

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

James Fritz Brogdon, PEDN; CN = James Fritz Brogdon, PEDN; CN

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED. THE SIGNATURE MUST BE VERIFIED ON THE ELECTRONIC DOCUMENTS.

ARCADIS US, INC. 1210 PREMIER DRIVE, SUITE 200 CHATTANOOGA, TN

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 SHEETS	ROADWAY-SIGN1
TITLE SHEET	1
ROADWAY INDEX AND STANDARD	
ROADWAY & STRUCTURE DRAWINGS	1A
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B
GENERAL NOTES	2C
SPECIAL NOTES	2D
ENVIRONMENTAL NOTES	2E
TABULATED QUANTITIES	2F-2F1
DETAIL SHEETS	2G
UTILITY NOTES, AND UTILITY OWNERS	3
PROPERTY MAP AND RIGHT-OF-WAY ACQUISITION TABLE	3A–3B
PRESENT LAYOUT	4
RIGHT-OF-WAY DETAILS	4A
PROPOSED LAYOUT	4B
PROPOSED PROFILE	4C
SIDE ROADS PROFILES	5–6
DRAINAGE MAP	7
CULVERT SECTION(S)	8
EROSION PREVENTION AND SEDIMENT CONTROL PLANS	9, 9A-9C, 10-12
SIGNING AND PAVEMENT MARKING PLAN	13
ROADWAY CROSS SECTIONS	14–16
TRAFFIC CONTROL PLANS	T1–T4
RETAINING WALL PLANS	R-1, R-4
NOTE: THE ALPHABETICAL LETTERS "I", "O" & "Q" ARE NOT U	SED IN THE NUMBERING OF

YEAR 2025	PROJECT NO. 58S002-S3-004	SHEET NO.  ROADWAY-SIGN 1
2023	303002-33-004	NOADWAT-SIGN T

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

SHEETS.

# SEE SHEET 1A FOR INDEX OF SHEETS

# 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.	
I CININ.	2025	1	
FED. AID PROJ. NO.	N	/A	
STATE PROJ. NO.	58S002-S3-004		

## **MARION COUNTY**

SR-2 (LEE HIGHWAY) (US-41)
DRAINAGE PIPES AT L.M. 17.25 (ARPA)

#### PS&E

Ebenezer

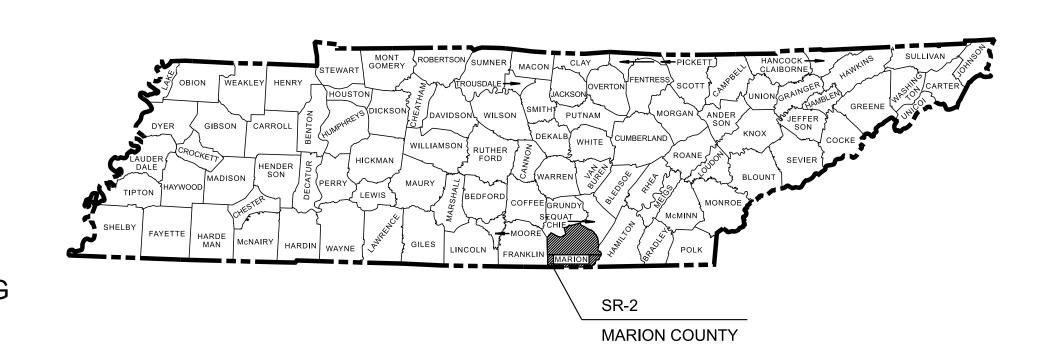
函

2.> 2

Ranl

GRADE, DRAIN, RETAINING WALL, PAVE, GUARDRAIL, AND PAVEMENT MARKING

STATE HIGHWAY NO. 2 F.A.H.S. NO. 41



## BEGIN CONSTRUCTION PROJECT NO. 58S002-S3-004

STA. 11+80.06

N 264430.0669 E 2088822.1732

#### BEGIN R.O.W. PROJECT NO. 58S002-S2-004

STA 12+07.12

N 264411.3840' E 2088841.7437'

#### END R.O.W. PROJECT NO. 58S002-S2-004

STA 13+84.72

N 264288.7482 E 2088970.2058

#### END CONSTRUCTION PROJECT NO. 58S002-S3-004

CHECKED BY: JAMES FRITZ BROGDON, P.E.

STA. 15+26.81

N 264190.6337 E 2089072.9816

#### 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: JASON TAYS, P.E.

58S002-S1-004 (PE-D)

DESIGNED FIRM : ARCADIS US, INC.

DESIGNER : LINA KHOURY, P.E.

PIN NO.

O. 133630.00

R.O.W. LENGTH

ROADWAY LENGTH

BRIDGE LENGTH

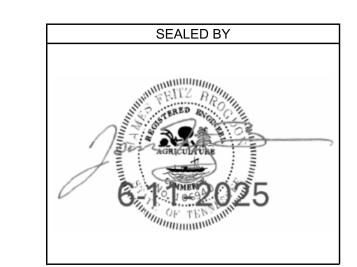
BOX B

**JASPER** 

POP. 3,214

NO EXCLUSIONS

**NO EQUATIONS** 



WILL REID, DEPUTY COMMISSIONER /
CHIEF ENGINEER

DATE:

APPROVED:

HOWARD H. ELEY, DEPUTY GOVERNOR & COMMISSIONER

SURVEY 05-03-23

TRAFFIC DATA

ADT (2025) 4880

ADT (2045) 5370

DHV (2045) 591

D 65-35

T (ADT) 6

T (DHV) 4

COORDINATES ARE NAD/83(2011) ADJUSTED BY
THE FACTOR OF 1.00000 AND TIED TO THE TGRN. ALL ELEVATIONS
ARE REFERENCED TO THE NAVD 1988 USING GEOID 18.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR

DATE

## STANDARD ROADWAY DRAWINGS

**DESCRIPTION** DWG. REV.

#### 10-100.00 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-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

#### **10-101.00 STANDARDS ROADWAY DRAWINGS**

RD11-SE-1	TRANSITION AND CROSS SLOPE DETAILS
RD11-TS-2	DESIGN STANDARDS FOR COLLECTORS, 2-LANE ROADS AND STREETS
RD11-LR-2	MINIMUM RUNOFF LENGTHS (LR) FOR RURAL HIGHWAYS
RD11-S-11	DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD11-S-11A	ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION

#### 10-104.00 ROADWAY, PAVEMENT APPURTENANCES, AND **FENCES**

	00 01 20	THOIT VIOLDIETT TEITOE
S-F-10B	06-28-19	STANDARD RIGHT-OF-WAY CHAIN LINK FENCE

CRASH CUSHION

03-01-23 HIGH VISIBILITY FENCE

S-F-1

S-CC-1

S-GRT-2P

S-GRA-3

S-GRA-4

10-16-20

01-09-24

03-01-23

01-28-22

S-CZ-1	06-28-19	CLEAR ZONE CRITERIA
S-PL-1	03-01-23	SAFETY PLAN FOR BARRIER LENGTH OF NEED
S-PL-1A	03-01-23	SAFETY PLAN FOR BARRIER LENGTH OF NEED (FOR RIGID OBJECTS)
S-PL-6	07-30-24	SAFETY PLAN SAFETY HARDWARE PLACEMENT ON OUTSIDE EDGE

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-3	06-28-19	SPECIAL CASE GUARDRAIL FOOTING
S-GRS-8		SAFETY PLAN AT SIDEROADS OR DRIVEWAYS FOR LOW SPEED ROADWAYS
S-GRT-1A		LAYOUT OF FLARED GUARDRAIL (TL- 3)
S-GRT-2	06-28-19	TYPE 38 GUARDRAIL END TERMINAL

TYPE 13 GUARDRAIL ANCHOR

GUARDRAIL HEIGHT ADJUSTMENT

EARTH PAD FOR TYPE 38 AND TYPE 21 TERMINAL

IN-LINE GUARDRAIL ANCHOR TO PRIVATE DRIVE

	William DEGIGIT DIWITING	P-I-H	2025	58S002-S3-004	
		PS&E	2025	58S002-S3-004	1
REV.	DESCRIPTION				

#### 10-107.00 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-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-27	08-01-12	TEMPORARY SLOPE DRAIN AND BERM
EC-STR-30		INSTREAM DIVERSION (WITHOUT TRAFFIC)
EC-STR-30A		INSTREAM DIVERSION (WITH TRAFFIC)
EC-STR-33	05-04-22	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION
EC-STR-33A	05-04-22	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION
EC-STR-34	05-04-22	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION
FC-STR-37	06-10-14	SEDIMENT TUBE

## STANDARD TRAFFIC DESIGN DRAWINGS

T-S-20	07-11-17	SIGN DETAILS												
10-204.00	PAVEME	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												

MARKING STANDARDS FOR TRAFFIC ISLANDS, PAVED 01-24-25 SHOULDERS AND MEDIANS FOR CONVENTIONAL ROADS

STANDARD INTERSECTION PAVEMENT MARKINGS T-M-4 01-24-25

#### 10-205.00 WORK ZONES

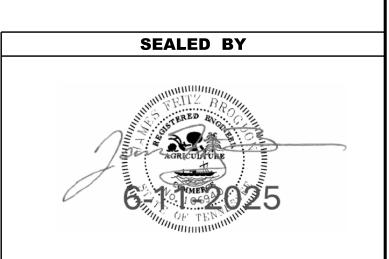
10-200.00 SIGNS

DWG.

T-WZ-10	03-26-25	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-FAB1	03-26-25	FLASHING YELLOW ARROW BOARD
T-WZ-PBR1	03-26-25	INTERCONNECTED PORTABLE BARRIER RAIL
T-WZ-PBR2	03-26-25	DETAILS FOR WORK ZONE CHANNELIZATION DEVICES
T-WZ-PCB3	03-26-25	PORTABLE CONCRETE BARRIER RAIL DETAILS

## STANDARD STRUCTURE DRAWINGS

10-301.00	LRFD BO	X CULVERTS
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 SECTIONS AND DETAILS
STD-17-6		TYPICAL ELEVATION
STD-17-8		EDGE BEAM DETAILS FOR FILLS GREATER THAN 3' - 6"
STD-17-17	06-01-11	BACKFILL AND DRAINAGE DETAILS
STD-17-18		BACKFILL DETAILS
STD-17-54	06-01-11	BOX BRIDGE, 1 BARREL AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL



SHEE NO.

PROJECT NO.

YEAR

TYPE

**STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION** 

**ROADWAY INDEX AND** STANDARD **ROADWAY & STRUCTURE DRAWINGS** 

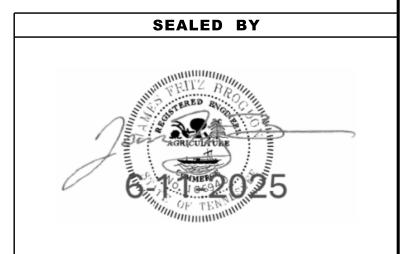
ITEM NO.	DESCRIPTION	UNIT	QUANTITY 58S002-S3-004
202-01.13	REMOVAL OF PIPE (66" CMP)	L.F.	140
202-01.56	REMOVAL OF STRUCTURES & OBSTRUCTIONS (CB, STA. 13+39.03 OFF. 32.5')	LS	1
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	2443
203-04	PLACING AND SPREADING TOPSOIL	C.Y.	85
203-07	FURNISHING & SPREADING TOPSOIL	C.Y.	50
204-08	FOUNDATION FILL MATERIAL	C.Y.	3
209-02.07	18" TEMPORARY SLOPE DRAIN	L.F.	96
209-03.53	STREAM MITIGATION - ARTICULATED CONCRETE MAT	S.Y.	660
209-05	SEDIMENT REMOVAL	C.Y.	13
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	244
209-09.01	SANDBAGS	BAG	360
209-09.04	SEDIMENT FILTER BAG(15' X 10')	EACH	4
209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	32
209-65.04	TEMPORARY IN STREAM DIVERSION	L.F.	222
303-01.01	GRANULAR BACKFILL (ROADWAY)	TON	99
303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	145
307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	96
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	0.3
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	3
407-20.05	SAW CUTTING ASPHALT PAVEMENT	L.F.	150
411-01.10	ACS MIX(PG64-22) GRADING D	TON	437
415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	5488
602-01	STRUCTURAL STEEL	LB	180.5
604-01.01	CLASS A CONCRETE (ROADWAY)	C.Y.	110
604-01.02	STEEL BAR REINFORCEMENT (ROADWAY)	LB	3292
604-07.01	RETAINING WALL (R1, STA. 13+00.39 TO STA. 13+33.46 RT)	S.F.	155
604-07.02	RETAINING WALL (R2, STA. 13+46.30 TO STA. 13+72.10 RT)	S.F.	134
621-03.06	42" TEMPORARY DRAINAGE PIPE	L.F.	40
621-05.02 705-04.09	TEMPORARY SHORING  EARTH PAD FOR TYPE 38 GR END TREATMENT	LS EACH	1
705-04.09	W BEAM GR (TYPE 2) MASH TL3 (LONG POST)	L.F.	196
705-06.02	GR TERMINAL TRAILING END (TYPE 13) MASH TL-3	EACH	196
705-06.10	GR TERMINAL (INLINE) MASH TL-3	EACH	2
705-06.11	TANGENT ENERGY ABSORBING TERM MASH TL-3	EACH	1
706-06.03	RADIUS RAIL	L.F.	60
706-00.03	ROUNDED END ELEMENT	EACH	1
707-01.11	CHAIN LINK FENCE (6 FOOT)	L.F.	130
707-01.12	END & CORNER POST ASSEMBLY (CHAIN-LINK FENCE 6')	EACH	2
707-06.01	REMOVAL OF FENCE (TRACT 1)	L.F.	130
707-06.03	REMOVAL AND RESET FENCE (TRACT 1)	L.F.	130
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	43
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	50
709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	23
709-05.08	MACHINED RIP-RAP (CLASS B)	TON	16
712-01	TRAFFIC CONTROL	LS	1
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	290
712-02.60	TEMPORARY WORK ZONE CRASH CUSHION (MASH TL-3)	EACH	2
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	100
712-06	SIGNS (CONSTRUCTION)	S.F.	269
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	20
712-08.03	ARROW BOARD (TYPE C)	EACH	2
712-09.02	REMOVABLE PAVEMENT MARKING (8" BARRIER LINE)	L.F.	4500
712-09.04	REMOVABLE PAVEMENT MARKING (STOP LINE)	L.F.	40
712-09.30	REMOVABLE BLACK-OUT TAPE (6")	L.F.	2500
716-01.21	SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR) (1 COLOR)	EACH	55
716-01.22	SNOWPLOWABLE RAISED PAVEMENT MARKERS (MONO-DIR) (1 COLOR)	EACH	10
716-02.04	PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.	130
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	55
716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	2
716-02.12	PLASTIC PAVEMENT MARKING (8IN LINE)	L.M.	0.1
716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	1

		ESTIMATED ROADWAY QUANTITIES		
	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 58S002-S3-004
	717-01	MOBILIZATION	LS	1
(10)	730-01.04	MODIFICATION OF EXISTING TRAFFIC SIGNAL EQUIPMENT	LS	1
(2), (3)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	240
(2), (3)	740-11.03	TEMPORARY SEDIMENT TUBE 18IN	L.F.	619
(2), (3)	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	9
(2), (3), (8)	801-01.38	NATVE SEED MX FINAL STABLIZATN OF SLOPES	UNIT	14
	801-01.65	TEMPORARY MULCH	UNIT	1
(2), (3), (9)	801-03	WATER (SEEDING & SODDING)	M.G.	2
(2), (3)	805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	800

Ο,	0010	1.00	TO THE SEED WITH THE STREET THE STOCKES	0.111
				UNIT
9)	801-0	3	WATER (SEEDING & SODDING)	M.G.
3)	805-1	2.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.
		FOOTNOTES  INCLUDES 29 CUBIC YARDS FOR EPSC AND 2414 FOR GENERAL PROJECT CHANNEL QUANTITY CALCULATED FROM SURFACES. EXCAVATION FOR CONS RETAINING WALLS CALCULATED FROM CROSS SECTION END AREAS.  ALL EROSION PREVENTION AND SEDIMENT CONTROL QUANTITES ARE TO BE DIRECTED BY THE ENGINEER. SEE SUBSECTION 209.07 OF THE STANDARD S MAINTENANCE REPLACEMENT.  FOR EROSION PREVENTION AND SEDIMENT CONTROL.  FOR STREAM CHANNEL STABILIZATION. TO BE USED AS SPECIFIED ON PLANSHEETS.  INCLUDES 15 TONS FOR EPSC AND 130 TONS FOR PAVEMENT REPAIRS.  RETAINING WALL SHALL BE MSE MODULAR BLOCK FACING RETAINING WALL SEE SPECIAL NOTES SHEET 2D.  PERMANENT STABILIZATION WITH NATIVE OR NATURALIZED PERENNIAL VEGING REQUIRED IN ALL AREAS AUTHORIZED FOR TEMPORARY AND PERMANENT TO STREAMS AND RIPARIAN AREAS, INCLUDING ADJACENT BUFFER ZONES VOOT THE EDGE OF WATER. THE APPROPRIATE SEED MIXTURE FOR THE REGIC CONDITIONS SHALL BE SELECTED FROM TABLE 7.9-1 (PREFERRED SEED MIX NATIVES OR NATURALIZED PLANTS AND PLANTING DATES) FOUND IN CHAPTE (PERMANENT VEGETATION) OF THE TENNESSEE DEPARTMENT OF ENVIRONM CONSERVATION (TIDEC) TENNESSEE EROSION & SEDIMENT CONTROL HANDS EDITION.  INCLUDES 2000 GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL HANDS EDITION.  INCLUDES 2000 GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL HANDS EDITION.  INCLUDES 2001 GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL HANDS EDITION.  INCLUDES 2001 GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL HANDS EDITION.  INCLUDES 2001 GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL HANDS EDITION.  INCLUDES 2001 GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL HANDS EDITION.  INCLUDES 2001 GALLONS FOR EROSION PREVENTION OF SR-2/US11 @ SROAD/PLEASANT GROVE ROAD TO FACILIATE CONSTRUCTION DURING THE D PROJECT. THIS COST WILL ALSO INCLUDE RE IURNING THE IRAFFIC SIGNAL (TO ITS ORIGINAL CONDITION AT THE COMPLETION OF THE PROJECT.  PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL REMOVE AND RESET THON TRACT 1. IT SHALL BE RESET IN A MANNER AS TO ALLOW FOR CONSTRU		
			FOOTNOTES	
	(1)	CHAN	NEL QUANTITY CALCULATED FROM SURFACES. EXCAVATION FOR CONSTRUCTION OF	
	(2)	DIRE	EROSION PREVENTION AND SEDIMENT CONTROL QUANTITES ARE TO BE USED AS CTED BY THE ENGINEER. SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS TENANCE REPLACEMENT.	S FOR
	(3)	FOR	EROSION PREVENTION AND SEDIMENT CONTROL.	
	(4)		STREAM CHANNEL STABILIZATION. TO BE USED AS SPECIFIED ON PLANS. SEE DETAIL ETS.	S
(	(5)	INCLU	JDES 15 TONS FOR EPSC AND 130 TONS FOR PAVEMENT REPAIRS.	
	(6)	RETA	INING WALL SHALL BE MSE MODULAR BLOCK FACING RETAINING WALL.	
	(7)	SEE	SPECIAL NOTES SHEET 2D.	
	(8)	IS RETO STORY OF THE CONDITION (PER CONS	MANENT STABILIZATION WITH NATIVE OR NATURALIZED PERENNIAL VEGETATION EQUIRED IN ALL AREAS AUTHORIZED FOR TEMPORARY AND PERMANENT IMPACTS TREAMS AND RIPARIAN AREAS, INCLUDING ADJACENT BUFFER ZONES WITHIN 30 FT HE EDGE OF WATER. THE APPROPRIATE SEED MIXTURE FOR THE REGION AND SITE DITIONS SHALL BE SELECTED FROM TABLE 7.9-1 (PREFERRED SEED MIXES USING VES OR NATURALIZED PLANTS AND PLANTING DATES) FOUND IN CHAPTER 7.9 MANENT VEGETATION) OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND SERVATION (TDEC) TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK 4TH ON.	
	(9)	INCLU	JDES 2000 GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL	
(	10)	TRAF ROAL PROJ	COST BID WILL INCLUDE ANY MODIFICATIONS (INCLUDING TIMING) REQUIRED FOR THE FIC SIGNAL SYSTEM LOCATED AT THE INTERSECTION OF SR-2/US11 @ SHELLMOUND D/PLEASANT GROVE ROAD TO FACILIATE CONSTRUCTION DURING THE DURATION OF THE THIS COST WILL ALSO INCLUDE RETURNING THE TRAFFIC SIGNAL (INCLUDING TIMES ORIGINAL CONDITION AT THE COMPLETION OF THE PROJECT.	
(	11)	ON TI	R TO CONSTRUCTION, THE CONTRACTOR SHALL REMOVE AND RESET THE EXISTING FERACT 1. IT SHALL BE RESET IN A MANNER AS TO ALLOW FOR CONSTRUCTION OF THE POSED CHANNEL AND MAINTAIN ACCESS CONTROL FOR TRACT 1. THE RESET LOCATION BE COORDINATED WITH THE OWNER OF TRACT 1.	
(	12)	WITH	HE CONCLUSION OF CONSTRUCTION ACTIVITIES, THE REMOVAL SHALL BE COORDINATION OF THE PROPOSED FENCE AS TO MAINTAIN ACCESS CONTROL TO TRACT 1.	CT 1.
(	13)	то в	E USED AT THE DIRECTION OF THE ENGINEER.	
(	14)	INCLU	JDES 2 CUBIC YARDS FOR SPECIAL GUARDRAIL FOOTING.	
(	15)		MATED AT 400 SF TO BE USED AS NECESSARY TO FACILITATE CONSTRUCTION OF THE LINING WALL AND BOX CULVERT EXTENSION.	
(	16)	THE I	REMOVED PIPE SHALL BECOME THE PROPERTY OF THE CONTRACTOR FOR DISPOSAL	<b></b>
(	17)	FOR	SPECIAL GUARDRAIL FOOTING	
,	40)	001	EDA OTOD OLIALI, LIGE THE EXEDUDED OD DIDDON METHOD FOR A DRIVE A TION	

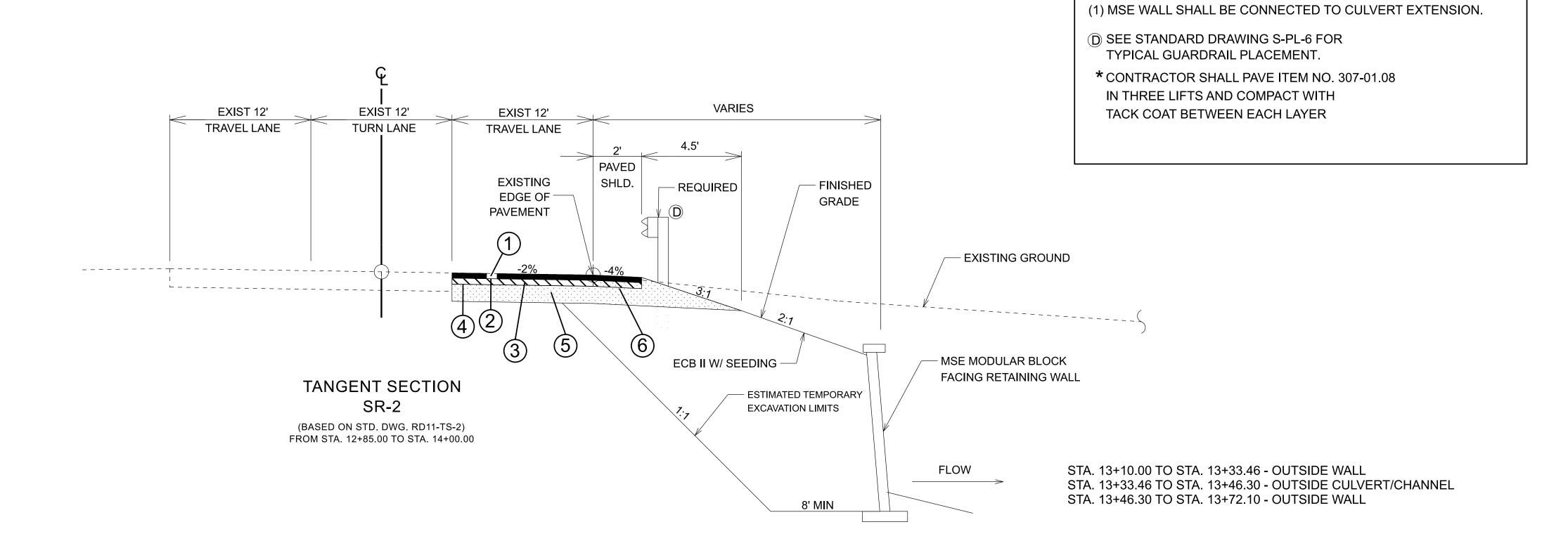
(18) CONTRACTOR SHALL USE THE EXTRUDED OR RIBBON METHOD FOR APPLICATION

TYPE	YEAR	PROJECT NO.	SHEET NO.
P-I-H	2025	58S002-S3-004	2
PS&E	2025	58S002-S3-004	2



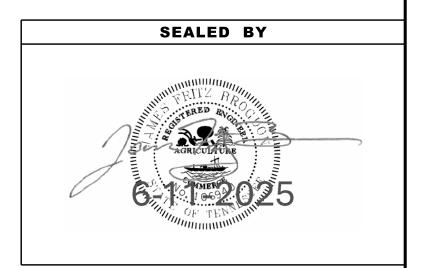
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

> **ESTIMATED** ROADWAY QUANTITIES



NOTES:

### PROPOSED PAVEMENT SCHEDULE 1 ASPHALTIC CONCRETE SURFACE (HOT MIX) PG64-22 GRADING "D" SURFACE @ 1.5" THICK @ 159.0 LBS/SY 411-01.10 ACS MIX (PG64-22) GRADING "D" TACK COAT 403-01 BITUMI 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) APPLY AT A RATE OF 0.08 GAL/S.Y. 3\*BITUMINOUS PLANT MIX BASE (HOT MIX) PG64-22 GRADING "B-M2" @ 10.5" THICK @ 1186.5 LBS/SY 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "B-M2" 4 PRIME COAT 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) @ 0.30-0.35 GAL./SQ. YD. 5 MINERAL AGGREGATE TYPE 57 STONE @ 12.0" THICK 303-10.01 MINERAL AGGREGATE (SIZE 57) 6 MINERAL AGGREGATE TYPE 57 STONE @ 22.5" THICK 303-10.01 MINERAL AGGREGATE (SIZE 57)



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL
SECTIONS
& PAVEMENT
SCHEDULE

#### 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.
- 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

(1) ITEM NO. 801-01.38 NATIVE SEED MIX FINAL STABILIZATION OF SLOPES SHALL BE USED ON SLOPES 3:1 OR STEEPER AND OTHER AREAS AS INDICATED IN THE PLANS THAT ARE INACCESSIBLE FOR MOWING.

#### **GUARDRAIL**

- 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.
- 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

#### DRAINAGE

- (3) CULVERT EXCAVATION FOR CONCRETE BOX OR SLAB TYPE CULVERTS OR BRIDGES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.
- DURING CONSTRUCTION OF DRAINAGE STRUCTURES ALL COST ASSOCIATED WITH MAINTAINING THE FLOW OF WATER AND TRAFFIC, AT THESE STRUCTURES, DURING THE PHASED CONSTRUCTION OF THIS PROJECT ARE TO BE INCLUDED IN THE UNIT PRICE OF THE DRAINAGE STRUCTURES AND TRAFFIC CONTROL ITEMS.

#### **FENCING**

THE CONTRACTOR SHALL GIVE THE AFFECTED PROPERTY OWNERS A TWO-WEEK NOTICE PRIOR TO CUTTING FENCES.

#### **MISCELLANEOUS**

- 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.
- 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

#### PAVEMENT MARKINGS

#### TEMPORARY PAVEMENT MARKINGS ON INTERMEDIATE LAYERS

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. 716-05.20. PAINTED PAVEMENT MARKING (6" LINE), L.M.

#### FINAL PAVEMENT MARKING

PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-12.02, ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE

END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. 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.

#### DETOURS, LANE SHIFTS AND MEDIAN CROSS-OVERS

- (16) THE PAVEMENT MARKINGS ON THE LANE SHIFT FOR CENTERLINE, EDGELINES & LANE LINES WILL BE INSTALLED AND MAINTAINED TO THE SAME STANDARDS AS FOR PERMANENT MARKINGS ON THE MAIN ROADWAY. THESE MARKINGS SHALL BE IN PLACE PRIOR TO ALLOWING TRAFFIC ONTO THE PAVEMENT. THESE PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO.716-05.20 L.M.
- BEFORE OPENING THE LANE SHIFT TO TRAFFIC, THE TRANSITIONAL MARKINGS ON THE EXISTING ROADWAY MUST BE IN PLACE. ALL EXISTING MARKINGS IN THE AREA OF THESE TRANSITIONAL MARKINGS SHALL BE OBLITERATED AND ALL EXISTING RAISED PAVEMENT MARKERS SHALL BE REMOVED TO ELIMINATE CONFLICTING MARKINGS. REMOVAL OF THE EXISTING CONFLICTING MARKINGS AND RAISED PAVEMENT MARKERS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN ITEM NO. 712-01. TRAFFIC CONTROL. LUMP SUM.

#### **PAVEMENT**

#### **PAVING**

- THE CONTRACTOR SHALL BE REQUIRED TO PAVE IN THE DIRECTION OF TRAFFIC.
- THE CONTRACTOR SHALL BE REQUIRED TO COLD PLANE AND PAVE IN THE DIRECTION OF TRAFFIC.
- 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

(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

#### **SIGNALIZATION**

EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNALS SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS. SECTION 730.

#### CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

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

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

SHEE NO. PROJECT NO. 2C P-I-H 58S002-S3-004 2C PS&E 2025 58S002-S3-004

SEALED BY AGRICULTURE

STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION** 

> **GENERAL** NOTES

## **SPECIAL NOTES**

#### **RETAINING WALLS**

- (1) THE RIGHT-OF-WAY BETWEEN STATION 13+00 TO STATION 14+00 SHALL REMAIN CLEAR FOR THE CONSTRUCTION OF THE RETAINING WALL. NO UTILITY LINES MAY BE PLACED THERE WITHOUT APPROVAL FROM STRUCTURES DIVISION.
- (2) THE OPTIONS FOR RETAINING WALL TYPES SHALL BE LIMITED TO THE APPROVED ALTERNATIVES AS SPECIFIED ON THE RETAINING WALL SHEET(S).
- (3) VALUE ENGINEERING CHANGE PROPOSALS WILL NOT BE ACCEPTED FOR RETAINING WALLS ITEM NUMBER(S): 604-07.01 (R1, STA. 13+00.39 TO STA. 13+33.46 RT.) AND 604-07.02 (R2, STA. 13+46.30 TO STA. 13+72.10 RT.)
- (4) ALL COST OF BUILDING, INSTALLING AND BACKFILLING THE RETAINING WALL, INCLUDING GRANULAR BACKFILL, GEOTEXTILE FABRIC (TYPE IV), LEVELING PAD, AMD MOMENT SLAB, SHALL BE INCLUDED IN THE COST BID FOR ITEM NUMBERS 604-07.01 AND 604-07.02. COSTS FOR EXCAVATION OF THE WALL SHALL BE INCLUDED IN ITEM NO. 203-01, ROAD AND DRAINAGE EXCAVATION PER CUBIC YARD. END AREAS FOR EXCAVATION FOR THE WALL SHALL BE INCLUDED IN END AREA TOTALS ON CROSS-SECTIONS.

 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 P-I-H
 2025
 58S002-S3-004
 2D

 PS&E
 2025
 58S002-S3-004
 2D

SEALED BY

SEALED BY

AGRICULTURE

AGRICULTU

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SPECIAL 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.
- 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
- INSTREAM EPSC DEVICES REQUIRE THE TDOT ENVIRONMENTAL DIVISION. PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN WATER QUALITY PERMITS
- THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S.. INCLUDING WETLANDS AND EPHEMERAL, INTERMITTENT, AND PERENNIAL STREAMS, IS NOT ALLOWED.
- 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.
- 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.
- 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.
- WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION PLANS AND PERMITS.
- 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

(19) 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

#### **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**

- 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.
- 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.

#### **SCOPE OF WORK**

- CULVERT EXTENSION
- RETAINING WALLS
- OPEN CHANNEL DESIGN AND STABILIZATION
- TRAFFIC CONTROL

AGRICULTURE

SEALED BY

**STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION** 

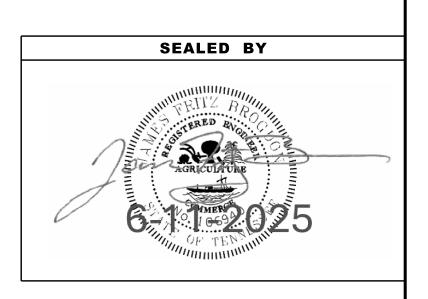
> **ENVIRONMENTAL** NOTES

				В	OX CUL	VERT	TABL	JLATIO	N					
		TY	PΕ								CULVER	Γ ≤ 20 FT.	STD. DWG. ST	D-17-17 & 18
					NO.				DRAINAGE	STANDARD	CLASS "A"	STEEL BAR	FOUNDATION	GRANULAR
STATION	LOCATION	вох	SLAB	SKEW	BARRELS	WIDTH	HEIGHT	LENGTH	AREA	DRAWING	CONCRETE	REINF.	FILL MATERIAL	BACKFILL
									SQ.MILE	NO.	604-01.01	604-01.02	204-08	303-01.01
											CU. YD.	LB.	CU. YD.	TONS
13+40.20	SR-2	X	·	45°	1	10	6	11	1.16	STD-17-6	108	3292	3	99
			TO	TALS							108	3292	3	99

	TOPSOIL														
	IF EXISTING TOPSOIL IS SUITABLE FOR REUSE														
PROPOSED SLOPE AREA S.F.	SLOPE TOPSOIL (FXC.)		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.								
8766	163	0	163	85	85	0	78								
	IF	EXISTING 7	TOPSOIL IS	NOT SUITABL	E FOR REUS	SE									
PROPOSED SLOPE AREA S.F.	SLOPE TOPSOIL (FXC.)		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.								
0	N/A	N/A	N/A	0	N/A	0	N/A								

			ESTIMA	TED GRAD	ING QUA	NTITIES						
	DESCRIPTION				VOLUMES (CY)	ADJUSTED VOLUMES (CY)	BALANCE SUMMARY					
				EXC.	EMB.	EXC.	SHRINK = 20	%	SWELL = 2	20 %		
MAINLINE				305	6	244						
SIDE ROADS				0	0							
PVT. DRIVES,	BUSINESS AN	ND FIELD ENTE	RANCES	0	0		EXC.		EMB.			
INDEPENDENT DITCHES				1946	8	1557						
TEMPORARY	CONSTRUCTIO	ON EXITS		29	0	24	1824	VS.	-14			
OTHER (BRID	GE EXCAVATION	ON, PAVEMEN	T, ETC)	0	0							
TOPSOIL (EM	B.)			0			AVAILABLE	=	1810			
TOPSOIL (EXC	C.)			163								
		TOPSOIL TO	OTALS (SEE TO	OPSOIL TABLE)	_		WASTE MATERIAL	=	2172			
ROCK	(C.Y.)			TOTALS (C.Y.	.)							
EXC.	EMB.	EXC. (UNCL.)	EMB. (UNCL.)	EXC (COMMON								
0	0	2443	14	2443								

					PRO	POSED G	UARDRAIL					
					W BEAM	W BEAM TYPE 38		EARTH PAD GR TERMINAL GR TERMINAL			ROUNDED	
SHEET	LOCATION	SIDE	STA <sup>-</sup>	STATIONS		MASH TL3	FOR TYPE 38 GR END	TRAILING END (TYPE 13)	(INLINE) MASH TL3	RAIL	END ELEMENT	REMARKS
NO.					MASH TL3	1 TL3 (46.875')	TREATMENT	MASH TL-3				
		LT RT	FROM	то	705-06.02 (L.F.)	705-06.20 (EACH)	705-04.09 (EACH)	705-06.10 (EACH)	705-06.11 (EACH)	706-06.03 (L.F.)	706-10.26 (EACH)	
4	SR2	Х	11+83.37	14+21.37	196	1	1	1	2	60	1	
	TOTAL	S			196	1	1	1	2	60	1	



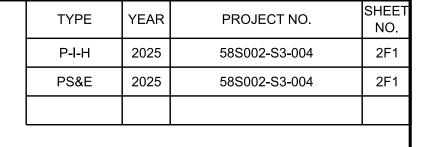
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

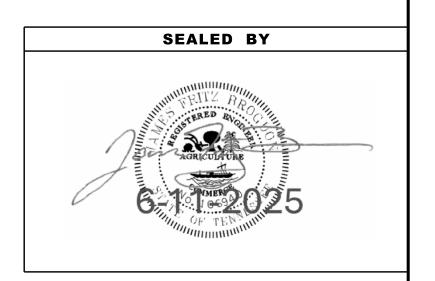
TABULATED QUANTITIES

				P	AVEM	ENT Q	UANTI	TIES								
		TYPE - GRADE - PAY ITEM (TON)														
	MINERAL	MINERAL BITUMINOUS PLANT MIX					IME	TACK	,	ASPHALTIC	CONCRET	E	BITUMINOUS PLANT			
LOCATION	AGG.		BASE (H	IOT MIX)		COAT		COAT		SURFACE	SURFACE (HOT MIX)			MIX		
(ROADWAY)	D	A A-S B-M B-M2 *					D	E			TON	S.Y.	C.Y.			
	303-01	307-	307-	307-	307-	402-01	402.02	402.04	411-	411-	411-	411-	445 04 04	445 04 02	415 04 03	
	303-01	01.01	01.20	01.07	01.08	402-01	402-02	403-01	01.10	01.07	xx.xx	xx.xx	410-01.01	415-01.02	415-01.03	
SR-2 (SEE SHT T-4)					96.0	0.3		3.0	437.0					5488.0		
TOTALS					96.0	0.3		3.0	437.0					5488.0		

<sup>\* -</sup> ONLY USED IN FULL DEPTH REPAIR AREA - SR-2 (STA 12+85.00 TO STA 14+00)

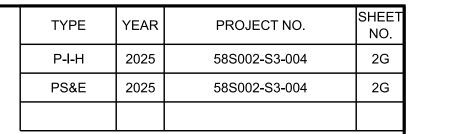
TRAFFIC CONTROL SIGN TABULATION											
M.U.T.C.D.			SIZE			TOTAL	ITEM NO.				
SIGN	LEGEND \ DESCRIPTION	IN I	IN INCHES S.F.		S.F.	NUMBER	712-06				
NO.		L	X	W		REQUIRED	S.F.				
G20-2	END ROAD WORK	48''		24''	8	4	32				
R3-7	RIGHT LANE MUST TURN RIGHT	36''		36''	9	1	9				
W1-4L	LANE SHIFT LEFT	48''		48''	16	2	32				
W1-4R	LANE SHIFT RIGHT	48''		48''	16	2	32				
W6-3	TWO-WAY TRAFFIC	48''		48''	16	2	32				
W16-9P	AHEAD (PLAQUE)	24''		12''	2	2	4				
W20-1	ROAD WORK	48''		48''	16	8	128				
						TOTAL	269				

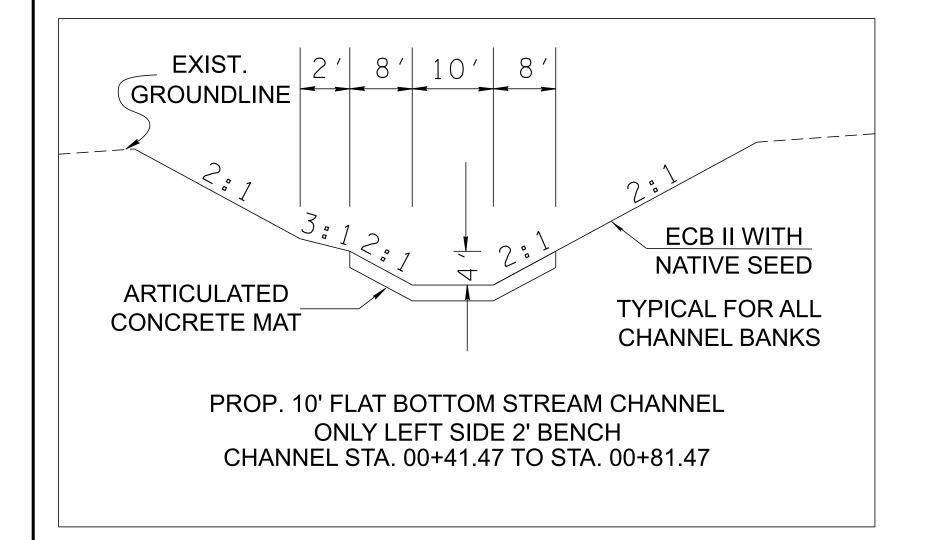


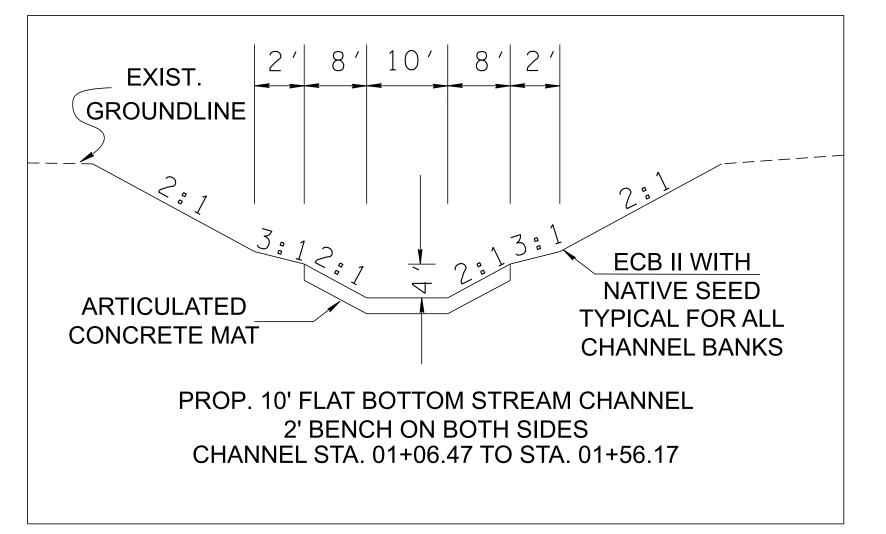


STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

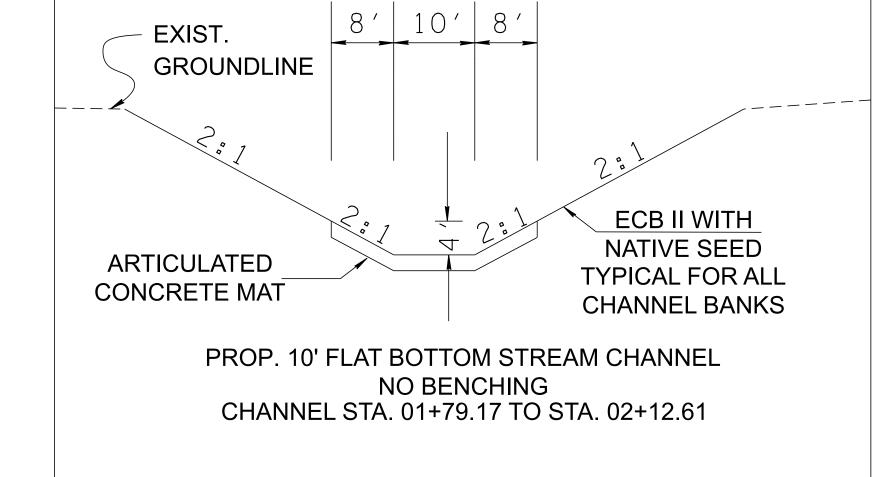


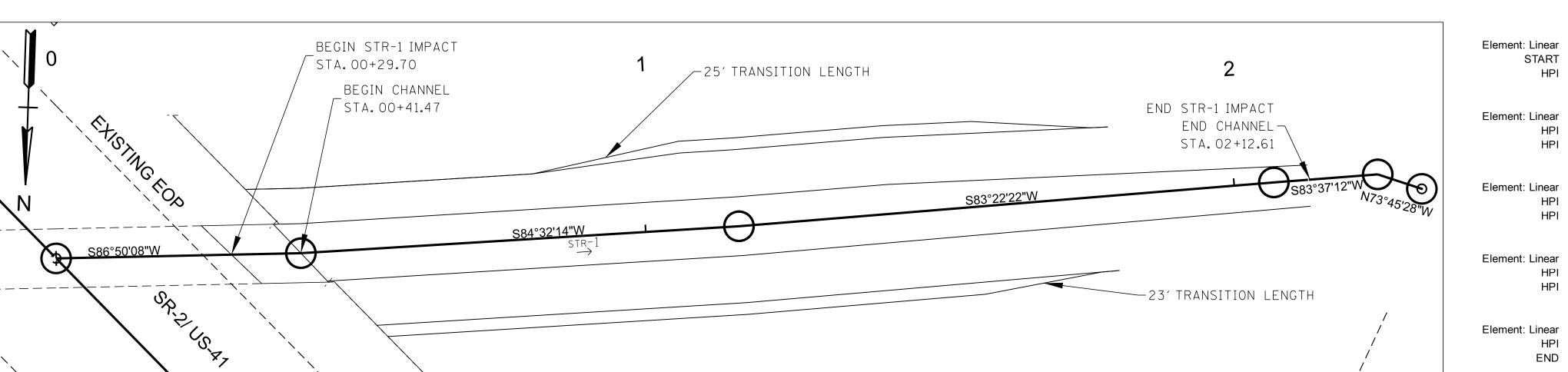


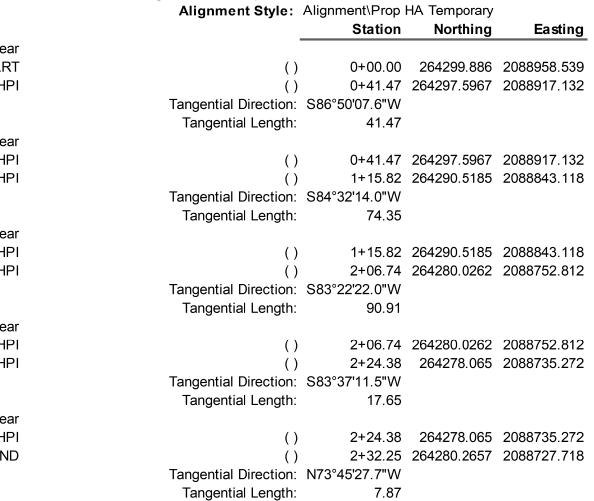


STR-1 ALIGNMENT DETAIL

N.T.S.





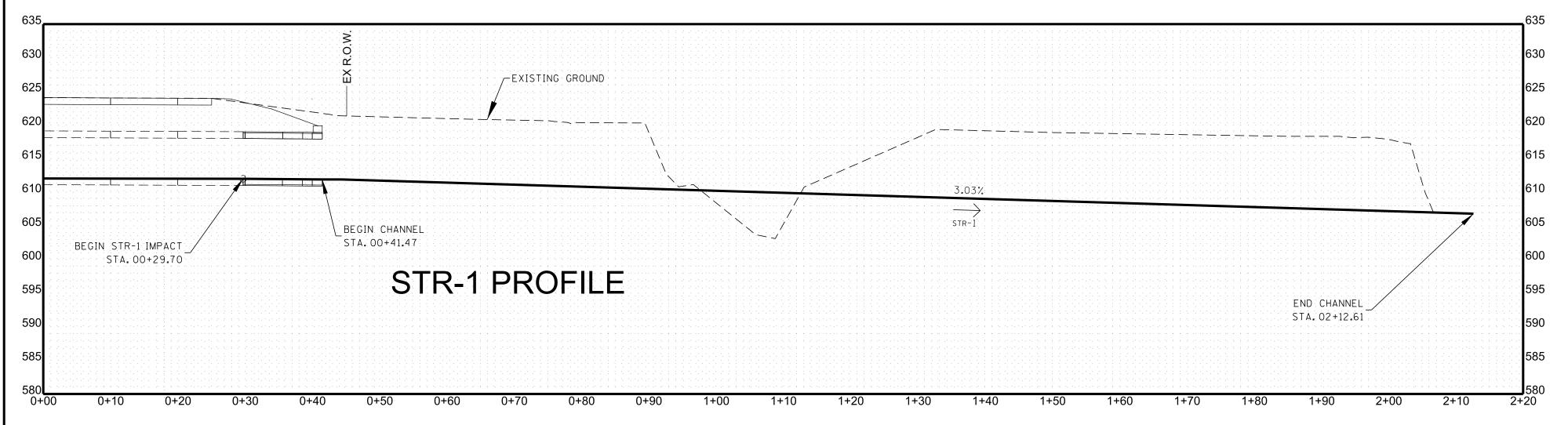


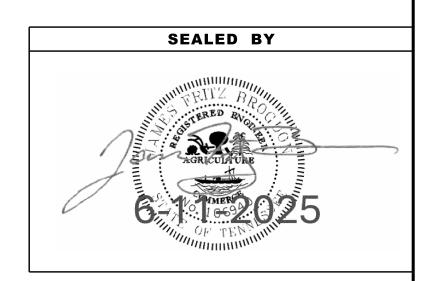
Horizontal Alignment Review Report

**Alignment Description:** 

Alignment Name: STREAM CL\_NEW

Easting





STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION** 

**DETAIL SHEETS** 

#### 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**

#### SEWER:

TOWN OF JASPER

4460 MAIN STREET

JASPER, TN 37347

CONTACT: JASON TURNER

OFFICE PHONE: 423 942 - 3180 CELL PHONE:

Email: jasonturner@jasper-tn.com

#### ELECTRIC:

SEQUACHEE VALLEY ELECTRIC COOPERATIVE

512 S. CEDAR AVENUE

CONTACT: LUCAS MARSH

SOUTH PITTSBURG, TN 37380

OFFICE PHONE: 423 837 - 5026

CELL PHONE:
Email: Imarsh@svalleyec.com

#### FIBER:

#### AT&T

360 GEES MILL BUSINESS PARKWAY

CONYERS, GA 30013

CONTACT: TRINA IVEY

OFFICE PHONE: 678 641 - 5522 CELL PHONE: 678 641 - 5522

Email: ki2863@att.com

#### WATER:

TOWN OF JASPER

4460 MAIN STREET

JASPER, TN 37347

CONTACT: MAYOR JASON TURNER

OFFICE PHONE: 423 942 - 3180

CELL PHONE:

Email: jasonturner@jasper-tn.com

 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 P-I-H
 2025
 58S002-S2-004
 3

 PS&E
 2025
 58S002-S3-004
 3

SEALED BY



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

UTILITY NOTES

AND

UTILITY OWNERS

TYPE	YEAR	PROJECT NO.	SHEET NO.	
P-I-H	2025	58S002-S3-004	3A	
PS&E	2025	58S002-S3-004	3A	

	R.O.W. ACQUISITION TABLE																
TRACT		COUNTY RECORDS				TOTAL AREA (ACRES)		AREA TO BE ACQUIRED (ACRES)		AREA REMAINING (ACRES)		EASEMENT (ACRES)					
NO.	PROPERTY OWNERS		PARCEL	DEED DOCUME	NT REFERENCE	LEET	RIGHT	TOTAL	LEET	LEFT RIGHT	TOTAL	1	DICUT	DEDMANENT	CL ODE	CONSTRUCTION	AID DICUTE
		NO.	NO.	воок	PAGE	LEFT	RIGHT	IOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERMANENT	SLOPE	CONSTRUCTION	AIR RIGHTS
1	JOSHUA KILGORE	120 N A	032.00	540	331		6.182	6.182					6.182			0.298 ①	
2	ROGER D. YORK AND WIFE, KAREN S. YORK AND RANDY YORK AND WIFE, LISA YORK AS JOINT TENANTS WITH THE	120	052.03	352	882	0.488						0.488					
	RIGHT OF SURVIVORSHIP																
3	SHANNON YORK	120	<del>052.01</del>	<del>369</del>	182	0.365						0.365					
4	VINCENT C. SKILES	120	<del>052.05</del>	477	1237	0.459						0.459					
	ACQUISITION TOTALS	(ACRES)			•		•			•	•					0.298	

FOOTNOTES:

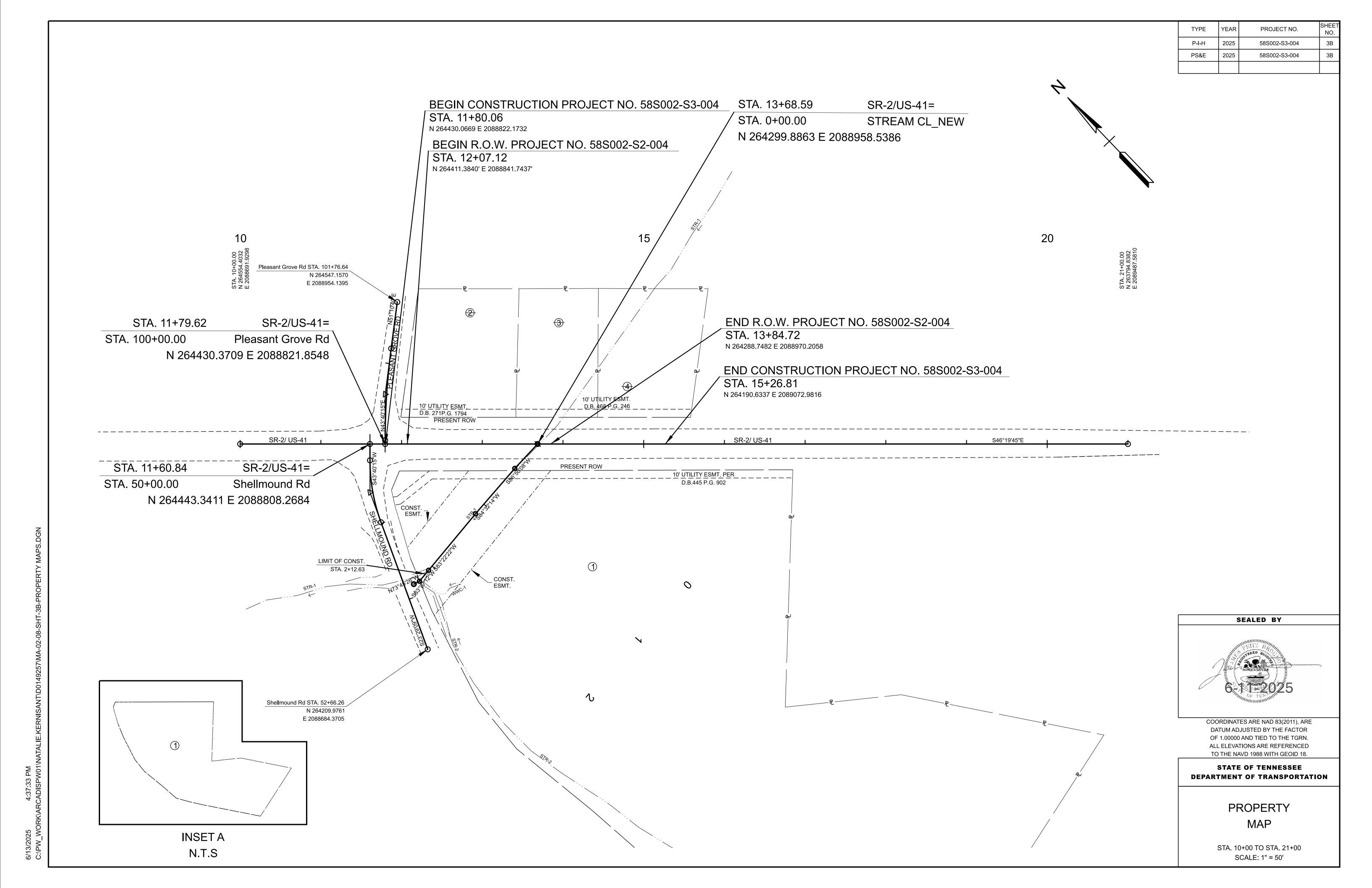
1 TRACT 1 CONST. ESMT. FOR CONSTRUCTION USE

DISTURBED AREA		
IN BETWEEN SLOPE LINES	0.210	(AC)
15 FOOT WIDE STRIP (OUT SIDE SLOPE LINES)	0.100	(AC)
TOTAL DISTURBED AREA	0.310	(AC)
TOTAL PROJECT AREA	0.310	(AC)

SEALED BY

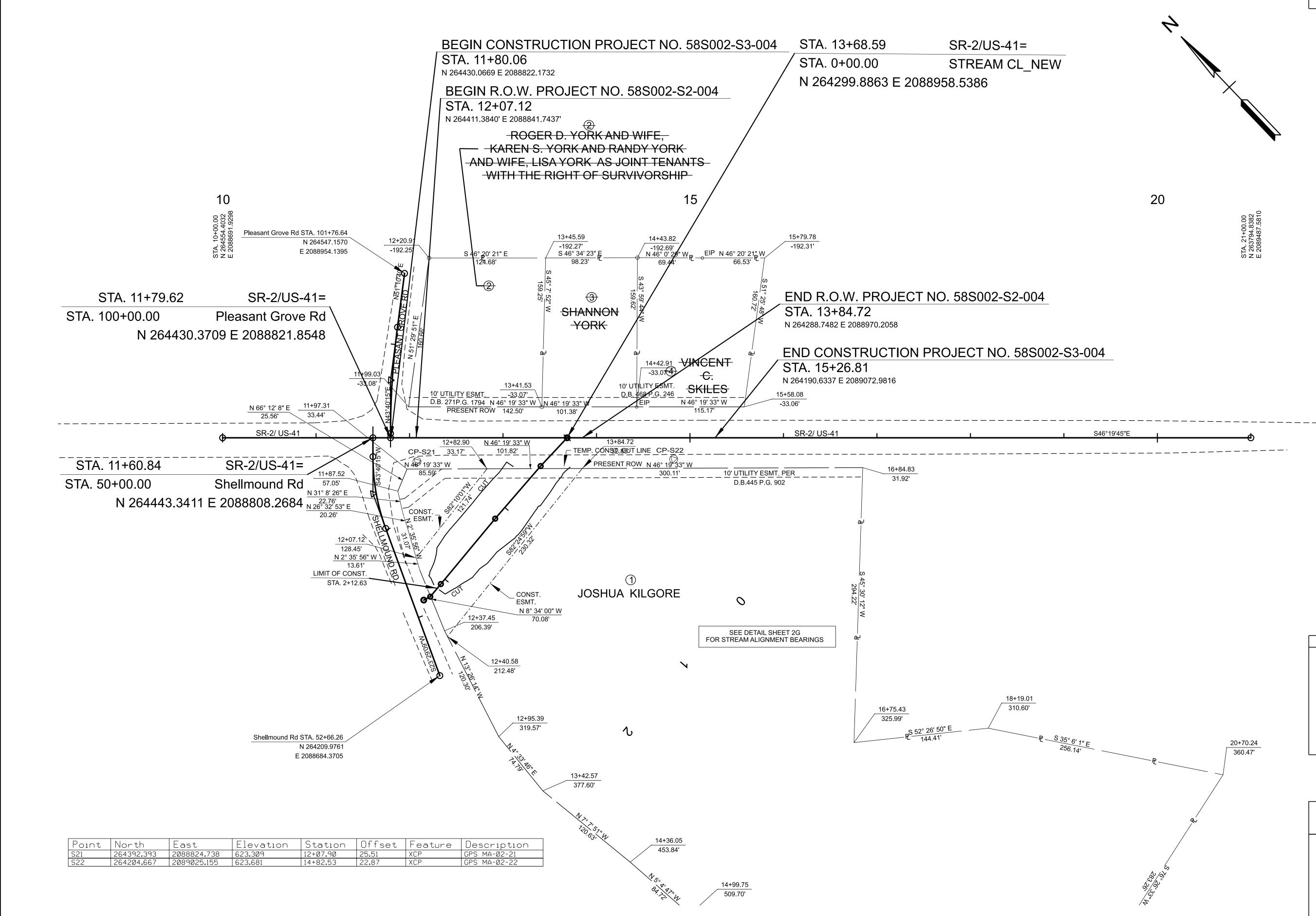
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

> RIGHT-OF-WAY ACQUISITION **TABLE**



13/2025 4:37:46 PM PM WORKARCANISDWOMNATALIE KERNISANTARASSEMAA 02 08 SHT 4 BRESENT LAVO

STA. 10+00 TO STA. 21+00 SCALE: 1" = 50'



SEALED BY

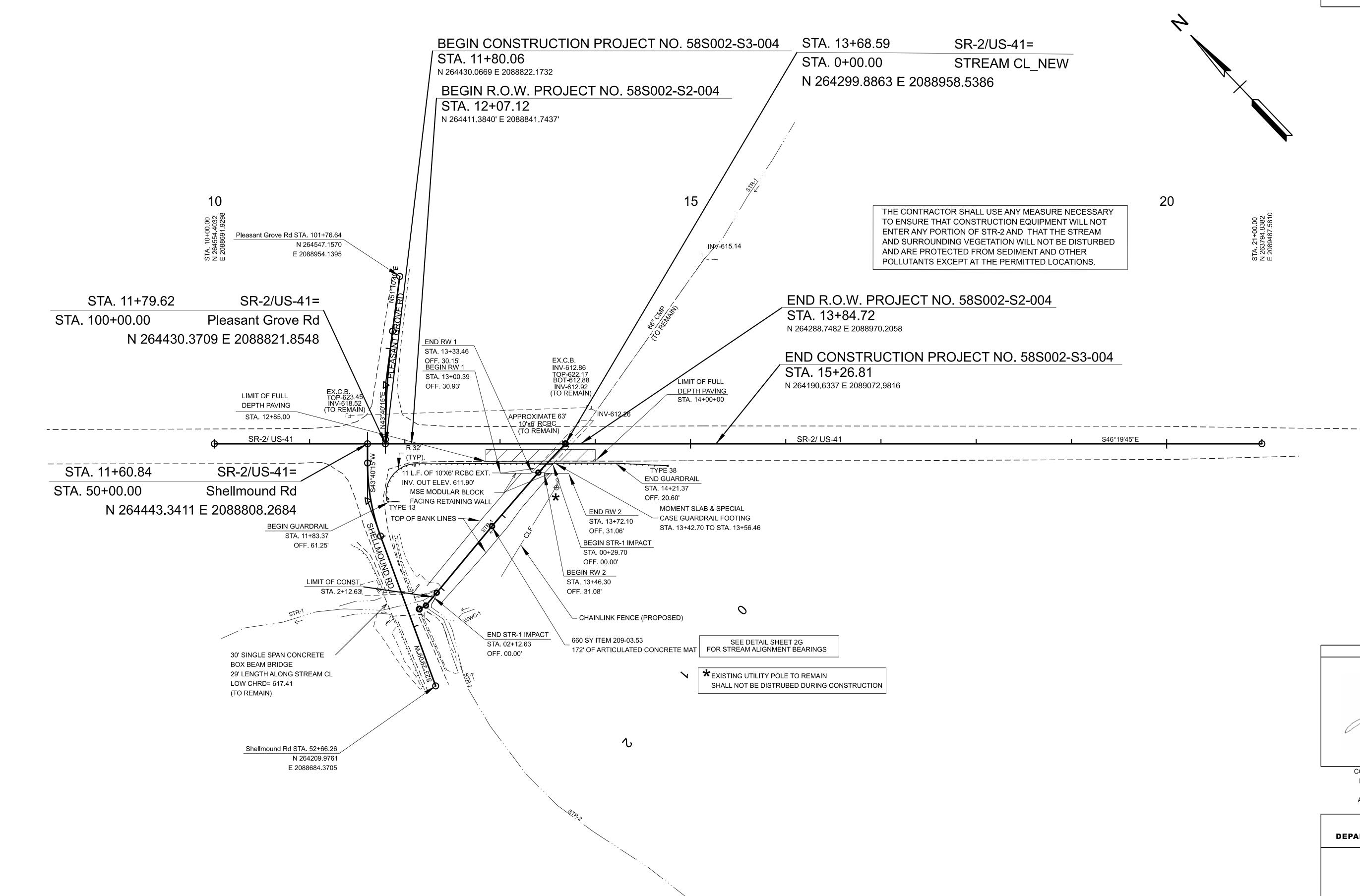


COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 18.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA. 10+00 TO STA. 21+00 SCALE: 1" = 50'



SEALED BY



COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.0000 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID18.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 10+00 TO STA. 21+00 SCALE: 1" = 50'

670																						670
665																						665
660																						660
655																						655
650																						650
						STA. 11+60.8 STA.50+00.0	( SHE	2/US-41= LLMOUND RD														
645						STA. 11+79.	11 E 2088808.26 .62 SF	3-2/US-41= EASANT GROV														645
640						STA.100+00 N 264430.3	000 PL 709 E 2088821.8		E RD													640
605						BEGIN CO STA. 11+8 N 264430.06668	ONSTRUCTION 80.06 9 E 2088822.1732	PROJECT NO.	58\$002-\$3-00	04	EN STA	D R.O.W. PRO 4. 13+84.72 1288.7482 E 2088870.2	DJECT NO. 58	S002-S3-004								625
635							BEGIN R.O.W STA. 12+07.12 N 264411.3840' E 20888	PROJECT NO.	CB (EXI	STING TO REMAI	N 264	4288.7482 E 2088970.2	2058									635
630									STA. 13- OFFSET TOP 622 INV 612	Т -38.06' 2.17			END CON	STRUCTION PI	ROJECT NO. 58	S002-S3-004						630
625		STA. 11+		IAIN)					111/012	EXISTING GRO	DUND		N 264225.1588 E	2089036.8163								625
023		OFFSET TOP 623 INV 618.	.45 52 <u> </u>			18"						EX.	6" SANITARY	SEWER					<u>+ := := := :</u>			023
620			EX. UG F	IBER +	1/0-																	620
615		S21 XCP 2 OFF. 25.51' N 264392.39				EX.	6" WATER —		EX. 12" \ STA. 13+82.8		S22 XCP STA. 14+82 N 264204.6		7' · · · · · · · · · · · · · · · · · · ·									615
		E 2088824.74 EL. 623.31'		(v)					EXIST. 10' X SKEW 46°50' FLOWS RIGH	6' BOX CULV. '07" RT	E 2089026. EL. 623.68'											
610								BE REMOVED	INLET ELEV. OUTLET ELE	6 2.00' V. 611.90'												610
605							STA. 13+39.20 32.52' (RT) TOP 621.30' INVERT 610.45															605
							PROP	. BOX CULVE ON: 13 + 40.2														
600							SKEW		F. OF 10' X (	6' RCBC EXTEN	SION 46 DEG 1.16 SQ.M											600
595							DESIG	ON DISCHAR ON DISCHAR TOPPING			583 CFS 788 CFS 624.2 ELE	V.										595
							ALLO\ Q50 H	WABLE HEAD IEADWATER HEADWATER			623.2 ELE 498 ELEV. 583 ELEV.											
590							VELO	CITY (Q50) CITY (Q100)	•		10.46 FT/S 10.36 FT/S 612.00 FT.											590
585							OUTL STANI	ET DARD DRAW	NG NOS.: S	STD-17-8, STD-1	611.90 FT.											585
							CLAS	ITITIES: S "A" CONCR			108 C.Y.											
580							ВАСК	L BAR REINF FILL DATION FILL			3292 LB. 99 TONS 3 C.Y.											580
575																						<u>575</u>
570	0		00	4.0	+00	4.0	+00	4 4	+00		-00	16+	<u> </u>	4 <b>7</b>	+00	18+	 4.0	+00		+00	04	<u>  570</u> +00

 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 P-I-H
 2025
 58S002-S3-004
 4C

 PS&E
 2025
 58S002-S3-004
 4C

SEALED BY

SEALED BY

AGRICULTURE

AGRICULTU

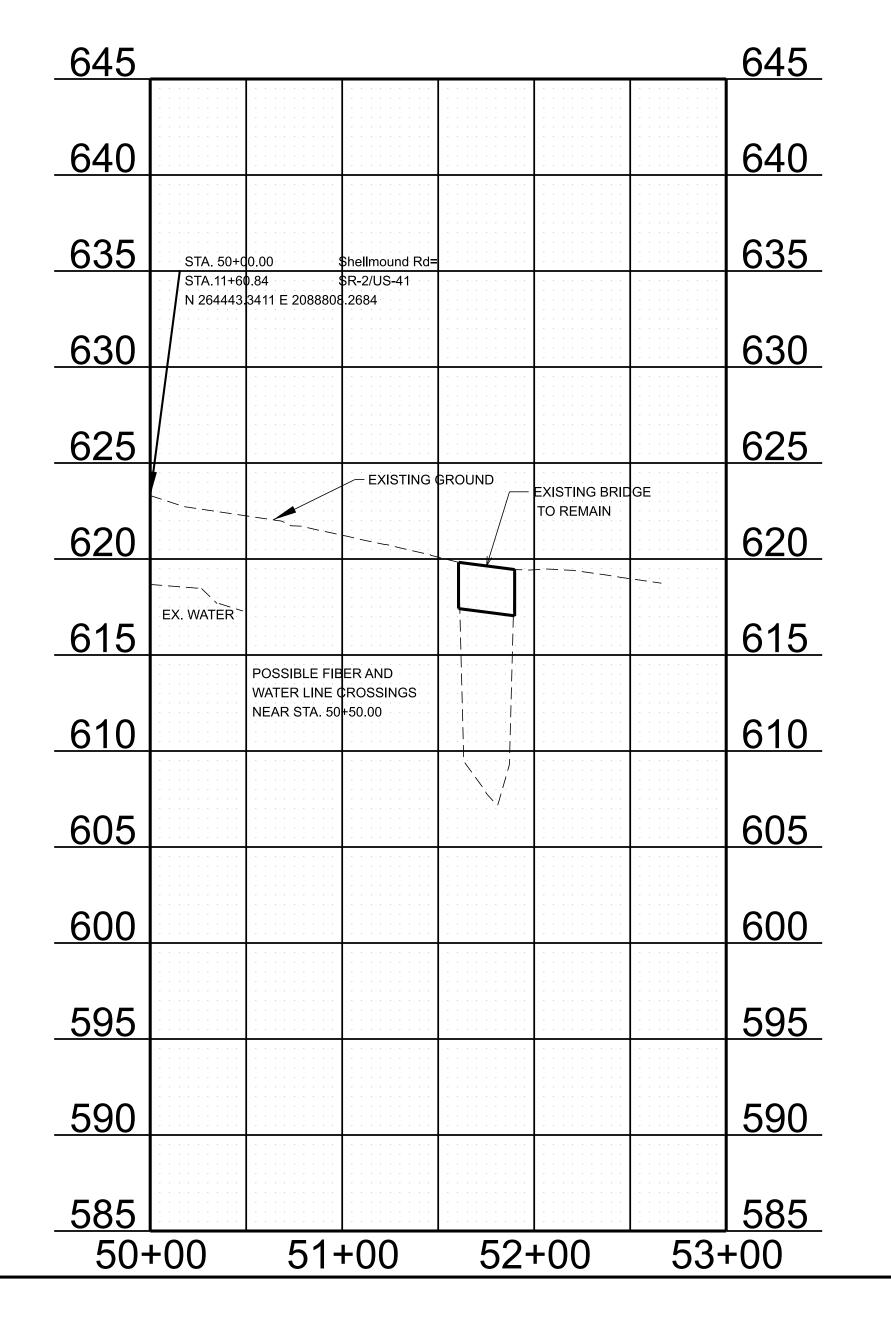
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

PROPOSED

SR-2

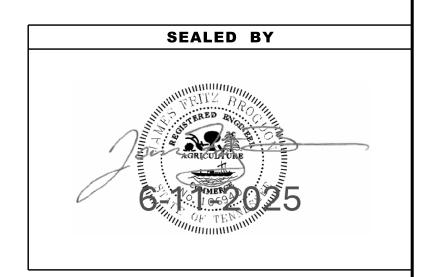
PROFILE STA. 10+00 TO STA. 21+00

> CALE: 1" = 50' HORIZ. 1" = 5' VERT.



SHT-PROPOSED PROFILES.DGN

6/13/2025 4:38:34 PM C:\PW\_WORK\ARCADISPW01\NATALIE.KERNISANT\D0149257\MA-



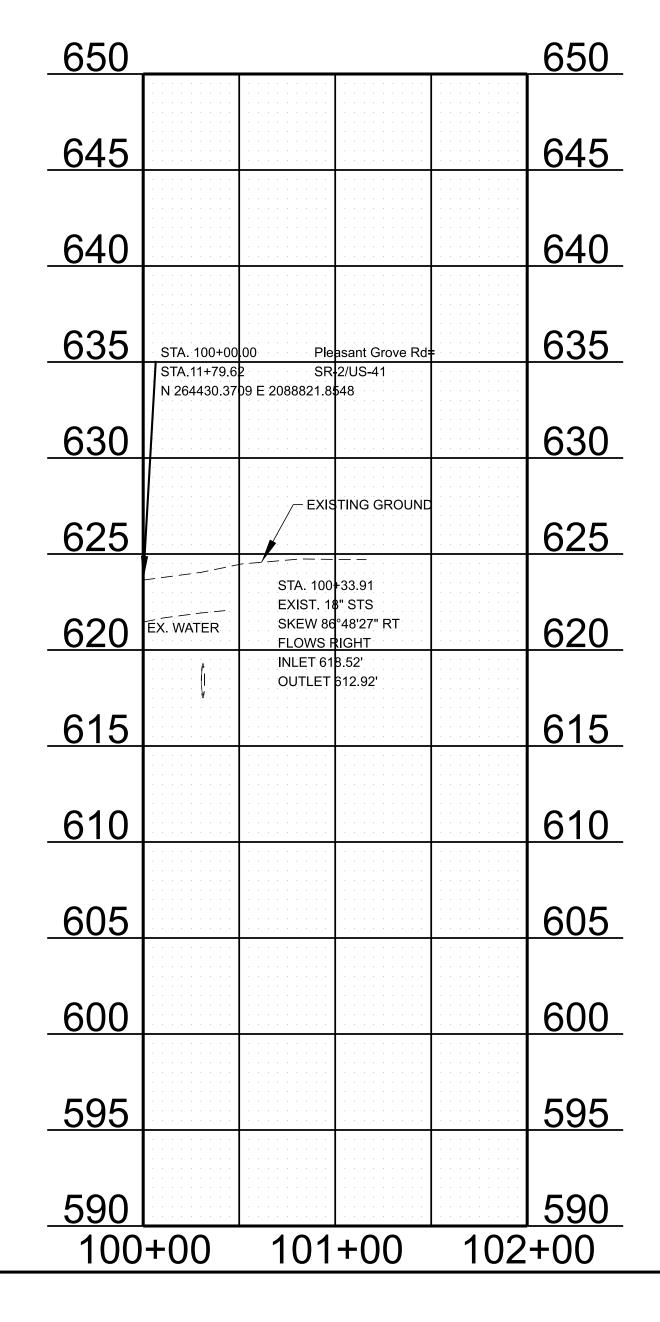
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED SHELLMOUND ROAD

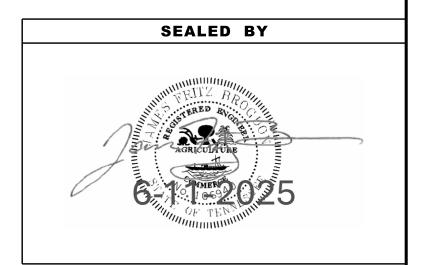
PROFILE STA. 50+00 TO STA. 53+00

SCALE: 1" = 50' HORIZ. 1" = 5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
P-l-H	2025	58S002-S3-004	6
PS&E	2025	58S002-S3-004	6



6/13/2025 4:38:35 PM C:\PW\_WORK\ARCADISPW01\NATALIE.KERNISANT\D0149257\MA



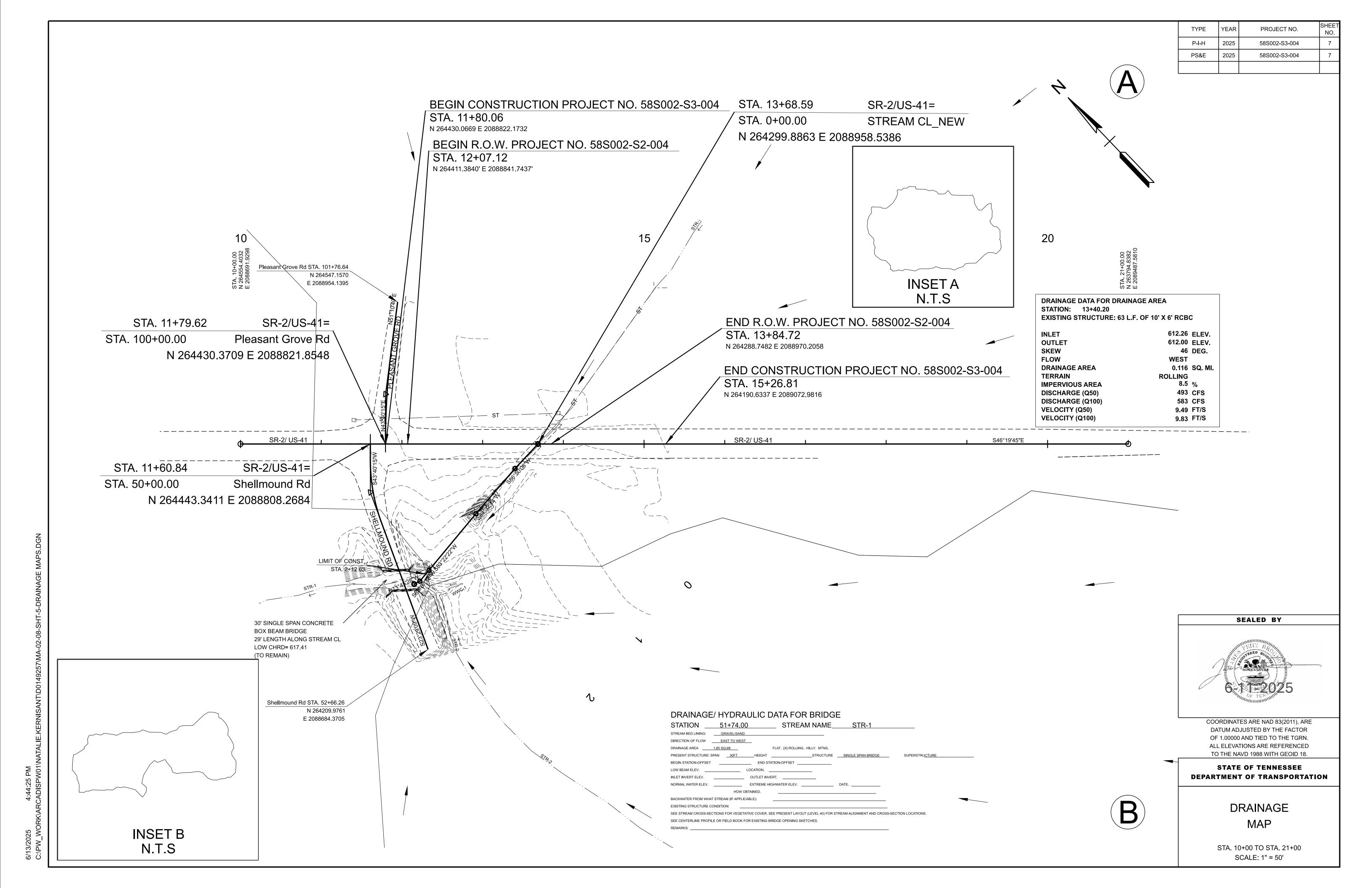
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

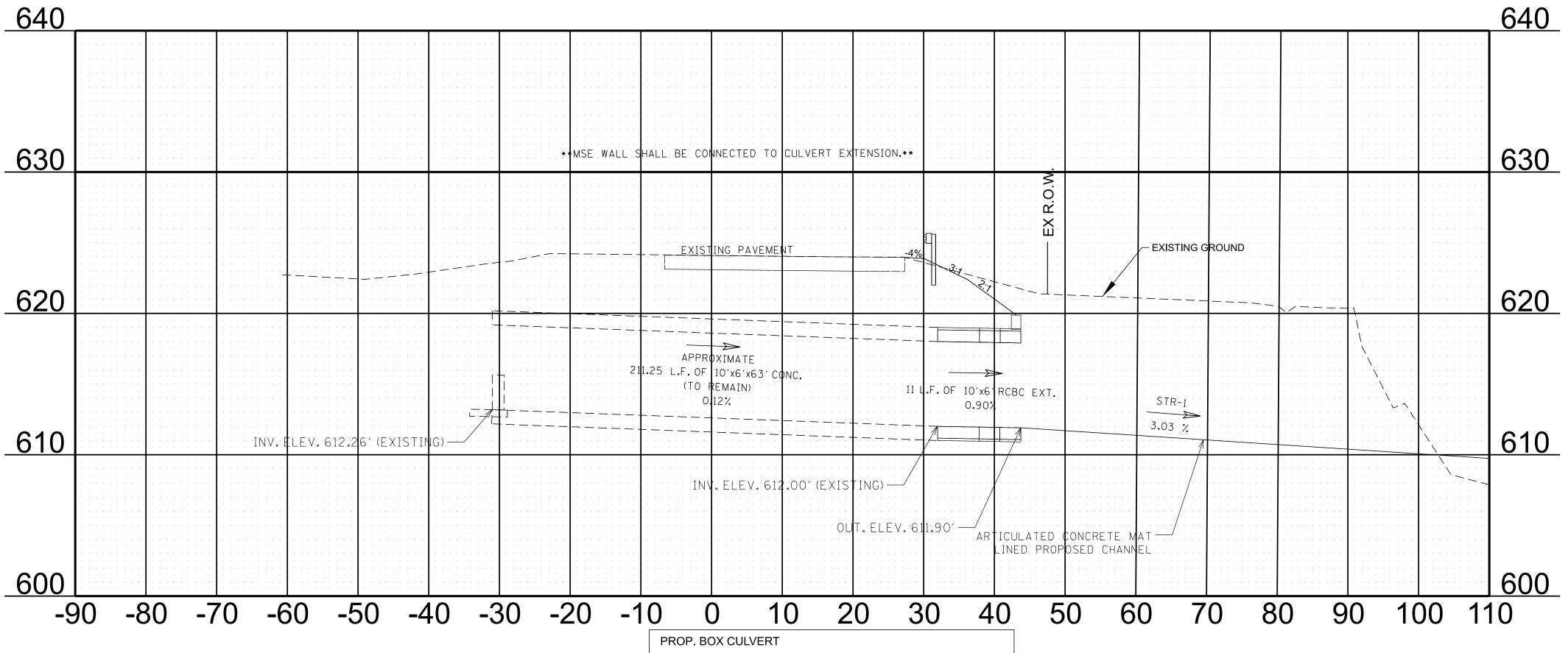
PROPOSED

PLEASANT GROVE ROAD

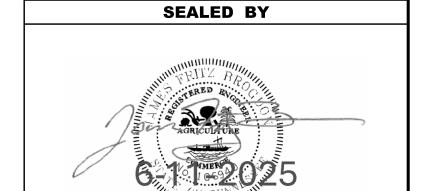
PROFILE STA. 100+00 TO STA. 102+00

> 1" = 50' HORIZ. CALE: 1" = 5' VERT.





STATION: 13 + 40.20 STRUCTURE: 11 L.F. OF 10' X 6' RCBC EXTENSION 46 DEG SKEW 1.16 SQ.M DRAINAGE AREA DESIGN DISCHARGE (Q50) 583 CFS 788 CFS DESIGN DISCHARGE (Q100) OVERTOPPING 624.2 ELEV. 623.2 ELEV. ALLOWABLE HEADWATER Q50 HEADWATER 498 ELEV. 583 ELEV. Q100 HEADWATER VELOCITY (Q50) 10.46 FT/S VELOCITY (Q100) 10.36 FT/S INLET 612.00 FT. OUTLET 611.90 FT. STANDARD DRAWING NOS.: STD-17-8, STD-17-17, STD-17-18, STD-17-54 QUANTITIES: 108 C.Y. CLASS "A" CONCRETE 3292 LB. STEEL BAR REINFORCING 99 TONS BACKFILL FOUNDATION FILL MATERIAL 3 C.Y.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CULVERT SECTION STA. 13+14.20

> SCALE: 1" = 10' HORIZ. 1" = 5' VERT.

#### **EROSION PREVENTION AND SEDIMENT CONTROL NOTES**

#### DISTURBED AREA

- 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.
- AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.
- UNLESS OTHERWISE NOTED IN THE PLANS, THE CONTRACTOR SHALL NOT CLEAR/DISTURB ANY AREA BEYOND 15 FEET FROM SLOPE LINES.
- 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.
- 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

- 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.
- 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.
- 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.
- 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.
- 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

(11) 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.
- (12) 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.
- 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.
- 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.
- 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.
- 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.
- (17) 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.
- (18) 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**

- (19) CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION.
- (20) 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.
- (21) 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.

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

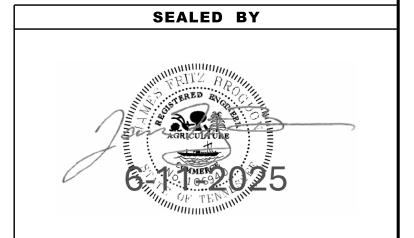
#### PERMITS, PLANS & RECORDS

(27) 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.

#### GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL

- (28) 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.
- 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.
- (30) 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.
- (31) 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.
- 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.

TYPE YEAR PROJECT NO. NO. P-I-H 2025 58S002-S3-004 2025 PS&E 58S002-S3-004



STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION** 

> **EROSION** PREVENTION AND SEDIMENT CONTROL NOTES

## **EROSION PREVENTION AND SEDIMENT CONTROL NOTES (CONT.)**

- 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.

 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 P-I-H
 2025
 58S002-S3-004
 9A

 PS&E
 2025
 58S002-S3-004
 9A

SEALED BY

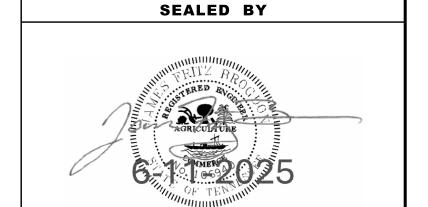
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION
PREVENTION
AND SEDIMENT
CONTROL NOTES

#### SHEE NO. YEAR PROJECT NO. P-I-H 2025 58S002-S3-004 2025 PS&E 58S002-S3-004

#### 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.
- 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.
- 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.



STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION** 

> **EROSION** PREVENTION AND SEDIMENT SPECIAL NOTES

TABULATED EPSC QUANTITIES										
ITEM NO.	DESCRIPTION	UNIT	QUANTITY 58S002-S3-004							
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	29							
209-02.07	18" TEMPORARY SLOPE DRAIN	L.F.	96							
209-03.53	STREAM MITIGATION - ARTICULATED CONCRETE MAT	S.Y.	660							
209-05	SEDIMENT REMOVAL	C.Y.	13							
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	244							
209-09.01	SANDBAGS	BAG	360							
209-09.04	SEDIMENT FILTER BAG(15' X 10')	EACH	4							
209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	32							
209-65.04	TEMPORARY IN STREAM DIVERSION	L.F.	222							
303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	15							
621-03.06	42" TEMPORARY DRAINAGE PIPE	L.F.	40							
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	43							
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	50							
709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	23							
709-05.08	MACHINED RIP-RAP (CLASS B)	TON	16							
740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	240							
740-11.03	TEMPORARY SEDIMENT TUBE 18IN	L.F.	619							
801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	9							
801-01.38	NATVE SEED MX FINAL STABLIZATN OF SLOPES	UNIT	14							
801-03	WATER (SEEDING & SODDING)	M.G.	2							
801-01.65	TEMPORARY MULCH	UNIT	1							
805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	800							

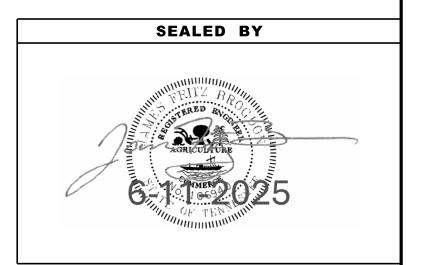
<b>FOOTNOTES</b>	3
------------------	---

ALL EROSION PREVENTION AND SEDIEMNT CONTROL QUANTITES ARE TO BE USED AS DIRECTED BY THE ENGINEER. SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT

- FOR STABILIZING THE CHANNEL. SEE DETAIL SHEET FOR MORE INFORMATION.
- FOR SUSPENDED PIPE DIVERSION.
- PUMP AROUND AND CONSTRUCT IN THE DRY. (3)
- FOR THE TEMPORARY CONSTRUCTION EXIT. (4)
- FOR TEMPORARY SLOPE DRAINS.
- 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 30 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 CHAPTER 7.9 (PERMANENT VEGETATION) OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK 4TH EDITION.
- FOR PERMANENT STABILIZATION WITH SEED.
- INCLUDES 154 S.Y. FOR THE SEDIMENT FILTER BAG AND 86 S.Y. FOR TEMPORARY CONSTRUCTION EXIT.
- INCLUDES 2000 GALLONS FOR EPSC
- INCLUDES QUANTITIES FOR DISTURBED AREA
- INCLUDES 2 SEDIMENT FILTER BAG TO BE USED AS REPLACEMENTS.

	TYPE	YEAR	PROJECT NO.	SHEET NO.
	P-I-H	2025	58\$002-\$3-004	9C
	PS&E	2025	58\$002-\$3-004	9C
ĺ				

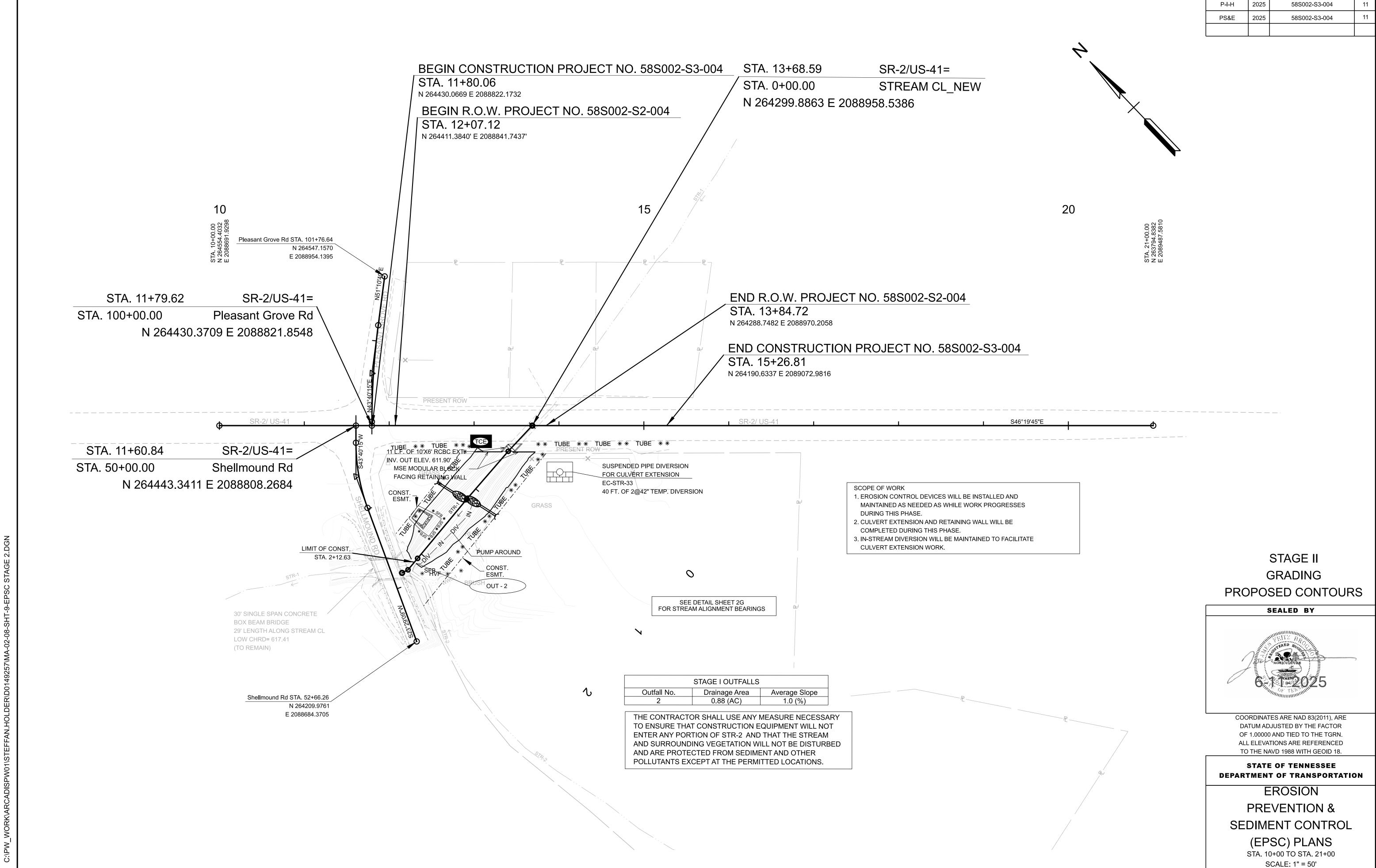
	OSION PREVENTION AND DIMENT CONTROLLEGE			
SYMBOL	ITEM	STD. DWG.		
* SEB*	SEDIMENT FILTER BAG	EC-STR-2		
* SFB* SFB*	SILT FENCE WITH WIRE BACKING	EC-STR-3C		
* HVF * HVF	HIGH VISIBILITY FENCE	S-F-1		
	TEMPORARY SLOPE DRAIN	EC-STR-27		
** TUBE ** TUBE	SEDIMENT TUBE	EC-STR-37		
□IN □ DIV □	INSTREAM DIVERSION	EC-STR-30 EC-STR-30A		
	TEMPORARY CONSTRUCTION EXIT	EC-STR-25		
	SUSPENDED PIPE DIVERSION	EC-STR-33 EC-STR-33A		
	EROSION CONTROL BLANKET	EC-STR-34		



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

**EROSION** PREVENTION & SEDIMENT CONTROL LEGEND & TABULATION

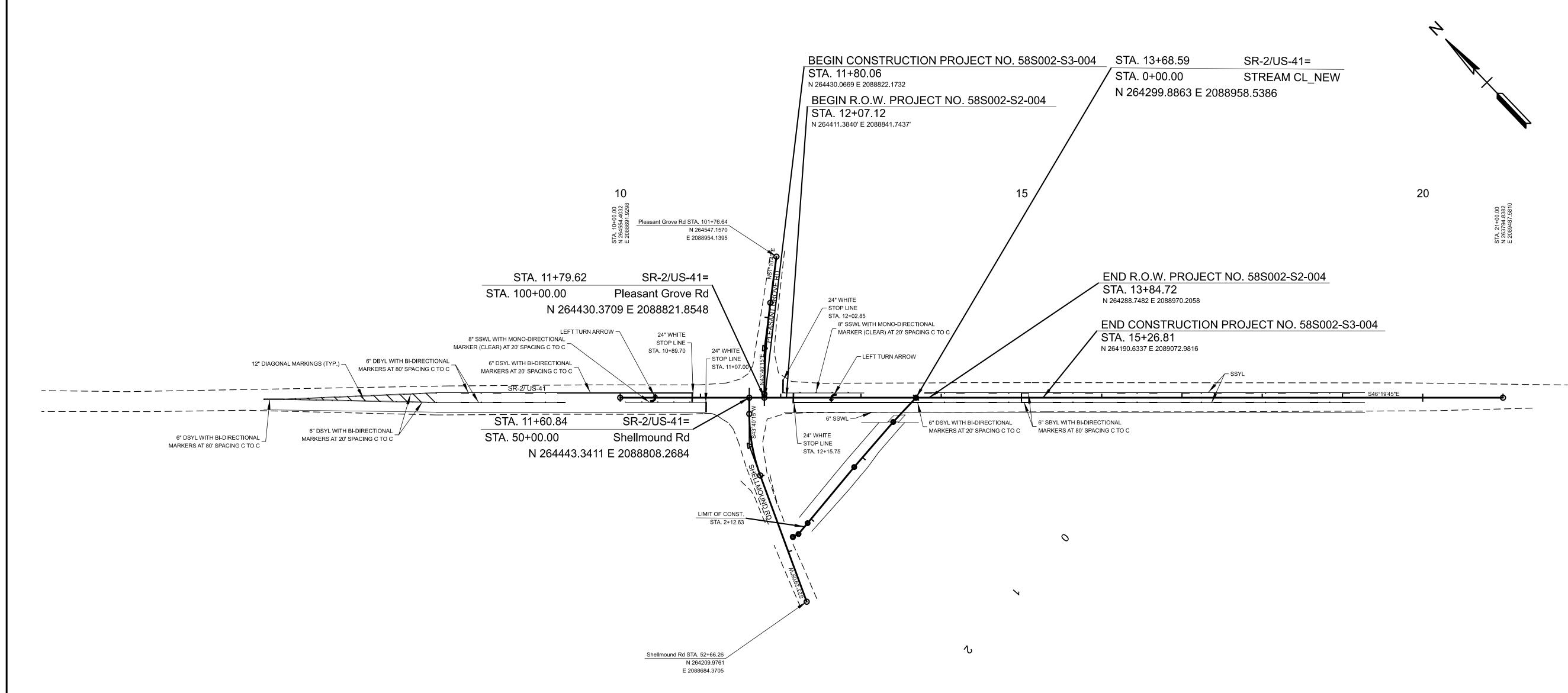
PROJECT NO.



PROJECT NO.

PROJECT NO.

6/13/2025 C:\PW\_WORK\ARCADISPW01\NATALIF.KFRNISANT\D0149257\MA-02-08-SHT-10-FPSC.STAGF





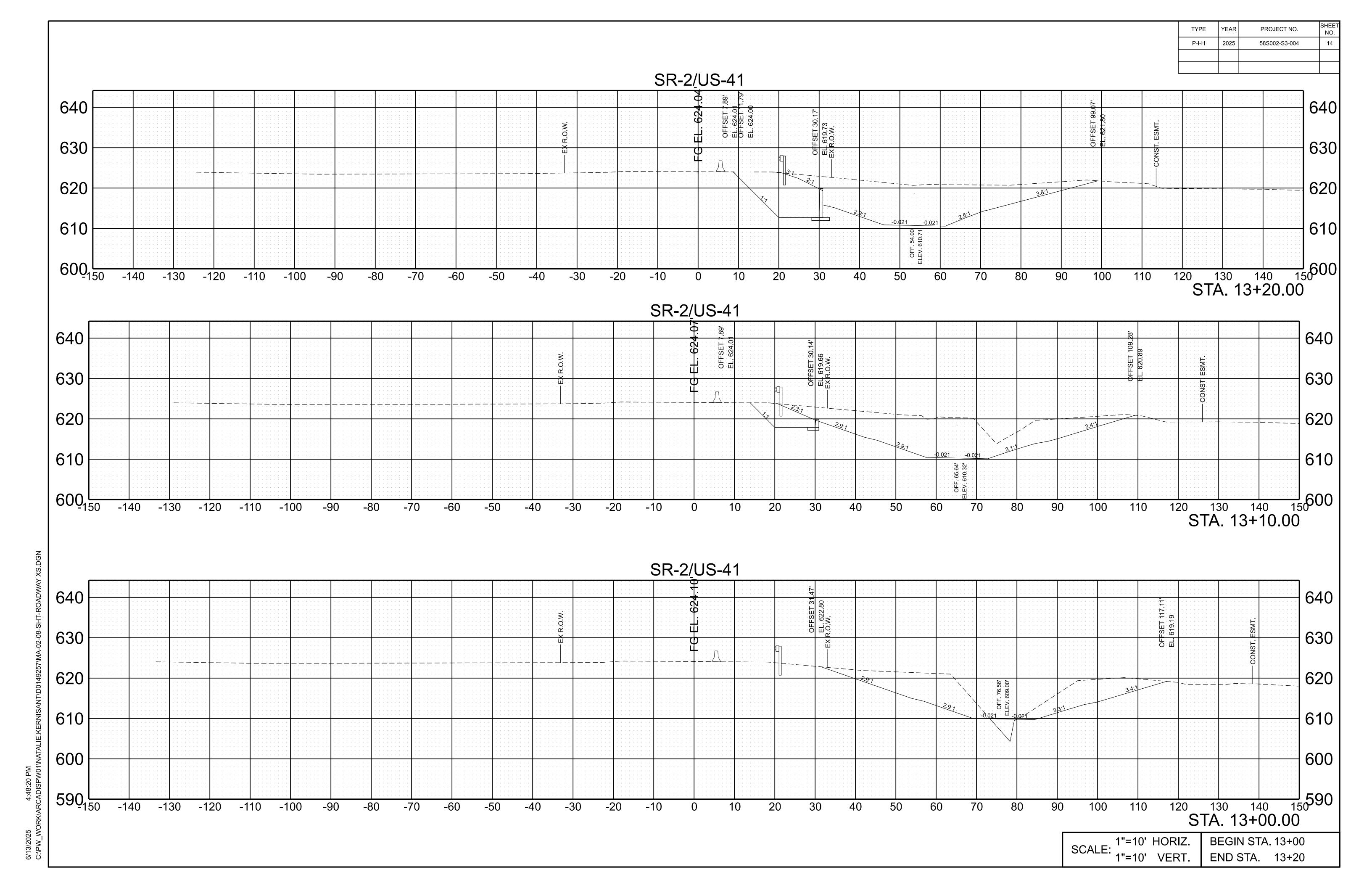


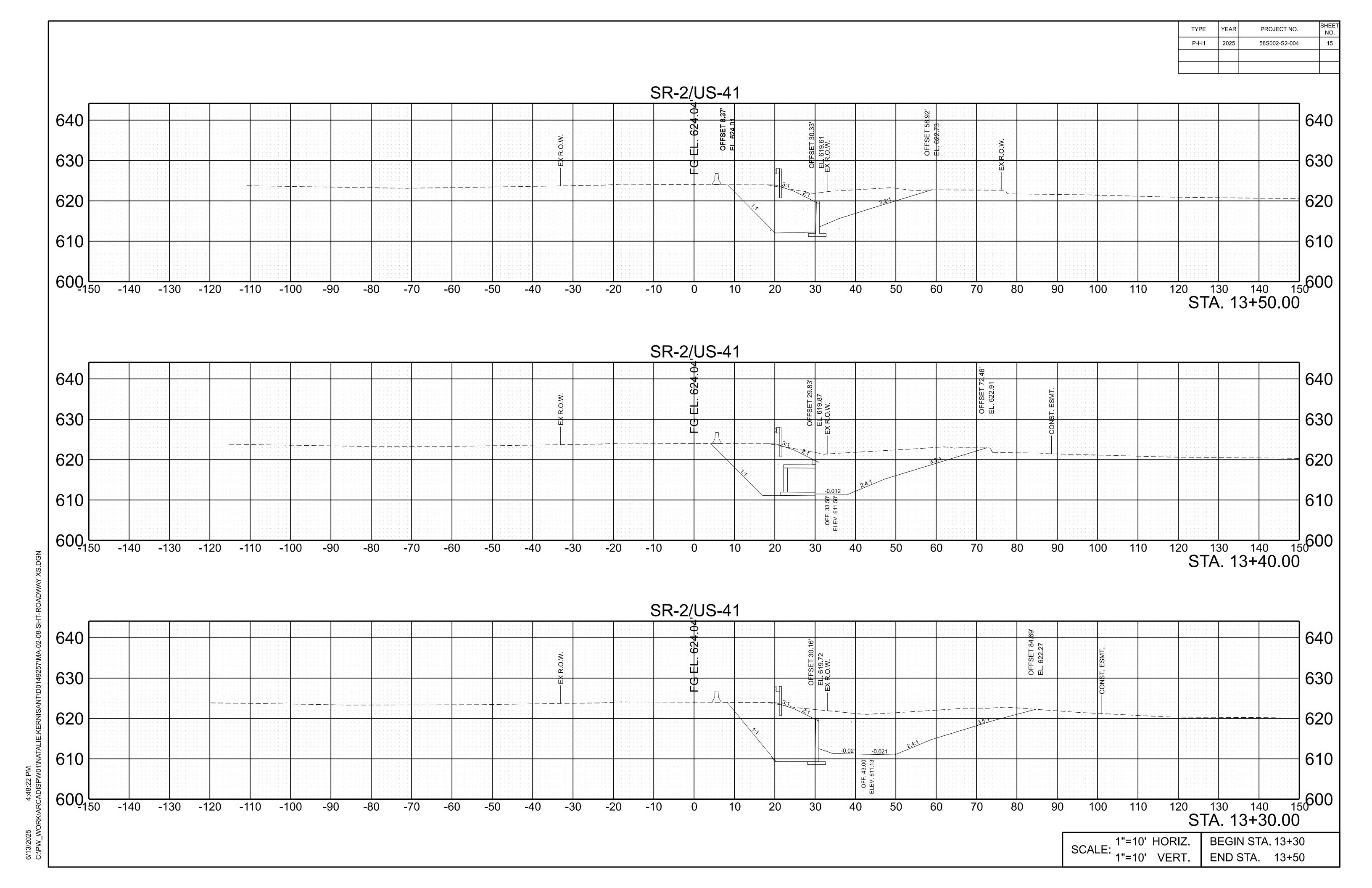
COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 18.

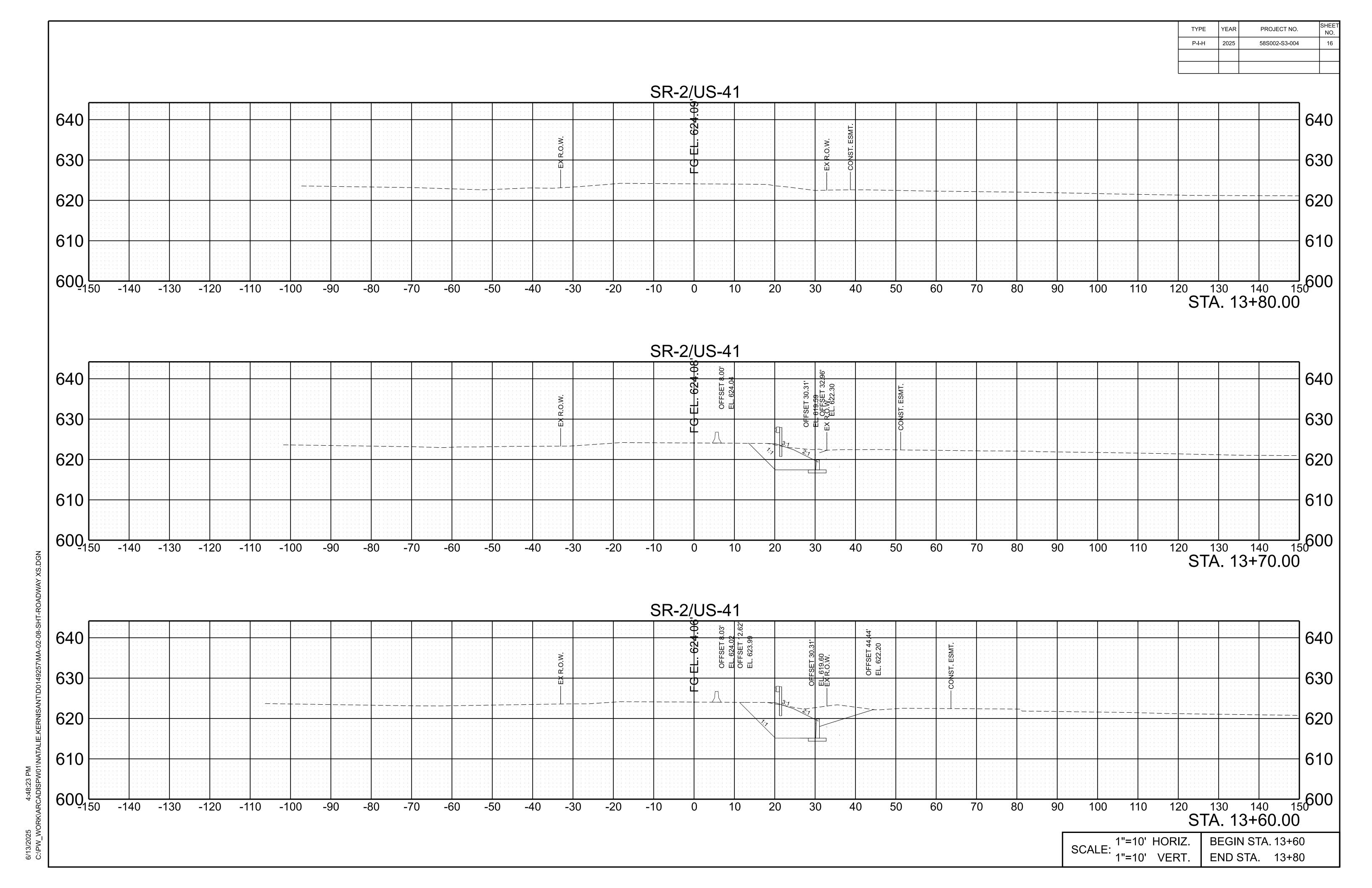
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

SIGNING AND
PAVEMENT
MARKING

PLAN STA. 10+00 TO STA. 21+00.00 SCALE: 1" = 50'







# 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.
- B. 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:
  - 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 FFFT
    - (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.
- 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.:
  - 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.
    - 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.

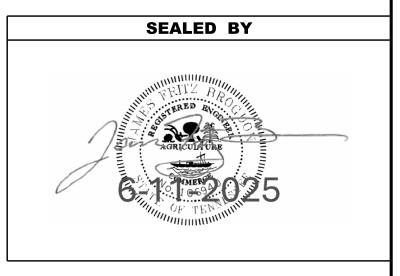
C. IF THE DIFFERENCE IN ELEVATION IS FARTHER THAN 8 FEET FROM THE NEAREST TRAFFIC LANE BUT NOT MORE THAN 30 FEET FROM THE NEAREST TRAFFIC LANE:

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.

TYPE	YEAR	PROJECT NO.	SHEET NO.
P-I-H	2025	58\$002-\$3-004	T-1
PS&E	2025	58S002-S3-004	T-1



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE
DROP-OFF NOTES
FOR
TRAFFIC CONTROL

TABULATED TRAFFIC CONTROL QUANTITIES										
ITEM NO.										
712-01	TRAFFIC CONTROL	LS	1							
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	290							
712-02.60	TEMPORARY WORK ZONE CRASH CUSHION (MASH TL-3)	EACH	2							
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	100							
712-06	SIGNS (CONSTRUCTION)	S.F.	269							
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	20							
712-08.03	ARROW BOARD (TYPE C)	EACH	2							
712-09.02	REMOVABLE PAVEMENT MARKING (8" BARRIER LINE)	L.F.	4500							
712-09.04	REMOVABLE PAVEMENT MARKING (STOP LINE)	L.F.	40							
712-09.30	REMOVABLE BLACK-OUT TAPE (6")	L.F.	2500							
730-01.04	MODIFICATION OF EXISTING TRAFFIC SIGNAL EQUIPMENT	LS	1							

	TRAFFIC CONTRO	DL SIC	SN TA	BULA	TION	
M.U.T.C.D.		,	SIZE		TOTAL	ITEM NO.
SIGN	LEGEND \ DESCRIPTION	INI	NCHES	S.F.	NUMBER	712-06
NO.		L	x W		REQUIRED	S.F.
G20-2	END ROAD WORK	48"	24"	8	4	32
R3-7	R3-7 RIGHT LANE MUST TURN RIGHT W1-4L LANE SHIFT LEFT		36"	9	1	9
W1-4L			48"	16	2	32
W1-4R	LANE SHIFT RIGHT	48"	48"	16	2	32
W6-3	TWO-WAY TRAFFIC	48"	48"	16	2	32
W16-9P	AHEAD (PLAQUE)	24"	12"	2	2	4
W20-1	ROAD WORK	48"	48"	16	8	128
					TOTAL	269

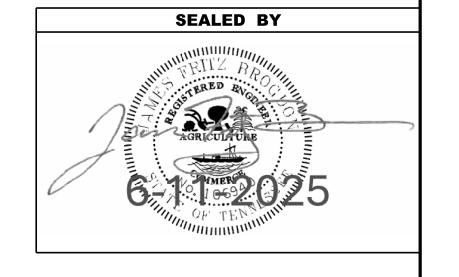
#### PHASING NOTES

#### PHASE 1:

THE CONTRACTOR SHALL IMPLEMENT THE TRAFFIC CONTROL PLAN AS SHOWN ON SHEET T-3. NO WORK SHALL BEGIN UNTIL THE TRAFFIC CONTROL SHOWN SHEET T-3 IS COMPLETELY INSTALLED. THE MODIFICATION OF THE EXISTING TRAFFIC SIGNAL MUST ALSO BE COMPLETED AT THIS TIME. THIS TRAFFIC CONTROL PLAN SHALL REMAIN IN EFFECT UNTIL ALL WORK RELATED TO THE EXTENSION OF THE BOX CULVERT AND ASSOCIATED CHANNEL WORK ARE COMPLETED.

#### PHASE 2:

THE CONTRACTOR SHALL IMPLEMENT THE TRAFFIC CONTROL PLAN AS SHOWN ON SHEET T-4. NO WORK SHALL BEGIN UNTIL THE TRAFFIC CONTROL SHOWN SHEET T-3 IS COMPLETELY INSTALLED. THE MILLING AND OVERLAYING OPERATION WILL BE ACCOMPLISHED UNDER TRAFFIC. THIS TRAFFIC CONTROL PLAN SHALL REMAIN IN EFFECT UNTIL ALL WORK RELATED TO THE MILLING, OVERLAY, AND PROPOSED STRIPING ARE COMPLETE.



PROJECT NO.

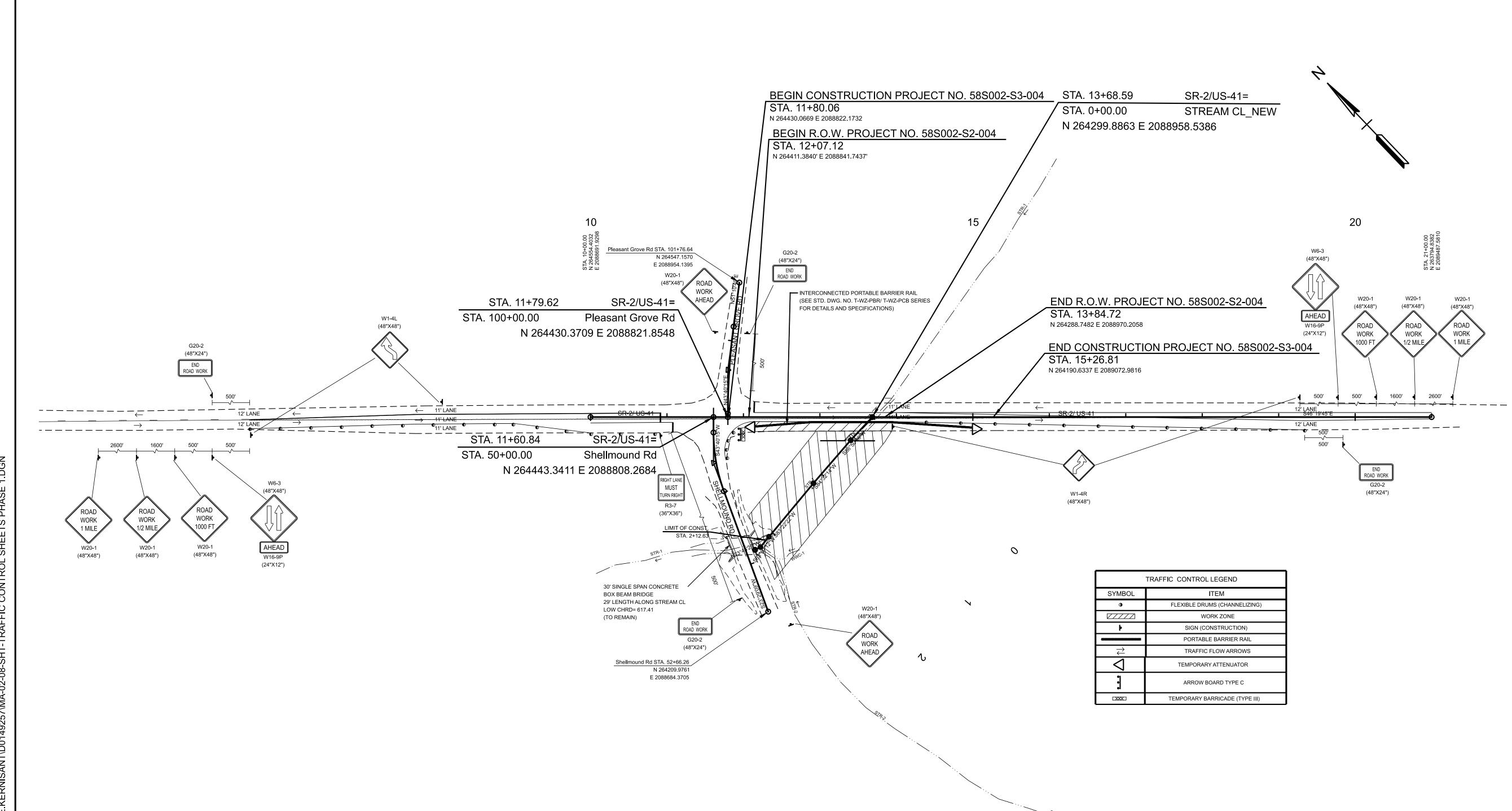
58S002-S3-004

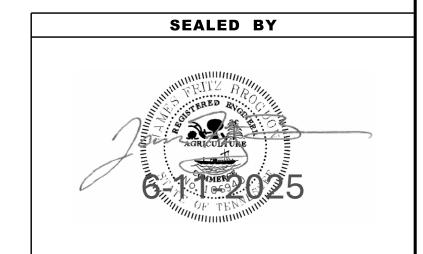
58S002-S3-004

2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL
PHASING NOTES
LEGEND AND
TABULATION





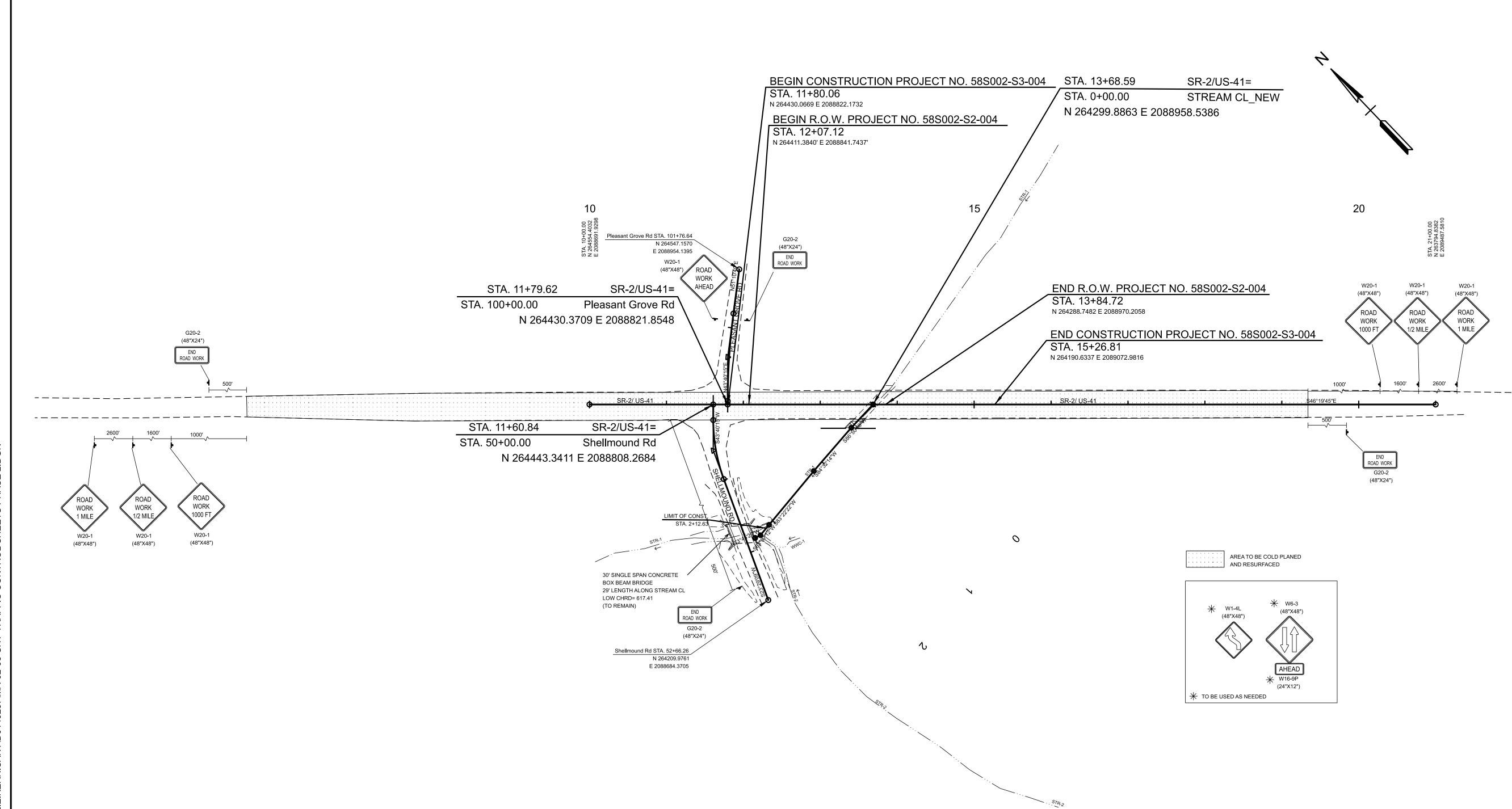
COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 AND TIED TO THE TGRN.
ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 18.

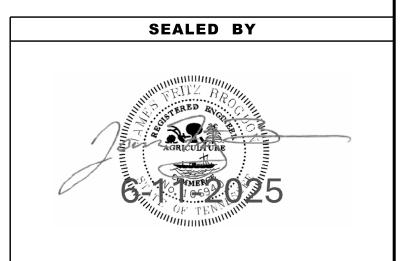
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

PHASE I

STA. 10+00.00 TO STA. 21+00.00 SCALE: 1" = 50'





COORDINATES ARE NAD 83(2011), ARE
DATUM ADJUSTED BY THE FACTOR
OF 1.00000 AND TIED TO THE TGRN.
ALL ELEVATIONS ARE REFERENCED
TO THE NAVD 1988 WITH GEOID 18.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

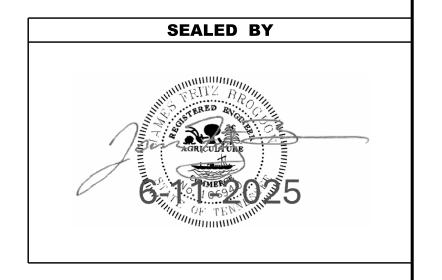
PHASE II

STA. 10+00.00 TO STA. 21+00.00 SCALE: 1" = 50'

## PROJECT NO. PS&E 58S002-S3-004

## **GEOTECHNICAL INDEX**

SHEET NAME	SHEET NO.
RETAINING WALL INDEX.	R-1
RETAINING WALL GEOTECHNICAL	
DESIGN NOTES AND REQUIREMENTS	R-2
RETAINING WALL TYPICAL DETAIL	R-3
RETAINING WALL GEOMETRIC LAYOUT	R-4
RETAINING WALL SOIL PROFILE AND DETAILS	R-5



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

> GEOTECHNICAL INDEX

#### ACCEPTABLE WALL TYPES

MECHANICALLY STABILIZED EARTH (MSE) WALL - MODULAR BLOCK

THE RETAINING WALL(S) SHALL BE ONE OF THE WALL TYPE(S) AS LISTED ABOVE OR ON FORTHCOMING "RETAINING WALL DETAIL-GEOMETRIC LAYOUT" SHEET(S). ANY PROPRIETARY RETAINING WALL SYSTEM SHALL BE LISTED AS PRE-APPROVED IN QPL 38.

#### RETAINING WALL DESIGN NOTES

UNLESS SPECIFICALLY STATED OTHERWISE IN THE CONTRACT PLANS, THE BIDDING FOR, THE DESIGN OF AND THE CONSTRUCTION OF RETAINING WALLS SHOWN IN THE PLANS SHALL BE GOVERNED BY THE TENNESSEE DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION 624 REGARDING RETAINING WALLS. THIS SPECIAL PROVISION SHALL BE CONSIDERED AS ONE OF THOSE DOCUMENTS WHICH THE BIDDER/CONTRACTOR HAS EXAMINED AND MADE HIMSELF FAMILIAR WITH AS DESCRIBED IN SECTION 102.04 - EXAMINATION OF THE SITE, THE WORK, THE PLANS, AND THE SPECIFICATIONS IN THE TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

EXCAVATION FOR THE WALL AND/OR ITS FOOTING SHALL NOT BE ACCOMPLISHED UNTIL THE CONTRACTOR HAS SUBMITTED WALL DESIGNS AND CALCULATIONS AND HAS BEEN ISSUED AN APPROVED SET OF WALL PLANS AND HAS LABOR AND MATERIAL RESOURCES AVAILABLE TO BEGIN AND CONTINUE WALL CONSTRUCTION IMMEDIATELY AFTER EXCAVATION.

THIS WALL SHALL BE DESIGNED IN ACCORDANCE WITH LRFD DESIGN PROCEDURES AND REQUIREMENTS AS DESCRIBED IN:

- AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2020
- PUBLICATION FHWA-NHI-10-024/FHWA GEC 011, DESIGN AND CONSTRUCTION OF MECHANICALLY STABILIZED EARTH WALLS AND REINFORCED SOIL SLOPES, NOVEMBER 2009 FOR MSE WALLS

FOR PROPRIETARY WALL SYSTEMS THAT HAVE BEEN APPROVED AS SHOWN IN QPL 38, THE WALL DESIGNER SHALL BE RESPONSIBLE FOR PROVIDING WALL DESIGNS INCORPORATING MATERIALS AND COMPONENTS (I.E. REINFORCEMENT CONNECTION DEVICES, SPECIFIC MANUFACTURER AND PROPERTIES OF GEOGRID) AS WAS ORIGINALLY SUBMITTED AND APPROVED BY TDOT, IF A MATERIAL AND/OR COMPONENT OF THE WALL SYSTEM HAVE BEEN MODIFIED FROM THE ORIGINALLY APPROVED SYSTEM, A WALL DESIGN AND SET OF PLANS AND CALCULATIONS FOR THIS WALL SYSTEM CANNOT BE SUBMITTED FOR REVIEW AND APPROVAL UNTIL THE WALL SYSTEM DESIGNER WHO ORIGINALLY SUBMITTED THE WALL SYSTEM FOR APPROVAL BY TDOT SUBMITS A REQUEST FOR RE-APPROVAL UTILIZING THE MODIFIED ELEMENTS OF THE WALL. THIS SUBMITTAL DOES NOT GUARANTEE APPROVAL OF THE MODIFIED SYSTEM. IF THIS RE-APPROVAL PROCESS DOES NOT MEET THE CONTRACTOR'S SCHEDULE OR IF THE MODIFIED SYSTEM IS NOT APPROVED, THE CONTRACTOR/WALL DESIGNER SHALL PROVIDE A WALL DESIGN FOR ONE OF THE APPROVED SYSTEMS AT NO CHANGE IN CONTRACT PRICE FOR THE RETAINING WALL AND NO CHANGE IN PROJECT SCHEDULE REQUIREMENTS WILL BE ALLOWED.

THE WALL DESIGNER SHALL PROVIDE RETAINING WALL PLANS, DETAILS AND CALCULATIONS AS REQUIRED BY SPECIAL PROVISION 624 AND AS REQUIRED HEREIN.

- THE WALL DESIGNER SHALL UTILIZE THE GEOTECHNICAL PARAMETERS AND RESISTANCE FACTORS AS PROVIDED FOR EACH PROJECT RETAINING WALL ON THE "RETAINING WALL DETAIL" SHEET(S) TO PREPARE AND SUBMIT DESIGN CALCULATIONS. LOAD FACTORS AND OTHER PERTINENT DESIGN REQUIREMENTS PROVIDED IN AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2020 AND INTERIMS SHALL BE USED FOR NON-MSE WALLS AND PUBLICATION FHWA-NHI-10-024/FHWA GEC 011, DESIGN AND CONSTRUCTION OF MECHANICALLY STABILIZED EARTH WALLS AND REINFORCED SOIL SLOPES, NOVEMBER 2009 FOR MSE WALLS.
- CALCULATIONS FOR BOTH INTERNAL AND EXTERNAL STABILITY (SLIDING, ECCENTRICITY, AND BEARING CAPACITY-GLOBAL STABILITY AND SETTLEMENT BEING THE EXCEPTIONS) SHALL BE PROVIDED FOR EACH CRITICAL WALL SECTION WHICH DEMONSTRATES THE REQUIRED CAPACITY TO DEMAND RATIO OF 1.0 IS MET UTILIZING THE DESIGN PARAMETERS PROVIDED. FOR MSE WALLS, THE WALL DESIGNER MUST ADJUST THE REINFORCEMENT LENGTHS BEYOND THOSE MINIMUM REQUIRED LENGTHS, IF REQUIRED, TO MEET BOTH INTERNAL AND EXTERNAL REQUIREMENTS. THE WALL DESIGNER/CONTRACTOR PLANS MUST INCLUDE ANY FOUNDATION IMPROVEMENTS AS REQUIRED HEREIN ON THE WALL DESIGNER/CONTRACTOR'S WALL ELEVATION VIEWS AND ANY CROSS-SECTIONAL DETAIL DRAWINGS.
- UNLESS OTHERWISE STATED, THE WALL DESIGNER CAN ASSUME THAT MINIMUM GLOBAL STABILITY AND SETTLEMENT CRITERIA IS ACHIEVED WITH A WALL DESIGN MEETING OTHER MINIMUM EXTERNAL STABILITY REQUIREMENTS AND ASSUMING WALL FOUNDATION BEARING IMPROVEMENTS ARE MET. WHILE THE WALL DESIGNER'S DESIGN MUST DEMONSTRATE COMPLIANCE WITH EXTERNAL STABILITY REQUIREMENTS AS DISCUSSED ABOVE, THE WALL DESIGNER PROVIDES CERTIFICATION (BY SIGNING AND STAMPING BY PROFESSIONAL ENGINEER REGISTERED IN STATE OF TENNESSEE) OF THE WALLS, PLANS, AND CALCULATIONS "FOR INTERNAL STABILITY ONLY".
- LOAD COMBINATIONS STRENGTH I, EXTREME EVENT I, AND EXTREME EVENT II SHALL BE EVALUATED AS GIVEN IN AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2020 AND INTERIMS. FOR MSE WALLS, LOAD COMBINATIONS STRENGTH I, EXTREME EVENT I, AND EXTREME EVENT II AS GIVEN IN TABLE 4-1 OF PUBLICATION FHWA-NHI-10-024/FHWA GEC 011, DESIGN AND CONSTRUCTION OF MECHANICALLY STABILIZED EARTH WALLS AND REINFORCED SOIL SLOPES, NOVEMBER 2009 FOR MSE WALLS SHALL BE EVALUATED.

#### NOTE REGARDING CONSTRUCTION SLOPES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE EXCAVATION IN ACCORDANCE WITH OSHA AND OTHER APPLICABLE STATE AND LOCAL REGULATIONS REGARDING CONSTRUCTION SLOPES AND TRENCHES. IN ADDITION TO FOLLOWING APPLICABLE REGULATORY REQUIREMENTS, AS A MINIMUM REQUIREMENT, ALL TEMPORARY CONSTRUCTION SLOPES SHALL BE PLACED AT A MAXIMUM OF A 1:1 SLOPE IN SOIL AND SHALL NOT BE LEFT OPEN WITHOUT SHORING FOR ANY LONGER THAN ABSOLUTELY NECESSARY. THE CONTRACTOR BUILDING THE WALL SHALL ENSURE THAT THESE TEMPORARY BACK SLOPES ARE NOT AND DO NOT BECOME UNSTABLE. IF SLOPE IS UNSTABLE, BECOMES UNSTABLE, IS CUT STEEPER THAN A 1:1 SLOPE OR IS UNACCEPTABLE FOR ANOTHER REASON, THEN TEMPORARY SHORING SHALL BE USED. ANY UNUSUAL SOIL CONDITIONS OTHER THAN THOSE ASSUMED SHOULD BE REPORTED TO THE PROJECT ENGINEER.

AASHTO LRFD SECTION 3.10.3.1 - SITE CLASS DEFINITION

SITE CLASS D

GES No. 5804224 VERSION 01/29/2024

#### TABLE 1-DESIGN REQUIREMENTS AND PARAMETERS

MSE WALLS

120 POUNDS PER CUBIC FOOT

GREATER OF 8-FT OR O.8H

OR AS SPECIFIED ON THE

L/4 (SOIL), 3L/8 (ROCK)

1.20

NOTE

DESIGN LIFE	75 YEARS	
SEISMIC ACCELERATION COEFFICIENTS		

DESCRIPTION

As	0.18	
$S_{DS}$	0.362	
$S_{D1}$	0.164	

#### EFFECTIVE (DRAINED) FRICTION ANGLE

UNCLASSIFIED SITE OR BORROW SOIL

MINIMUM LENGTH OF SOIL REINFORCEMENT,

RETAINED BACKFILL-UNCLASSIFIED SITE OR BORROW SOIL	28 <sup>O</sup>	
RETAINED BACKFILL-SELECT BACKFILL	34 ° TO MAX 40 °	1
REINFORCED BACKFILL	34 ° TO MAX 40 °	1

#### UNIT WEIGHT

SELECT BACKFILL MATERIAL	VARIES	1 A	
DESIGN BASIS			
COEFFICIENT OF SLIDING FRICTION	SEE TABLE 2	3	
NOMINAL BEARING RESISTANCE	SEE TABLE 2	3	

#### RESISTANCE FACTORS

LIMITING ECCENTRICITY

SLIDING-STATIC	1.0	4
SLIDING-COMBINED STATIC+EARTHQUAKE	1.0	4
BEARING-STATIC	0.65	5
BEARING-COMBINED STATIC+EARTHQUAKE	0.9	5
PULLOUT RESISTANCE OF METALLIC REINFORCE	MENT	
STATIC -STEEL STRIP REINFORCEMENTS	0.90	6
-STEEL GRID REINFORCEMENTS	0.90	ð
COMBINED STATIC/EARTHQUAKE		
-STEEL STRIP REINFORCEMENTS	1.20	6

#### PULLOUT RESISTANCE OF GEOSYNTHETIC REINFORCEMENT

-STEEL GRID REINFORCEMENTS

TOLLOG RESISTANCE OF OLOSINTHETTO RETAIN ONCEMENT			
STATIC			
-GEOTEXTILES AND GEOGRIDS	0.70	6	
-GEOSTRIP REINFORCEMENTS	0.70		
COMBINED STATIC/EARTHQUAKE			
-GEOTEXTILES AND GEOGRIDS	1.00	6	
-GEOSTRIP REINFORCEMENTS	1.00		

#### TENSILE RESISTANCE OF METALLIC REINFORCEMENTS AND CONNECTORS

STATIC		
-STRIP REINFORCEMENT	0.75	7
-GRID REINFORCEMENT	0.65	7,8
COMBINED STATIC/EARTHQUAKE		
-STRIP REINFORCEMENT	1.00	7
-GRID REINFORCEMENT	0.85	7,8

## TENSILE RESISTANCE OF GEOSYNTHETIC REINFORCEMENTS AND CONNECTORS

-GEOTEXTILE AND GEOGRID REINFORCEMENTS -GEOSTRIP REINFORCEMENTS	0.80 0.55	
COMBINED STATIC/EARTHQUAKE -GEOTEXTILE AND GEOGRID REINFORCEMENTS -GEOSTRIP REINFORCEMENTS	1.00 1.00	

#### NOTES FOR TABLE 1

110 .	NOTE
1	A MAXIMUM FRICTION ANGLE OF 34 DEGREES CAN BE ASSUMED FOR MATERIAL MEETING SPECIFICATIONS IN
	SECTION F, PART 1. MATERIALS OF TENNESSEE DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION 624
	REGARDING RETAINING WALLS. A HIGHER FRICTION ANGLE THAN 34 DEGREES CAN BE UTILIZED IF THE
	CONTRACTOR SUBMITS INDEPENDENT TESTING AND IT IS VERIFIED BY TDOT. HOWEVER, IN NO CASE SHALL THE
	FRICTION ANGLE FOR ANALYSIS EXCEED 40-DEGREES. INDEPENDENT TESTING MUST BE VERIFIED ANNUALLY.

- 1A | SELECT BACKFILL UNIT WEIGHT TO BE DETERMINED BY CONTRACTOR/DESIGNER DEPENDING ON ACTUAL BACKFILL MATERIAL USED. SELECT BACKFILL IS DEFINED AS MATERIAL MEETING SPECIFICATIONS IN SECTION F, PART 1. MATERIALS OF TENNESSEE DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION 624 REGARDING RETAINING WALLS. IN ORDER TO UTILIZE \$\phi\$ FOR SELECT BACKFILL DESIGN, SELECT BACKFILL MUST BE PLACED FOR A MINIMUM ZONE FORMED BY A 1:1 SLOPE FROM 2 FEET BEHIND THE BOTTOM OF BACK OF WALL FOOTING OR REINFORCED SOIL ZONE FOR MSE WALLS UP TO FINISHED GRADE.
- H IS DESIGN HEIGHT OF THE WALL AND IS DEFINED AS THE DIFFERENCE IN ELEVATION BETWEEN THE FINISHED  $\mid$  grade at the top of the wall and the top of leveling pad or bottom of footing for non-mse walls. THE TOP OF THE LEVELING PAD SHALL ALWAYS BE BELOW THE MINIMUM EMBEDMENT REFERENCE LINE AS INDICATED ON THE PLANS FOR THAT LOCATION. THE LENGTH OF THE SOIL REINFORCEMENT, L, IS MEASURED FROM THE BACKFACE OF THE WALL FACING UNIT. IN CASE OF GRID TYPE REINFORCEMENTS THE LENGTH OF THE SOIL REINFORCEMENT IS MEASURED FROM THE BACKFACE OF THE WALL FACING UNIT TO THE LAST FULL TRANSVERSE MEMBER. FOR MODULAR BLOCKFACING UNITS, THE TOTAL LENGTH OF THE REINFORCEMENT, Br AS MEASURED FROM THE FRONT FACE OF THE WALL IS THE LENGTH L AS DEFINED ABOVE PLUS THE WIDTH OF THE MODULAR BLOCK UNIT (THE HORIZONTAL DIMENSION OF THE BLOCK UNIT MEASURED PERPENDICULAR TO THE WALL FACE).
- 2A | WALL DESIGNER MUST ADJUST THE REINFORCEMENT LENGTHS BEYOND THOSE MINIMUM REQUIRED LENGTHS, IF REQUIRED, TO MEET BOTH INTERNAL AND EXTERNAL STABILITY REQUIREMENTS. MINIMUM REINFORCEMENT LENGTHS MAY BE REQUIRED FOR GLOBAL STABILITY. THIS REQUIREMENT WILL BE SHOWN IN THE PLANS.
- 2B | ALL DESIGN SECTION REINFORCEMENT LENGTHS SHALL BE EQUAL.
- THESE VALUES WILL BE PROVIDED IN TABLES 2 AND/OR 3
- 4 | PASSIVE RESISTANCE SHALL  $\overline{ ext{NOT}}$  BE CONSIDERED IN EVALUATION OF SLIDING RESISTANCE. NO SHEAR KEYS NOR DOWELS WILL BE PERMITTED. FOR CAST-IN-PLACE CONCRETE CANTILEVER WALLS, THE FOOTING SHALL BE UNIFORM IN THICKNESS THROUGHOUT THE DESIGN SECTION.
- 5 | FOR ALL LIMIT STATES, THE DESIGN LOADING FOR THE RETAINING WALL SYSTEM SHALL NOT EXCEED THE FACTORED BEARING RESISTANCE, WHICH IS THE PRODUCT OF THE NOMINAL BEARING RESISTANCE SPECIFIED IN TABLES 2 AND/OR 3 AND THE APPROPRIATE RESISTANCE FACTOR.

THE FACING MAT, USE THE RESISTANCE FACTOR FOR STRIP REINFORCEMENTS.

LIVE LOAD DUE TO VEHICULAR TRAFFIC SHALL BE INCLUDED IN THE COMPUTATIONS TO DETERMINE THE MAXIMUM TENSILE FORCES IN REINFORCEMENT LAYERS, BUT SHALL BE NEGLECTED IN THE COMPUTATIONS FOR PULLOUT RESISTANCE. APPLY TO GROSS CROSS-SECTION LESS SACRIFICIAL AREA. FOR SECTIONS WITH HOLES, REDUCE GROSS AREA IN ACCORDANCE WITH ARTICLE 6.8.3 OF AASHTO (2020) AND APPLY TO NET SECTION LESS SACRIFICIAL AREA. 8 APPLIES TO GRID REINFORCEMENTS CONNECTED TO A RIGID FACING ELEMENT, E.G., A CONCRETE PANEL OR BLOCK. FOR GRID REINFORCEMENTS CONNECTED TO A FLEXIBLE FACING MAT OR WHICH ARE CONTINUOUS WITH

TYPE	YEAR	PROJECT NO.	NO.
PS&E	2025	58\$002-\$3-004	R-2

#### TABLE 2-FOUNDATION PARAMETERS AND REQUIREMENTS FOR MSE WALLS

STATION LIMITS	FOUNDATION (REINFORCED ZONE) BEARING CONDITION REQUIREMENT	NOMINAL BEARING RESISTANCE (psf)	COEFFICIENT OF SLIDING FRICTION
13+10 TO 13+33.46	UNDERCUT 3 FEET BELOW PROPOSED LEVELING PAD ELEVATION AND REPLACE WITH GRADED SOLID ROCK	6000	0.65
13+46.30 TO 13+72.10	UNDERCUT 3 FEET BELOW PROPOSED LEVELING PAD ELEVATION AND REPLACE WITH GRADED SOLID ROCK	6000	0.65

#### OTHER DESIGN REQUIREMENTS

THE WALL SHALL HAVE A DRAINAGE GUTTER AT THE TOP DESIGNED TO CARRY SURFACE RUNOFF TO EITHER OR BOTH ENDS OF WALLS. DETAILS OF THIS DRAINAGE FEATURE SHALL BE PROVIDED IN WALL DESIGNER/CONTRACTOR'S WALL DESIGN PLANS AND COSTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE WALL.

FOR FOUNDATION IMPROVEMENT AND EXCAVATION ZONE DETAILS, SEE TYPICAL DETAIL FOR UNDERCUTTING AND BACKFILLING DETAIL ON ACCOMPANYING SHEET.

ANY SHIMMING PLATES MUST BE PERMANENT (NO ASPHALT SHIMS).

ALL WALL ELEMENTS SHALL BE WITHIN TDOT ROW.

ALL CONSTRUCTION MUST STAY WITHIN TDOT ROW, SLOPE EASEMENT, AND CONSTRUCTION

IF A STEEPER THAN 1:1 BACKSLOPE IS REQUIRED BEHIND RETAINING WALL OR TEMPORARY SHORING, THE EFFECTIVE FRICTION ANGLE FOR SELECT BACKFILL WILL NOT BE ALLOWABLE FOR DESIGN AND THE EFFECTIVE FRICTION ANGLE FOR UNCLASSIFIED SITE OR BORROW SITE SHALL BE REQUIRED.

THE CONTRACTOR SHALL COORDINATE AND PERFORM ALL UTILITY RELOCATION SO THAT IT DOES NOT INTERFERE WITH THE RETAINING WALL INSTALLATION.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND PRESERVING THE INTEGRITY AND FUNCTION OF THE ROADWAY DURING CONSTRUCTION AND THROUGHOUT THE DESIGN LIFE OF THE

WHERE A PROPOSED RETAINING WALL MEETS AN EXISTING RETAINING WALL OR ANOTHER STRUCTURE, THE INTERFACE SHOULD BE ONE VERTICAL JOINT. THIS INTERFACE SHOULD BE DESIGNED TO PREVENT LOSS OF FINES AND ALLOW FOR DIFFERENTIAL SETTLEMENT. DETAILS OF THIS JOINT SHALL BE PROVIDED IN WALL DESIGNER/CONTRACTOR'S WALL DESIGN PLANS AND COSTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE WALL.

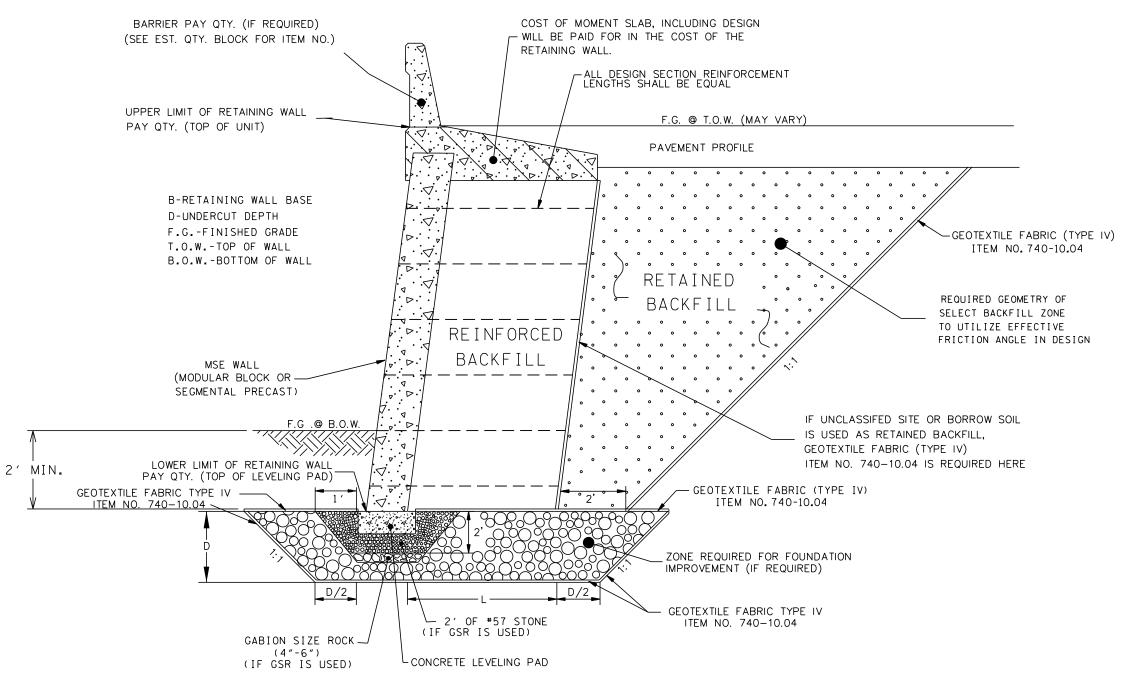
FOR MSE WALLS, A MINIMUM HORIZONTAL BENCH 4 FEET WIDE AS MEASURED FROM THE FACE SHALL BE PROVIDED IN FRONT OF WALLS FOUNDED ON SLOPES. THE BENCH MAY BE FORMED OR THE SLOPE CONTINUED ABOVE THAT LEVEL. SEE ARTICLE 11.10.2.2, AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2020 AND INTERIMS. ALTERNATIVELY, THE EMBEDMENT DEPTH MAY BE INCREASED TO SATISFY THE REQUIREMENTS.

MINIMUM WALL EMBEDMENT SHALL BE 2 FT BELOW PROPOSED GROUND SURFACE OR SCOUR ELEVATION AS APPLICABLE.

> STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION**

> > RETAINING WALL **GEOTECHNICAL DESIGN NOTES &** REQUIREMENTS

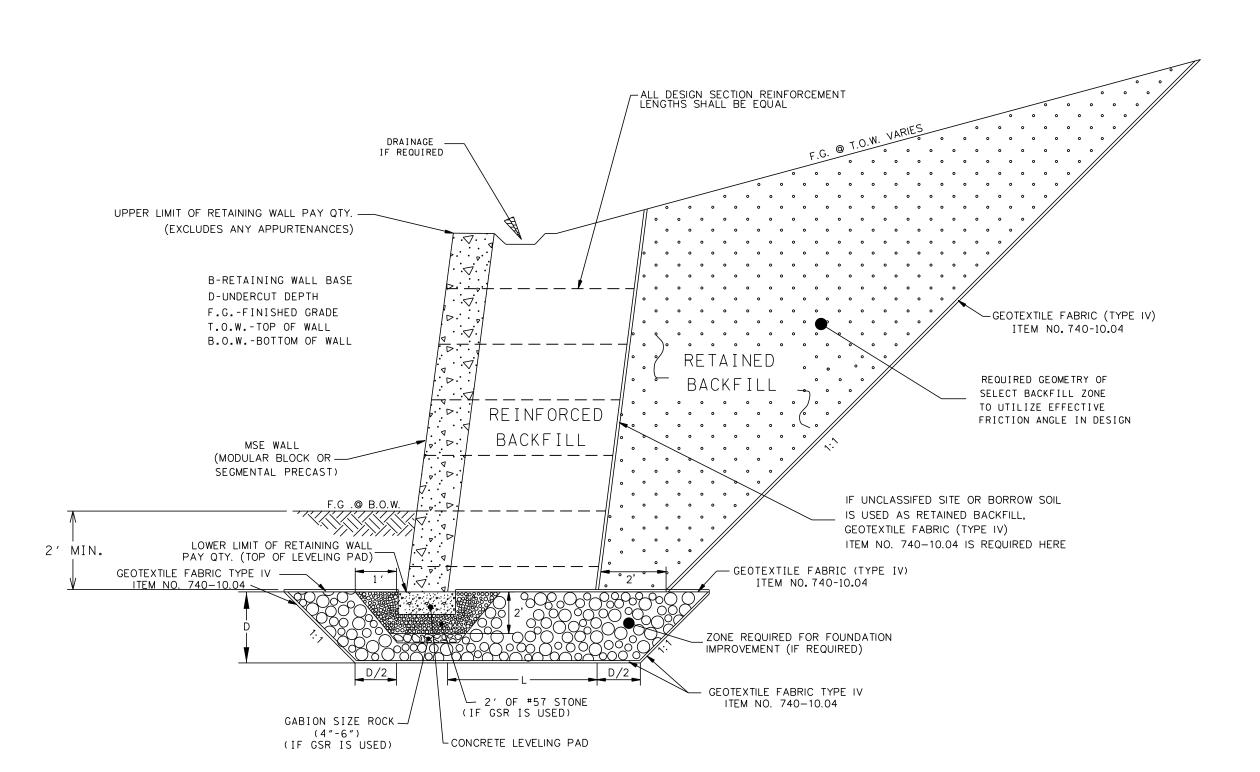
TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	58S002-S3-004	R-3



TYPICAL DETAIL

MSE WALL - MODULAR BLOCK\SEGMENTAL PRECAST

BARRIER REQUIRED



TYPICAL DETAIL

MSE WALL - MODULAR BLOCK\SEGMENTAL PRECAST

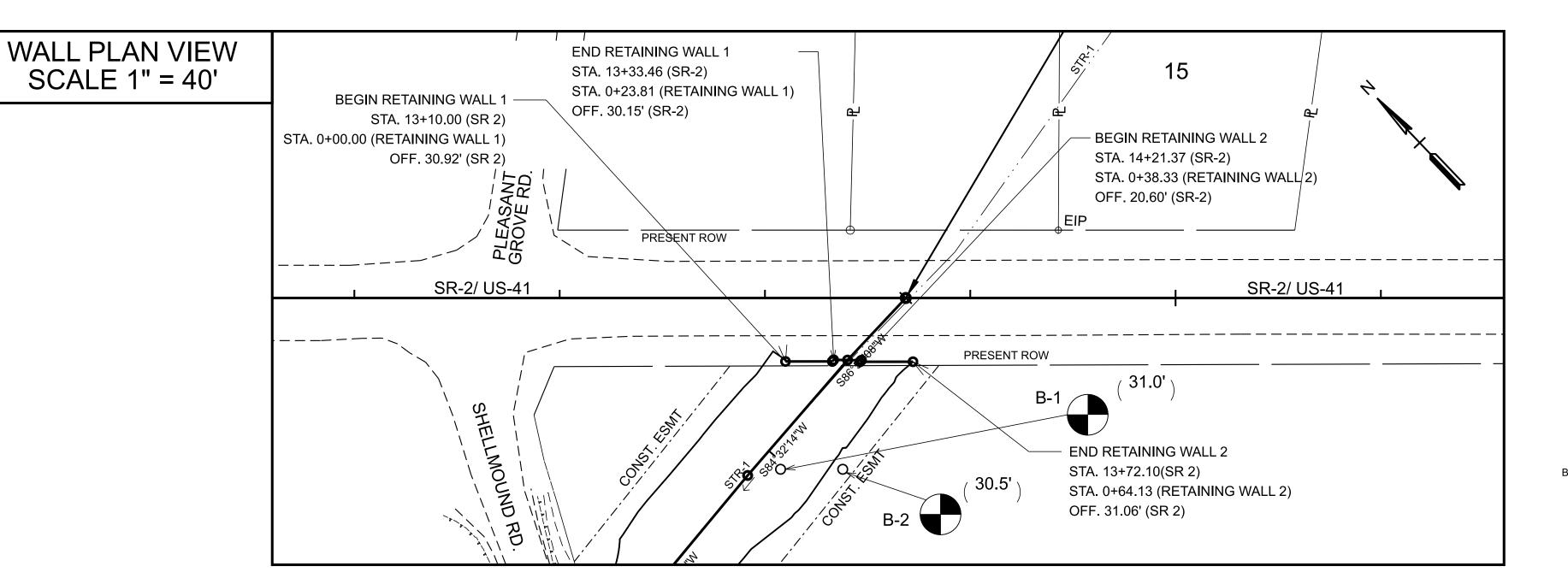
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RETAINING WALL
TYPICAL SECTION

 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 P-I-H
 2025
 58S002-S3-004
 R-1

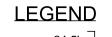
 PS&E
 2025
 58S002-S3-004
 R-4



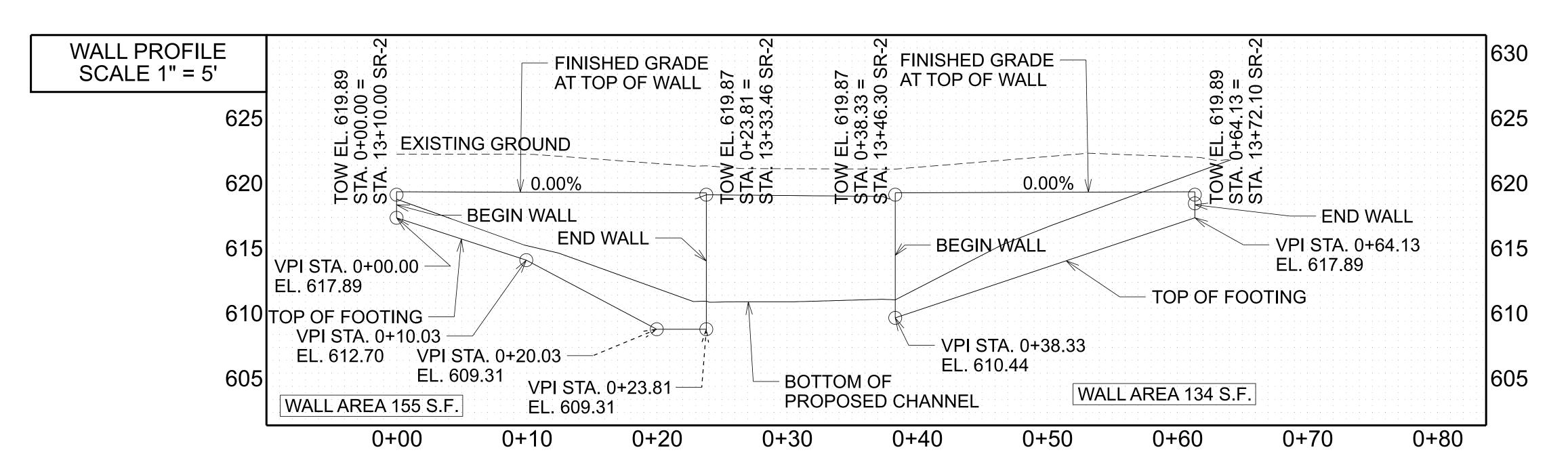
BORING NO.	STATION	OFFSET	GROUND ELEVATION	ROCK ELEVATION	TOTAL DEPTH
1	13+07.74	RT. 52.79'	621.43	N/A	31.0'
2	13+37.41	RT. 51.96'	620.29	N/A	30.5'

#### NOTE:

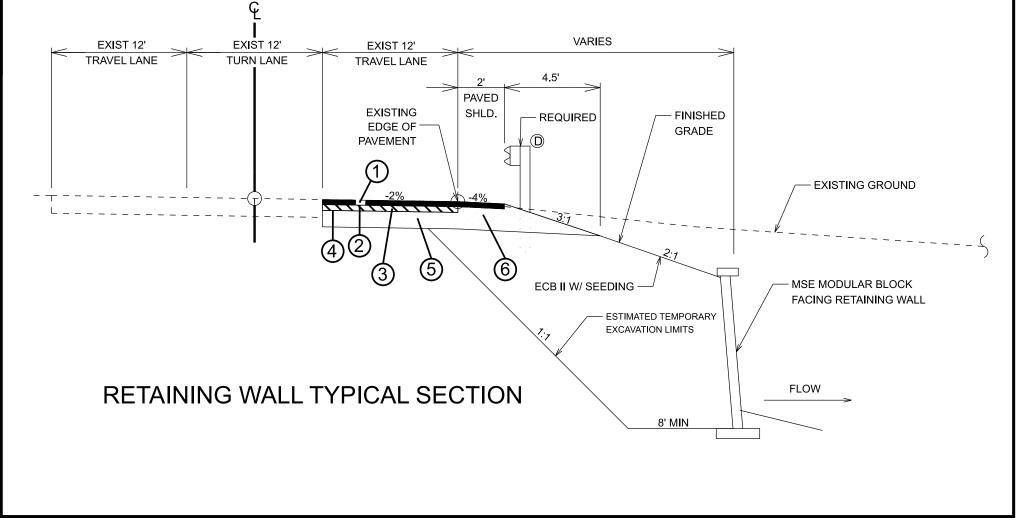
BORING DEPICTIONS SHOWN ON FOUNDATION DATA SHEET INDICATE GENERAL SOIL AND ROCK TYPES AT THE SPECIFIC BORING LOCATIONS

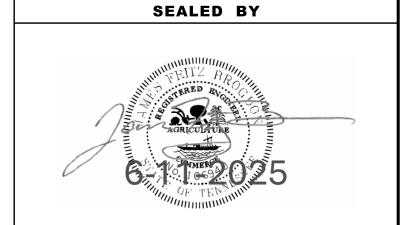


BORING LOCATION TERMINATION DEPTH (NO REFUSAL)







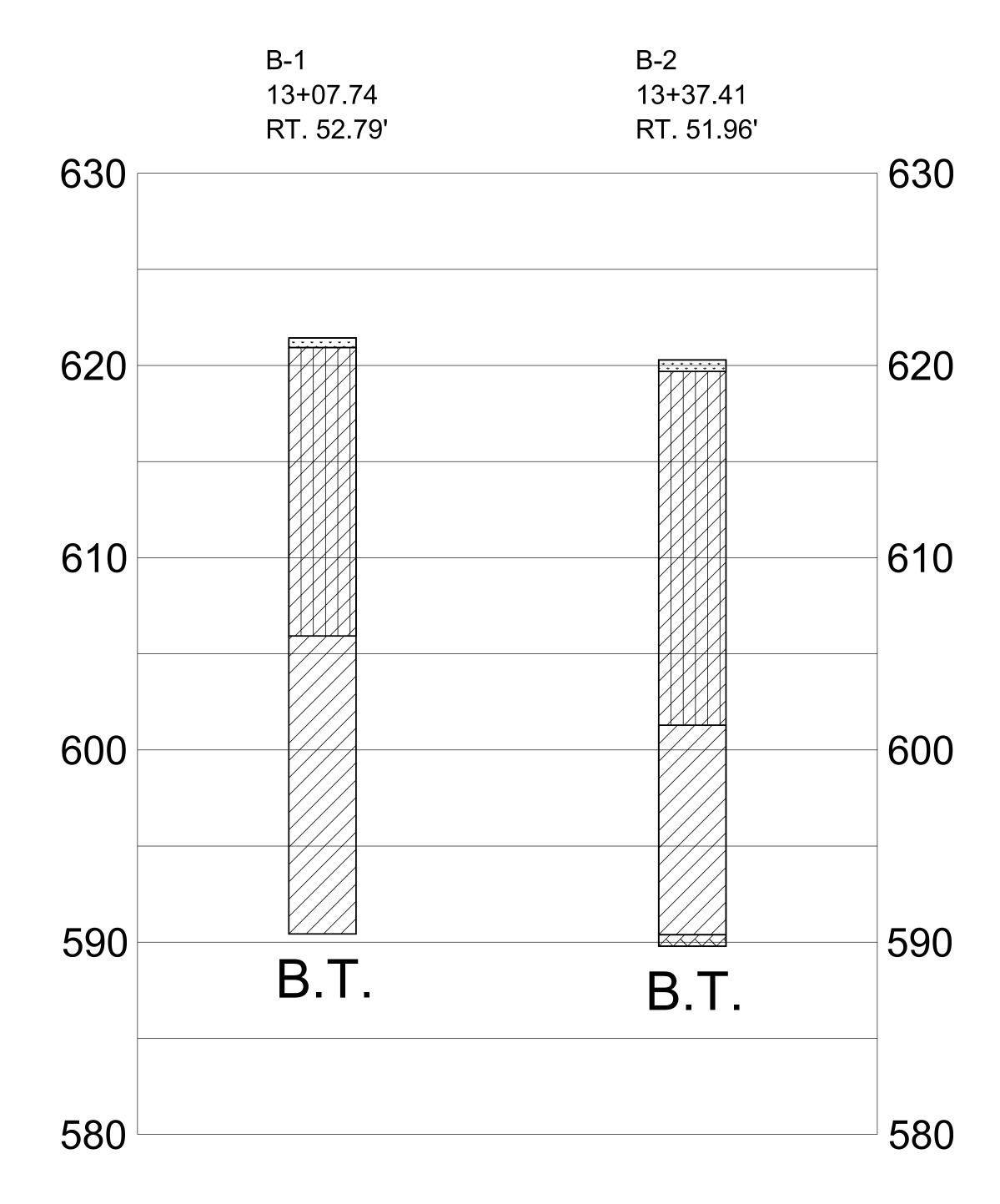


COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 18.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

RETAINING WALL
GEOMETRIC
LAYOUT

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	58S002-S3-004	R-5



BORING NO.	STATION	OFFSET	GROUND ELEVATION	ROCK ELEVATION	TOTAL DEPTH
1	13+07.74	RT. 52.79'	621.43	N/A	31.0'
2	13+37.41	RT. 51.96'	620.29	N/A	30.5'

#### NOTE:

BORING DEPICTIONS SHOWN ON FOUNDATION DATA SHEET INDICATE GENERAL SOIL AND ROCK TYPES AT THE SPECIFIC BORING LOCATIONS.

## **LEGEND**

**TOPSOIL** 



FILL



CLAY



WEATHERED LIMESTONE

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET. B.T.= BORING TERMINATED

STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION** 

> **RETAINING WALL** SOIL PROFILES AND DETAILS

Index Of Sheets				
SHEET NAME	SHEET NUMBER			
UTILITIES INDEX, UTILITIES OWNERS, GENERAL NOTES AND UTILITY SHEETS	U1-1			

# STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING

TYPE YEAR PROJECT NO. SHEET NO.

PS&E 2025 58S002-S3-004 U1-1

133630.00

# SPECIAL NOTES

UTILITIES ARE MOVING AT NO COST TO THE STATE.

LOCATIONS ARE APPROXIMATE
AND FOR REFERENCE
ONLY

# MARION COUNTY

STATE ROUTE 2 (ARPA) DRAINAGE PIPES AT LM 17.25 (ARPA)

## UTILITY OWNERS AND CONTACTS:

COMMUNICATIONS: CHARTER FIBER: LUMEN 460 METROPLEX SUITE 110 10417 WALLACE ALLEY STREET KINGSPORT, TN 37663 NASHVILLE. TN 37211 MR. MORGAN WILCHER MR. JEFFREY CANNON MORGAN.WILCHER@CHARTER.COM BSTEJEFFREY.CANNON@CENTURYLINK.COM (615) 263-1128 (423) 212-2349 COMMUNICATIONS: WATER: CITY OF JASPER 360 GEES MILL BUSINESS PARKWAY 4460 MAIN STREET CONYERS, GA 30013 JASPER, TN 37347 MR. JOE PERREL MR. JASON TURNER JP1389@ATT.COM JASONTURNER@JASPER-TN.COM (423) 266-1566 (423) 942-3180 (NO KNOWN CONFLICTS) (NO KNOWN CONFLICTS) WATER: **ELECTRIC:** CITY OF JASPER SEQUACHEE VALLEY ELECTRIC COOPERATIVE 4460 MAIN STREET PO BOX 31 JASPER, TN 37347 SOUTH PITTSBURG, TN 37380 MR. LUCAS MARSH MR. JASON TURNER JASONTURNER@JASPER-TN.COM LMARSH@SVALLEYEC.COM (423) 942-3180 (423) 837-5026

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY
REFERENCE