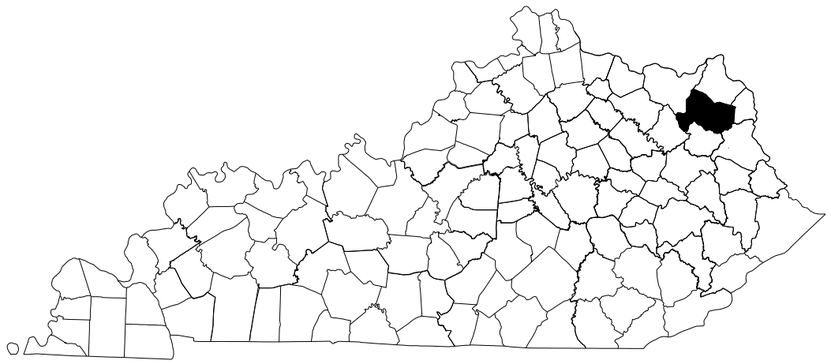
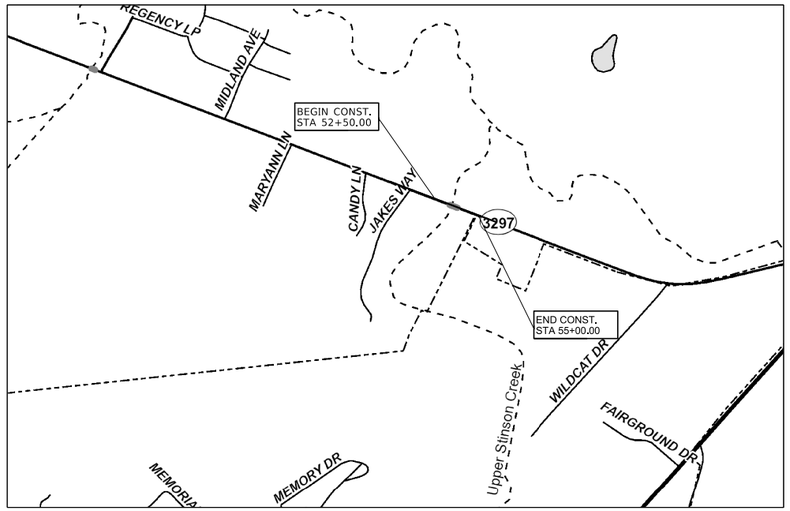
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

PLANS OF
PROPOSED PROJECT

Midland Trail (KY 3297)
Over Upper Stinson Creek,
Carter County, Kentucky
Grade, Drain, and Surfacing Plans





THIS PROJECT IS OFF THE NH SYSTEM

THE CONTROL OF ACCESS ON THIS PROJECT SHALL BE BY PERMIT

LAYOUT MAP

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.

DESIGN CRITERIA

CLASS OF HIGHWAY	MAJOR COLLECTOR
TYPE OF TERRAIN	ROLLING
DESIGN SPEED	55 MPH
REQUIRED NPSD	495'
REQUIRED PSD	900'
LEVEL OF SERVICE	NA
ADT PRESENT (2021)	2,156
ADT FUTURE (X)	X
DHV	X
D %	55
T %	X

GEOGRAPHIC COORDINATES

LATITUDE 38 DEGREES 20 MINUTES 08 SECONDS NORTH
LONGITUDE 82 DEGREES 54 MINUTES 23 SECONDS WEST

DESIGNED

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

INDEX OF SHEETS

R1	LAYOUT SHEET
R2	TYPICAL SECTIONS
R2A	GENERAL SUMMARY SHEET
R2B	GENERAL NOTES AND SPECIAL NOTES
R3	LEGEND AND UTILITY OWNERS
R4 - R5	PLAN AND PROFILE SHEETS
R6	MOT NOTES AND PHASING
R7	DETOUR SHEET
R8 - R9	EROSION CONTROL SHEETS
R10	COORDINATE CONTROL & ROW STRIP MAP
R11	ROW SUMMARY SHEET
X1 - X4	CROSS SECTION SHEETS

STANDARD DRAWINGS

RBI-001-012	RBR-020-007	RDX-225-001	SEPIA 001
RBI-004-006	RBR-055-001	RGX-001-006	SEPIA 017
RBR-001-013	RDI-040-001	RGX-005-006	
RBR-005-011	RDX-210-003	RGX-010-004	
RBR-010-006	RDX-215-001	RGX-100-007	
RBR-015-006	RDX-220-005	RGX-105-009	
		RGX-200-001	

MIDLAND TRAIL (KY 3297)

LENGTH 186.5 LIN. FT. 0.035 MILES	LENGTH X LIN. FT. X MILES	LENGTH X LIN. FT. X MILES	LENGTH X LIN. FT. X MILES
ADDED / DEDUCTED FOR EQUALITIES X LIN. FT.	ADDED / DEDUCTED FOR EQUALITIES X LIN. FT.	ADDED / DEDUCTED FOR EQUALITIES X LIN. FT.	ADDED / DEDUCTED FOR EQUALITIES X LIN. FT.
NOT INCLUDED	NOT INCLUDED	NOT INCLUDED	NOT INCLUDED
RAILROAD CROSSINGS NO. X LIN. FT.	RAILROAD CROSSINGS NO. X LIN. FT.	RAILROAD CROSSINGS NO. X LIN. FT.	RAILROAD CROSSINGS NO. X LIN. FT.
BRIDGES 63.5 LIN. FT.	BRIDGES X LIN. FT.	BRIDGES X LIN. FT.	BRIDGES X LIN. FT.
X	X	X	X
X	X	X	X

PROJECT NUMBER:

PROJECT DESCRIPTION: BRIDGE REPLACEMENT, MIDLAND TRAIL OVER UPPER STINSON CREEK. BRIDGE ID#022B00138N

RECOMMENDED BY: Carl van Zee 05/30/23
PROJECT MANAGER DATE:

PLAN APPROVED BY: _____
STATE HIGHWAY ENGINEER DATE:

STATE OF KENTUCKY · TROY M. WOODYARD · 30849 · LICENSED PROFESSIONAL ENGINEER

Tracy Woodyard

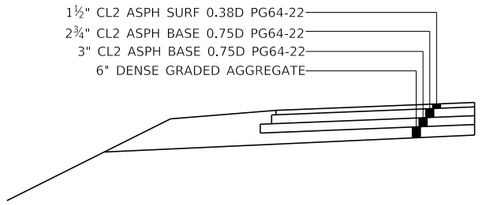
LOCHNER

LETTING DATE: 7/20/2023

ITEM NO. 09-40001.00 COUNTY OF CARTER

SHEET NO. R001

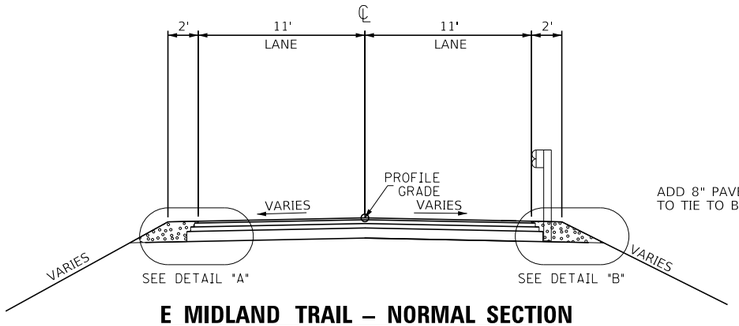
TYPICAL SECTIONS



DETAIL "A" – PAVEMENT DESIGN

FROM EDGE OF PAVED SHOULDER TO A POINT 2' DOWN THE SLOPE
BITUMINOUS SEAL - TWO APPLICATIONS OF THE FOLLOWING:

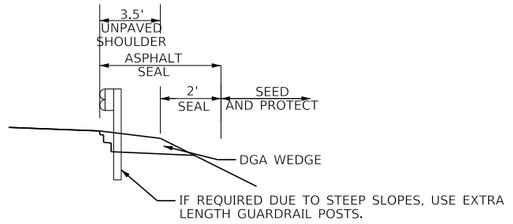
ASPHALT SEAL COAT	2.4 LB/SY
ASPHALT SEAL AGGREGATE	20 LB/SY



ADD 8" PAVED SHOULDER AS REQUIRED TO TIE TO BRIDGE TYPICAL SECTION.

E MIDLAND TRAIL – NORMAL SECTION

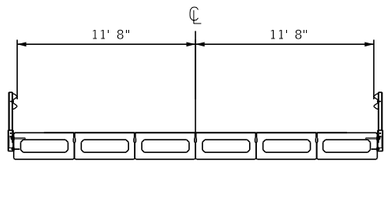
STA 52+50.00 TO STA 53+43.25
STA 54+06.75 TO STA 55+00.00



DETAIL "B" – GUARDRAIL INSTALLATION

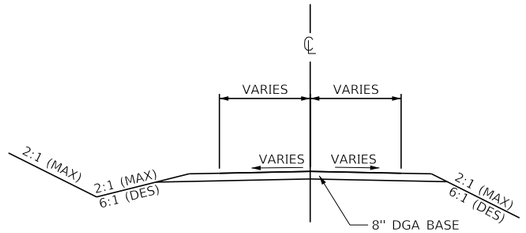
BITUMINOUS SEAL - TWO APPLICATIONS OF THE FOLLOWING:

ASPHALT SEAL COAT	2.4 LB/SY
ASPHALT SEAL AGGREGATE	20 LB/SY

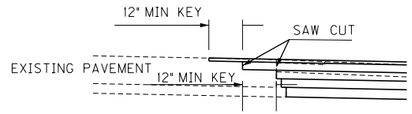


BRIDGE DETAIL

STA 53+43.25 TO STA 54+06.75



ENTRANCE TYPICAL SECTION



ALL SAW CUTS FOR EDGE KEY ARE INCIDENTAL TO EDGE KEY. CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING PAVEMENT DEPTHS, AND ELEVATIONS.

EDGE KEY

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: TYPICAL SECTIONS

ITEM NO. 09-40001.00 COUNTY OF CARTER

SHEET NO. R2

	ITEM	DESCRIPTION	UNIT	KY 3297	TOTAL PROJECT
	1987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	EACH	12	12
(1)	2159	TEMP DITCH	LF	94	94
(1)	2160	CLEAN TEMP DITCH	LF	47	47
(4)	2200	ROADWAY EXCAVATION	CUYD	207	207
	2242	WATER	MGAL	35	35
	2351	GUARDRAIL-STEEL W BEAM-S FACE	LF	137.5	137.5
	2360	GUARDRAIL TERMINAL SECTION NO 1	EACH	1	1
	2367	GUARDRAIL END TREATMENT TYPE 1	EACH	3	3
	2429	RIGHT-OF-WAY MONUMENT TYPE 1	EACH	8	8
(3)	2545	CLEARING AND GRUBBING	LS	1	1
	2565	OBJECT MARKER TYPE 2	EACH	4	4
	2569	DEMOBILIZATION	LS	1	1
	2585	EDGE KEY	LF	44	44
	2650	MAINTAIN & CONTROL TRAFFIC	LS	1	1
(1)	2701	TEMP SILT FENCE	LF	94	94
(1)	2703	SILT TRAP TYPE A	EACH	1	1
(1)	2704	SILT TRAP TYPE B	EACH	1	1
(1)	2706	CLEAN SILT TRAP TYPE A	EACH	1	1
(1)	2707	CLEAN SILT TRAP TYPE B	EACH	1	1
	2726	STAKING	LS	1	1
	2731	REMOVE STRUCTURE	LS	1	1
(1)	5950	EROSION CONTROL BLANKET	SQYD	104	104
(1)	5952	TEMP MULCH	SQYD	1395	1395
(1)	5953	TEMP SEEDING AND PROTECTION	SQYD	1041	1041
(1)	5963	INITIAL FERTILIZER	TON	0.06	0.06
(1)	5964	MAINTAINENCE FERTILIZER	TON	0.11	0.11
(1)	5985	SEEDING AND PROTECTION	SQYD	1978	1978
(1)	5992	AGRICULTURAL LIMESTONE	TON	1.29	1.29
	6515	PAVE STRIPING- PERM PAINT - 6 IN	LF	70	70
	24631EC	BARCODE SIGN INVENTORY	EACH	4	4

A ALL ASPHALT MIXTURES SHALL BE ESTIMATED AT 110 LBS PER SQ YD PER INCH OF DEPTH, UNLESS NOTED OTHERWISE.

B ESTIMATED AT 115 LBS PER SQ YD PER IN OF DEPTH.

C ESTIMATED AT 20 LBS PER SQ YD, 2 APPLICATIONS REQUIRED.

D ESTIMATED AT 2.40 LBS PER SQ YD, 2 APPLICATIONS REQUIRED.

E ESTIMATED AT 0.84 LBS PER SQ YD. TO BE PLACED ON TOP OF DGA PRIOR TO ASPHALT PAVING.

F ESTIMATED AT 0.84 LBS PER SQ YD. TO BE PLACED ON TOP OF ALL BASE LIFTS.

(1) TO BE USED AT THE ENGINEER'S DISCRETION FOR EROSION CONTROL.

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

(3) APPROX 1/2 ACRE MORE OR LESS

(4) INCLUDES 54 CUYD FOR EMB. BENCHING.

Paving Areas

ITEM	KY 3297	Entrances	TOTALS
	SQUARE YARDS		
DGA BASE	512	31	543
ASPHALT SEAL AGGREGATE	114		114
ASPHALT SEAL COAT	114		114
2.75" CL2 ASPH BASE 0.75D PG64-22	502		502
3" CL2 ASPH BASE 0.75D PG64-22	507		507
ASPHALT PRIME COAT	512		512
CL2 ASPH SURF 0.38D PG64-22	499		499
ASPHALT MATERIAL FOR TACK	1009		1009

Paving Summary

	ITEM CODE	ITEM	UNIT	KY 3297	Entrances	TOTAL PROJECT
(B)	00001	DGA BASE	TON	249	20	269
(C)	00100	ASPHALT SEAL AGGREGATE	TON	2.28		2.28
(D)	00103	ASPHALT SEAL COAT	TON	0.27		0.27
(A)	00221	CL2 ASPH BASE 0.75D PG64-22	TON	160		160
(E)	00296	ASPHALT PRIME COAT	TON	0.21		0.21
(A)	00301	CL2 ASPH SURF 0.38D PG64-22	TON	41		41
(F)	00356	ASPHALT MATERIAL FOR TACK	TON	0.42		0.42

(2)

Earthwork Volumes (CUYD)			
	Exc.	Emb.	Emb. Bench
KY 3297	153	54	54
Total	**153**	**54**	**54**

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: GENERAL SUMMARY SHEET

ITEM NO. 09-40001.00 COUNTY OF CARTER

SHEET NO. R2A

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 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 WHO 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 FURNITSHED ON THIS PROJECT BY OPTION B ACCORDING TO SUBSECTIONS 402.03.02 AND 403.03.10 OF THE STANDARD SPECIFICAITONS.

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

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.

IN THE AREA ALONG UPPER STINSON CREEK, CLEAR AND GRUB ONLY THAT RIPARIAN AREA THAT IS NECESSARY FOR STAGING AND CONSTRUCTION. IF VEGETATION DOES NOT CONFLICT WITH CONSTRUCTION ACTIVITIES IT SHOULD REMAIN UNDISTURBED.

SPECIAL PROVISION 69 FOR EMBANKMENT AT BRIDGE END BENT STRUCTURES SHALL APPLY. PER SPECIAL PROVISION 69, PILE CORE SHALL BE INCIDENTAL TO ROADWAY EXCAVATION.

SPECIAL NOTE FOR BARCODES ON PERMANENT SIGNS 2019 SHALL APPLY.

Corporate Limits
County Line
Easement
Fence COA
Mineral Parcel
Property Line
Right of Way Line
All Overhead Utility Lines
Cable Underground Electric With Quality Levels
Duct Underground Electric With Quality Levels
Cable Underground Fiber With Quality Levels
Cable Underground Telephone With Quality Levels
Duct Underground Telephone With Quality Levels
Cable Underground TV With Quality Levels
Main Gas With Quality Levels
Main Water With Quality Levels
Main Water Greater Than 12 With Quality Levels
Sewer Sanitary With Quality Levels
Sewer Sanitary Force Main With Quality Levels
Sewer Storm WIth Quality Levels
Multi Utility Bank Quality Levels
Oil Line Quality Levels
Steam Line Quality Levels
Cable Underground Electric Marker
Duct Underground Electric Marker
Cable Underground Fiber Marker
Cable Underground Telephone Marker
Duct Underground Telephone Marker
Cable Underground TV Marker
Main Gas Marker

Main Water Marker
Main Water Greater Than 12 Marker
Sewer Sanitary Marker
Sewer Sanitary Force Main Marker
Sewer Storm Marker
Multi Utility Bank Marker
Oil Line Marker
Steam Line Marker
Cable Guardrail
Ditch
Edge of Water
Fence Hedge
Fence
Flow Line/Thalweg/ Int. Stream or Ditch
Guardrail
Railroad
Shrub Line
Sink Hole
Tree Line
Wall (WSM or DSM)
Blue Line Stream
Lakes and Ponds
Regulated Floodway
RDZ Line
ADA Ramp
Anchor Pole
Benchmark
Bike Lane Symbol
Bollard
Centerline
Centerline Stationing
Control Monument
Control Point
Core Hole
Crash Cushion TY 6 D
Crash Cushion TY 6 A
Crash Cushion TY 9A

Crash Cushion TY 9
Cross Notch
Curb Box Inlet
Curb Notch
Combination Pole
Delineator Post
Drop Box
Existing Spring
Electric Manhole
Electric Meter
Electric Pedestal
Electric Pole
Electric Junction Box
Fire Hydrant
Flag Pole
Force Main Sewer Valve
Fuel Tank Inlet
Fuel Tank Vent
Gas Meter
Gas Monitoring Well
Gas Valve
Gas Vent
Gas Well
Guidewires & Anchors
Headstone
Interstate Shield
Iron Pin
Light Pole
Low Wire
Mag Nail
Mailbox
Manhole
Mile Marker Post
Mineral Parcel
Misc Location Point
Monitoring Well
Parking Meter
Pedestrian Signal
Pins/Pipes
PK Nail

Point (Misc)
Pole
Pole (Light)
Post
Power Pole
Quarry
Random (Ground Shot)
Railroad Mile Marker
Railroad Spike
Right of Way Marker
Right of Way Monument
RR Traffic Signal Pole
RW Parcel
Sanitary Cleanout
Sanitary Manhole
Satelite Dish
Septic Tank Cleanout
Service Pole
Sewer Air Release Valve
Shrub
Sign
Sign Post (Single)
Sign with 2 posts
Sign group (4)
Station Stamp
Storm Manhole
Stub Power
Stub Telephone
Survey Cross Notch
Survey Curb Notch
Survey Nail
Survey Spike
Survey Stone Marker
Swamp
Telephone Booth
Telephone Junction Box
Telephone Line Overhead
Telephone Manhole

Telephone Pedestal
Telephone Pole
Temporary Benchmark
Traffic Light
Traffic Signal Control Box
Traffic Signal Junction Box
Traffic Signal Pole
Traverse Point
Tree
TV Junction Box
Utility Pole
Underground Storage Tank
Utility Test Hole
Water Line Marker
Water Meter
Water Spigot
Water Valve
Water Well
Yard Light
Yard Sprinkler
Yard Sprinkler Water Valve

Utility Owners

American Electric Power - Electric
855 Central Avenue, Suite 200
Ashland, KY 41101
Contact - Pat Thovson
606-831-2307
pathovson@aep.com

AT&T - KY - Communications
2601 Trailwood Lane
Lexington, KY 40511
Contact - Mike Jones
859-230-0282
mj205c@att.com

Grayson Utilities Commission - Sewer/Water
1671 S. State Highway 7
Grayson, KY 41143
Contact - Gerald Haney
606-474-7569
utilitysupt@graysonutilities.com

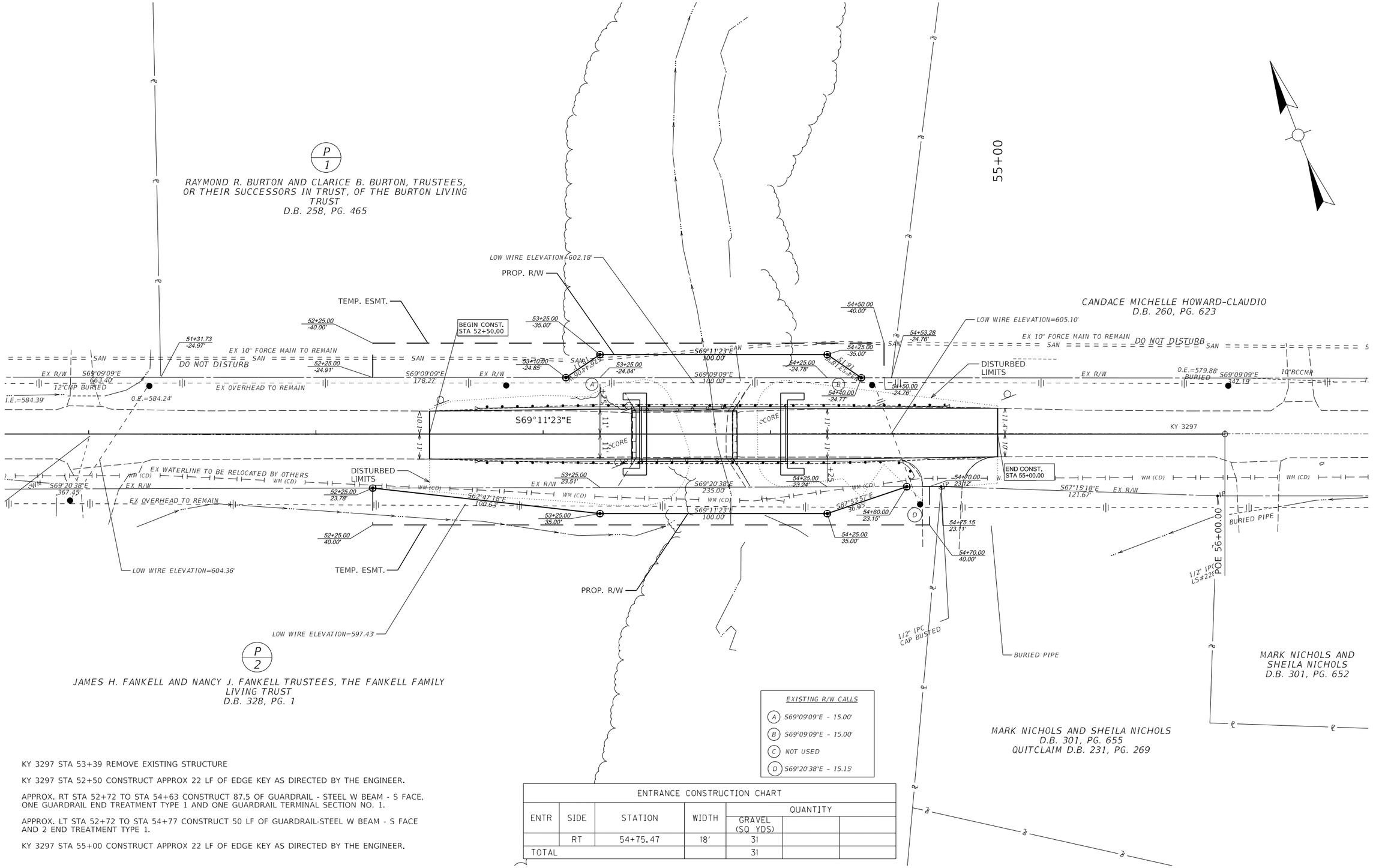
Spectrum- Charter Communications - CATV
1617 Foxhaven Drive
Richmond, KY 40475
Contact - Ralph W. McDonie
859-514-2417
ralph.mcdonie@charter.com

Windstream Communications, LLC - Communications
130 West New Circle Road
Lexington, KY 40505
Contacts - Mark Ware 606-329-6195
mark.ware@windstream.com
Steve Johnson 859-357-6209
steve.johnson@windstream.com

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: LEGEND AND UTILITY OWNERS

ITEM NO. 09-40001.00
COUNTY OF CARTER
SHEET NO. R3



KY 3297 STA 53+39 REMOVE EXISTING STRUCTURE

KY 3297 STA 52+50 CONSTRUCT APPROX 22 LF OF EDGE KEY AS DIRECTED BY THE ENGINEER.

APPROX. RT STA 52+72 TO STA 54+63 CONSTRUCT 87.5 OF GUARDRAIL - STEEL W BEAM - S FACE, ONE GUARDRAIL END TREATMENT TYPE 1 AND ONE GUARDRAIL TERMINAL SECTION NO. 1.

APPROX. LT STA 52+72 TO STA 54+77 CONSTRUCT 50 LF OF GUARDRAIL-STEEL W BEAM - S FACE AND 2 END TREATMENT TYPE 1.

KY 3297 STA 55+00 CONSTRUCT APPROX 22 LF OF EDGE KEY AS DIRECTED BY THE ENGINEER.

ENTRANCE CONSTRUCTION CHART

ENTR	SIDE	STATION	WIDTH	QUANTITY		
				GRAVEL (SQ YDS)		
	RT	54+75.47	18'	31		
TOTAL				31		

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: PLAN SHEET

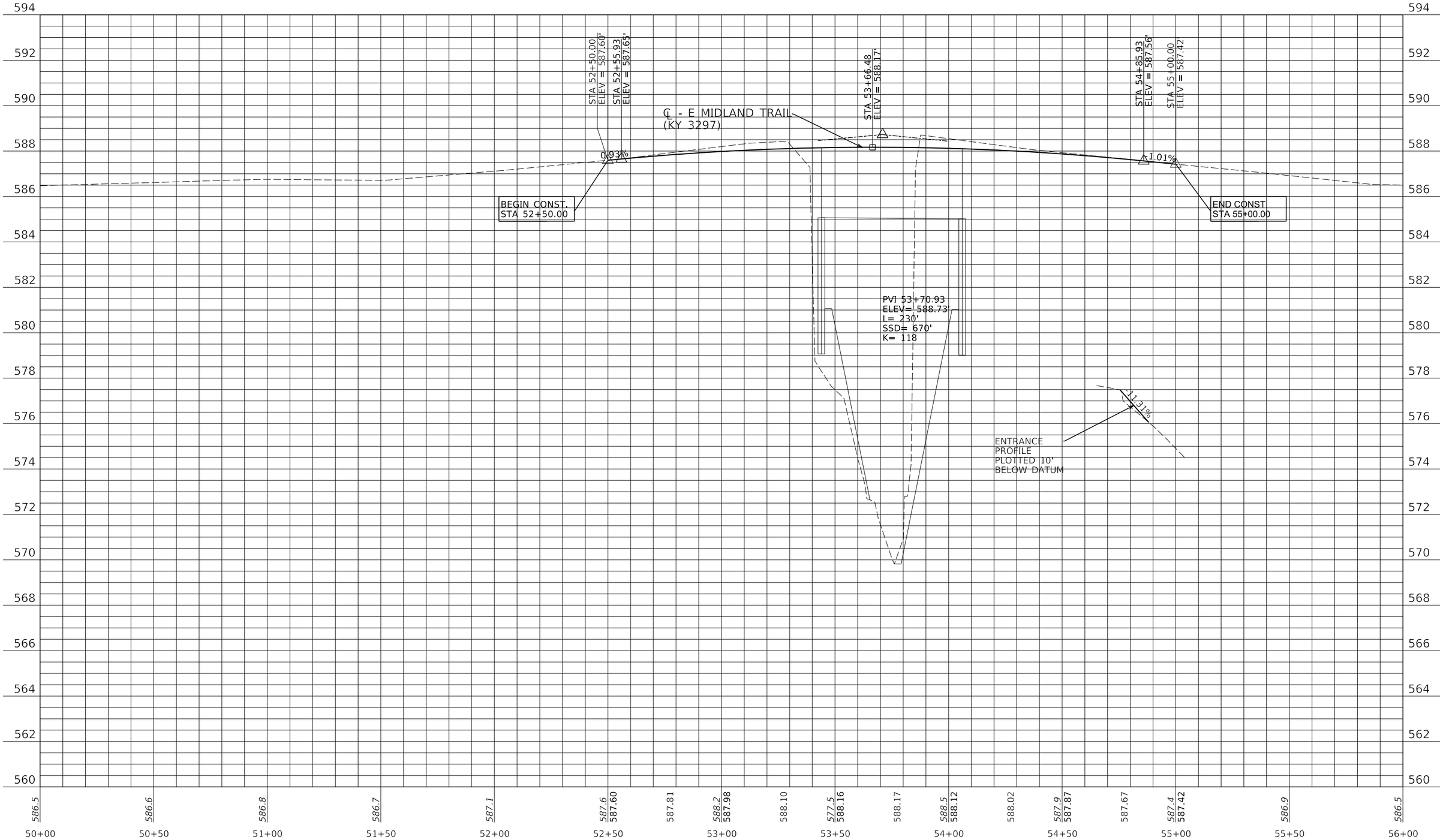
HORIZONTAL SCALE
SCALE: 1"=20'

0' 20' 40' 80'

STA 52+50.00 TO 55+00.00

ITEM NO. 9-40001.00 COUNTY OF CARTER

SHEET NO. R4



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: PROFILE

0' 20' 40' 80'
HORIZONTAL SCALE: 1"=20'

0' 2' 4' 8'
VERTICAL SCALE: 1"=2'

STA 52+50.00 TO STA 55+00.00

ITEM NO. 09-40001.00
COUNTY OF CARTER

SHEET NO. R5

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 UNLESS OTHERWISE PROVIDED FOR IN THESE NOTES. THE LUMP SUM BID TO "MAINTAIN AND CONTROL TRAFFIC" SHALL ALSO INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS AND OPERATIONS:

   A. ALL GRADING AND NECESSARY DRAINAGE (UNLESS A BID ITEM FOR DETOUR CONSTRUCTION IS INCLUDED) FOR THE TEMPORARY ROADWAY AND REMOVAL THEREOF, WHEN IT IS NO LONGER NEEDED. IF A BID ITEM FOR DETOUR CONSTRUCTION IS INCLUDED, GRADING AND DRAINAGE WILL BE PAID FOR IN THE BID ITEM "DETOUR CONSTRUCTION".

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

   C. ALL FLAGPERSONS AND TRAFFIC CONTROL DEVICES SUCH AS, BUT NOT LIMITED TO, FLASHERS, SIGNS BARRICADES AND VERTICAL PANELS, PLASTIC DRUMS (STEEL DRUMS WILL NOT BE PERMITTED) AND CONES NECESSARY FOR THE CONTROL AND PROTECTION OF VEHICULAR AND PEDESTRIAN 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. EXCEPTING THE ROAD CLOSURE AT THE EXISTING BRIDGE LOCATION, THE CONTRACTOR SHALL MAINTAIN THE EXISTING TRAVELED WAY WIDTH AS DIRECTED BY THE ENGINEER.

5. 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.

6. IN GENERAL, ALL TRAFFIC CONTROL DEVICES SHALL BE PLACED STARTING AND PROCEEDING IN THE DIRECTION OF THE FLOW OF TRAFFIC AND REMOVED STARTING AND PROCEEDING IN THE DIRECTION OPPOSITE THE FLOW OF TRAFFIC.

7. THE ENGINEER AND THE CONTRACTOR, OR THEIR AUTHORIZED REPRESENTATIVES, SHALL REVIEW THE SIGNING BEFORE TRAFFIC IS ALLOWED TO USE ANY LANE CLOSURES, CROSSOVERS OR DETOURS. ALL SIGNING SHALL BE APPROVED BY THE ENGINEER BEFORE WORK CAN BE STARTED BY THE CONTRACTOR.

8. 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, WHERE APPLICABLE.

9. 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.

10. ALL SIGNS NECESSARY FOR A MARKED DETOUR WILL BE PROVIDED BY THE CONTRACTOR AS REQUIRED BY STANDARD DRAWINGS AND THE MUTCD. SIGNS OUTSIDE THE PROJECT LIMITS SHALL BE PAID FOR AS PART OF THE LUMP SUM BID PRICE FOR "MAINTAIN AND CONTROL TRAFFIC". THIS QUANTITY SHALL INCLUDE SIGN MOUNTING HARDWARE AND POSTS.

PAVEMENT DROP-OFF

A PAVEMENT EDGE THAT TRAFFIC IS NOT EXPECTED TO CROSS, EXCEPT ACCIDENTALLY, SHOULD BE TREATED AS FOLLOWS:

* LESS THAN TWO INCHES - NO PROTECTION REQUIRED. WARNING SIGNS SHOULD BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.

* TWO TO FOUR INCHES - PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES 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 FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING OF DEVICES ON TAPERED SECTIONS SHOULD BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.

* 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 AND THE DROP-OFF, THEN DRUMS, PANEL, 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.

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.

LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.

PAYMENT WILL BE ALLOWED FOR DGA MATERIAL USED FOR WEDGING.

PHASING PLAN

PLASE 1

- CONSTRUCTION:
  CONSTRUCT PERMANENT ROAD GRADE, SLOPE PROTECTION, AND BRIDGE.
- TRAFFIC:
  UTILIZE THE PROPOSED DETOUR.

PLASE 2

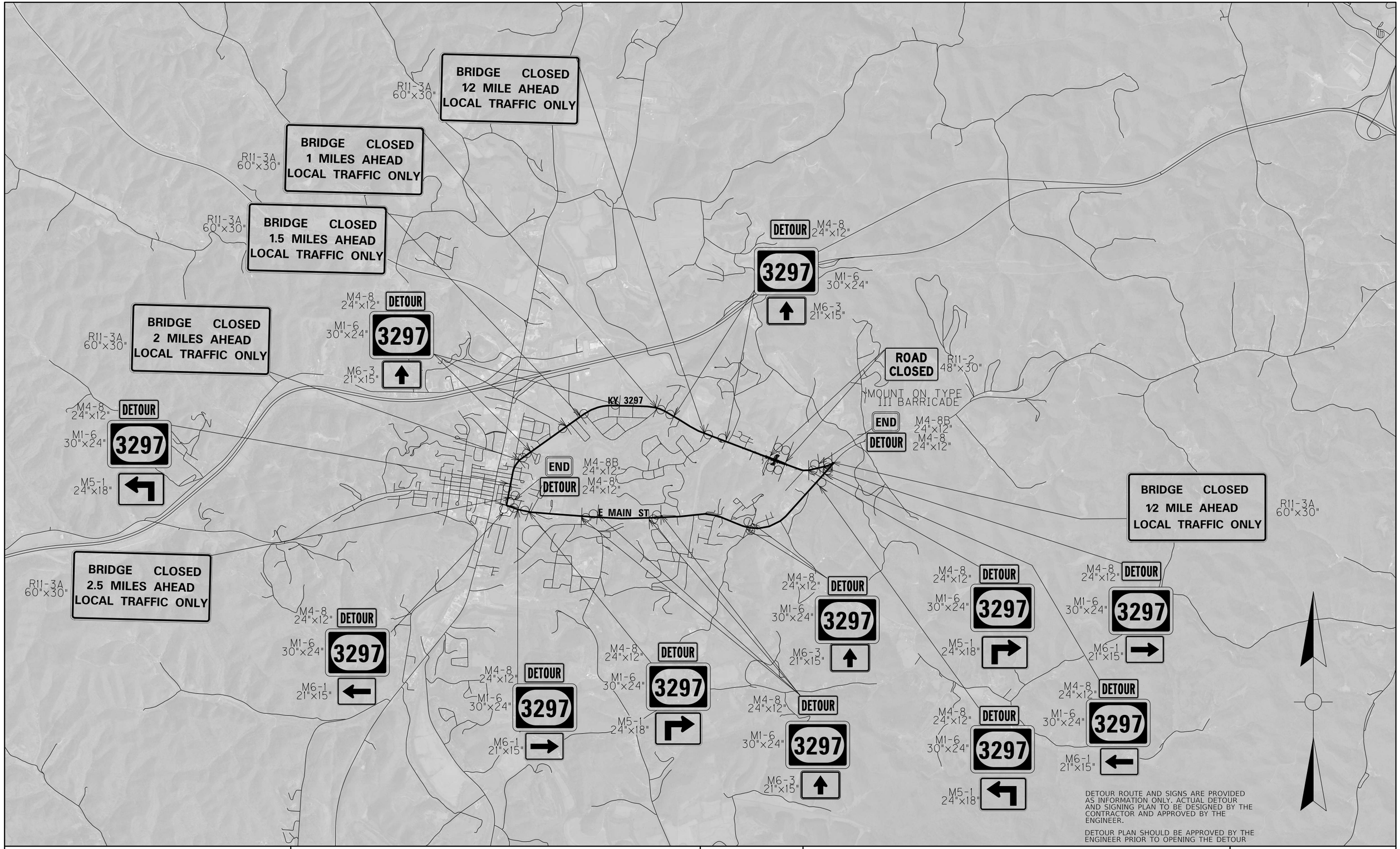
- CONSTRUCTION:
  FINISH CONSTRUCTION. STABILIZE TEMPORARILY DISTURBED AREA AND REPAIR ANY DAMAGE TO PRIVATE PROPERTY.
- TRAFFIC:
  OPEN E MIDLAND TRAIL AND NEW BRIDGE TO TRAFFIC.

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: MOT NOTES AND PHASING SHEET

ITEM NO. 09-40001.00 COUNTY OF CARTER

SHEET NO. R6



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: DETOUR SHEET

NTS

ITEM NO. 09-40001.00 COUNTY OF CARTER

SHEET NO. R7

OpenRoads Designer v10.16.2.267 USER: AASAOLU FILE NAME: C:\PW_WORKING\LOCHNER-PW-01\DMS76301\9_40001_PL_DETOUR.DGN

EROSION CONTROL NOTES

ALL SILT CONTROL DEVICES SHALL BE SIZED TO RETAIN A VOLUME OF 3,600 CUBIC FEET PER DISTURBED CONTRIBUTING ACRE.

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED GROUND DURING EACH PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL COMPUTE THE VOLUME NECESSARY TO CONTROL SEDIMENT DURING EACH PHASE OF CONSTRUCTION. AS WORK PROCEEDS, SILT TRAPS MAY BE ADDED OR REMOVED IN ORDER TO ACHIEVE THE BEST MANAGEMENT PLAN. THE REQUIRED VOLUME AT EACH ADDED SILT TRAP SHALL BE COMPUTED AS UP GRADIENT CONTRIBUTING AREAS ARE DISTURBED OR ARE STABILIZED TO THE SATISFACTION OF THE ENGINEER. THE REQUIRED VOLUME CALCULATION FOR EACH SILT TRAP SHALL BE DETERMINED BY THE CONTRACTOR AND VERIFIED BY THE ENGINEER. THE REQUIRED VOLUME AT EACH SILT TRAP MAY BE REDUCED BY THE FOLLOWING AMOUNTS:

- UP GRADIENT AREAS NOT DISTURBED (ACRES).
- UP GRADIENT AREAS THAT HAVE BEEN RECLAIMED AND PROTECTED BY EROSION CONTROL BLANKET OR OTHER GROUND PROTECTION MATERIAL SUCH AS TEMPORARY MULCH.(ACRES).
- THE USE OF TEMPORARY MULCH IS ENCOURAGED.
- UP GRADIENT AREAS THAT HAVE BEEN PROTECTED BY SILT FENCE (ACRES). AREAS PROTECTED BY SILT FENCE SHALL BE COMPUTED AT A MAXIMUM RATE OF 100 SQUARE FOOT PER LINEAR FOOT OF SILT FENCE.
- UP GRADIENT AREAS THAT HAVE BEEN PROTECTED BY SILT TRAPS (ACRES).

THE EROSION CONTROL PLAN SHALL BE ANNOTATED AS THE WORK PROCEEDS BY THE CONTRACTOR TO DETAIL THE SELECTION OF EACH EROSION CONTROL DEVICE USED AND THE VOLUME PROVIDED BY EACH SILT TRAP IN ACCORDANCE WITH THE DOCUMENTATION PROCEDURES ESTABLISHED BY THE DIVISION OF CONSTRUCTION.

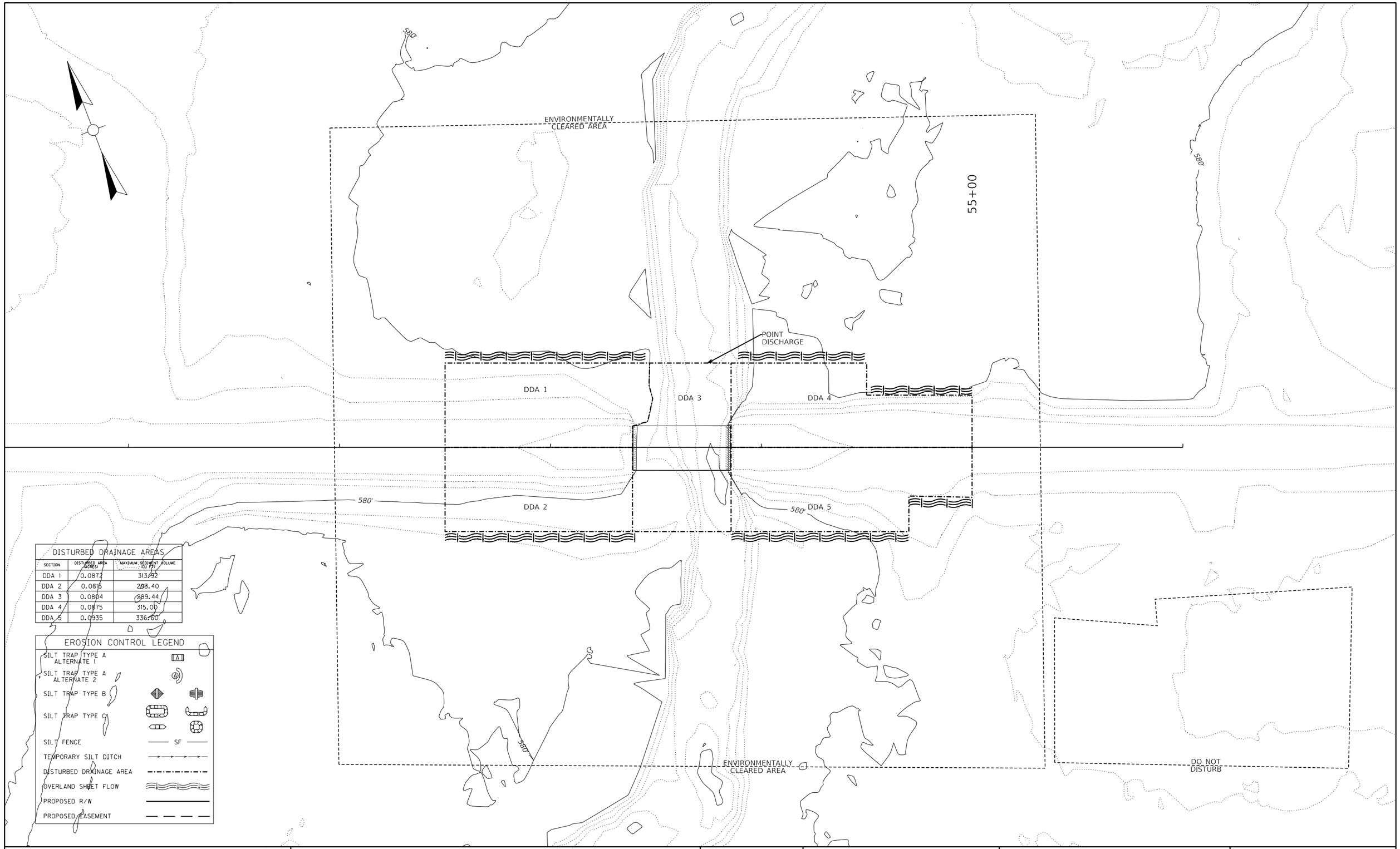
IF A SILT BASIN IS NOT USED THEN ONE SILT TRAP TYPE A, ALTERNATE NUMBER 2 OR SILT TRAP TYPE B SHALL ALWAYS BE PLACED AT THE MOST REMOTE DOWNSTREAM COLLECTION POINT PRIOR TO DISCHARGING INTO A BLUE LINE STREAM OR ONTO AN ADJACENT PROPERTY OWNER. WHERE OVERLAND FLOW EXIST, A SILT FENCE OR OTHER FILTER DEVICES MAY BE USED OR THE OVERLAND FLOW MAY BE DIVERTED TO ONE OF THE AFOREMENTED SILT BASIN OR TRAPS.

THE EROSION CONTROL PLANS DO NOT CONSTITUTE A BMP BY THEMSELVES. THEY PROVIDE A STARTING POINT FOR THE CONTRACTOR AND SECTION ENGINEER TO DEVELOP THE BMP ACCORDING TO SECTION 213.03.01 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE SUPPLEMENTAL SPECS EFFECTIVE WITH THE OCTOBER, 2004 LETTING.

EROSION CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONING PRIOR TO ANY EXCAVATION OR DISTURBANCE WITHIN A DRAINAGE AREA.

THE CONTRACTOR SHALL BE REQUIRED TO CLEAN OUT (REMOVE SEDIMENT FROM) SILT TRAPS AND SILT FENCES WHENEVER THEY BECOME ONE- HALF FULL AND PROPERLY DISPOSE OF THE MATERIAL AT SITES APPROVED BY THE SECTION ENGINEER.

EROSION CONTROL MEASURES EMPLOYED BY THE CONTRACTOR WILL BE UNIQUE TO THE PROJECT AND WORK CONDITIONS AND SHALL BE APPROVED BY THE SECTION ENGINEER. THE DEVELOPMENT AND UTILIZATION OF THESE MEASURES WILL BE RECORDED AS PART OF THE BMP, KEPT ON SITE, AND AVAILABLE FOR PUBLIC INSPECTION.



DISTURBED DRAINAGE AREAS		
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 1	0.0872	313.92
DDA 2	0.0815	293.40
DDA 3	0.0804	289.44
DDA 4	0.0875	315.00
DDA 5	0.0935	336.60

EROSION CONTROL LEGEND

- SILT TRAP TYPE A ALTERNATE 1 — [A]
- SILT TRAP TYPE A ALTERNATE 2 — (A)
- SILT TRAP TYPE B
- SILT TRAP TYPE C
- SILT FENCE — SF
- TEMPORARY SILT DITCH
- DISTURBED DRAINAGE AREA
- OVERLAND SHEET FLOW
- PROPOSED R/W
- PROPOSED EASEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: EROSION CONTROL PLAN

HORIZONTAL SCALE
SCALE: 1" = 20'

0' 20' 40' 80'

STA 50+41.07 TO STA 56+00.00

ITEM NO. 09-40001.00
COUNTY OF CARTER
SHEET NO. R9

OpenRoads Designer v10.16.2.267
USER: KMACKEY
FILE NAME: C:\PW_WORKING\LOCHNER-PW-01\DMS76301\9_40001_EC_PLAN.DGN

RIGHT OF WAY MONUMENT POINTS						
ALIGNMENTS	STATION	OFFSET	TYPE	DESCRIPTION	STATE PLANE COORDINATES	
					NORTHING (Y)	EASTING (X)
E MIDLAND TRAIL	52+25.00	23.78	TY 1	ROW MON	4022298.0843	5736604.3929
E MIDLAND TRAIL	53+10.00	-24.85	TY 1	ROW MON	4022313.3477	5736701.1265
E MIDLAND TRAIL	53+25.00	35.00	TY 1	ROW MON	4022252.0696	5736693.8833
E MIDLAND TRAIL	53+25.00	-35.00	TY 1	ROW MON	4022317.5030	5736718.7524
E MIDLAND TRAIL	54+25.00	35.00	TY 1	ROW MON	4022216.5422	5736787.3595
E MIDLAND TRAIL	54+25.00	-35.00	TY 1	ROW MON	4022281.9756	5736812.2287
E MIDLAND TRAIL	54+40.00	-24.77	TY 1	ROW MON	4022267.0843	5736822.6125
E MIDLAND TRAIL	54+60.00	23.15	TY 1	ROW MON	4022215.1877	5736824.2827

COORDINATE CONTROL POINTS						
CP NUMBER	TYPE	NORTHING (Y)	EASTING (X)	ELEVATION (Z)	STATION	OFFSET
1	5/8" IPC	4021912.286	5737609.387	583.77	NA	NA
2	5/8" IPC	4022088.378	5737176.771	585.81	NA	NA
3	5/8" IPC	4022436.175	5736359.836	585.64	NA	NA
4	5/8" IPC	4022555.803	5735947.406	585.42	NA	NA

E MIDLAND TRAIL (KY 3297)			
POINT	STATION	NORTHING (Y)	EASTING (X)
START	50+00.00	4022400.25	5736402.52
END	56+00.00	4022187.09	5736963.38

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.

BASIS OF ELEVATIONS

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

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	DRAWING TITLE: COORDINATE CONTROL & ROW STRIP MAP SHEET	HORIZONTAL SCALE SCALE: 1" = 50'	0' 50' 100' 200'	STA 50+00.00 TO 56+00.00	ITEM NO. 09-40001.00 COUNTY OF CARTER SHEET NO. R10

PARCEL NO.	SHEET NO.	OWNER(S)	TOTAL AREA OF TRACT		PERMANENT R/W ACQUIRED		EASEMENTS		AREA SEVERED				EXCESS PURCHASED		PORTION REMAINING		SEWER SYSTEM TYPE	SEWER SYSTEM AFFECTED BY PROJECT		BUILDINGS ACQUIRED NUMBER				SOURCE OF TITLE	REMARKS*
							PERMANENT	TEMPORARY	LEFT		RIGHT														
			ACRES	SQ. FT.	ACRES	SQ. FT.	SQ. FT.	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.		YES	NO	C	R	F	S		
1	R4	RAYMOND R. BURTON AND CLARICE B. BURTON, TRUSTEES, OR THEIR SUCCESSORS IN TRUST, OF THE BURTON LIVING TRUST	10.00			1172		2241	9.973						9.973				X	0	0	0	0	D.B. 258 PG. 465	AREA BY PVA
2	R4	JAMES H. FANKELL AND NANCY J. FANKELL, TRUSTEES, THE FANKELL FAMILY LIVING TRUST	6.50			1943		2113			6.4550				6.455				X	0	0	0	0	D.B. 328 PG. 1	AREA BY DEED

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 COMMERCIAL
R RESIDENTIAL
F FARM
S STORAGE

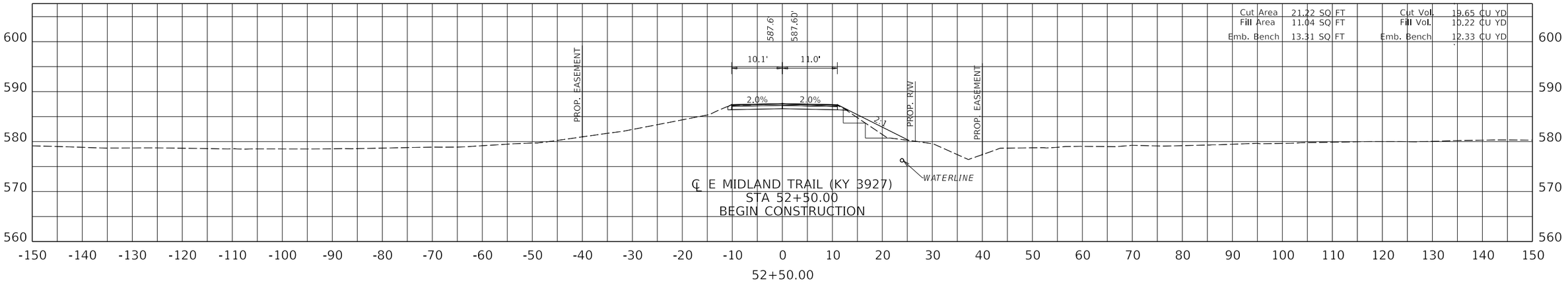
* INCLUDES HAZARDOUS WASTE (UST - UNDERGROUND STORAGE TANKS)

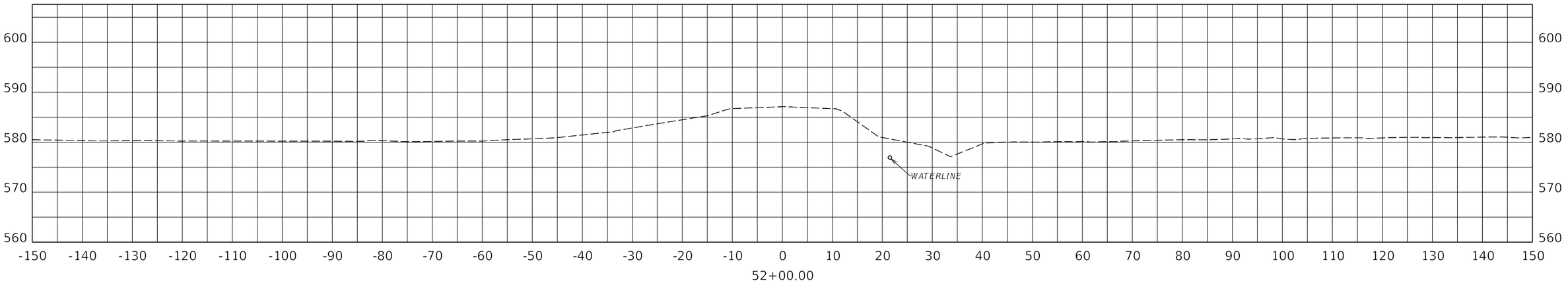
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: RIGHT OF WAY SUMMARY

ITEM NO. 09-40001.00 COUNTY OF CARTER

SHEET NO. R11





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: KY 3297 CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 10'

0' 10' 20' 40'

STA 52+00.00 TO 52+50.00

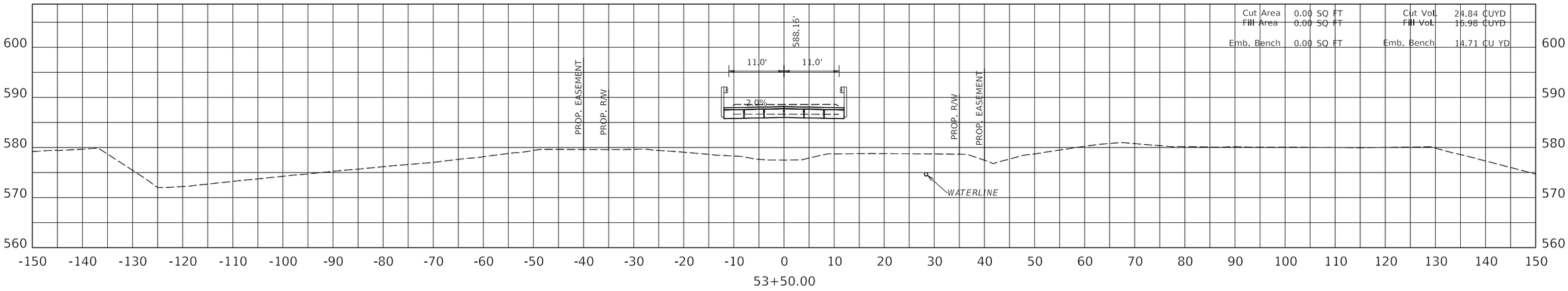
ITEM NO. 09-40001.00
COUNTY OF CARTER

SHEET NO. X1

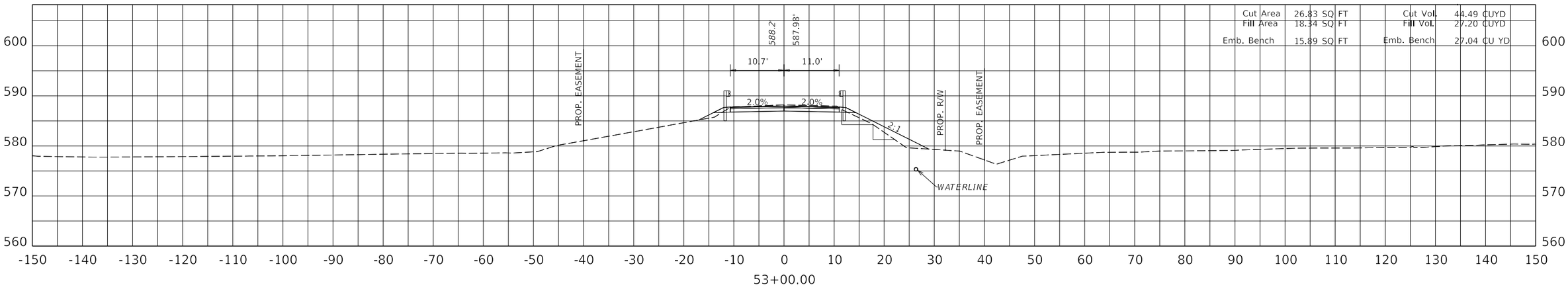
OpenRoads Designer v10.16.2.267

USER: AASAOLU

FILE NAME: C:\PW_WORKING\LOCHNER-PW-01\DMS76301\9_40001_XS_KY 3297.DGN

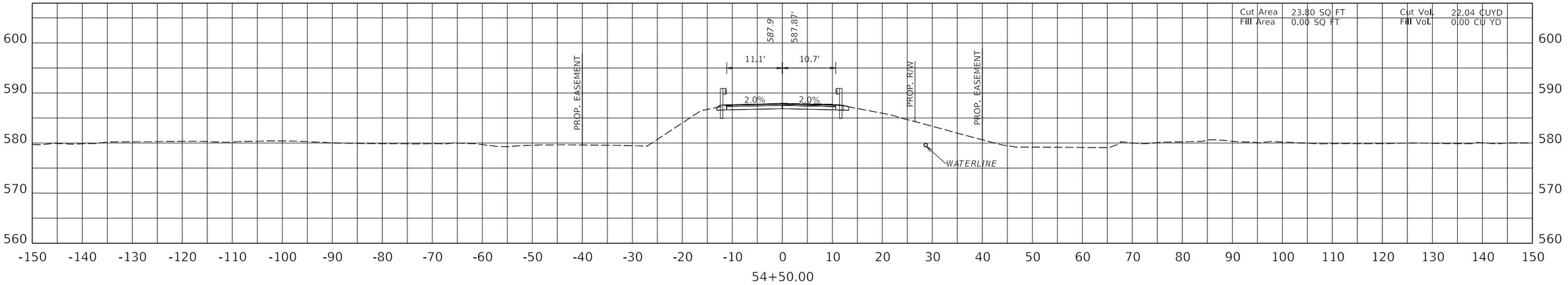


53+50.00

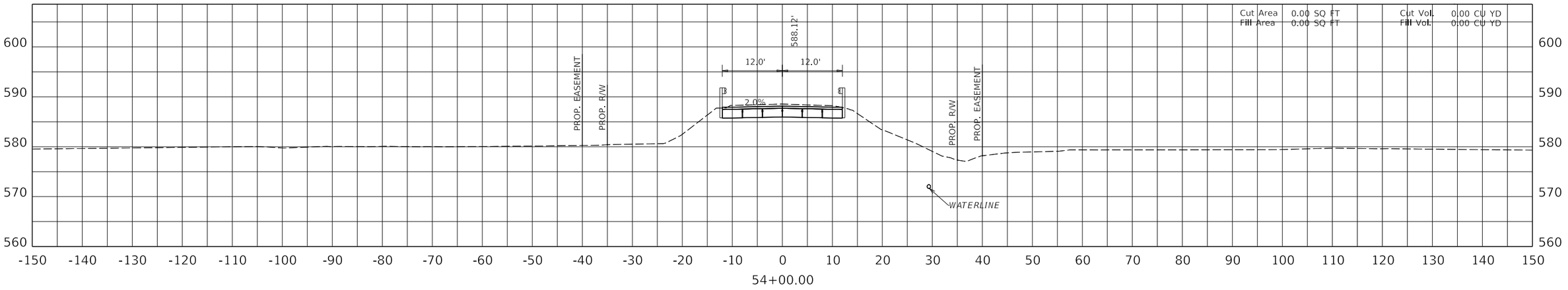


53+00.00

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	DRAWING TITLE: KY 3297 CROSS SECTIONS	HORIZONTAL SCALE SCALE: 1" = 10'	0′ 10′ 20′ 40′	STA 53+00.00 TO 53+50.00	ITEM NO. 09-40001.00 COUNTY OF CARTER SHEET NO. X2

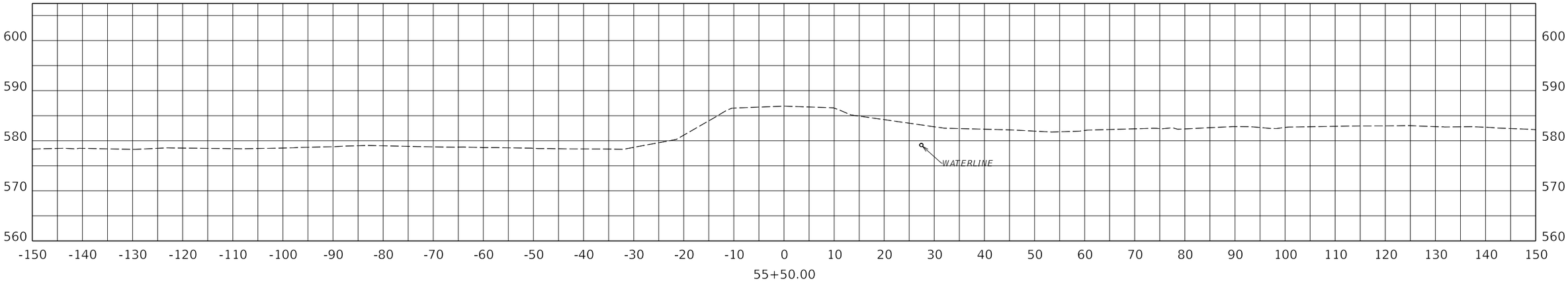


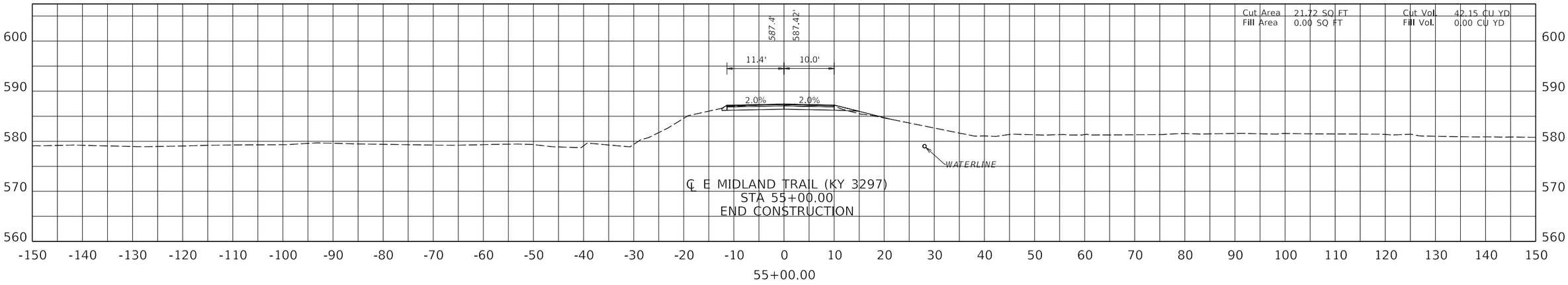
54+50.00



54+00.00

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	DRAWING TITLE: KY 3297 CROSS SECTIONS	HORIZONTAL SCALE SCALE: 1" = 10'	0' 10' 20' 40'	STA 54+00.00 TO 54+50.00	ITEM NO. 09-40001.00 COUNTY OF CARTER SHEET NO. X3





COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	DRAWING TITLE: KY 3297 CROSS SECTIONS	HORIZONTAL SCALE SCALE: 1" = 10'	0' 10' 20' 40'	STA 55+00.00 TO 55+50.00	ITEM NO. 09-40001.00 COUNTY OF CARTER SHEET NO. X4

LETTING DATE

CONSTRUCTION PROJECT NO.

TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS

CARTER COUNTY
EAST MIDLAND TRAIL
KY 3297 OVER UPPER STINSON CREEK
STA. 53+75.00

ESTIMATE OF QUANTITIES

BID ITEM CODE		08100	08104	08151	08019	02231	08046	08033	03299	08003	08094	23378EC	25017ED	08664
BID ITEM		Concrete Class "A"	Concrete Class "AA"	Steel Reinforcement, Epoxy Coated	Cyclopean Stone Rip Rap	Structure Granular Backfill	Piles - Steel HP 12 x 53	Test Piles	Armored Edge for Concrete	Foundation Preperation	Pile Points 12 Inch	Concrete Sealing	Railing System Side Mounted MGS	PPC Box Beam CB27
UNIT		C.Y.	C.Y.	LBS.	Tons	C.Y.	L.F.	L.F.	L.F.	L.S.	EA.	S.F.	L.F.	L.F.
Substructure	End Bent #1	34.2	9.4	3589	264	78	217	40			7	391		
	End Bent #2	34.2	9.4	3589	309	78	223	41			7	391		
Superstructure			24.2	3228					48			1577	112.5	381
BRIDGE TOTALS		68.4	43.0	10406	573	156	440	81	48	1	14	2359	112.5	381

INDEX OF SHEETS

Sheet No.	Description
S1	Title Sheet
S2	General Notes
S3	Layout
S4	Subsurface Data
S5	Foundation Layout
S6-S7	End Bent #1
S8-S9	End Bent #2
S10	Superstructure
S11	Construction Elevations

SPECIAL NOTES

Special Note for Concrete Sealing

SPECIAL PROVISIONS

69 Embankment at Bridge End Bent Structures

STANDARD DRAWINGS

BBP-003-02	Elastomeric Bearing Pads for Box Beams
BDP-001-06	Box Beam General Notes & References
BDP-002-03	Box Beam Bearing Details
BDP-003-03	Box Beam Miscellaneous Details
BDP-004-04	Box Beam Tension Rod Details
BDP-009-04	Box Beam B27 & CB27 Details
BGX-006-10	Stencils for Structures
BGX-012-02	Geotechnical Legend
BGX-022	Joint Waterproofing
BJE-001-14	Armored Edges
BHS-011	Railing System Side Mounted MGS Details
BPS-003-09	HP12x53 Steel Pile

SPECIFICATIONS

2019 Standard Specifications for Road and Bridge Construction.

2020 AASHTO LRFD Bridge Design Specifications

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY
Division of Structural Design

DATE: March 2023	CHECKED BY
DESIGNED BY: J. Van Zee	N. Cordtz
DETAILED BY: B. Miller	J. Van Zee

TITLE SHEET

CROSSING: Upper Stinson Creek

ROUTE	ITEM NO.	COUNTY OF
KY 3297	9-40001.00	CARTER
	SHEET NO. S1	DRAWING NUMBER 28741

MicroStation v10.16.3.31 USER: Joseph.VanZee DATE PLOTTED: 25-MAY-2023 FILE NAME: J:\District09\9-40001\28741.dgn

GENERAL NOTES

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

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

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

DESIGN STRESSES:
Concrete Class "A" ~ f'c = 3500 psi
Concrete Class "AA" ~ f'c = 4000 psi
Steel Reinforcement ~ Fy = 60,000 psi
Steel Piling ~Fy = 50,000 psi

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

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: Bevel all exposed edges ¾", unless otherwise noted.

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

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

FOUNDATION DATA: See Foundation Layout Sheet.

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

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

SLOPE PROTECTION: Slope protection will be required at the bridge meeting the requirements of Sections 703 & 805 of the Standard Specifications for Road and Bridge Construction, current edition. Place a Class 1 Geotextile Fabric, in accordance with Sections 214 & 843 of the Standard Specifications for Road and Bridge Construction, current edition, between the embankment and the slope protection.

MASONRY COATING: Contrary to the Specifications, do not apply Masonry Coating. Apply Concrete Sealing in place of Masonry Coating as noted in CONCRETE SEALER note.

CONCRETE SEALER: All areas detailed in the specifications as requiring masonry coating shall be sealed in accordance with the special note for concrete sealing. The superstructure deck, barriers, and overhangs shall also be sealed as shown herein these plans. Concrete surfaces (except the deck) shall receive the ordinary surface finish as described in section 601.03.18(A) prior to being sealed.

FOUNDATION PREPARATION: Include all costs for required excavation, backfilling, and material required to backfill to the bottom of the roadway subgrade in accordance with the specifications in the price bid for Foundation Preparation.

PILE POINTS: Provide pile points for all point bearing piles. Ensure pile points are in accordance with section 604 of the specifications and of the type as shown on the foundation layout sheet.

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

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

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

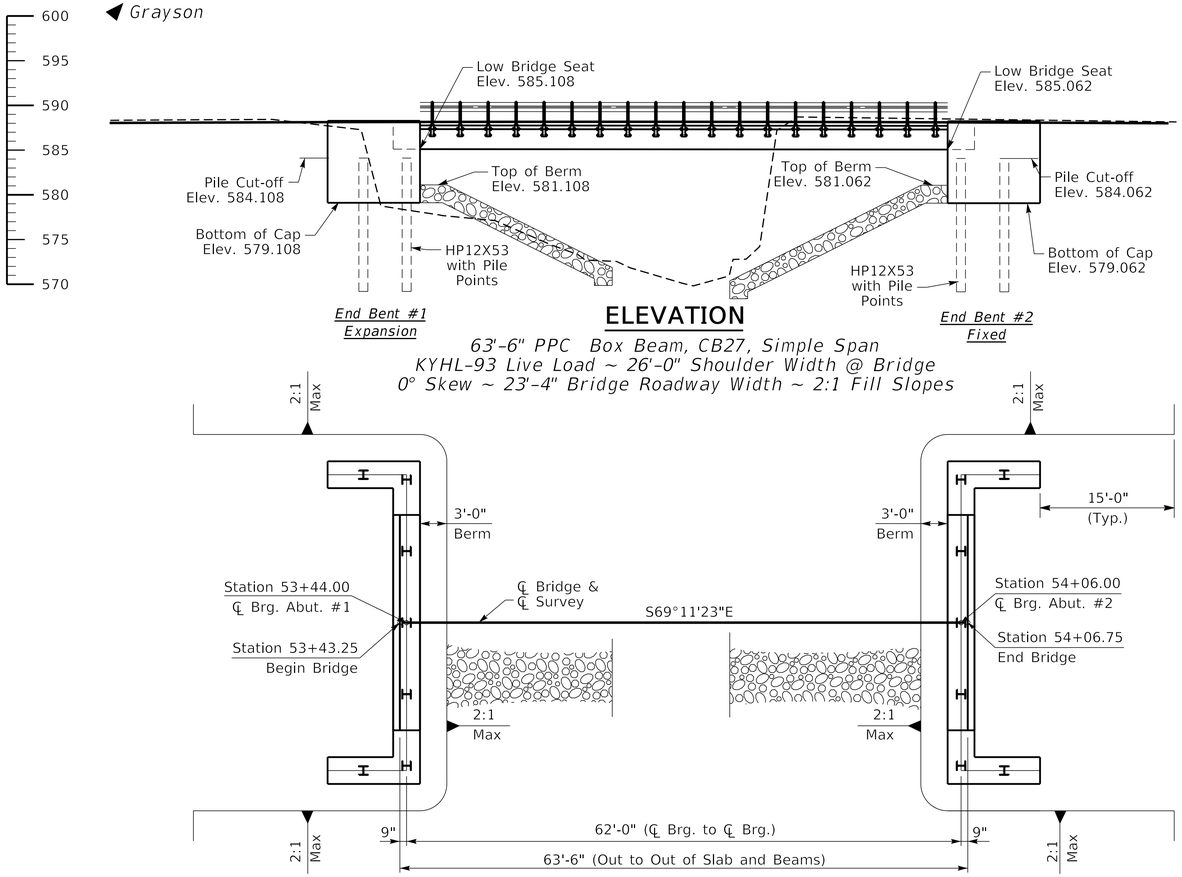
REVISION	DATE

PREPARED BY
Division of Structural Design

DATE: March 2023	CHECKED BY	
DESIGNED BY: J. Van Zee	N. Cordtz	
DETAILED BY: B.Miller	J. Van Zee	

GENERAL NOTES
CROSSING: Upper Stinson Creek

ROUTE	ITEM NO.	COUNTY OF
KY 3297	9-40001.00	CARTER
	SHEET NO.	DRAWING NUMBER
	S2	28741

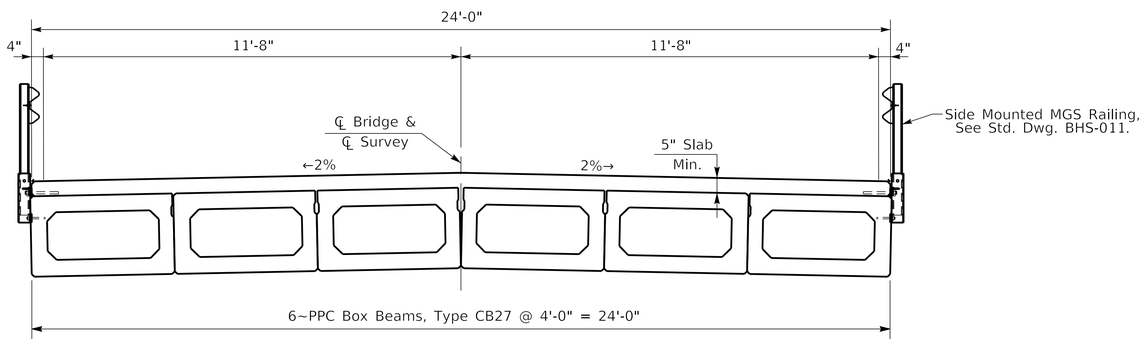


ELEVATION

63'-6" PPC Box Beam, CB27, Simple Span
KYHL-93 Live Load ~ 26'-0" Shoulder Width @ Bridge
0° Skew ~ 23'-4" Bridge Roadway Width ~ 2:1 Fill Slopes

PLAN

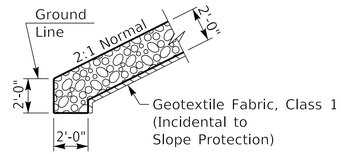
~Superstructure not shown~



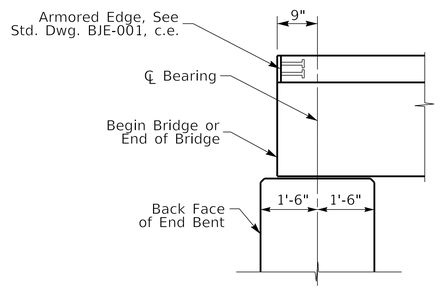
TYPICAL SECTION

NOTE:
Roadway guardrail is to attach to bridge guardrail to form a continuous unit.
See Std. Dwg. BHS-011, c.e.

NOTE:
For end bent backfill and method of construction see Special Provision 69. Include the cost of any required geotextile fabric in the unit price for Structure Granular Backfill.



TOE OF SLOPE DETAIL



END OF BEAM DETAIL

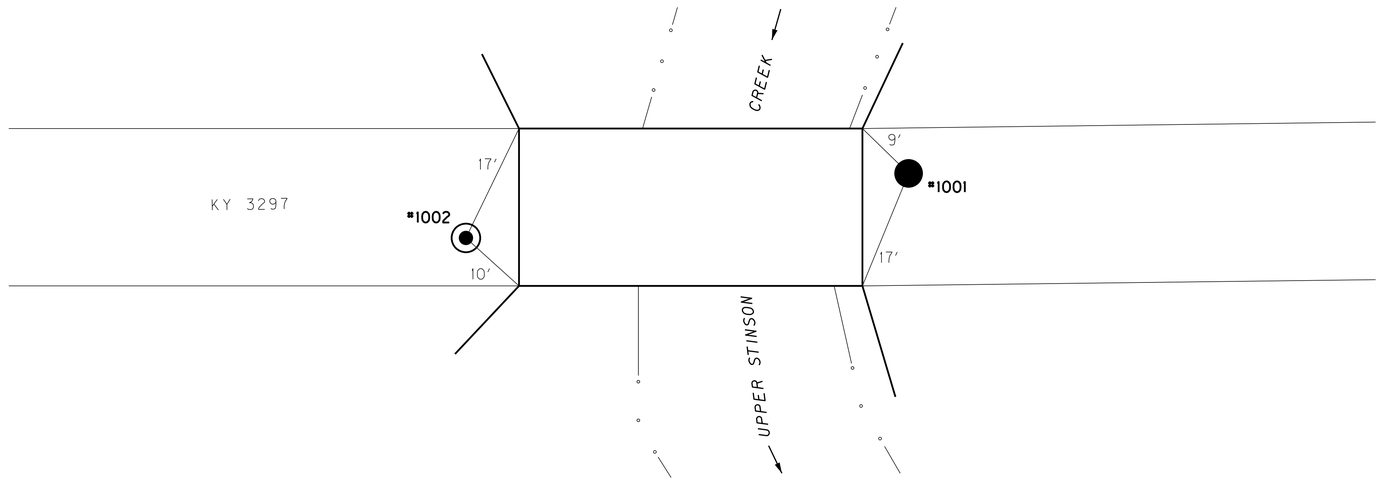
(Measured Along ℄ Beam)

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION / DATE	PREPARED BY Division of Structural Design	DATE: March 2023	CHECKED BY	*LAYOUT*	ROUTE	ITEM NO.	COUNTY OF
			DESIGNED BY: J. Van Zee	N. Cordtz	CROSSING Upper Stinson Creek	KY 3297	9-40001.00	CARTER
			DETAILED BY: B.Miller	J. Van Zee			SHEET NO. S3	DRAWING NUMBER 28741

MicroStation v10.16.3.31 USER: Joseph.VanZee DATE PLOTTED: 25-MAY-2023 FILE NAME: J:\District09\9-40001\28741.dgn

SUBSURFACE DATA

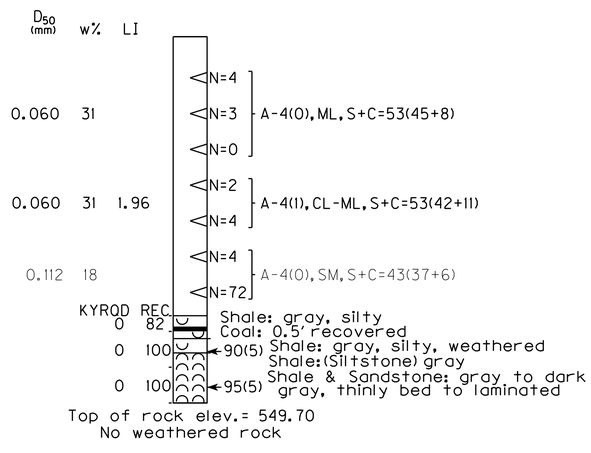
Plan Scale 1" = 10'

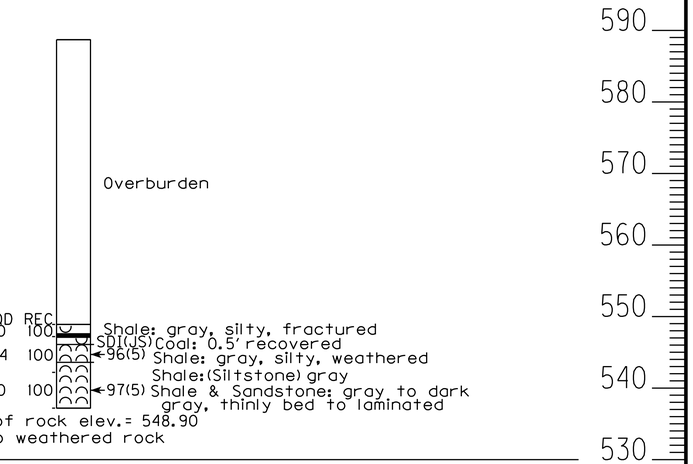


Profile Scale:
Vertical 1" = 10'
Horizontal not to scale

END BENT ONE — END BENT TWO

	#1002	#1001
Hole No.		
Station	38.335436, -82.906306	38.335478, -82.906536
Offset		
Elev. (NAVD 88 datum)	588.70	588.70





Datum

The Presumptive Factored Bearing Resistance at the Service Limit State is
16 ksf for Spread Footings on Competent Unweathered Bedrock

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY
Division of Structural Design
Geotechnical Branch

DATE: 28-JULY-2022		CHECKED BY
DESIGNED BY:		
DETAILED BY: E. BAILEY		R. McDONALD

SUBSURFACE DATA
CROSSING: Bridge over Upper Stinson Creek

ROUTE	ITEM NO.	COUNTY OF
KY 3297	9-40001.00	CARTER
	SHEET NO. S4	DRAWING NUMBER 28741

Definitions of Terms

PILE CUT-OFF ELEVATION: Elevation of the top of pile in the finished structure.

PILE LENGTH IN PLACE: Actual pile length below the Pile Cut-Off Elevation in the finished structure.

PILE TIP ELEVATION AS DRIVEN: Actual point of pile elevation in the finished structure.

DESIGN AXIAL LOAD: Load carried by each pile as estimated from structural design calculations for Factored LRFD Loadings.

CALCULATED FIELD BEARING: Contrary to Section 604.03.07 of the Standard Specifications, in place bearing values are not required for piles bearing on rock when driven to practical refusal.

Driving Criteria

DRIVING CRITERIA: Drive point bearing piles to practical refusal.

PRACTICAL REFUSAL: Drive point bearing piles to practical refusal. For this project minimum blow requirements are reached after total penetration becomes ½ inch or less for 10 consecutive blows, practical refusal is obtained after the pile is struck an additional 10 blows with total penetration of ½ inch or less. Advance the production piling to the driving resistances specified above and to depths determined by test pile(s) and subsurface data sheet(s). Immediately cease driving operations if the pile visibly yields or becomes damaged during driving. If hard driving is encountered because of dense strata or an obstruction, such as a boulder before the pile is advanced to the depth anticipated, the Engineer will determine if more blows than the average driving resistance specified for practical refusal is required to further advance the pile. Drive additional production and test piles if directed by the Engineer.

HAMMER CRITERIA: A hammer with a rated energy of between 28 and 45 kip-ft will be required to drive the H-piles to practical refusal without encountering excessive blow counts or damaging the pile. The contractor shall submit the proposed pile driving system to the Department for approval prior to the installation of the first pile. Approval of the pile driving system by the Engineer will be subject to satisfactory field performance of the pile driving procedures.

Field Data

For each pile, the Project Engineer shall record the following on this sheet: Pile Length in Place and Point of Pile Elevations as Driven.

Submit this record to:

Kentucky Transportation Cabinet
Division of Structural Design
3rd. Floor East
200 Mero Street
Frankfort, KY 40622

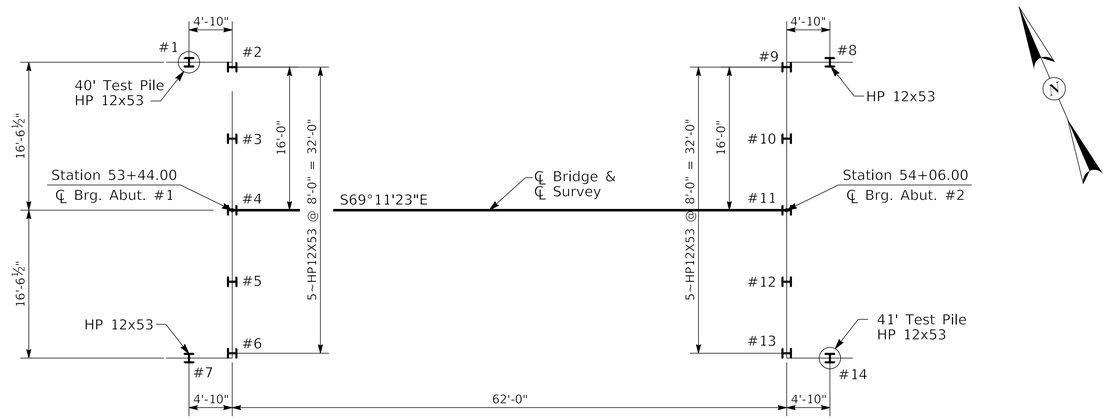
This pile record does not replace other pile records the Project Engineer is required to keep and submit.

Use HP12X53 (50 ksi) piles.

Provide Pile Points capable of penetrating boulders and keying into sloping rock surfaces for all piles.

PILE RECORD FOR POINT BEARING PILES

Pile No.	Pile Cut-off Elevation	Pile Length In Place	Point of Pile Elevation As Driven	Design Axial Load
	FEET	FEET	FEET	TONS
	~End Bent #1~			
1	584.108			84
2	584.108			84
3	584.108			84
4	584.108			84
5	584.108			84
6	584.108			84
7	584.108			84
	~End Bent #2~			
8	584.062			84
9	584.062			84
10	584.062			84
11	584.062			84
12	584.062			84
13	584.062			84
14	584.062			84



End Bent #1
Expansion

FOUNDATION LAYOUT

End Bent #2
Fixed

Note: Piles #1 and #7 may be battered slightly if necessary to miss existing substructure elements. If required submit proposal to Engineer for approval before driving.

Note:
Cofferdams and/or dewatering methods may be required to facilitate foundation construction of pile caps. Temporary sheeting and/or shoring may be required for installation of pile caps. The contractor shall be responsible for the stability and safety of all excavations. All costs incidental to Foundation Preparation.

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

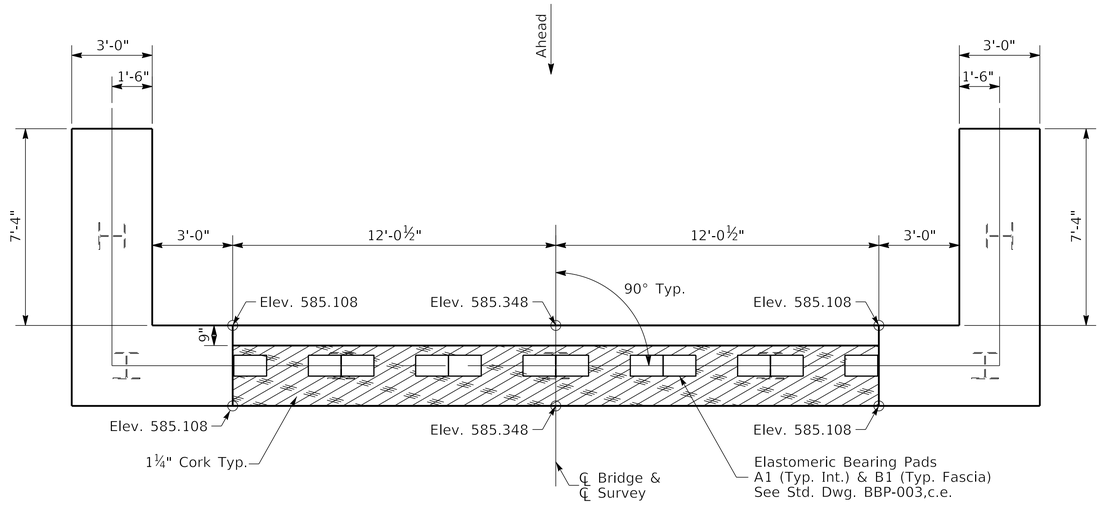
REVISION	DATE

PREPARED BY
Division of Structural Design

DATE: March 2023	CHECKED BY
DESIGNED BY: J. Van Zee	N. Cordtz
DETAILED BY: B.Miller	J. Van Zee

FOUNDATION LAYOUT
CROSSING: Upper Stinson Creek

ROUTE	ITEM NO.	COUNTY OF
KY 3297	9-40001.00	CARTER
	SHEET NO. S5	DRAWING NUMBER 28741

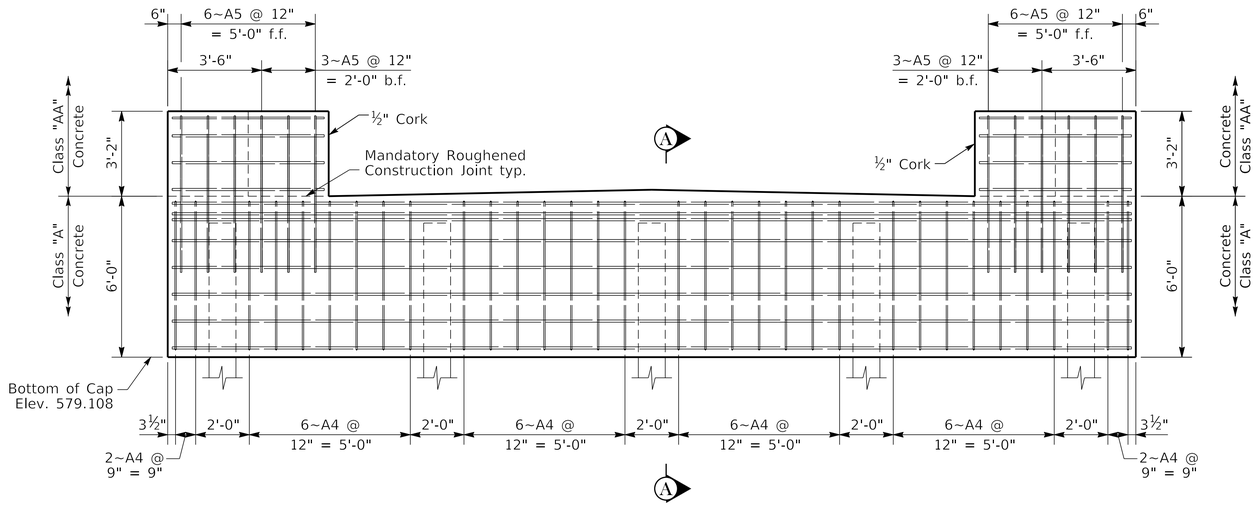


PLAN

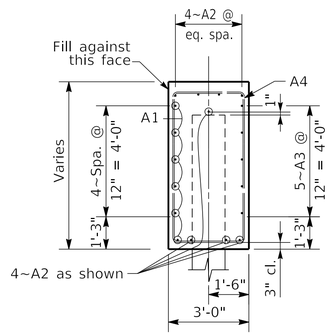
NOTE:
For pile location see
Foundation Layout Sheet.

NOTE:
Seat Elevations given
at top of concrete.

Note: Place beams, tighten tension rod, and then pour wings against box beams.



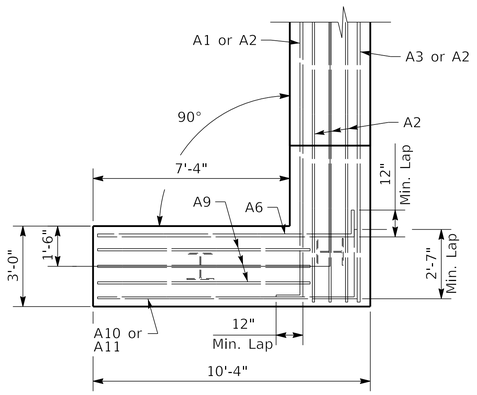
ELEVATION



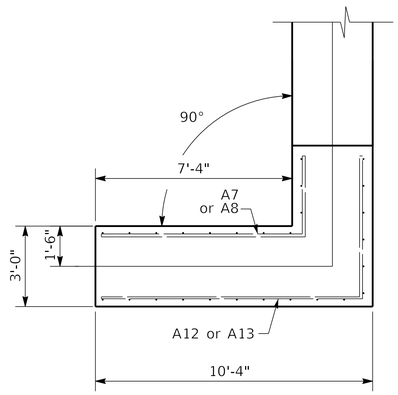
SECTION A-A

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY Division of Structural Design	DATE: March 2023	CHECKED BY	*END BENT #1*	ROUTE KY 3297	ITEM NO. 9-40001.00	COUNTY OF CARTER
				DESIGNED BY: J. Van Zee	N. Cordtz	CROSSING Upper Stinson Creek		SHEET NO. S6	DRAWING NUMBER 28741
				DETAILED BY: B.Miller	J. Van Zee				

MicroStation v10.16.3.31 USER: Joseph.VanZee DATE PLOTTED: 25-MAY-2023 FILE NAME: J:\District09\9-40001\28741.dgn



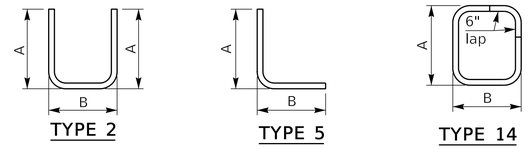
DETAIL BELOW BRIDGE SEAT

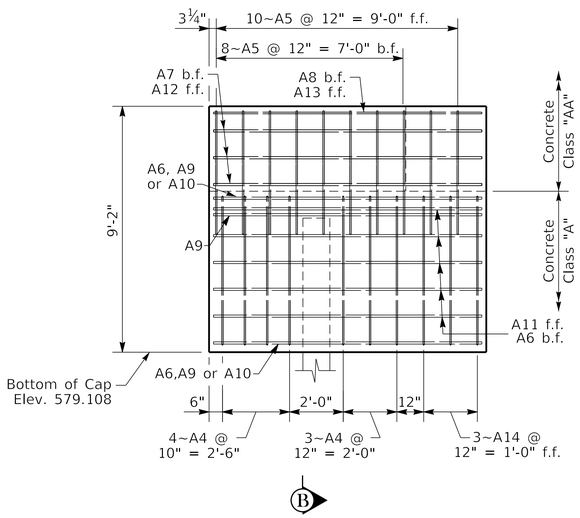


DETAIL ABOVE BRIDGE SEAT

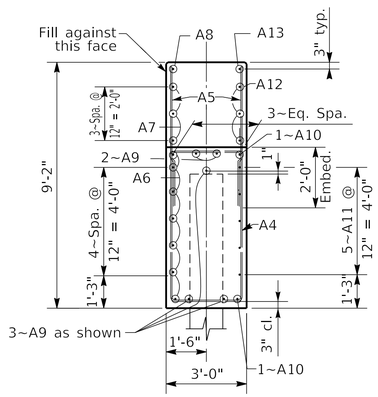
BILL OF REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B
A1e	2	6	8	37- 4	Cap B.F.	1- 0	35- 9
A2e	Str.	8	8	35- 9	Cap		
A3e	Str.	5	5	35- 9	Cap F.F.		
A4e	14s	42	5	17- 0	Cap Stirrup	5- 7	2- 8
A5e	Str.	54	5	5- 0	Wing Vertical		
A6e	5	14	8	10- 7	Wing B.F.	9-10	1- 0
A7e	5	6	5	10- 4	Wing B.F.	7- 6	3- 0
A8e	5	2	6	10- 4	Top Wing B.F.	7- 6	3- 0
A9e	Str.	10	5	7-11	Wing		
A10e	5	4	8	12- 3	Wing F.F.	9-11	2- 7
A11e	5	10	5	12- 4	Wing F.F.	9-11	2- 7
A12e	5	6	5	15- 4	Wing F.F.	9-11	5- 7
A13e	5	2	6	15- 4	Top of Wing F.F.	9-11	5- 7
A14e	Str.	6	5	5- 7	Wing F.F.		

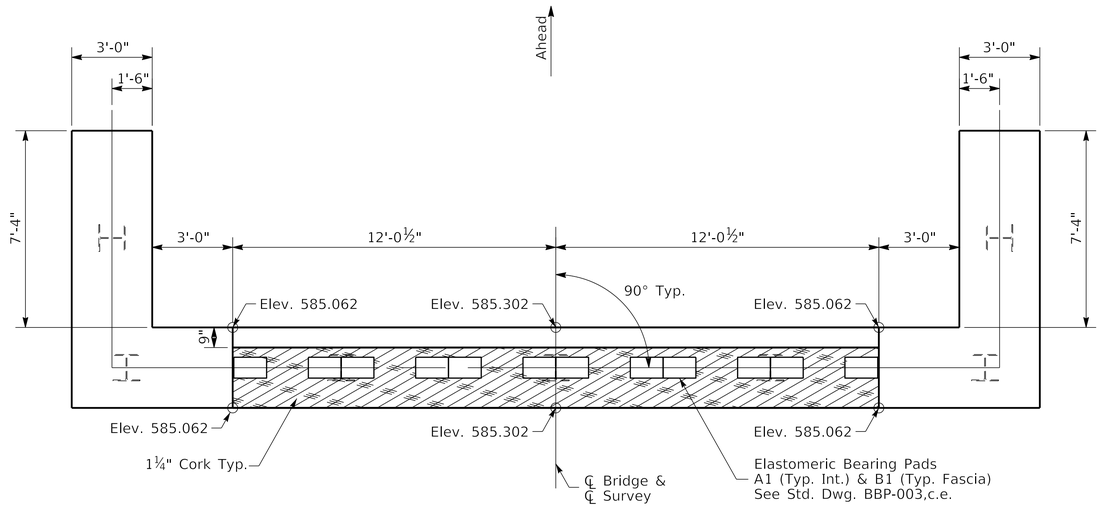




WING ELEVATION



SECTION B-B

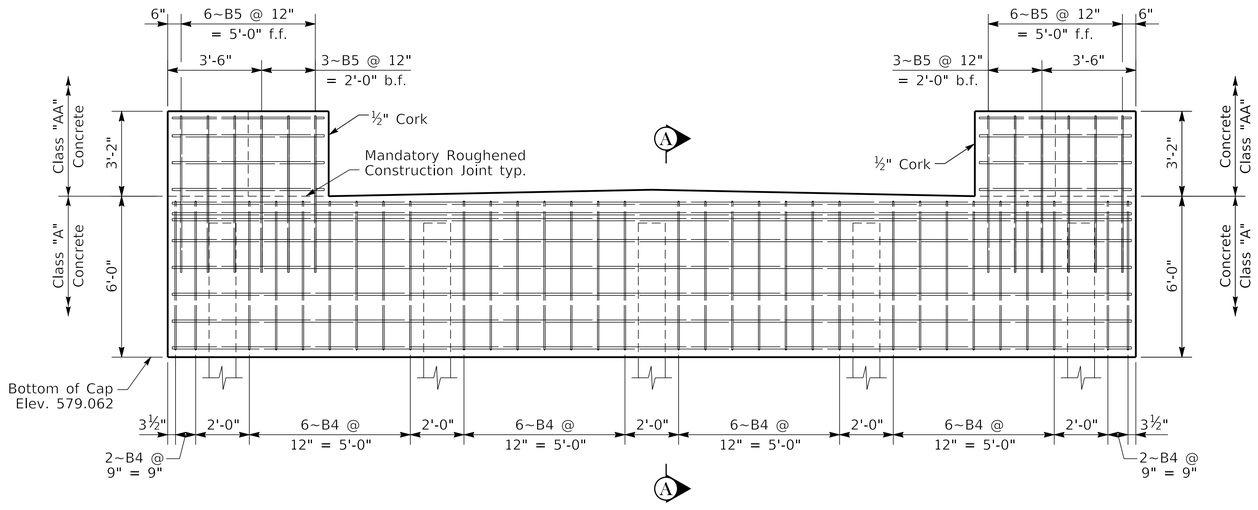


PLAN

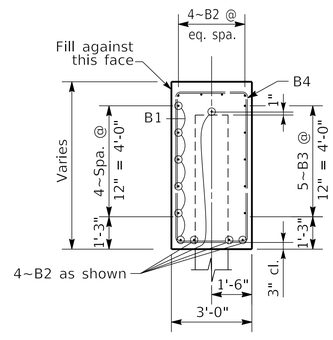
NOTE:
For pile location see
Foundation Layout Sheet.

NOTE:
Seat Elevations given
at top of concrete.

Note: Place beams, tighten tension rod, and then pour wings against box beams.

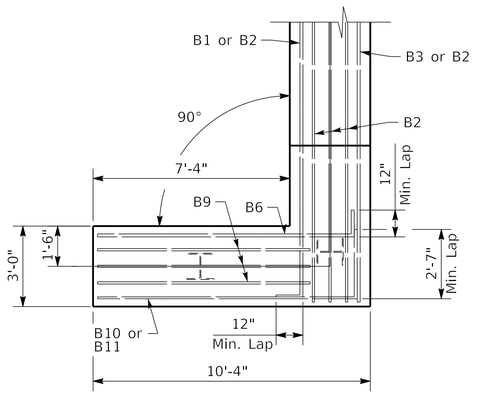


ELEVATION

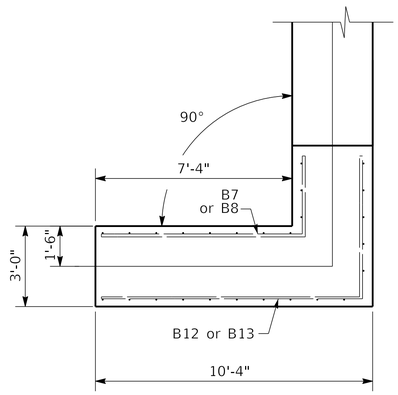


SECTION A-A

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY Division of Structural Design	DATE: March 2023	CHECKED BY	END BENT #2	ROUTE	ITEM NO.	COUNTY OF
				DESIGNED BY: J. Van Zee	N. Cordtz	CROSSING Upper Stinson Creek	KY 3297	9-40001.00	CARTER
				DETAILED BY: B.Miller	J. Van Zee			SHEET NO. S8	DRAWING NUMBER 28741



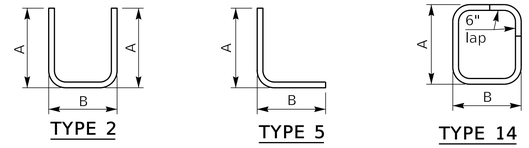
DETAIL BELOW BRIDGE SEAT

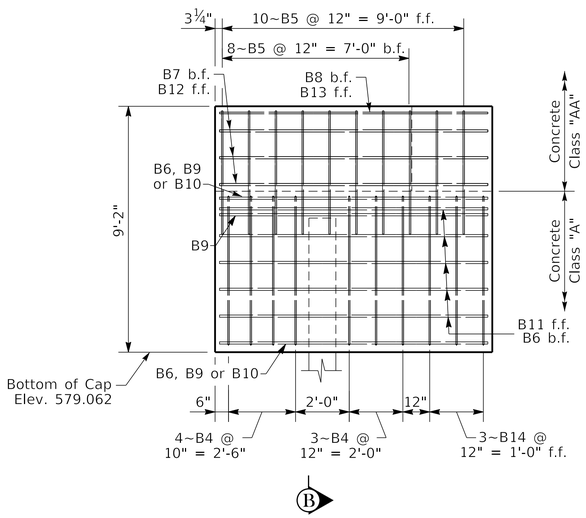


DETAIL ABOVE BRIDGE SEAT

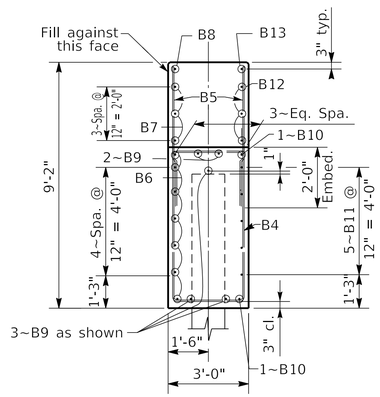
BILL OF REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B
B1e	2	6	8	37- 4	Cap B.F.	1- 0	35- 9
B2e	Str.	8	8	35- 9	Cap		
B3e	Str.	5	5	35- 9	Cap F.F.		
B4e	14s	42	5	17- 0	Cap Stirrup	5- 7	2- 8
B5e	Str.	54	5	5- 0	Wing Vertical		
B6e	5	14	8	10- 7	Wing B.F.	9-10	1- 0
B7e	5	6	5	10- 4	Wing B.F.	7- 6	3- 0
B8e	5	2	6	10- 4	Top Wing B.F.	7- 6	3- 0
B9e	Str.	10	5	7-11	Wing		
B10e	5	4	8	12- 3	Wing F.F.	9-11	2- 7
B11e	5	10	5	12- 4	Wing F.F.	9-11	2- 7
B12e	5	6	5	15- 4	Wing F.F.	9-11	5- 7
B13e	5	2	6	15- 4	Top of Wing F.F.	9-11	5- 7
B14e	Str.	6	5	5- 7	Wing F.F.		





WING ELEVATION



SECTION B-B

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY
Division of Structural Design

DATE: March 2023	CHECKED BY
DESIGNED BY: J. Van Zee	N. Cordtz
DETAILED BY: B.Miller	J. Van Zee

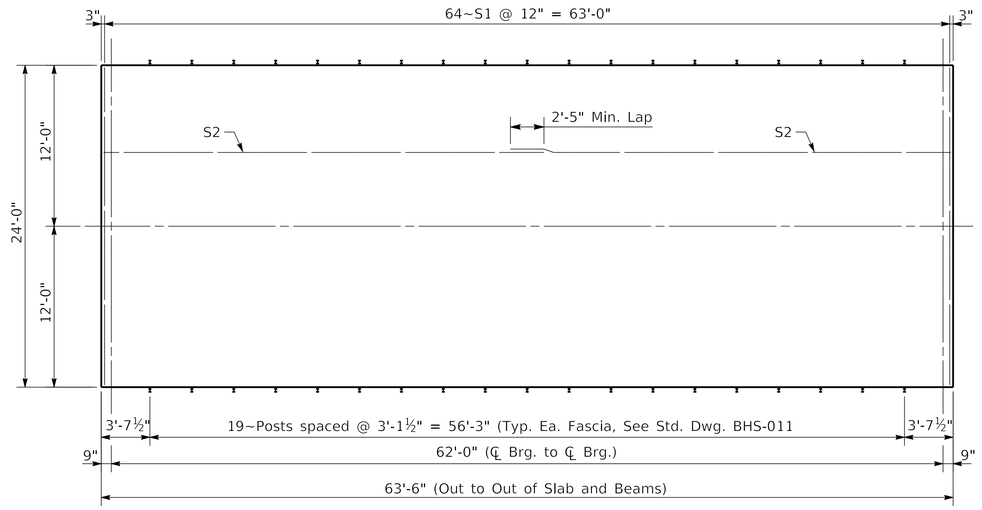
END BENT #2

CROSSING
Upper Stinson Creek

ROUTE	ITEM NO.	COUNTY OF
KY 3297	9-40001.00	CARTER
	SHEET NO. S9	DRAWING NUMBER 28741

BILL OF REINFORCEMENT

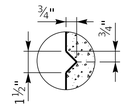
MARK	TYPE	NO.	SIZE	LENGTH	LOCATION
S1e	Str.	64	5	23- 8	Slab
S2e	Str.	48	5	32-10	Slab



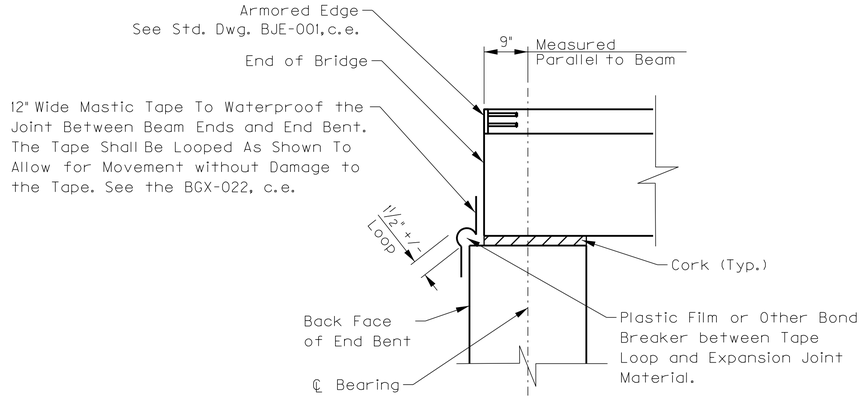
PLAN OF SLAB

NOTE: Contrary to the Standard Drawings (5" slab thickness), the construction elevations will cause the slab to be approximately 5.3" thick at the ends and go to approximately 5" thick at the center of the bridge. This is how the quantities fo Class AA Concrete were calculated. There should not be any additional concrete due to the max and min. allowable slab depths shown on the constsruction elevations.

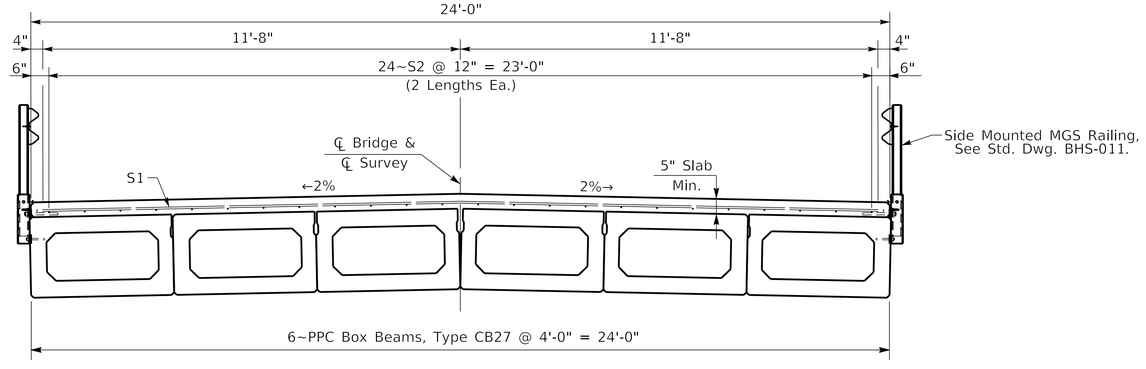
NOTE: Guardrail inserts in beam will need to be varied vertically to maintain proper clearance to top of slab.



"V-Groove" Rustication



JOINT WATERPROOFING DETAIL



TYPICAL SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY
Division of Structural Design

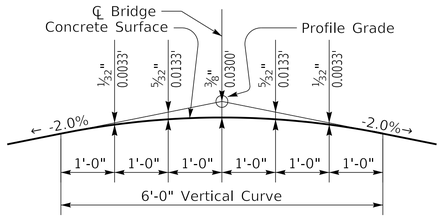
DATE: March 2023	CHECKED BY
DESIGNED BY: J. Van Zee	N. Cordtz
DETAILED BY: B.Miller	J. Van Zee

SUPERSTRUCTURE
CROSSING
Upper Stinson Creek

ROUTE	ITEM NO.	COUNTY OF
KY 3297	9-40001.00	CARTER
	SHEET NO. S10	DRAWING NUMBER 28741

CONSTRUCTION ELEVATIONS

LOCATION	LEFT FASCIA			℄ BRIDGE			RIGHT FASCIA		
	CONSTR. ELEV.	TOP OF BEAM	DIM. "X"	CONSTR. ELEV.	TOP OF BEAM	DIM. "X"	CONSTR. ELEV.	TOP OF BEAM	DIM. "X"
SKEW LN AA	587.906			588.116			587.906		
SKEW LN BB	587.907			588.117			587.907		
SKEW LN CC	587.861			588.071			587.861		
SKEW LN DD	587.859			588.069			587.859		
GRID LN 01	587.918			588.128			587.918		
GRID LN 02	587.941			588.151			587.941		
GRID LN 03	587.955			588.165			587.955		
GRID LN 04	587.960			588.170			587.960		
GRID LN 05	587.954			588.164			587.954		
GRID LN 06	587.938			588.148			587.938		
GRID LN 07	587.911			588.121			587.911		
GRID LN 08	587.876			588.086			587.876		



PARABOLIC CROWN

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.

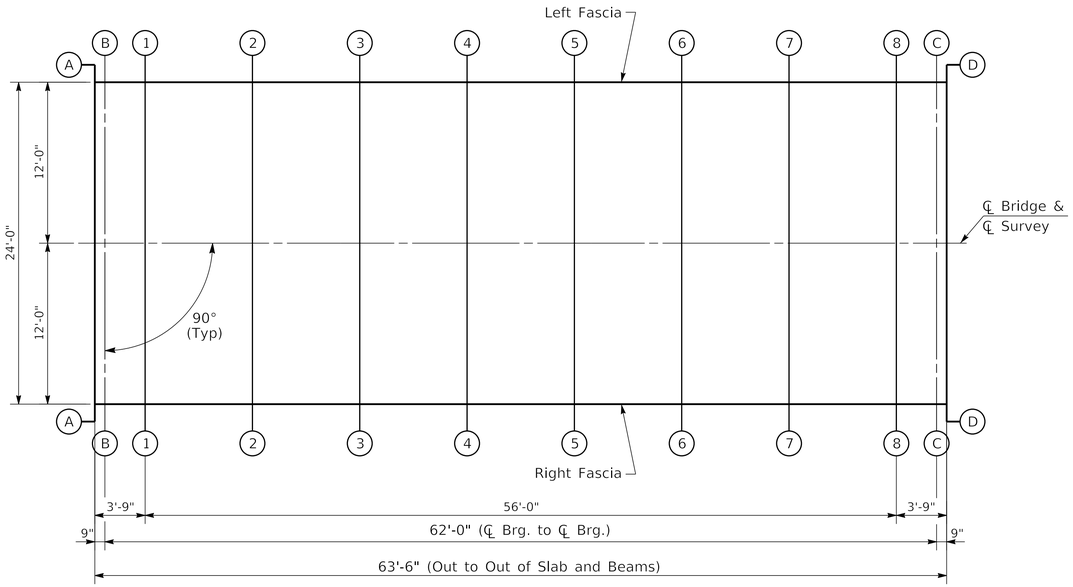
Compute dimension "X" as follows: "Construction Elevation" minus "Top of Beam" elevation equals dimension "X". Construction Elevations include camber due to weight of the concrete slab and barrier. Measuring of dimension "X" gives the final check on beam tolerances for camber, beam damage, and errors 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.

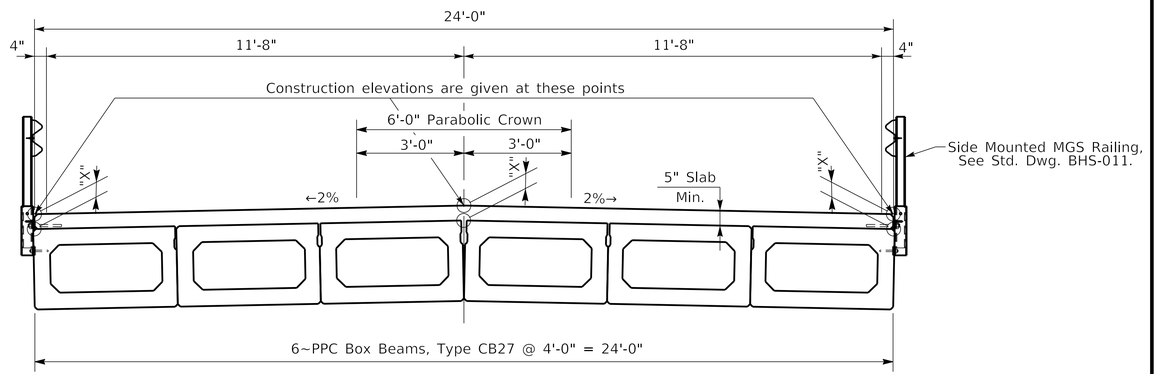
Temporary supports or shoring will not be permitted under the girders when pouring the concrete floor slab or when taking "Top of Beam" elevations.

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 minimum allowable dimension "X" or slab thickness is 5" (0.417'). If any computed dimension "X" is less than that, adjustmants will need to be made to the "X" dimensions on some or all grid lines. Adjustmants must meet approval of the Engineer.



GRID LAYOUT



TYPICAL SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY
Division of Structural Design

DATE: March 2023	CHECKED BY
DESIGNED BY: J. Van Zee	N. Cordtz
DETAILED BY: B.Miller	J. Van Zee

CONSTRUCTION ELEVATIONS
CROSSING: Upper Stinson Creek

ROUTE	ITEM NO.	COUNTY OF
KY 3297	9-40001.00	CARTER
	SHEET NO. S11	DRAWING NUMBER 28741