THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Elizabeth David Digitally signed by Elizabeth David
Date: 2025.05.20 12:03:19 -05'00'

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TENNESSEE DEPARTMENT OF TRANSPORTATION
ADMINISTRATION BUILDING, FIRST FLOOR
300 BENCHMARK PLACE
JACKSON, TN 38301
ELIZABETH DAVID, P.E. NO. 124129

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE OF TENN. CODE ANN. §62-2-306.

SHEET NAME	SHEET NO.
SIGNATURE SHEET	ROADWAY-SIGN1
TITLE SHEET	1
ROADWAY INDEX AND STANDARD DRAWINGS	1A
PROJECT COMMITMENTS	1B
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B
GENERAL NOTES	2C
SPECIAL NOTES	2D
ENVIRONMENTAL NOTES	2E
TABULATED QUANTITIES	2F
DETAIL SHEET	2G
RIGHT-OF-WAY NOTES, UTILITY NOTES AND UTILITY OWNERS	3
RAILROAD NOTES	3-1
RIGHT-OF-WAY ACQUISITION TABLE	3A
PROPERTY MAP	3B
PRESENT LAYOUT	4
RIGHT OF WAY DETAILS	4A
PROPOSED LAYOUT	4B
PROPOSED PROFILE	4C
DRAINAGE MAP	5
CULVERT SECTIONS	6
EROSION PREVENTION AND SEDIMENT CONTROL PLANS	7-14
ROADWAY CROSS SECTIONS	15-22
TRAFFIC CONTROL PLANS	T1-T3

YEAR	PROJECT NO.	SHEET NO.
2025	BRZ-300(37)	ROADWAY-SIGN1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

Index Of Sheets
SEE SHEET NO. 1A

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

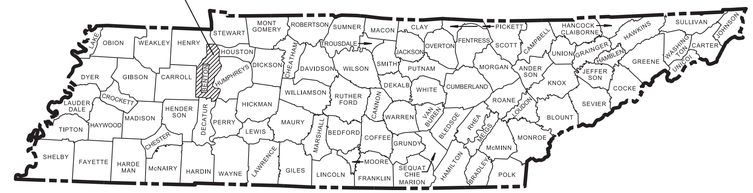
DOES THIS PROJECT QUALIFY FOR UTILITY CHAPTER 86	YES	NO X
WORK ZONE SIGNIFICANCE DETERMINATION		
SIGNIFICANT	YES	NO X

TENN.	YEAR	SHEET NO.
	2025	1
FED. AID PROJ. NO.	BRZ-300(37)	
STATE PROJ. NO.	03LCIT-F3-002	

BENTON COUNTY

FERN AVENUE,
BRIDGE OVER CANE CREEK,
LM 1.26 IN CAMDEN (IA)

PROJECT LOCATION
BRIDGE ID. # 030A4390003



03LCIT-F2-002
END PROJECT NO. BRZ-300(37) R.O.W.
STA. 12+40.17
N 631327.6494 E 1347629.0928

03LCIT-F3-002
END PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 11+54.71
N 631242.4130 E 1347634.3062

CSXT OVERHEAD CROSSING @ FERN AVE. L.M. 1.249
CSX #350894E (MILEPOST 00N 85.92)

03LCIT-F3-002
BEGIN PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F2-002
BEGIN PROJECT NO. BRZ-300(37) R.O.W.
STA. 10+00.00
N 631087.7247 E 1347631.7192

PS&E

GRADE, DRAIN, BASE & SURFACE, STRUCTURE, GUARDRAIL, AND PAVEMENT MARKING

STATE HIGHWAY NO. N/A F.A.H.S. NO. N/A

SCALE: 1"= 5280'

0 1 2 3 MILES

N

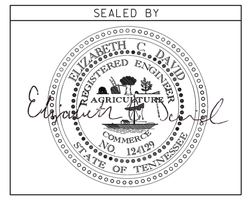
NO EXCLUSIONS

ROAD TO BE CLOSED
DURING CONSTRUCTION

DESIGN EXCEPTION
APPROVED 07-15-23

1) [VERTICAL ALIGNMENT]
[20 MPH DESIGN SPEED]

SEALED BY



APPROVED:
WILL REID, DEPUTY COMMISSIONER / CHIEF ENGINEER
DATE:

APPROVED:
HOWARD H. ELEY, DEPUTY GOVERNOR & COMMISSIONER

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2021 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT PROJECT MANAGER : ELI JONES, REG. 4

DESIGNER : GINA GOLIGHTLY, REG. 4 CHECKED BY : ELIZABETH DAVID, P.E., REG. 4

P.E. NO. 03455-1527-04 (DESIGN)

PIN NO. 107646.00

R.O.W. LENGTH	0.045 MILES
ROADWAY LENGTH	0.022 MILES
BRIDGE LENGTH	0.000 MILES
BOX BRIDGE LENGTH	0.007 MILES
PROJECT LENGTH	0.029 MILES

SURVEY 04-20-12	TRAFFIC DATA	
UPDATED 05/25/21	ADT (2025)	540
UPDATED 04/11/24	ADT (2045)	640
	DHV (2045)	90%
	D	65 - 35
	T (ADT)	3 %
	T (DHV)	2 %
	V	40 MPH

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	BRZ-300(37)	1A
PS&E	2025	BRZ-300(37)	1A

ROADWAY INDEX

NOTE: THE ALPHABETICAL LETTERS “I”, “O” & “Q” ARE NOT USED IN THE NUMBERING OF SHEETS.

STANDARD ROADWAY DRAWINGS

DWG.	REV.	DESCRIPTION
STANDARD ROADWAY TITLE SHEET, ABBREVIATIONS, AND LEGENDS		
RD-TP-1	10-01-24	STANDARD ROADWAY DRAWINGS TITLE SHEET
RD-A-1	02-20-20	STANDARD ABBREVIATIONS A THROUGH L
RD-A-2		STANDARD ABBREVIATIONS M THROUGH Z
RD-L-1	02-20-20	STANDARD LEGEND
RD-L-1A		STANDARD LEGEND
RD-L-2	02-20-20	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-5	07-30-24	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	02-20-20	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7	02-20-20	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-8	02-20-20	STANDARD LEGEND FOR NATURAL STREAM DESIGN
ROADWAY DESIGN STANDARDS		
RD11-SE-1		TRANSITION AND CROSS SLOPE DETAILS
RD11-TS-1A	06-28-19	DESIGN STANDARDS FOR LOCAL ROADS AND STREETS
RD11-S-11		DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD11-S-11A		ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION
RD11-SD-1		INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES
RD11-SD-2		INTERSECTION SIGHT DISTANCE LANDSCAPE AND OBSTRUCTION
RD11-SD-3		INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS
ROADWAY, PAVEMENT APPURTENANCES, AND FENCES		
S-F-1	03-01-23	HIGH VISIBILITY FENCE
SAFETY DESIGN AND GUARDRAILS		
S-CZ-1	06-28-19	CLEAR ZONE CRITERIA
S-GR31-1	03-13-25	GUARDRAIL DETAILS
S-GR31-1A	06-28-19	GUARDRAIL AND BLOCK-OUT DETAILS
S-GR31-1B		GUARDRAIL FASTENING HARDWARE
S-GR31-1C	07-07-23	GUARDRAIL GENERAL NOTES AND POST DETAILS
S-GRS-2	01-28-22	SPECIAL CASE GUARDRAIL ATTACHMENT TO CONCRETE DECKS
S-GRT-1A		LAYOUT OF FLARED GUARDRAIL (TL- 3)
S-GRA-3	01-09-24	TYPE 13 GUARDRAIL ANCHOR
EROSION PREVENTION AND SEDIMENT CONTROL		
EC-STR-2	08-01-12	SEDIMENT FILTER BAG
EC-STR-3C	03-01-23	SILT FENCE WITH WIRE BACKING
EC-STR-37	06-10-14	SEDIMENT TUBE
EC-STR-6A	05-06-16	ENHANCED ROCK CHECK DAM
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-30		INSTREAM DIVERSION (WITHOUT TRAFFIC)

DWG.	REV.	DESCRIPTION
NATURAL STREAM DESIGN		
D-NSD-30	05-01-20	SUBSTRATE RESTORATION
D-NSD-33	05-01-20	COIR FIBER EROSION CONTROL BLANKET AND COIR FIBER ROLLS

STANDARD TRAFFIC DESIGN DRAWINGS

DWG.	REV.	DESCRIPTION
T-S-9	06-10-14	STANDARD LAYOUT GROUND MOUNTED SIGNS
T-S-10	04-04-12	STANDARD MOUNTING DETAILS FLAT SHEET SIGNS ALUMINUM-STEEL DESIGN
T-S-16	07-02-15	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-16A	07-02-15	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-19	06-12-20	STANDARD STEEL SIGN SUPPORTS
T-S-20	07-11-17	SIGN DETAILS
PAVEMENT MARKINGS		
T-M-1	01-24-25	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	01-24-25	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
WORK ZONES		
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS

STANDARD STRUCTURE DRAWINGS

DWG.	REV.	DESCRIPTION
STD-17-1		INDEX OF DRAWINGS
STD-17-2		TERMINOLOGY OF DRAWINGS
STD-17-3		GENERAL NOTES
STD-17-4		DESIGN SECTION LIMITS
STD-17-5		TYPICAL SECTION AND DETAILS
STD-17-6		TYPICAL ELEVATIONS
STD-17-7		CURB, RAIL & EDGE BEAM DETAILS - SKEW NOT LESS THAN 45 DEG.
STD-17-8		EDGE BEAM DETAILS FOR FILLS GREATER THAN 3’ - 6”
STD-17-9		INTERIOR WALL END TREATMENTS
STD-17-10		TYPICAL WINGWALL DETAILS AND NOTES
STD-17-11		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-16		WINGWALL DESIGN SECTION
STD-17-17	06-01-11	BACKFILL AND DRAINAGE DETAILS
STD-17-18		BACKFILL DETAILS
STD-17-20		LOW FLOW CHANNEL CONSTRUCTION DETAILS FOR CULVERT INLET AND OUTLET
STD-17-85		BOX BRIDGE, 2 BARRELS AT 18’, CLEAR HTS. 6’ - 8’, 0-60’ FILL

SEALED BY

ELIZABETH C. DAVIS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 124139
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ROADWAY INDEX AND STANDARD DRAWINGS

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	1B
PIH	2025	BRZ-300(37)	1B
PS&E	2025	BRZ-300(37)	1B

PROJECT COMMITMENTS

COMMITMENT ID	SOURCE DIVISON	DESCRIPTION	STATION / LOCATION
EDHZ001	ENVIRONMENTAL	Asbestos Containing Material (ACM) surveys were conducted on Bridge No. 030A4390003, Fern Avenue over Cane Creek, LM 1.28 (03-0A439-01.28). No ACM was detected. No special accommodations for demolition and waste disposal are anticipated for these structures and the material can be deposited in a C&D landfill. Prior to the demolition or rehabilitation of any structure (bridge or building), the contractor is required to submit the National Emission Standards for Hazardous Air Pollutants standard 10-day notice of demolition to the TDEC Division of Air Pollution Control (per TDOT Standard Specifications for Road and Bridge Construction (January 1, 2021) Sections 107.08 D and 202.03).	BRIDGE ID. # 030A4390003

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROJECT COMMITMENTS

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	2
PIH	2025	BRZ-300(37)	2
PS&E	2025	BRZ-300(37)	2

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 03LCIT-F3-002
	105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
	201-01	CLEARING AND GRUBBING	LS	1
(1)	202-01	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1
	202-03.01	REMOVAL OF ASPHALT PAVEMENT	S.Y.	263
(2)(3)(4)(5)(6)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	1267
	203-05	UNDERCUTTING	C.Y.	371
(7)	203-06	WATER	M.G.	5
	203-07	FURNISHING & SPREADING TOPSOIL	C.Y.	88
	203-08	CHANNEL EXCAVATION (UNCLASSIFIED)	C.Y.	700
(8)	203-20.01	CHANNEL SUBSTRATE	C.Y.	418
	204-08	FOUNDATION FILL MATERIAL	C.Y.	28
(2)(3)	209-05	SEDIMENT REMOVAL	C.Y.	47
(2)(3)(9)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	400
(2)(3)	209-08.08	ENHANCED ROCK CHECK DAM	EACH	9
	209-09.01	SANDBAGS	BAG	100
(2)(3)(10)	209-09.03	SEDIMENT FILTER BAG (15' X 15')	EACH	2
	209-20.04	POLYETHYLENE SHEETING (10 MIL.)	S.Y.	826
(2)(3)(11)	209-65.04	TEMPORARY IN STREAM DIVERSION	L.F.	165
	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	183
	303-01.01	GRANULAR BACKFILL (ROADWAY)	TON	424
(2)(3)(12)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	51
	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	27
	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	1
(3)	402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	2
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	1
	407-20.05	SAW CUTTING ASPHALT PAVEMENT	L.F.	34
	411-01.10	ACS MIX(PG64-22) GRADING D	TON	23
(13)	604-01.01	CLASS A CONCRETE (ROADWAY)	C.Y.	16
(1)	604-02.01	CLASS A CONCRETE (BOX BRIDGES)	C.Y.	144
	604-02.02	STEEL BAR REINFORCEMENT (BOX BRIDGES)	LB.	34693
	621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	36
	705-01.04	METAL BEAM GUARD FENCE	L.F.	88
	705-06.01	W BEAM GR (TYPE 2) MASH TL3	L.F.	50
	705-06.10	GR TERMINAL TRAILING END (TYPE 13) MASH TL3	EACH	4
(1)	706-01	GUARDRAIL REMOVED	L.F.	50
(2)(3)	707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	220
(2)(3)(14)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100
(15)	709-05.09	MACHINED RIP-RAP (CLASS C)	TON	858
	710-10.02	6" PERFORATED PLASTIC PIPE	L.F.	60
	712-01	TRAFFIC CONTROL	LS	1
	712-05.01	WARNING LIGHTS (TYPE A)	EACH	74
(16)	712-06	SIGNS (CONSTRUCTION)	S.F.	359
	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	60
	713-02.21	SIGN POST DELINEATION ENHANCEMENT	L.F.	7
	713-15.36	REMOVE SIGN, SUPPORT & FOOTING	EACH	7
	713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	2
	713-16.20	SIGNS (I2-5)	EACH	2
	713-16.21	SIGNS (OM3-R)	EACH	3
	713-16.22	SIGNS (OM3-L)	EACH	2
	713-16.23	SIGNS (R1-1, W5-3A, OM3-L)	EACH	1
	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	12
	716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	0.1
	717-01	MOBILIZATION	LS	1
(2)(3)(17)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	432
	740-11.01	TEMPORARY SEDIMENT TUBE 8IN	L.F.	50
(18)	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	5
(19)	801-01.38	NATVE SEED MX FINAL STABLIZATN OF SLOPES	UNIT	1
(20)	801-03	WATER (SEEDING & SODDING)	M.G.	6
(21)	803-01	SODDING (NEW SOD)	S.Y.	584

FOOTNOTES

(1) SEE SHEET 2F FOR DETAILS.

(2) ALL EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER. SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATION FOR MAINTENANCE REPLACEMENT.

(3) ITEM TO BE USED AS DIRECTED BY THE ENGINEER.

(4) 15 C.Y. TO BE USED FOR TEMPORARY CONSTRUCTION EXITS.

(5) SEE GRADING SPECIAL NOTES ON SHEET 2D.

(6) CULVERT EXCAVATION FOR CONCRETE BOX CULVERTS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

(7) 2 M.G. TO BE USED FOR BASE MATERIAL.
3 M.G. TO BE USED FOR EMBANKMENT.

(8) DURING CONSTRUCTION OF THE STREAM CONVEYANCE STRUCTURE, THE CONTRACTOR SHALL GATHER COARSE ALLUVIUM FROM PORTIONS OF THE STREAM CHANNEL THAT IS BEING EXCAVATED OR FILLED AND STOCKPILE THE MATERIAL IN A NON-WETLAND/AQUATIC SITE. FOLLOWING THE INSTALLATION OF THE STRUCTURE, THE STOCKPILED ALLUVIUM SHALL BE BACKFILLED WITHIN THE STRUCTURE TO SATISFY THE REQUIRED EMBEDMENT DEPTH AS DEPICTED IN THE PLANS. WHEN THESE MATERIALS ARE NOT PRESENT OR SUFFICIENT TO PROVIDE THE REQUIRED EMBEDMENT DEPTH, THE REMAINDER OF THE FILL FOR EMBEDMENT WILL BE COMPRISED OF MATERIALS THAT ARE APPROXIMATELY THE SAME SIZE AND COMPOSITION AS THE UPSTREAM AND DOWNSTREAM CHANNEL MATERIALS. THE STANDARD DRAWING FOR SUBSTRATE RESTORATION D-NSD-30 SHOULD BE USED.

(9) 214 L.F. TO BE USED FOR SEDIMENT FILTER BAG.

(10) ALLOW ONE (1) EXTRA FILTER BAG FOR REPLACEMENT AS NEEDED.

(11) 90 L.F. TO BE USED FOR STAGE 2A.
75 L.F. TO BE USED FOR STAGE 2B.

(12) TO BE USED FOR SEDIMENT FILTER BAG.

(13) FOR ROADWAY CROWN.

(14) TO BE USED FOR TEMPORARY CONSTRUCTION EXITS.

(15) TO BE USED FOR BOX BRIDGE INLET, OUTLET AND SIDE DITCHES.

(16) THIS CONSTRUCTION SIGNING IS TO BE A MINIMUM. OTHER SIGNS AS DIRCETED BY THE TDOT ENGINEER MAY BE REQUIRED DURING DIFFERENT PHASES. ALL SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

(17) 260 S.Y. TO BE USED FOR SEDIMENT FILTER BAG.
172 S.Y. TO BE USED FOR TEMPORARY CONSTRUCTION EXITS.

(18) THE COST OF FERTILIZER AND LIME USED IN INITIAL SEED BED PREPARATION IS TO BE INCLUDED IN THE COST OF SEEDING. SEE SECTION 801 OF TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

(19) PERMANENT STABILIZATION WITH NATIVE OR NATURALIZED PERENNIAL VEGETATION IS REQUIRED IN ALL AREAS AUTHORIZED FOR TEMPORARY AND PERMANENT IMPACTS TO STREAMS AND RIPARIAN AREAS, INCLUDING ADJACENT BUFFER ZONES WITHIN 60 FT OF THE EDGE OF WATER. THE APPROPRIATE SEED MIXTURE FOR THE REGION AND SITE CONDITIONS SHALL BE SELECTED FROM TABLE 7.9-1 (PREFERRED SEED MIXES USING NATIVES OR NATURALIZED PLANTS AND PLANTING DATES) FOUND IN 7.9 (PERMANENT VEGETATION) OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK 4TH EDITION.

(20) 1 M.G. TO BE USED FOR EROSION PREVENTION AND SEDIMENT CONTROL.
5 M.G. TO BE USED FOR SODDING.

(21) 54 S.Y. TO BE USED FOR SPECIAL DITCHES.

SEALED BY

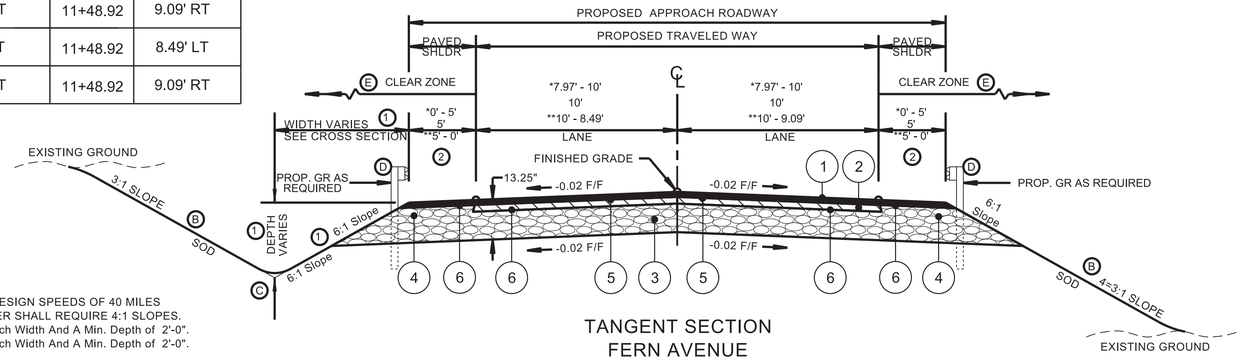
ELIZABETH C. DAVIS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 124129
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	2B
PIH	2025	BRZ-300(37)	2B
PS&E	2025	BRZ-300(37)	2B

TRANSITION TABLE					
DESCRIPTION	**LENGTH**	**BEGIN STA.**	**BEGIN OFFSET**	**END STA.**	**END OFFSET**
SHOULDER	13.54'	10+00.00	7.97' LT	10+13.54	15' LT
SHOULDER	17.70'	10+00.00	7.97' RT	10+17.70	15' RT
EOP	30'	10+00.00	7.97' LT	10+30.00	10' LT
EOP	30'	10+00.00	7.97' RT	10+30.00	10' RT
SHOULDER	41.92'	11+07.00	15' LT	11+48.92	8.49' LT
SHOULDER	41.92'	11+07.00	15' RT	11+48.92	9.09' RT
EOP	41.92'	11+07.00	10' LT	11+48.92	8.49' LT
EOP	41.92'	11+07.00	10' RT	11+48.92	9.09' RT



TANGENT SECTION
FERN AVENUE

(BASED ON STD. DWG. RD11-TS-1A)
*FROM STA. 10+00.00 TO STA. 10+30.00
FROM STA. 10+30.00 TO STA. 11+07.00
**FROM STA. 11+07.00 TO STA. 11+48.92

NOTE: THE PROPOSED BOX BRIDGE IS LOCATED FROM STA. 10+43.91 TO STA. 10+81.91

(1) ADTS OVER 1000 AND DESIGN SPEEDS OF 40 MILES PER HOUR AND GREATER SHALL REQUIRE 4:1 SLOPES. 3:1 Slope Require A 6' Ditch Width And A Min. Depth of 2'-0". 4:1 Slope Require A 8' Ditch Width And A Min. Depth of 2'-0".

(2) WHEN THE PROPOSED SHOULDER WIDTH IS 2' OR 4' THE SHOULDER SLOPE MATCHES THE ROADWAY PAVEMENT CROSS SLOPE.

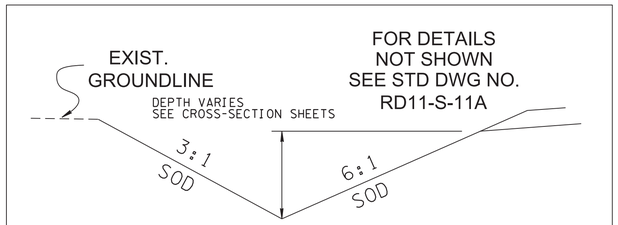
(A) THE SLOPE OF THE SHOULDER AND THE ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7%.

(B) SEE STANDARD DRAWINGS RD11-S-11 AND RD11-S-11B FOR FILL AND CUT SLOPE TABLES, ROUNDING ON TOP OF CUT SLOPES AND TOE OF FILL SLOPES, SPECIAL ROCK TREATMENT AND SUB GRADE ROUNDING IF APPLICABLE.

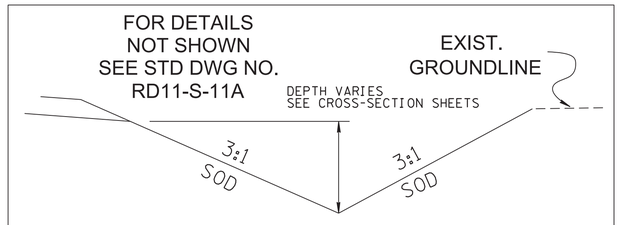
(C) SEE STANDARD DRAWING RD11-S-11A FOR ROUNDING OF ROADSIDE DITCH SLOPES.

(D) SEE STANDARD DRAWING S-PL-6 FOR TYPICAL GUARDRAIL PLACEMENT.

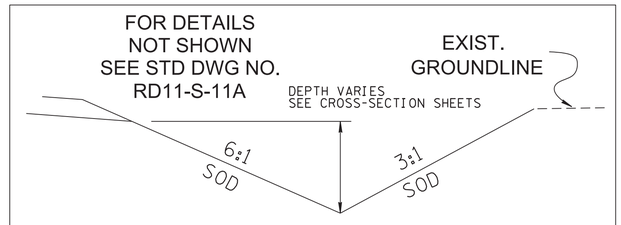
(E) SEE STANDARD DRAWING S-CZ-1 FOR CLEAR ZONE CRITERIA. SEE THE "ROADSIDE DESIGN GUIDE", AASHTO, 2011, FOR FURTHER INFORMATION REGARDING CLEAR ZONES.



PROP. "V" BOTTOM SODDED SPECIAL DITCH
LT. FERN AVENUE STA. 10+20.00 TO STA 10+39.00
LT. FERN AVENUE STA. 10+85.07 TO STA 11+47.00



PROP. "V" BOTTOM SODDED SPECIAL DITCH
RT. FERN AVENUE STA. 10+20.00 TO STA. 10+37.00



PROP. "V" BOTTOM SODDED SPECIAL DITCH
RT. FERN AVENUE STA. 10+84.80 TO STA. 11+47.00

PROPOSED PAVEMENT SCHEDULE

(1) ASPHALTIC CONCRETE SURFACE (HOT MIX) PG64-22 GRADING "D" SURFACE @ 1.25" THICK (APPROX. 132.5 LB./S.Y.) 411-01.10 ACS MIX (PG64-22) GRADING "D"	**(4) MINERAL AGGREGATE 12" THICK (SHOULDERS)** 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"
(2) BITUMINOUS PLANT MIX BASE (HOT MIX) PG64-22 GRADING "B-M2" @ 2.00" THICK (APPROX. 226 LB./S.Y.) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "B-M2"	**(5) TACK COAT** 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC). SEE SECTION 403.05 OF TDOT SPECIFICATION FOR DETERMINING APPLICATION RATE IN FIELD.
(3) MINERAL AGGREGATE 10" THICK 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"	**(6) PRIME COAT** 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) RATE = 0.30 – 0.35 GALLONS/S.Y. 402-02 AGGREGATE FOR COVER MATERIAL (PC) RATE = 8 - 12 LB./S.Y.

SEALED BY

ELIZABETH C. DAVIS REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 19439 STATE OF TENNESSEE

NOT TO SCALE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS AND PAVEMENT SCHEDULE

GENERAL NOTES

GRADING

(1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

(2) CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.

(3) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) WITHOUT APPROVAL BY FEMA. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

SEEDING AND SODDING

(2) SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES.

GUARDRAIL

(1) THE CONTRACTOR SHALL NOT REMOVE ANY SECTIONS OF EXISTING GUARDRAIL TO REWORK SHOULDERS OR FLATTEN SLOPES UNTIL THE ENGINEER CONCURS IN THE NECESSITY OF REMOVAL DUE TO CONSTRUCTION REQUIREMENTS AND THE APPROPRIATE WARNING DEVICES ARE INSTALLED. THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE.

(3) IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL USE TWO (2) TEMPORARY BARRICADES OR DRUMS WITH TYPE "A" LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END. ALL COST OF FURNISHING AND INSTALLING TEMPORARY BARRICADES OR DRUMS WITH TYPE "A" LIGHTS TO DELINEATE GUARDRAIL END AND A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL END TERMINAL.

(4) GUARDRAIL IS TO BE COMPLETE IN PLACE BEFORE THE MAINLINE ROADWAY IS OPENED TO TRAFFIC.

DRAINAGE

(1) THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

(4) THE CUTTING OF INLET AND OUTLET DITCHES WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER WILL BE MEASURED AND PAID FOR AS ITEM NO. 203-01 ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED).

(5) WHERE A CULVERT (PIPE, SLAB OR BOX) IS MOVED TO A NEW LOCATION OTHER THAN THAT SHOWN ON THE PLANS, INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION WILL NOT RESULT IN AN INCREASE OR DECREASE IN THE AMOUNT OF PAYMENT THAT WILL BE MADE DUE TO SUCH CHANGE.

MISCELLANEOUS

(2) THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES AND POSTS WHERE AND AS DIRECTED BY THE ENGINEER. COST TO BE INCLUDED IN PRICE BID FOR OTHER CONSTRUCTION ITEMS.

(3) NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.

ROAD CLOSURE

(1) NO LESS THAN SEVEN (7) DAYS PRIOR TO THE CLOSURE OF THE ROAD, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING INDIVIDUALS OR AGENCIES COMPLETELY DESCRIBING THE AFFECTED ROADS AND THE APPROXIMATE DURATION OF THE CONSTRUCTION: THESE PARTIES INCLUDE, BUT ARE NOT LIMITED TO: (1) LOCAL LAW ENFORCEMENT OFFICE, (2) LOCAL FIRE DEPARTMENT, (3) AMBULANCE SERVICE, (4) LOCAL SCHOOL SUPERINTENDENT, (5) UNITED STATES POSTAL SERVICE, AND (6) LOCAL ROAD SUPERINTENDENT.

PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKINGS ON INTERMEDIATE LAYERS

(1) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01, PAINTED PAVEMENT MARKING (4" LINE), L.M.

FINAL PAVEMENT MARKING

(1) PERMANENT PAVEMENT LINE MARKINGS SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01, PAINTED PAVEMENT MARKING (4" LINE), L.M. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

PAVEMENT

PAVING

(1) THE CONTRACTOR SHALL BE REQUIRED TO PAVE IN THE DIRECTION OF TRAFFIC.

(2) THE CONTRACTOR SHALL BE REQUIRED TO COLD PLANE AND PAVE IN THE DIRECTION OF TRAFFIC.

(3) THE CONTRACTOR SHALL ATTACH A DEVICE TO THE SCREED OF THE PAVER SUCH THAT MATERIAL IS CONFINED AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A CONSOLIDATED WEDGE-SHAPE PAVEMENT EDGE OF APPROXIMATELY 25 TO 30 DEGREES AS IT LEAVES THE PAVER (MEASURED FROM A LINE PARALLEL TO THE PAVEMENT SURFACE.) THE DEVICE SHALL MEET THE REQUIREMENTS THAT ARE CURRENTLY SET FORTH IN SPECIAL PROVISION 407SE.

SIGNING

(4) THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE GROUND LINE.

(5) AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE REGIONAL CONSTRUCTION OFFICE.

(7) ALL SIGNS MARKED "TO BE REMOVED" ARE TO BE REMOVED BY THE CONTRACTOR AND PAID FOR UNDER ITEM NO. 713-15 AND BECOME THE PROPERTY OF THE CONTRACTOR.

(8) THE EXISTING FOOTINGS ARE TO BE REMOVED 6 INCHES BELOW GROUND LINE.

(9) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUT-OUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND, OR BROWN BACKGROUND.

(11) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS.

(12) ALL SIGNS WHICH INTERFERE WITH CONSTRUCTION WILL BE RELOCATED OUTSIDE LIMITS OF CONSTRUCTION BY THE CONTRACTOR. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR WILL RESTORE THE SIGNS TO ORIGINAL LOCATION. THE CONTRACTOR SHALL CHECK WITH THE REGIONAL TRAFFIC ENGINEER PRIOR TO MOVING ANY PERMANENT SIGNS.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

(1) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.

(2) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO. 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.

(3) A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.

(4) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

(5) USE OF BARRICADES, PORTABLE BARRIER RAILS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

(6) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

(7) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

(8) ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED, AND FLEXIBLE DRUMS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.

(9) THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING CONSTRUCTION SIGNS. THE COST OF THIS WORK SHALL BE INCLUDED IN ITEM NO. 712-06, SIGNS (CONSTRUCTION), S.F.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	BRZ-300(37)	2C
PS&E	2025	BRZ-300(37)	2C

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GENERAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	BRZ-300(37)	2D
PS&E	2025	BRZ-300(37)	2D

SPECIAL NOTES

GRADING

(1) THE GRADING TABULATIONS AND RESULTING EARTHWORK ASSOCIATED BID QUANTITIES WERE PREPARED UTILIZING AVAILABLE GEOTECHNICAL INFORMATION AND/OR REPORTS PREPARED FOR THIS PROJECT. THIS INFORMATION IS PROVIDED FOR GENERAL INFORMATION AND ESTIMATION GUIDANCE ONLY.

(3) TO ASSIST IN BID PREPARATION FOR EARTHWORK AND FOUNDATION CONSTRUCTION, DETAIL ROCK AND SOIL DESCRIPTION AND ON SOME PROJECTS, ROCK CORE SAMPLES ARE AVAILABLE FOR INSPECTION AT THE MATERIALS AND TESTS HEADQUARTERS AT 6601 CENTENNIAL BOULEVARD, NASHVILLE, TN OR AT THE TDOT REGION 1 BUILDING IN KNOXVILLE, TN.

(4) THE CONTRACTOR SHALL UTILIZE ALL INFORMATION PROVIDED IN THE PLANS, CROSS-SECTIONS AND CONTRACT DOCUMENTS INCLUDING ANY SPECIAL PROVISIONS AS WELL AS UTILIZING HIS PAST EXPERIENCE WITH PROJECTS OF SIMILAR NATURE, SCOPE AND LOCATION IN PREPARATION OF HIS BID FOR EARTHWORK ITEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND PROVIDE EQUIPMENT AND MEANS NECESSARY TO CONDUCT THE EXCAVATION ACTIVITIES IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.

(5) EARTHWORK IS PAID FOR UNDER ITEM NO. 203-01, ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED). NO ADDITIONAL PAYMENT WILL BE MADE FOR EARTHWORK QUANTITIES BASED SOLELY ON A CLAIM THAT THE QUANTITIES SHOWN IN THE GRADING TABULATION OR ELSEWHERE IN THE PLANS ARE INACCURATE WITH RESPECT TO THE TYPE OF MATERIALS ENCOUNTERED DURING CONSTRUCTION EXCEPT AS PROVIDED FOR BY SECTION 104.02 IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR AS AMENDED IN SUPPLEMENTAL SPECIFICATIONS.

DEMOLITION

DEMOLITION, REPAIR, OR REHABILITATION OF BRIDGES

(1) THE CONTRACTOR SHALL VERIFY THAT AN ASBESTOS SURVEY HAS BEEN COMPLETED PRIOR TO ANY DEMOLITION, REPAIR OR REHABILITATIONS ACTIVITIES (NOT INCLUDING ASPHALT MILLING OR OVERLAY).

(2) ASBESTOS-CONTAINING MATERIALS (ACM) ABATEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE COMPLETED PRIOR TO ANY DEMOLITION, REPAIR OR REHABILITATION OF BRIDGE(S). ABATEMENT SHOULD BE ACCOMPLISHED PER SP202ACM SPECIAL PROVISION REGARDING REMOVAL OF ASBESTOS-CONTAINING MATERIALS. STATE OF TENNESSEE ASBESTOS ACCREDITATION REQUIREMENTS (TCA 1200-01-20) MANDATE THAT ACM ABATEMENT WORK BE PERFORMED BY AN ACCREDITED FIRM (CONTRACTOR) USING ACCREDITED ABATEMENT WORKERS AND SUPERVISORS.

(3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A NOTICE TO THE TDEC, DIVISION OF AIR POLLUTION CONTROL TEN (10) DAYS IN ADVANCE OF ANY ACM ABATEMENT, DEMOLITION, OR MAJOR REPAIR INVOLVING THE REMOVAL/REPLACEMENT OF A STRUCTURAL COMPONENT.

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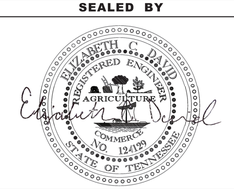

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SPECIAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	2E
PIH	2025	BRZ-300(37)	2E
PS&E	2025	BRZ-300(37)	2E

ENVIRONMENTAL NOTES

SUBSECTION 1 – ENVIRONMENTAL GENERAL NOTES

ENVIRONMENTAL GENERAL NOTES

NATURAL RESOURCES

(1) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT NATURAL RESOURCES AND WATER QUALITY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. APPROPRIATE EPSC MEASURES MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG NATURAL RESOURCES IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS, WETLANDS OR OTHER NATURAL FEATURES IN ACCORDANCE WITH TDOT STANDARDS. EPSC MEASURES SHALL BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.

(2) NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.

(3) INSTREAM EPSC DEVICES REQUIRE THE TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN WATER QUALITY PERMITS.

(4) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS AND EPHEMERAL, INTERMITTENT, AND PERENNIAL STREAMS, IS NOT ALLOWED.

(5) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING, NOT TO EXCEED THE WIDTH SPECIFIED IN THE STANDARD DRAWING.

(6) STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CULVERT CROSSINGS SHALL BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES SHALL BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK SHALL BE USED AT THE CROSSING POINT AND CULVERTED TO PREVENT THE IMPOUNDMENT OF WATER FLOW. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, WHICH CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER MATERIALS USED FOR ALL TEMPORARY FILLS SHALL BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO PREEXISTING ELEVATIONS. ALL TEMPORARY CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (E.G. BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FROM TOP OF BANK TO TOP OF BANK OR THE APPROPRIATE USE OF BARGES AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION.

(7) HEAVY EQUIPMENT WORKING IN WETLANDS WITH PERMITTED TEMPORARY IMPACTS SHALL BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE AND COMPACTION UNLESS SPECIFICALLY ADDRESSED IN THE CONSTRUCTION PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT SHALL BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED. ALL AFFECTED AREAS SHOULD BE RETURNED TO PRE-EXISTING CONDITIONS.

(8) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION PLANS AND PERMITS.

(9) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS PRIOR TO ANY CONSTRUCTION AND MAINTENANCE ACTIVITIES TO ENSURE THAT ENVIRONMENTAL FEATURES (E.G., STREAMS, WETLANDS, SPRINGS, ETC.) ARE NOT IMPACTED BEYOND PERMITTED LOCATIONS. IF THE CONTRACTOR OR TDOT INSPECTOR IS UNSURE OF THE IDENTITY OF AN ENVIRONMENTAL FEATURE, THE INSPECTOR SHALL CONTACT THE TDOT REGION ENVIRONMENTAL TECH GROUP IMMEDIATELY.

SPECIES

(10) NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA.

(11) SHOULD CLIFF SWALLOW OR BARN SWALLOW NESTS, EGGS, OR BIRDS (YOUNG AND ADULTS) BE PRESENT, THE CONTRACTOR SHALL CONTACT THE REGIONAL ECOLOGY OFFICE TO DETERMINE IF SEASONAL RESTRICTIONS WILL BE NECESSARY. GENERALLY, BIRDS, NESTS, AND EGGS MAY NOT BE DISTURBED BETWEEN APRIL 15 AND JULY 31. FROM AUGUST 1 TO APRIL 14, NESTS CAN BE REMOVED OR DESTROYED SO LONG AS BIRDS OR EGGS ARE NOT PRESENT, AND MEASURES IMPLEMENTED TO PREVENT FUTURE NEST BUILDING AT THE SITE (I.E., CLOSING OFF AREA USING NETTING).

(12) IF THE REMOVAL OF ANY TREES WITH A DIAMETER AT BREAST HEIGHT (DBH) GREATER THAN 3 INCHES IS DEEMED NECESSARY THE TDOT SUPERVISOR SHALL CONTACT THE TDOT ENVIRONMENTAL DIVISION, ECOLOGY SECTION IMMEDIATELY.

PERMITS, PLANS & RECORDS

(13) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO ARCHAEOLOGY, ECOLOGY, HISTORICAL, HAZARDOUS MATERIALS, AIR AND NOISE, TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING ANY MATERIAL AND STAGING AREAS AND THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS TO BE USED. ANY SUCH PERMITS SHALL BE SUPPLIED TO THE TDOT PROJECT RESPONSIBLE PARTY PRIOR TO THE USE OF THE PERMITTED AREA(S).

(14) ANY DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT RESPONSIBLE PARTY. THE ENVIRONMENTAL DIVISION, DESIGN DIVISION, AND HEADQUARTERS CONSTRUCTION OFFICE SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.

(15) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE TDOT PERMIT SECTION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS ARE NEEDED. THE ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

(16) THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATE. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE TDOT PROJECT RESPONSIBLE PARTY TO COMMENCE PERMIT RENEWAL PROCESS.

(17) ALL WATER QUALITY PERMITS SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. THE NAME, COMPANY NAME, EMAIL ADDRESS, TELEPHONE NUMBER AND ADDRESS OF THE PROJECT SITE OWNER, OPERATOR, OR A LOCAL CONTACT PERSON WITH A BRIEF DESCRIPTION OF THE PROJECT SHALL ALSO BE POSTED. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WHERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.

SUPPORT ACTIVITIES

(18) MATERIALS AND STAGING AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY ENVIRONMENTAL PERMITS, OBTAINED SOLELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATES. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE TDOT PROJECT RESPONSIBLE PARTY TO COMMENCE PERMIT RENEWAL PROCESS.

ENVIRONMENTAL

(20) EXCEPT AS OTHERWISE SPECIFIED, THERE ARE NO KNOWN SPECIAL ENVIRONMENTAL FACTORS PRESENT ON THIS PROJECT THAT INDICATE A NEED FOR SEASONAL LIMITATIONS ON THE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OPERATIONS OR ON THE TOTAL AREA OF EXPOSED SOIL.

SUBSECTION 2 – ENVIRONMENTAL SPECIAL NOTES

ENVIRONMENTAL SPECIAL NOTES

ENVIRONMENTAL

(1) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE SHALL BE INVITED TO ALL PRE-CONSTRUCTION MEETINGS.

ECOLOGY

(2) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE SHALL ADVISE THE CONTRACTOR DURING THE PRE-CONSTRUCTION MEETING WHEN ENVIRONMENTAL DIVISION PERSONNEL OR A DESIGNATED CONSULTANT WILL NEED TO BE ONSITE FOR WORK BEING DONE WHICH COULD AFFECT WATERS OF THE STATE/U.S. OR SPECIES.

(3) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE SHALL ATTEND THE PRE-CONSTRUCTION MEETING FOR ALL PROJECTS WHICH HAVE THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITAT PROXIMAL TO SCHEDULED WORK. THIS WILL PROVIDE THE OPPORTUNITY TO ENSURE THAT PERSONNEL INCLUDING THE CONTRACTOR'S PERSONNEL AND SUBCONTRACTORS ARE MADE AWARE OF THE NECESSARY PRECAUTIONS THAT MUST BE FOLLOWED.

(4) ALL PROJECTS WITH LEGALLY PROTECTED SPECIES OR CRITICAL HABITAT IDENTIFIED SHALL HAVE MEASURES IN PLACE TO CONTAIN CONCRETE DUST, CEMENT DUST AND ALL OTHER MATERIALS. THESE MATERIALS ARE NOT ALLOWED TO ENTER WATERS OF THE STATE/U.S.

PROJECT COMMITMENTS

(5) SEE PROJECT COMMITMENTS, SHEET 1B, FOR DETAILS RELATING TO SPECIAL ENVIRONMENTAL COMMITMENTS REQUIRED BY THIS PROJECT.

SCOPE OF WORK

(6) CONSTRUCT A BOX CULVERT AND APPROACH ROADWAY CONSISTING OF 2 LANES AND PAVED SHOULDERS ALONG FERN AVENUE TO REPLACE THE EXISTING 1-SPAN BRIDGE OVER CANE CREEK IN BENTON COUNTY. FURTHER ROADWAY IMPROVEMENTS INCLUDE THE INSTALLATION OF GUARDRAIL (WITH ASSOCIATED TERMINALS), PAVEMENT MARKINGS, AND SIGNS WITHIN THE PROJECT LIMITS.

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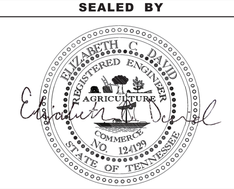

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	2F
PIH	2025	BRZ-300(37)	2F
PS&E	2025	BRZ-300(37)	2F

ESTIMATED GRADING QUANTITIES

DESCRIPTION	UNADJUSTED VOLUMES (CY)		ADJUSTED VOLUMES (CY)
	EXC.	EMB.	EXC.
MAINLINE	1137	10	1024
SIDE ROADS			
PVT. DRIVES, BUSINESS AND FIELD ENTRANCES			
INDEPENDENT DITCHES			
TEMPORARY CONSTRUCTION EXITS	15		14
OTHER (BRIDGE EXCAVATION, PAVEMENT, ETC...)			
TOPSOIL (EMB.)			
TOPSOIL (EXC.)			
TOPSOIL TOTALS (SEE TOPSOIL TABLE)			

BALANCE SUMMARY

SHRINK = 10 % SWELL = 10 %

EXC.		EMB.
1037	VS.	-10
AVAILABLE	=	1027
WASTE MATERIAL	=	1130

ROCK (C.Y.)		TOTALS (C.Y.)				
EXC.	EMB.	EXC. (UNCL.)	EMB. (UNCL.)	EXC (COMMON)	EXC. (AVAIL.)	EXC. (ADJ.)
0	0	1152	10	1152	1152	1037

TOPSOIL

IF EXISTING TOPSOIL IS NOT SUITABLE FOR REUSE

PROPOSED SLOPE AREA S.F.	EXISTING TOPSOIL (EXC.)	EXISTING TOPSOIL (EMB.)	EXISTING TOPSOIL (TOTAL) C.Y.	REQUIRED TOPSOIL C.Y.	PLACING TOPSOIL 203-04 C.Y.	FURNISHED TOPSOIL 203-07 C.Y.	EXCESS TOPSOIL C.Y.
4711	N/A	N/A	N/A	88	N/A	88	N/A

REMOVAL OF STRUCTURES

SHEET NO.	STATION	LOCATION	DESCRIPTION	REMARKS
4	10+62.73	MAINLINE (FERN AVE.)	29' X 21.6' 1-SPAN EXISTING CONCRETE BRIDGE	

PAVEMENT QUANTITIES

LOCATION (ROADWAY)	TYPE - GRADE - PAY ITEM (TON)					
	MINERAL AGG.	BITUMINOUS PLANT MIX BASE (HOT MIX)	PRIME COAT		TACK COAT	ASPHALTIC CONCRETE SURFACE (HOT MIX)
	D	B-M2				D
	303-01	307-01.08	402-01	402-02	403-01	411-01.10
Fern Avenue	183	27	1	2	1	23
TOTALS	183	27	1	2	1	23

SPECIAL DITCHES

ROADWAY	STATION		SIDE	CONFIGURATION		SODDING NEW SOD 803-01 (S.Y.)
	FROM	TO		FORE (H/V)	BACK (H/V)	
FERN AVENUE	10+20.00	10+37.00	RT	3:1	3:1	
FERN AVENUE	10+84.80	11+47.00	RT	6:1	3:1	
FERN AVENUE	10+20.00	10+39.00	LT	3:1	6:1	
FERN AVENUE	10+85.07	11+47.00	LT	3:1	6:1	

PROPOSED GUARDRAIL

SHEET NO.	LOCATION	SIDE		STATIONS		GUARDRAIL		TERMINAL ANCHORS	REMARKS
		LT	RT	FROM	TO	METAL BEAM GUARD FENCE 705-01.04 (L.F.)	W BEAM GR (TYPE 2) MASH TL3 705-06.01 (L.F.)	TYPE 13 MASH TL3 (9.375') 705-06.10 (EACH)	
4B	Fern Ave.	X		10+19.03	10+28.41			1	
4B	Fern Ave.	X		10+28.41	10+40.91		12.50		
4B	Fern Ave.	X		10+40.91	10+84.66	44.00			
4B	Fern Ave.	X		10+84.66	10+97.16		12.50		
4B	Fern Ave.	X		10+97.16	11+06.53			1	
4B	Fern Ave.		X	10+19.28	10+28.66			1	
4B	Fern Ave.		X	10+28.66	10+41.16		12.50		
4B	Fern Ave.		X	10+41.16	10+84.91	44.00			
4B	Fern Ave.		X	10+84.91	10+97.41		12.50		
4B	Fern Ave.		X	10+97.41	11+06.78			1	
TOTALS						88	50	4	

REMOVAL OF GUARDRAIL

STATION RANGE	LOCATION	LF
10+50.33 - 10+75.41	LT	25
10+50.72 - 10+75.85	RT	25
	TOTAL (LF)	50

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BOX CULVERT \ BRIDGE TABULATION

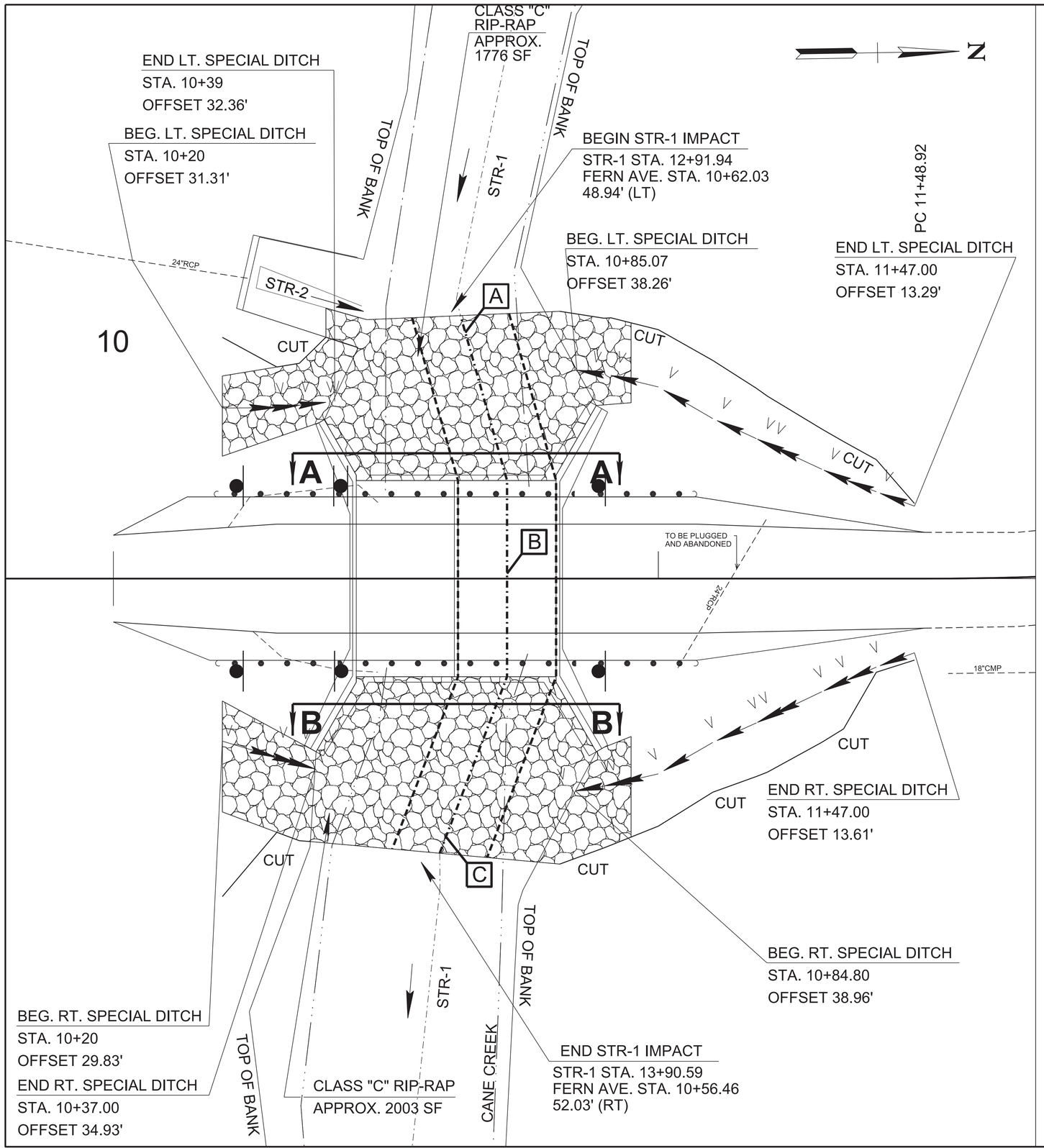
STATION	LOCATION	TYPE		SKEW	NO. BARRELS	WIDTH	HEIGHT	LENGTH	DRAINAGE AREA SQ. MI.	STANDARD DRAWING NO.	BRIDGE > 20 FT.		STD. DWG. STD-17-17 & 18		RIP-RAP CLASS C 709-05.09 TON
		BOX	SLAB								CLASS "A" CONCRETE 604-02.01 CU. YD.	STEEL BAR REINF. 604-02.02 LB.	FOUNDATION FILL MATERIAL 204-08 CU. YD.	GRANULAR BACKFILL 303-01.01 TONS	
10+62.91	FERN AVENUE	X		90°	2	18	8	36	5	STD-17-85	144.00	34693	28	424	858
TOTALS											144.00	34693	28	424	858

▲ ALL COST OF CULVERT EXCAVATION WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

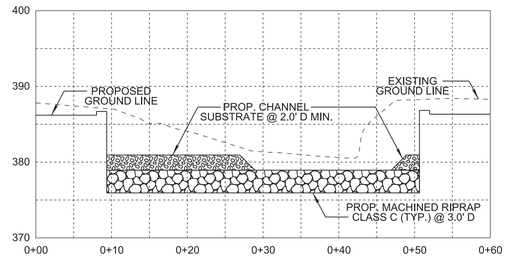
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

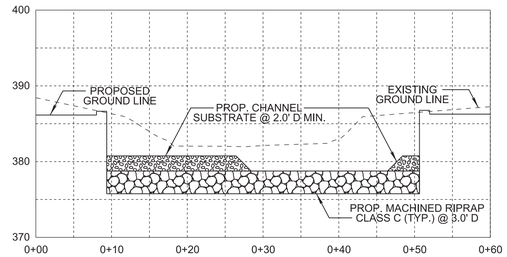
TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	BRZ-300(37)	2G
PS&E	2025	BRZ-300(37)	2G



LOW FLOW CHANNEL DETAILS		
A	S 75° 13' 35" W	31.45'
B	N 89° 01' 55" W	36.00'
C	N 68° 09' 26" W	34.68'



SECTION 'B-B'



SECTION 'A-A'

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DETAIL SHEET

SCALE: 1" = 10'

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	3
PIH	2025	BRZ-300(37)	3
PS&E	2025	BRZ-300(37)	3

RIGHT-OF-WAY

(1) EASEMENT REQUIRED FOR THE RAILROAD CROSSING IS TO BE OBTAINED BY THE UTILITIES ENGINEER BY PROVISIONS CONTAINED IN THE CROSSING AGREEMENT NEGOTIATED WITH THE RAILROAD.

UTILITY

(1) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS, AND/OR MAPS PREPARED BY OTHERS. THEREFORE, RELIANCE UPON THE TYPE, SIZE, AND LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTENCE, LOCATION, AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. IN TENNESSEE, IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT", THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN THREE (3) OR NOT MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.

(2) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.

(3) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

(4) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.

(5) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC AT 1-800-351-1111 WILL BE REQUIRED.

UTILITY OWNERS

COMMUNICATIONS:
AT&T
315 E. COLLEGE STREET
JACKSON, TN 38301
CONTACT: DANIEL R. POTTS
OFFICE PHONE: 901 488 2359
CELL PHONE: ___ ___ ____
Email: DP7607@ATT.COM

WATER:
TOWN OF CAMDEN WATER DEPT.
110 HWY 641 SOUTH P.O. BOX 779
CAMDEN, TN 38320
CONTACT: JOHN BEASLEY
OFFICE PHONE: 731 584 4656
CELL PHONE: ___ ___ ____
Email: N/A

GAS:
WEST TENNESSEE PUBLIC UTILITY
14055 PARIS STREET
HUNTINGDON, TN 38344
CONTACT: MIKE STAFFORD
OFFICE PHONE: 731 986 8289
CELL PHONE: ___ ___ ____
Email: N/A

COMMUNICATIONS:
SPRINT COMMUNICATIONS COMPANY L.P.
1594 HIGHWAY 73
MARIANNA, FL 32448
CONTACT: CLIFTON NEAL
OFFICE PHONE:
CELL PHONE: 850 696 5972
Email: CNEAL@COGENTCO.COM

SANITARY:
TOWN OF CAMDEN WATER DEPT.
110 HWY 641 SOUTH P.O. BOX 779
CAMDEN, TN 38320
CONTACT: JOHN BEASLEY
OFFICE PHONE: 731 584 4656
CELL PHONE: ___ ___ ____
Email: N/A

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY
NOTES,
UTILITY NOTES
AND
UTILITY OWNERS

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	3-1
PIH	2025	BRZ-300(37)	3-1
PS&E	2025	BRZ-300(37)	3-1

CSXT RAILROAD NOTES

(1) COMPLY WITH THE CONSTRUCTION SUBMISSION CRITERIA OF THE CSXT PUBLIC INFORMATION DOCUMENT AND CONSTRUCTION REQUIREMENTS OF THE PUBLIC PROJECTS MANUAL, WHICH IS AVAILABLE AT THE FOLLOWING URL: https://www.csx.com/index.cfm/about-us/property/

(2) ALL WORK IN THE FRA RED ZONE (WITHIN 4 FEET FROM OUTSIDE OF THE RAIL ON EACH SIDE OF THE TRACK) WILL BE ALLOWED ONLY WITH A CSXT, FRA QUALIFIED FLAGMAN OR WATCHMAN AS SPECIFIED BY THE LOCAL ENGINEERING REPRESENTATIVE.

(3) ALL WORK BEYOND 4 FEET FROM THE OUTSIDE RAILS AND WITHIN 25 FEET MUST BE DONE UNDER THE SUPERVISION OF A QUALIFIED INSPECTOR OR CSXT FLAGMAN.

(4) CERTAIN TYPES OF WORK DONE BEYOND 25 FEET FROM THE OUTSIDE OF THE RAILS, AND WITH EQUIPMENT THAT WILL NOT REACH BEYOND THIS POINT, MAY BE DONE WITHOUT FLAGGING PROTECTION OR A WATCHMAN. THIS MUST BE APPROVED BY THE LOCAL ENGINEERING REPRESENTATIVE, THE AREA MUST BE PROTECTED BY A CONSTRUCTION FENCE, AND THE WORK MUST BE STATIONARY

(5) ALL WORKERS WILL REMAIN OFF THE TRACKS. IF NECESSARY TO PERFORM THE WORK ON TRACK, PROTECTION WILL BE PROVIDED AS STATED ABOVE.

(6) ALL WORKERS MUST COMPLY WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS, INCLUDING BUT NOT LIMITED TO THOSE OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE FEDERAL RAILROAD ADMINISTRATION (FRA).

(7) AT LEAST THIRTY (30) DAYS ADVANCED NOTIFICATION MUST BE GIVEN TO THE RAILROAD REPRESENTATIVE, TO SCHEDULE A RAILROAD FLAGMAN.

(8) THE CONTRACTOR MAY NOT USE CSXT RIGHT-OF-WAY, FOR STORAGE OF MATERIALS OR EQUIPMENT, WITHOUT PRIOR WRITTEN APPROVAL FROM CSXT.

(9) THE CONTRACTOR SHALL CONDUCT ITS WORK AT ALL TIMES, IN A MANNER WHICH WILL PROTECT CSXT'S PROPERTY AND TRACK FACILITIES FROM DAMAGE AND WITHOUT INTERRUPTION TO TRAIN OPERATIONS

(10) CONTRACTOR SHALL MAINTAIN ALL DITCHES AND DRAINAGE STRUCTURES FREE OF SILT OR OTHER OBSTRUCTIONS THAT MAY RESULT FROM THEIR OPERATIONS. CONTRACTOR, UPON COMPLETION OF THE PROJECT, SHALL LEAVE CSXT PROPERTY IN A NEAT CONDITION, SATISFACTORY TO THE CSXT REPRESENTATIVE.

(11) PRIOR TO THE INSTALLATION OF ANY SIGNAGE WITHIN CSXT RIGHT-OF-WAY, CONTRACTORS MUST CONTACT THE RAILROAD'S REPRESENTATIVE FOR LOCATION OF ALL UNDERGROUND SIGNAL UTILITIES.

(12) ANY VIOLATION OF ANY CSXT RULES, REGULATIONS OR POLICIES, MAY RESULT IN REMOVAL OF CONTRACTOR PERSONNEL FROM THE RIGHT-OF-WAY.

(13) NO CRANE OR BOOM EQUIPMENT SHALL BE ALLOWED TO SET UP TO WORK OR PARK WITHIN BOOM DISTANCE PLUS 15 FEET OF THE CENTERLINE OF TRACK WITHOUT SPECIFIC PERMISSION FROM THE RAILROAD. NO CRANE OR BOOM EQUIPMENT SHALL BE ALLOWED TO FOUL TRACK, WORK WITHIN THE FOUL ZONE, OR LIFT A LOAD OVER THE TRACK WITHOUT FLAGGING PROTECTION AND PERMISSION FOR TRACK TIME FROM THE RAILROAD.

(14) ALL WORKMEN AND MACHINE OPERATORS SHALL STAY WITH THEIR MACHINES WHEN CRANE OR BOOM EQUIPMENT IS POINTED TOWARD THE TRACK. ALL CRANES AND BOOM EQUIPMENT SHALL STOP WORK AND CLEAR TRACK WHILE TRAIN IS PASSING. SWINGING LOADS SHALL BE SECURED TO PREVENT MOVEMENT WHILE TRAIN IS PASSING AND NO LOADS SHALL BE SUSPENDED ABOVE A MOVING TRAIN. ALL CRANES AND BOOM EQUIPMENT SHALL BE TURNED AWAY FROM THE TRACK AFTER EACH WORKDAY OR WHENEVER UNATTENDED BY AN OPERATOR.

(15) ALL WORK MUST BE STOPPED WHILE TRAINS ARE PASSING WITHIN THE WORK ZONE.

(16) "ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE FIVE (5) DAYS IN ADVANCE OF THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE RAILROAD UNDERGROUND LINES ON RAILROAD PROPERTY. UPON REQUEST FROM THE CONTRACTOR OR AGENCY, RAILROAD SIGNAL FORCES WILL LOCATE AND PAINT MARK OR FLAG RAILROAD UNDERGROUND SIGNAL, COMMUNICATION, AND POWER LINES IN THE AREA TO BE DISTURBED FOR THE CONTRACTOR. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE LINES WHICH ARE CRITICAL TO THE SAFETY OF THE RAILROAD AND THE PUBLIC. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD SIGNAL, COMMUNICATION, OR POWER LINE, THE LINE SHALL BE POTHOLED MANUALLY WITH CAREFUL HAND EXCAVATION BY THE CONTRACTOR AND PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF A RAILROAD SIGNAL REPRESENTATIVE.

(17) ALL SOILS EXCAVATED WITHIN CSXT'S RAILROAD RIGHT-OF-WAY SHALL REMAIN ON CSXT'S RIGHT-OF-WAY. TESTING OF SOILS ON CSXT ROW IS PROHIBITED WITHOUT PRIOR WRITTEN CSXT AUTHORIZATION. ANY SOILS EXCAVATED ON CSXT ROW CAN BE REUSED ON THE ROW PROVIDED PLACING SOILS ALONG CSXT ROW POSES NO ADVERSE IMPACTS TO THE EXISTING TERRAIN, DRAINAGE OR ENVIRONMENT. SHOULD SOIL NEED TO BE REMOVED FROM CSXT ROW, THE CSXT ENVIRONMENTAL DEPARTMENT WILL SAMPLE THE SOIL FOR DISPOSITION. SOIL STAGED ON CSXT MUST FOLLOW CSXT PROTOCOL AND BE PROPERLY STORED AND/OR PROTECTED FROM THE ELEMENTS AND POTENTIAL EXPOSURE.

(18) THE CONTRACTOR SHALL NOTIFY AND COORDINATE THEIR WORK WITH THE FOLLOWING CSXT REPRESENTATIVE:

CROUCH ENGINEERING, INC.

5115 MARYLAND WAY, SUITE 225

BRENTWOOD, TN 37027

ATTN: MR. SCOTT VICK, P.E.

PHONE: 615-791-0630

EMAIL: SVICK@CROUCHENGINEERING.COM

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RAILROAD NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	3A
PIH	2025	BRZ-300(37)	3A
PS&E	2025	BRZ-300(37)	3A

R.O.W. ACQUISITION TABLE

TRACT NO.	PROPERTY OWNERS	COUNTY RECORDS				TOTAL AREA (ACRES)			AREA TO BE ACQUIRED (S.F.)			AREA REMAINING (ACRES)		EASEMENT (ACRES)				
		TAX MAP NO.	PARCEL NO.	DEED DOCUMENT REFERENCE		LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERMANENT	SLOPE	CONST	AIR RIGHTS	PERM RAILROAD
				BOOK	PAGE													
1	CITY OF CAMDEN	78K	Gp C, 004.00	270	246	0.155		0.155				0.155						
*2	BENTON COUNTY FAIR ASSOCIATION	78K	Gp C, 006.00	56	358		5.231	5.231		3072 S.F.	3072 S.F.		5.160					
3	KENNETH D AND DEBORAH T SMOTHERS	78K	Gp C, 004.01	320	660	0.785		0.785				0.785						
4	CSX RAILROAD FORMERLY LOUISVILLE & NASHVILLE RAILROAD	78K	403.00	12 10 10 22	214 17 273 559									0.346		0.068		
5	REBA ANN LOVEALL	78K	Gp C, 002.01	242	62	6.373		6.373				6.373						
6	GEORGE A KING	78K	Gp C, 001.02	234	77	14.112		14.112				14.112						
ACQUISITION TOTALS (ACRES)										3072 S.F.				0.346		0.068		

* AFFECTED 5.231AC IS ONLY THE WESTERN PORTION OF THE SITE. THE TOTAL AREA OF THE PROPERTY IS 10.00 AC, ACCORDING TO THE BENTON COUNTY ASSESSOR OF PROPERTY.

DISTURBED AREA (AC)	
IN BETWEEN SLOPE LINES	0.274
15 FOOT WIDE STRIP (OUT SIDE SLOPE LINES)	0.123
TOTAL DISTURBED AREA	0.397
TOTAL PROJECT AREA	0.426

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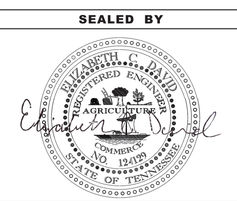

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY
ACQUISITION
TABLE

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	3B
PIH	2025	BRZ-300(37)	3B
PS&E	2025	BRZ-300(37)	3B

03LCIT-F3-002
BEGIN PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F2-002
BEGIN PROJECT NO. BRZ-300(37) R.O.W.
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F3-002
END PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 11+54.71
N 631242.4130 E 1347634.3062

03LCIT-F2-002
END PROJECT NO. BRZ-300(37) R.O.W.
STA. 12+40.17
N 631327.6494 E 1347629.0928

14.30'
75' PRES. CSX ROW
PRESENT CSX R.O.W.
CANE CREEK
PRESENT CSX R.O.W.
PRESENT CSX R.O.W.
TOP OF BANK
TOP OF BANK
EX. CSX RAILROAD CL
S 89° 10' 23" E
EX. CSX RAILROAD CL
S 89° 12' 03" E
CSX R.O.W. VARIES 253.22' - 271.19'
PRESENT CSX R.O.W.
WOODS
STR-1
TEMP. CONST. EASEMENT
PC 11+48.92
PROPOSED PERMANENT EASEMENT
PT 12+37.21
POT 9+00.00
EX-FERN AVE STA. 9+70.18 =
EX- CSX RAILROAD STA. 4539+48.00
ELEV. 420.30
N 631057.9101 E 1347631.2154
EX-FERN AVE STA. 9+55.97=
EX- CSX RAILROAD STA. 4539+47.97
ELEV. 417.63
N 631043.7048 E 1347630.9754
CSXT MP 00N 85.92
CSX#350894E
PRESENT R.O.W.
N 7° 10' 11" W
PRESENT R.O.W.
FERN AVENUE CL
N 0° 58' 05" E
ASPHALT
ASPHALT
PROPOSED PERMANENT EASEMENT
BEG. TUNNEL
STA. 9+26.73
END TUNNEL
STA. 10+00
PROP. ROW
EX-FERN AVE STA. 9+00.00
N 630987.7390
E 1347630.0297
PROPOSED PERMANENT EASEMENT
PROP. ROW
TEMP. CONST. EASEMENT
100' PRES. CSX ROW
4540
TOP OF BANK
PRESENT CSX R.O.W.
TOP OF BANK
WOODS
STR-1
FIELD
14.12'

EX-FERN AVE STA. 9+70.18 =
EX- CSX RAILROAD STA. 4539+48.00
ELEV. 420.30
N 631057.9101 E 1347631.2154
Fern Ave.
EX-FERN AVE STA. 9+55.97=
EX- CSX RAILROAD STA. 4539+47.97
ELEV. 417.63
N 631043.7048 E 1347630.9754
CSXT MP 00N 85.92
N.T.S.

CSX RR R.O.W. DETAILS

TRACT 6
CLOSED TRACT DETAIL
N.T.S

	TEMP. CONSTRUCTION EASEMENT
	PROP. PERMANENT EASEMENT

SEALED BY

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COMMERCE
NO. 124199
STATE OF TENNESSEE

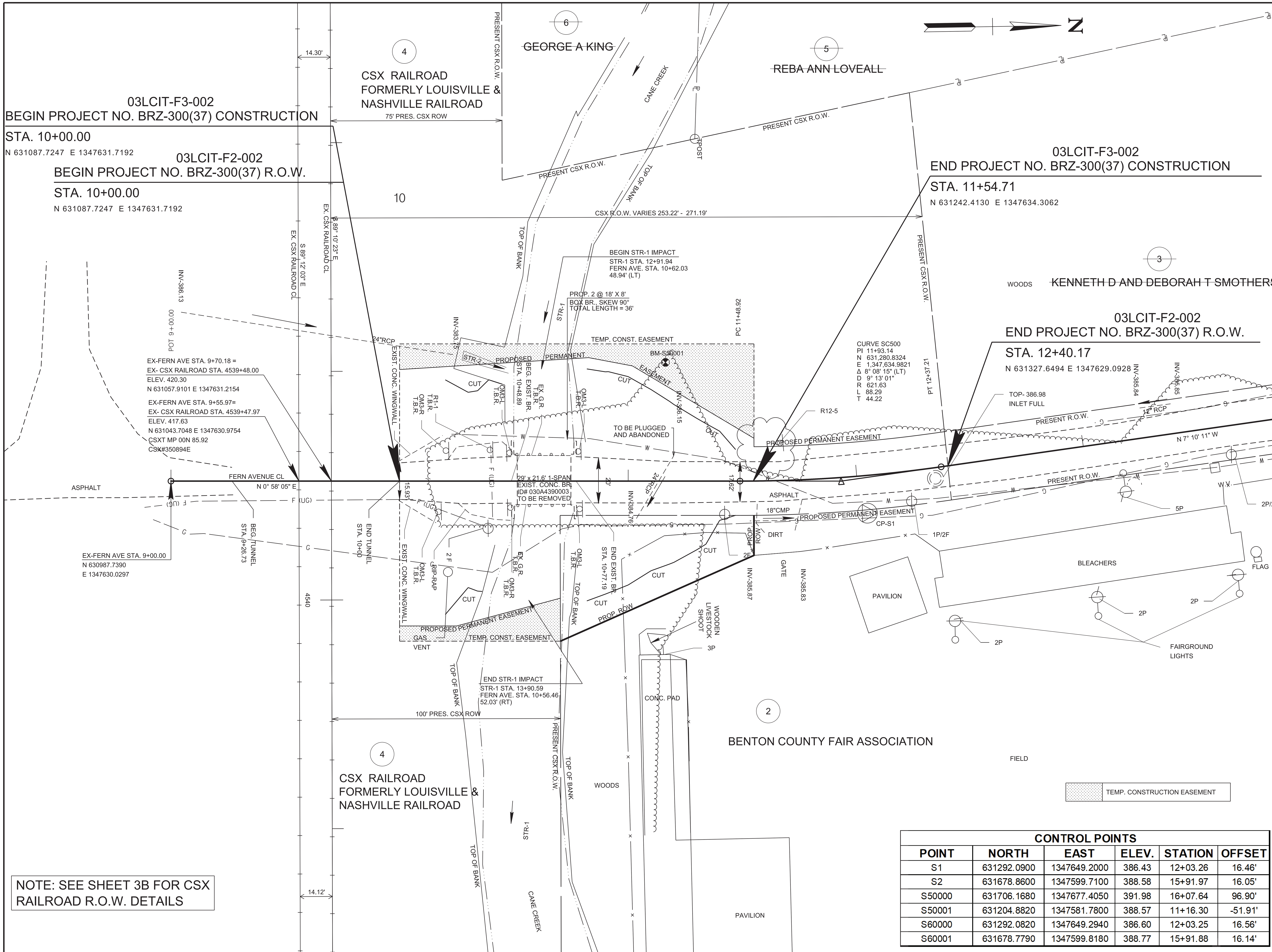
COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP

STA.9+00 TO STA.13+88
SCALE: 1"=20'

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	4
PIH	2025	BRZ-300(37)	4
PS&E	2025	BRZ-300(37)	4



03LCIT-F3-002
BEGIN PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 10+00.00
N 631087.7247 E 1347631.7192
03LCIT-F2-002
BEGIN PROJECT NO. BRZ-300(37) R.O.W.
STA. 10+00.00
N 631087.7247 E 1347631.7192
CSX RAILROAD FORMERLY LOUISVILLE & NASHVILLE RAILROAD
75' PRES. CSX ROW
GEORGE A KING
REBA ANN LOVEALL
CANE CREEK
PRESENT CSX R.O.W.
CSX R.O.W. VARIES 253.22' - 271.19'
03LCIT-F3-002
END PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 11+54.71
N 631242.4130 E 1347634.3062
03LCIT-F2-002
END PROJECT NO. BRZ-300(37) R.O.W.
STA. 12+40.17
N 631327.6494 E 1347629.0928
KENNETH D AND DEBORAH T SMOTHERS
WOODS
BEGIN STR-1 IMPACT
STR-1 STA. 12+91.94
FERN AVE. STA. 10+62.03
48.94' (LT)
PROP. 2 @ 18' X 8'
BOX BR., SKEW 90°
TOTAL LENGTH = 36'
TEMP. CONST. EASEMENT
PROPOSED PERMANENT EASEMENT
CURVE SC500
PI 11+93.14
N 631,280.8324
E 1,347,634.9821
Δ 8° 08' 15" (LT)
D 9° 13' 01"
R 621.63
L 88.29
T 44.22
EX-FERN AVE STA. 9+70.18 =
EX- CSX RAILROAD STA. 4539+48.00
ELEV. 420.30
N 631057.9101 E 1347631.2154
EX-FERN AVE STA. 9+55.97=
EX- CSX RAILROAD STA. 4539+47.97
ELEV. 417.63
N 631043.7048 E 1347630.9754
CSXT MP 00N 85.92
CSX#350894E
FERN AVENUE CL
N 0° 58' 05" E
N 7° 10' 11" W
ASPHALT
TO BE PLUGGED AND ABANDONED
29' x 21.6' 1-SPAN
EXIST. CONC. BR.
ID# 030A4390003
TO BE REMOVED
TOP- 386.98
INLET FULL
EX-FERN AVE STA. 9+00.00
N 630987.7390
E 1347630.0297
BEG. TUNNEL STA. 9+26.73
END TUNNEL STA. 10+00
END EXIST. BR. STA. 10+77.19
BEG. EXIST. BR. STA. 10+48.89
BLEACHERS
PAVILION
FAIRGROUND LIGHTS
WOODEN LIVESTOCK SHOOT
CONC. PAD
END STR-1 IMPACT
STR-1 STA. 13+90.59
FERN AVE. STA. 10+56.46
52.03' (RT)
100' PRES. CSX ROW
BENTON COUNTY FAIR ASSOCIATION
FIELD
TEMP. CONSTRUCTION EASEMENT

NOTE: SEE SHEET 3B FOR CSX RAILROAD R.O.W. DETAILS

CONTROL POINTS					
POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S1	631292.0900	1347649.2000	386.43	12+03.26	16.46'
S2	631678.8600	1347599.7100	388.58	15+91.97	16.05'
S50000	631706.1680	1347677.4050	391.98	16+07.64	96.90'
S50001	631204.8820	1347581.7800	388.57	11+16.30	-51.91'
S60000	631292.0820	1347649.2940	386.60	12+03.25	16.56'
S60001	631678.7790	1347599.8180	388.77	15+91.88	16.14'

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.9+00 TO STA.13+88
SCALE: 1"=20'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2025	BRZ-300(37)	4A
PIH	2025	BRZ-300(37)	4A
PS&E	2025	BRZ-300(37)	4A

REV. 03/05/25: ADDED THE CHORD BEARING FOR CURVE ONE, TWO, AND THREE ALONG TRACT FOUR AND TRACT TWO. REVISED BEARING FOR PROP. ROW THAT CONNECTS TO C1 ALONG TRACT 4.

03LCIT-F3-002
BEGIN PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F2-002
BEGIN PROJECT NO. BRZ-300(37) R.O.W.
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F3-002
END PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 11+54.71
N 631242.4130 E 1347634.3062

03LCIT-F2-002
END PROJECT NO. BRZ-300(37) R.O.W.
STA. 12+40.17
N 631327.6494 E 1347629.0928

6 GEORGE A KING

5 REBA ANN LOVEALL

4 CSX RAILROAD
FORMERLY LOUISVILLE & NASHVILLE RAILROAD

3 KENNETH D AND DEBORAH T SMOTHERS

10

2 BENTON COUNTY FAIR ASSOCIATION

4 CSX RAILROAD
FORMERLY LOUISVILLE & NASHVILLE RAILROAD

75' PRES. CSX ROW
14.30'
PRESENT CSX R.O.W.
CSX R.O.W. VARIES 253.22' - 271.19'
100' PRES. CSX ROW
PRESENT CSX R.O.W.
EX. CSX RAILROAD CL
S 89° 12' 03" E
S 89° 10' 23" E
1452.00'
N 87° 08' 52" W
128.77'
POST
S 11° 09' 44" E
172.00'
96.00'
12+46.58
163.92'
N 11° 9' 44" W
86.20'
11+29.13
149.69'
10+44.86
131.57'
N 89° 01' 56" W
11.27'
48.79'
POT 9+00.00
EX-FERN AVE STA. 9+70.18 =
EX- CSX RAILROAD STA. 4539+48.00
ELEV. 420.30
N 631057.9101 E 1347631.2154
EX-FERN AVE STA. 9+55.97=
EX- CSX RAILROAD STA. 4539+47.97
ELEV. 417.63
N 631043.7048 E 1347630.9754
CSXT MP 00N 85.92
CSX#350894E
EX-FERN AVE STA. 9+00.00
N 630987.7390
E 1347630.0297
10+00.00
60.00'
10+00.00
48.79'
N 2° 38' 13" W
62.85'
10+82.68
54.00'
S 0° 58' 05" W
155.01'
TEMP. CONST. EASEMENT
11+01.87
50.38'
BM-S50001
PROPOSED PERMANENT EASEMENT
N 11° 40' 08" E
19.53'
CUT
N 21° 43' 48" E
6.64'
PC 11+48.92
11+55.66
59.97'
N 88° 01' 48" W
41.23'
11+55.20
18.72'
S 89^ 01' 48" E
3.72'
11+55.16
15.00'
PROPOSED PERMANENT EASEMENT
C1
S 7^ 10' 21" E
3.55'
PT 12+43.21
12+37.21
15.00'
12+40.76
15.00'
N 85^ 04' 07" E
15.01'
N 85° 04' 07" W
149.04'
282.54'
N 7° 10' 11" W
PRESENT R.O.W.
N 7° 10' 11" W
12+40.17
0.00
N 85° 04' 07" E
15.01'
N 7° 10' 11" W
283.71'
PRESENT R.O.W.
12+39.59
15.00'
N 7° 10' 11" W
2.38'
12+37.21
15.00'
FLAG
10+00.00
0.00'
FERN AVENUE CL
N 0° 58' 05" E
ASPHALT
BEG. TUNNEL
STA. 9+26.73
END TUNNEL
STA. 10+00
N 89° 01' 56" W
63.35'
N 0° 58' 05" E
78.70'
11+48.92
15.00'
C3
11+54.87
15.00'
10+70.22
15.00'
PROP. ROW
N 89° 10' 23" W
38.21'
CUT
N 89° 02' 10" W
17.51'
CUT
N 72° 55' 55" W
92.60'
11+54.71
32.51'
END FENCE REMOVAL
STA. 11+54.71
10+70.31
51.21'
PROP. ROW
BEGIN FENCE REMOVAL
STA. 10+97.89
10+00.00
63.35'
N 14° 01' 37" W
46.91'
S 0° 58' 05" W
45.00' PROPOSED PERMANENT EASEMENT
N 89° 10' 23" W
18.79'
N 89° 01' 56" W
6.65'
N 0° 58' 5" E
70.35'
TEMP. CONST. EASEMENT
10+25.00
63.35'
10+70.35
70.00'
10+00.00
70.00'
N 89° 10' 23" W
395.45'
4540
14.12'
C2
PROPOSED PERMANENT EASEMENT
CP-ST

TEMP. CONSTRUCTION EASEMENT
PROP. PERMANENT EASEMENT

CURVE TABLE

CODE	RADIUS	LENGTH	CHORD BEARING	CHORD DIST.
C1	606.63'	80.07'	N 3° 23' 20" W	80.01'
C2	636.63'	84.32'	N 3° 22' 31" W	84.26'
C3	636.63'	6.10'	N 0° 41' 36" E	6.10'

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S1	631292.0900	1347649.2000	386.43	12+03.26	16.46'
S2	631678.8600	1347599.7100	388.58	15+91.97	16.05'
S50000	631706.1680	1347677.4050	391.98	16+07.64	96.90'
S50001	631204.8820	1347581.7800	388.57	11+16.30	-51.91'
S60000	631292.0820	1347649.2940	386.60	12+03.25	16.56'
S60001	631678.7790	1347599.8180	388.77	15+91.88	16.14'

NOTE: SEE SHEET 3B FOR CSX RAILROAD R.O.W. DETAILS

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STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DETAILS

STA.9+00 TO STA.13+88
SCALE: 1"=20'

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	4B
PIH	2025	BRZ-300(37)	4B
PS&E	2025	BRZ-300(37)	4B

03LCIT-F3-002
BEGIN PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F2-002
BEGIN PROJECT NO. BRZ-300(37) R.O.W.
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F3-002
END PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 11+54.71
N 631242.4130 E 1347634.3062

03LCIT-F2-002
END PROJECT NO. BRZ-300(37) R.O.W.
STA. 12+40.17
N 631327.6494 E 1347629.0928

N

CANE CREEK

14.30'

EX. CSX RAILROAD CL
S 89° 10' 23" E
S 89° 12' 03" E

BEGIN PROP. BOX BRIDGE
STA. 10+43.91
90° SKEW

END LT. SHLD. TRANS.
STA. 10+13.54
OFFSET 15'

10

BEG. LT. SPECIAL DITCH
STA. 10+20
OFFSET 31.31'

END LT. SPECIAL DITCH
STA. 10+39.00
OFFSET 32.36'

END LT. PVMT TRANS.
STA. 10+30
OFFSET 10'

TOP OF BANK

CLASS "C" RIP-RAP
APPROX. 1776 SF

PROPOSED GUARDRAIL				
SIDE	BEG STA	BEG OFFSET	END STA	END OFFSET
LT	10+28.41	15'	10+97.16	15'
RT	10+28.66	15'	10+97.41	15'

BEG. PVMT & SHLD TRANS
STA. 10+00
LT/RT EOP OFFSET 7.97'
LT/RT SHLD OFFSET 7.97'

POT 9+00.00

STR-1

BEGIN STR-1 IMPACT
STR-1 STA. 12+91.94
FERN AVE. STA. 10+62.03
48.94' (LT)

BEG. LT. SPECIAL DITCH
STA. 10+85.07
OFFSET 38.26'

PC 11+48.92

END LT. SPECIAL DITCH
STA. 11+47.00
OFFSET 13.29'

BEG. PVMT & SHLD TRANS
STA. 11+07
LT/RT EOP OFFSET 10'
LT/RT SHLD OFFSET 15'

PT 12+37.21

EX-FERN AVE STA. 9+70.18 =
EX- CSX RAILROAD STA. 4539+48.00
ELEV. 420.30
N 631057.9101 E 1347631.2154

EX-FERN AVE STA. 9+55.97=
EX- CSX RAILROAD STA. 4539+47.97
ELEV. 417.63
N 631043.7048 E 1347630.9754
CSXT MP 00N 85.92
CSX#350894E

STR-2

EXIST. CONC. WINGWALL

V SOD V

TYPE 13

PROP. GR

SSWL

DSYL

5'

20'

15.94'

17.58'

N 7° 10' 11" W

FERN AVENUE CL
N 0° 58' 05" E

ASPHALT

END PVMT & SHLD TRANS
STA. 11+48.92
LT OFFSET 8.49'
RT OFFSET 9.09'

END RT. SPECIAL DITCH
STA. 11+47.00
OFFSET 13.61'

EX-FERN AVE STA. 9+00.00
N 630987.7390
E 1347630.0297

BEG. TUNNEL
STA. 9+26.73

END TUNNEL
STA. 10+00

EXIST. CONC. WINGWALL

4540

END RT. SHLD. TRANS.
STA. 10+17.70
OFFSET 15'

END PVMT. TRANS.
STA. 10+30
OFFSET 10'

BEG. RT. SPECIAL DITCH
STA. 10+20
OFFSET 29.83'

END RT. SPECIAL DITCH
STA. 10+37.00
OFFSET 34.93'

PROP. 2 @ 18'X 8'
BOX BR., SKEW 90°
TOTAL LENGTH = 36'

END PROP. BOX BRIDGE
STA. 10+81.91
90° SKEW

BEG. RT. SPECIAL DITCH
STA. 10+84.80
OFFSET 38.96'

END STR-1 IMPACT
STR-1 STA. 13+90.59
FERN AVE. STA. 10+56.46
52.03' (RT)

CLASS "C" RIP-RAP
APPROX. 2003 SF

TOP OF BANK

STR-1

CANE CREEK

14.12'

1 STOP — R1-1, 30" X 30"
2 ONE LANE UNDERPASS — W5-3A, 36" X 36"
3 — OM3-L, 12" X 36"
4 — OM3-R, 12" X 36"

NOTE:
HIGH VISIBILITY FENCE (S-F-1) SHALL BE PLACED AROUND ALL NON-IMPACTED SECTIONS OF WATER QUALITY FEATURES WITHIN THE R.O.W. OR EASEMENTS.

STRUCTURE EMBEDMENT NOTE:
DURING CONSTRUCTION OF THE STREAM CONVEYANCE STRUCTURE, THE CONTRACTOR SHALL GATHER COARSE ALLUVIUM FROM PORTIONS OF THE STREAM CHANNEL THAT IS BEING EXCAVATED OR FILLED AND STOCKPILE THE MATERIAL IN A NON-WETLAND/AQUATIC SITE. FOLLOWING THE INSTALLATION OF THE STRUCTURE, THE STOCKPILED ALLUVIUM SHALL BE BACKFILLED WITHIN THE STRUCTURE TO SATISFY THE REQUIRED EMBEDMENT DEPTH AS DEPICTED IN THE PLANS. WHEN THESE MATERIALS ARE NOT PRESENT OR SUFFICIENT TO PROVIDE THE REQUIRED EMBEDMENT DEPTH, THE REMAINDER OF THE FILL FOR EMBEDMENT WILL BE COMPRISED OF MATERIALS THAT ARE APPROXIMATELY THE SAME SIZE AND COMPOSITION AS THE UPSTREAM AND DOWNSTREAM CHANNEL MATERIALS. THE STANDARD DRAWING FOR SUBSTRATE RESTORATION D-NSD-30 SHOULD BE USED.

RIP-RAP EMBEDMENT NOTE:
RIPRAP SHALL BE PLACED AS TO MIMIC THE EXISTING CONTOURS OF THE STREAM CHANNEL. THE TOP OF THE PROPOSED RIPRAP SHALL BE AT GRADE WITH THE BOTTOM OF THE EXISTING STREAM CHANNEL. VOIDS WITHIN THE RIPRAP SHALL BE FILLED WITH STREAM BED SUBSTRATE. IF AVAILABLE, TO PREVENT LOSS OF STREAM WITHIN RIP-RAP AREAS. STREAM BED SUBSTRATE CAN BE REMOVED FROM RIP-RAP EMBEDMENT AREA. IF STREAM BED SUBSTRATE IS NOT AVAILABLE, THE FOLLOWING SHOULD BE USED. PRIOR TO PLACEMENT OF RIPRAP, IT SHOULD BE MIXED WITH A MIXTURE OF 70 % CREEK GRAVEL AND 30 % SAND TO FILL THE VOIDS. ONCE THE RIP-RAP MIXTURE HAS BEEN INSTALLED THE AREA SHOULD BE THOROUGHLY COMPACTED. ONCE COMPACTED AN ADDITIONAL 1 -2 INCHES OF SAND AND CREEK GRAVEL SHALL BE ADDED TO FILL IN THE REMAINING VOIDS IF NEEDED. THE CONTRACTOR SHALL ENSURE THAT WATER WILL FLOW OVER THE RIPRAP AND THAT FLOW IS NOT LOST BELOW OR WITHIN THE ROCK.

CONTRACTOR NOTE:
THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION AND CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY NON-IMPACTED PORTION OF STR-1 OR STR-2 AND THAT ANY NON-IMPACTED PORTION OF STR-1 AND STR-2 AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT PERMITTED LOCATIONS.

LOW FLOW WITH MULTIPLE BARREL EMBEDDED STRUCTURE NOTES:
THE STREAM CHANNEL SHALL BE CONSTRUCTED SO THAT IT ALIGNS WITH A SINGLE BARREL OF THE STREAM CONVEYANCE STRUCTURE. THE STREAM AT THE INLET AND OUTLET OF PROPOSED EMBEDDED STREAM CONVEYANCE STRUCTURES SHALL BE RESTORED TO THE PRECONSTRUCTION STREAM CHANNEL CROSS-SECTION MATCHING THE CHANNEL BOTTOM WIDTH WITH BANK BY USING THE EXCAVATED STREAM AND STREAM BANK MATERIALS, OR OTHER MATERIALS IF SPECIFIED, ONCE THE CONSTRUCTION OF THE STREAM CONVEYANCE STRUCTURE IS COMPLETE. ALL BARRELS SHALL BE BACKFILLED, SUCH AS DESCRIBED IN THE "EMBEDDING OF STRUCTURES" NOTE.

WHEN RECONSTRUCTING THE STREAM BANK, USE A COIR FIBER ROLL AT THE TOE OF THE BANK TO PROVIDE BANK STABILITY WHILE NATIVE VEGETATION ESTABLISHES. STANDARD DRAWING D-NSD-33 MUST BE USED FOR COIR FIBER ROLL INSTALLATION. THE BANK HEIGHT SHOULD BE CONSTRUCTED ONE (1) FOOT HIGHER THAN THE STREAM BED AT THE CULVERT WITH THE ADDITIONAL FOOT OF MATERIAL INSTALLED IN THE BARREL(S) OF THE STRUCTURE THAT DO NOT CONVEY THE NORMAL STREAM FLOW. THE ADDITIONAL MATERIAL IN THE ADJACENT BARREL(S) WILL PREVENT NORMAL STREAM FLOW FROM ENTERING THE (THOSE) BARREL(S). TAPER THE ONE-FOOT BANK HEIGHT FROM THE CULVERT TO THE EXISTING BANK HEIGHT WITHIN 25 FEET OF BOTH ENDS OF THE STRUCTURE TO TIE BACK TO THE EXISTING STREAM CHANNEL BANK. STREAM BANK MATERIALS EXCAVATED DURING THE CONSTRUCTION OF THE STREAM CONVEYANCE STRUCTURE, OR OTHER MATERIALS IF SPECIFIED, SHOULD BE USED WHEN RECONSTRUCTING THE STREAM BANK ONCE THE STRUCTURE IS COMPLETE. NATIVE SEED MIXTURES AS SPECIFIED IN STANDARD DRAWING STD-17-20 SHALL BE PLANTED ONCE THE BANK CONSTRUCTION IS COMPLETE.

SEE SHEET 2G FOR LOW FLOW CHANNEL DETAILS.

NOTE: SEE SHEET 3B FOR CSX RAILROAD R.O.W. DETAILS

DSYL - DOUBLE SOLID YELLOW LINE
SSWL - SINGLE SOLID WHITE LINE

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STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.9+00 TO STA.13+88
SCALE: 1"=20'

20-MAY-2025 10:44
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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	4C
PIH	2025	BRZ-300(37)	4C
PS&E	2025	BRZ-300(37)	4C

MATCH LINE ELEV. 414 FT SEE SHEET NO. 4C RT.

SUPERELEVATION DIAGRAM

STA. 10+00.00 -2.13% LT
STA. 10+03.00 -2.00% LT
NORMAL CROWN -2.00%
STA. 10+39.00 -2.00% RT
STA. 10+00.00 -3.78% RT
STA. 11+18.00 -2.00% RT
STA. 11+24.00 -2.00% LT
STA. 11+48.92 -1.44% LT
STA. 11+48.92 -3.29% RT

EX-FERN AVE STA. 9+55.97=
EX- CSX RAILROAD STA. 4539+47.97
ELEV. 417.63
N 631043.7048 E 1347630.9754
CSXT MP 00N 85.92
CSX#350894E

EX-FERN AVE STA. 9+70.18 =
EX- CSX RAILROAD STA. 4539+48.00
ELEV. 420.30
N 631057.9101 E 1347631.2154

EXISTING GROUND

MATCH LINE ELEV. 414 FT SEE SHEET NO. 4C LT.

9+40 9+60 9+80 10+00 10+20

03LCIT-F3-002
BEGIN PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F2-002
BEGIN PROJECT NO. BRZ-300(37) R.O.W.
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F3-002
END PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 11+54.71
N 631242.4130 E 1347634.3062

03LCIT-F2-002
END PROJECT NO. BRZ-300(37) R.O.W.
STA. 12+40.17
N 631327.6494 E 1347629.0928

VC = 25.02'
K = 17
VC = 30.73'
K = 27

VPI 9+99.68 EL. 388.62
VPC 10+17.49 EL. 388.45
VPT 10+42.51 EL. 388.39
VPI 10+44.91 EL. 388.40
BEG. EXIST. BRIDGE STA. 10+46.89 ELEV. 388.90
VPI 10+80.92 EL. 388.58
END EXIST. BRIDGE STA. 10+77.10 ELEV. 388.92
VPC 10+82.61 EL. 388.59
VPI 11+00.00 EL. 388.68
VPT 11+17.39 EL. 388.16
VPC 11+17.64 EL. 388.15
VPT 11+48.36 EL. 387.40
VPI 11+48.92 EL. 387.39

EXISTING GROUND
BEG. PROP. BOX BRIDGE STA. 10+43.91 ELEV. 388.40
PROP. FINISH GRADE
29' SPAN EXIST. CONC. BEAM BR. ID# 030A4390003 TO BE REMOVED
END PROP. BOX BRIDGE STA. 10+81.91 ELEV. 388.58
PROP. FINISH GRADE
TO BE PLUGGED AND ABANDONED
EXTREME HIGH WATER ELEV. = 389.90±

-0.97% 0.50% 0.50% 0.50% -2.98% -1.88%

FIBER
24" RCP
BEG. LT. SPEC. DT. VPI 10+20.00 EL. 385.05
END LT. SPEC. DT. VPI 10+30.00 EL. 388.33
BEG. LT. SPEC. DT. VPI 10+39.00 EL. 384.46
BEG. LT. SPEC. DT. VPI 10+85.07 EL. 384.07
END. LT. SPEC. DT. VPI 11+47.00 EL. 385.93
END. RT. SPEC. DT. VPI 11+47.00 EL. 385.15
END. RT. SPEC. DT. VPI 11+33.00 EL. 387.69
BEG. RT. SPEC. DT. VPI 10+20.00 EL. 383.99
BEG. RT. SPEC. DT. VPI 10+84.80 EL. 383.95
END. RT. SPEC. DT. VPI 10+37.00 EL. 382.29
-10.00%
-0.50%
3.00%
2.89%
LOW CHRD=387.37
VC = 34.77'
K = 9
NORMAL WATER ELEV. = 382.50±

WATER LINE
6" W
2" G
SAS LINE
EXISTING GROUND

CATCH BASIN
TOP EL. 386.98
BOTTOM EL. UNKNOWN

BOX BRIDGE
STATION: 10+62.91
STRUCTURE: 2 @ 18' x 8'

SKEW	90	DEG.
DRAINAGE AREA	4.65	SQ. MI.
DESIGN DISCHARGE (4 YR)	890	CFS
BACKWATER (4 YR)	0.00	FT (EL. 385.71)
VELOCITY (4 YR)	4.45	FPS
DISCHARGE (100 YR)	2320	CFS (EL. 389.10)
INLET INVERT ELEVATION	378.80	
OUTLET INVERT ELEVATION	378.60	
APPROACH OVERTOPPING ELEVATION	386.93	
STANDARD DRAWING NUMBERS	STD-17-85	

36' OF 2 @ 18' X 8' BOX BR.
SKEW 90°

FERN AVENUE

XBM - S50001
STA. 11+16.30, 51.91'(LT)
N 631204.8820
E 1347581.7800
ELEV 388.57
1/2 INCH IRON PIN

EXISTING BRIDGE:	1 SPAN
BRIDGE I.D. #	030A4390003
STATION:	10+62.73
DIMENSIONS APPROX.:	29' SPAN X 4.5' HEIGHT
STRUCTURE:	CONCRETE BEAM
SUPERSTRUCTURE:	CONC. DECK GIRDER & STEEL I-BEAM BRIDGE
SKEW:	90°
DRAINAGE AREA:	4.65 SQ. MI.

SEE SHEETS 4B AND 6 FOR FURTHER PROP. MACHINED RIPRAP CLASS C @ 3.0' D FROM INLET/OUTLET TO END OF WING WALLS DETAILS.

8+80 9+00 9+20 9+40 9+60 9+80 10+00 10+20 10+40 10+60 10+80 11+00 11+20 11+40 11+60 11+80 12+00 12+20 12+40 12+60 12+80 13+00 13+20 13+40 13+60 13+80 14+00

SEALED BY

ELIZABETH C. DAVID
REGISTERED ENGINEER
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COMMERCE
NO. 124291
STATE OF TENNESSEE

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA. 9+00 TO STA.13+88

SCALE: 1"=20' HORIZ.
1"=2' VERT.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	5
PIH	2025	BRZ-300(37)	5
PS&E	2025	BRZ-300(37)	5

DRAINAGE/ HYDRAULIC DATA FOR BRIDGE

STATION 10+62.73 STREAM NAME CANE CREEK

STREAM BED LINING: SAND, CLAY, SILT

DIRECTION OF FLOW EAST

DRAINAGE AREA 4.65 SQ.MI. ( ) FLAT, (X) ROLLING, ( ) HILLY, ( ) MTNS.

PRESENT STRUCTURE: SPAN APPROX. 29' ,HEIGHT APPROX.4.5' AT FLOWLINE, STRUCTURE: CONCRETE BEAM

SUPERSTRUCTURE: CONC. DECK GIRDER & STEEL I-BEAM BRIDGE

BEGIN STATION-OFFSET 10+48.89 END STATION-OFFSET 10+77.19

LOW BEAM ELEV. 387.37 LOCATION. 10+63.11

INLET INVERT ELEV. N/A OUTLET INVERT. N/A

NORMAL WATER ELEV.382.50\; EXTREME HIGHWATER: 16.09' DATE. 06/24/2020

BACKWATER FROM WHAT STREAM (IF APPLICABLE): N/A

EXISTING STRUCTURE CONDITION: SUFFICIENCY RATING 36.2

SEE DRAINAGE DETAIL THIS SHEET

03LCIT-F3-002
BEGIN PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F2-002
BEGIN PROJECT NO. BRZ-300(37) R.O.W.
STA. 10+00.00
N 631087.7247 E 1347631.7192

14.30'
75' PRES. CSX ROW
EX. CSX RAILROAD CL
S 89° 10' 23" E
S 89° 12' 03" E
PRESENT CSX R.O.W.
CSX R.O.W. VARIES 253.22' - 271.19'
TOP OF BANK
CANE CREEK
STR-1
STR-2
PC 11+48.92
PT 12+37.21
BM-S50001
INV-386.13
INV-386.15
INV-384.76
INV-385.84
INV-385.85
INV-385.87
INV-385.83
24"RCP
12" RCP
18"CMP
BEG. EXIST. BR. STA. 10+48.89
END EXIST. BR. STA. 10+77.19
29' x 21.6' 1-SPAN EXIST. CONC. BR ID# 030A4390003 TO BE REMOVED
TO BE PLUGGED AND ABANDONED
PRESENT R.O.W.
N 7° 10' 11" W
CP-S1
ASPHALT
FERN AVENUE CL
N 0° 58' 05" E
BEG. TUNNEL STA. 9+26.73
END TUNNEL STA. 10+00
RIP-RAP
100' PRES. CSX ROW
PRESENT CSX R.O.W.
14.12'
4540

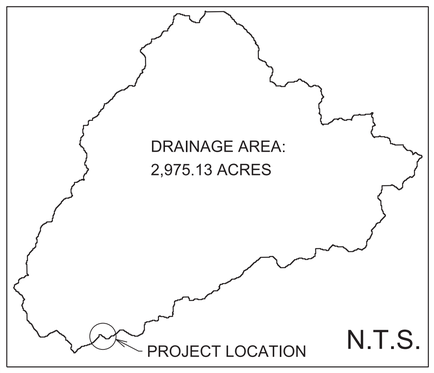
EX-FERN AVE STA. 9+70.18 =
EX- CSX RAILROAD STA. 4539+48.00
ELEV. 420.30
N 631057.9101 E 1347631.2154

EX-FERN AVE STA. 9+55.97=
EX- CSX RAILROAD STA. 4539+47.97
ELEV. 417.63
N 631043.7048 E 1347630.9754
CSXT MP 00N 85.92
CSX#350894E

EX-FERN AVE STA. 9+00.00
N 630987.7390
E 1347630.0297

03LCIT-F2-002
END PROJECT NO. BRZ-300(37) R.O.W.
STA. 12+40.17
N 631327.6494 E 1347629.0928

03LCIT-F3-002
END PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 11+54.71
N 631242.4130 E 1347634.3062



NOTE: SEE SHEET 3B FOR CSX RAILROAD R.O.W. DETAILS

CONTROL POINTS					
POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S1	631292.0900	1347649.2000	386.43	12+03.26	16.46'
S2	631678.8600	1347599.7100	388.58	15+91.97	16.05'
S50000	631706.1680	1347677.4050	391.98	16+07.64	96.90'
S50001	631204.8820	1347581.7800	388.57	11+16.30	-51.91'
S60000	631292.0820	1347649.2940	386.60	12+03.25	16.56'
S60001	631678.7790	1347599.8180	388.77	15+91.88	16.14'

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STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DRAINAGE MAP

STA.9+00 TO STA.13+88

SCALE: 1"=20'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	6
PIH	2025	BRZ-300(37)	6
PS&E	2025	BRZ-300(37)	6

BOX \ SLAB TABULATION

STATION	STD. DWG.	NO. BARRELS	WIDTH	HEIGHT	LENGTH
10+62.91	STD-17-85	2	18	8	36

FILL HEIGHT	CALCULATION FACTORS		SECTION LENGTH FT.	QUANTITY	
	CONCRETE. CY/FT	REINF. STEEL LB/FT		CONCRETE. C.Y.	REINF. STEEL LB.
2.99' TO 0.00'	3.5	915	36	126	32940
4.99' TO 3.00'					
9.99' TO 5.00'					
19.99 TO 10.00'					
29.99 TO 20.00'					
39.99 TO 30.00'					
49.99 TO 40.00'					
59.99 TO 50.00'					
> 60.00'					
SUB TOTALS			36	126	32940

WINGWALL TABULATION

STD. DWG.	BOX/SLAB HEIGHT FT.	ST HEIGHT FT.	CURB HEIGHT FT.	TOTAL HEIGHT FT.	DESIGN HEIGHT FT.
STD-17-1 THRU	8		0	8	9
STD-17-10 & STD-17-16 THRU	WINGWALL STD. DWG.	SKEW	FILL SLOPE	CONCRETE. C.Y.	REINF. STEEL LB.
STD-17-18	STD-17-11	90	6:1	18	1753
TOTAL QUANTITY				144	34693

BOX BRIDGE
STATION: 10+62.91
STRUCTURE: 2 @ 18' x 8'

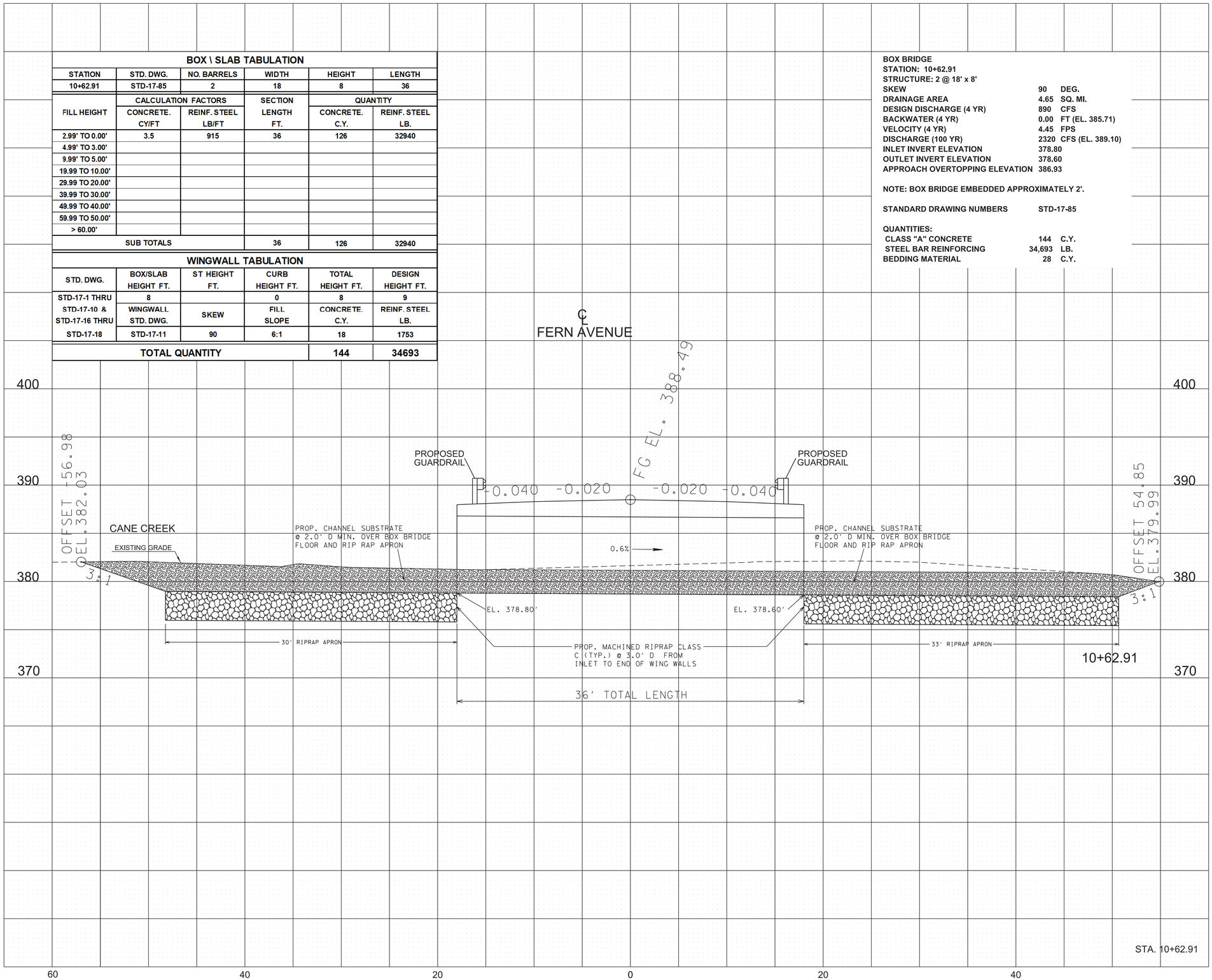
SKEW	90	DEG.
DRAINAGE AREA	4.65	SQ. MI.
DESIGN DISCHARGE (4 YR)	890	CFS
BACKWATER (4 YR)	0.00	FT (EL. 385.71)
VELOCITY (4 YR)	4.45	FPS
DISCHARGE (100 YR)	2320	CFS (EL. 389.10)
INLET INVERT ELEVATION	378.80	
OUTLET INVERT ELEVATION	378.60	
APPROACH OVERTOPPING ELEVATION	386.93	

NOTE: BOX BRIDGE EMBEDDED APPROXIMATELY 2'.

STANDARD DRAWING NUMBERS STD-17-85

QUANTITIES:

CLASS "A" CONCRETE	144	C.Y.
STEEL BAR REINFORCING	34,693	LB.
BEDDING MATERIAL	28	C.Y.



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DEPARTMENT OF TRANSPORTATION

CULVERT SECTIONS

SCALE: 1"=5' HORIZ.
1"=5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	7
PIH	2025	BRZ-300(37)	7
PS&E	2025	BRZ-300(37)	7

ENVIRONMENTAL NOTES

SUBSECTION 3 – EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES

EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES

DISTURBED AREA

(1) IF DISTURBED ACREAGE IS EQUAL TO ONE ACRE OR MORE, PLEASE CONTACT TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION AS SOON AS POSSIBLE BECAUSE AN NPDES PERMIT WILL BE REQUIRED.

(2) AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.

(3) UNLESS OTHERWISE NOTED IN THE PLANS, THE CONTRACTOR SHALL NOT CLEAR/DISTURB ANY AREA BEYOND 15 FEET FROM SLOPE LINES.

(4) PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 14 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS MULCHED, SEEDED WITH MULCH, OR OTHER TEMPORARY COVER IS APPLIED.

(5) CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION, INCLUDING STREAM AND WETLAND BUFFERS (UNLESS PERMITTED), SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.

SEDIMENT CONTROL

(6) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.

(7) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY BUT MUST BE REINSTALLED AT THE END OF THE WORKDAY OR BEFORE/DURING A PRECIPITATION EVENT.

(8) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFFSITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.), INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFFSITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE NEGOTIATED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.

(9) OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION EXIT (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.

(10) THE DEWATERING OF WORK AREAS, TRENCHES, FOUNDATIONS, EXCAVATIONS, ETC. THAT HAVE COLLECTED STORMWATER, WATER FROM VEHICLE WASH AREAS, OR GROUNDWATER SHALL BE EITHER HELD IN SETTLING BASINS OR TREATED BY FILTRATION AND/OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER DISCHARGED SHALL NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITHIN THE RECEIVING NATURAL RESOURCE. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL-VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. DISCHARGES FROM BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. DISCHARGES MUST NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITH THE RECEIVING STREAM.

INSPECTION, MAINTENANCE & REPAIR

(12) THE TDOT CONSTRUCTION SUPERVISOR (OR THEIR DESIGNEE) AND THE CONTRACTOR'S RESPONSIBLE PARTY ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT CONSTRUCTION SUPERVISOR OR THEIR DESIGNEE SHALL COMPLETE THE EPSC INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

(13) TDOT CONSULTANTS AND CONTRACTOR STAFF RESPONSIBLE FOR THE INSPECTION, IMPLEMENTATION, MAINTENANCE, AND/OR REPAIR OF EPSC MEASURES SHALL SUCCESSFULLY COMPLETE THE TDEC "LEVEL 1 - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY REFRESHER COURSES AS REQUIRED TO MAINTAIN CERTIFICATION. TDOT STAFF AND SUPERVISORS RESPONSIBLE FOR THE INSPECTION, IMPLEMENTATION, MAINTENANCE, AND/OR REPAIR OF EPSC MEASURES SHALL SUCCESSFULLY COMPLETE THE TDOT "FUNDAMENTALS OF EROSION AND SEDIMENT CONTROL" CLASS AND ANY REFRESHER COURSES AS REQUIRED TO MAINTAIN CERTIFICATION.

(14) EPSC CONTROLS SHALL BE INSPECTED ACCORDING TO PERMIT REQUIREMENTS TO VERIFY MEASURES HAVE BEEN INSTALLED AND MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS, SPECIFICATIONS, AND GOOD ENGINEERING PRACTICES. EPSC INSPECTIONS SHALL BE DOCUMENTED ON THE TDOT EPSC INSPECTION REPORT.

(15) DISCHARGE POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING EROSION AND CONTROLLING SEDIMENT INCLUDING SIGNIFICANT IMPACTS TO SURROUNDING NATURAL RESOURCES AND ADJACENT PROPERTY OWNERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWN GRADIENT LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE ROADWAY SEDIMENT TRACKING.

(16) UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE 24 HOUR TIMEFRAME, WRITTEN DOCUMENTATION SHALL BE PROVIDED IN THE FIELD DIARY AND EPSC INSPECTION REPORT. AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.

(17) INSPECTION, REPAIR, AND MAINTENANCE OF EPSC MEASURES SHALL BE PERFORMED ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE STEPS TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE EPSC MEASURES AT THE CONTRACTOR'S OWN EXPENSE.

(18) THE EPSC PLAN SHALL BE UPDATED WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY.

(19) SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS AND DOES NOT MIGRATE ONTO ADJACENT PROPERTIES AND INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT SHALL BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL, C.Y.

EROSION PREVENTION

(20) CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION.

(21) THE ACCEPTED EPSC PLAN SHALL REQUIRE THAT EPSC MEASURES BE IN PLACE BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CULVERT OR BRIDGE CONSTRUCTION, CUTTING, FILLING, OR ANY OTHER EARTHWORK OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.

(22) NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE TDOT RESPONSIBLE PARTY. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EPSC DEVICES ON THE EPSC PLAN.

(23) TEMPORARY STABILIZATION SHALL BE INITIATED WITHIN 14 CALENDAR DAYS WHEN CONSTRUCTION ACTIVITIES ON A PORTION OF THE SITE ARE TEMPORARILY CEASED AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME UNTIL AFTER 14 CALENDAR DAYS. PERMANENT STABILIZATION MEASURES IN DISTURBED AREAS SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OF ANY PHASE OF CONSTRUCTION.

(24) STEEP SLOPES SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED. STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR GREATER REGARDLESS OF HEIGHT.

(25) PERMANENT STABILIZATION WILL REPLACE TEMPORARY MEASURES AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS.

(26) TEMPORARY OR PERMANENT STABILIZATION MUST BE FREE OF FINES (SILT AND CLAY SIZED PARTICLES). UNPACKED GRAVEL CONTAINING FINES OR CRUSHER-RUN WILL NOT BE CONSIDERED SUFFICIENT STABILIZATION.

(27) DELAYING THE PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED.

PERMITS, PLANS & RECORDS

(28) THE EPSC PLAN IS TO SERVE AS AN INITIAL GUIDE FOR SITE PERSONNEL AS THE CONSTRUCTION PROCESS DEVELOPS. IT MUST BE AMENDED, MODIFIED, AND UPDATED WHENEVER A CHANGE IN THE DESIGN OR CONSTRUCTION OF THE PROJECT OCCURS. THE STAGES DEPICTED IN THE EPSC PLANS MAY NOT COINCIDE WITH THE ACTUAL PHASES OF CONSTRUCTION ESTABLISHED BY THE CONTRACTOR DURING CONSTRUCTION, THUS MODIFICATIONS WILL BE REQUIRED TO ENSURE THE EPSC PLAN IS MAINTAINED TO DEPICT CURRENT SITE CONDITIONS. IT SHOULD BE MAINTAINED SUCH THAT IT WILL ALWAYS REFLECT THE MEASURES THAT ARE INSTALLED DURING THE VARIOUS PHASES OF CONSTRUCTION. IT IS IMPRACTICAL TO DETERMINE ALL THE INTERMEDIATE PHASES OF CONSTRUCTION THAT WILL OCCUR; THUS THESE DOCUMENTS WILL HAVE TO BE UPDATED THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT.

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DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	8
PIH	2025	BRZ-300(37)	8
PS&E	2025	BRZ-300(37)	8

ENVIRONMENTAL NOTES

GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL

(29) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS SHALL BE REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFFSITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EPSC SHALL BE REMOVED FROM THE SITE.

(30) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION. APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED.

(31) CONTRACTORS SHALL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED, NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS SHALL NOT BE PERMITTED ONSITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.

(32) WHEEL WASH WATER SHALL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER SHALL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM.

(33) IF PORTABLE SANITARY FACILITIES ARE PROVIDED ON CONSTRUCTION SITES, SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY REGULATIONS. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

(34) ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ONSITE BY THE CONTRACTOR. THE CONTRACTOR SHALL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING SHALL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR'S RESPONSIBLE PARTY SHALL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL.

(35) WHEN POSSIBLE, ALL PRODUCTS SHALL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFFSITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS SHALL BE FOLLOWED.

(36) ALL PAINT CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.

(37) ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.

(38) OPEN BURNING IS PROHIBITED UNLESS IT IS SPECIFICALLY ALLOWED BY LAW. IF ALLOWED, NATURAL VEGETATION, TREES, AND UNTREATED LUMBER SHALL BE THE ONLY MATERIALS THAT CAN BE OPEN BURNED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE STATE AND LOCAL PERMITS PRIOR TO ANY BURNING.

(39) DISPOSAL OF ONSITE VEGETATION AND TREES BY CHIPPING THEM INTO MULCH IS PREFERABLE TO OPEN BURNING. THIS MULCH MAY BE USED AS AN ONSITE SOIL STABILIZATION MEASURE WHERE APPROPRIATE.

(40) WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S), CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

SUPPORT ACTIVITIES

(41) IF OFFSITE BORROW AND WASTE AREAS BECOME NECESSARY DURING THE LIFE OF THE PROJECT, THIS SUPPORT ACTIVITY SHALL BE ADDRESSED PER THE TDOT WASTE AND BORROW MANUAL.

(42) MATERIALS AND STAGING AREAS SHALL BE LOCATED IN NON-WETLAND AREAS AND ABOVE THE 100-YEAR, FEDERAL EMERGENCY MANAGEMENT AGENCY FLOODPLAIN.

(43) IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY EPSC PLANS FOR THE MATERIAL AND STAGING AREAS TO THE ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE FOR REVIEW.

SPILL PREVENTION, MANAGEMENT & NOTIFICATION

(44) ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE AND SPILLS.

(45) FOR ALL HAZARDOUS MATERIALS STORED ONSITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN UP SHALL BE CLEARLY POSTED. SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.

(46) APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT SHALL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ONSITE AND UNDER COVER. SPILL RESPONSE EQUIPMENT SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.

(47) ALL SPILLS SHALL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

(48) THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND CLEANUP.

(49) IF AN OIL SHEEN IS OBSERVED ON SURFACE WATER (E.G. SETTLING PONDS, DETENTION PONDS, SWALES), ACTION SHALL BE TAKEN IMMEDIATELY TO REMOVE THE MATERIAL CAUSING THE SHEEN. THE CONTRACTOR SHALL USE APPROPRIATE MATERIALS TO CONTAIN AND ABSORB THE SPILL. THE SOURCE OF THE OIL SHEEN WILL ALSO BE IDENTIFIED AND REMOVED OR REPAIRED AS NECESSARY TO PREVENT FURTHER RELEASES.

(50) FERTILIZERS SHALL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED. ONCE APPLIED, FERTILIZERS SHALL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER.

(51) IF A SPILL OCCURS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM AND FOR REPORTING THE SPILL TO THE TDOT PROJECT RESPONSIBLE PARTY. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

(52) WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO OR IN EXCESS OF A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD, SEE THE LATEST TENNESSEE GENERAL PERMIT NO. TNR100000 STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES SECTION 5.1 FOR REPORTING REQUIREMENTS.

(53) CONTRACTOR'S BULK FUEL AND PETROLEUM PRODUCTS STORED ONSITE OR ADJACENT TO THE R.O.W. IN ABOVE GROUND STORAGE CONTAINERS WITH A COMBINED CAPACITY OF 1320 GALLONS OR MORE SHALL HAVE SECONDARY CONTAINMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN FOR THE BULK STORAGE AND BE SOLELY RESPONSIBLE FOR OBTAINING ANY NECESSARY LOCAL, STATE, AND FEDERAL PERMITS. THE SPCC PLAN AND/OR PERMITS SHALL BE KEPT ONSITE AND A COPY PROVIDED TO THE TDOT PROJECT RESPONSIBLE PARTY PRIOR TO STORING 1320 GALLONS ON SITE.

STREAMS, WETLANDS & BUFFER ZONES

(54) ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., PIER FOOTING, RIP-RAP PLACEMENT, CULVERT/BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS (EC-STR-31) AND TEMPORARY DIVERSION CULVERTS (EC STR-32) FOR SINGLE BARREL CULVERT CONSTRUCTION.

SUBSECTION 4 – EROSION PREVENTION AND SEDIMENT CONTROL SPECIAL NOTES

EROSION PREVENTION AND SEDIMENT CONTROL SPECIAL NOTES

STREAMS, WETLANDS & BUFFER ZONES

(1) FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, A 60 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM WITH THIS DESIGNATION SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 60 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 30 FEET AT ANY MEASURED LOCATION.

(2) A 30 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 30 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 15 FEET AT ANY MEASURED LOCATION. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES.

(3) BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND MUST NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES. BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MAY BE USED. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

SEALED BY

ELIZABETH G. DAVIS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 124129
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	8
PIH	2025	BRZ-300(37)	9
PS&E	2025	BRZ-300(37)	9

ENVIRONMENTAL NOTES

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UTILITY RELOCATION

(5) STORMWATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND TREATED PRIOR TO DISCHARGE.

(6) SILT FENCE SHALL BE INSTALLED ON THE DOWNGRADIENT SIDE OF STOCKPILED SOIL. TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING DRY CONDITIONS AND STABILIZED BY THE END OF THE WORK DAY.

(7) UTILITY CROSSINGS IN ENVIRONMENTAL FEATURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. ENVIRONMENTAL PERMITS APPLY TO UTILITIES IN THIS PROJECT. THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE PERMITS.

(8) IT IS THE RESPONSIBILITY OF THE STATE UTILITY CONTRACTOR TO PROTECT EXPOSED EARTH FROM EROSION AND TO PROVIDE FOR CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFFSITE IN THE EVENT OF RAIN. DURING THE PROGRESSION OF THEIR WORK, EXPOSED EARTH AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EROSION. AT NO TIME SHALL EXPOSED EARTH RESULTING FROM THEIR OPERATIONS HAVE UNPROTECTED ACCESS TO FLOWING OFFSITE AND ENTERING WATERS OF THE STATE/U.S.

(9) FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES), TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN SEVEN DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOILS OF EXCAVATED EARTH SHALL BE LOCATED WITHIN TDOT EPSC MEASURES OR RECEIVE SEPARATE EPSC MEASURES. IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE STATE UTILITY CONTRACTOR UNTIL SUCH TIME AS THE TRENCH IS BACKFILLED.

(10) IN REGARD TO EPSC, TDEC REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS ON THIS PROJECT. THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT.

(11) TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORMWATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EPSC MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE TDOT PROJECT RESPONSIBLE PARTY.

(12) FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE TDOT RIGHT-OF-WAY, EPSC MEASURES SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH FINAL VEGETATIVE COVER.

(13) THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS AS APPROVED BY THE TDOT RESPONSIBLE PARTY.

(14) THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EPSC MEASURES TO REPLACE ONSITE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE TDOT RESPONSIBLE PARTY BEFORE COMMENCING WORK.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	9
PIH	2025	BRZ-300(37)	10
PS&E	2025	BRZ-300(37)	10

TABULATED EPSC QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 03LCIT-F3-002
(3)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	15
	209-05	SEDIMENT REMOVAL	C.Y.	47
(4)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	400
	209-08.08	ENHANCED ROCK CHECK DAM	EACH	9
(5)	209-09.03	SEDIMENT FILTER BAG (15' X 15')	EACH	2
(10)	209-65.04	TEMPORARY IN STREAM DIVERSION	L.F.	165
(1) (2) (6)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	51
	707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	220
(3)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100
(7)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	432
	740-11.01	TEMPORARY SEDIMENT TUBE 8IN	L.F.	50
(8)	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	5
(9)	801-03	WATER (SEEDING & SODDING)	M.G.	6

FOOTNOTES

(1) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATION FOR MAINTENANCE REPLACEMENT.

(2) ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.

(3) TO BE USED FOR TEMPORARY CONSTRUCTION EXITS.

(4) 214 L.F. TO BE USED FOR SEDIMENT FILTER BAG.

(5) ALLOW ONE (1) EXTRA FILTER BAG FOR REPLACEMENT AS NEEDED.

(6) TO BE USED FOR SEDIMENT FILTER BAG.

(7) 93 S.Y. TO BE USED FOR SEDIMENT FILTER BAG.
172 S.Y. TO BE USED FOR TEMPORARY CONSTRUCTION EXITS.

(8) THE COST OF FERTILIZER AND LIME USED IN INITIAL SEED BED PREPARATION IS TO BE INCLUDED IN THE COST OF SEEDING. SEE SECTION 801 OF TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

(9) 1 M.G. TO BE USED FOR EPSC.
5 M.G. TO BE USED FOR SODDING.

(10) 90 L.F. TO BE USED FOR STAGE 2A.
75 L.F. TO BE USED FOR STAGE 2B.

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

	SYMBOL	ITEM	STD. DWG.
(1)		SEDIMENT FILTER BAG	EC-STR-2
(2)	SFB SFB SFB SFB	SILT FENCE WITH WIRE BACKING	EC-STR-3C
		ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
(1)	TCE	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	IN DIV	INSTREAM DIVERSION	EC-STR-30
	TUBE 8" TUBE 8"	8 INCH SEDIMENT TUBE	EC-STR-37
	HVF HVF	HIGH VISIBILITY FENCE	S-F-1

(1) TO BE FIELD LOCATED BY ENGINEER.

(2) J-HOOKS SHALL BE INSTALLED FOR SILT FENCE INSTALLED ACROSS A CONTOUR.

ALL EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) LEGEND & TABULATION

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	10
PIH	2025	BRZ-300(37)	11
PS&E	2025	BRZ-300(37)	11

03LCIT-F3-002
BEGIN PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F2-002
BEGIN PROJECT NO. BRZ-300(37) R.O.W.
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F3-002
END PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 11+54.71
N 631242.4130 E 1347634.3062

03LCIT-F2-002
END PROJECT NO. BRZ-300(37) R.O.W.
STA. 12+40.17
N 631327.6494 E 1347629.0928

EX-FERN AVE STA. 9+70.18 =
EX- CSX RAILROAD STA. 4539+48.00
ELEV. 420.30
N 631057.9101 E 1347631.2154

EX-FERN AVE STA. 9+55.97=
EX- CSX RAILROAD STA. 4539+47.97
ELEV. 417.63
N 631043.7048 E 1347630.9754
CSXT MP 00N 85.92
CSX#350894E

EX-FERN AVE STA. 9+00.00
N 630987.7390
E 1347630.0297

PRESENT CSX R.O.W.
EX. CSX RAILROAD CL
S 89° 10' 23" E
S 89° 12' 03" E
14.30'
TOP OF BANK
CANE CREEK
LIMIT OF LAND DISTURBANCE
TEMP. CONST. EASEMENT
PROPOSED PERMANENT EASEMENT
PC 11+48.92
PT 12+37.21
WOODS
TO BE PLUGGED AND ABANDONED
TOP- 386.98
INLET FULL
PRESENT R.O.W.
N 7° 10' 11" W
FERN AVENUE CL
N 0° 58' 05" E
ASPHALT
BEG. TUNNEL STA. 9+26.73
END TUNNEL STA. 10+00
BEG. EXIST. BR STA. 10+48.89
END EXIST. BR STA. 10+77.19
29' x 21.6' 1-SPAN EXIST. CONC. BR ID# 030A4390003 TO BE REMOVED
PROP. ROW
OUT - 1
OUT - 2
OUT - 3
OUT - 4
OUT - 5
STR-1
STR-2
FIELD
4540
14.12'

ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., PIER FOOTING, RIP-RAP PLACEMENT, CULVERT/BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS (EC-STR-31) AND TEMPORARY DIVERSION CULVERTS (EC STR-32) FOR SINGLE BARREL CULVERT CONSTRUCTION.

OUTFALLS		
Outfall No.	Drainage Area	Average Slope
1	.170 AC	-3.722 %
2	.048 AC	-7.010 %
3	.046 AC	-10.082 %
4	.050 AC	2.032 %
5	.009 AC	12.171 %

EXISTING BRIDGE:	1 SPAN
BRIDGE I.D. #	030A4390003
STATION:	10+62.73
DIMENSIONS APPROX.:	29' SPAN X 4.5' HEIGHT
STRUCTURE:	CONCRETE BEAM
SUPERSTRUCTURE:	CONC. DECK GIRDER & STEEL I-BEAM BRIDGE
SKEW:	90°
DRAINAGE AREA:	4.65 SQ. MI.

DRAINAGE/ HYDRAULIC DATA FOR BRIDGE
STATION 10+62.73 STREAM NAME CANE CREEK
STREAM BED LINING: SAND, CLAY, SILT
DIRECTION OF FLOW EAST
DRAINAGE AREA 4.65 SQ.MI. ( ) FLAT, (X) ROLLING, ( ) HILLY, ( ) MTNS.
PRESENT STRUCTURE: SPAN APPROX. 29' HEIGHT APPROX.4.5' AT FLOWLINE STRUCTURE: CONCRETE BEAM SUPERSTRUCTURE: CONC. DECK GIRDER & STEEL I-BEAM BRIDGE
BEGIN STATION-OFFSET 10+48.89 END STATION-OFFSET 10+77.19
LOW BEAM ELEV. 387.37 LOCATION 10+63.11
INLET INVERT ELEV. N/A OUTLET INVERT. N/A
NORMAL WATER ELEV.382.50; EXTREME HIGHWATER: 16.09' DATE 06/24/2020
BACKWATER FROM WHAT STREAM (IF APPLICABLE): N/A
EXISTING STRUCTURE CONDITION: SUFFICIENCY RATING 36.2

ALL SEDIMENT FILTER BAGS ARE 15' X 15'

STAGE 1
EXISTING CONTOURS
CLEARING & GRUBBING

SEALED BY
ELIZABETH C. DAVIS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 124129
STATE OF TENNESSEE

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS
STA.9+00 TO STA.13+88
SCALE: 1"=20'

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	11
PIH	2025	BRZ-300(37)	12
PS&E	2025	BRZ-300(37)	12

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CSX#350894E

EX-FERN AVE STA. 9+00.00
N 630987.7390
E 1347630.0297

FERN AVENUE CL
N 0° 58' 05" E

BEG. TUNNEL
STA. 9+26.73

END TUNNEL
STA. 10+00

EX. CSX RAILROAD CL
S 89° 10' 22" E
S 89° 12' 03" E

PRESENT CSX R.O.W.

TOP OF BANK

CANE CREEK

LIMIT OF LAND DISTURBANCE

PROP. 2 @ 18' X 8'
BOX BR., SKEW 90°
TOTAL LENGTH = 36'

STR-1

STR-2

PC 11+48.92

PT 12+37.21

TEMP. CONST. EASEMENT

PROPOSED PERMANENT EASEMENT

TO BE PLUGGED AND ABANDONED

PROPOSED PERMANENT EASEMENT

PRESENT R.O.W.

N 7° 10' 11" W

ASPHALT

PROP. ROW

OUT - 1

OUT - 4

OUT - 5

OUT - 6

OUT - 7

IN - DIV.

WOODS

FIELD

4540

14.30'

14.12'

ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., PIER FOOTING, RIP-RAP PLACEMENT, CULVERT/BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS (EC-STR-31) AND TEMPORARY DIVERSION CULVERTS (EC STR-32) FOR SINGLE BARREL CULVERT CONSTRUCTION.

EXISTING BRIDGE:	1 SPAN
BRIDGE I.D. #	030A4390003
STATION:	10+62.73
DIMENSIONS APPROX.:	29' SPAN X 4.5' HEIGHT
STRUCTURE:	CONCRETE BEAM
SUPERSTRUCTURE:	CONC. DECK GIRDER & STEEL I-BEAM BRIDGE
SKEW:	90°
DRAINAGE AREA:	4.65 SQ. MI.

OUTFALLS

Outfall No.	Drainage Area	Average Slope
1	.170 AC	-3.722 %
4	.048 AC	-7.010 %
5	.046 AC	-10.082 %
6	.050 AC	2.032 %
7	.009 AC	12.171 %

ALL SEDIMENT FILTER BAGS ARE 15' X 15'

DRY AREA TO ALLOW FOR INSTREAM WORK

STAGE 2A
EXISTING & PROPOSED CONTOURS

SEALED BY

ELIZABETH C. DAVID
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 124199
STATE OF TENNESSEE

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.9+00 TO STA.13+88

SCALE: 1"=20'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	12
PIH	2025	BRZ-300(37)	13
PS&E	2025	BRZ-300(37)	13

03LCIT-F3-002
BEGIN PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F2-002
BEGIN PROJECT NO. BRZ-300(37) R.O.W.
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F3-002
END PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 11+54.71
N 631242.4130 E 1347634.3062

03LCIT-F2-002
END PROJECT NO. BRZ-300(37) R.O.W.
STA. 12+40.17
N 631327.6494 E 1347629.0928

EX-FERN AVE STA. 9+70.18 =
EX- CSX RAILROAD STA. 4539+48.00
ELEV. 420.30
N 631057.9101 E 1347631.2154

EX-FERN AVE STA. 9+55.97=
EX- CSX RAILROAD STA. 4539+47.97
ELEV. 417.63
N 631043.7048 E 1347630.9754
CSXT MP 00N 85.92
CSX#350894E

EX-FERN AVE STA. 9+00.00
N 630987.7390
E 1347630.0297

FERN AVENUE CL
N 0° 58' 05" E

BEG. TUNNEL
STA. 9+26.73

END TUNNEL
STA. 10+00

EX. CSX RAILROAD CL
S 89° 12' 03" E

EX. CSX RAILROAD CL
S 89° 10' 23" E

PRESENT CSX R.O.W.

TOP OF BANK

CANE CREEK

LIMIT OF LAND DISTURBANCE

PROP. 2 @ 18' X 8'
BOX BR., SKEW 90°
TOTAL LENGTH = 36'

STR-1

STR-2

PC 11+48.92

PT 12+37.21

TEMP. CONST. EASEMENT

PROPOSED PERMANENT EASEMENT

OUT - 1

OUT - 6

OUT - 7

OUT - 8

OUT - 9

TUBE

PROP. ROW

WOODS

FIELD

ASPHALT

PRESENT R.O.W.

N 7° 10' 11" W

14.30'

14.12'

4540

ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., PIER FOOTING, RIP-RAP PLACEMENT, CULVERT/BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS (EC-STR-31) AND TEMPORARY DIVERSION CULVERTS (EC STR-32) FOR SINGLE BARREL CULVERT CONSTRUCTION.

OUTFALLS

Outfall No.	Drainage Area	Average Slope
1	.170 AC	-3.722 %
6	.088 AC	-.500 %
7	.103 AC	-.500 %
8	.068 AC	-3.000 %
9	.062 AC	-3.000 %

ALL SEDIMENT FILTER BAGS ARE 15' X 15'

DRY AREA TO ALLOW FOR INSTREAM WORK

STAGE 2B
PROPOSED CONTOURS

SEALED BY

ELIZABETH C. DAVIS
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AGRICULTURE
COMMERCE
NO. 124291
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.9+00 TO STA.13+88

SCALE: 1"=20'

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	13
PIH	2025	BRZ-300(37)	14
PS&E	2025	BRZ-300(37)	14

N

03LCIT-F3-002
BEGIN PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F2-002
BEGIN PROJECT NO. BRZ-300(37) R.O.W.
STA. 10+00.00
N 631087.7247 E 1347631.7192

03LCIT-F3-002
END PROJECT NO. BRZ-300(37) CONSTRUCTION
STA. 11+54.71
N 631242.4130 E 1347634.3062

03LCIT-F2-002
END PROJECT NO. BRZ-300(37) R.O.W.
STA. 12+40.17
N 631327.6494 E 1347629.0928

EX-FERN AVE STA. 9+70.18 =
EX- CSX RAILROAD STA. 4539+48.00
ELEV. 420.30
N 631057.9101 E 1347631.2154

EX-FERN AVE STA. 9+55.97=
EX- CSX RAILROAD STA. 4539+47.97
ELEV. 417.63
N 631043.7048 E 1347630.9754
CSXT MP 00N 85.92
CSX#350894E

EX-FERN AVE STA. 9+00.00
N 630987.7390
E 1347630.0297

FERN AVENUE CL
N 0° 58' 05" E

BEG. TUNNEL
STA. 9+26.73

END TUNNEL
STA. 10+00

EX. CSX RAILROAD CL
S 89° 12' 03" E

EX. CSX RAILROAD CL
S 89° 10' 23" E

4540

PRESENT CSX R.O.W.

TOP OF BANK

CANE CREEK

14.30'

14.12'

10
BEG. LT. SPECIAL DITCH
STA. 10+20
OFFSET 31.31'

END LT. SPECIAL DITCH
STA. 10+39.00
OFFSET 32.56'

CLASS "C" RIP-RAP
APPROX.
1776 SF

BEGIN STR-1 IMPACT
STR-1 STA. 12+91.94
FERN AVE. STA. 10+62.03
48.94' (LT)

PROP. 2 @ 18' X 8'
BOX BR., SKEW 90°
TOTAL LENGTH = 36'

PC 11+48.92

PT 12+37.21

OUT - 1

TEMP. CONST. EASEMENT

PROPOSED PERMANENT EASEMENT

BEG. LT. SPECIAL DITCH
STA. 10+85.07
OFFSET 38.26'

END LT. SPECIAL DITCH
STA. 11+47.00
OFFSET 13.29'

STR-1

STR-2

OUT - 6

OUT - 7

OUT - 8

PRESENT R.O.W.

N 7° 10' 11" W

ASPHALT

END RT. SPECIAL DITCH
STA. 11+17.00
OFFSET 13.61'

PROP. ROW

BEG. RT. SPECIAL DITCH
STA. 10+84.80
OFFSET 38.96'

BEG. RT. SPECIAL DITCH
STA. 10+20
OFFSET 29.83'

END RT. SPECIAL DITCH
STA. 10+37.00
OFFSET 34.93'

CLASS "C" RIP-RAP
APPROX. 2003 SF

END STR-1 IMPACT
STR-1 STA. 13+90.59
FERN AVE. STA. 10+56.46
52.03' (RT)

PROP. SOD

OUTFALLS		
Outfall No.	Drainage Area	Average Slope
1	.170 AC	-3.722 %
6	.088 AC	-.500 %
7	.103 AC	-.500 %
8	.068 AC	-3.000 %
9	.062 AC	-3.000 %

STAGE 3
PROPOSED CONTOURS
FINAL STABILIZATION

SEALED BY

ELIZABETH C. DAVIS
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STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.9+00 TO STA.13+88

SCALE: 1"=20'

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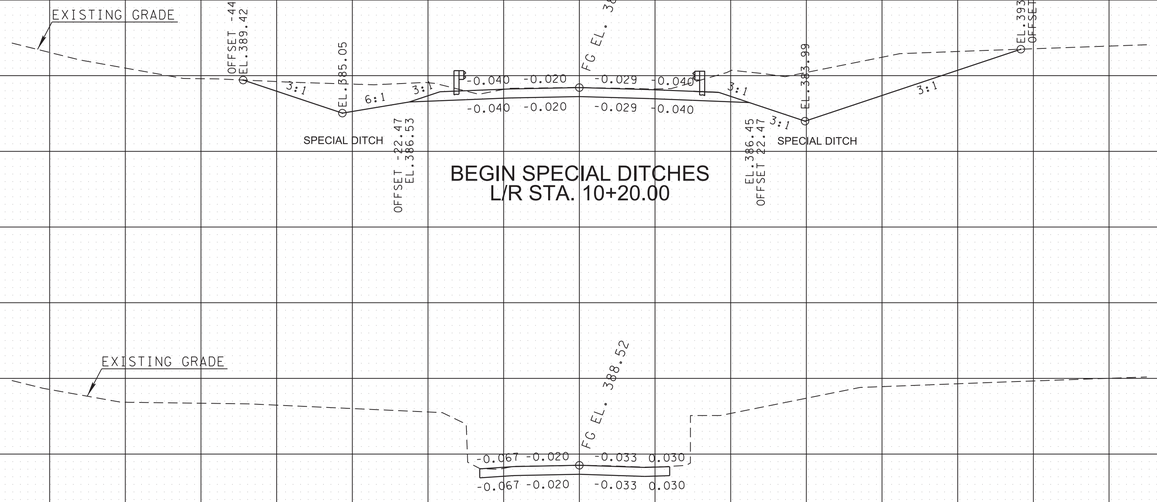
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	14
PIH	2025	BRZ-300(37)	15
PS&E	2025	BRZ-300(37)	15

CL
FERN AVENUE

VOLUME
(C.Y.)

AREA
(S.Y.)



BEGIN SPECIAL DITCHES
L/R STA. 10+20.00

10+20.00

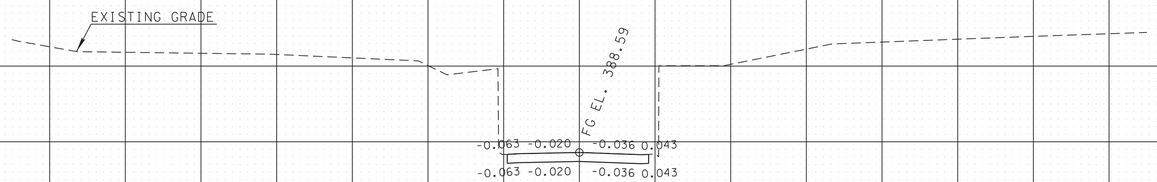
CUT 57
FILL 0

CUT 276
FILL 0

10+10.00

CUT 7
FILL 0

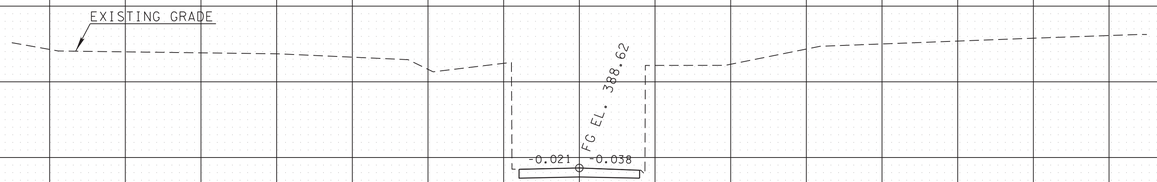
CUT 29
FILL 0



10+03.00

CUT 2
FILL 0

CUT 22
FILL 0



BEGIN CONSTRUCTION
MATCH EXISTING
STA. 10+00

10+00.00

CUT 0
FILL 0

CUT 18
FILL 0

FERN AVENUE
BEGIN STA. 10+00.00
END STA. 10+20.00

100 80 60 40 20 0 20 40 60 80 100

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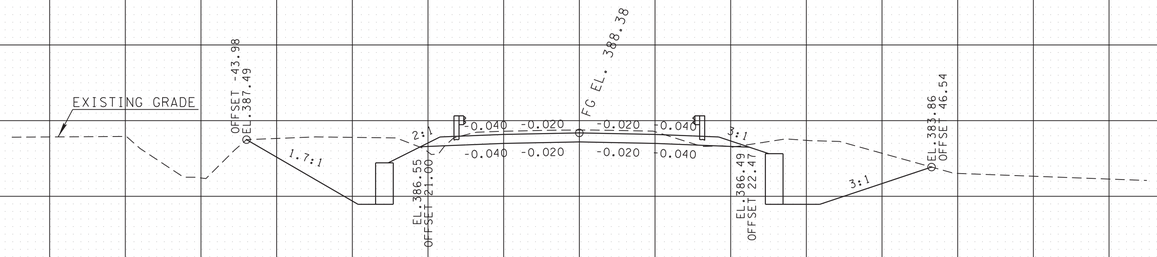
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	15
PIH	2025	BRZ-300(37)	16
PS&E	2025	BRZ-300(37)	16

CL
FERN AVENUE

VOLUME (C.Y.)

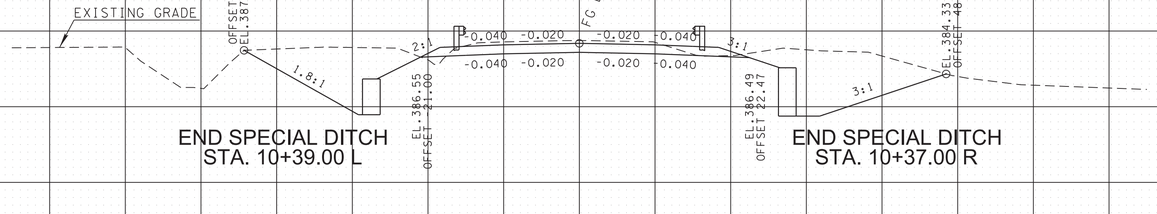
AREA (S.Y.)



CUT 11
FILL 0

10+40.00

CUT 289
FILL 2



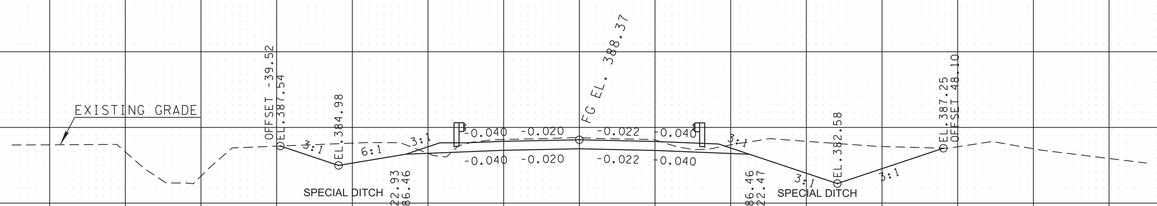
CUT 40
FILL 0

END SPECIAL DITCH
STA. 10+39.00 L

END SPECIAL DITCH
STA. 10+37.00 R

10+39.00

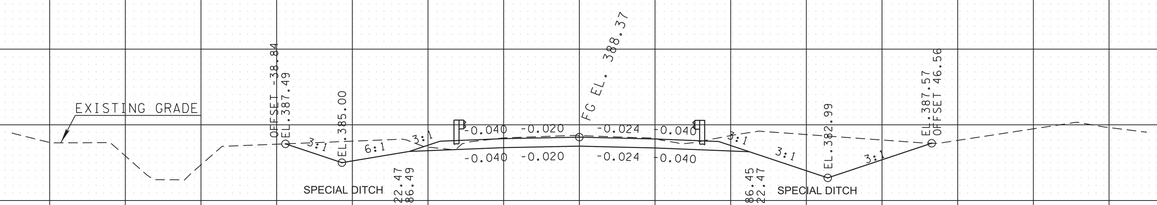
CUT 286
FILL 2



CUT 25
FILL 0

10+34.12

CUT 159
FILL 1



CUT 81
FILL 0

10+30.00

CUT 164
FILL 0

FERN AVENUE

BEGIN STA. 10+30.00
END STA. 10+40.00

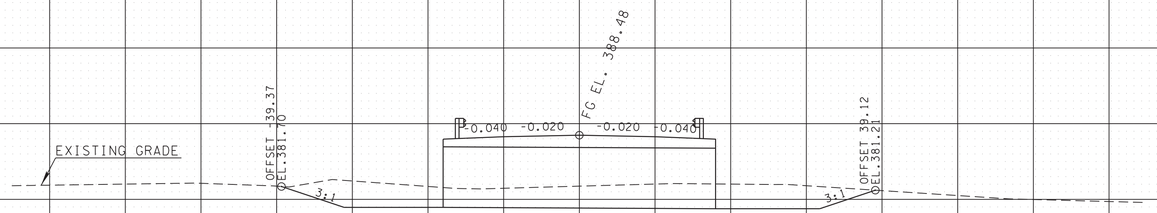
100 80 60 40 20 0 20 40 60 80 100

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	16
PIH	2025	BRZ-300(37)	17
PS&E	2025	BRZ-300(37)	17

CL
FERN AVENUE

VOLUME
(C.Y.)

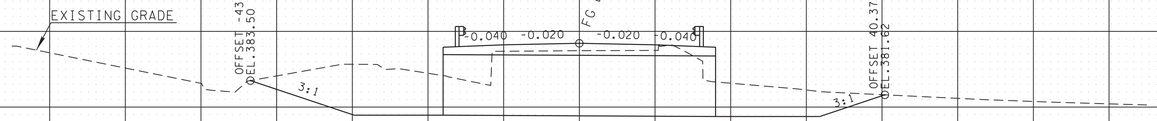
AREA
(S.Y.)



CUT 126
FILL 0

10+60.00

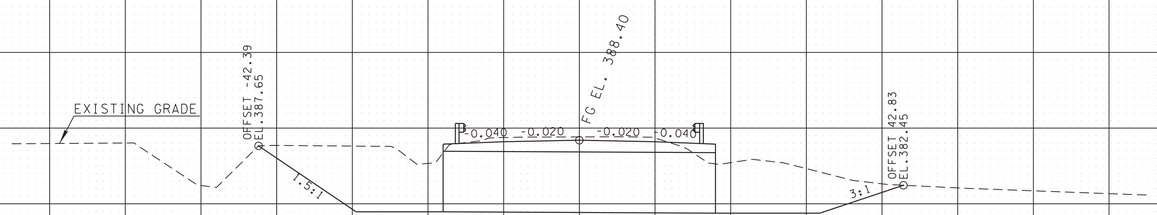
CUT 214
FILL 0



CUT 101
FILL 0

10+50.00

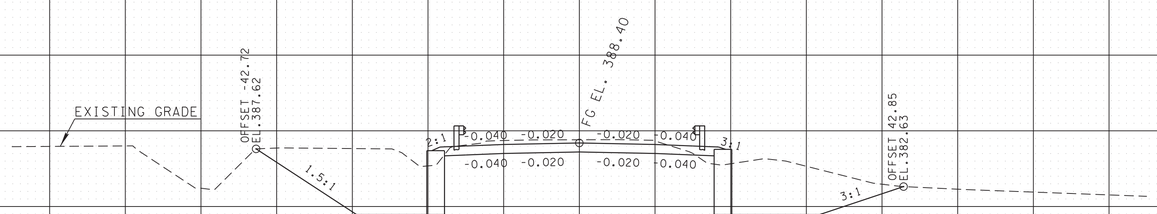
CUT 466
FILL 0



CUT 17
FILL 0

10+44.91

CUT 603
FILL 0



CUT 44
FILL 0

10+43.91

CUT 325
FILL 2

BEGIN BRIDGE
STA. 10+43.91

FERN AVENUE
BEGIN STA. 10+43.91
END STA. 10+60.00

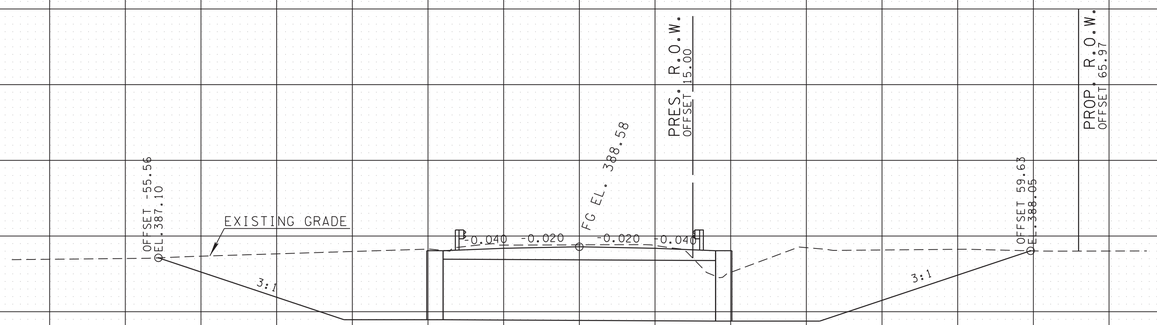
100 80 60 40 20 0 20 40 60 80 100

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	17
PIH	2025	BRZ-300(37)	18
PS&E	2025	BRZ-300(37)	18

CL
FERN AVENUE

VOLUME
(C.Y.)

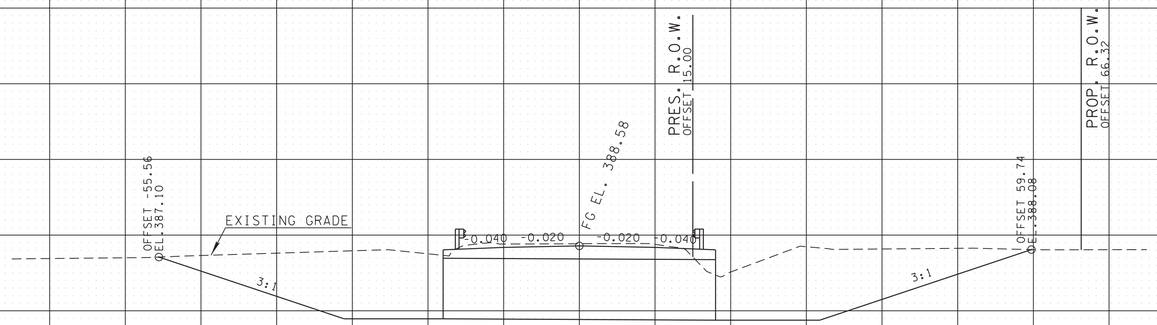
AREA
(S.Y.)



CUT 28
FILL 0

10+80.91

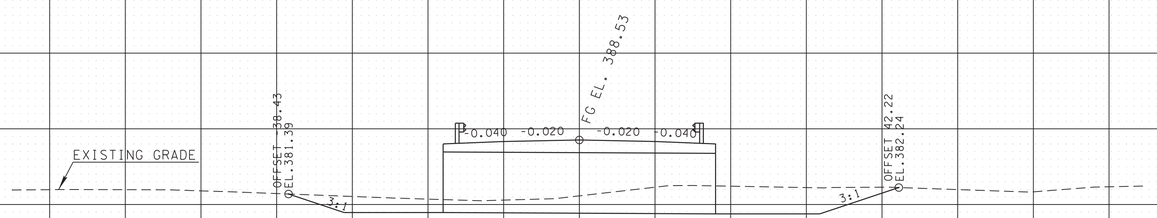
CUT 821
FILL 0



CUT 186
FILL 0

10+80.00

CUT 816
FILL 0



CUT 75
FILL 0

10+70.00

CUT 191
FILL 0

FERN AVENUE
BEGIN STA. 10+70.00
END STA. 10+80.91

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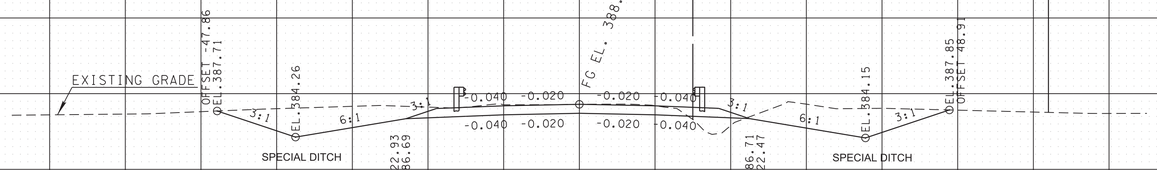
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	18
PIH	2025	BRZ-300(37)	19
PS&E	2025	BRZ-300(37)	19

CL
FERN AVENUE

VOLUME
(C.Y.)

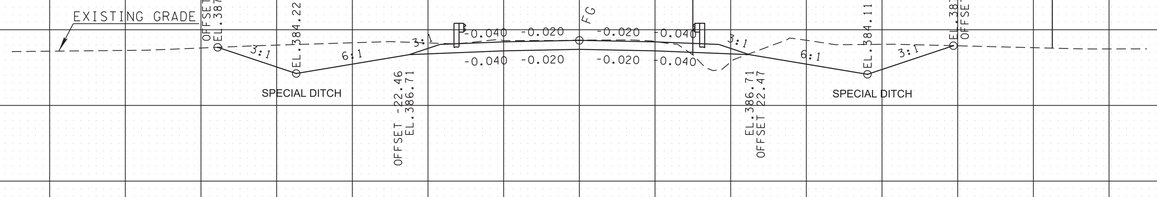
AREA
(S.Y.)



CUT 9
FILL 0

10+91.33

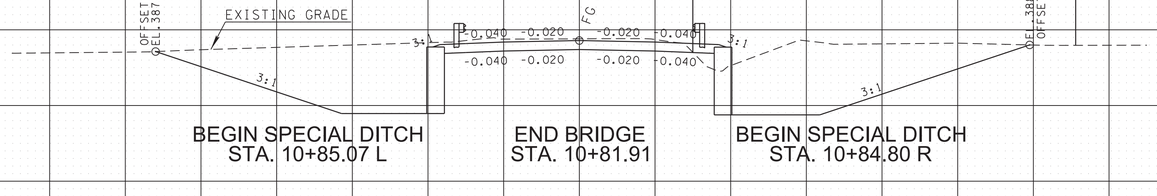
CUT 172
FILL 9



CUT 106
FILL 2

10+90.00

CUT 174
FILL 10



CUT 25
FILL 0

10+81.91

CUT 531
FILL 4

410
400
390
380

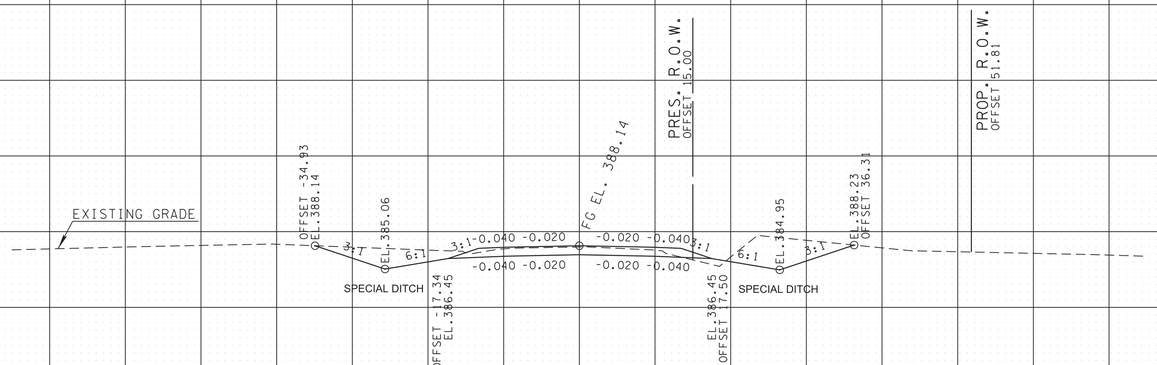
100 80 60 40 20 0 20 40 60 80 100

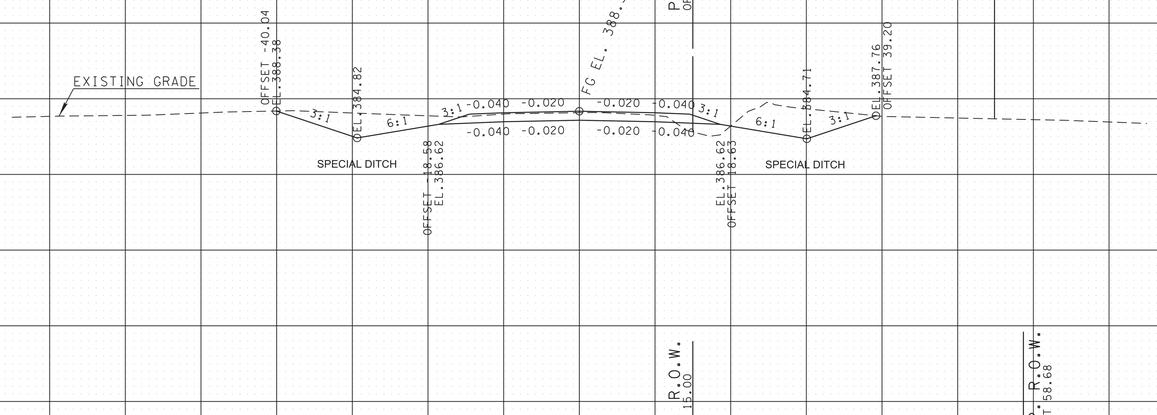
FERN AVENUE
BEGIN STA. 10+81.91
END STA. 10+91.33

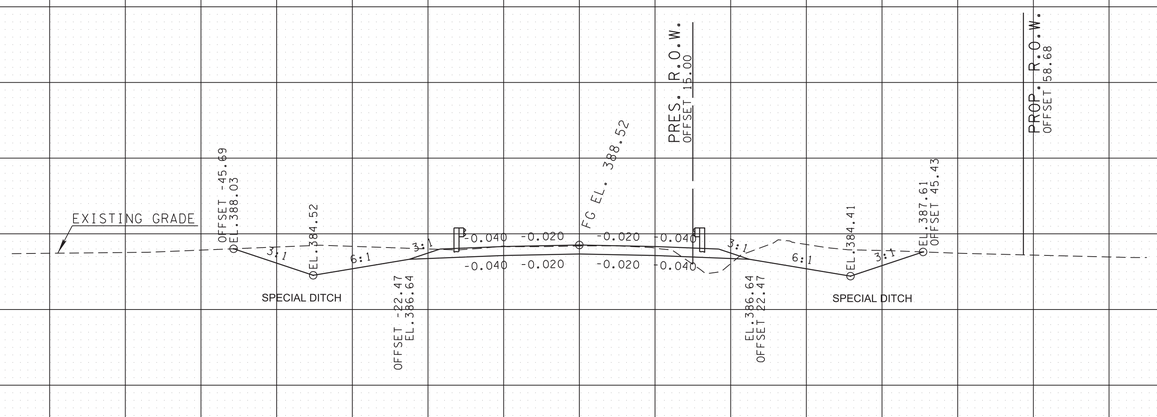
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	19
PIH	2025	BRZ-300(37)	20
PS&E	2025	BRZ-300(37)	20

CL
FERN AVENUE

VOLUME (C.Y.)		AREA (S.Y.)	
CUT 32 FILL 2	11+18.00	CUT 97 FILL 3	
CUT 50 FILL 3	11+10.00	CUT 120 FILL 8	
CUT 52 FILL 3	11+00.00	CUT 151 FILL 9	







100 80 60 40 20 0 20 40 60 80 100

FERN AVENUE

BEGIN STA. 11+00.00
END STA. 11+18.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	20
PIH	2025	BRZ-300(37)	21
PS&E	2025	BRZ-300(37)	21

CL
FERN AVENUE

VOLUME
(C.Y.)

AREA
(S.Y.)

410
400
390
380

EXISTING GRADE

PRES. R.O.W.
OFFSET 15.00

PROP. R.O.W.
OFFSET 45.70

OFFSET -25.15
EL. 387.83

EL. 385.54

OFFSET -14.86
EL. 386.11

FG EL. 387.71

-0.040 -0.020 -0.026 -0.040

-0.040 -0.020 -0.026 -0.040

SPECIAL DITCH

SPECIAL DITCH

EL. 386.04
OFFSET 15.24

EL. 385.43

EL. 388.31
OFFSET 27.57

CUT 8
FILL 0

11+34.00

CUT 51
FILL 0

PRES. R.O.W.
OFFSET 15.00

PROP. R.O.W.
OFFSET 47.23

OFFSET -27.45
EL. 387.88

EL. 385.42

OFFSET -15.48
EL. 386.19

FG EL. 387.81

-0.040 -0.020 -0.025 -0.040

-0.040 -0.020 -0.025 -0.040

SPECIAL DITCH

SPECIAL DITCH

EL. 386.14
OFFSET 15.81

EL. 385.31

EL. 388.41
OFFSET 30.5

CUT 28
FILL 0

11+30.00

CUT 62
FILL 0

PRES. R.O.W.
OFFSET 15.00

PROP. R.O.W.
OFFSET 51.04

OFFSET -33.50
EL. 388.04

EL. 385.12

OFFSET -7.03
EL. 386.40

FG EL. 388.08

-0.040 -0.020

-0.021 -0.040

-0.040 -0.020

-0.021 -0.040

SPECIAL DITCH

SPECIAL DITCH

EL. 386.39
OFFSET 7.22

EL. 385.01

EL. 388.35
OFFSET 35.53

CUT 7
FILL 0

11+20.00

CUT 89
FILL 2

100 80 60 40 20 0 20 40 60 80 100

FERN AVENUE

BEGIN STA. 11+20.00
END STA. 11+34.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	21
PIH	2025	BRZ-300(37)	22
PS&E	2025	BRZ-300(37)	22

CL
FERN AVENUE

VOLUME
(C.Y.)

AREA
(S.Y.)

11+50.00

EXISTING GRADE

PROP. R.O.W.
OFFSET 40.00

FG EL. 387.39

-0.006 -0.032
-0.006 -0.032

END CONSTRUCTION
MATCH EXISTING
STA. 11+48.92

CUT 2
FILL 0

11+48.92

CUT 21
FILL 0

PROP. R.O.W.
OFFSET 40.73

EXISTING GRADE

OFFSET -13.79
EL. 386.10

OFFSET -12.84
EL. 386.01

OFFSET -11.89
EL. 385.93

FG EL. 387.43

-0.040 -0.008 -0.031 -0.040
-0.040 -0.008 -0.031 -0.040

SPECIAL DITCH
SPECIAL DITCH

EL. 385.75
OFFSET 13.41

EL. 386.20
OFFSET 14.96

CUT 9
FILL 0

11+47.00

CUT 30
FILL 0

END SPECIAL DITCHES
L/R STA. 11+47.00

PROP. R.O.W.
OFFSET 43.41

PRES. R.O.W.
OFFSET 15.00

EXISTING GRADE

OFFSET -21.83
EL. 387.69

OFFSET -13.93
EL. 386.06

EL. 385.72

FG EL. 387.57

0.040 -0.014 -0.028 -0.040
-0.040 -0.014 -0.028 -0.040

SPECIAL DITCH
SPECIAL DITCH

EL. 385.61
OFFSET 13.43

EL. 385.92
OFFSET 14.40

OFFSET 17.18

CUT 10
FILL 0

11+40.00

CUT 36
FILL 0

FERN AVENUE

BEGIN STA. 11+40.00
END STA. 11+50.00

410
400
390
380

100 80 60 40 20 0 20 40 60 80 100

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	T1
PIH	2025	BRZ-300(37)	T1
PS&E	2025	BRZ-300(37)	T1

PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

A. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES OR TRAFFIC LANE AND SHOULDER WHERE THE TRAFFIC LANE IS BEING USED BY TRAFFIC, CAUSED BY BASE, PAVING OR RESURFACING:

1. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEEDING 1.75 INCHES:

   a. WARNING SIGNS, UNEVEN LANES (W8-11) AND/OR SHOULDER DROP-OFF WITH PLAQUE (W8-17 AND W8-17P), SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

   b. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.

   c. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.

   d. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE TRAFFIC LANE BEING UTILIZED BY TRAFFIC AND SHOULDER THE DIFFERENCE IN ELEVATION SHALL BE ELIMINATED WITHIN SEVEN WORKDAYS AFTER THE CONDITION IS CREATED.

2. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 1.75 INCHES AND NOT EXCEEDING 6 INCHES, TRAFFIC IS NOT TO BE ALLOWED TO TRAVERSE THIS DIFFERENCE IN ELEVATION.

   a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

      (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

      (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

   b. IF THE DIFFERENCE IN ELEVATION IS ELIMINATED OR DECREASED TO 2 INCHES OR LESS BY THE END OF EACH WORKDAY, CONES MAY BE USED DURING DAYLIGHT HOURS IN LIEU OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES MENTIONED IN PARAGRAPH a, PROVIDED WARNING SIGNS ARE ERECTED. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

   c. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE THROUGH TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 3 INCHES, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE REGIONAL TRAFFIC ENGINEER. SEE PARAGRAPH a REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

   IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 2 MILES IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

3. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 6 INCHES BUT NOT EXCEEDING 18 INCHES, THE CONTRACTOR, WITH THE ENGINEER'S APPROVAL, MAY UTILIZE ONE OF THE FOLLOWING:

   a. THE CONTRACTOR SHALL ACCOMPLISH SEPARATION BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

      (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

      (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

   IN ORDER TO USE THIS METHOD, THE CONTRACTOR MUST REDUCE THE DIFFERENCE IN ELEVATION TO 6 INCHES OR LESS BY THE END OF THE WORKDAY THAT THE CONDITION IS CREATED.

   b. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a, AND CONSTRUCT A STONE WEDGE WITH A 4:1 SLOPE, OR FLATTER, TO ELIMINATE THE VERTICAL OFFSET IF THE LOWER ELEVATION IS AT OR BELOW SUBGRADE AT THE END OF EACH DAY.

   c. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a AND IF THE LOWER ELEVATION IS BASE STONE OR ASPHALT PAVEMENT, PLACEMENT OF SUBSEQUENT LAYERS OF PAVEMENT MUST BEGIN THE NEXT WORK DAY AND PROGRESS CONTINUOUSLY UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED OR REDUCED TO SIX INCHES OR LESS.

   d. THE CONTRACTOR SHALL PROVIDE SEPARATION BY PORTABLE BARRIER RAIL.

   FOR PRECEDING CONDITIONS a, b, AND c, THE CONTRACTOR SHALL USE THE SHOULDER DROP-OFF WARNING SIGN WITH PLAQUE (W8-17 AND W8-17P). IT SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN THE SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

4. FOR DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 18 INCHES.

   SEPARATION WILL BE PROVIDED BY USE OF PORTABLE BARRIER RAIL.

   IN THIS SITUATION THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

B. IF THE DIFFERENCE IN ELEVATION IS WITHIN 30 FEET OF THE NEAREST TRAFFIC LANE BEING USED BY TRAFFIC CAUSED BY GRADING, EXCAVATION FOR UTILITIES, DRAINAGE STRUCTURES, UNDERCUTTING, ETC.:

1. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 3/4 INCH AND NOT EXCEEDING 2 INCHES.

   a. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

2. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES:

   a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

      (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

      (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

3. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 6 INCHES:

   a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

      (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

      (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

   b. ELIMINATE VERTICAL OFFSET BY CONSTRUCTING A STONE WEDGE OR GRADING TO A 4:1 SLOPE, OR FLATTER, OR USE PORTABLE BARRIER RAIL.

   THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE WITHIN 8 FEET OF A TRAFFIC LANE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

C. IF THE DIFFERENCE IN ELEVATION IS FARTHER THAN 8 FEET FROM THE NEAREST TRAFFIC LANE BUT NOT MORE THAN 30 FEET FROM THE NEAREST TRAFFIC LANE:

SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

1. WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

2. WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE
DROP-OFF NOTES
FOR
TRAFFIC CONTROL

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	T2
PIH	2025	BRZ-300(37)	T2
PS&E	2025	BRZ-300(37)	T2

TABULATED TRAFFIC CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY 03LCIT-F3-002
712-01	TRAFFIC CONTROL	LS	1
712-05.01	WARNING LIGHTS (TYPE A)	EACH	74
712-06	SIGNS (CONSTRUCTION)	S.F.	359
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	60

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	SIGN (CONSTRUCTION)
	TEMPORARY BARRICADE (TYPE III)

TRAFFIC CONTROL SIGN TABULATION

M.U.T.C.D. SIGN NO.	LEGEND	SIZE IN INCHES L	X	W	S.F.	NO. REQUIRED PHASE I	TOTAL NO. REQUIRED	ITEM NO. 712-06 S.F.	REMARKS
D3-1	Fern Ave. / Rockport Rd.	36"	x	24"	6	26	26	156.00	
M4-8	Detour	24"	x	12"	2	5	5	10.00	
M4-8A	End Detour	24"	x	18"	3	6	6	18.00	
M4-9L	Detour Left	30"	x	24"	5	4	4	20.00	
M4-9R	Detour Right	30"	x	24"	5	6	6	30.00	
M4-9 (MOD)	Modified Detour Straight	30"	x	24"	5	4	4	20.00	
R11-2	Road Closed	48"	x	30"	10	2	2	20.00	TO BE MOUNTED ABOVE TEMP. BARRICADE (TYPE III)
R11-4	Road Closed to Thru Traffic	60"	x	30"	13	1	1	12.50	TO BE MOUNTED ABOVE TEMP. BARRICADE (TYPE III)
W20-2	Detour Ahead	36"	x	36"	9	7	7	63.00	
W20-3	Road Closed Ahead	36"	x	36"	9	1	1	9.00	
							TOTAL	359	

SEALED BY

ELIZABETH C. DAVIS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 124139
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED TRAFFIC CONTROL QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2024	BRZ-300(37)	T3
PIH	2025	BRZ-300(37)	T3
PS&E	2025	BRZ-300(37)	T3

TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
1	DETOUR / FERN AVE./ ROCKPORT RD. — M4-8 24" X 12"; D3-1 36" X 24"
2	DETOUR ← / FERN AVE./ ROCKPORT RD. — M4-9L 30" X 24"; D3-1 36" X 24"
3	DETOUR → / FERN AVE./ ROCKPORT RD. — M4-9R 30" X 24"; D3-1 36" X 24"
4	DETOUR AHEAD / FERN AVE./ ROCKPORT RD. — W20-2 36" X 36"; D3-1 36" X 24"
5	ROAD CLOSED AHEAD — W20-3 36" X 36"
6	END DETOUR — M4-8A 24" X 18"
7*	ROAD CLOSED — R11-2 48" X 30"
8	DETOUR ↑ / FERN AVE./ ROCKPORT RD. — M4-9R (MOD) 30" X 24"; D3-1 36" X 24"
9*	ROAD CLOSED TO THRU TRAFFIC — R11-4 60" X 30"

* TO BE MOUNTED ABOVE TEMPORARY BARRICADE (TYPE III)

NOTE: REFER TO MUTCD FIGURE 6H-8 FOR MORE DETAILS ON DETOUR SIGNAGE

TYPE III BARRICADE ROAD CLOSURE
w/ TYPE A
WARNING LIGHTS

TYPE III BARRICADE ROAD CLOSURE
w/ TYPE A
WARNING LIGHTS

SEALED BY

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NO. 124129
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

NOT TO SCALE

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	BRZ-300(37)	U1-1
		–	

Index Of Sheets	
SHEET NAME	SHEET NO.
UTILITIES INDEX, UTILITIES OWNERS, AND UTILITIES SHEETS;	U1-1
TOWN OF CAMDEN	U2-1 - U2-4

PIN: 107646.00

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

BENTON COUNTY

FERN AVENUE, BRIDEG OVER CANE CREEK
LM 1.26 IN CAMDEN (IA)

STATE HIGHWAY NO. N/A F.A.H.S. NO. N/A

CONTRACT TYPE	UTILITY	UTILITY OWNERS & CONTACTS:	CONTRACT TYPE	UTILITY	UTILITY OWNERS & CONTACTS:
MOVE IN STATE	WATER	TOWN OF CAMDEN JOHN BEASLEY 110 HWY 641 S. CAMDEN, TN 38320 731-584-4656 johnbeasley@bellsouth.net			
NO COST	TELEPHONE FIBER OPTIC	AT&T DANIEL POTTS 315 E. MAIN STREET JACKSON, TN. 38301 901-488-2359 dp7607@att.com			
NO COST	GAS	WEST TN. PUBLIC UTILITY DISTRICT JACOB ALLEN 14055 PARIS ST. HUNTINGDON, TN 38344 731-415-3806 jcob@wtpud.com			
MOVE PRIOR	FIBER OPTIC	COGENT CAMERON JERNIGAN 1594 HIGHWAY 73 MARIANNA, FL 32448 448-234-3503 cjernigan@cogentco.com			

SEALED BY

SPECIAL NOTES

SOME UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE SYSTEM, INC. AT 1-800-351-1111.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY INDEX
AND
UTILITY OWNERS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	BRZ-300(37)	U2-1

STATE PROJECT #: 03951-0514-04, 03455-3527-04, 03LCIT-F2-002, 03455-1527-04
ROUTE: FERN AVENUE, BRIDGE OVER CANE CREEK, LM 1.26 IN Camden (IA) Route: Fern Ave
COUNTY: BENTON
SUBMITTED BY: STEVEN T PUDLO, P.E. (CIA)
UTILITY OFFICE CONTACT: JOHN BEASLEY (CITY OF CAMDEN)

INDEX OF SHEETS

WATER MAIN QUANTITY'S

ITEM	ITEM SHORT DESCRIPTION	UNITS	TOTAL QUANTITY	PERCENT UTILITY	PERCENT PROJECT	FOOTNOTES TO THE ITEM TO BE SHOWN ON PLANS/SPECS (NUMBERED FOOTNOTES LOCATED AT BOTTOM OF THIS ITEM LIST).
303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	50	100%	0%	1
795-01.03	6IN DIP RESTRAINED JOINT WATER LINE (CL 52 DIP)	L.F.	200	100%	0%	1
795-06.04	CONNECT TO 6IN WATER LINE	EA	2	100%	0%	3
795-06.33	CUT AND CAP 6IN WATER LINE	EA	2	100%	0%	1
795-08.04	6IN GATE VALVE ASSEMBLY (W/BOX)	EA	1	100%	0%	5
795-11.12	RETIRE IN PLACE EXISTING WATER MAIN	L.F.	135	100%	0%	9
795-13.01	DI FITTINGS	LBS	1000	100%	0%	INCLUDES FITTINGS, GLANDS AND RESTRAINT DEVICES DESCRIBED IN POUNDS
795-13.05	CREEK CROSSING	LS	1	100%	0%	12

FOOTNOTE 1: INCLUDES ALL MATERIALS, LABOR, EQUIPMENT FOR COMPLETE INSTALLATION OF PIPE INCLUDING BUT NOT LIMITED TO TRAFFIC CONTROL, MATERIALS, EQUIPMENT, EXCAVATION IN BOTH UNCONSOLIDATED AND, ROCK, REMOVAL AND REPLACEMENT OF UNSUITABLE SOIL, ENEVELOPE/BEDDING MATERIAL, BACK FILLING, FLOWABLE FILL, THRUST BLOCKING,CONCRETE DEADMAN, PIPE FUSION TRACER WIRE, WARNING TAPE, APPURTENANCES, TEMPORARY/PERMANENT SHORING, MAINTAINING THE TRENCH, TESTING, FLUSHING, DISINFECTION, BACTERIOLOGICAL SAMPLING, TEMPORARY/PERMANENT SURFACE RESTORATION, AND ANY OTHER LABOR OR MATERIAL REQUIRED TO COMPLETE THE WORK AS SPECIFIED ON THE PLANS.

FOOTNOTE 2: INCLUDES ALL MATERIALS, LABOR, EQUIPMENT, AND TRAFFIC CONTROL, INCLUDING BUT NOT LIMITED TO FLUID CONTAINMENT FOR COMPLETE HORIZONTAL DIRECTIONAL DRILLING INSTALLATION OF CASING PIPE OR UNCASED CARRIER PIPE IN BOTH UNCONSOLIDATED SOIL OR ROCK. IF CASING PIPE HAS CARRIER PIPE, THE CARRIER PIPE SHALL BE PAID AT THE OPEN CUT ITEM.

FOOTNOTE 3: INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY FOR CONNECTIONS TO AN EXISTING WATER LINE INCLUDING TRAFFIC CONTROL.

FOOTNOTE 4: INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT INCLUDING BUT NOT LIMITED TO TAPPING SLEEVE, VALVE, VALVE BOX, BOX ADJUSTMENT, VALVE BOX COLLAR, VALVE MARKER, EXCAVATION, BEDDING, BACKFILL, BLOCKING AND RESTRAINT, TAP OF EXISTING LINE, AND TRAFFIC CONTROL.

FOOTNOTE 5: INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT INCLUDING BUT NOT LIMITED TO FITTINGS, VALVE, VALVE STEM EXTENSIONS, VALVE BOX AND COVER, BOX ADJUSTMENT, VALVE BOX COLLAR, VALVE MARKER, EXCAVATION, BEDDING, BACKFILL, BLOCKING, AND TRAFFIC CONTROL.

FOOTNOTE 6: INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT INCLUDING BUT NOT LIMITED TO MACHINERY, TOOLS OR APPARATUS NECESSARY FOR INSTALLATION, OF ASSEMBLIES AS DESCRIBED IN THE PLANS AND SPECS EXCEPT FOR SERVICE LINE WHICH IS PAID SEPARATELY FOR EACH FOOT INSTALLED.

FOOTNOTE 7: INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT FOR COMPLETE INSTALLATION OF SERVICE LINE OR CASING FOR SERVICE LINE ON LONG SIDE AND SHORT SIDE OF MAIN.

FOOTNOTE 8: INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT FOR COMPLETE INSTALLATION OF UNIT OR LUMP SUM ITEM AS SPECIFIED ON BID FORM.

FOOTNOTE 9: INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT FOR REMOVAL OF ITEM.

FOOTNOTE 10: INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT INCLUDING BUT NOT LIMITED TO CASING PIPE, PIPE SPACERS, CASING END SEALS, FITTINGS, TRACER WIRE, WARNING TAPE, UTILITY LINE MARKERS AND TRAFFIC CONTROL. IF CASING PIPE HAS CARRIER PIPE, THE CARRIER PIPE SHALL BE PAID AT THE OPEN CUT ITEM.

FOOTNOTE 11: INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT, SETUP AND TRAFFIC CONTROL.

FOOTNOTE 12: FINISHED WATER 14" FITTINGS ARE BROKEN OUT (14,000 LBS), RAW (3,500) – INCLUDE FITTINGS, GLANDS, & RESTRAINT DEVICES DESCRIBED IN POUNDS.

UTILITY INFORMATION

CITY OF CAMDEN
JOHN BEASLEY
P.O. BOX 779
110 HIGHWAY 641 SOUTH
CAMDEN, TN 38320
P: 731.584.4656
F: 731.584.1781
E: johnwbeasley@bellsouth.net

CIVIL INFRASTRUCTURE ASSOCIATES
307 HICKERSON DRIVE
MURFREESBORO, TN 37129
P 615.663.7678

STEVEN T. PUDLO — REGISTERED ENGINEER — AGRICULTURE & COMMERCE — NO. 100097 — STATE OF TENNESSEE
5/06/25

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WATER LINE RELOCATION

COVER SHEET

SCALE: N.T.S.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	BRZ-300(37)	U2-2

GENERAL NOTES

(1) Except for erosion sediment control items, no Roadway or Bridge items shall be utilized to compensate for work methods or materials associated with and/or specified for the utility installation, even though the same or similar roadway or bridge materials may have been called for in the Utility Specifications or drawings.

(2) All materials, methods, and/or integral materials outlined in the utility specifications or drawings necessary to provide a complete and functional installation must be included in the unit price for the associated utility work item.

(3) The contractor must maintain all services during the construction of the relocated facility. Any costs associated with installation of required temporary service lines due to the roadway construction sequence of work (i.e., cuts, fills, phasing, etc.) shall be included in the cost of the permanent utility items. (Note to Utility: The utility relocation plans shall provide to the contractor the utility's requirements for temporary tie-ins (including necessary testing and sterilization to accomplish the tie-in) and also any restrictions for taking lines out of service. If a temporary line will be a major item of work, a specific temporization plan and item must be included in the utility's plans.

(4) It shall be the responsibility of the Prime Contractor's surveyor to lay out all the facilities being relocated within the contract.

(5) For buried utilities, the Prime contractor or subcontractor shall be required to provide to the utility upon completion of the utility's relocation work a set of as-built drawings for their records. These as-built drawings should be prepared as the job progresses to ensure their accuracy.

(6) Where erosion control measures are needed for the utility relocation work occurring inside or outside State right-of-way, the contractor shall submit to the TDOT Project Supervisor for approval a proposed erosion and sediment control plan prior to beginning the work. TDOT approval must be received before the erosion control pay items for roadway construction can be used for any additional erosion control measures required for the utility relocation work.

(7) Driveway, sidewalk and roadway temporary restoration shall be part of the in-place cost of placing the utility item within the ROW.

When applicable, the utility relocation plans will show any stream crossings and cross-sections of the streams crossings with the following note:

(8) Any excavation of the stream channel area shall be separated from flowing water and accomplished during low flow conditions. This shall be accomplished by the use of flumes, lined diversion channel with sandbag berm, diversion pipe with sandbag dam at pipe inlet, or in some cases cofferdams. Alternatively, based on field conditions and contractor selection, the utility relocation may be accomplished using bore technology with no stream channel impacts.

(9) All water line construction shall be in accordance with Tennessee Department of Transportation (TDOT) Standards and Technical Specifications.

(10) The contractor's authorized field representative must notify the City of Camden Water Department Superintendent Mr. John Beasly prior to construction.

(11) The contractor must obtain all licenses, permits, etc., prior to construction and pay all associated fees.

(12) The owner does not take responsibility for the possibility that, during construction, utilities other than those shown may be encountered or that the actual locations of utilities shown on the contract drawings may be different. In areas where it is necessary that exact locations be known of underground utilities, the contractor shall, at his own expense, furnish all labor and tools necessary to either verify and substantiate or definitely establish the position of underground utility lines.

(13) Contractor to verify grades and water line location with City of Camden Water Department Inspector. Before ordering materials and laying pipe, slight field adjustments may be necessary. Before ordering materials Shop Drawings must be approved by design Engineer & City of Camden Water Department.

(14) It is imperative that the contractor obtains a copy of the approved water plans from the TDOT design engineer for the project. "UNAPPROVED COPIES ARE NOT ACCEPTABLE". The approved copy must be kept on site during the construction period. Additionally, the contractor shall give a 48-hour notice to City of Camden Water Department prior to the beginning of construction.

(15) For details and water specifications refer to TDOT and City of Camden standards, technical specifications and project manual.

(16) A ten foot minimum horizontal and eighteen inches vertical separation is to be maintained between water and sanitary sewer lines if at all feasible, where this separation is not possible, notify City of Camden Water department for advisement.

(17) Contractor shall notify all residents in writing on Fern Ave 48 hours prior to water interruption with estimate time of outage. Location of existing services to be field located, other services that are encountered during construction other than those shown shall also be replaced.

(18) Use Mechanical joint fittings and install thrust blocks as specs at all vertical or horizontal bends and junctions as per TDOT standards and technical specification.

(19) Contractor shall include in the bid all necessary fittings with appurtenances for adjustments to the water line so conflicts can be avoided with other structures and other utilities.

(20) Existing water line to be cut, capped and abandoned under existing Fern Ave and Cane Creek. After water line relocation construction and before proposed roadway construction.

(21) All necessary erosion control measure to be utilized and constructed as per TDOT standards and technical specification.

(22) The contractor will exercise extreme caution in the use of equipment in and around overhead electrical wires and services. If at any time in the pursuit of this work, the contractor must work in the close proximity of the above-noted wires, the electrical company shall be contacted prior to work and the proper safety measures taken. A thorough examination of the electrical wires in the area should be made by the contractor prior to construction.

(23) If, during construction, a question of intent of clarity arises from the construction plans, the contractor will immediately bring the matter to the attention of the engineer for resolutions before the affected work items are initiated or pursued further.

(24) Water line must remain in service at all times, unless prior coordination has been obtained with City of Camden Water Treatment Plant. All service interruptions to be coordinated at least 48 hours in advance with City of Camden Water Department Headquarters/City Hall 731-584-4656, Water Treatment Plant 731-584-7133, and residents.

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STEVEN T. PUCKETT
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 100397
STATE OF TENNESSEE
5/06/25

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WATER LINE RELOCATION

GENERAL NOTES

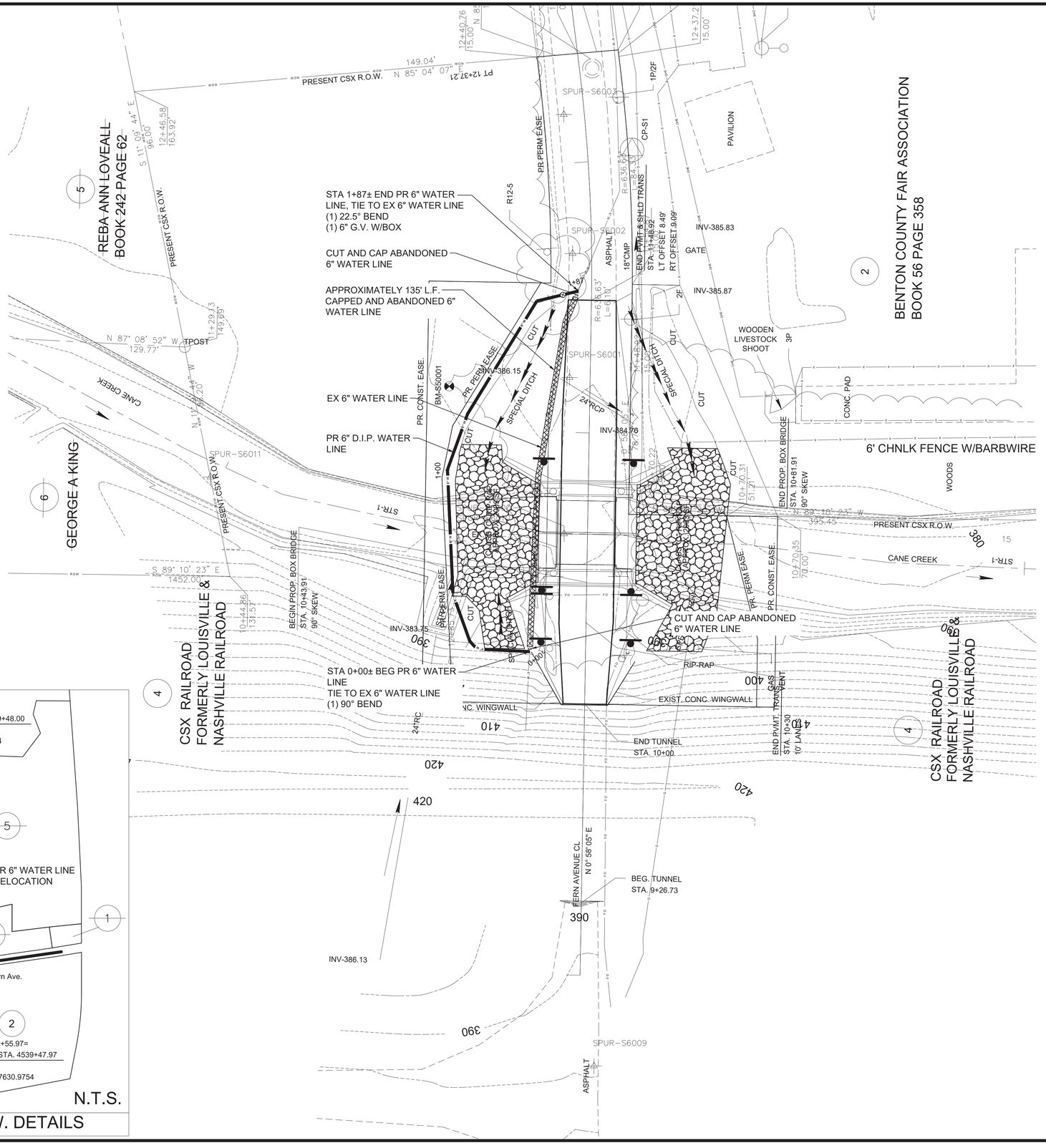
SCALE: N.T.S.

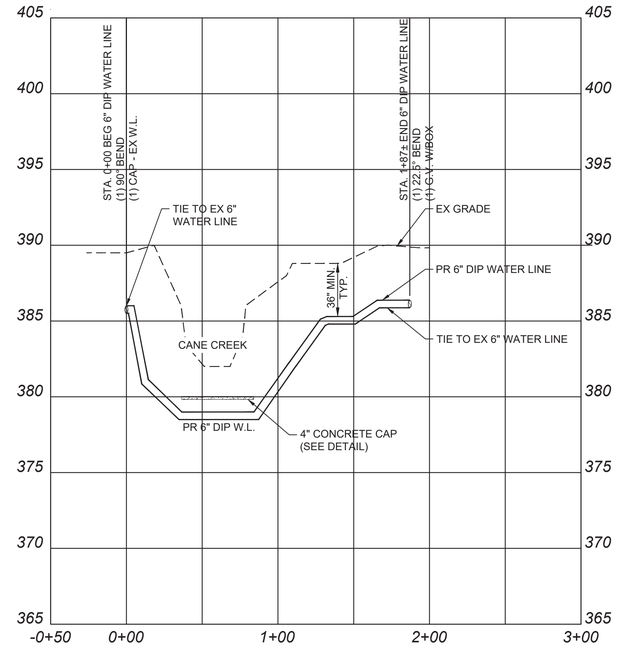
TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	BRZ-300(37)	U2-3

STATE PLANE

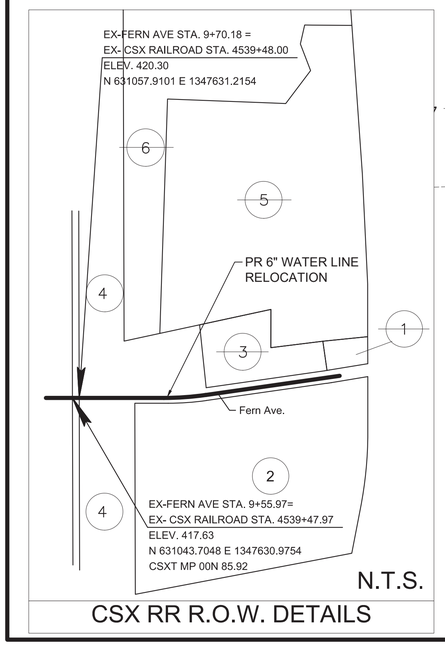
0 20' 40' 60'

SCALE: 1"= 20'





FERN AVE / CANE CREEK- PR 6" WATER LINE
HORIZ: 1"=50', VERT: 1"=50'



CSX RR R.O.W. DETAILS

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COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Know what's **below.**
Call before you dig.

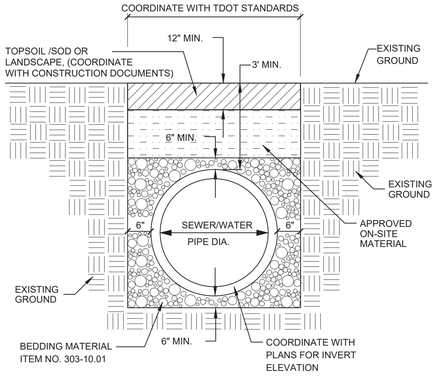
WATER LINE RELOCATION

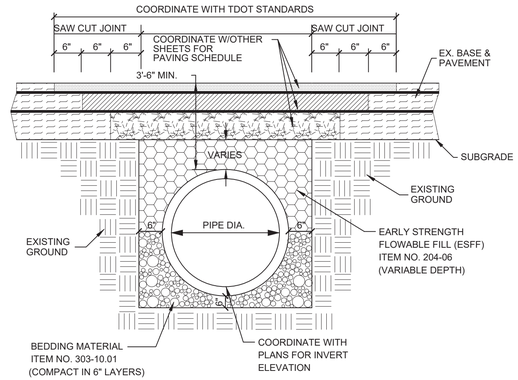
SITE PLAN

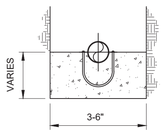
STA.0+00 TO STA.1+87±

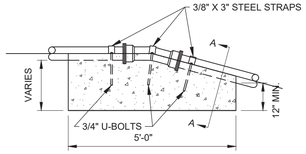
SCALE: 1"=20'

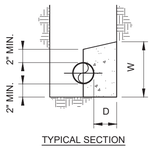
$$$$SCYTIMES$$$$$
$$$$DGNSPECS$$$$$

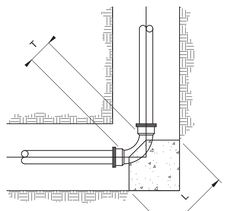


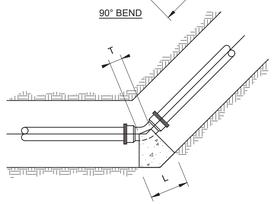


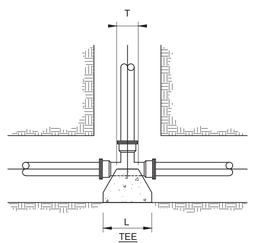


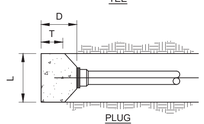


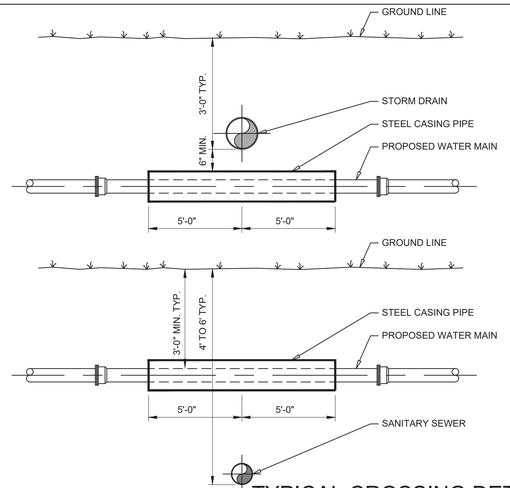


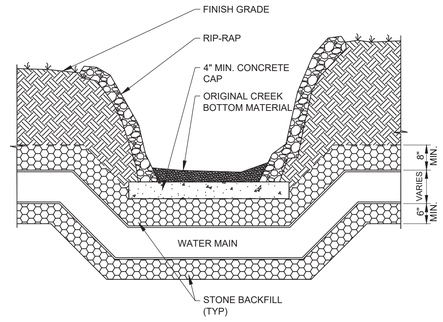


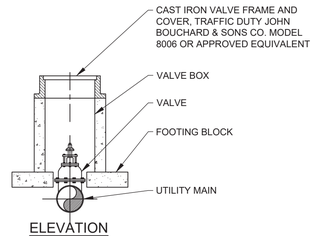


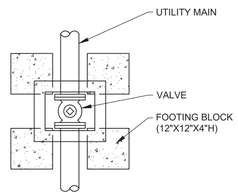












DETAIL 8

GRASS/LANDSCAPE AREA BEDDING DETAIL 6

STATE ROUTE ROADWAY DETAIL 3

NOTE: ALL FITTINGS 3" THRU 16"
TO BE MECHANICAL JOINT SSB
CLASS 350 DUCTILE IRON FITTINGS

90° BEND								
SIZE	6"	8"	10"	12"	16"	18"	20"	24"
D	8"	10"	12"	12"	12"	16"	20"	20"
L	24"	27"	30"	34"	48"	51"	54"	70"
W	12"	16"	20"	24"	28"	34"	40"	44"
T	16"	18"	20"	22"	36"	40"	44"	50"

45° & 22 1/2° BEND								
SIZE	6"	8"	10"	12"	16"	18"	20"	24"
D	6"	6"	6"	6"	6"	8"	8"	8"
L	18"	20"	22"	24"	34"	40"	45"	52"
W	12"	14"	16"	18"	22"	25"	28"	32"
T	14"	14"	16"	16"	26"	31"	35"	44"

11 1/4° BEND								
SIZE	6"	8"	10"	12"	16"	18"	20"	24"
D	6"	6"	6"	6"	6"	8"	16"	16"
L	14"	16"	18"	20"	30"	36"	41"	48"
W	12"	14"	16"	18"	22"	25"	28"	32"
T	14"	14"	16"	16"	26"	31"	35"	44"

TEE								
SIZE	6"	8"	10"	12"	16"	18"	20"	24"
D	8"	10"	12"	12"	12"	16"	38"	38"
L	18"	18"	22"	27"	28"	30"	46"	48"
W	12"	16"	20"	24"	28"	34"	48"	48"
T	12"	12"	16"	18"	20"	22"	24"	24"

PLUG								
SIZE	6"	8"	10"	12"	16"	18"	20"	24"
D	18"	24"	30"	30"	30"	30"	30"	30"
L	18"	24"	30"	30"	48"	48"	48"	48"
W	18"	18"	24"	24"	30"	30"	48"	48"
T	12"	12"	12"	12"	12"	18"	24"	24"

CONCRETE BLOCKING FOR FITTINGS DETAIL 7

TABLE OF DIMENSIONS FOR CONCRETE BLOCKING

SIZE	90° BEND				45° BEND				22 1/2° BEND				11 1/4° BEND			
PIPE	L	T	W	D	L	T	W	D	L	T	W	D	L	T	W	D
4"	24"	12"	24"	8"	18"	8"	12"	8"	18"	8"	12"	8"	15"	8"	12"	6"
6"	24"	15"	24"	8"	18"	10"	12"	8"	18"	10"	12"	8"	18"	10"	18"	6"
8"	36"	16"	30"	8"	24"	12"	18"	8"	24"	12"	18"	8"	24"	12"	18"	8"
10"	48"	20"	36"	10"	30"	14"	24"	10"	30"	14"	24"	10"	24"	14"	18"	8"
12"	54"	24"	48"	10"	36"	16"	30"	10"	36"	16"	30"	10"	30"	16"	24"	10"
14"	60"	28"	60"	12"	42"	16"	42"	12"	42"	16"	42"	12"	33"	16"	27"	12"

SIZE	TEE				PLUG				
PIPE	L	T	W	D	L	T	W	D	S
4"	18"	12"	12"	8"	18"	12"	18"	18"	2"
6"	18"	12"	12"	8"	18"	12"	18"	18"	2"
8"	30"	12"	24"	8"	30"	18"	30"	24"	4"
10"	36"	18"	30"	10"	36"	18"	36"	24"	4"
12"	48"	18"	36"	10"	42"	18"	42"	24"	4"

NOTES:

1 FOR TEE WITH BRANCH UNEQUAL TO RUN USE TEE TYPE KICKER WITH D, L, AND W DIMENSIONS THE SAME AS THOSE FOR PLUG WITH SAME DIAMETER AS BRANCH OF TEE. SELECT "T" DIMENSIONS FROM TEE TABLE UNDER COLUMN HEADED BY THE SIZE OF THE BRANCH.

2 IF EXACT SIZE PIPE BLOCKING IS NOT SHOWN USE NEXT LARGER SIZE.

3 DEPTH "D" MAY BE GREATER THAN SPECIFIED TO ALLOW WORKING SPACE. BLOCKING MUST BE PLACED AGAINST UNDISTURBED EARTH OR ROCK.

4 CONCRETE BLOCKING SHALL BE CLASS "B".

THRUST BLOCKING DETAIL 5

NOTES:

1. CONCRETE TO BE CLASS "B".
2. ENCASEMENT WIDTH TO BE POURED THE WIDTH OF TRENCH WITH A MINIMUM OF 4" ON EACH SIDE PIPE.

CREEK CROSSING FOR WATER MAINS DETAIL 2

TYPICAL CROSSING DETAIL 4

ELEVATION

PLAN

GATE VALVE AND BOX DETAIL 1

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	BRZ-300(37)	U2-4

CIVIL INFRASTRUCTURE ASSOCIATES
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SEALED BY

STEVEN T. PUDLO
NO. 100397
5.06.25

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WATER LINE RELOCATION

DETAILS

SCALE: 1"=20'