THE CORKS. REFER TO THE SPECIAL NOTE FOR CONCRETE COATING FOR MORE INFORMATION. APPLY CONCRETE SEALING TO REMAINING EXPOSED SURFACE ABOVE A POINT OF 6" BELOW GROUND OR FILL LINE OF END BENTS. REFER TO SPECIAL NOTE FOR CONCRETE SEALING FOR MORE INFORMATION.
- 12" WIDE MASTIC TAPE TO WATERPROOF THE JOINT BETWEEN THE BEAMS AND ABUTMENT OR END BENT. THE TAPE SHALL BE LOOPED AS SHOWN TO ALLOW MOVEMENT WITHOUT DAMAGE TO THE TAPE. INSTALL PLASTIC FILM OR OTHER BOND BREAKER BETWEEN THE TAPE LOOP AND EXPANSION JOINT. REFER TO STD. DWG. BGX-022-C.E. FOR MORE INFORMATION.
- SET CORK IN ACCORDANCE WITH STANDARD DRAWING BDP-002-C.E. THE CORK SHALL BE INCIDENTAL TO BID ITEM PRECAST PC BOX BEAM CB12-48 AND PRECAST PC BOX BEAM CB17-48.
- INSTALL ARMORED EDGE IN ACCORDANCE WITH STANDARD DRAWING BJE-001-C.E.
- DOWELS, D(E) SHALL BE EPOXY COATED. DOWELS TO BE DRILLED AND GROUTED WITH 12" MINIMUM EMBEDMENTS INTO SUBSTRUCTURE UNITS. DOWELS SHALL BE SPACED AS SHOWN ON STANDARD DRAWING. BDP-003-CE. AT FIXED ENDS, THE HOLES IN THE BOX BEAMS SHALL BE GROUTED AT EXPANSION ENDS, THE HOLES IN THE BOX BEAMS SHALL BE FILLED WITH HOT-POURED JOINT SEALER AS SHOWN IN STANDARD DRAWING BDP-002-C.E.



PROPOSED SECTION AT ABUTMENT

(FIELD VERIFY ALL DIMENSIONS)
(ABUTMENT 1 SHOWN, END BENT 1 OPPOSITE HAND)
(NOT TO SCALE)

BILL OF REINFORCEMENT ABUTMENT 1														
MARK	TYPE	NO.	SIZE	LENGTH		LOCATION	A		B		C		D	
				FT	IN		FT	IN	FT	IN	FT	IN		
D(E)	STR	14	#8	2	0	BEARING SEAT/BEAM								

BILL OF REINFORCEMENT PIER 1														
MARK	TYPE	NO.	SIZE	LENGTH		LOCATION	A		B		C		D	
				FT	IN		FT	IN	FT	IN	FT	IN		
D(E)	STR	28	#8	2	0	BEARING SEAT/BEAM								

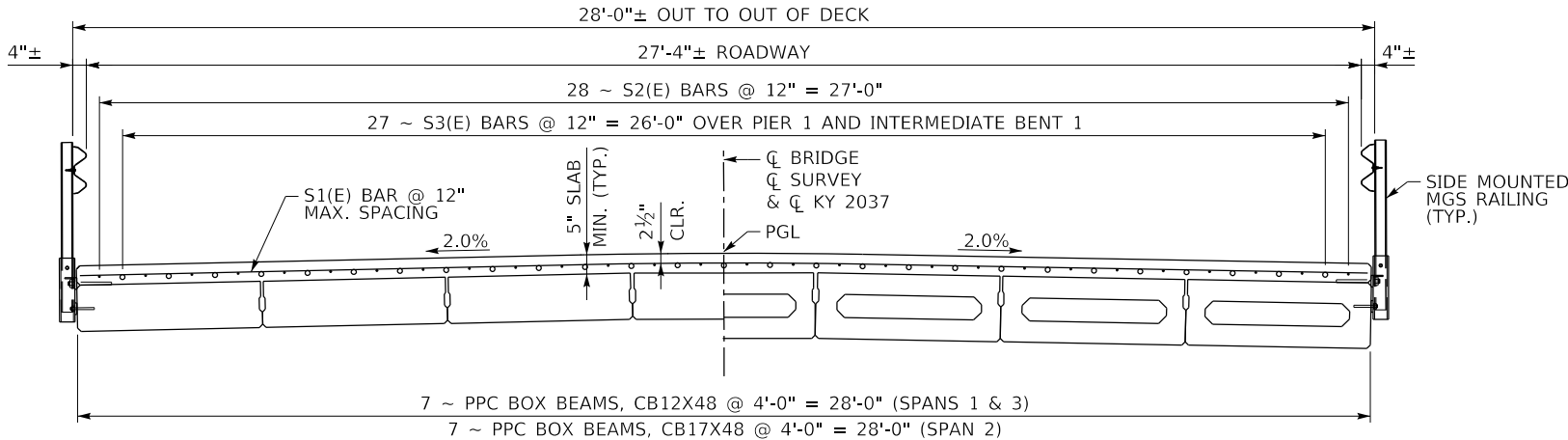
BILL OF REINFORCEMENT INTERMEDIATE BENT 1														
MARK	TYPE	NO.	SIZE	LENGTH		LOCATION	A		B		C		D	
				FT	IN		FT	IN	FT	IN	FT	IN		
D(E)	STR	28	#8	2	0	BEARING SEAT/BEAM								

BILL OF REINFORCEMENT END BENT 1														
MARK	TYPE	NO.	SIZE	LENGTH		LOCATION	A		B		C		D	
				FT	IN		FT	IN	FT	IN	FT	IN	FT	IN
D(E)	STR	14	#8	2	0	BEARING SEAT/BEAM								

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY 1650 Lyndon Farm Ct, Suite 101 Michael Baker Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM INTERNATIONAL	DATE:	CHECKED BY	SUBSTRUCTURE DETAILS	ROUTE KY 2037	ITEM NO. 12-10115	COUNTY OF LAWRENCE
			DESIGNED BY: C.Y. YONG	C. LARKIN	SHEET NO. S4			DRAWING NUMBER 28662	
			DETAILED BY: R. HOLLEY	C.Y. YONG	CROSSING GRIFFIN CREEK				

SUPERSTRUCTURE BILL OF REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH		LOCATION	A		B		C		D	
				FT	IN		FT	IN	FT	IN	FT	IN	FT	IN
S1(E)	STR	104	#5	27	8	SLAB TRANSVERSE								
S2(E)	STR	84	#5	35	10	SLAB LONGITUDINAL								
S3(E)	STR	54	#10	28	0	SLAB LONG. OVER PIER								



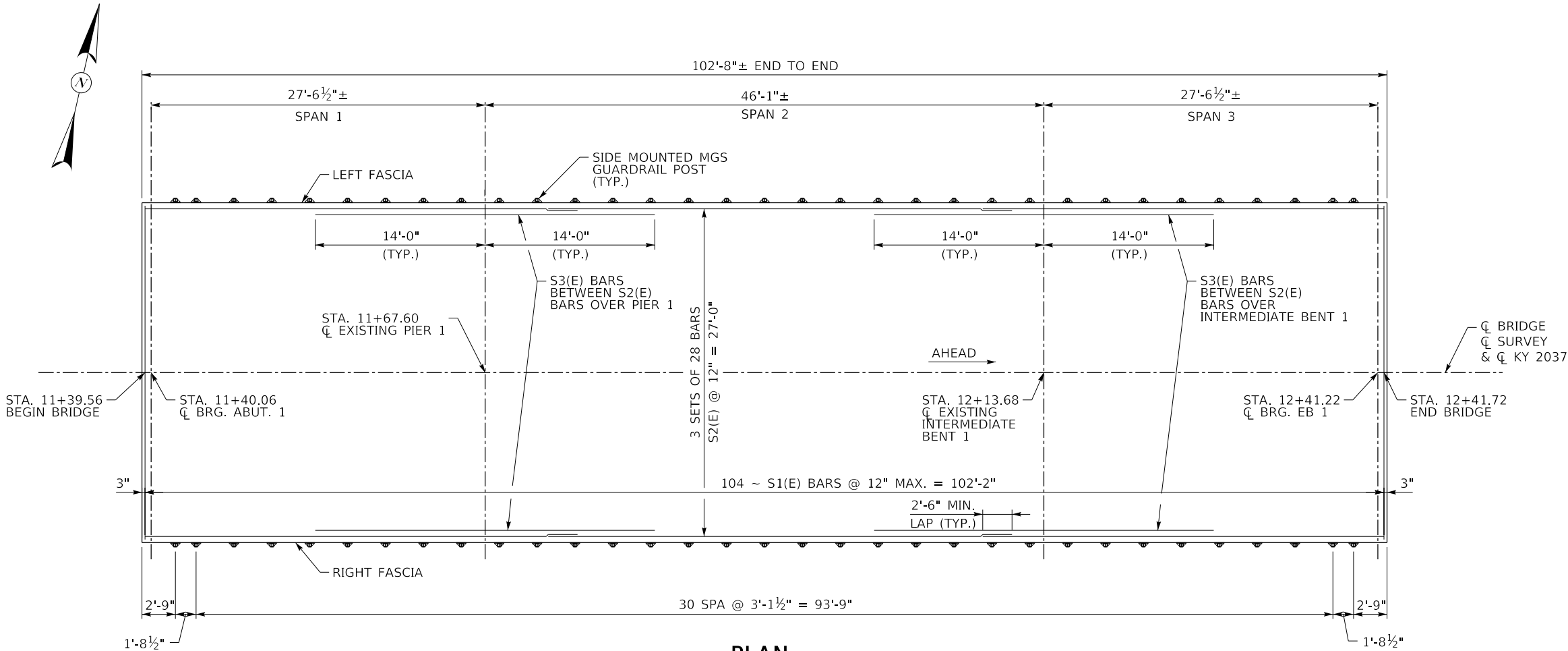
TYPICAL SECTION

(LOOKING AHEAD STATION)

NOTES:

- STR DENOTES STRAIGHT BARS.
- ALL REBAR TO BE EPOXY COATED, A615 GRADE 60.
- SHOULD THE CONTRACTOR CHOOSE TO INTRODUCE LAP SPLICES IN ADDITION TO WHAT IS ALREADY SPECIFIED IN THESE PLANS, USE THE FOLLOWING MINIMUM LAP SPLICE LENGTHS:

2'-6" FOR #5 BARS.
- GUARDRAIL INSERTS ARE TO BE PLACED IN SUCH A WAY THAT ACCOMMODATES TOLERANCES FOR GUARDRAIL HEIGHT.



PLAN

(FIELD VERIFY ALL DIMENSIONS)

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

REVISION	DATE

PREPARED BY

Michael Baker
INTERNATIONAL

1650 Lyndon Farm Ct, Suite 101
Louisville, KY 40223
Phone: (502) 339-3557
MBAKERINTL.COM

DATE:	CHECKED BY:
DESIGNED BY: P. Cozzens	C.Y. Yong
DETAILED BY: R. HOLLEY	C.Y. YONG

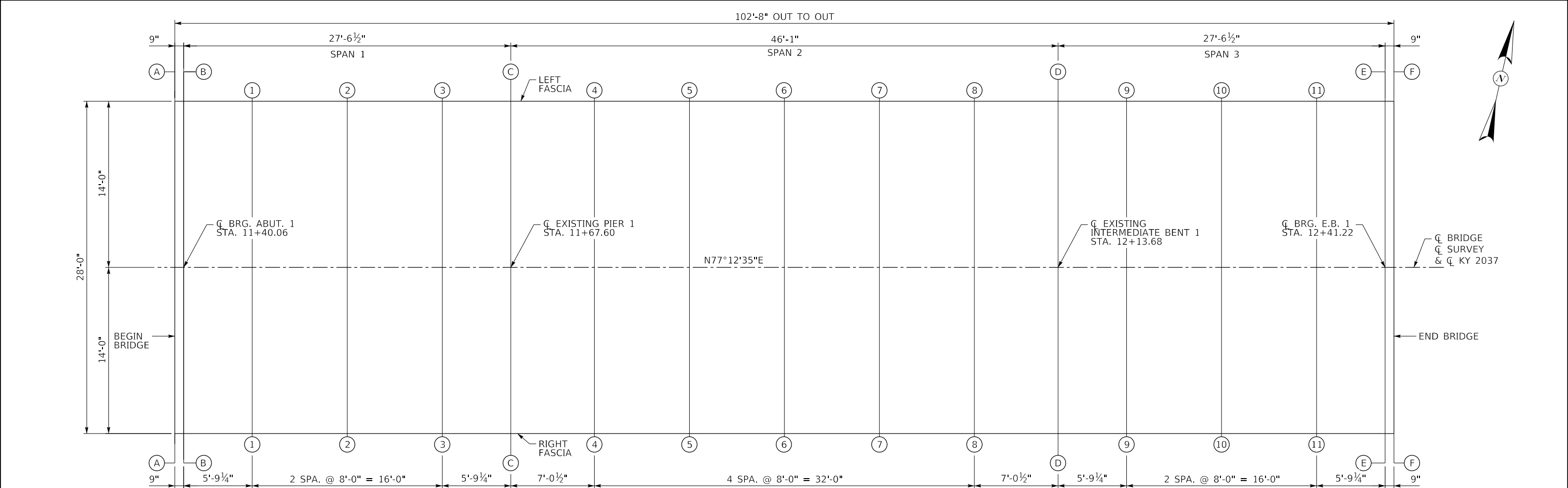
SUPERSTRUCTURE

CROSSING
GRIFFIN CREEK

ROUTE
KY 2037

ITEM NO. 12-10115
SHEET NO. S5

COUNTY OF LAWRENCE
DRAWING NUMBER 28662



GRID LAYOUT

NOTES FOR ELEVATIONS TAKEN ON PRESTRESSED CONCRETE BOX BEAMS

TAKE ELEVATIONS ON TOP OF BEAM AT POINTS INDICATED AFTER THE BEAMS HAVE BEEN Laterally Tensioned and Grouted. The beam elevations are to be read to three decimal places 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.

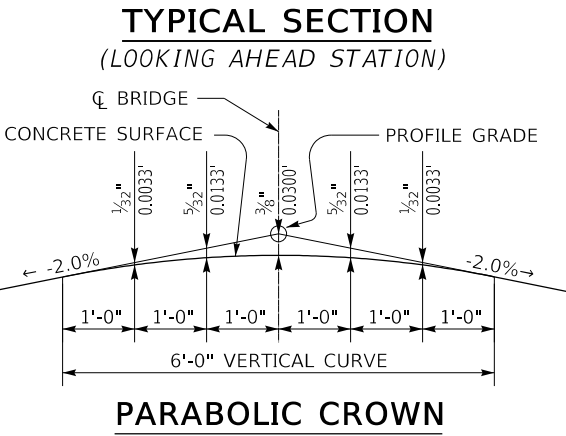
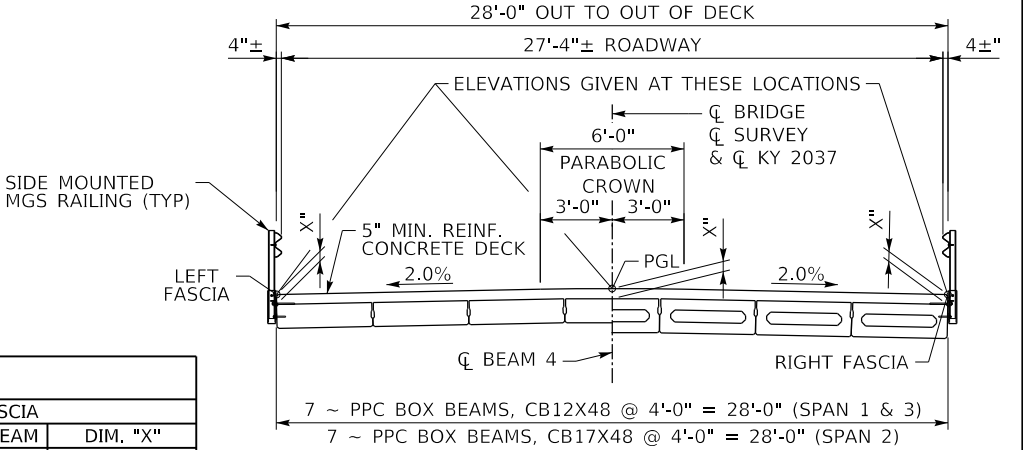
NOTE TO RESIDENT: The "Maximum Allowable Camber" shown on the beam sheet is the amount of camber, measured prior to casting the deck, above which the beam will begin to encroach into the slab.

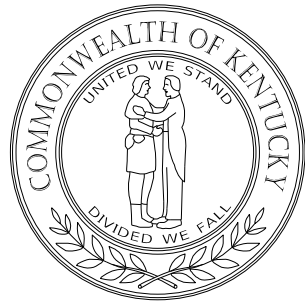
The center beam is placed level, other beams are sloped with roadway crown. This may effect the out to out dimension of the deck. Ensure slab fascia is flush with beam fascia.

The minimum allowable dimension "X" or slab thickness is 5" (0.417'). The maximum allowable dimension "X" or slab thickness is 7.7" (0.640') at abutment 1, 6.7" (0.558') at pier 1, 8.3" (0.692') at intermediate bent 1 and 8.1" (0.672') at end bent 1. If any computed dimension "X" is outside limits, adjustments need to be made to the dimensions "X" on one or more grid lines at the discretion of the engineer.

No additional payment will be made for any additional slab concrete due to beam camber in excess of the designer's assumption. No additional concrete above plan quantity should be placed without the approval of the engineer.

CONSTRUCTION ELEVATIONS									
MARK	LEFT FASCIA			CENTER LINE			RIGHT FASCIA		
	CONST. ELEV.	TOP OF BEAM	DIM. "X"	CONST. ELEV.	TOP OF BEAM	DIM. "X"	CONST. ELEV.	TOP OF BEAM	DIM. "X"
SKREW LINE AA	570.530			570.780			570.530		
SKREW LINE BB	570.527			570.777			570.527		
GRID LINE 1	570.510			570.760			570.510		
GRID LINE 2	570.481			570.731			570.481		
GRID LINE 3	570.445			570.695			570.445		
SKREW LINE CC	570.417			570.667			570.417		
GRID LINE 4	570.399			570.649			570.399		
GRID LINE 5	570.378			570.628			570.378		
GRID LINE 6	570.349			570.599			570.349		
GRID LINE 7	570.314			570.564			570.314		
GRID LINE 8	570.271			570.521			570.271		
SKREW LINE DD	570.233			570.483			570.233		
GRID LINE 9	570.216			570.466			570.216		
GRID LINE 10	570.189			570.439			570.189		
GRID LINE 11	570.153			570.403			570.153		
SKREW LINE EE	570.123			570.373			570.123		
SKREW LINE FF	570.120			570.370			570.120		



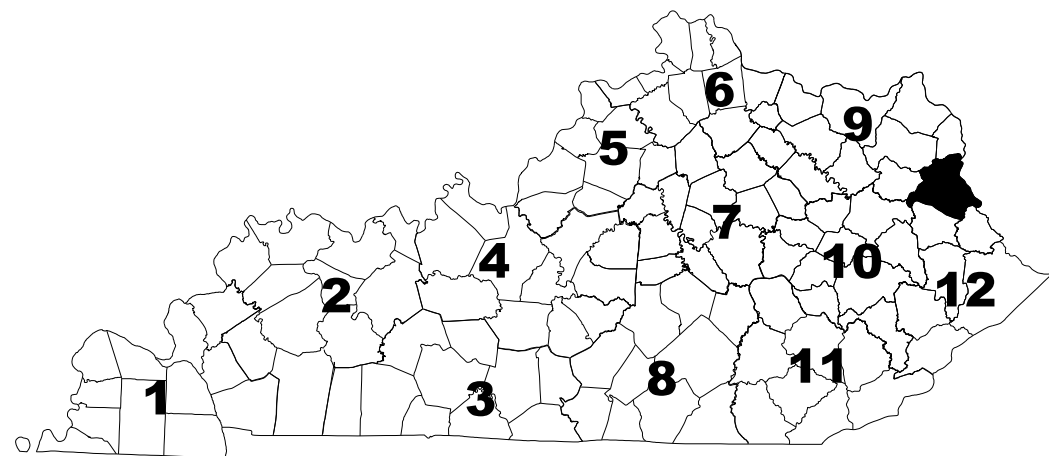


COMMONWEALTH OF KENTUCKY

DEPARTMENT OF HIGHWAYS

PLANS OF PROPOSED PROJECT LAWRENCE COUNTY

KY 1496 OVER EAST FORK LITTLE SANDY RIVER
STA. 49+41.92 TO STA. 54+01.47



BEGIN CONST.
STA. 49+41.92



END CONST.
STA. 54+01.47

THIS PROJECT IS OFF THE NH SYSTEM

LAYOUT MAP

THE CONTROL OF ACCESS ON THIS
PROJECT SHALL BE BY PERMIT

REV. NO.	SHEETS REVISED	DATE
TABLE OF REVISIONS		
DESIGN CRITERIA		
CLASS OF HIGHWAY	RURAL MINOR COLLECTOR	
TYPE OF TERRAIN	ROLLING	
DESIGN SPEED	NA	
REQUIRED NPSD	NA	
REQUIRED PSD	NA	
LEVEL OF SERVICE	NA	
ADT PRESENT (2020)	173	
ADT FUTURE (NA)	NA	
DHV	NA	
D %	NA	
T %	NA	
GEOGRAPHIC COORDINATES		
LATITUDE	38 DEGREES 13 MINUTES 02 SECONDS NORTH	
LONGITUDE	82 DEGREES 44 MINUTES 08 SECONDS WEST	
DESIGNED		
% RESTRICTED SD	NA	
LEVEL OF SERVICE	NA	
MAX. DISTANCE W/O PASSING	NA	

INDEX OF SHEETS	
R1	LAYOUT SHEET
R2	TYP. SECTIONS AND COORD. CONTROL
R2A	GENERAL, MOT AND SPECIAL NOTES
R3	LEGEND
R4 - R5	ROADWAY PLAN AND PROFILE SHEETS
R6 - R7	DIVERSION PLAN AND PROFILE SHEETS
R8	ENVIRONMENTALLY CLEARED AREA LAYOUT
S1	GENERAL NOTES
S2	LAYOUT
S3	TYPICAL SECTION
S4	SUBSTRUCTURE DETAILS
S5	CONSTRUCTION ELEVATIONS
X1 - X6	CROSS SECTION SHEETS

SPECIFICATIONS	
Standard Specifications for Road and Bridge Construction, Current Edition	
AASHTO LRFD Bridge Construction Specifications With Current Interims	

STANDARD DRAWINGS		ACTIVE SEPIAS		SPECIAL NOTES		SPECIAL PROVISIONS	
BBP-003-02	Elastomeric Bearing Pads for Box Beams			Concrete Sealing	69	Embankment at Bridge End Bent Structures	
BDP-001-06	Beam General Notes and References			Concrete Patching Repair			
BDP-002-03	Box Beam Bearing Details			Epoxy Injection Crack Repair			
BDP-003-03	Box Beam Miscellaneous Details			Over the Side Drainage and MGS Railing			
BDP-004-04	Box Beam Tension Rod Details			Traffic Control on Bridge Repair Contracts			
BDP-009-04	Box Beam B27 & CB27 Details			Sediment Prevention and Erosion Control			
BGX-006-10	Stencils for Structure			Foundation Preparation			
BHS-011	Railing System Side Mounted MGS Details			Seasonal Tree Clearing Restriction			
BJE-001-14	Armored Edges			Additional Environmental Commitments			
BGX-012-02	Geotechnical Legend			Completion Date and Liquidated Damages			
BGX-022	Joint Waterproofing			on Bridge Repair Contracts			
RGX-100-07	Treatment of Embankments at End-Bents						
RGX-105-09	Treatment of Embankments at End-Bents - Details						
RBI-001-12	Typical Guardrail Installations						
RBI-002-07	Typical Guardrail Installations						

STANDARD DRAWINGS	
RBI-004-06	Installation of Guardrail End Treatment Type I
RBR-001-13	Steel Beam Guardrail ("W" Beam)
RBR-005-11	Guardrail Components
RBR-015-06	Steel Guardrail Posts
RBR-018	Guardrail System Transition
RBR-020-07	Guardrail End Treatment Type I
RBR-055-01	Delineators for Guardrail
TTC-110-04	Lane Closure Using Traffic Signals
TTC-150-04	Road Closure with Detour

PROJECT NUMBER: VM D12 064B00061N
EXISTING BRIDGE ID #: 064B00061N
DRAWING NO:

RECOMMENDED BY:	PROJECT MANAGER	DATE:
PLAN APPROVED BY:	STATE HIGHWAY ENGINEER	DATE:

Michael Baker
INTERNATIONAL

FOR ROADWAY SHEETS

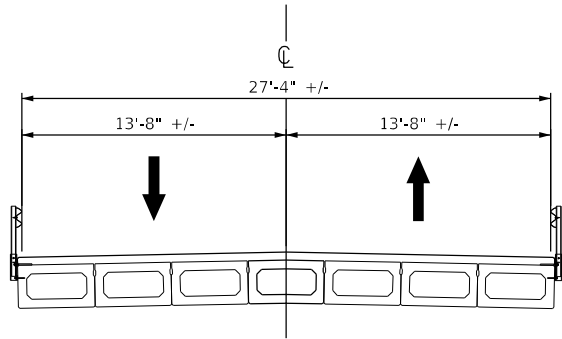
Michael Baker
INTERNATIONAL

FOR BRIDGE SHEETS

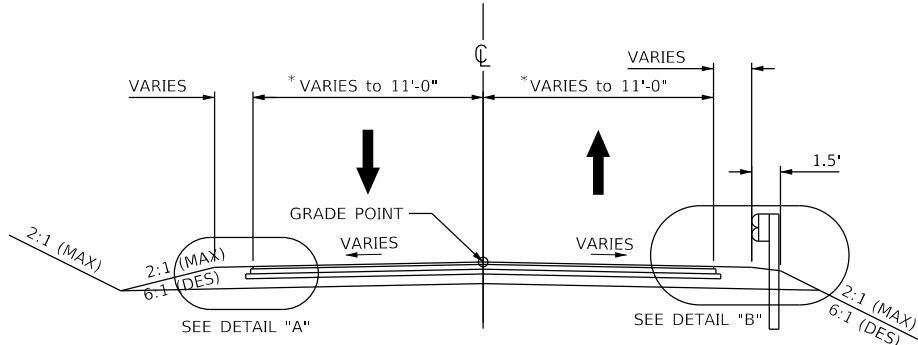
LETTING DATE: 2/23/2023

ITEM NO. 12-10114 COUNTY OF LAWRENCE

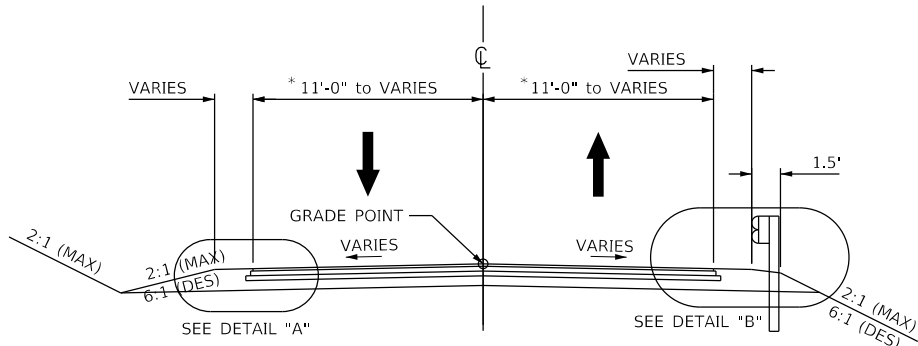
SHEET NO. R1



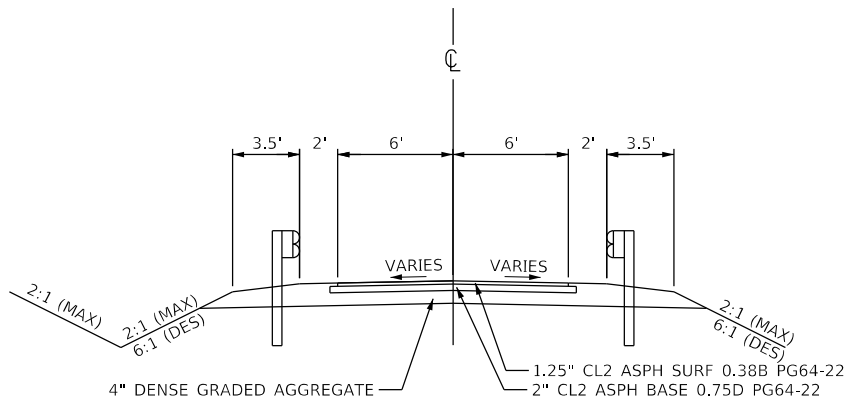
KY 1496
STA 51+33.80 TO STA 52+01.80



KY 1496
STA 50+86.00 TO 51+33.80
* MATCHES PAVEMENT WIDTH AT TIE-IN TO EXISTING



KY 1496
STA 52+01.80 TO 52+39.00
* MATCHES PAVEMENT WIDTH AT TIE-IN TO EXISTING

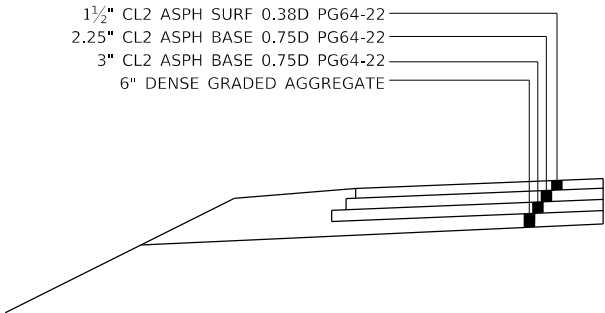


DIVERSION
STA 10+70.51 TO 14+39.32

COORDINATE CONTROL POINTS						
CP NUMBER	TYPE	Northing (Y)	Easting (X)	Elevation (Z)	Station	Offset
1	CP (PK Nail & Washer)	3,980,608.92	5,787,281.14	695.789	53+57.43	10.12 LT
2	CP (PK Nail & Washer)	3,980,830.60	5,787,062.10	693.944	50+46.55	9.32 RT

KY 1496			
NAME	Station	Northing (Y)	Easting (X)
START	50+00.00	3,980,871.142	5,787,037.396
PC	52+37.81	3,980,696.308	5,787,198.601
HPI	52+64.53	3,980,676.667	5,787,216.710
PT	52+91.20	3,980,655.428	5,787,232.916
END	54+03.33	3,980,566.285	5,787,300.936

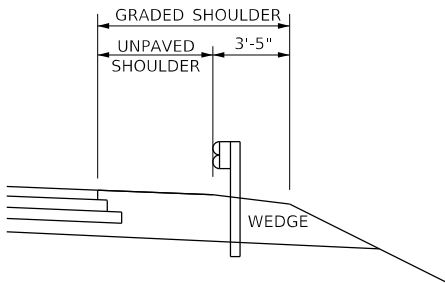
DIVERSION			
NAME	Station	Northing (Y)	Easting (X)
START	10+00.00	3,980,940.172	5,786,966.603
PC	10+15.78	3,980,929.366	5,786,978.106
HPI	10+49.17	3,980,906.505	5,787,002.441
PT	10+81.23	3,980,874.899	5,787,013.204
PC	10+89.36	3,980,867.202	5,787,015.826
HPI	11+18.41	3,980,839.702	5,787,025.191
PT	11+46.75	3,980,817.687	5,787,044.145
PC	13+47.50	3,980,665.553	5,787,175.130
HPI	13+79.09	3,980,641.616	5,787,195.739
PT	14+09.77	3,980,628.023	5,787,224.250
PC	14+29.23	3,980,619.646	5,787,241.822
HPI	14+60.18	3,980,606.329	5,787,269.756
PT	14+90.06	3,980,582.111	5,787,289.021
END	15+19.57	3,980,559.014	5,787,307.396



DETAIL "A" - KY 1496 PAVEMENT DESIGN

ASPHALT SEAL REQUIRED FROM EDGE OF PAVEMENT TO A POINT 2' DOWN THE DITCH OR FILL SLOPE.

BITUMINOUS SEAL-TWO APPLICATIONS OF THE FOLLOWING:
ASPHALT SEAL COAT 2.4 LB/SY
ASPHALT SEAL AGGREGATE 20 LB/SY



DETAIL "B" - GUARDRAIL INSTALLATION

SHOULDERS SHALL BE WIDENED 3 FEET 5 INCHES WHERE GUARDRAIL IS TO BE INSTALLED ALLOWING FOR 2 FEET OF FILL BEHIND THE POSTS.

ASPHALT SEAL REQUIRED FROM EDGE OF PAVEMENT TO A POINT 2' DOWN THE DITCH OR FILL SLOPE.

BITUMINOUS SEAL-TWO APPLICATIONS OF THE FOLLOWING:
ASPHALT SEAL COAT 2.4 LB/SY
ASPHALT SEAL AGGREGATE 20 LB/SY

ASPHALT SEAL COAT AND ASPHALT SEAL AGGREGATE TO BE APPLIED TO KY 1496 AND NOT THE DIVERSION.

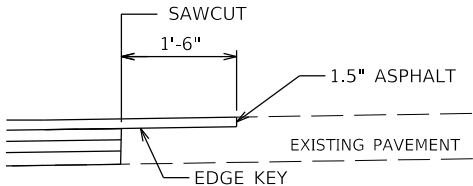
BASIS OF ELEVATIONS

Elevations were derived from GPS methods and are adjusted to the NAVD88 Vertical Datum. Geoid model used was Geoid18.

COORDINATE SYSTEM

Coordinates for horizontal control were obtained from GPS methods and adjusted to the National NAD83/FBN System.

Coordinates are based on State Plane Coordinate System Single Zone and in U.S. Survey Feet.



DETAIL "C" - EDGE KEY

RIGHT OF WAY SUMMARY						
PARCEL NO.	OWNER(S)	TOTAL AREA OF TRACT		EASEMENTS		REMARKS
		ACRES	SQ. FT.	PERMANENT SQ. FT.	TEMPORARY SQ. FT.	
6	JOHNNIE KING JR.	78.174			9698.038	DB338 PG58



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: TYPICAL SECTIONS AND COORDINATE CONTROL

ITEM NO. 12-10114 COUNTY OF LAWRENCE
SHEET NO. R2

GENERAL NOTES

DIVISION 100 -- GENERAL PROVISIONS

165 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 FAVILITIES 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.

DIVISION 400 -- ASPHALT PAVEMENTS

448 COMPACTION OF ASPHALT MIXTURES

WILL ACCEPT THE COMPACTION OF ASPHALT MIXTURES FURNISHED ON THIS PROJECT BY OPTION B ACCORDING TO SUBSECTIONS 402.03.02 AND 403.03.10 OF THE STANDARD SPECIFICATIONS.

448 EDGE KEY

THIS WORK INCLUDES CUTTING OUT THE EXISTING ASPHALT SURFACE TO A MINIMUM DEPTH AND WIDTH AS DETAILED IN THE PLANS SO THAT THE NEW SURFACE MAY HEEL INTO THE EXISTING SURFACE. THE CONTRACT UNIT PRICE BID LINEAR FOOT FOR "EDGE KEY" INCLUDES ALL NECESSARY MATERIALS, LABOR AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND DISPOSE OF THE REMOVED ASPHALT MATERIAL.

DIVISION 600 -- STRUCTURES AND CONCRETE

650 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 ADMINSTRATIVE SERVICES IN FRANKFORT, KY. AT (502)564-4610

SPECIAL MAINTENANCE OF TRAFFIC NOTES

SEE SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS.

CONTRACTOR SHALL CONSTRUCT A TEMPORARY DIVERSION UPSTREAM OF THE BRIDGE THAT WILL MAINTAIN ONE LANE OF TRAFFIC AND PROVIDE TEMPORARY TRAFFIC SIGNAL. ONCE SUPERSTRUCTURE PLACEMENT IS COMPLETE, OPEN TO TRAFFIC AND REMOVE THE TEMPORARY DIVERSION.

ROAD CLOSURE DURATION IS 30 DAYS.

THE CONTRACTOR SHALL COORDINATE WITH LAWRENCE COUNTY PUBLIC SCHOOLS, LOCAL FIRST RESPONDERS, AND THE KYTC DISTRICT 12 PUBLIC INFORMATION OFFICER PRIOR TO SCHEDULING THE ROAD CLOSURE. EVIDENCE OF COORDINATION SHALL BE PROVIDED IN WRITING TO THE ENGINEER.

MOT GENERAL NOTES

1.

TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE STANDARD DRAWINGS, CURRENT EDITIONS.
2.

EXCEPT FOR THE ROADWAY AND TRAFFIC CONTROL BID ITEMS LISTED, ALL ITEMS OF WORK NECESSARY TO MAINTAIN AND CONTROL TRAFFIC WILL BE PAID AT THE LUMP SUM BID PRICE TO "MAINTAIN AND CONTROL TRAFFIC" AS SET FORTH IN THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE LUMP SUM BID TO "MAINTAIN AND CONTROL TRAFFIC" SHALL ALSO INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS AND OPERATIONS:

A.

ALL LABOR AND MATERIALS NECESSARY FOR CONSTRUCTION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES AND MARKINGS.

B.

ALL FLAGPERSONS AND TRAFFIC CONTROL DEVICES SUCH AS, BUT NOT LIMITED TO, FLASHERS, SIGNS AND VERTICAL PANELS, PLASTIC DRUMS (STEEL DRUMS WILL NOT BE PERMITTED) AND CONES NECESSARY FOR THE CONTROL AND PROTECTION OF VEHICULAR TRAFFIC AS SPECIFIED IN THESE NOTES, THE PLANS, THE MUTCD OR THE ENGINEER.
3.

ANY TEMPORARY TRAFFIC CONTROL ITEMS, DEVICES, MATERIALS AND INCIDENTALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR WHEN NO LONGER NEEDED.
4.

THE CONTRACTOR SHALL COMPLETELY COVER ANY SIGNS, EITHER EXISTING, PERMANENT OR TEMPORARY, WHICH DO NOT PROPERLY APPLY TO THE CURRENT TRAFFIC PHASING, AND SHALL MAINTAIN THE COVERING UNTIL THE SIGNS ARE APPLICABLE OR ARE REMOVED.
5.

IF THE CONTRACTOR DESIRES TO DEVIATE FROM THE TRAFFIC CONTROL SCHEME AND CONSTRUCTION SCHEDULE OUTLINED IN THESE PLANS AND THIS PROPOSAL, HE SHALL PREPARE AN ALTERNATE PLAN AND PRESENT IT IN WRITING TO THE ENGINEER. THIS ALTERNATE PLAN CAN BE USED ONLY AFTER REVIEW AND APPROVAL OF THE DIVISIONS OF TRAFFIC, DESIGN AND CONSTRUCTION, AND THE FEDERAL HIGHWAY ADMINISTRATION, WHEN APPLICABLE.
6.

IF TRAFFIC SHOULD BE STOPPED DUE TO CONSTRUCTION OPERATIONS AND AN EMERGENCY VEHICLE ON AN OFFICIAL EMERGENCY RUN ARRIVES AT THE SCENE, THE CONTRACTOR SHALL MAKE THE PROVISIONS FOR THE PASSAGE OF THAT VEHICLE AS QUICKLY AS POSSIBLE.

SPECIAL NOTES

THE CONTRACTOR IS ADVISED THAT THE EARTHWORK CALCULATIONS SHOWN ARE FOR INFORMATION ONLY. ASSUMPTIONS FOR SHRINKAGE AND SWELL FACTORS ARE THE CONTRACTOR'S RESPONSIBILITY.

DIVERSION EARTHWORK QUANTITY INCLUDED FOR INFORMATION ONLY PAYMENT TO BE INCLUDED IN PRICE FOR "DIVERSION (BY-PASS DETOURS)".

KY 1496
TOTAL EXCAVATION: 84 CY
TOTAL EMBANKMENT: 2 CY

DIVERSION
TOTAL EXCAVATION: 125 CY
TOTAL EMBANKMENT: 947 CY

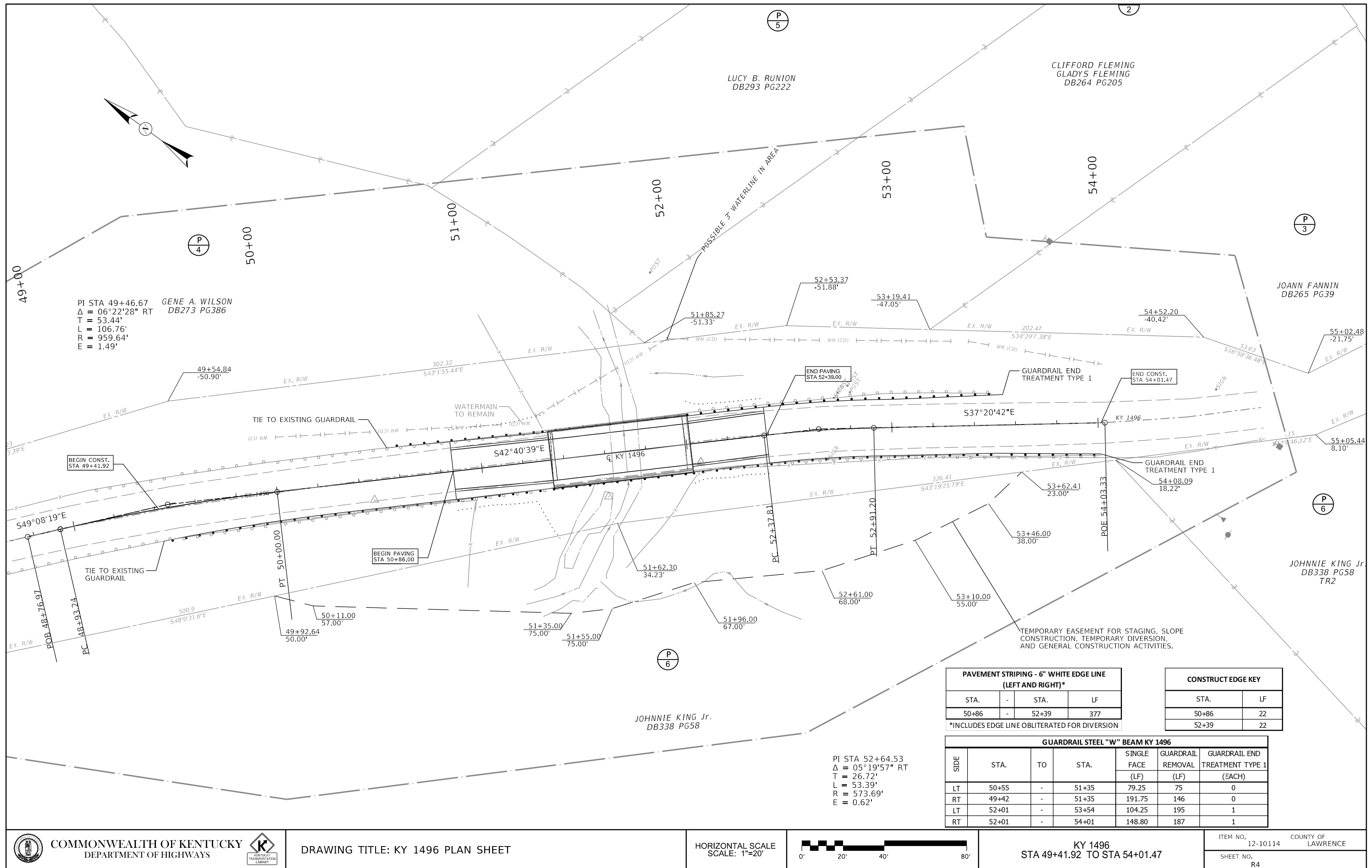


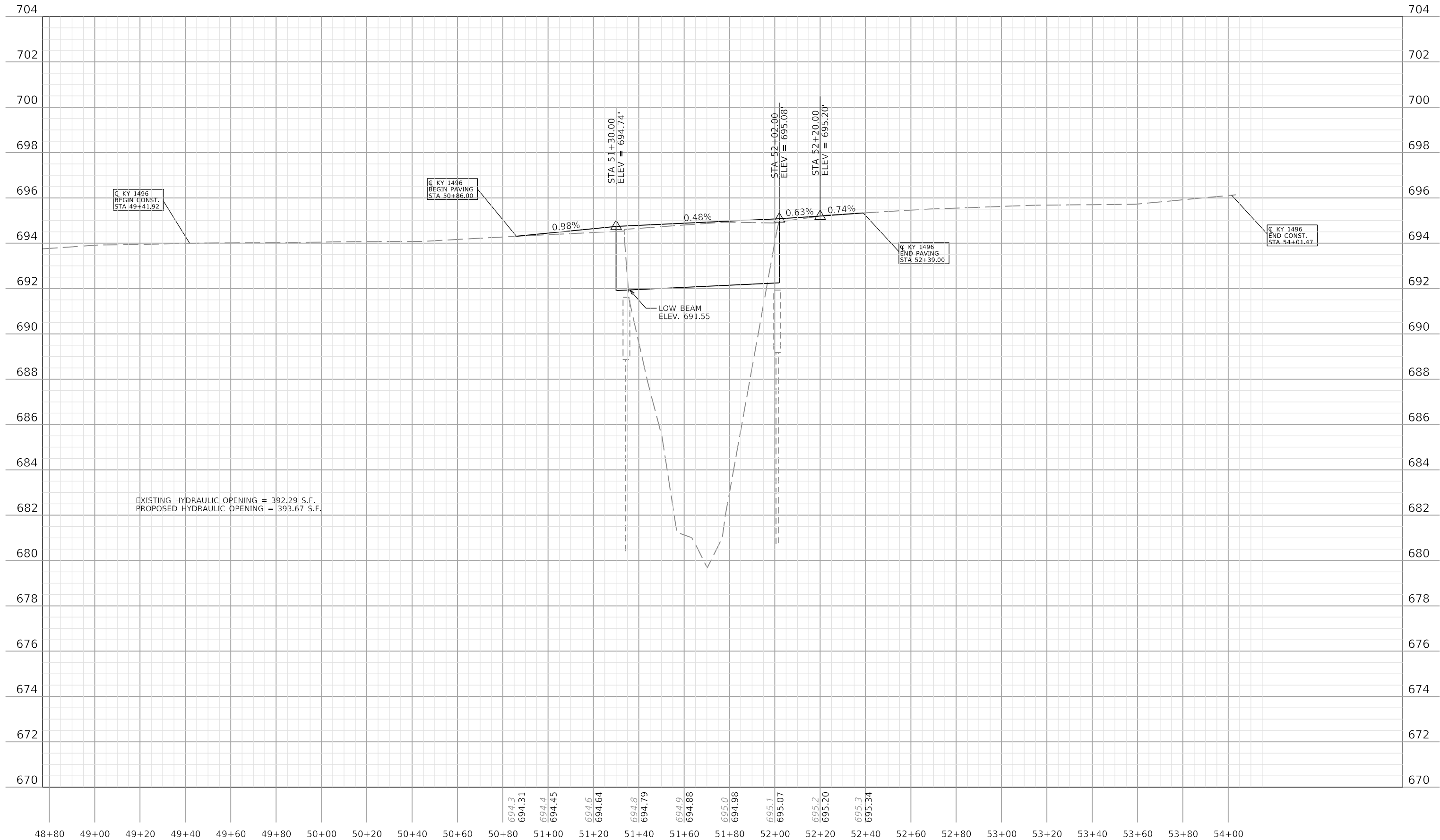
Corporate Limits			Main Water Marker		Crash Cushion TY 9		Point (Misc)		Telephone Pedestal	
County Line			Main Water Greater Than 12 Marker		Cross Notch		Pole		Telephone Pole	
Easement			Sewer Sanitary Marker		Curb Box Inlet		Pole (Light)		Temporary Benchmark	
Fence COA			Sewer Sanitary Force Main Marker		Curb Notch		Post		Traffic Light	
Mineral Parcel			Sewer Storm Marker		Combination Pole		Power Pole		Traffic Signal Control Box	
Property Line			Multi Utility Bank Marker		Delineator Post		Quarry		Traffic Signal Junction Box	
Right of Way Line			Oil Line Marker		Drop Box		Random (Ground Shot)		Traffic Signal Pole	
All Overhead Utility Lines			Steam Line Marker		Existing Spring		Railroad Mile Marker		Traverse Point	
Cable Underground Electric With Quality Levels			Cable Guardrail		Electric Manhole		Railroad Spike		Tree	
Duct Underground Electric With Quality Levels			Ditch		Electric Meter		Right of Way Marker		TV Junction Box	
Cable Underground Fiber With Quality Levels			Edge of Water		Electric Pedestal		RR Traffic Signal Pole		Utility Pole	
Cable Underground Telephone With Quality Levels			Fence Hedge		Electric Junction Box		RW Parcel		Underground Storage Tank	
Duct Underground Telephone With Quality Levels			Fence		Fire Hydrant		Sanitary Cleanout		Utility Test Hole	
Cable Underground TV With Quality Levels			Flow Line/Thalweg/ Int. Stream or Ditch		Flag Pole		Sanitary Manhole		Water Line Marker	
Main Gas With Quality Levels			Guardrail		Force Main Sewer Valve		Satelite Dish		Water Meter	
Main Water With Quality Levels			Railroad		Fuel Tank Inlet		Septic Tank Cleanout		Water Spigot	
Main Water Greater Than 12 With Quality Levels			Shrub Line		Fuel Tank Vent		Service Pole		Water Valve	
Sewer Sanitary With Quality Levels			Sink Hole		Gas Meter		Sewer Air Release Valve		Water Well	
Sewer Sanitary Force Main With Quality Levels			Tree Line		Gas Monitoring Well		Shrub		Yard Light	
Sewer Storm With Quality Levels			Wall (WSM or DSM)		Gas Valve		Sign		Yard Sprinkler	
Multi Utility Bank Quality Levels			Blue Line Stream		Gas Vent		Sign Post (Single)		Yard Sprinkler Water Valve	
Oil Line Quality Levels			Lakes and Ponds		Gas Well		Sign with 2 posts			
Steam Line Quality Levels			Regulated Floodway		Guidewires & Anchors		Sign group (4)			
Cable Underground Electric Marker			RDZ Line		Headstone		Station Stamp			
Duct Underground Electric Marker			ADA Ramp		Interstate Shield		Storm Manhole			
Cable Underground Fiber Marker			Anchor Pole		Iron Pin		Stub Power			
Cable Underground Telephone Marker			Benchmark		Light Pole		Stub Telephone			
Duct Underground Telephone Marker			Bike Lane Symbol		Low Wire		Survey Cross Notch			
Cable Underground TV Marker			Bollard		Mag Nail		Survey Curb Notch			
Main Gas Marker			Centerline		Mailbox		Survey Nail			
			Centerline Stationing		Manhole		Survey Spike			
			Control Monument		Mile Marker Post		Survey Stone Marker			
			Control Point		Mineral Parcel		Swamp			
			Core Hole		Misc Location Point		Telephone Booth			
			Crash Cushion TY 6 D		Monitoring Well		Telephone Junction Box			
			Crash Cushion TY 6 A		Parking Meter		Telephone Line Overhead			
			Crash Cushion TY 9A		Pedestrian Signal		Telephone Manhole			
					Pins/Pipes					
					PK Nail					

Utility Owners

Big Sandy Water District
18211 State Rt. 3
Catletsburg, KY 41129
Contact: James Blanton
Cell: 606-831-1223

Kentucky Power Company
1(800) 572-1113





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: KY 1496 PROFILE SHEET



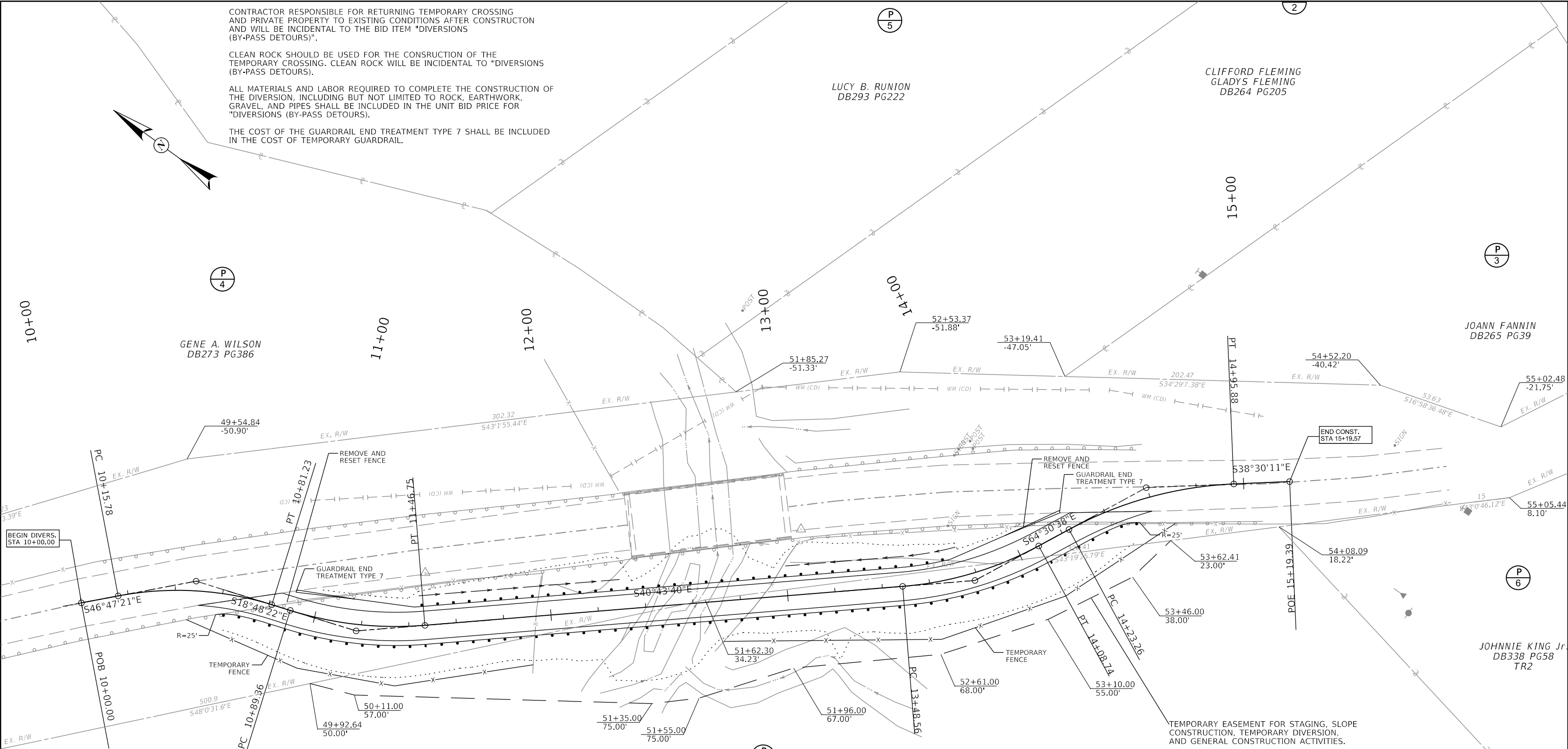
HORIZONTAL SCALE: 1"=20'



VERTICAL SCALE: 1"=2'

KY 1496
STA 49+41.92 TO STA 54+01.47

ITEM NO. 12-10114 COUNTY OF LAWRENCE
SHEET NO. R5



TEMPORARY PAVEMENT MARKINGS FOR DIVERSION				
ITEM	STA.	-	STA.	LF
6" EDGE LINE (LT & RT)	10+00	-	15+19.39	2,876
12" STOP BAR	10+00	-	-	11
	-	-	15+19.39	11

TEMPORARY GUARDRAIL KY 1496				
SIDE	STA.	TO	STA.	SINGLE FACE (LF)
LT	11+16	-	13+94	226.7
RT	10+60	-	14+53	398.3

TEMPORARY 6" EDGE LINE TO BE OFFSET 5.5 FEET FROM DIVERSION CENTERLINE

FENCE					
SIDE	STA.	TO	STA.	TEMPORARY FENCE	REMOVE & RESET FENCE
				(LF)	(LF)
RT	10+45.00	-	11+90.87	152	65
RT	12+71.63	-	14+68.08	202	69

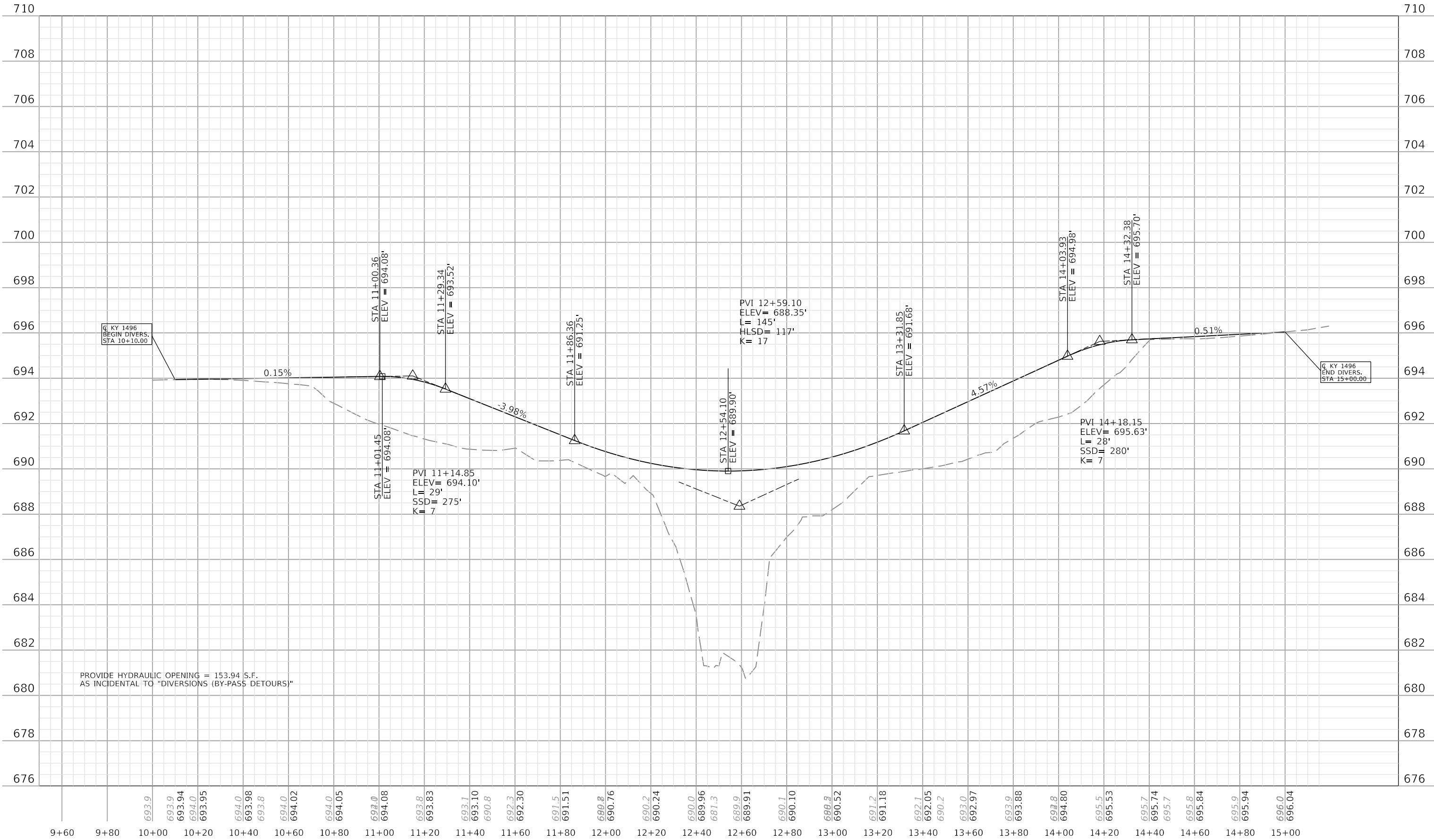
*CONTRACTOR SHALL PROVIDE TEMPORARY FENCE SIMILAR TO EXISTING PRIOR TO CONSTRUCTING DIVERSION

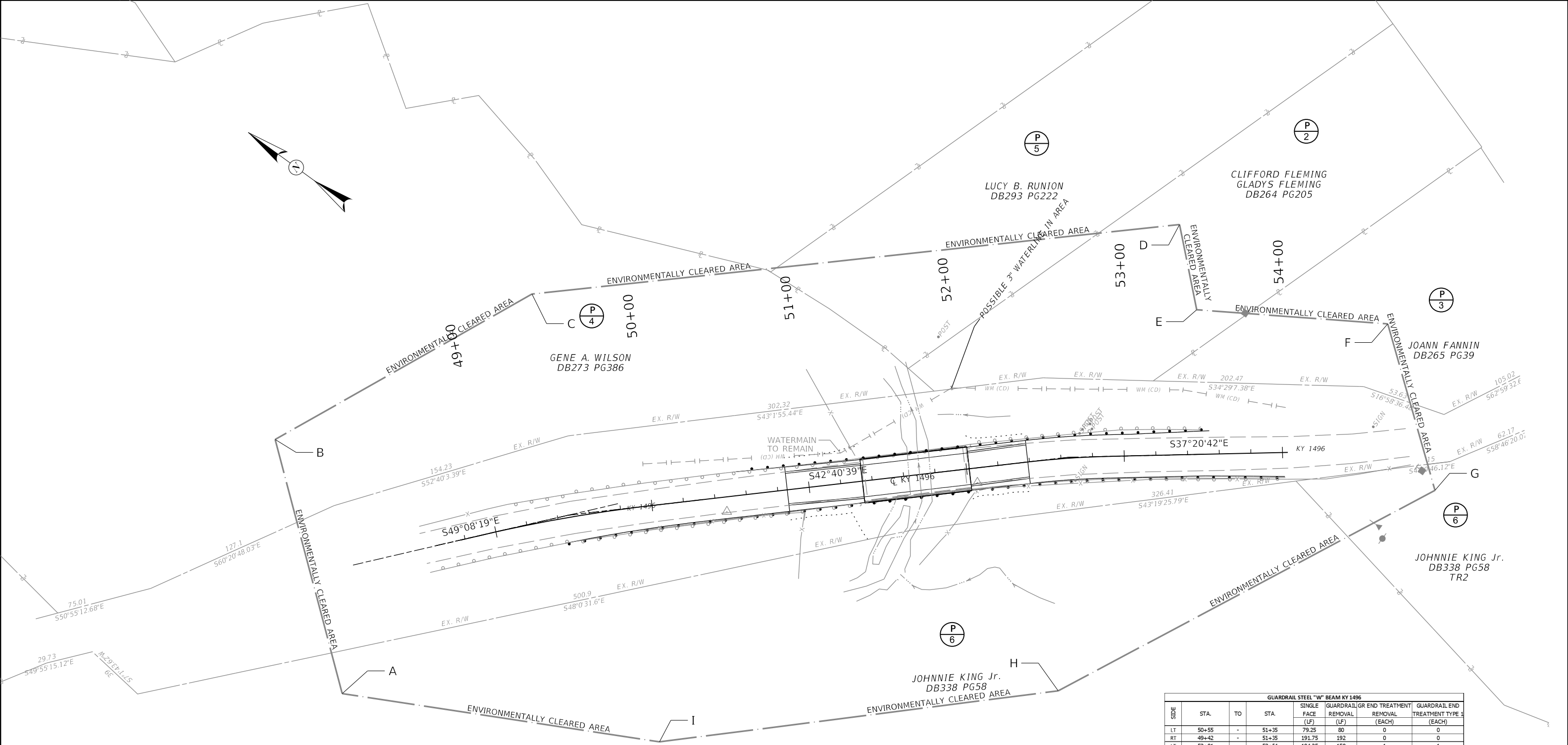
PI STA 10+49.17
Δ = 27°58'59" RT
T = 33.39'
L = 65.45'
R = 134.00'
E = 4.10'

PI STA 11+18.41
Δ = 21°55'18" LT
T = 29.05'
L = 57.39'
R = 150.00'
E = 2.79'

PI STA 13+79.09
Δ = 23°46'58" LT
T = 30.53'
L = 60.19'
R = 145.00'
E = 3.18'

PI STA 14+60.21
Δ = 26°00'27" RT
T = 36.95'
L = 72.63'
R = 160.00'
E = 4.21'





GUARDRAIL STEEL "W" BEAM KY 1496							
RTS	STA.	TO	STA.	SINGLE	GUARDRAIL	GR END TREATMENT	GUARDRAIL END
				FACE	REMOVAL	REMOVAL	TREATMENT TYPE 1
				(LF)	(LF)	(EACH)	(EACH)
LT	50+55	-	51+35	79.25	80	0	0
RT	49+42	-	51+35	191.75	192	0	0
LT	52+01	-	53+54	104.25	150	1	1
RT	52+01	-	54+01	148.80	198	1	1

D	3980709.25	5787376.95
E	3980665.79	5787339.84
F	3980563.06	5787403.66
G	3980477.06	5787336.28
H	3980594.88	5787093.89
I	3980779.47	5786919.57

GENERAL NOTES

SPECIFICATIONS: References to the Specifications are to the current Edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction including any current supplemental Specifications. All references to the AASHTO Specifications are to the current edition of the AASHTO LRFD Bridge Construction Specifications, with Interims.

DESIGN LOAD: This superstructure is designed for KY HL-93 Live Load, (i.e. 1.25x AASHTO HL-93 live load). This bridge is designed for a future wearing surface of 15 psf.

DESIGN METHOD: All New reinforced concrete members are designed to be equivalent or greater than the load and resistance factor design method as specified in the current AASHTO Specifications.

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 expeditiously performed after a Contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. All claims resulting from the site conditions will not be honored by the Department of Highways.

VERIFYING FIELD CONDITIONS: The Contractor is not to order any materials, produce any shop drawings, or begin any construction activities until after verifying dimensions and conditions in the field. Dimensions and details shown on these Plans in relation to the existing structure shall be considered approximate. Existing plans, if available, shall not be considered accurate. It shall be the Contractor's responsibility to verify such dimensions and details in the field and to notify the Project Engineer and the Designer of any differences. Failure to notify either may delay drawing and other approvals. Thereafter make the necessary approved adjustments prior to construction or ordering materials. All Specifications requirements shall remain in effect. Any variations shall not be cause for additional compensation for a change in scope of work; however, the Contractor will be paid for the quantity furnished at the unit price bid for the work. In addition, the overrun and underrun formulas may be applied to appropriate repairs provided that the requirement of Article 104.02.02 of the Standard Specifications is satisfied. The cost of all labor, equipment, surveying, and materials necessary to verify field dimensions shall be included in the lump sum price for "Staking".

PLANS OF EXISTING STRUCTURE: Plans of the existing structure are available as an aid to the contractor and shall be used to supplement details not shown on the plans. The completeness of these drawings is not guaranteed and no responsibility is assumed by KYTC for their accuracy. Originals plans included: KY 1496 over East Fork of Little Sandy River Drawing Number 20496.

CONSTRUCTION LOAD: The Contractor shall abide by the posted bridge limits. Storage of material on the bridge is prohibited.

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.

UTILITIES: Before beginning work, locate all existing utilities. Consider location of utilities shown on the drawings to be approximate and for informational purposes only. The Department does not warrant the locations and assumes no responsibility for the accuracy or completeness. The Contractor must make his own determination. Except as shown on the Plans, work around and do not disturb existing utilities.

DAMAGE OUTSIDE CONSTRUCTION LIMITS: Any area used outside the archaeology cleared area shall obtain full environmental approvals prior to use. Once cleared, any area that is disturbed outside of the limits of the construction during the life of the project shall be repaired by the Contractor at his expense, should any damage result from the Contractor's actions.

DAMAGE TO THE STRUCTURE: The Contractor shall bear full responsibility and expense for repair of any and all damage to the structure, should such damage result from the Contractor's actions. 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. 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.

STAKING: Construction staking, if required, shall be incidental to the project.

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

REMOVE SUPERSTRUCTURE: This pay item for "Remove Superstructure" shall consist of the removal of the superstructure (beams) as shown in the plans. The existing end bents shall remain in place to be reused in the rehabilitated structure. Care shall be exercised not to damage areas of remaining concrete or reinforcing steel during concrete removal operations.

Remove concrete by means of approved pneumatic hammers employing pointed and blunt chisel tools. Hydraulic hoe-ram type hammers will not be permitted. The weight of the hammer shall not be more than 35 pounds for removal within 18 inches of portions to be preserved. Outside the 18 inch limit, the Contractor may use hammers not exceeding 90 pounds upon the approval of the Engineer. Do not place pneumatic hammers in direct contact with reinforcing steel that is to be retained. Care shall be taken to not damage bond to adjacent non-exposed reinforcing steel during concrete removal processes. The perimeter of all areas where concrete is removed shall be tapered at an approximately 45° angle, except that the outer edges of all chipped areas shall be saw cut to minimum depth of 1 inch to prevent feather edging unless otherwise approved by the Engineer. After all concrete has been removed, the repair surface shall be prepared by abrasive blast cleaning. Abrasive blast cleaning shall remove all fractured surface concrete and all traces of any unsound material or contaminants such as oil, grease, dirt, slurry, or any materials which could interfere with the bond of freshly placed concrete. The Contractor shall dispose all removed material off state right of way in an approved site.

DISPOSAL OF MATERIALS: All materials and debris removed from or beneath the bridge shall become the property of the Contractor and shall be removed from the right-of-way.

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 for the work involved and otherwise considered incidental to the Contract. This may include cofferdams, shoring, excavations, backfilling, removal of all or parts of the existing structure, phase construction, incidental materials, labor, or anything else required to complete the structure.

BEFORE YOU DIG: The Contractor shall be responsible for all requirements and conformation with the Underground Facility Damage Prevention Act of 1994. The Contractor will be responsible for locating any utilities on this project. All underground utilities shall be located prior to construction. Any utilities disturbed or damaged as a result of the Contractor's operations will be repaired to the satisfaction of the utility owner at the Contractor's expense. The Contractor is advised to call (800) 752-6007 a minimum of two working days prior to excavation for information on the location of some, but not necessarily all underground utilities.

MATERIALS FOR DESIGN SPECIFICATIONS:

For Class "A" Concrete: F'C = 3,500 psi
For Class "AA" Concrete: F'C = 4,000 psi
For Steel Reinforcement: FY = 60,000 psi

The Specifications, Current Edition, as designated below shall govern the following materials furnished:

Material	Specification
Grout	ASTM C1107

CONCRETE: Class "AA" Concrete is to be used throughout the superstructure and in the portions of the substructure above the tops of caps. Class "A" concrete is to be used in the substructure below the caps. Prestressed beam concrete shall be in accordance with the plans and specifications.

SUPERSTRUCTURE SLAB: The superstructure slab shall be poured continuously from end to end of slab before the concrete is allowed to set.

REINFORCEMENT: Dimensions shown from the face of concrete to bars are to center of bars unless otherwise shown. Clear distance to face of concrete is 2" unless otherwise noted. Spacing of bars is from center to center of bars. Any reinforcing bars designated by 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.

EXISTING STEEL REINFORCEMENT: The cost of cutting, bending, and cleaning existing steel reinforcement shall be incidental to the repair item being completed.

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

CONCRETE SEALER: Apply concrete sealer in accordance with the Special Note for Concrete Sealing.

DRIP STRIP: When metal bridge rail is proposed without a curb, install drip strips in accordance with the Special Note for Structures With Over the Side Drainage and MGS Railing.

TEMPORARY SUPPORTS: Temporary Supports or shoring will not be permitted under the beams when pouring the concrete deck slab or when taking "top of beam" elevations.

ARMORED EDGE: Fabricate armored edge to match cross slope and parabolic crown at each end of bridge.

PREFORMED CORK EXPANSION JOINT MATERIAL: Preformed Cork Expansion Joint Material shall conform to subsection 807.04.02 (Type 1I) of the Kentucky Department of Highways Standard Specifications.

PAYMENT FOR PRECAST CONCRETE BEAMS: The basis of payment for the Prestressed Concrete Beams shall be at the contract unit price per linear foot of beam, in accordance with the specifications.

WORKING DRAWINGS: Working drawings for temporary work shall follow the same procedures as outline for shop drawings.

BONDING NEW CONCRETE TO HARDENED CONCRETE: Bond new concrete to existing concrete with a two component epoxy resin system in accordance with section 826 and 511.03.02 of the Standard Specifications. Consider payment incidental to the bid item that receives the epoxy bond coating.

SHOP DRAWINGS: The fabricator shall submit all required shop plans, by e-mail to SHOP_064B00061N@docs.e-Builder.net, for review. These submissions shall depict the shop plans in .PDF format, as either 11"x17" or 22"x36" sheets. When any changes to the design plans are proposed, the shop drawings shall identify the proposed changes with revision clouds and notes. Designers will make review comments on these electronic submissions as needed and, if required, shall return them to the fabricator for corrections and resubmittal. Upon acceptable reconciliation of all comments, files shall be sent to the Bridge Program GEC Shop Plan Coordinator for distribution. Only plans submitted directly to the Shop Plan Coordinator will be distributed. Additionally, only plans electronically stamped "Distributed by The Bridge Program GEC Team" are to be used for fabrication.

MASTIC TAPE: Apply mastic tape at bridge in accordance with Standard Drawing BGX-022, c.e. The Contractor shall furnish all plans, equipment, and labor necessary to do the work for which no direct payment will be made.

STRUCTURE GRANULAR BACKFILL: Materials for Structure Granular Backfill shall be in accordance with Section 805 of the Specifications.

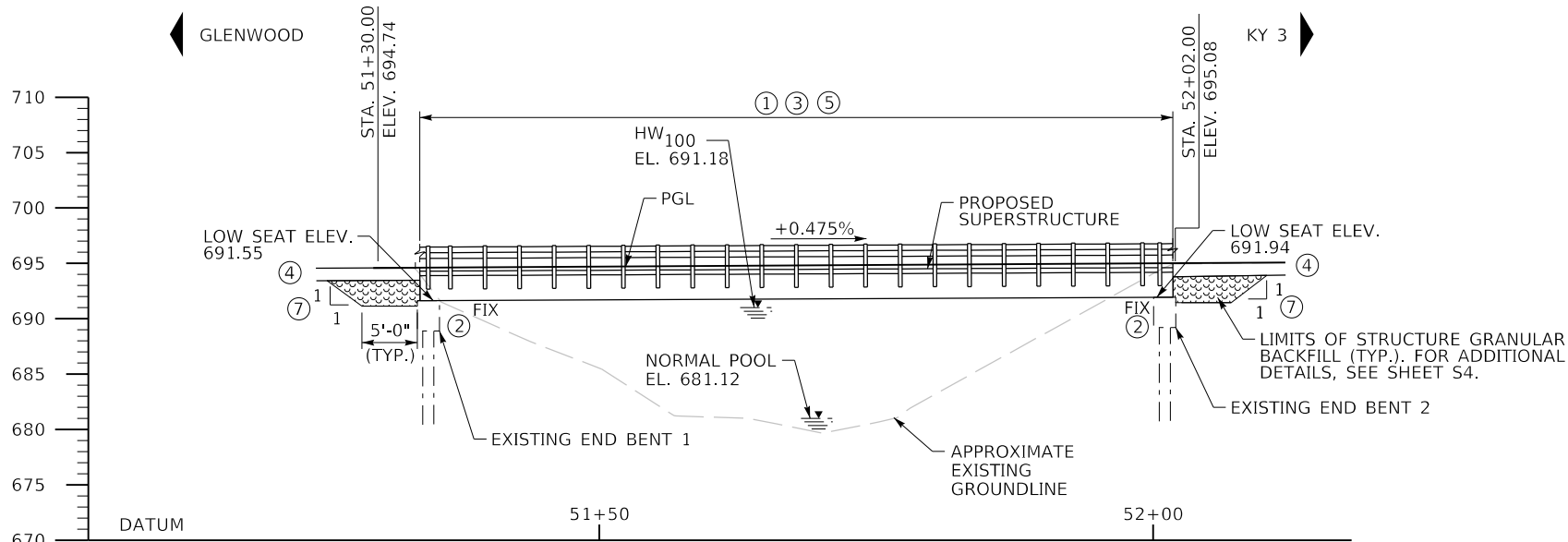
FOUNDATION PREPARATION: Foundation Preparation shall be in accordance with the Special Note for Foundation Preparation.

Foundation excavations should be properly braced/shored to provide adequate safety to persons working in or around excavations. Bracing should be performed in accordance with applicable federal, state and local guidelines. Temporary shoring, sheeting, cofferdams, and/or dewatering methods may be required to facilitate foundation construction. It should be anticipated that groundwater will be encountered at foundation locations within the flood plain.

Temporary shoring, bracing, sheeting, cofferdams and dewatering shall be included in the Lump Sum Bid for Foundation Preparation.

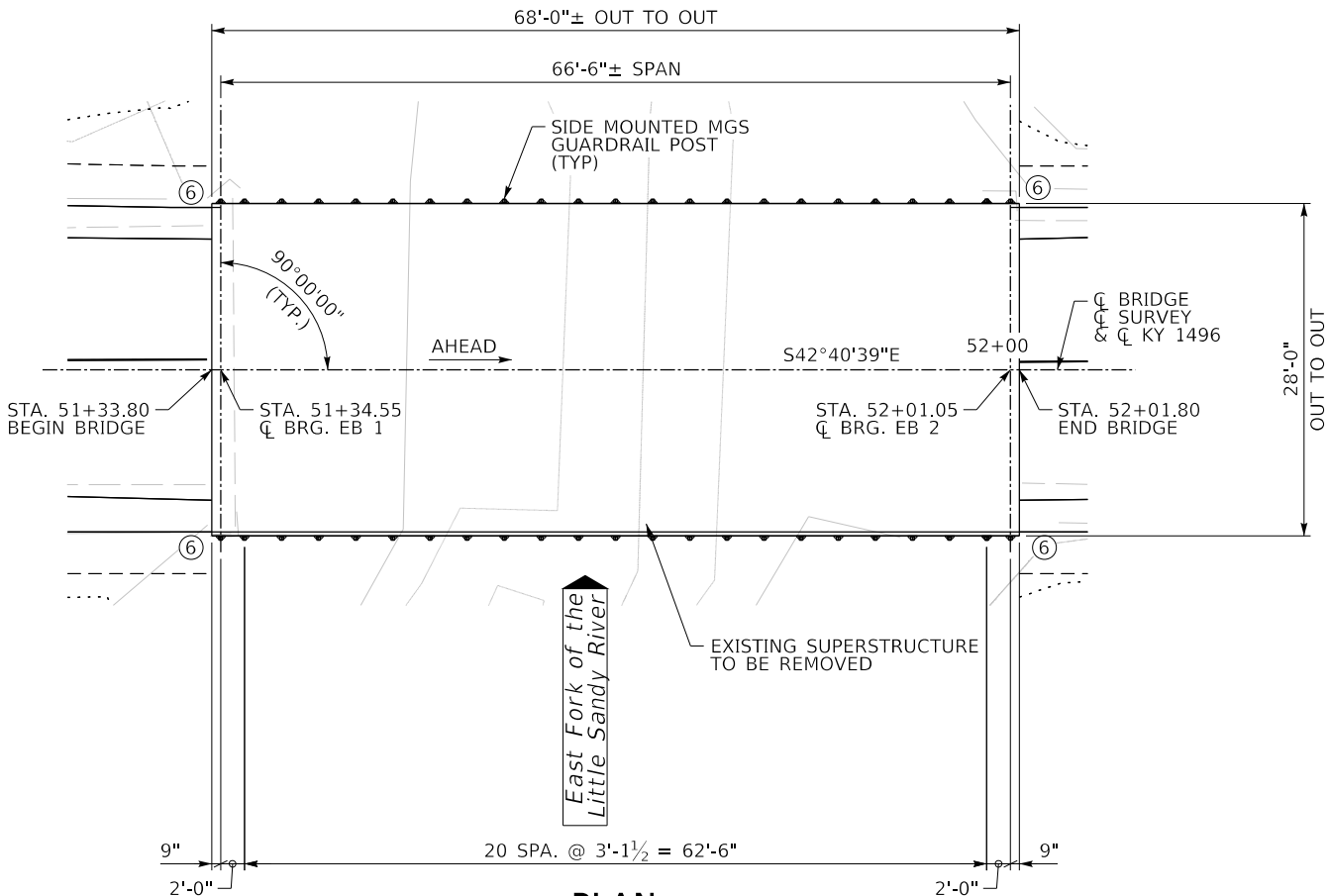
Substructure Repair: Repairs shall be made in accordance with the Special Note for Concrete Patching and the Special Note for Epoxy Injection Crack Repair.

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	<div>PREPARED BY</div> <div>Michael Baker</div> <div>INTERNATIONAL</div> <div>1650 Lyndon Farm Ct, Suite 101 Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM</div>	DATE:	CHECKED BY:	GENERAL NOTES	ROUTE	ITEM NO. 12-10114	COUNTY OF LAWRENCE
				DESIGNED BY: C.Y. YONG	C. LARKIN			SHEET NO.	DRAWING NUMBER
				DETAILED BY: R. HOLLEY	C.Y. YONG	EAST FORK OF THE LITTLE SANDY RIVER	KY 1496	S1	28661



ELEVATION

(FIELD VERIFY ALL DIMENSIONS)
(GUARDRAIL OFF BRIDGE NOT SHOWN)
1 SIMPLE SPAN 66'-6", CB27X48 KY HL-93 LOADING
0° SKEW, 27'-4" BRIDGE ROADWAY WIDTH

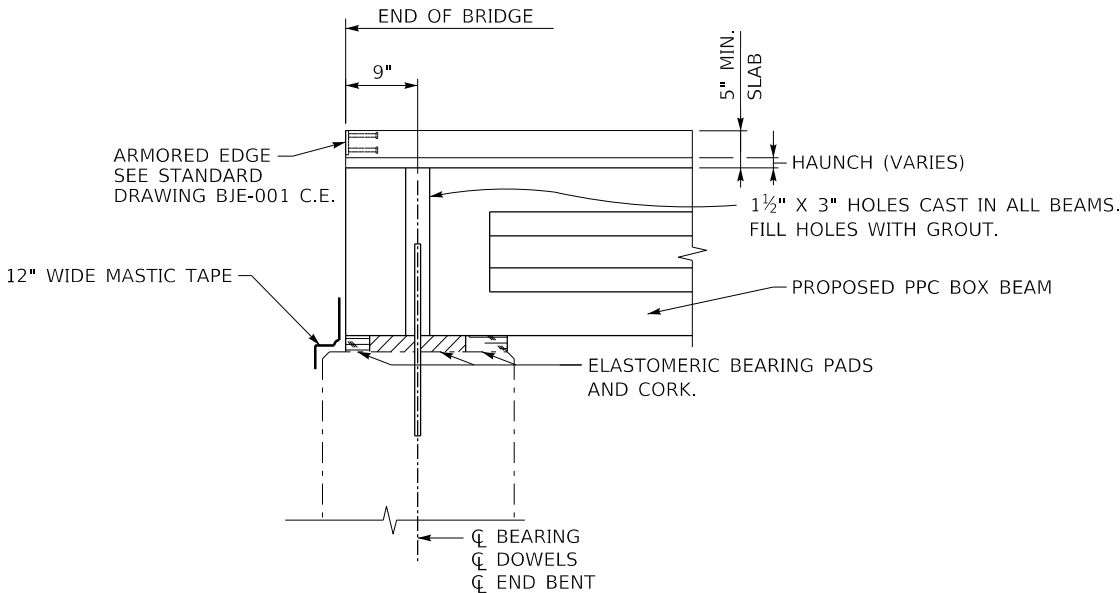


PLAN

(FIELD VERIFY ALL DIMENSIONS)

NOTES:

- ① REMOVE EXISTING SUPERSTRUCTURE.
- ② MODIFY AND REPAIR EXISTING END BENT AS NEEDED FOR NEW SUPERSTRUCTURE. SEE SHEET S4.
- ③ CONSTRUCT NEW SUPERSTRUCTURE, SEE SHEET S3.
- ④ CONSTRUCT APPROACH PAVEMENT. FOR APPROACH PAVEMENT DETAIL, SEE SHEET R4.
- ⑤ INSTALL SIDE MOUNTED MGS RAILING USING STANDARD DRAWINGS BHS-011.
- ⑥ ROADWAY GUARDRAILS TO ATTACH TO BRIDGE RAILING SYSTEM, SEE ROADWAY PLANS.
- ⑦ FOR END BENT BACKFILL AND METHOD OF CONSTRUCTION, SEE THE SPECIAL NOTE FOR FOUNDATION PREPARATION. THE REQUIRED EXCAVATION, GEOTEXTILE FABRIC CLASS 1, 4" PERFORATED PIPE, NEW STRUCTURE GRANULAR BACKFILL, AND GRADING NEEDED TO SHAPE THE BRIDGE APPROACHES TO BE INCIDENTAL TO FOUNDATION PREPARATION.



TYPICAL SECTION AT END BENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

REVISION	DATE

PREPARED BY

1650 Lyndon Farm Ct, Suite 101
Louisville, KY 40223
Phone: (502) 339-3557
MBAKERINTL.COM

Michael Baker
INTERNATIONAL

DATE:	CHECKED BY
DESIGNED BY: C.Y. YONG	C. LARKIN
DETAILED BY: R. HOLLEY	C.Y. YONG

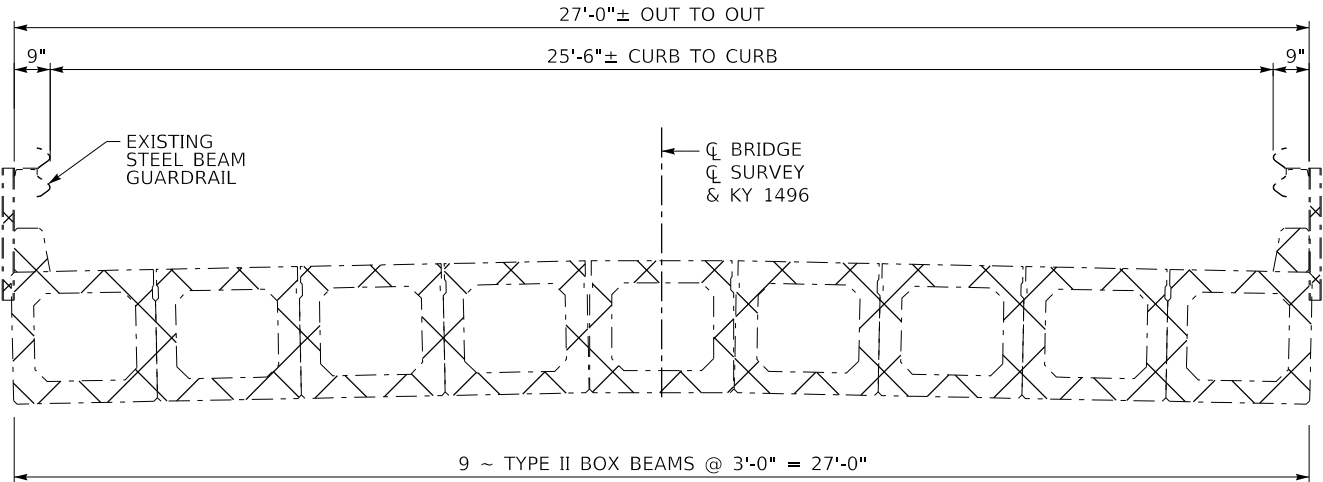
LAYOUT

CROSSING

EAST FORK OF THE LITTLE SANDY RIVER

ROUTE	ITEM NO. 12-10114	COUNTY OF LAWRENCE
KY 1496	SHEET NO. S2	DRAWING NUMBER 28661

SUPERSTRUCTURE BILL OF REINFORCEMENT														
MARK	TYPE	NO.	SIZE	LENGTH		LOCATION	A		B		C		D	
				FT	IN		FT	IN	FT	IN	FT	IN	FT	IN
S1(E)	STR	68	#5	27	8	SLAB TRANSVERSE								
S2(E)	STR	56	#5	35	1	SLAB LONGITUDINAL								



EXISTING TYPICAL SECTION
(FIELD VERIFY ALL DIMENSIONS)

- NOTES:
- REPLACE EXISTING SUPERSTRUCTURE WITH (7) PRECAST BOX BEAMS AND REINFORCED CONCRETE SLAB.
 - APPLY CONCRETE SEALING TO PROPOSED BEAMS AND SLAB PER SPECIAL NOTE.
 - CONTRACTOR INSTALL DRIP STRIPS ALONG BOTH SIDES OF THE BRIDGE, PER SPECIAL NOTE.


- BOX BEAM NOTES:
- BOX BEAMS SHALL BE FABRICATED IN ACCORDANCE WITH STANDARD DRAWING BDP-009-C.E., AS TABULATED FOR A 68'-0". THE SPAN LENGTH SHALL MATCH THE EXISTING CONDITIONS.

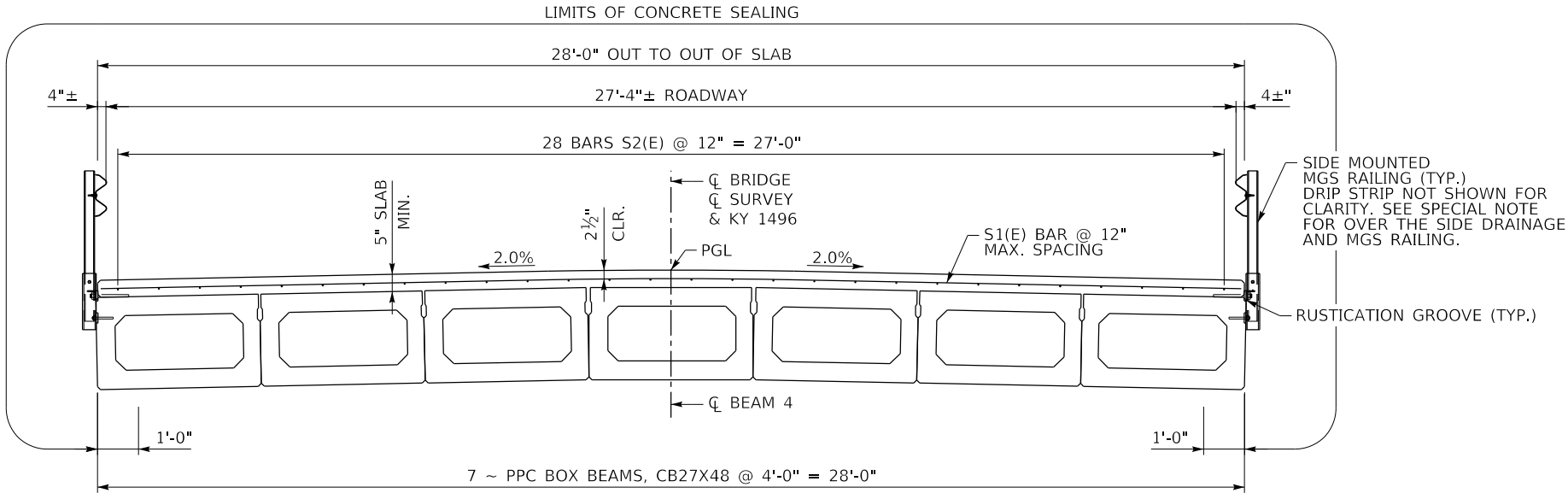
ESTIMATED PRECAST LENGTH = 68'-0"

ESTIMATED BEARING TO BEARING LENGTH = 66'-6".
 - BOX BEAMS SHALL BE INSTALLED AS SHOWN AND IN COMPLIANCE WITH STANDARD DRAWINGS BDP-001-C.E., BDP-002-C.E., BDP-003-C.E., BDP-004-C.E. AND BDP-009-C.E.

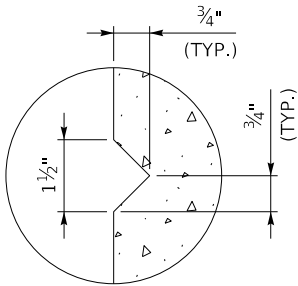
- DECK REINFORCEMENT NOTES:
- STR DENOTES STRAIGHT BARS.
 - ALL REBAR TO BE EPOXY COATED, A615 GRADE 60.
 - SHOULD THE CONTRACTOR CHOOSE TO INTRODUCE LAP SPLICES IN ADDITION TO WHAT IS ALREADY SPECIFIED IN THESE PLANS, USE THE FOLLOWING MINIMUM LAP SPLICE LENGTHS:
2'-6" FOR #5 BARS.

LEGEND:

 REMOVAL AREA

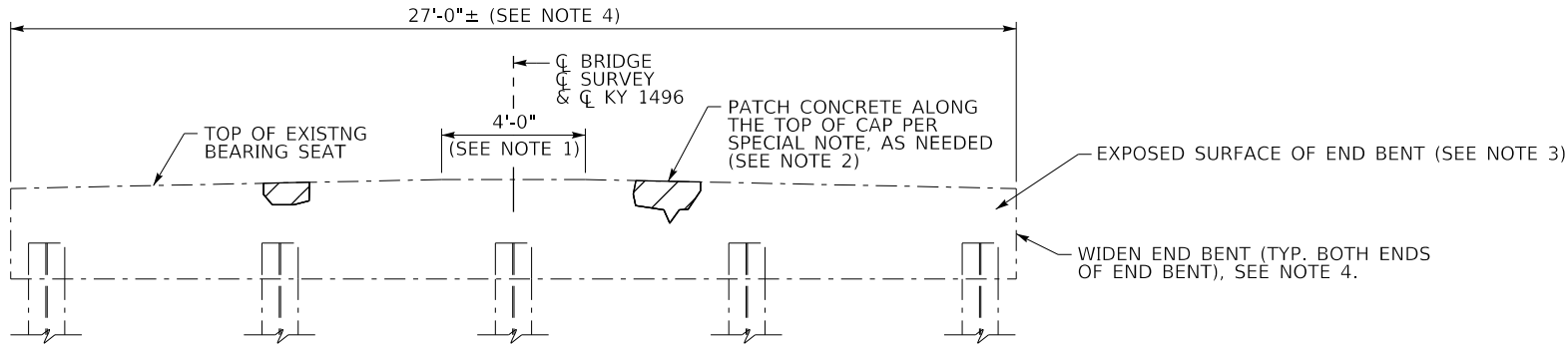


PROPOSED TYPICAL SECTION
(LOOKING AHEAD STATION)



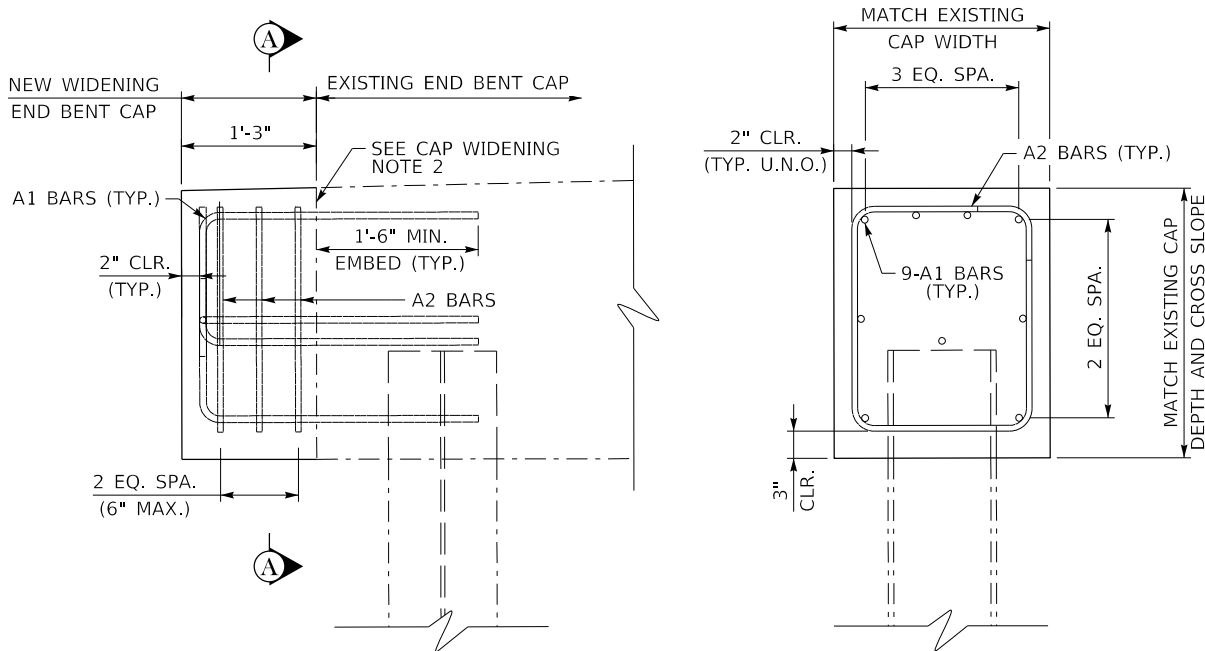
RUSTICATION GROOVE

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY Michael Baker INTERNATIONAL 1650 Lyndon Farm Ct, Suite 101 Louisville, KY 40223 Phone: (502) 339-3557 MBAKERINTL.COM	DATE:	CHECKED BY	TYPICAL SECTION CROSSING EAST FORK OF THE LITTLE SANDY RIVER	ROUTE KY 1496	ITEM NO. 12-10114	COUNTY OF LAWRENCE
				DESIGNED BY: C.Y. YONG	C. LARKIN			SHEET NO. S3	DRAWING NUMBER 28661
				DETAILED BY: R. HOLLEY	C.Y. YONG				



TYPICAL END BENT - ELEVATION

(FIELD VERIFY ALL DIMENSIONS)
(SUPERSTRUCTURE NOT SHOWN FOR CLARITY)



DETAIL 1

(NOT TO SCALE)

SECTION A-A

(NOT TO SCALE)

CAP WIDENING NOTES:

1. INSTALL REBAR ANCHORS WITH HILTI HIT-RE 500 V3 EPOXY ADHESIVE OR APPROVED EQUIVALENT. INSTALLATION AND SURFACE PREPARATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
2. CLEAN AND INTENTIONALLY ROUGHEN SURFACE TO A MINIMUM 1/4 INCH AMPLITUDE.
3. ENSURE THE SURFACE OF THE EXISTING CONCRETE IN A SATURATED-DRY (SSD) CONDITION. REMOVE ALL FREE (PONDING) WATER JUST BEFORE PLACING THE CONCRETE.
4. 2'-3" CAP WIDTH AND 2'-6" CAP DEPTH ASSUMED FOR QUANTITIES. THE QUANTITY OF CONCRETE CLASS A MAY INCREASE OR DECREASE BASED ON ACTUAL FIELD DIMENSIONS.
5. A MINIMUM OF 4 CUYD OF CONCRETE CLASS A WILL BE PAID.

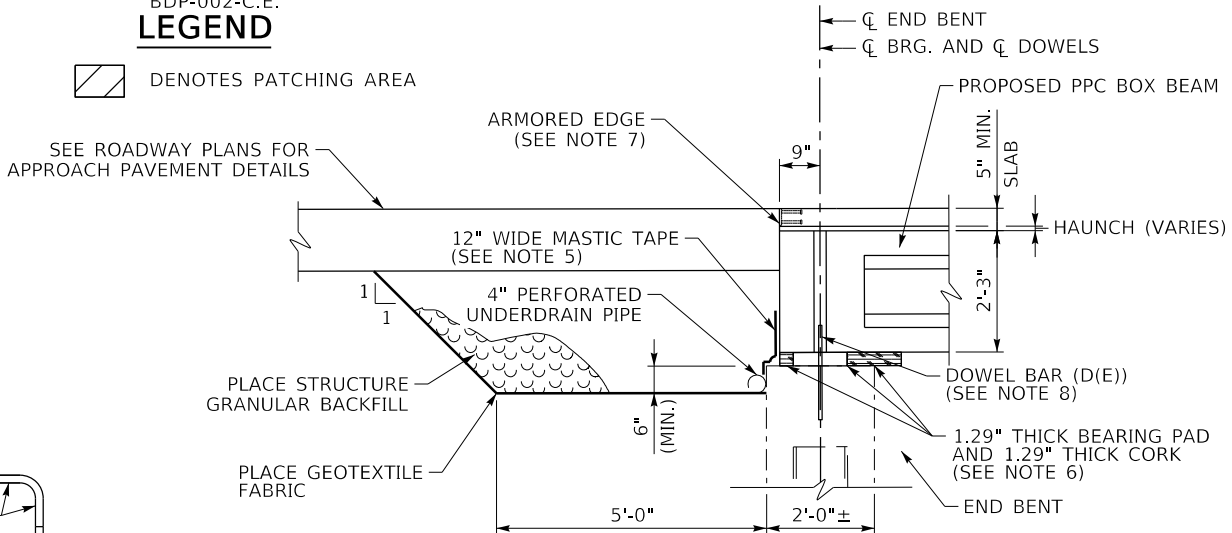
NOTES:

1. EXISTING END BENTS TO REMAIN. CONTRACTOR SHALL GRIND CONCRETE LEVEL OVER CENTER 4'-0" OF BRIDGE SEAT FOR NEW LEVEL BEAM 4 PLACEMENT. GRINDING SHALL BE INCIDENTAL TO BID ITEM PRECAST PC BOX BEAM CB27-48.
2. THE SUBSTRUCTURES APPEAR TO BE IN GOOD CONDITION BUT THE TOPS OF ALL CAPS ARE CURRENTLY NOT ABLE TO BE INSPECTED. ONCE THE EXISTING BEAMS HAVE BEEN REMOVED, THE CONTRACTOR SHALL INSPECT THE CAPS FOR SPALLS, DELAMINATIONS, AND CRACKING. IF DEFECTS ARE FOUND, WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL PATCH OR EPOXY INJECT THE DEFECT. EPOXY INJECTION SHALL BE PER THE SPECIAL NOTE FOR EPOXY INJECTION CRACK REPAIR AND PATCHING SHALL BE PER THE SPECIAL NOTE FOR CONCRETE PATCHING REPAIR. ASSUMED PATCHING QUANTITIES ARE FOR 5 PERCENT OF THE CAP SURFACE FOR EACH SUBSTRUCTURE AND CRACK INJECTION IS ASSUMED FOR 6 LINEAR FEET PER SUBSTRUCTURE.
3. APPLY CONCRETE SEALING AT END BENTS TO EVERY EXPOSED SURFACE ABOVE A POINT OF 6" BELOW GROUND OR FILL LINE OF END BENTS. REFER TO SPECIAL NOTE FOR CONCRETE SEALING FOR MORE INFORMATION.
4. CONTRACTOR SHALL FIELD VERIFY THE EXISTING END BENT CAPS TO ENSURE THAT THE NEW PRESTRESSED BOX BEAMS DO NOT OVERHANG FROM EXISTING END BENT CAP. WIDEN THE END BENT CAPS TO ACCOMMODATE THE NEW PRESTRESSED BOX BEAMS USING DETAIL 1 AND SECTION A-A. IF LENGTH OF WIDENING EXCEEDS 15" ON EITHER END OF THE END BENT, CONSULT WITH THE ENGINEER BEFORE WIDENING. ADJUST NEW REBAR TO AVOID CONFLICT WITH THE EXISTING CAP REBAR.
5. 12" WIDE MASTIC TAPE TO WATERPROOF THE JOINT BETWEEN THE BEAMS AND END BENT 1 OR END BENT 2. THE TAPE SHALL BE LOOPED AS SHOWN TO ALLOW MOVEMENT WITHOUT DAMAGE TO THE TAPE. INSTALL PLASTIC FILM OR OTHER BOND BREAKER BETWEEN THE TAPE LOOP AND EXPANSION JOINT. REFER TO STD. DWG. BGX-022-C.E. FOR MORE INFORMATION.
6. INSTALL BEARING PADS (A1 AND B1) IN ACCORDANCE WITH STANDARD DRAWING BBP-003-C.E. SET PADS AND CORK IN ACCORDANCE WITH STANDARD DRAWING BDP-002-C.E. THE BEARING PADS AND CORK SHALL BE INCIDENTAL TO BID ITEM PRECAST PC BOX BEAM CB27-48.
7. INSTALL ARMORED EDGE IN ACCORDANCE WITH STANDARD DRAWING BJE-001-C.E.
8. DOWELS, D(E) SHALL BE EPOXY COATED. DOWEL BARS TO BE DRILLED AND GROUTED WITH 12" MINIMUM EMBEDMENTS INTO SUBSTRUCTURE UNITS. DOWELS SHALL BE SPACED AS SHOWN ON STANDARD DRAWING. BDP-003-C.E. THE HOLES IN THE BOX BEAMS SHALL BE GROUTED AS SHOWN IN STANDARD DRAWING BDP-002-C.E.

LEGEND

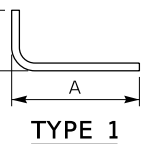


DENOTES PATCHING AREA

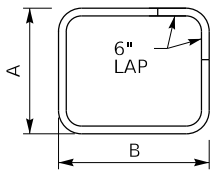


PROPOSED SECTION AT END BENT 1

(FIELD VERIFY ALL DIMENSIONS)
(END BENT 1 SHOWN, END BENT 2 OPPOSITE HAND)



TYPE 1



TYPE 14

BILL OF REINFORCEMENT END BENT 1

MARK	TYPE	NO.	SIZE	LENGTH		LOCATION	A		B		C		D	
				FT	IN		FT	IN	FT	IN	FT	IN	FT	IN
A1	1	18	#8	3	11	CAP	2	7						
A2	14	6	#5	8	6	CAP	2	1	1	8				
D(E)	STR	14	#8	2	0	BEARING SEAT/BEAM								

BILL OF REINFORCEMENT END BENT 2

MARK	TYPE	NO.	SIZE	LENGTH		LOCATION	A		B		C		D	
				FT	IN		FT	IN	FT	IN	FT	IN	FT	IN
A1	1	9	#8	3	11	CAP	2	7						
A2	14	4	#5	10	8	CAP	2	2	2	8				
D(E)	STR	14	#8	2	0	BEARING SEAT/BEAM								

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

REVISION

DATE

Michael Baker
INTERNATIONAL

PREPARED BY
1650 Lyndon Farm Ct, Suite 101
Louisville, KY 40223
Phone: (502) 339-3557
MBAKERINTL.COM

DATE:

CHECKED BY

DESIGNED BY: C.Y. YONG

A. Pschorr

DETAILED BY: R. HOLLEY

C.Y. YONG

SUBSTRUCTURE DETAILS

CROSSING
EAST FORK OF THE LITTLE SANDY RIVER

ROUTE

KY 1496

ITEM NO.

12-10114

SHEET NO.

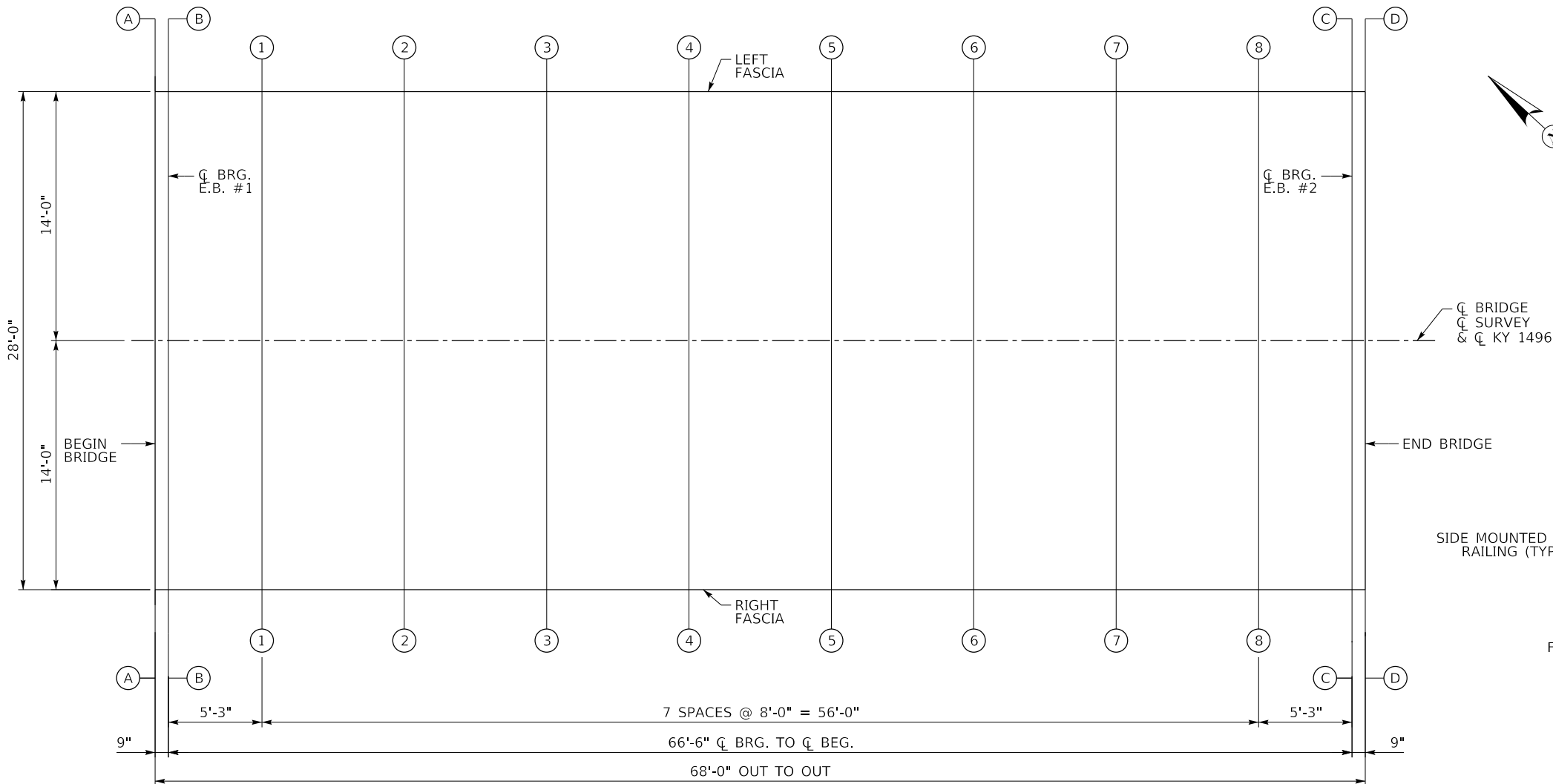
S4

COUNTY OF

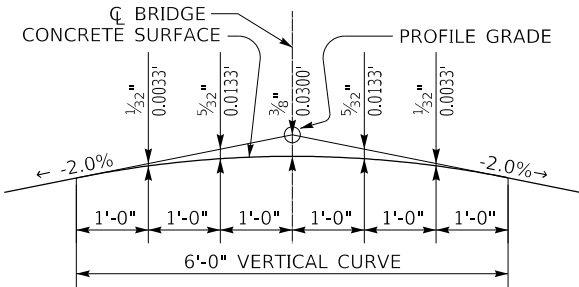
LAWRENCE

DRAWING NUMBER

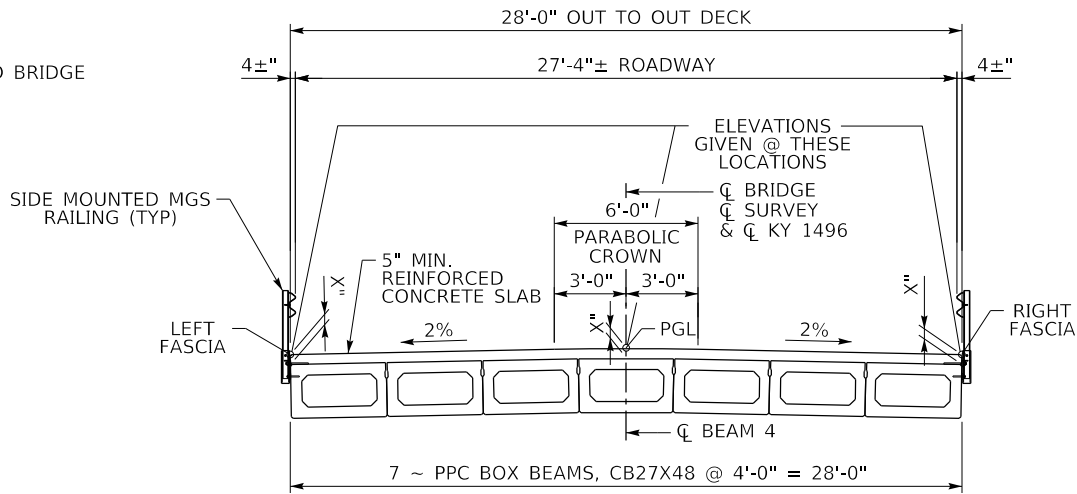
28661



GRID LAYOUT



PARABOLIC CROWN



TYPICAL SECTION

(LOOKING AHEAD STATION)

NOTES FOR ELEVATIONS TAKEN ON PRESTRESSED CONCRETE BOX BEAMS

TAKE ELEVATIONS ON TOP OF BEAM AT POINTS INDICATED AFTER THE BEAMS HAVE BEEN Laterally Tensioned and Grouted. The beam elevations are to be read to three decimal places 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.

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.

The center beam is placed level, other beams are sloped with roadway crown. This may effect the out to out dimension of the deck, ensure slab is fascia is flush with beam fascia.

The minimum allowable dimension "X" or slab thickness is 5" (0.417'). The maximum allowable dimension "X" or slab thickness is 6.8" (0.570') at end bent 1 and 6.0" (0.500') at end bent 2. If any computed dimension "X" is outside limits, adjustments need to be made to the dimensions "X" on one or more grid lines at the discretion of the engineer.

No additional payment will be made for any additional slab concrete due to beam camber in excess of the designer's assumptions. No additional concrete above plan quantity should be placed without the approval of the engineer.

LOCATION	CONSTRUCTION ELEVATIONS								
	LEFT FASCIA			CENTER LINE			RIGHT FASCIA		
	CONST. ELEV.	TOP OF BEAM	DIM. "X"	CONST. ELEV.	TOP OF BEAM	DIM. "X"	CONST. ELEV.	TOP OF BEAM	DIM. "X"
SKEW LINE AA	694.474			694.724			694.474		
SKEW LINE BB	694.477			694.727			694.477		
GRID LINE 1	694.513			694.763			694.513		
GRID LINE 2	694.565			694.815			694.565		
GRID LINE 3	694.614			694.864			694.614		
GRID LINE 4	694.657			694.907			694.657		
GRID LINE 5	694.695			694.945			694.695		
GRID LINE 6	694.728			694.978			694.728		
GRID LINE 7	694.755			695.005			694.755		
GRID LINE 8	694.779			695.029			694.779		
SKEW LINE CC	694.793			695.043			694.793		
SKEW LINE DD	697.797			695.047			694.797		

