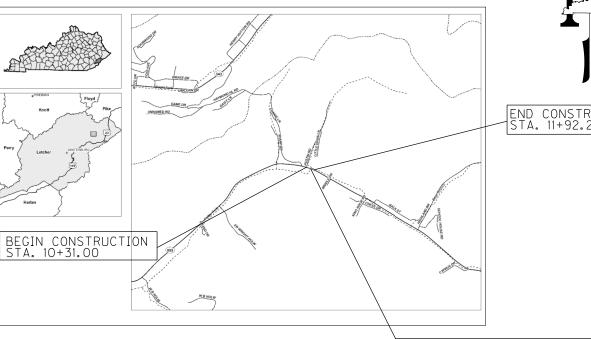
# STANDARD DRAWINGS RBR-001-13 STEEL BEAM GUARDRAIL "W" BEAM RBR-005-11 GUARDRAIL COMPONENTS RBR-010-06 GUARDRAIL TERMINAL SECTIONS RBR-015-06 STEEL GUARDRAIL POSTS GUARDRAIL END TREATMENT TYPE ALTERNATE ANCHOR RBR-051-01 RBR-055-01 DELINEATORS FOR GUARDRAIL RBI-001-12 TYPICAL GUARDRAIL INSTALLATIONS RDI-040-01 | EROSION CONTROL BLANKET SLOPE INSTALLATION RBM-020-09 DELINEATORS FOR CONCRETE BARRIERS CONCRETE BARRIER WALL TYPE 9T (TEMPORARY) RBM-115-10 RBM-120-02 BOX BEAM STIFFENING OF TEMPORARY CONCRETE BARRIE RDX-210-03 TEMPORARY SILT FENCE RDX-220-05 SILT TRAP TYPE A RDX-225-01 SILT TRAP TYPE B RDX-230-01 SILT TRAP TYPE C RGX-001-06 MISCELLANEOUS STANDARDS RGX-200-01 ONE POINT PROCTOR FAMILY OF CURVES TTC-100-05 LANE CLOSURE TWO-LANE HIGHWAY TTC-110-04 LANE CLOSURE USING TRAFFIC SIGNALS TTC-135-03 SHOULDER CLOSURE TTC-150-04 ROAD CLOSURE WITH DIVERSION **ACTIVE SEPIAS** PAVEMENT STRIPING DETAILS FOR TWO LANE SEPIA 34 GUARDRAIL END TREATMENT TYPE I

# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

LETCHER COUNTY **KY-805 OVER POTTER CREEK** STA. 11 + 07.40



END CONSTRUCTION STA. 11+92.29

LOCATION MAP SCALE: 1"=NTS

STA. 11+07.40 CONSTRUCT SINGLE 24'-0" X 6'-0" X 46'-0" R.C.B.C @ 35° SKEW RT

# **DESIGN CRITERIA**

CLASS OF HIGHWAY RURAL LOCAL ROAD TYPE OF TERRAIN ROLLING DESIGN SPEED REQUIRED NPSD REQUIRED PSD LEVEL OF SERVICE \_\_\_\_ ADT PRESENT ( 2023 ) 1,420 ADT FUTURE (

LATITUDE 37 DEGREES 11 MINUTES 10 SECONDS NORTH LONGITUDE 82 DEGREES 41 MINUTES 49 SECONDS WEST

#### DESIGNED

% RESTRICTED SD \_\_\_\_ LEVEL OF SERVICE \_\_\_\_ MAX. DISTANCE W/O PASSING .

#### **GEOGRAPHIC COORDINATES**

REV. NO. SHEETS REVISED DATE

HDR ENGINEERING, INC. 2517 SIR BARTON WAY LEXINGTON, KY 40509

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.

EXISTING BRIDGE ID # 067B00023N



Jared McCammon, PE #28688

ROADWAY P.E. STAMP

COUNTY OF	ITEM NO.	SHEET NO.				
LETCHER	12-10117	R1				

	INDEX OF SHEETS
Sheet No.	Description
R1	LAYOUT SHEET
R2	TYPICAL SECTION, GENERAL SUMMARY, LEGEND AND COORDINATE CONTROL SHEET
R3	PLAN AND PROFILE SHEET
R3A	RIGHT OF WAY SUMMARY SHEET
R4	MOT NOTES
R5	MOT PLAN SHEET
R6	ENVIRONMENTALLY CLEARED AREA SHEET
X1-X2	ROADWAY CROSS SECTIONS SHEETS
S1	TITLE SHEET
S2	LAYOUT
S3	PROPOSED PHASES
S4-S5	BARREL DETAILS
S6	WINGS 1 & 3
S7	WING 2
S8	WING 4
S9	BILL OF REINFORCEMENT
	SPECIAL NOTES

SPECIAL PROVISIONS

STRUCTURE REMOVAL AND RENOVATIONS SEASONAL TREE CLEARING RESTRICTION

## **SPECIFICATIONS**

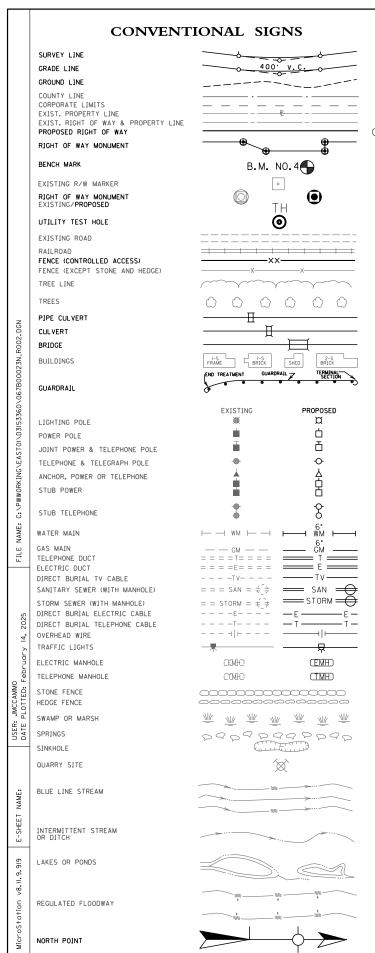
2019, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

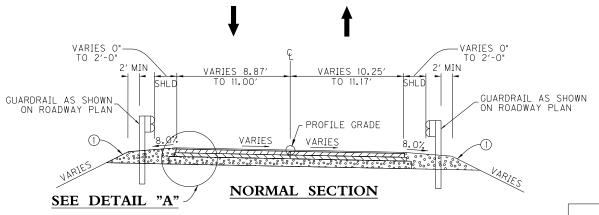
REVISION	DATE

### Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS COUNTY OF

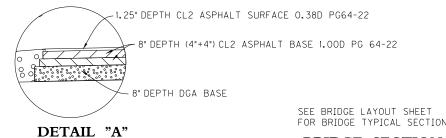
### **LETCHER**

ITEM NO. 12-10117
DRAWING NO.
PROJECT
LETTING DATE:
RECOMMENDED BY: PROJECT MANAGER DATE:
PLAN APPROVED BY:





#### TRAFFIC LANE PAVEMENT (PERMANENT & TEMPORARY) (1) (2) 1.25" DEPTH CL2 ASPHALT SURFACE 0.38D PG64-22 ASPHALT BASE 8" DEPTH (4"+4") CL2 ASPHALT BASE 1.00D PG 64-22 DGA BASE 8" DEPTH (4"+4") **SHOULDERS** DGA BASE AND/OR FULL DEPTH GRANULAR EMBANKMENT



# **BRIDGE SECTION**

ITEM	DESCRIPTION	UNIT	TOTAL
00001	DGA BASE 6	TON	197
00212	CL2 ASPHALT BASE 1.00D PG 64-22 6	TON	243
00301	CL2 ASPHALT SURFACE 0.38D PG64-22 ⑥	TON	39
01987	DELINEATOR FOR GUARDRAIL B/W	EACH	8
02273	FENCE-4 FT CHAIN LINK	LF	93
02351	GUARDRAIL-STEEL W BEAM-S FACE	LF	212.5
02360	GUARDRAIL TERMINAL SECTION NO I	EACH	3
02371	GUARDRAIL END TREATMENT TYPE 1	EACH	1
02483	CHANNEL LINING CLASS II	TON	146
02562	TEMPORARY SIGNS ③	SQFT	200
02569	DEMOBILIZATION	LS	1
02585	EDGE KEY	LF	40
~~0265Q~	MATATATH AND GONTROL TRAFETIC ®	more	mh
02671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	3
04934	TEMP SIGNAL MULTI PHASE	EACH	1
V02726V	TISTAKING THE TOTAL THE TO	wyw	ww
02731	REMOVE STRUCTURE	LS	1
23823EC	SEGMENTAL RETAINING WALL	SQFT	50
21415ND	EROSION CONTROL (5)	LS	1
20418ED	REMOVE AND RELOCATE SIGNS	EACH	2

#### NOTES:

④ ALL TEMPORARY TRAFFIC CONTROL DEVICES EXCEPT TEMPORARY SIGNAGE, TEMP SIGNAL AND PORTABLE CHANGEABLE MESSAGE SIGNS ARE CONSIDERED INCIDENTAL TO THIS BID ITEM, INCLUDING TEMP GUARDRAIL AND CONCRETE BARRIERS WALLS TYPE 9T. BYSEE SPECTAL NOTE. THOCKUDES ALL YELEARING, TEMPORARY EROSION CONTROL BURPS AND PERMANENT SPEDING.

(6) INCLUDES TEMPORARY PAVEMENT WIDENING FOR MAINTENANCE OF TRAFFIC.

COUNTY OF ITEM NO. SHEET NO. LETCHER 12-10117 R2

#### KY-805 LETCHER COUNTY EXISTING BRIDGE ID #67B00023N

PROJECT COORDINATES COORDINATES FOR HORIZONTAL CONTROL WERE OBTAINED BY GPS OBSERVATIONS ON JANUARY 3, 2023 AND WERE ADJUSTED TO NGS OPUS SOLUTION BASED ON THE NAD83 KENTUCKY STATE PLANE COORDINATE SYSTEM, KY SINGLE ZONE, US SURVEY FEET. COORDINATES SHOWN ARE STATE PLANE COORDINATES, US SURVEY FEET. NO PROJECT DATUM FACTOR WAS CALCULATED OR USED FOR THIS PROJECT.

BASIS OF ELEVATIONS

ELEVATIONS WERE ESTABLISHED BY GPS OBSERVATIONS ON JANUARY 3, 2023 ON THE NAVD88 VERTICAL DATUM, GEOID12B UTILIZING NGS OPUS SOLUTION AND WERE ADJUSTED BY CLOSED DIFFERENTIAL LEVEL LOOP BASED ON THE ELEVATION OF CP#1 = 1327.288.

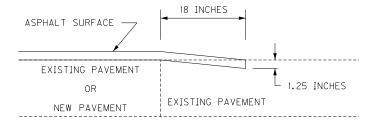
COORDINATE CONTROL POINTS									
POINT	DESCRIPTION	STATE PLAN	E SINGLE ZONE C	ZONE COORDINATES STATION		OFFSET			
		NORTH (Y)	EAST (X)	ELEV. (Z)					
CPI	1/2" REBAR & CAP	3605948.3600	5810422.0990	1327.288	10+47.68	13.87 RT.			
CP2	1/2" REBAR & CAP	3605864.5480	5810677.4620	1325.614	13+15.58	12.93 LT.			

#### NOTES:

- (1) FULL-DEPTH PAVEMENT CONSTRUCTION WILL BE USED FOR THE ENTIRE PAVING LIMITS. FOR THE DRIVEWAY TIE-INS REDUCE THE ASPHALT BASE TO 4" AND THE DGA BASE TO 4".
- 2) THE PAVEMENT DEPTH WILL VARY ACROSS THE BOX CULVERT. BUILD UP THE PAVEMENT PER THE PAVEMENT DESIGN UNTIL THE FULL SECTION IS ACHIEVED. ADDITIONAL FILL OVER THE CULVERT, IF NEEDED, IS TO BE PER KYTC SPECIFICATIONS.

ADDENDUM 1

CENTERLINE COORDINATE DATA								
POINT	SINGLE ZONE NATES							
POINT	STATION	NORTH (Y)	EAST (X)					
P.O.T.	10+00.00	3605977.5583	5810381.9388					
P.C.	11+59.70	3605923.4533	5810532.1954					
P.I.	12+01.45	3605909.3102	5810571.4724					
Р.Т.	12+43.00	3605888.8498	5810607.8603					
P. O. T.	13+52.89	3605834.9880	5810703.6510					

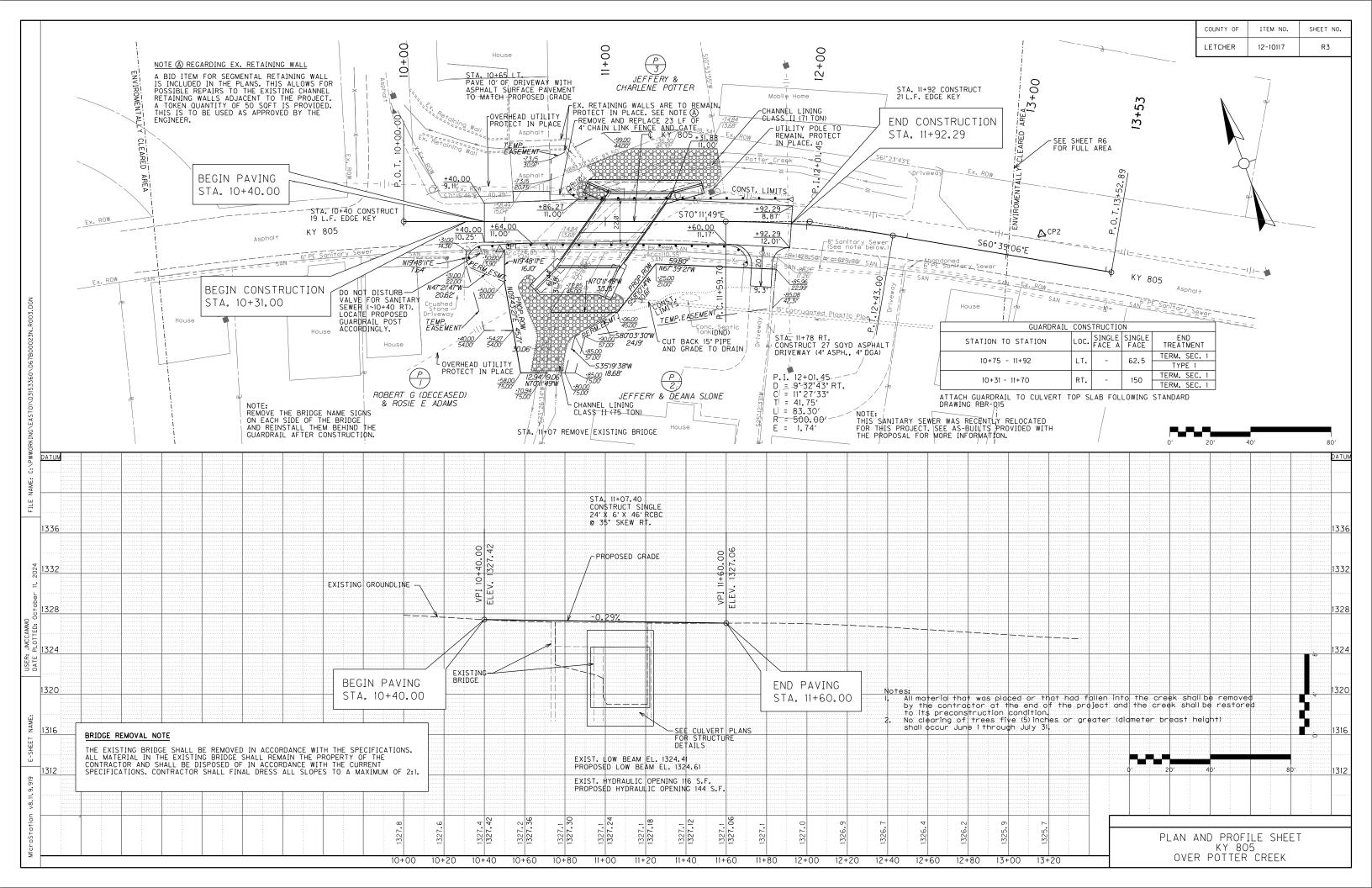


#### EDGE KEY DETAIL

WORK UNDER THIS ITEM SHALL INCLUDE CUTTING OUT THE EXISTING BITUMINOUS SURFACE TO A MINIMUM DEPTH AND WIDTH AS SHOWN. SO THE NEW SURFACE MAY HEEL INTO THE EXISTING SURFACE.

> TYPICAL SECTION, GENERAL SUMMARY LEGEND AND COORD. CONTROL SHEET
> KY 805 OVER POTTER CREEK

SCALE: 1"=NTS



OUNTY OF	ITEM NO.	SHEET NO.
LETCHER	12-10117	R3A

# **RIGHT OF WAY SUMMARY**

DARCEL		TOTAL ARE	EA OF TRACT	PERMANENT R	/W ACQUIRED	EASE PERMANENT	MENTS	LE	AREA S	EVERED RIC	SHT	EXCESS F	PURCHASED	PORTION	REMAINING	SEWER	SEWER SYST AFFECTED	EM BUII	LDINGS	ACQUIRE	)	
PARCEL NO.	OWNER(S)	ACRES	SQ. FT.	ACRES	SQ. FT.	SQ. FT.	SQ. FT.				SQ. FT.	ACRES	SQ. FT.	ACRES	REMAINING SQ. FT.	TYPE	YES NO	) C	R	F	SOURCE OF TITLE	REMARKS*
1	ROBERT G (DECEASED) & ROSIE E ADAMS		12448		1222	226	439				11226				11226	1	×	+		$\overline{}$	- DB 314 PG 333	
2	JEFFERY & DEANA SLONE		15726		1738	474	2045				13988				13988	1	X	-	-	-	- DB 348 PG 588	
3	JEFFERY & CHARLENE POTTER		22645		0	0	548		22645						22645	1	X	-	-	-	- DB 314 PG 115	

NOTE: PERMANENT R/W ACQUIRED + AREA SEVERED = TOTAL AREA OF TRACT.

TYPE SEWER SYSTEM

1. PRIVATE - INDIVIDUAL
2. PRIVATE - MULTI PARTY
3. PUBLIC
4. NONE
5. NOT APPLICABLE

BUILDINGS ACQUIRED CODE C - COMMERICAL R - RESIDENTIAL F - FARM S - STORAGE

\*INCLUDES HAZARDOUS WASTE (UST - UNDERGROUND STORAGE TANKS)

RIGHT OF WAY SUMMARY SHEET KY 805 OVER POTTER CREEK

#### MAINTENANCE OF TRAFFIC NOTES:

- 1. CONTRACTOR SHALL INVENTORY, REMOVE AND REPLACE EXISTING SIGNS, WITH NEW SIGNS IMPACTED BY THE PROPOSED CONSTRUCTION. OFFSITE SIGNS CONFLICTING WITH THE PROPOSED IMPROVEMENTS SHALL BE REMOVED AND REPLACED AT THE DIRECTION OF KYTC.
- 2. CONTRACTOR SHALL COORDINATE WITH LOCAL RESIDENTS AND OFFICIALS PRIOR TO CONSTRUCTION AND ANY TEMPORARY CLOSURES.
- 3. INGRESS AND EGRESS SHALL BE MAINTAINED TO ALL DWELLINGS AFFECTED BY THE PROJECT.
- 4. CLOSURE SIGNS, DETOUR SIGNS AND BI-DIRECTIONAL LANE CLOSURE SIGNS SHOULD BE PLACED NO SOONER THAN TWO WEEKS PRIOR TO THE CLOSING OF THE BRIDGE (WHEN APPLICABLE) OR PLACING LANE CLOSURES.
- 5. TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE 2019 KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE KYTC STANDARD DRAWINGS.
- 6. CONTRARY TO SECTION 106.01, TRAFFIC CONTROL DEVICES USED ON THIS PROJECT MAY BE NEW OR USED IN NEW CONDITION, AT THE BEGINNING OF THE WORK AND MAINTAINED IN LIKE NEW CONDITION UNTIL COMPLETION OF WORK.
- 7. TRAFFIC CONTROL DEVICES SHALL BE PLACED AND MAINTAINED IN THE WORK ZONE IN A MANNER THAT ENSURES THERE IS NO RESTRICTION TO THE VISIBILITY OF APPROACHING TRAFFIC.
- 8. SIGNS NOT APPLICABLE TO CURRENT PHASE OF CONSTRUCTION SHALL BE REMOVED OR COVERED IF LEFT IN PLACE.
- 9. TEMPORARY CLOSURES AND FLAGGERS SHALL BE UTILIZED AS NECESSARY.
- 10. BRIDGE SHALL BE PARTIALLY CLOSED AND TRAFFIC DIVERTED AND MAINTAINED ON A SINGLE LANE MINIMUM 10-FT WIDE DIVERSION AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS.
- 11. TEMPORARY SIGNALS WILL BE UTILIZED IN ACCORDANCE WITH KYTC STANDARD DRAWING TTC-110-03 FOR THE TWO-WAY ONE-LANE TEMPORARY DIVERSION.
- 12. BARRICADES SHALL BE TYPE III BARRICADES IN CONFORMANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). SECTION 6F.68 ADDRESSES TEMPORARY BARRICADES. MINIMUM LENGTH OF TYPE III BARRICADE WILL BE 48", UTILIZE ENOUGH DEVICES OF SUFFICIENT LENGTH TO ADEQUATELY BLOCK ROAD USERS FROM EDGE OF ROAD TO EDGE OF ROAD OR CURB TO CURB. IF PROVISIONS HAVE BEEN MADE FOR ACCESS OF AUTHORIZED EQUIPMENT AND VEHICLES THE DBT PROJECT TRAFFIC COORDINATOR, OR DESIGNATED REPRESENTATIVE, SHALL ENSURE THAT PROPER CLOSURE OF THE ROADWAY IS OBTAINED AT THE END OF EACH WORKDAY. CONTRARY TO THE STANDARD SPECIFICATIONS, NO DIRECT PAYMENT WILL BE MADE FOR BARRICADES, BUT THEY WILL BE INCLUDED IN THE LUMP SUM PRICE FOR THE INDIVIDUAL BRIDGE AS SHOWN IN THE SCHEDULE OF VALUES.
- 13. ROADWAY SHALL REMAIN OPEN DURING CONSTRUCTION AND ALL TRAFFIC SHALL BE PROVIDED ACCESS TO THE DIVERSION DURING CONSTRUCTION.
- 14. ENSURE THAT UP TO THREE (3) PORTABLE CHANGEABLE MESSAGE SIGNS ARE PLACED ON KY-805 AS YOU APPROACH THE PROJECT SITE FROM EACH DIRECTION, AND ALSO ON AUSTIN RD OR AT LOCATIONS DETERMINED BY THE ENGINEER. THESE MESSAGE BOARDS ARE EXPECTED TO BE IN PLACE ONE WEEK PRIOR TO THE LANE CLOSURE OF THE ROADWAY AND REMAIN IN PLACE FOR THE DURATION OF THE CLOSURE. A BID ITEM FOR PORTABLE CHANGEABLE MESSAGE SIGNS IS INCLUDED IN THE PLANS.

ADDENDUM 1

- 15. PAVEMENT DROP-OFF SHALL ADHERE TO THE FOLLOWING:
  - A. LESS THAN TWO INCHES NO PROTECTION REQUIRED. WARNING SIGNS SHOULD BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.

- B. TWO TO FOUR INCHES PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES PLACED EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MPH OR GREATER, CONES MAY BE USED IN PLACE OF PLASTIC DRUMS, PANELS AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MPH AND CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. PLACEMENT OF DEVICES ON TAPERED SECTIONS SHOULD BE IN ACCORDANCE WITH THE MUTCD, CURRENT EDITION.
- C. GREATER THAN FOUR INCHES POSITIVE SEPARATION OR WEDGE WITH 3:1 OR FLATTER SLOPE NEEDED. IF THERE IS FIVE FEET OR MORE DISTANCE BETWEEN THE EDGE OF THE PAVEMENT ADN THE DROP-OFF, THEN DRUMS, PANELS, OR BARRICADES MAY BE USED. IF THE DROP-OFF IS GREATER THAN 12 INCHES, POSITIVE SEPARATION IS STRONGLY ENCOURAGED. IF CONCRETE BARRIERS ARE USED, SPECIAL REFLECTIVE DEVICES OR STEADY BURN LIGHTS SHOULD BE USED FOR OVERNIGHT INSTALLATIONS.
- D. FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN FOUR INCHES MAY BE PROTECTED WITH PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.

COUNTY OF ITEM NO. SHEET NO.

LETCHER 12-10117 R4

#### MAINTENANCE OF TRAFFIC PHASING:

WHERE TEMPORARY BARRIERS ARE INDICATED, THEY SHALL BE CONCRETE BARRIER WALL TYPE 9T IN ACCORDANCE WITH STANDARD DRAWING RBM-115-10. THE BARRIERS SHALLL BE STIFFENED IN ACCORDANCE WITH STANDARD DRAWING RBM-120-02 ALONG THE ENTIRE LENGTH OF THE RCBC INCLUDING ALONG SHORING LIMITS FOR THE RCBC CONSTRUCTION.

CONSTRUCTION OF THIS RCBC AND REMOVAL OF THE EXISTING BRIDGE IS TO BE ACCOMPLISHED IN PHASES IN ACCORDANCE WITH THESE PLANS AND THE ROADWAY MAINTENANCE OF TRAFFIC PLANS.

#### PHASE 1:

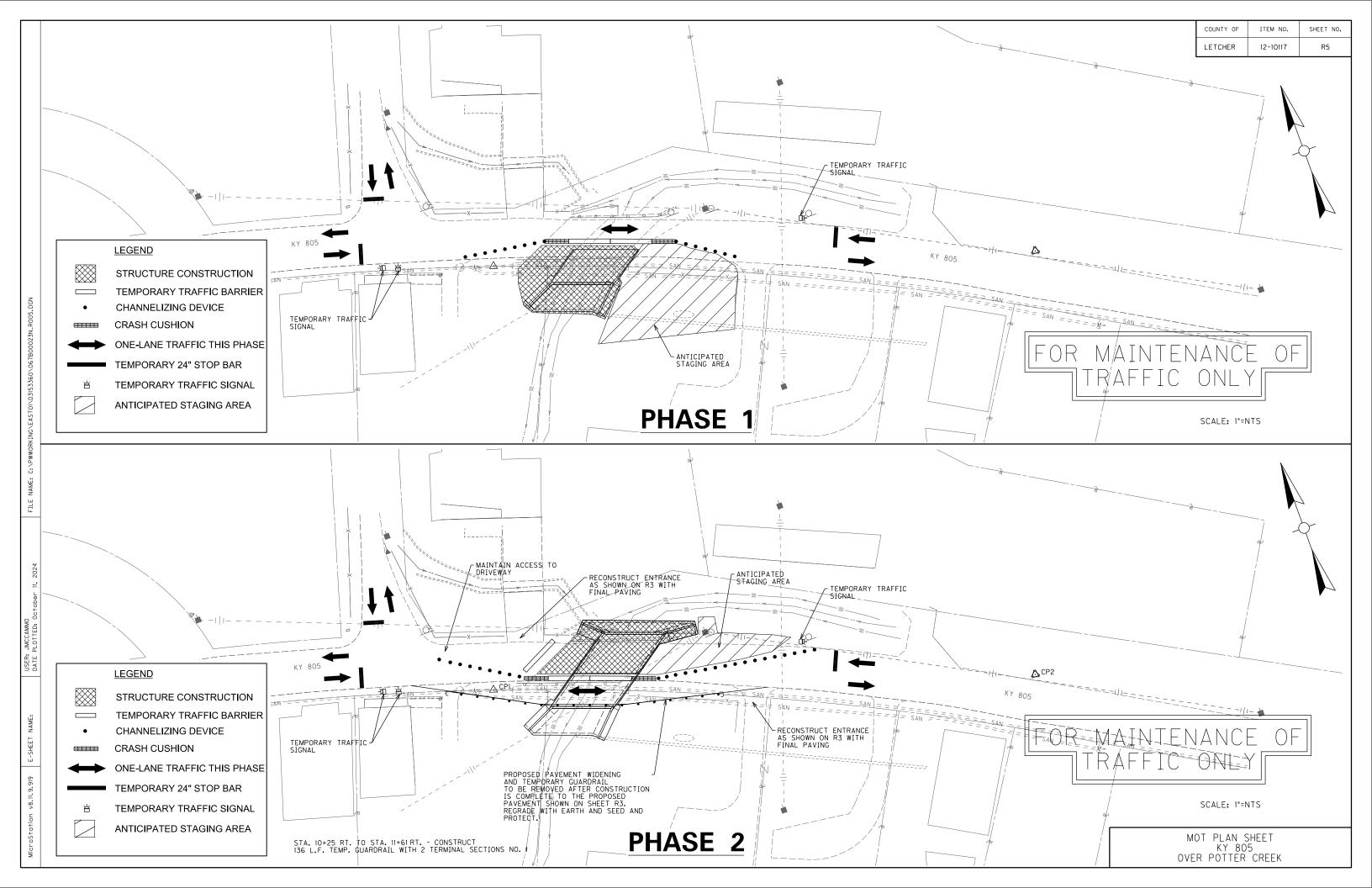
- INSTALL AND MAINTAIN TEMPORARY TRAFFIC CONTROL SIGNS AND DEVICES PER KYTC STANDARD DRAWING TTC-100-05 AND TTC-110-04 ALONG KY 805.
- 2. DIRECT TRAFFIC TO EXISTING KY 805. THREE-PHASE TEMPORARY SIGNALS SHALL BE INSTALLED AS PER THE MOT PLAN AS SHOWN ON MOT PLAN SHEET R5.
- 3. INSTALL TEMPORARY BARRIER AND REMOVE SOUTH SIDE OF EXISTING BRIDGE AS SHOWN ON SHEET S3.
- 4. CONSTRUCT PHASE 1 OF NEW RCBC AND PROPOSED TEMPORARY WIDENING AND GUARDRAIL AS SHOWN ON SHEET S3 AND SHEET R5.

#### PHASE 2:

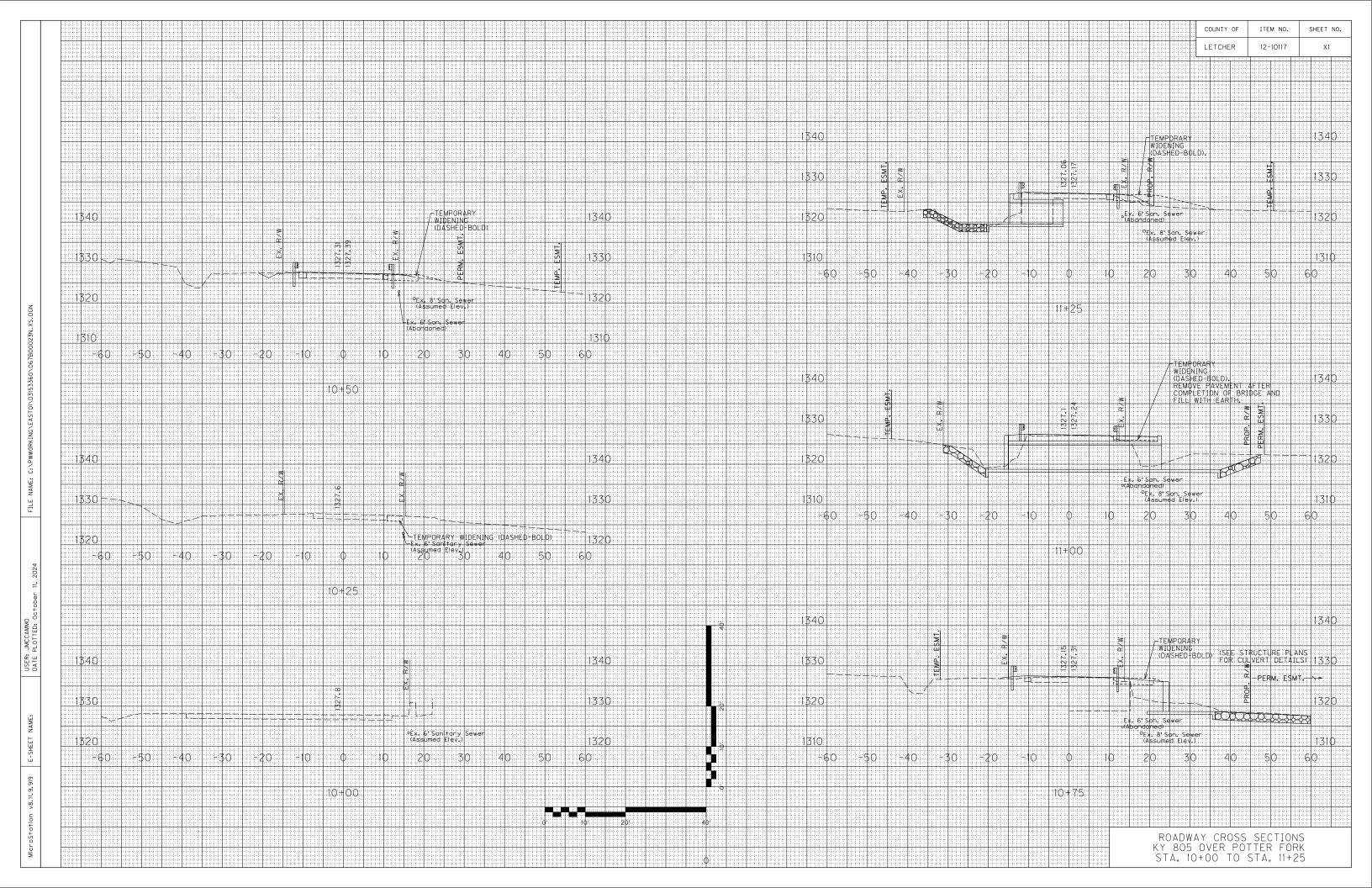
- 1. INSTALL ALL REMAINING APPLICABLE SIGNS AND DEVICES PER KTYC STANDARD DRAWING TTC-150-04 AND TTC-110-04.
- INSTALL TEMPORARY BARRIER AND DIRECT TRAFFIC TO PORTION OF RCBC CONSTRUCTED IN PHASE I.
- 4. REMOVE REMAINING PORTION OF EXISTING KY 805 BRIDGE AND ROADWAY.
- 5. CONSTRUCT REMAINING PORTION OF KY 805 RCBC AND ROADWAY AS SHOWN ON SHEET S3 AND SHEET R5.

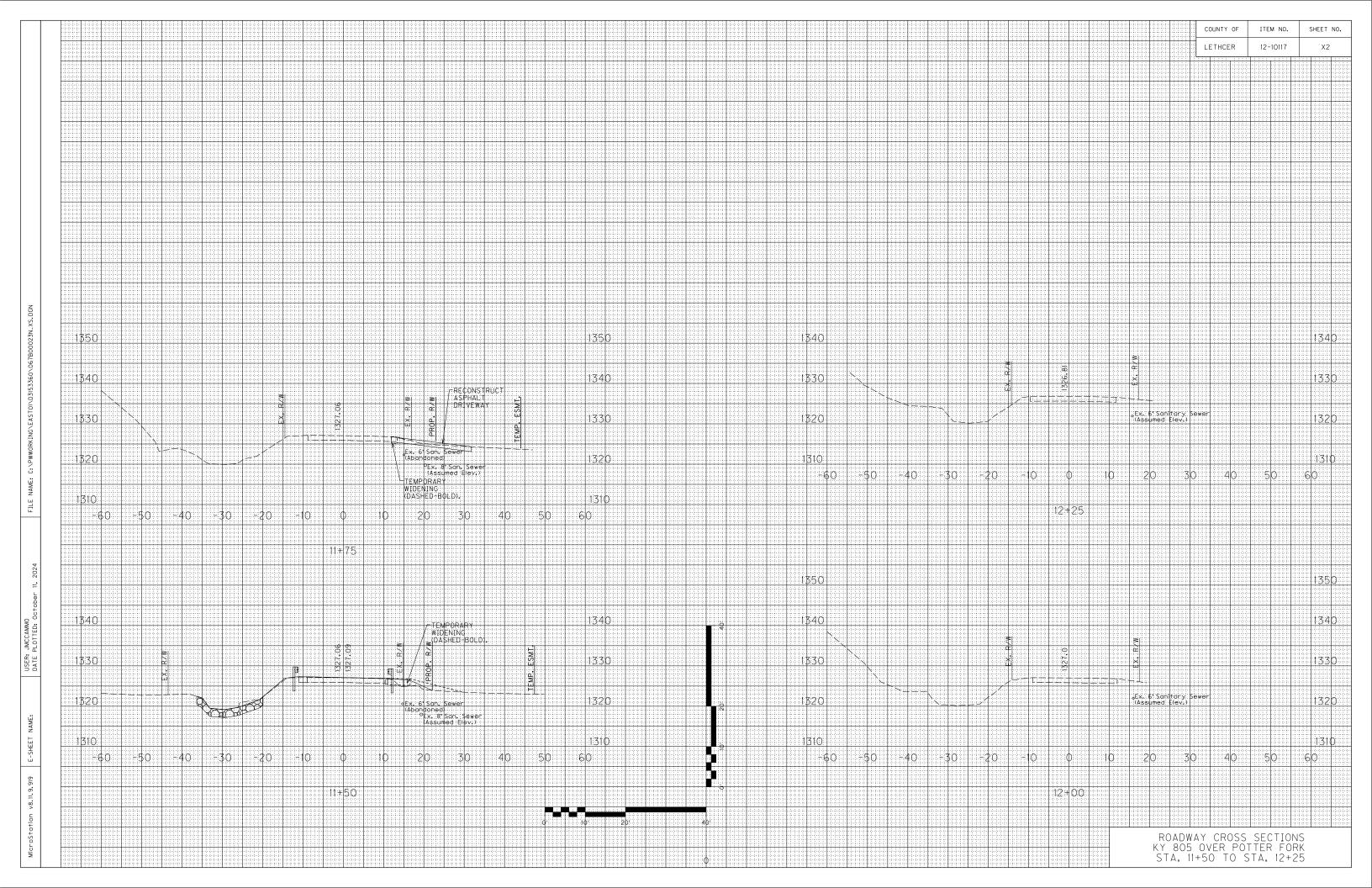
#### PHASE 3:

- 1. INSTALL PERMANENT SIGNS ALONG NEW ROADWAY AND REQUIRED PAVEMENT MARKINGS.
- 2. REMOVE TEMPORARY BARRIER. CONSTRUCT PERMANENT GUARDRAIL AND REMOVE TEMPORARY PAVEMENT.
- 3. DIRECT TRAFFIC TO PROPOSED KY 805 RCBC AND ROADWAY.









# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

# LETCHER COUNTY KY 805 KY 805 OVER POTTER CREEK Station 11 + 07.40

### GENERAL NOTES

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

DESIGN LOAD: This structure is designed for HL-93 live load increased by 25%. The 25% increase is arrived by increasing the design truck or tandem and the design lane load by 25%.

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

MASONRY COATING: Masonry coating will not be required for this structure.

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, excavatuions, backfilling, removal of all or parts of existing structures, phase construction, incidental materials, labor, or anything else required to complete the structure.

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

BEVELED EDGES: All exposed edges shall be beveled 3/4" unless otherwise shown.

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

WEIGHT OF FILL MATERIAL: The assumed weight of fill material is 120 lbs per

CONCRETE: Class "A" concrete shall be used throughout.

CONSTRUCTION JOINTS: Vertical construction joints shall be located in the field, except that no construction joint shall be located in the barrel within six feet of the ends of the culvert.

FOOTING PRESSURE: Foundation materials for wing footings required to resist a maximum bearing pressure of 1999 PSF.

ESTIMATE OF QUANTITIES									
BID CODE	ITEM	QUANTITY	UNIT	L					
8100	Class "A" Concrete	238.8	C.Y.	1					
8150	Reinforcement	18333	Lb	L					
8151	Epoxy Coated Steel Reinforcement	20507	Lb	┢					
3250	Waterproofing Membrane	135	S.Y.	BO					
8003	Foundation Preparation	1	L.S.	B(					
				RI					

FLOWLINE REINFORCEMENT: Reinforcement in the 6 in thick slab shall be Size 4 bars at 18 in centers in each direction or an equivalent area of welded deformed steel fabric. The bars shall extend a minimum of 12 in into wing footings and/or the bottom slab. The cost of this reinforcement shall be incidental to the unit price bid for Concrete, Class "A".

CONSTRUCTION NOTES: Temporary sheeting, shoring, cofferdams, and/ or dewatering methods may be necessary for construction of the culvert. Include all costs in the price bid for Foundation Preparation.

YIELDING FOUNDATION: Rock and boulders within 2 ft of the design flowline must be excavated and backfilled with properly compacted soil to the base of the slab. Payment for this work shall be included in the lump sum bid for

		SP	ECIAL NO	DTES
	Special Not	e for Or	ie Step Membrane	
	<del>                                     </del>		TAL DOO	CIONC
		SPEC	IAL PROV	ISIONS
UNIT				
C.Y.	<b>1</b>			
Lb				
Lb	S	TANI	DARD DR	AWINGS
S.Y.			s for Structures	
	BGX-012-02	Geotech	ınical Legend	
L.S.				ype 9T (Temporary)
	RBR-015-04			Temp. Concrete Barrier
	11311 013 01	Guarare		
		SP	ECIFICAT	IONS
	2019 Stan			for Road and Bridge
		dard Sp tructio		ioi nuau allu biildge
	2020 AASH 9th		) Bridge Desig	n Specifications,
III/EDT		OUTE	ITEM NO.	COUNTY OF
ILVERT		005	12-10117	LETCHER

**INDEX OF SHEETS** 

Description

Sheet No.

Title

4 & 5 Barrel Details

Layout Proposed Phases

Wina 1 Wing 2 Wings 3 & 4 Bill of Reinforcement

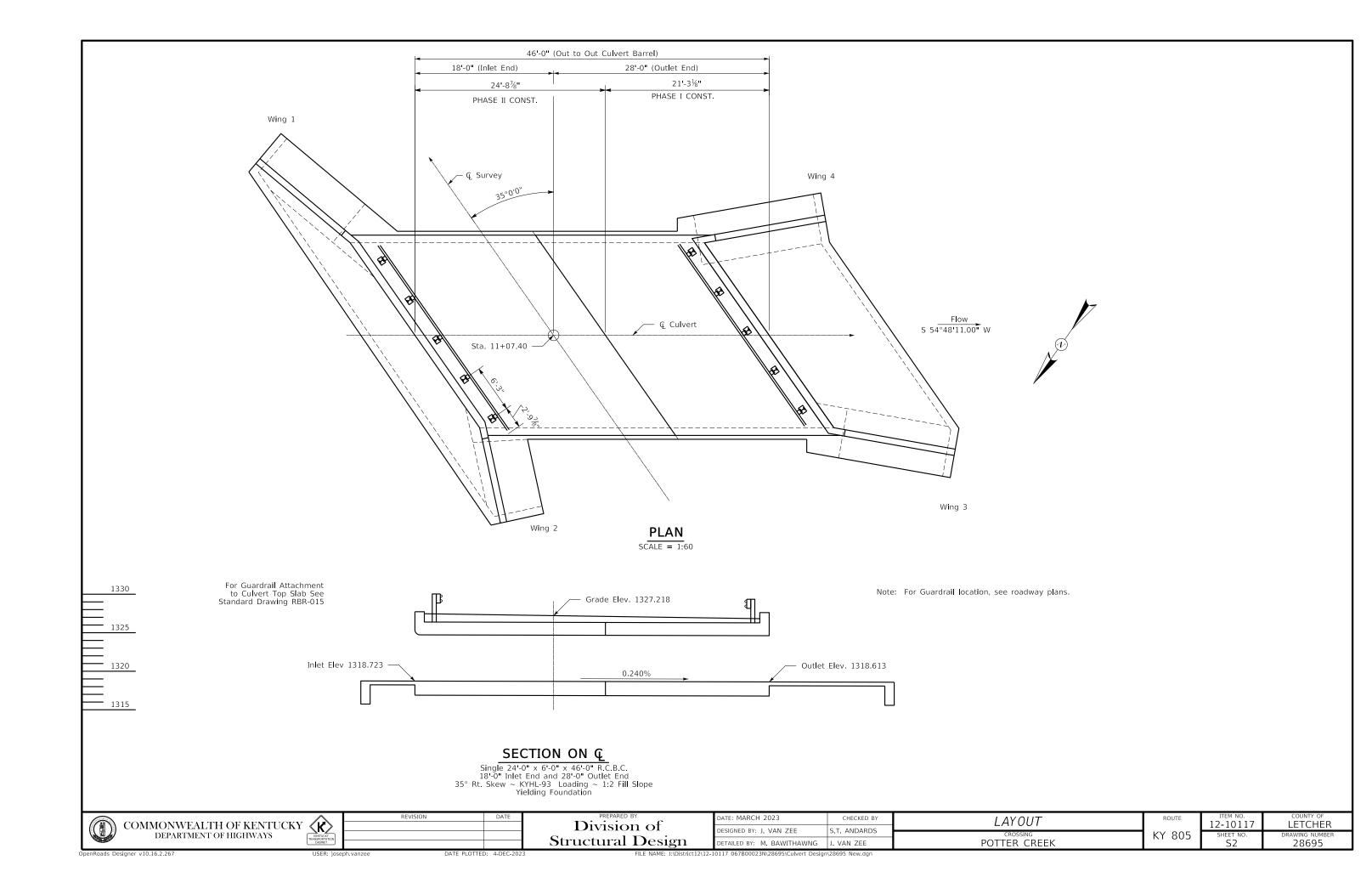
COMMONWEALTH OF KENTUCKY (K) DEPARTMENT OF HIGHWAYS

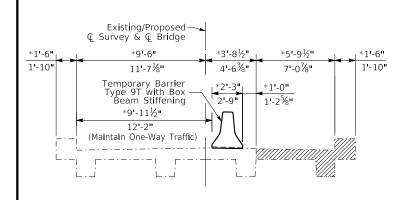
Division of Structural Design

ATE: MARCH 2023 CHECKED BY SINGLE 24.0 X 6.0 CU DESIGNED BY: J. VAN ZEE S.T. ANDARDS DETAILED BY: M. BAWITHAWNG POTTER CREEK

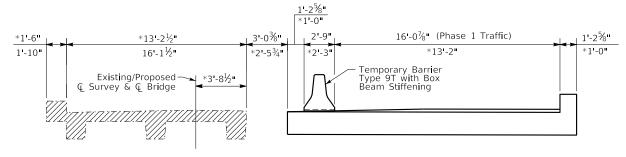
KY 805

28695





# PHASE 1 REMOVAL



PHASE 2 REMOVAL

Barrier Note: Provide Temporary Barrier Type 9T (Std. Dwg. RBM-115, c.e., Barrier Quantities are included in Roadway Quantities) and Box Beam Stiffening (Std. Dwg. RBM-120, c.e., Include all costs in the price bid for Temporary Barrier)

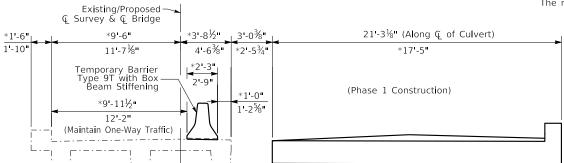
Note: Contractor to field verify all dimensions prior to submitting bid. No claims for changed site conditions shall be allowed.

Note: All dimensions with (\*) denotation given on this sheet are perpendicular to Q Survey.

The rest of dimensions given are along the Q of culvert.

LETCHER

28695



### PHASE 1 CONSTRUCTION

# SUGGESTED CONSTRUCTION PHASING SEQUENCE

Phase 1.) Maintain traffic on existing roadway and portions of existing bridge during phase 1 culvert construction. Portions of existing bridge shall be removed to facilitate phased construction. Use sheeting or shoring as necessary to maintain existing roadway. Include all costs of sheeting, shoring, dewatering, etc. in price bid for foundation preparation. Construct phase 1 of culvert.

Phase 2.) Move barrier onto new structure and install box beam stiffening. Backfill new structure and apply fill to top to provide a smooth riding surface.

Shift traffic to new structure.

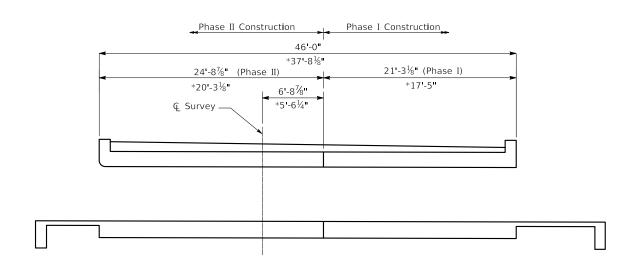
Remove the rest of existing structure. Use sheeting or shoring as necessary to maintain roadway.

Complete proposed structure construction.

Complete backfill of new structure. Remove temporary concrete barrier.

Complete paving operations.

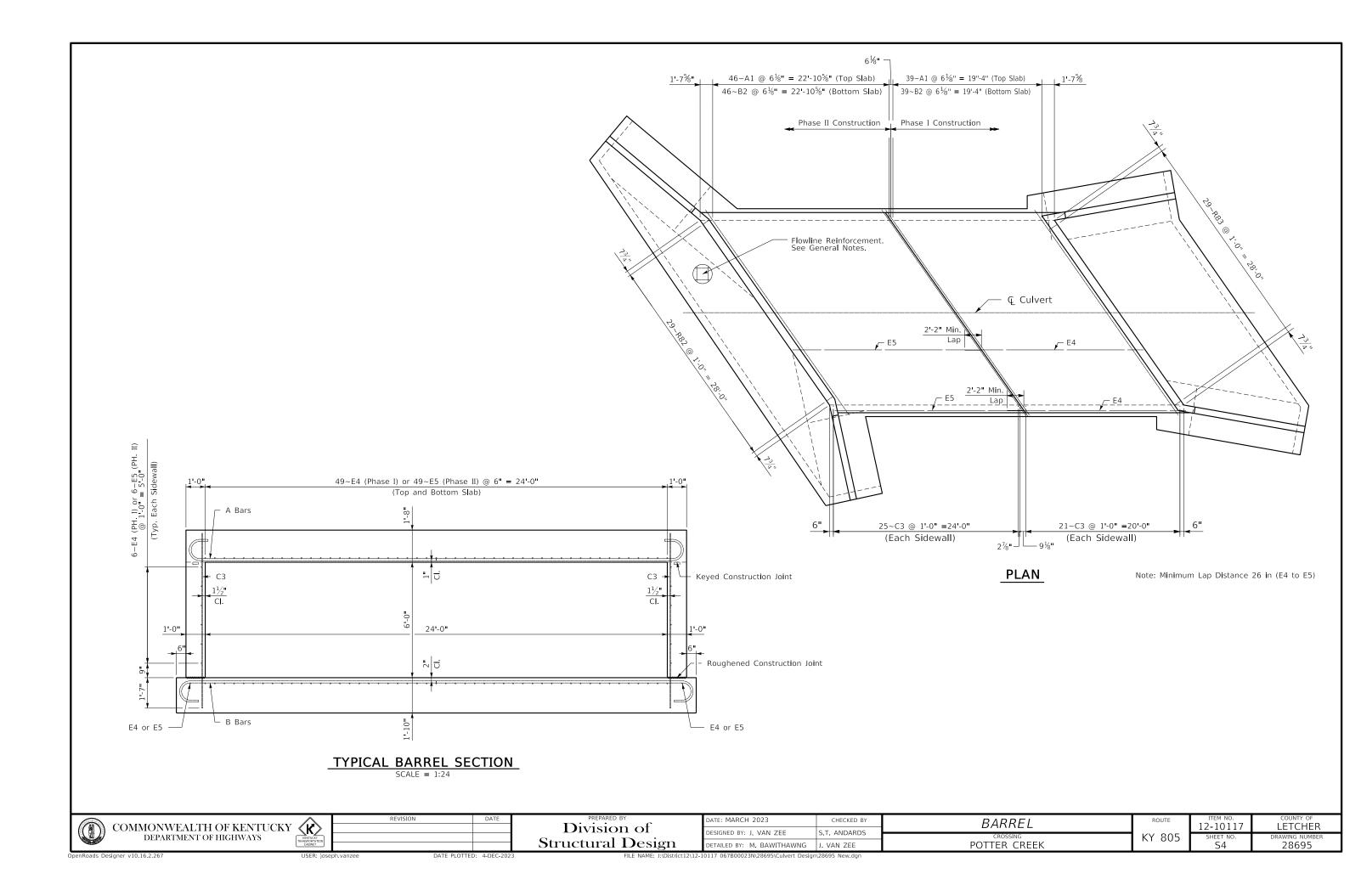
Adjust sequence as necessary and in accordance with the Engineers recommendations.

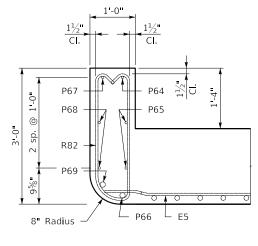


### PHASE 2 CONSTRUCTION

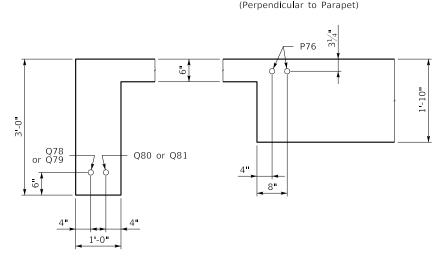


	REVISION	DATE
< <b>K</b> >		
KENTUCKY TRANSPORTATION CABINET		
USER jose	oh,vanzee DATE	PLOTTED: 4-DEC-2023

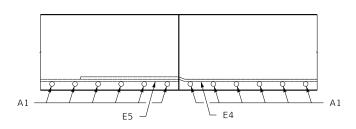


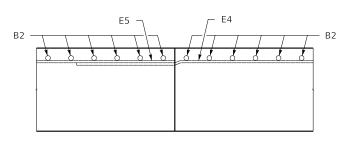


# LEFT PARAPET SCALE = 1:12 (Perpendicular to Parapet)

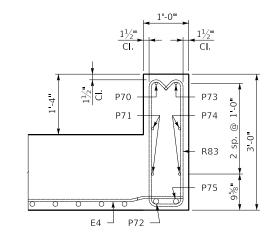


LEFT END
SCALE = 1:12
(Perpendicular to Apron)

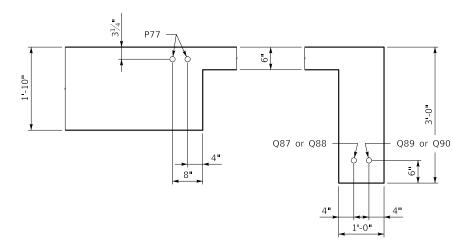




SCALE = 1:12



# RIGHT PARAPET SCALE = 1:12 (Perpendicular to Parapet)



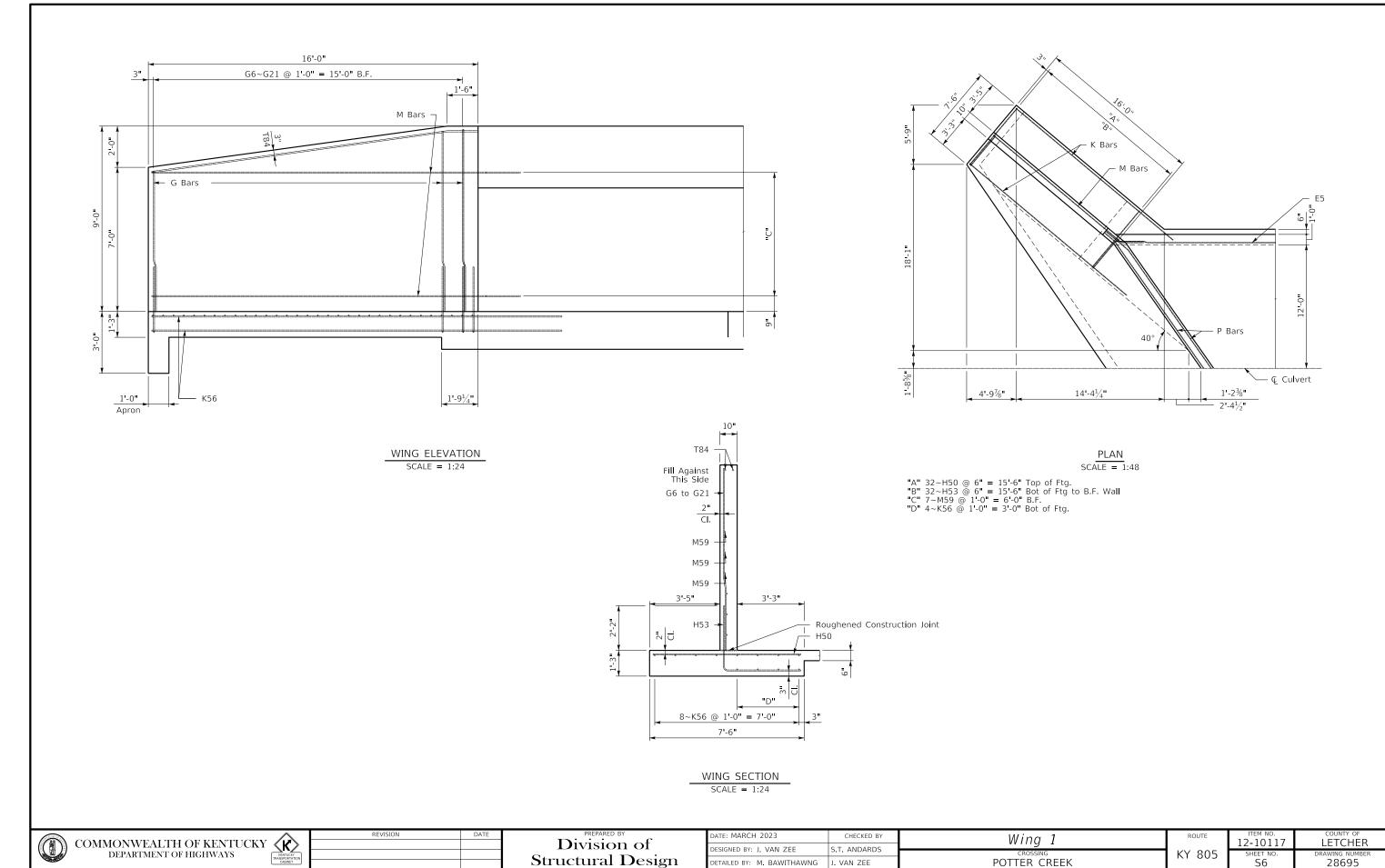
RIGHT END
SCALE = 1:12
(Perpendicular to Apron)

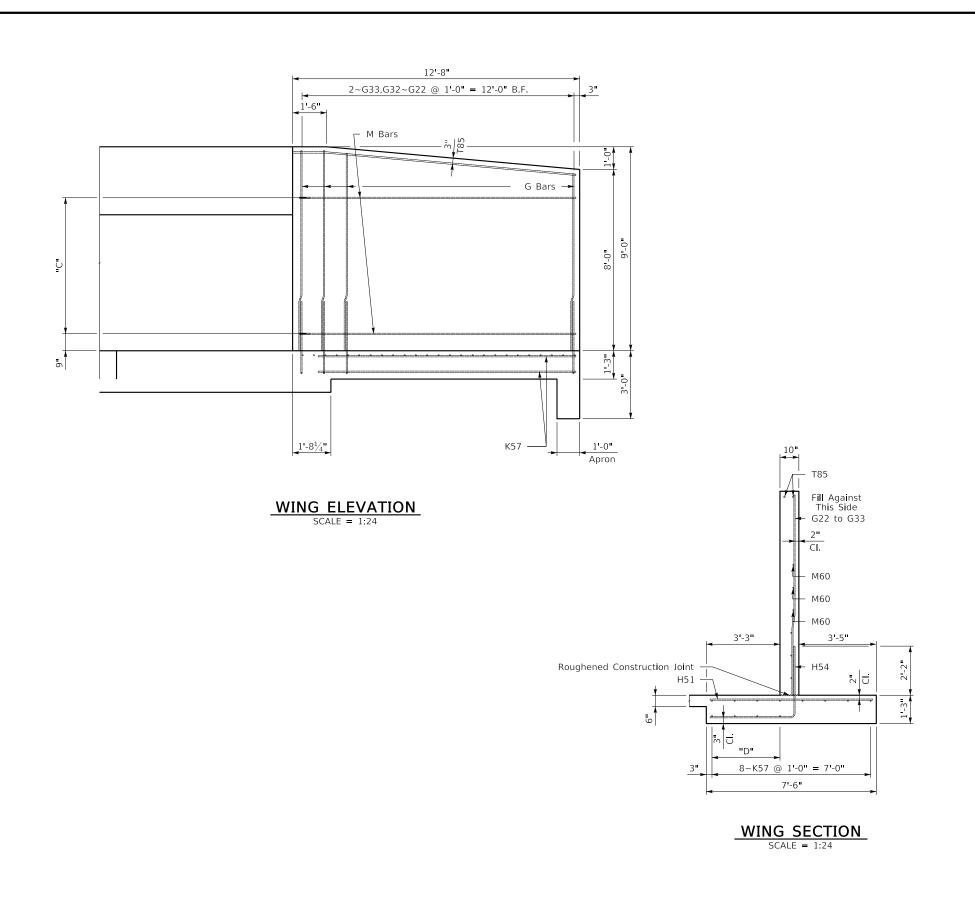
DATE PLOTTED: 4-DEC-2023

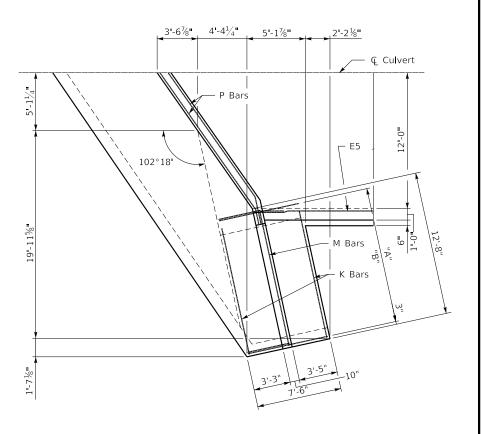
Division of Structural Design

DATE: MARCH 2023 CHECKED BY DESIGNED BY: J. VAN ZEE S.T. ANDARDS DETAILED BY: M. BAWITHAWNG J. VAN ZEE

BARREL 12-10117 LETCHER KY 805 RAWING NUMBE 28695 POTTER CREEK



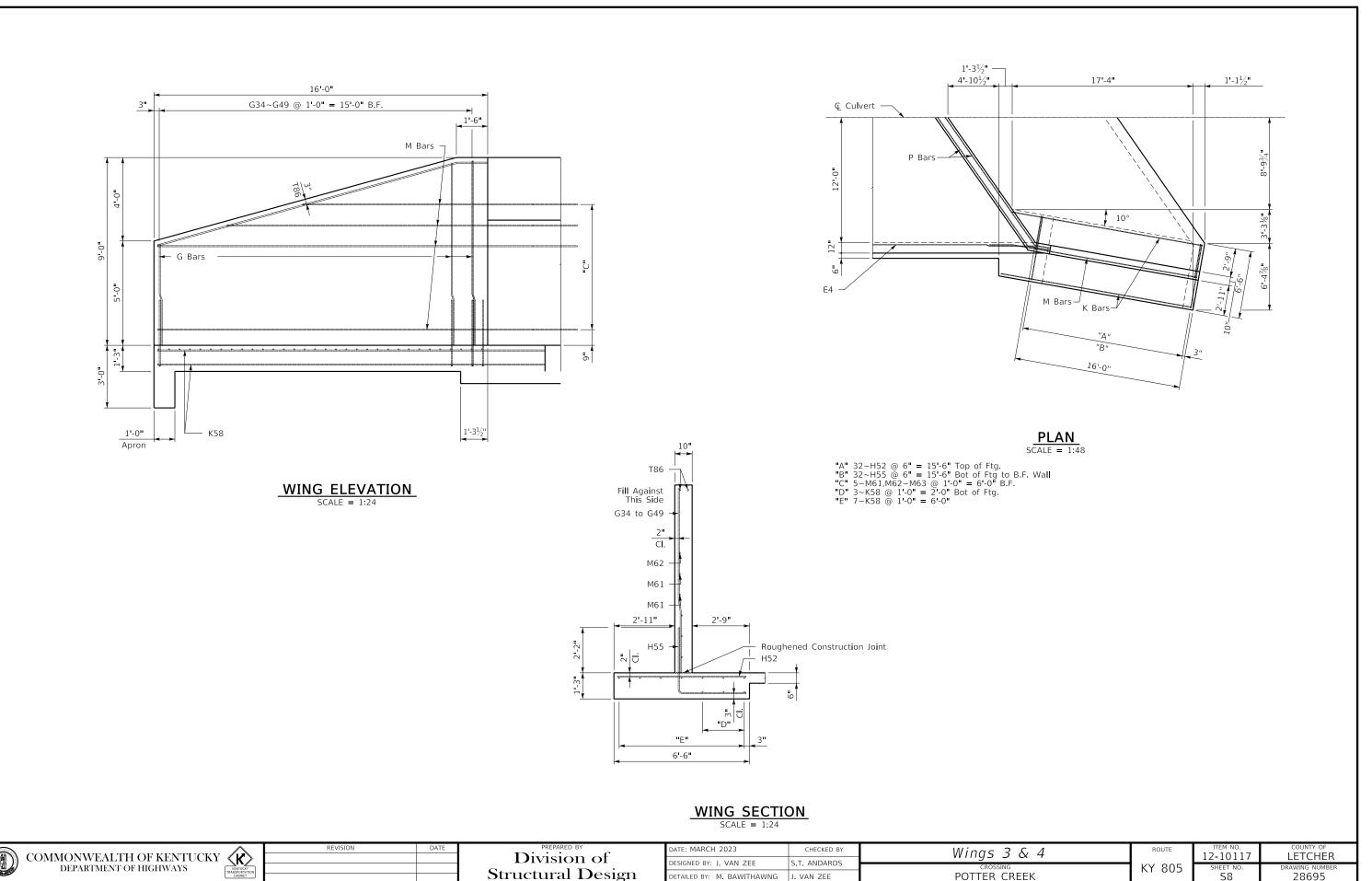




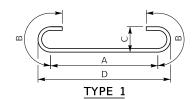
PLAN
SCALE = 1:48

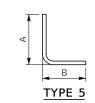
- "A" 25~H51 @ 6" =  $12^{\circ}$ -0" Top of Ftg.
  "B" 25~H54 @ 6" =  $12^{\circ}$ -0" Bot of Ftg to B.F. Wall
  "C" 7~M60 @  $1^{\circ}$ -0" =  $6^{\circ}$ -0" B.F.
  "D" 4~K57 @  $1^{\circ}$ -0" =  $3^{\circ}$ -0" Bot of Ftg.

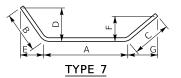
DATE: MARCH 2023 CHECKED BY COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS Wing 2 Division of LETCHER 12-10117 DESIGNED BY: J. VAN ZEE S.T. ANDARDS KY 805 Structural Design AWING NUMBE 28695 POTTER CREEK DETAILED BY: M. BAWITHAWNG J. VAN ZEE

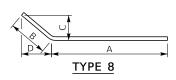


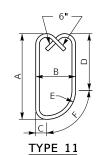
POTTER CREEK

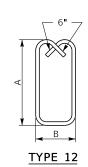


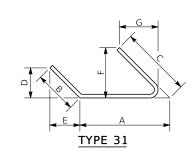












	BILL OF REINFORCEMENT							BILL OF REINFORCEMENT											
MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A/E	B/F	C/G	D/H	MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A/E	B/F	C/G	D/H
Ale	l l	85	10	34- 7		30- 23/4	2- 2		31- 4	G43	Str.	2	5	7- 4	B.F Wings 3 & 4				
В2		85	10	35- 9		31-53/8	2- 2	1- 11/4	32- 6%		Str.	2	5	7- 7	B.F Wings 3 & 4				
СЗе	Str.	92	5	9- 1	Sidewalls					G45	Str.	2	5	7 - 1 1	B.F Wings 3 & 4				
E4e	Str.	112	5		Sidewalls, Top & Bot. Slabs (Phase I)					G46	Str.	2	5	8- 2	B.F Wings 3 & 4				
E5e	Str.	112	5		Sidewalls, Top & Bot. Slabs (Phase II)					G47	Str.	2	5	8- 5	B.F Wings 3 & 4				
G6	Str.	- 1	5	6-10	·					G48	Str.	2	5	8- 9	B.F Wings 3 & 4				
G7	Str.	- 1	5	7- 0	3					G49	Str.	2	5	8-10	B.F Wings 3 & 4				
G8	Str.	ı	5	7- 1	B.F Wing I					Н50	Str.	32	5	7- 2	Top Ftg Wing I				
G9	Str.	1	5	7- 3	J					H5 I	Str.	25	5	7- 2	Top Ftg Wing 2				
GIO	Str.	- 1	5	7- 5	·					H52	Str.	64	5	6- 2	Top Ftg Wings 3 & 4				
GII	Str.	- 1	5	7- 6	<u> </u>					H53	5	32	5	6- 9	Bot Ftg Wing I	3- 2			
GI2	Str.	I	5	7- 8						H54	5	25	5	6- 9	Bot Ftg Wing 2	3- 2			
G I 3	Str.	I	5	7- 9	J					H55	5	64	5	6- 3	Bot Ftg Wings 3 & 4	3- 2	3 - 3		
G14	Str.	- 1	5	7-11	B.F Wing I					K56	Str.	12	5	19-11	Ftg Wing I				
G15	Str.	- 1	5	8- I	B.F Wing I					K57	Str.	12	5	11- 4	Ftg Wing 2				
G16	Str.	I	5	8- 2						K58	Str.	20	5	18- 7	Ftg Wings 3 & 4				
G17	Str.	I	5	8- 4						M59	8	7	5	18- 4	B.F. Wing I	16- 23/4			4 1- 77
G18	Str.	- 1	5	8- 6	3					M60	25	7	5	14- 2	B.F. Wing 2	12- 23/8		2- 13/8	
G19	Str.	- 1	5	8- 7	B.F Wing I					M6 I	8	10	5	20- 2	B.F. Wings 3 & 4	18- 0		0- 41/2	
G20	Str.	- I	5	8- 9						M62	8	2	5	16-10	B.F. Wings 3 & 4	14- 8	2- 2	0- 41/2	_ /
G2 I	Str.	I	5	8-10						M63	8	2	5	13- 2	B.F. Wings 3 & 4	11- 01/2		0- 41/2	
G22	Str.	- 1	5	7-10	B.F Wing 2					P64e	7	- 1	5	32- 9	B.F. Parapet Lt. End	28- 81/2		1-113/6	6 0- 63
G23	Str.	- 1	5	7-11	B.F Wing 2											2- 0	0- 9	1- 9%	
G24	Str.	- 1	5	8- 0						P65e	7	2	5	32- 9	B.F. Parapet Lt. End	28- 23/4			0- 73
G25	Str.	I	5	8- 1	B.F Wing 2											2- 31/2		1-117/8	3
G26	Str.	- 1	5	8- 2	J					P66e	7	- 1	10	32- 8	B.F. Parapet Lt. End	28- 61/8			0- 67
G27	Str.	- 1	5	8- 3												2- 11/2		1-101/2	2
G28	Str.	- 1	5	8- 4						P67e	7	1	5	32- 5	F.F. Parapet Lt. End	28-10			
G29	Str.	I	5	8- 5												1- 91/2			
G30	Str.	- 1	5	8- 6						P68e	7	2	5	32- 5	F.F. Parapet Lt. End	29- 3¾			0-47
G3 I	Str.	- 1	5	8- 7												1- 6	0- 71/4		4
G32	Str.	- 1	5	8- 9						P69e	7	1	10	32- 5	F.F. Parapet Lt. End	29- 0%			
G33	Str.	2	5	8-10												1-81/8	, , ,		
G34	Str.	2	5	4-10	J					P70e	31	1	5	34- 9	B.F. Parapet Rt. End	30- 4%			4 1- 3
G35	Str.	2	5	5- 2												1- 33/4		1- 0%	
G36	Str.	2	5	5- 5	· · · j ·					P7le	31	2	5	34-11	B.F. Parapet Rt. End	30- 41/8	1-11/2	2- 6 1/8	1- 45
G37	Str.	2	5	5- 8	B.F Wings 3 & 4											1- 4 1/8		1- 1	
G38	Str.	2	5	5-11	B.F Wings 3 & 4					P72e	31	1	10	34- 9	B.F. Parapet Rt. End	30- 4%	1-101/4	2- 53/4	1 1- 37
G39	Str.	2	5	6- 3												1- 33/4		1- 0 1/8	
G40	Str.	2	5	6- 6	B.F Wings 3 & 4					P73e	31	- 1	5	33- 2	F.F. Parapet Rt. End	29-9%		1-101/8	
G41	Str.	2	5	6- 9	B.F Wings 3 & 4											1- 11/4		0- 93/8	,
G42	Str.	2	5	7- 1	B.F Wings 3 & 4					P74e	31	2	5	33- 0	F.F. Parapet Rt. End	29-9%	1- 51/2	1- 91/8	1- 0 <sup>3</sup> /
																1- 03/8	, ,	0-8 1/8	,
										P75e	31		10	33- 3	F.F. Parapet Rt. End		1- 63/4		
															•	1 = 11/.	1_0	n_ a 3/	

P76 P77

Q78 Q79

R82e

R83e T84 T85

T86

Q87 Q88 Q89 10

10

10

10

4 6 16- 4
1 10 23- 8
1 10 23- 3
1 10 23- 11
1 10 23- 5

1 10

29

lls

32- 7 32- 7 36- I

36- 7

36- I

35- 6

6-11

12- 6

Bottom Slab Lt. End Bottom Slab Rt. End

Apron Lt. End

Apron Lt. End

Apron Lt. End

Apron Lt. End

Parapet Wall (Left End)

Parapet Wall (Right End)
Top of Wing I

Top of Wing 2 Top of Wings 3 & 4

Appron Rt. End Appron Rt. End Appron Rt. End

Appron Rt. End



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-	TYPE 25
-	<u> </u>

	COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS
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	REVISION	DATE	
< <b>K</b> >			
KENTUCKY TRANSPORTATION			
CABINET			
USER: jose	ph.vanzee DATE PLOTTED	): 4-DEC-202	3

PREPARED BY
Division of
Structural Design

TE: MARCH 2023	CHECKED BY	Bill of Reinforcement
SIGNED BY: J. VAN ZEE	S.T. ANDARDS	Bill of Reilliofeement
SIGNED DI. J. VAIN ZEE	3.1. ANDARDS	CROSSING
TAILED BY: M. BAWITHAWNG	J. VAN ZEE	POTTER CREEK

0- 9 0- 2½ 0- 9¾