TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

Index Of Sheets
(See Sheet 1A)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

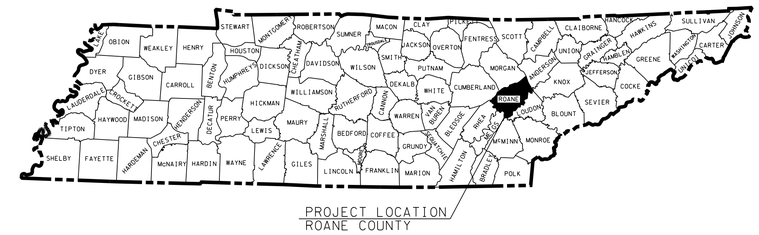
ROANE COUNTY

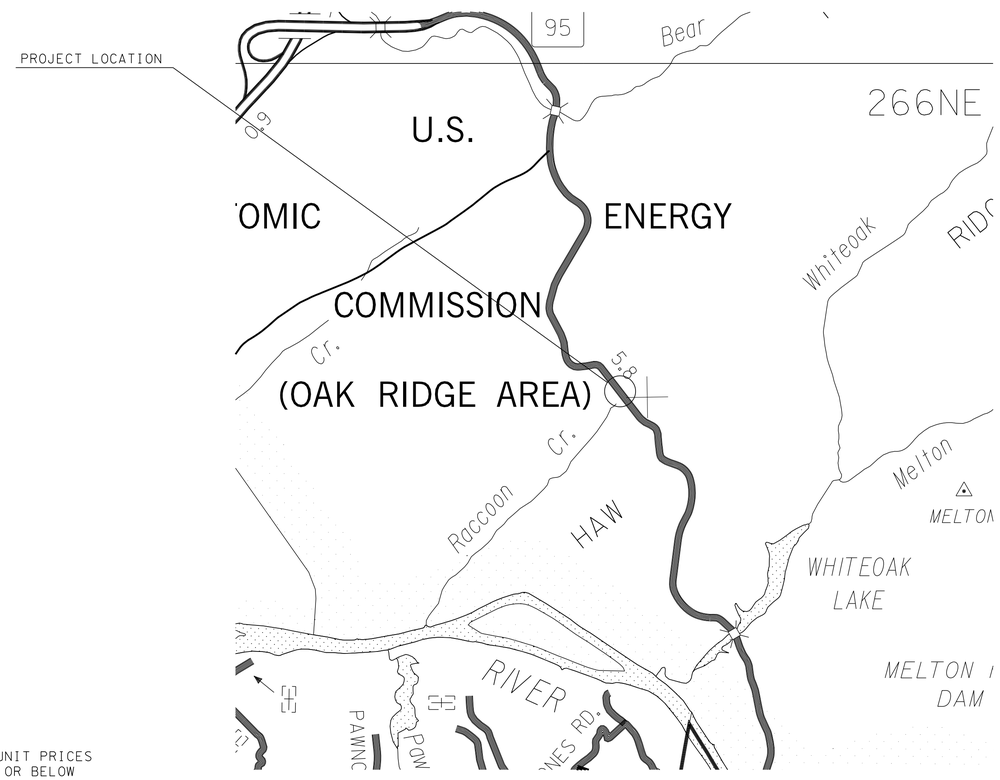
S.R. 95 (WHITE WING ROAD) INTERSECTION WITH BETHEL VALLEY ROAD SIGNALIZATION AND INTERSECTION IMPROVEMENTS

CONSTRUCTION

STATE HIGHWAY NO. 95 F.A.H.S. NO. 95

TENN.	YEAR	SHEET NO.
	2014	1
FED. AID PROJ. NO.	STP-SIP-95(9)	
STATE PROJ. NO.	73017-3221-94	





SCALE: 1"= 2000'

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EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY.

UNOFFICIAL SET
NOT FOR BIDDING

NO EXCLUSIONS
NO EQUATIONS

APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

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 MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT

TDOT C.E. MANAGER 1: Roland L. Jones, P.E.

DESIGNED BY: RPM Transportation Consultants, LLC

DESIGNER: Kristen D. Rice, P.E. CHECKED BY Daniel J. Spann, P.E., PTOE

P.E. NO. 73017-1221-94

PIN NO. 117139.00

ROADWAY LENGTH	0.123 MILES
BRIDGE LENGTH	0.000 MILES
BOX BRIDGE LENGTH	0.000 MILES
PROJECT LENGTH	0.123 MILES

TRAFFIC DATA (S.R. 95)	
ADT (2013)	7,850
ADT (2033)	9,430
DHV (2033)	1,276
D	55 - 45
T (ADT)	4 %
T (DHV)	3 %
V	50 MPH

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-SIP-95(9)	1A

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

INDEX

DESCRIPTION	SHT.
TITLE SHEET	1
INDEX AND STANDARD DRAWINGS	1A
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2A
GENERAL NOTES AND SPECIAL NOTES	2B-2D
PROPERTY MAP	3
RIGHT-OF-WAY ACQUISITION TABLE	3A
PRESENT LAYOUT	4
RIGHT-OF-WAY DETAILS	4A
PROPOSED LAYOUT	4B
PROFILE	4C
PROFILE OF SIDE ROADS AND STREETS	4D-4E
EROSION PREVENTION AND SEDIMENT CONTROL PLAN	5-5A
TRAFFIC CONTROL PLAN	6
PROPOSED SIGNAL LAYOUT	7
SIGNAL DETAILS	8
ROADWAY CROSS SECTIONS	9-13
UTILITIES INDEX, UTILITY OWNERS, AND UTILITY SHEETS	U1-1

NO PROJECT COMMITMENTS SHEET INCLUDED IN THIS SET OF PLANS

STANDARD ROADWAY DRAWINGS

DWG. NO	REV.	DESCRIPTION
ROADWAY DESIGN STANDARDS		
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-2	09-05-01	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-3	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-4	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-5	05-01-08	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	03-30-10	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7	05-24-12	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD01-S-11	04-04-03	DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD01-S-11A	10-15-02	ROADSIDE DITCH DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD01-S-12	08-01-09	CLEAR ZONE CRITERIA
RD01-TS-3	10-15-02	DESIGN STANDARDS FOR 2-LANE ARTERIAL HIGHWAYS
RD01-SD-1		INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES
RD01-SD-3		INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS
DRAINAGE – CULVERTS AND ENDWALL		
D-PB-1	01-02-13	STANDARD DETAILS FOR CONCRETE PIPE INSTALLATION
D-PE-1	02-12-76	TYPE “A” CONCRETE ENDWALL 2:1 SLOPE, 36” TO 78”
D-PE-18A	06-14-13	18” CONCRETE ENDWALL CROSS DRAIN
D-PE-18B		18” CONCRETE ENDWALL CROSS DRAIN
D-PG-3	04-15-97	FERROUS AND ALUMINUM CORRUGATED METAL PIPE
D-PS-1	03-15-76	STRUTTING DETAILS FOR COOR. METAL & STRUCTURAL PLATE ROUND PIPE
ROADWAY AND PAVEMENT APPURTENANCES		
RP-NMC-10	07-29-03	STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
TRAFFIC CONTROL APPURTENANCES		
T-M-1	11-01-11	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	01-15-13	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	09-19-91	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS, PAVED SHOULDERS ON CONVENTIONAL ROADS
T-M-4	11-01-11	STANDARD INTERSECTION PAVEMENT MARKINGS
T-S-10	04-04-12	MOUNTING DETAILS - FLAT SHEET SIGNS, ALUMINUM-STEEL DESIGN
T-S-16	11-01-11	GROUND MOUNTED ROADSIDE SIGN AND DETAILS
T-S-17	07-19-13	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE
T-S-19	07-19-13	STANDARD MEMBERS BENDAWAY SIGN SUPPORTS STEEL DESIGN
T-S-20	11-01-11	SIGN DETAILS
T-SG-2	07-29-04	LOOP LEAD-INS, CONDUIT AND PULL BOXES
T-SG-3	11-11-04	STANDARD NOTES AND DETAILS OF INDUCTION LOOPS
T-SG-3A		ALTERNATE DETECTION DETAILS
T-SG-5	07-29-04	CONTROLLER CABINET DETAILS
T-SG-7	11-01-11	SIGNAL HEAD ASSEMBLIES AND PEDESTRIAN PUSH BUTTON SIGNS
T-SG-7A	11-01-11	TYPICAL SIGN HEAD PLACEMENT
T-SG-9	11-16-07	DETAILS OF CANTILEVER SIGNAL SUPPORT
T-SG-9A		MISCELLANEOUS SIGNAL DETAILS
T-SG-10	05-06-13	MAST ARM POLE AND STRAIN POLES FOUNDATION DETAILS
T-SG-12	11-01-11	TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS
T-SG-13	06-01-09	FLASHING BEACON DETAIL
T-WZ-50	04-02-12	TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 2 OR 3 LANE MAJOR ROUTES
EROSION PREVENTION AND SEDIMENT CONTROL		
EC-STR-3C	08-01-12	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-8	08-01-12	FILTER SOCK
EC-STR-11	08-01-12	CULVERT PROTECTION TYPE 1

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX AND STANDARD DRAWINGS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-SIP-95(9)	2

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 100%
	105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
	201-01	CLEARING AND GRUBBING	LS	1
	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	650
	203-06	WATER	M.G.	2
(1)	209-03.23	FILTER SOCK (24 INCH)	L.F.	500
	209-05	SEDIMENT REMOVAL	C.Y.	300
(1)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	1275
	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	1095
	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	29
	307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	139
	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	78
	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	2
	402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	8
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	0.5
	403-02	ASPHALT CEMENT FOR TACK COAT (TC)	TON	0.3
	411-01.07	ACS MIX (PG64-22)GRADING E SHOULDER	TON	47
	411-01.10	ACS MIX(PG64-22) GRADING D	TON	46
	607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L.F.	15
	607-07.02	36" CONCRETE PIPE CULVERT (CLASS III)	L.F.	13
	611-07.01	CLASS "A" CONCRETE (PIPE ENDWALLS)	C.Y.	5
	611-07.02	STEEL BAR REINFORCING (PIPE ENDWALLS)	LB	152
	701-03	CONCRETE MEDIAN PAVEMENT	C.Y.	23
	702-01	CONCRETE CURB	C.Y.	8
	709-05.06	MACHINED RIPRAP (CLASS A-1)	TON	270
	712-01	TRAFFIC CONTROL	LS	1
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	45
	712-06	SIGNS (CONSTRUCTION)	S.F.	271
	712-09.01	REMOVABLE PAVEMENT MARKING LINE	L.F.	1500
(2)	713-15	REMOVAL OF SIGNS, POSTS, AND FOOTINGS	LS	1
(3)	713-15.02	REMOVAL & RELOCATION OF SIGN & SUPPORT	EACH	3
(4)	713-15.07	SUSPENDED FLAT SHEET ALUMINUM SIGN (0.080" THICK)(R10-12, 30"x36")	EACH	1
(5)	713-16.22	SIGNS (W3-3, 36"x36")	EACH	5
(6)	713-16.23	SIGNS (R1-2, 36"x36"x36")	EACH	2
(4)	713-16.24	SIGNS (STREET NAME SIGNS)	EACH	3
(7)	713-16.25	SIGNS (W3-4, 36"x36")	EACH	1
(7)	713-16.26	SIGNS (W16-13P, 24"x18")	EACH	1
	716-02.04	PLASTIC PAVEMENT MARKING (CHANNELIZATION STRIPING)	S.Y.	260
(8)	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	52
(8)	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	9
(8)	716-04.03	PLASTIC PAVEMENT MARKING (4" DOTTED LINE)	L.F.	160
	716-04.04	PLASTIC PAVEMENT MARKING (TRANSVERSE SHOULDER)	L.F.	250
(8)	716-04.12	PLASTIC PAVEMENT MARKING (YIELD LINE)	S.F.	18
(8)	716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	L.F.	1750
	716-08.04	REMOVAL OF PAVEMENT MARKING (CHANNELIZATION STRIPING)	S.Y.	305
	716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	12
	716-08.06	REMOVAL OF PAVEMENT MARKING (TURN LANE ARROW)	EACH	1
	716-08.11	REMOVAL OF WORD PAVEMENT MARKING (MERGE)	EACH	1
	716-13.01	SPRAY THERMO PVMT MRKNG (60 MIL) (4 IN LINE)	L.M.	1.5
	717-01	MOBILIZATION	LS	1
	730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	5
	730-02.17	SIGNAL HEAD ASSEMBLY (150 A2H WITH BACKPLATE)	EACH	1
	730-03.21	INSTALL PULL BOX (TYPE B)	EACH	10
(9)	730-05.01	ELECTRICAL SERVICE CONNECTION	EACH	1
	730-05.03	SERVICE CABLE (2 CONDUCTOR, # 6 AWG)	L.F.	1300
	730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	1250
	730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	1150
	730-11.01	STEEL CONDUIT RISER ASSEMBLY	EACH	1
	730-12.01	CONDUIT 1" DIAMETER (PVC)	L.F.	950
	730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	130
(10)	730-12.03	CONDUIT 3" DIAMETER (PVC)	L.F.	100
	730-12.07	CONDUIT 1" DIAMETER (RGS)	L.F.	1260
	730-12.14	CONDUIT 3" DIAMETER (JACK AND BORE)	L.F.	225
(14)	730-13.08	VEHICLE DETECTOR (RADAR DETECTION SYSTEM - 2 MATRIX, 2 ADVANCE)	EACH	4
	730-15.32	CABINET (EIGHT PHASE BASE MOUNTED)	EACH	1
(15)	730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1
	730-23.72	CANTILEVER SIGNAL SUPPORT (1 ARM @ 35')	EACH	1
	730-23.80	CANTILEVER SIGNAL SUPPORT (1 ARM @ 40')	EACH	1
	730-23.96	CANTILEVER SIGNAL SUPPORT (1 ARM @ 55')	EACH	1
(12)	730-26.07	FLASHING WARNING BEACON	EACH	1
(13)	730-35.06	BATTERY BACK-UP AND POWER CONDITIONER	EACH	1
	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	499
(11)	801-01	SEEDING (WITH MULCH)	UNIT	1
	801-03	WATER (SEEDING & SODDING)	M.G.	20
	803-01	SOD (NEW SOD)	S.Y.	1800

FOOTNOTES:

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

(2) INCLUDES THE REMOVAL OF EXISTING STOP SIGN, STOP AHEAD WARNING SIGN, YIELD SIGN, AND INTERSECTION AHEAD WARNING SIGNS ONCE SIGNAL IS OPERATIONAL.

(3) INCLUDES THE RELOCATION OF EXISTING DESTINATION SIGN, "NO THRU TRAFFIC" SIGN, AND WINDING ROAD AHEAD SIGN WITH SPEED ADVISORY PLAQUE.

(4) ITEM TO INCLUDE MOUNTING OF SIGNS ON MAST ARM.

(5) SIGN SUPPORT POST SHALL BE MEMBER DESIGNATION "P5".

(6) SIGN SUPPORT POST SHALL BE MEMBER DESIGNATION "P2".

(7) ITEM TO BE USED WITH FLASHING WARNING BEACON ASSEMBLY.

(8) THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THE THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.

(9) THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING THE LOCAL UTILITY TO OBTAIN THE ESTIMATE FOR ANY CHANGES BY THE UTILITY FOR PROVIDING ELECTRICAL SERVICE TO THE CONTROLLER. THESE CHARGES SHALL BE INCLUDED IN THE PRICE FOR ITEM NO. 730-05.01 FOR PAYMENT BY THE CONTRACTOR. ITEM TO INCLUDE 1-2C #6 CABLE FROM EXISTING ELECTRIC SERVICE TO CONTROLLER. INCLUDES A 50 AMP, 2 POLE WEATHER PROOF EXTERNAL DISCONNECT. ENCLOSURE SHALL BE METALLIC WITH A 50 AMP SINGLE POLE CIRCUIT BREAKER.

(10) INCLUDES 1" (RGS) CONDUIT FROM UTILITY POLE TO CONTROLLER FOR AC SERVICE.

(11) ITEM TO BE USED FOR SIGNAL INSTALLATION EPSC.

(12) ITEM INCLUDES POLE, BASE, FOUNDATION, BEACONS, WIRING, CONDUIT, ELECTRICAL CONNECTION, AND ALL INCIDENTAL MATERIALS AND EQUIPMENT FOR A FULLY OPERATIONAL FLASHING WARNING BEACON.

(13) ITEM INCLUDES BATTERY BACK-UP SYSTEM, FOUNDATION, WIRING, CONDUIT, ELECTRICAL CONNECTION, AND ALL INCIDENTAL MATERIALS AND EQUIPMENT FOR A FULLY OPERATIONAL BATTERY BACK-UP SYSTEM. BATTERY BACK-UP SYSTEM TO BE MYERS MP2000 UPS/BBS WITH CABINET OR APPROVED EQUAL.

(14) RADAR DETECTION UNITS FOR STOP LINE DETECTION SHALL BE WAVETRONIX SMARTSENSOR MATRIX OR APPROVED EQUAL. RADAR DETECTION UNITS FOR ADVANCED DETECTION SHALL BE WAVETRONIX SMARTSENSOR ADVANCE OR APPROVED EQUAL. DETECTION UNITS SHALL INCLUDE INSTALLATION, WIRING, AND ALL COMPONENTS NECESSARY TO PROVIDE A FULLY OPERATIONAL DETECTION SYSTEM.

(15) CONTROLLER TO BE PEAK 3000E, ECONOLITE COBALT, OR APPROVED EQUAL.

SUMMARY OF QUANTITIES - ITEM NO. 712-06

SIGN NO.	DESCRIPTION	SIZE (IN.)	NUMBER REQUIRED
G20-2A	END ROAD WORK	48X24	3
W5-1	ROAD NARROWS	48X48	1
W8-9A	LOW SHOULDER	36X36	2
W8-11	UNEVEN LANES	36X36	2
W16-2P	500 FT SUPPLEMENTAL PLAQUE	24X18	1
W20-1	ROAD WORK 1/2 MILE	48X48	2
W20-1	ROAD WORK 1500 FEET	48X48	3
W20-1	ROAD WORK 1000 FEET	48X48	3
W20-1	ROAD WORK 500 FEET	48X48	2
W20-7a	FLAGGER AHEAD	48X48	2

NOTES:

(1) ITEM 712-06, SIGNS (CONSTRUCTION), INCLUDES SIGNS SHOWN AND IS CONSIDERED A MINIMUM. ADDITIONAL SIGNS MAY BE REQUIRED BY THE ENGINEER AND WILL BE PAID FOR AT THE PRICE BID FOR ITEM 712-06.

(2) SIGNS SHALL BE LOCATED BY THE CONTRACTOR WITH THE APPROVAL OF THE ENGINEER.

(3) CONSTRUCTION SIGNING AND TRAFFIC CONTROL SHALL CONFORM TO PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND SECTION 712 OF THE TENNESSEE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

(4) THE CONTRACTOR IS NOT RELIEVED OF ANY RESPONSIBILITY TO PROVIDE ADEQUATE AND SAFE TRAFFIC CONTROL MEASURES BY THE ABOVE.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

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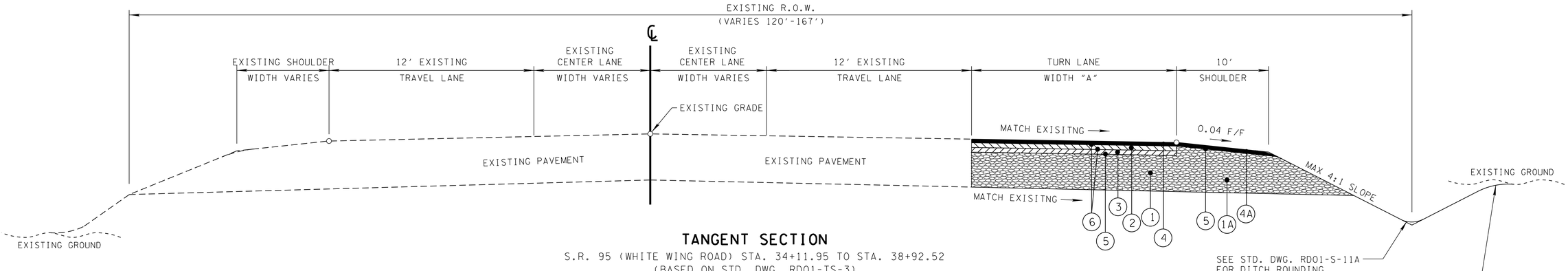
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

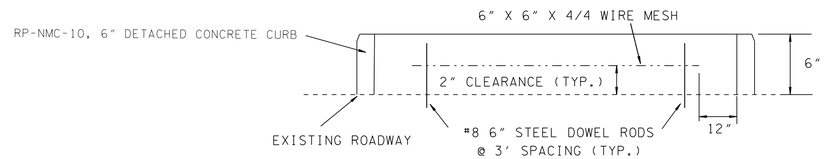
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-STP-95(9)	2
CONST.	2014	STP-STP-95(9)	2A



TANGENT SECTION

S.R. 95 (WHITE WING ROAD) STA. 34+11.95 TO STA. 38+92.52
(BASED ON STD. DWG. RD01-TS-3)

TURN LANE WIDTH "A"	
STATION	WIDTH
34+11.95 TO 35+61.50	0.0' TO 12.0'
35+61.50 TO 38+92.52	12.0'



NOTE: COST OF WIRE MESH AND DOWEL RODS
TO BE INCLUDED IN ITEM #701-03

DETAIL "A" - NTS
PROPOSED MONOLITHIC CONCRETE ISLAND

S.R. 95 (WHITE WING ROAD) STA. 39+48.13 TO STA. 39+82.17
S.R. 95 (WHITE WING ROAD) STA. 40+18.31 TO STA. 40+54.79

EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLEMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY

PROPOSED PAVEMENT SCHEDULE

(1) MINERAL AGGREGATE BASE ITEM NO. 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D ROADWAY @ 10.00" THICK	(4) BITUMINOUS SURFACE @ 1.25" THICK (APPROX. 132.5 LBS./S.Y.) ITEM NO. 411-01.10 ACS MIX (PG64-22) GRADING D
(1A) MINERAL AGGREGATE BASE ITEM NO. 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D ROADWAY @ 15.25" THICK	(4A) BITUMINOUS SURFACE @ 1.50" THICK (APPROX. 154.5 LBS./S.Y.) ITEM NO. 411-01.07 ACS MIX (PG64-22) GRADING E
(2) BITUMINOUS BINDER @ 2.00" THICK (APPROX. 226 LBS./S.Y.) ITEM NO. 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	(5) PRIME COAT ITEM NO. 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) @ 0.30 - 0.35 GAL./S.Y ITEM NO. 402-02 AGGREGATE FOR COVER MATERIAL (PC) @ 8 - 12 LBS./S.Y.
(3) BITUMINOUS BINDER @ 3.50" THICK (APPROX. 402.5 LBS./S.Y.) ITEM NO. 307-01.01 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	(6) TACK COAT ITEM NO. 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) ITEM NO. 403-02 ASPHALT CEMENT FOR TACK COAT (TC)

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS AND PAVEMENT SCHEDULE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-SIP-95(9)	2B

GENERAL NOTES

GRADING

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

(2) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE OR CITY-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATER COURSE. 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

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

(4) ITEM NO. 801-01, SEEDING (WITH MULCH), SHALL BE USED WHERE EROSION CONTROL BLANKET OR SOD ARE NOT APPLIED.

DRAINAGE

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

(6) EXCAVATION FOR DRAINAGE STRUCTURES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE (PIPE CULVERTS, STORM SEWERS, CONDUITS, ALL OTHER CULVERTS AND MINOR STRUCTURES).

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

(8) WHERE A CULVERT (PIPE, SLAB OR BOX) IS MOVED TO A NEW LOCATION OTHER THAN THAT SHOWN ON THE PLANS, INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION, NO INCREASE OR DECREASE IN THE AMOUNT OF PAYMENT WILL BE MADE DUE TO SUCH CHANGE.

(9) 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.

UTILITIES

(10) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.

(11) 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.

(12) 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.

(13) 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.

(14) 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.

SIGNING

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

(16) ALL SIGNS MARKED "TO BE REMOVED" ARE TO BE REMOVED BY THE CONTRACTOR AND PAID FOR UNDER ITEM 713-15 AND BECOME THE PROPERTY OF THE CONTRACTOR.

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

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

SIGNALIZATION

(19) EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNALS SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS, SECTION 730.

(20) ANY SIGNAL HEADS, WHEN VISIBLE TO DRIVERS BUT NOT OPERATIONAL, SHALL BE COMPLETELY COVERED.

(21) SIGNAL HEADS SHALL FLASH A MINIMUM OF SEVEN (7) DAYS PRIOR TO ACTIVATION OF THE SIGNAL.

MISCELLANEOUS

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

RIGHT-OF-WAY

(23) ON PROJECTS WITHOUT CURB AND GUTTER THAT ARE ON STATE ROUTES, IT WILL BE THE RESPONSIBILITY OF THE OWNER TO SECURE A PERMIT AND TO CONSTRUCT ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS.

(24) ON NON-STATE ROUTES, ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS SHALL REQUIRE A PERMIT ONLY IF THE LOCAL AGENCY SPECIFIES THE NEED FOR THAT PERMIT.

PAVEMENT MARKINGS

(25) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 4" SPRAY THERMOPLASTIC (60 MIL) INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS' WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNTER ITEM NO. 716-13.01, SPRAY THERMO PVMT MRKNG (60MIL) (4 IN 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.

(26) THE PAVEMENT MARKING ON THE LANE SHIFT FOR 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. 712-09.01 REMOVABLE PAVEMENT MARKING LINE, LIN. FT.

(27) BEFORE OPENING THE LANE SHIFT TO TRAFFIC, THE TRANSITIONAL MARKINGS ON THE EXISTING ROADWAY MUST BE IN PLACE. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM 712-09.01 REMOVABLE PAVEMENT MARKING LINE, LIN. FT. 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.

PAVING

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

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL NOTES

(29) 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.

(30) 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.

(31) 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.

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

(33) USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, 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.

(34) 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 A 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.

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

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND SPECIAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-SIP-95(9)	2C

GENERAL NOTES (CONT.)

EROSION PREVENTION AND SEDIMENT CONTROL

(1) PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 15 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS MULCHED, SEEDED WITH MULCH, OR OTHER TEMPORARY COVER IS INSTALLED.

(2) CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.

(3) ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS.

(4) EPSC MEASURES SHALL BE INSTALLED CONCURRENTLY WITH CLEARING OPERATIONS, SHALL BE FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.

(5) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE 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 SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.

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

(7) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.

(8) EPSC CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES.

(9) INSPECTION, REPAIR, AND MAINTENANCE OF EPSC MEASURES/STRUCTURES IS TO 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 CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.

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

(11) THE CONTRACTOR SHALL INSTALL A RAIN GAUGE EVERY LINEAR MILE AT ALL SITES WHERE CLEARING, GRUBBING, EXCAVATION, GRADING CUTTING OR FILLING IS BEING ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED. IF THE PROJECT LENGTH IS LESS THAN ONE LINEAR MILE, ONE RAIN GAUGE SHALL BE INSTALLED AT THE CENTER OF THE PROJECT OR AS INDICATED BY THE TDOT EPSC INSPECTOR. THE CONTRACTOR SHALL ENSURE THAT EACH GAUGE IS MAINTAINED IN GOOD WORKING CONDITION. TDOT AND/OR THE CONTRACTOR SHALL RECORD DAILY PRECIPITATION AND FORECASTED PERCENTAGE OF PRECIPITATION IN DETAILED RECORDS OF RAINFALL EVENTS INCLUDING DATES, AMOUNTS OF RAINFALL PER GAUGE, THE ESTIMATED DURATION (OR STARTING AND ENDING TIMES), AND FORECASTED PERCENTAGE OF PRECIPITATION FOR THE PROJECT. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGES IS TO BE INCLUDED IN THE UNIT BID PRICES FOR OTHER ITEMS. RAIN GAUGES SHALL BE AS SPECIFIED IN THE APPROVED TDOT RAINFALL MONITORING PLAN.

(12) INSPECTION OF EPSC MEASURES SHALL BE DONE AT LEAST TWICE PER CALENDAR WEEK AT LEAST 72 HOURS APART. A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE/QUALITY CONTROL SITE ASSESSMENT OF EPSC SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION'S COMPREHENSIVE INSPECTION OFFICE GUIDELINES.

(13) OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO SURROUNDING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.

(14) 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 TIMEFRAME, WRITTEN DOCUMENTATION MUST BE PROVIDED IN THE FIELD BOOK AND AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.

(15) THE TDOT PROJECT SUPERVISOR (OR THEIR DESIGNEE) AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT PROJECT SUPERVISOR OR THEIR DESIGNEE WILL COMPLETE THE INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

(16) WASTE AND BORROW AREAS SHALL BE LOCATED IN NON-WETLAND AREAS AND ABOVE THE 100-YEAR, FEDERAL EMERGENCY MANAGEMENT AGENCY FLOODPLAIN. BORROW AND WASTE DISPOSAL AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY AN ARAP, 404, OR NPDES PERMIT, OBTAINED SOLELY BY THE CONTRACTOR.

(17) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS.

(18) ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT ENGINEER. THE ENVIRONMENTAL DIVISION, ROADWAY 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.

(19) THE FOLLOWING INFORMATION SHALL BE MAINTAINED ON OR NEAR THE SITE: DATES THAT MAJOR GRADING ACTIVITIES OCCUR, DATES WHERE CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, DATES WHEN STABILIZATION MEASURES ARE INITIATED, EPSC INSPECTION RECORDS AND PRECIPITATION RECORDS.

(20) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENVIRONMENTAL DIVISION 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.

(21) PROJECT INSPECTORS AND SUPERVISORS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF EPSC PLANS SHALL SUCCESSFULLY COMPLETE THE TDEC "LEVEL I - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE OR EQUIVALENT COURSE. A COPY OF CERTIFICATION RECORDS FOR THIS COURSE SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

(22) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S.

(23) 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 (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. 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.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND SPECIAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-SIP-95(9)	2D

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

SPECIAL NOTES

TRAFFIC SIGNAL

(1) ALL SIGNAL DISPLAYS AND CLEARANCES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.

(2) LOCATIONS OF SIGNAL POLES ARE APPROXIMATE AND CAN BE ADJUSTED UP TO 2 FT. IN THE FIELD TO AVOID UTILITY CONFLICT. THE MAST ARM LENGTH SHOULD BE VERIFIED BASED ON THE FIELD LOCATION OF THE SIGNAL POLES.

(3) ALL CIRCULAR AND ARROW INDICATIONS WITHIN ALL VEHICULAR SIGNAL HEADS PROPOSED FOR THIS PROJECT SHALL CONSIST OF AN LED (LIGHT EMITTING DIODE) SIGNAL MODULE UNLESS OTHERWISE NOTED IN THE PLANS.

CIRCULAR INDICATIONS SHALL MEET “ITE VTCSH-LED CIRCULAR SIGNAL SUPPLEMENT” FOR EXPANDED/EXTENDED VIEW.

ARROW INDICATIONS SHALL MEET “ITE VTCSH-LED ARROW SPECIFICATION” FOR EXPANDED/EXTENDED VIEW.

INCANDESCENT OR SCREW-IN MODULES ARE NOT ACCEPTABLE.

COMPATABILITY WITH CONFLICT MONITORS AND LOAD SWITCHES SHALL BE TESTED AND CONFIRMED.

MANUFACTURER SHALL PROVIDE A MINIMUM FIVE-YEAR WARRANTY FOR OPERATION OF THE LED UNIT.

(4) THE DESIGN OF TRAFFIC SIGNAL SUPPORT POLES, MAST ARMS, STRAIN POLES, ETC. SHALL BE IN CONFORMANCE WITH THE *AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS*, CURRENT EDITION. OVERHEAD CANTILEVERED TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED FOR FATIGUE CATEGORY 1.

(5) SIGNAL HEADS SHALL INCLUDE LOUVERED BACKPLATES WITH A 1” MINIMUM YELLOW RETRO REFLECTIVE BORDER AROUND THE PERIMETER OF THE FACE OF THE BACKPLATE. THE RETRO REFLECTIVE BORDER TO BE MADE OF A TYPE III PRISMATIC OR BETTER MATERIAL.

SIGNAL EROSION PREVENTION AND SEDIMENT CONTROL

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

(7) SILT FENCE OR OTHER BARRIERS OF THE SPECIFIED TYPE SHALL BE INSTALLED ON THE DOWNHILL SIDE OF STOCKPILED SOIL. POLYETHYLENE SHEETING MAY BE USED TO COVER SPOILS FROM EXCAVATION. NO SEPARATE PAYMENT FOR POLYETHYLENE SHEETING.

(8) TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING NO FLOW CONDITIONS AND STABILIZED BY THE END OF THE WORK DAY.

(9) THE CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS (AS INDICATED BY THE APPROVED EROSION PREVENTION AND SEDIMENT CONTROL PLAN OR THE TDOT PROJECT ENGINEER).

(10) FOR THE INSTALLATION OF CONDUITS AND CABLES, TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN SEVEN DAYS AFTER BEING BACKFILLED, OR IMMEDIATELY AFTER ANY INSPECTION. ANY TEMPORARY SPOIL OF EXCAVATED EARTH SHALL BE LOCATED WITHIN TDOT EROSION PREVENTION AND SEDIMENT CONTROL MEASURES. IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE CONTRACTOR UNTIL SUCH TIME AS THE TRENCH IS BACKFILLED.

(11) RAIN WATER WHICH COLLECTS IN THE OPEN EXCAVATIONS (TRENCHES OR FOUNDATION EXCAVATIONS) SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND MAINTAINED. NO SEPARATE PAYMENT FOR THIS REQUIREMENT.

(12) SPOILS FROM FOUNDATION EXCAVATIONS SHALL BE PICKED UP AS BORING PROGRESSES, OR CONTAINED WITHIN APPROPRIATE EPSC MEASURES.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND SPECIAL NOTES

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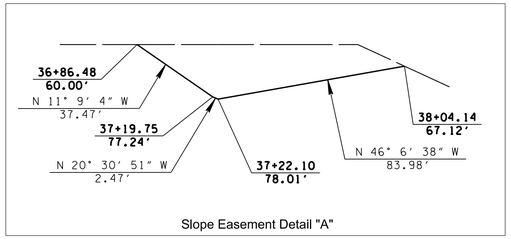
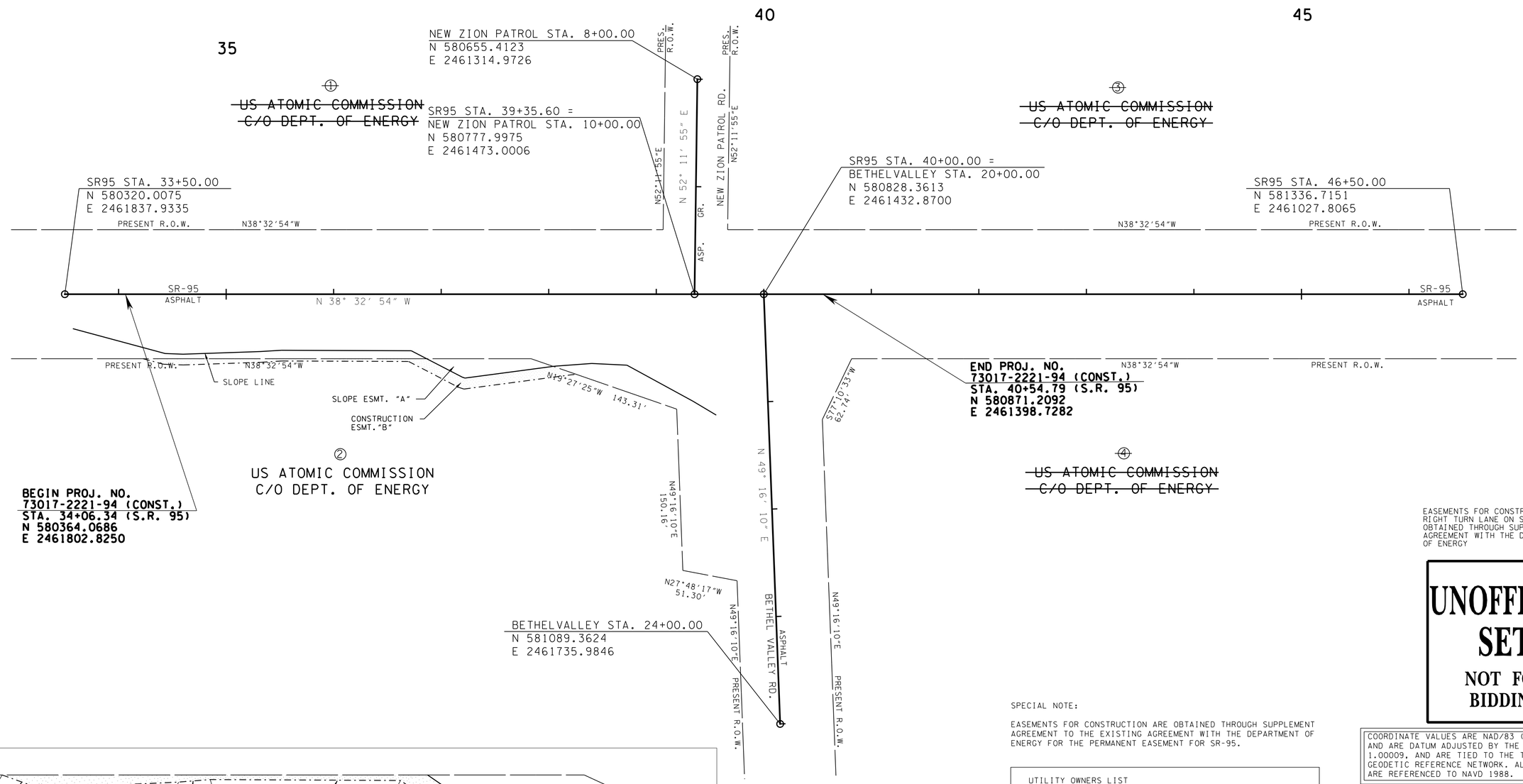
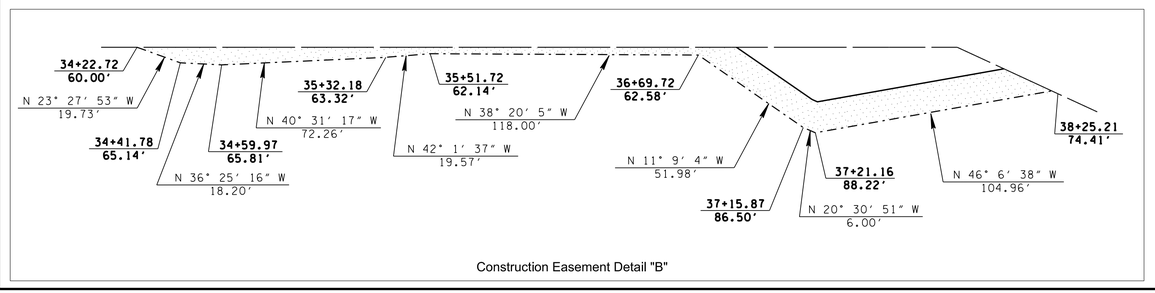
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	3
CONST.	2014	STP-SIP-95(9)	3



Slope Easement Detail "A"





Construction Easement Detail "B"

EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLEMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY

UNOFFICIAL SET
NOT FOR BIDDING

SPECIAL NOTE:

EASEMENTS FOR CONSTRUCTION ARE OBTAINED THROUGH SUPPLEMENT AGREEMENT TO THE EXISTING AGREEMENT WITH THE DEPARTMENT OF ENERGY FOR THE PERMANENT EASEMENT FOR SR-95.

COORDINATE VALUES ARE NAD/83 (1995), AND ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009, AND ARE TIED TO THE TENNESSEE GEODETIC REFERENCE NETWORK. ALL ELEVATIONS ARE REFERENCED TO NAVD 1988.

UTILITY OWNERS LIST

POWER:
U.T. BATTELLE
1 BETHEL VALLEY RD.
OAK RIDGE, TN 37831
CONTACT: MR. CHARLIE BRUCE 865-574-4116
MR. BILL NEEDHAM 865-574-8921

TELEPHONE/FIBER OPTICS:
AT&T/BELLSOUTH
9733 PARKSIDE DRIVE
KNOXVILLE, TN 37922
CONTACT: MR. DAVID OVERMAN 865-539-8579

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP

S.R. 95 AND BETHEL VALLEY ROAD

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	3A
CONST.	2014	STP-SIP-95(9)	3A

UTILITIES

THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.

UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR IT'S 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.

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.

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.

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.

RIGHT - OF - WAY NOTES

IT IS INTENDED THAT ALL BUILDINGS AND/OR PORTIONS OF BUILDINGS THAT ARE WITHIN THE PROPOSED RIGHT-OF-WAY AND/OR EASEMENT LINES FOR THE PROJECT, BE REMOVED THEREFROM IN THE PROCESS OF RIGHT-OF-WAY ACQUISITION. IF ANY SUCH BUILDINGS OR IMPROVEMENTS ARE NOT REMOVED IN THE COURSE OF RIGHT-OF-WAY ACQUISITION, THE CIVIL ENGINEERING MANAGER 2, DESIGN DIVISION IS TO BE NOTIFIED IN SUFFICIENT TIME TO PERMIT HAVING SUCH REMOVALS DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.

ALL RAMPS MUST CONFORM TO THE DEPARTMENT'S "POLICY ON FINANCING CONSTRUCTION OF PUBLIC ROAD INTERSECTIONS AND DRIVEWAYS ON HIGHWAY RESURFACING, RECONSTRUCTION AND CONSTRUCTION PROJECTS ON NEW LOCATIONS", THE MANUAL ON "RULES AND REGULATIONS FOR CONSTRUCTING DRIVEWAYS ON STATE HIGHWAY RIGHT-OF-WAY", STANDARD DRAWING RP-R-1, AND OTHER ACCEPTED DESIGN AND SAFETY STANDARDS.

R.O.W. ACQUISITION TABLE

TRACT NO.	PROPERTY OWNERS	COUNTY RECORDS				TOTAL AREA ACRES			AREA TO BE ACQUIRED ACRES			AREA REMAINING ACRES		EASEMENT (SQUARE FEET)		
		TAX MAP NO.	PARCEL NO.	DEED DOCUMENT REFERENCE BK.	DEED DOCUMENT REFERENCE PAGE	LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM. DRAINAGE	SLOPE	CONST.
~~1~~	~~US ATOMIC ENERGY COMMISSION C/O DEPT. OF ENERGY~~	~~30~~	~~1~~	~~S19~~	~~777~~	~~18304.000~~		~~18304.000~~				~~18304.000~~				
2	US ATOMIC ENERGY COMMISSION C/O DEPT. OF ENERGY	30	1	S19	777		18304.000	18304.000					18304.000		1286	3543
~~3~~	~~US ATOMIC ENERGY COMMISSION C/O DEPT. OF ENERGY~~	~~30~~	~~1~~	~~S19~~	~~777~~	~~18304.000~~		~~18304.000~~				~~18304.000~~				
4	~~US ATOMIC ENERGY COMMISSION C/O DEPT. OF ENERGY~~	~~30~~	~~1~~	~~S19~~	~~777~~		~~18304.000~~	~~18304.000~~					~~18304.000~~			

SPECIAL NOTE:
EASEMENTS FOR CONSTRUCTION ARE OBTAINED THROUGH SUPPLEMENT AGREEMENT TO THE EXISTING AGREEMENT WITH THE DEPARTMENT OF ENERGY FOR THE PERMANENT EASEMENT FOR SR-95.

EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLEMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY

UNOFFICIAL SET
NOT FOR BIDDING

COORDINATE VALUES ARE NAD/83 (1995), AND ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009, AND ARE TIED TO THE TENNESSEE GEODETIC REFERENCE NETWORK. ALL ELEVATIONS ARE REFERENCED TO NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY ACQUISITION TABLE
S.R. 95 AND BETHEL VALLEY ROAD

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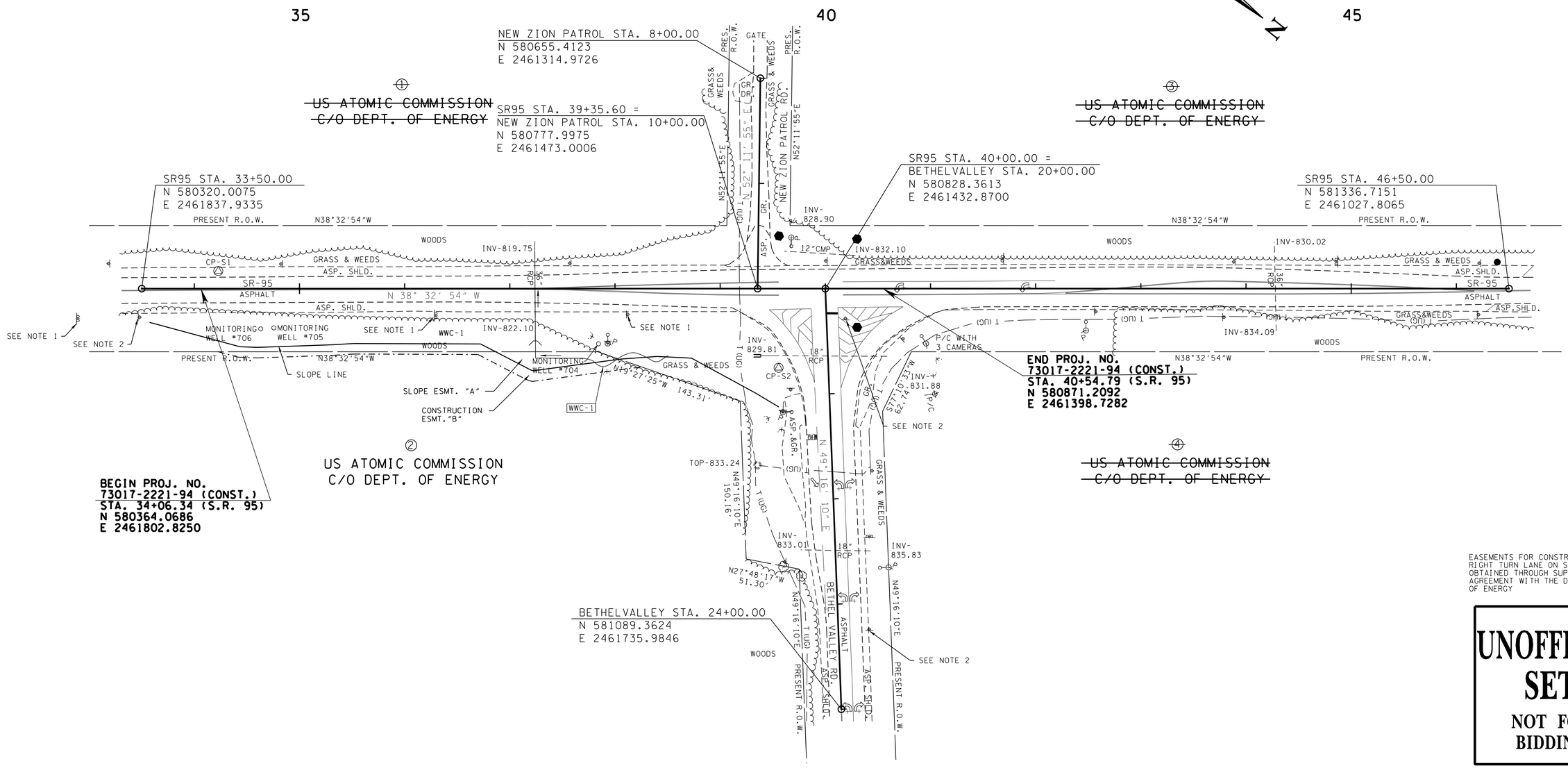
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	4
CONST.	2014	STP-SIP-95(9)	4

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.



EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLEMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY

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CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S1	580366.4639	2461779.4334	835.99	34+22.79	-16.80	ALUM DISC
S2	580840.4590	2461519.4044	831.68	39+55.54	75.22	ALUM DISC
S3	581320.0316	2461950.1679	851.32	40+62.16	710.97	ALUM DISC

NOTES:

1. EXISTING DESTINATION SIGN, "NO THRU TRAFFIC" SIGN, AND WINDING ROAD AHEAD SIGN WITH SPEED ADVISORY PLAQUE TO BE RELOCATED DURING CONSTRUCTION. SIGNS SHALL REMAIN VISIBLE TO ONCOMING TRAFFIC AT ALL TIMES.
2. REMOVE EXISTING STOP SIGN, STOP AHEAD WARNING SIGN, AND INTERSECTION AHEAD WARNING SIGN ON BETHEL VALLEY ROAD ONCE SIGNAL IS OPERATIONAL. REMOVE EXISTING INTERSECTION AHEAD WARNING SIGNS ON S.R. 95 ONCE SIGNAL IS OPERATIONAL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

S.R. 95 AND BETHEL VALLEY ROAD

SCALE: 1"= 50'

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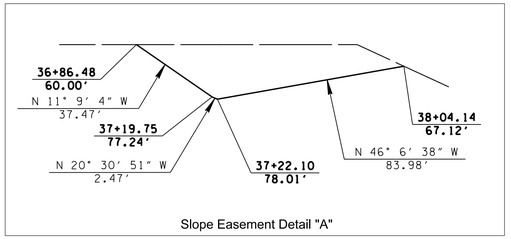
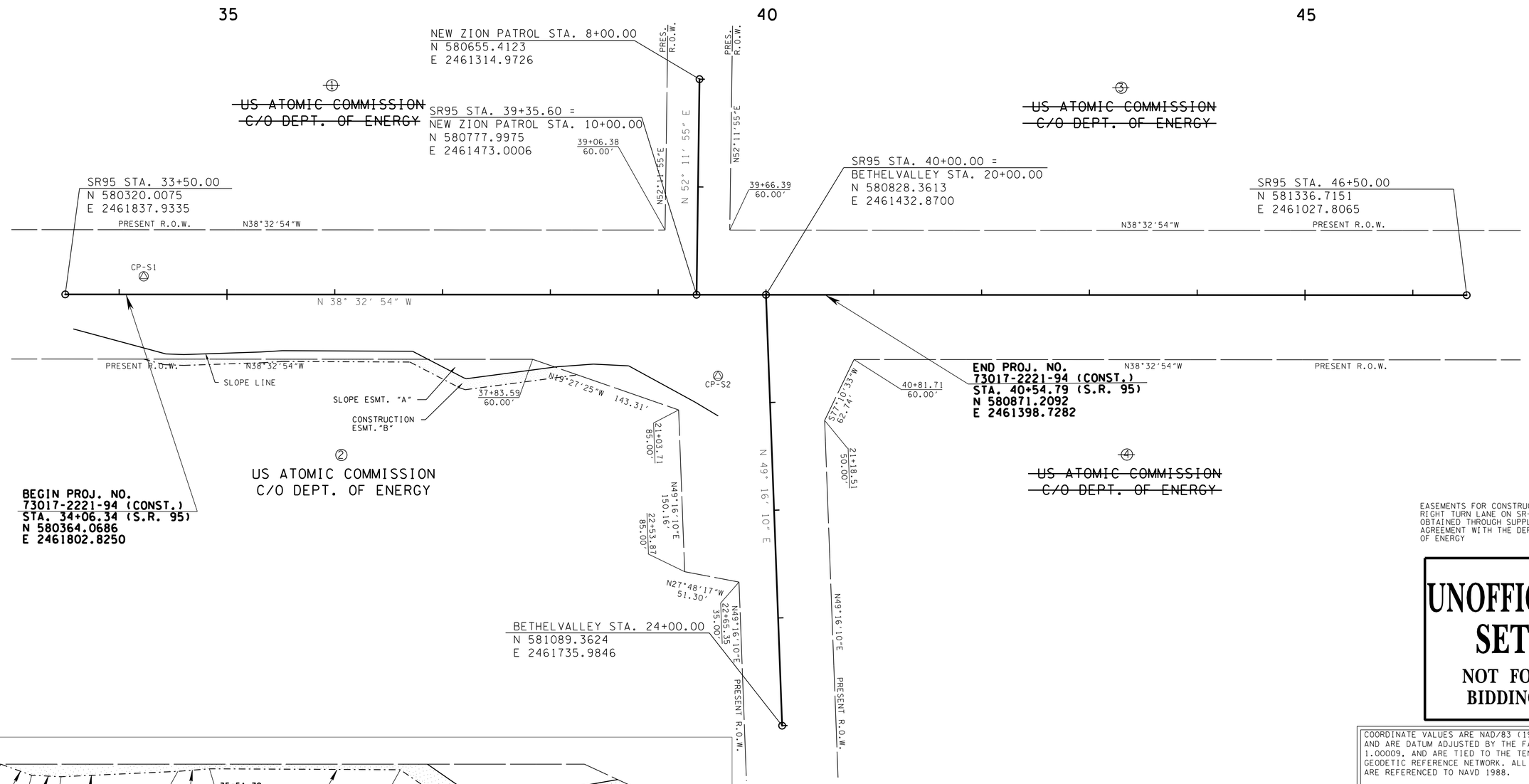
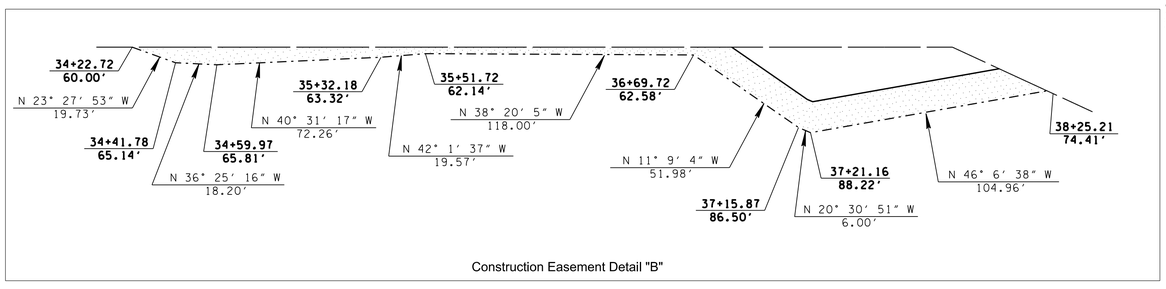
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	4A
CONST.	2014	STP-SIP-95(9)	4A



Slope Easement Detail "A"





Construction Easement Detail "B"

EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLEMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY

UNOFFICIAL SET
NOT FOR BIDDING

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SPECIAL NOTE:

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CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S1	580366.4639	2461779.4334	835.99	34+22.79	-16.80	ALUM DISC
S2	580840.4590	2461519.4044	831.68	39+55.54	75.22	ALUM DISC
S3	581320.0316	2461950.1679	851.32	40+62.16	710.97	ALUM DISC

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

R.O.W. DETAILS

S.R. 95 AND BETHEL VALLEY ROAD
SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

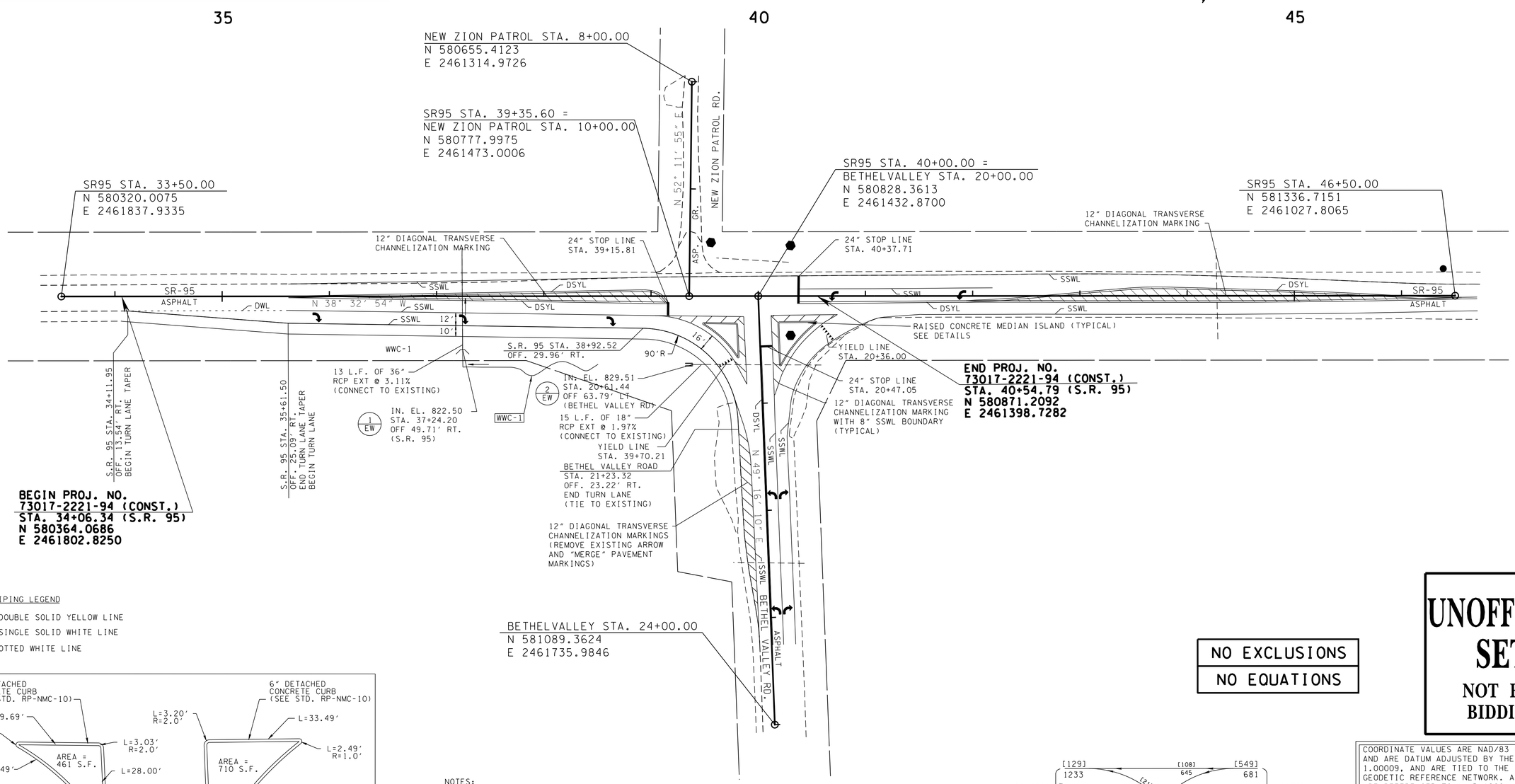
STORM DRAINAGE ENDWALLS

SHEET NO.	LOCATION	STATION	OFFSET (FT.)	DRAINAGE CODE	STRUCTURE TYPE	STANDARD DRAWING	CLASS A CONC. 611-07.01 (C.Y.)	REINF. STEEL 611-07.02 (LB.)
4B	S.R. 95	37+24.20	49.71' R	1	TYPE "A"	D-PE-1	3.89	73
4B	BETHEL VALLEY RD	20+61.44	63.79' L	2	TYPE "U"	D-PE-18A	0.87	79
TOTALS							4.76	152

STORM DRAINAGE PIPES

SHEET NO.	FROM CODE	FROM OUTLET ELEV.	TO CODE	TO INLET ELEV.	% GRADE	RCP - CLASS III SIZE & LENGTH (L.F.) 18"	24"	30"	36"	BEDDING MATERIAL (C.Y.)
4B	EXIST. EW	822.10'	1	822.50'	3.11	15				2.235
4B	EXIST. EW	829.81'	2	829.51'	1.97				13	3.76
TOTALS						15	0	0	13	5.99

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	4B
CONST.	2014	STP-SIP-95(9)	4B

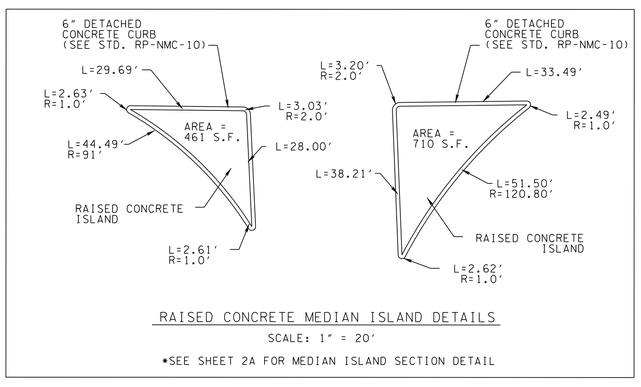


STRIPING LEGEND

DSYL - 4" DOUBLE SOLID YELLOW LINE

SSWL - 4" SINGLE SOLID WHITE LINE

DWL - 4" DOTTED WHITE LINE



RAISED CONCRETE MEDIAN ISLAND DETAILS

SCALE: 1" = 20'

*SEE SHEET 2A FOR MEDIAN ISLAND SECTION DETAIL

NOTES:

1. SIGNS TO BE RELOCATING DURING CONSTRUCTION AND SHALL REMAIN VISIBLE TO ONCOMING TRAFFIC AT ALL TIMES.

2. STOP LINES ON S.R. 95 TO BE INSTALLED ONLY WHEN TRAFFIC SIGNAL IS OPERATIONAL.

3. CONTRACTOR SHALL COORDINATE WITH SCOTT MCGILL OR GREG HAMBY WITH THE DEPARTMENT OF ENERGY (865-576-0586) BEFORE CONSTRUCTION BEGINS.

4. CONFLICTING PAVEMENT MARKINGS TO BE REMOVED.

5. ACCESS TO NEW ZION PATROL ROAD SHALL NOT BE RESTRICTED DURING HUNTING WEEKENDS. IF THIS CONDITION CANNOT BE MAINTAINED, CONSTRUCTION FORCES MUST COORDINATE WITH KEVEN BROWN, ENVIRONMENTAL DIVISION, TWO WEEKS PRIOR TO THE BLOCKAGE OF NEW ZION PATROL ROAD TO OBTAIN CLEARANCE.

NO EXCLUSIONS

NO EQUATIONS

UNOFFICIAL SET

NOT FOR BIDDING

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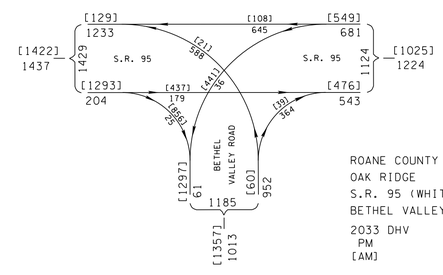

ROANE COUNTY
OAK RIDGE
S.R. 95 (WHITE WING ROAD) @
BETHEL VALLEY ROAD
2033 DHV
PM
[AM]

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

S.R. 95 AND BETHEL VALLEY ROAD

SCALE: 1"= 50'

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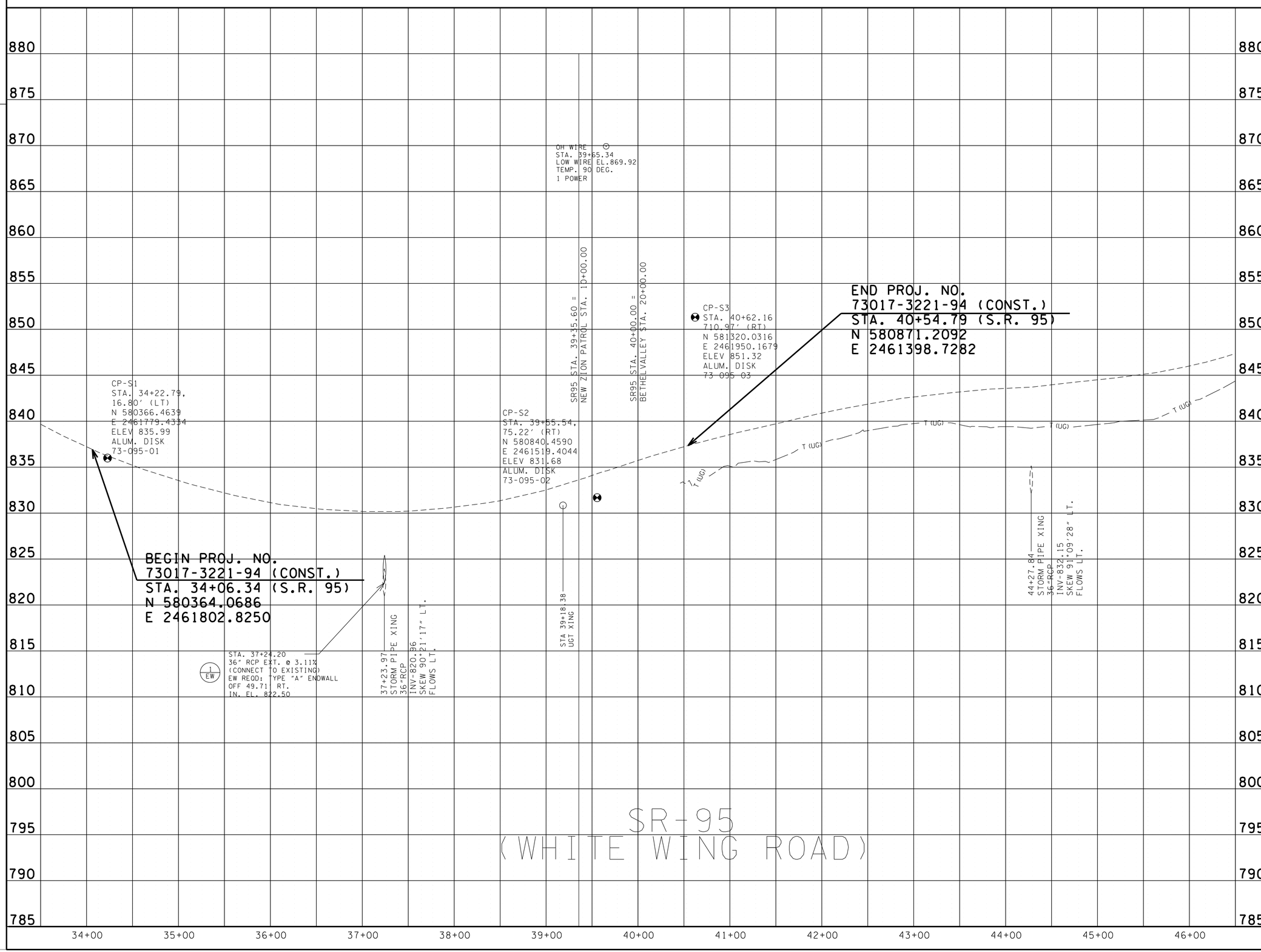
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	4C
CONST.	2014	STP-SIP-95(9)	4C



NO EXCLUSIONS
NO EQUATIONS

EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLEMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY

UNOFFICIAL SET
NOT FOR BIDDING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE

S.R. 95 AND BETHEL VALLEY ROAD

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

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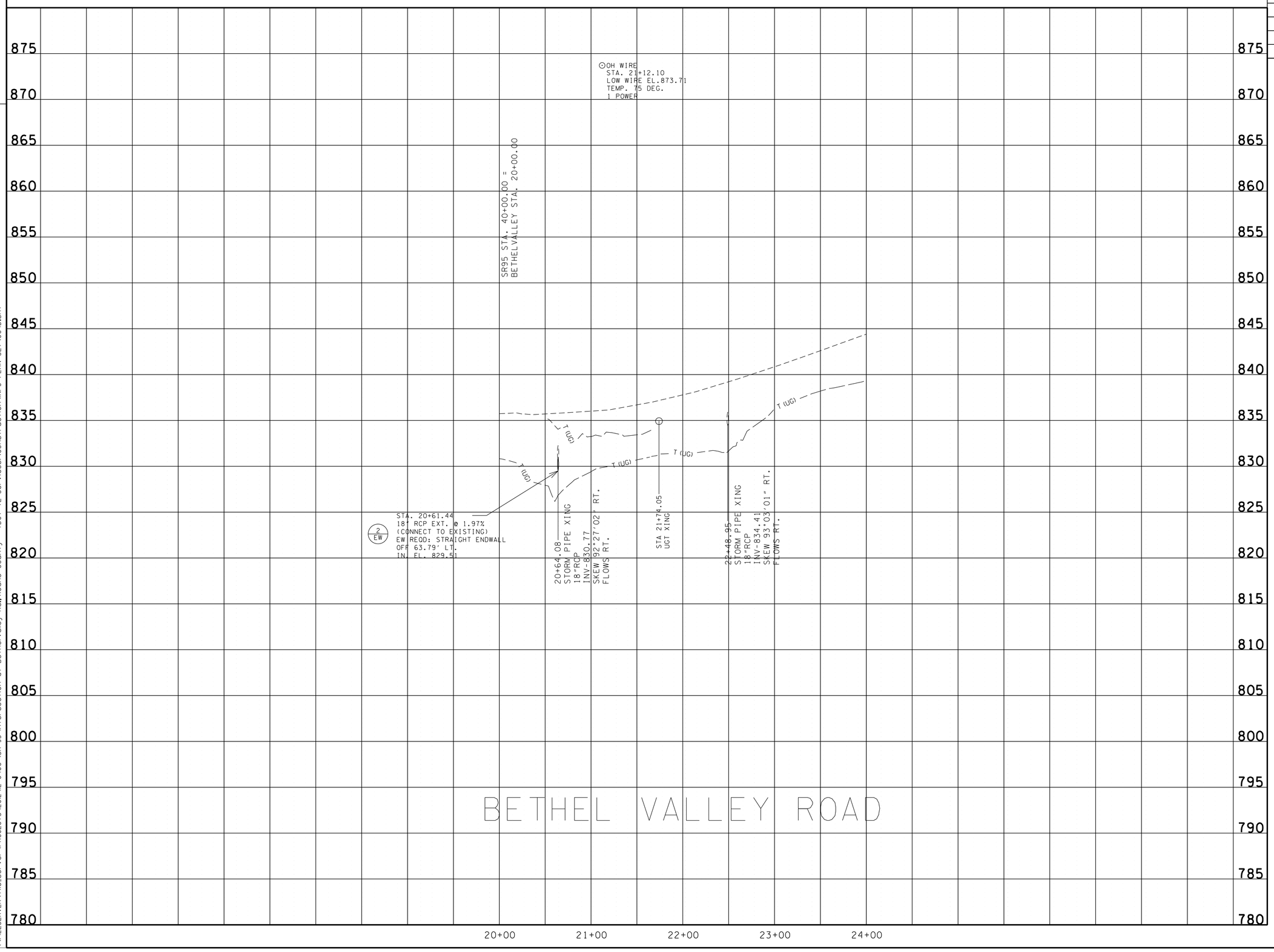
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	4D
CONST.	2014	STP-SIP-95(9)	4D



NO EXCLUSIONS
NO EQUATIONS

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UNOFFICIAL SET
NOT FOR BIDDING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE OF SIDE ROADS AND STREETS

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

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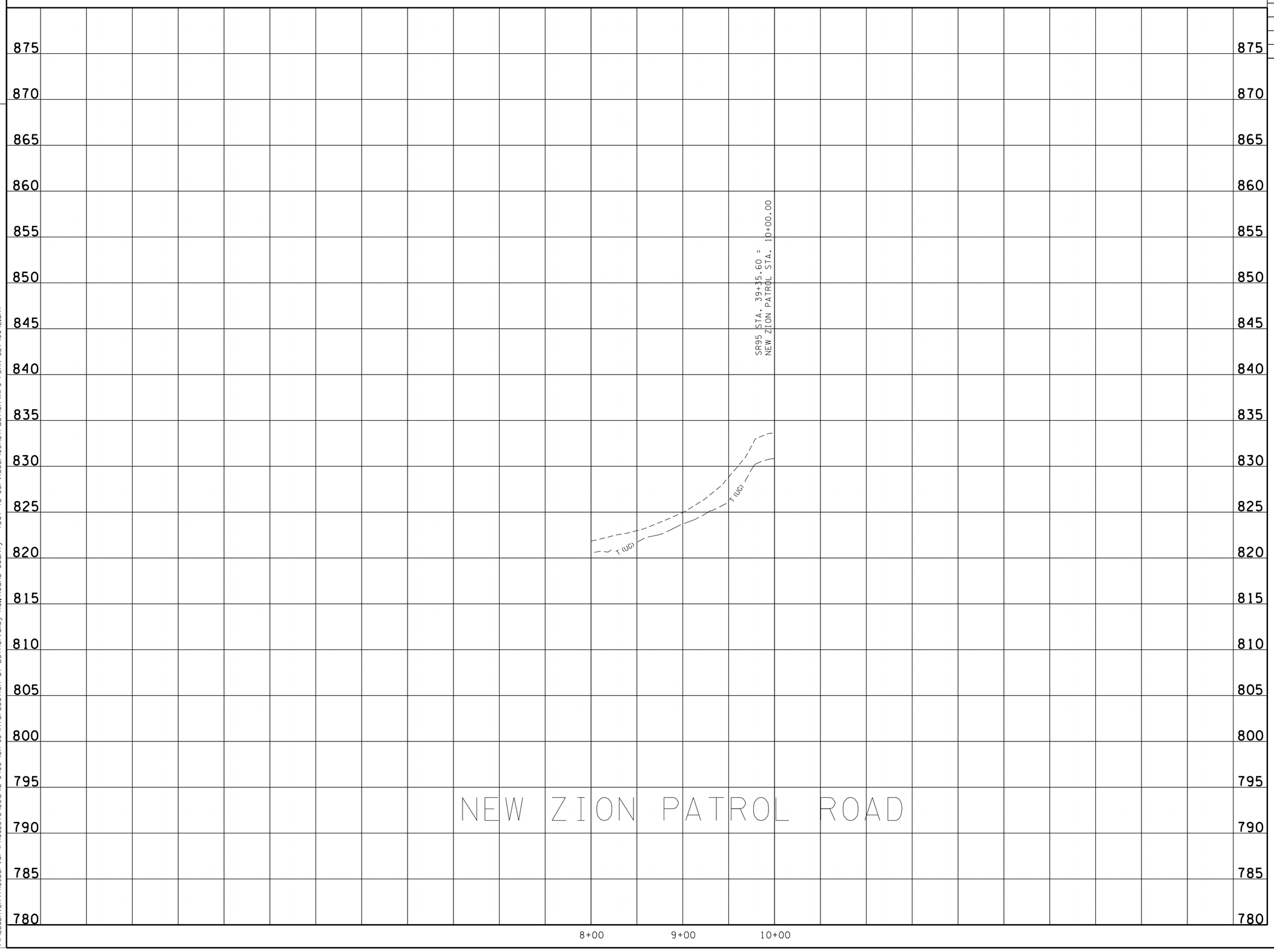
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	4E
CONST.	2014	STP-SIP-95(9)	4E



NO EXCLUSIONS

NO EQUATIONS

EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLEMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY

UNOFFICIAL SET

NOT FOR BIDDING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE OF SIDE ROADS AND STREETS

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

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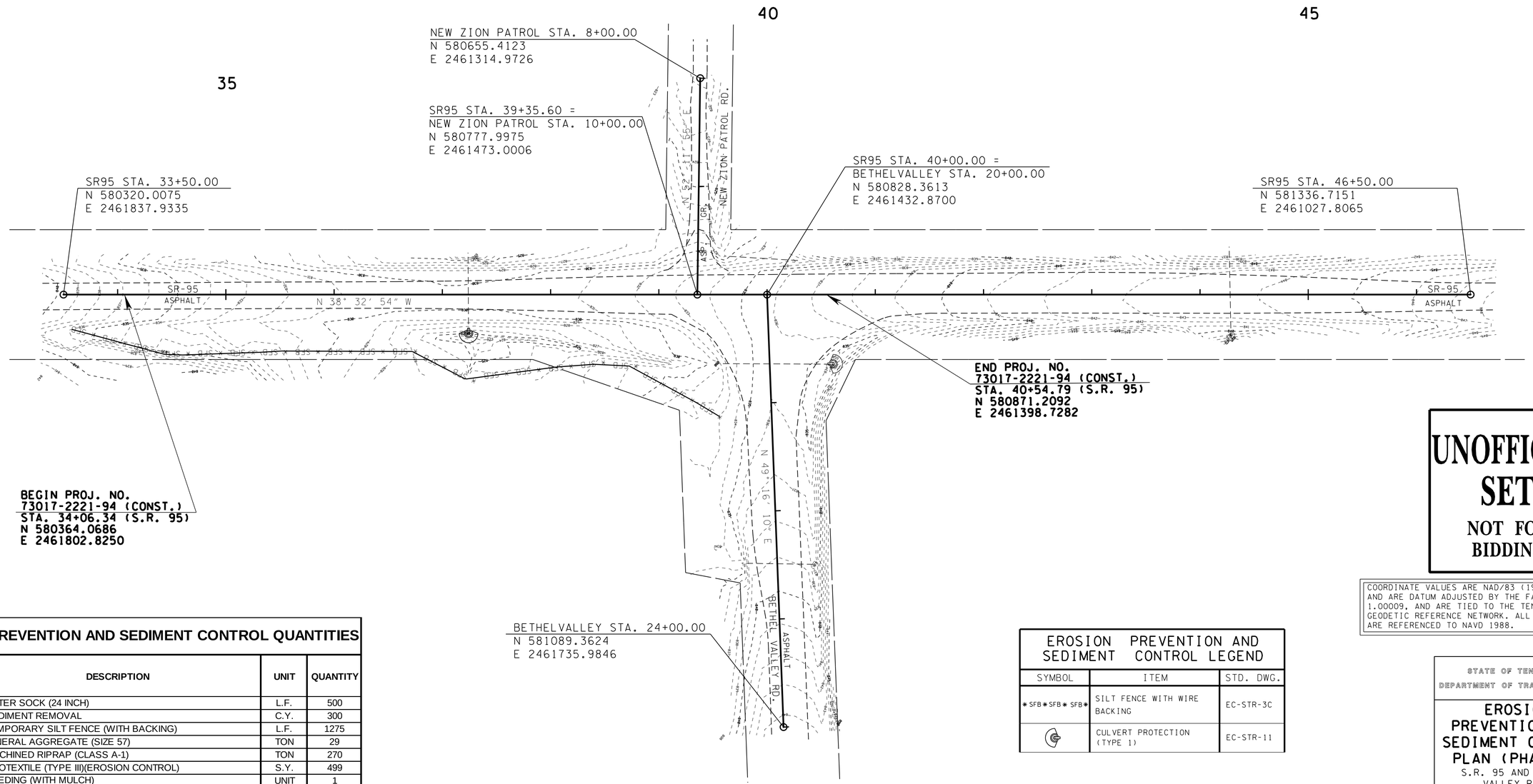
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	5
CONST.	2014	STP-SIP-95(9)	5

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.



EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
209-03.23	FILTER SOCK (24 INCH)	L.F.	500
209-05	SEDIMENT REMOVAL	C.Y.	300
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	1275
303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	29
709-05.06	MACHINED RIPRAP (CLASS A-1)	TON	270
740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	499
801-01	SEEDING (WITH MULCH)	UNIT	1

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
*SFB*SFB*SFB*	SILT FENCE WITH WIRE BACKING	EC-STR-3C
	CULVERT PROTECTION (TYPE 1)	EC-STR-11

UNOFFICIAL SET

NOT FOR BIDDING

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN (PHASE 1)

S.R. 95 AND BETHEL VALLEY ROAD

SCALE: 1"=50'

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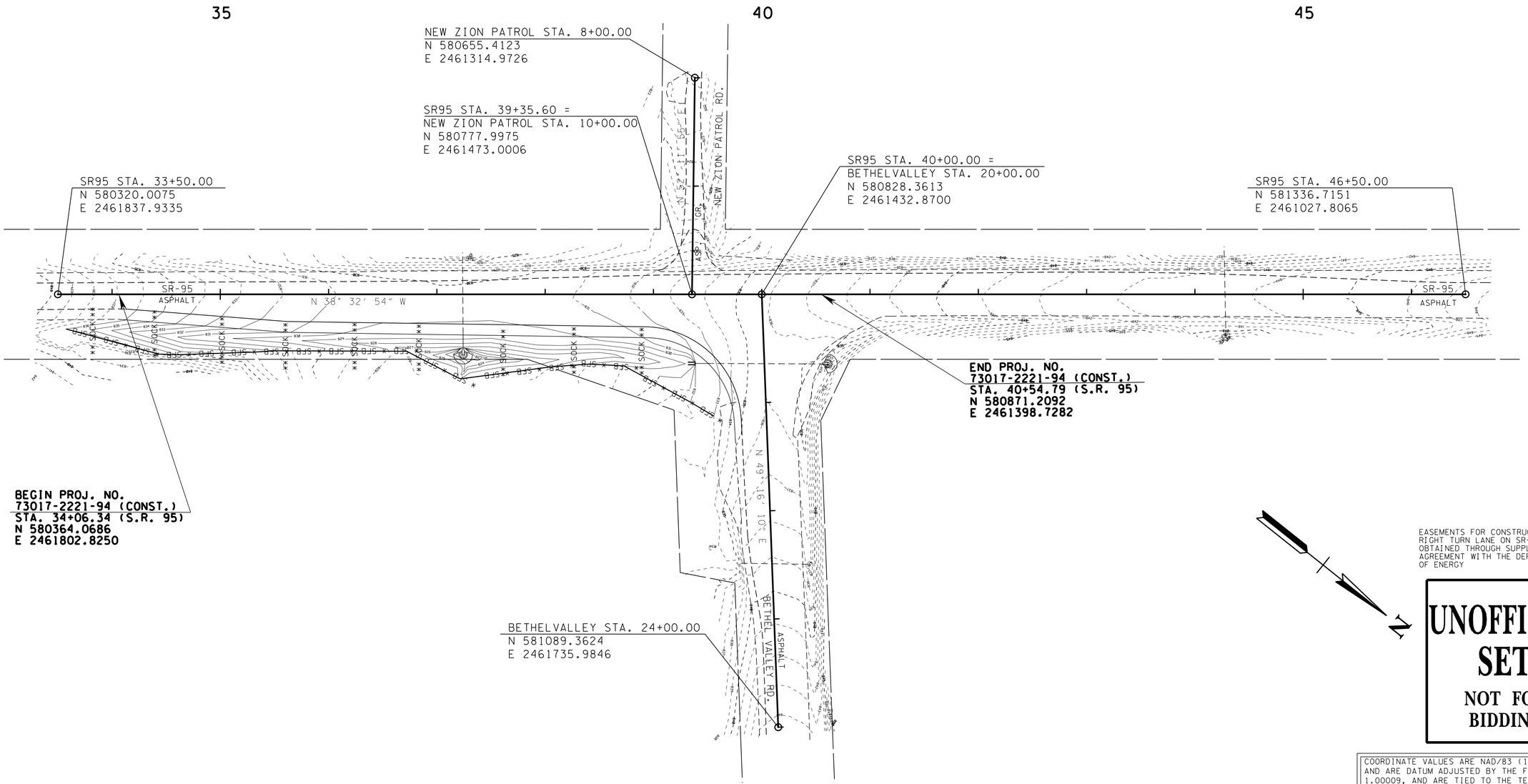
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	5A
CONST.	2014	STP-SIP-95(9)	5A

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.



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UNOFFICIAL SET

NOT FOR BIDDING

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EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
* SFB * SFB * SFB *	SILT FENCE WITH WIRE BACKING	EC-STR-3C
** SOCK ** SOCK **	FILTER SOCK	EC-STR-8
	CULVERT PROTECTION (TYPE 1)	EC-STR-11

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN (PHASE 2)

S.R. 95 AND BETHEL VALLEY ROAD

SCALE: 1"=50'

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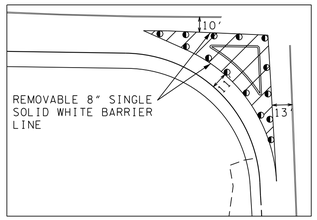
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

CONSTRUCTION PHASE 2 DETAIL



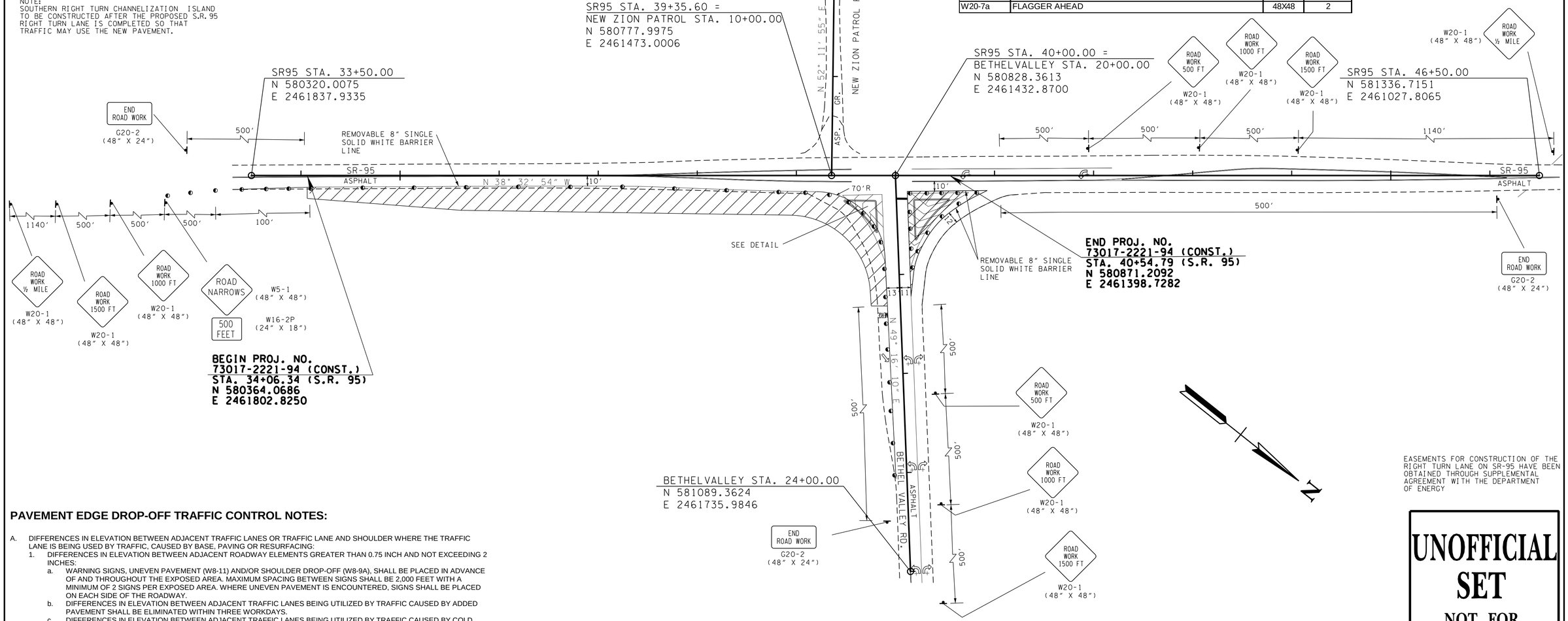
NOTE:
SOUTHERN RIGHT TURN CHANNELIZATION ISLAND TO BE CONSTRUCTED AFTER THE PROPOSED S.R. 95 RIGHT TURN LANE IS COMPLETED SO THAT TRAFFIC MAY USE THE NEW PAVEMENT.

SUMMARY OF QUANTITIES - ITEM NO. 712-06

SIGN NO.	DESCRIPTION	SIZE (IN.)	NUMBER REQUIRED
G20-2A	END ROAD WORK	48X24	3
W5-1	ROAD NARROWS	48X48	1
W8-9A	LOW SHOULDER	36X36	2
W8-11	UNEVEN LANES	36X36	2
W16-2P	500 FT SUPPLEMENTAL PLAQUE	24X18	1
W20-1	ROAD WORK 1/2 MILE	48X48	2
W20-1	ROAD WORK 1500 FEET	48X48	3
W20-1	ROAD WORK 1000 FEET	48X48	3
W20-1	ROAD WORK 500 FEET	48X48	2
W20-7a	FLAGGER AHEAD	48X48	2

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-SIP-95(9)	6

35 40 45



EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLEMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY

UNOFFICIAL SET
NOT FOR BIDDING

COORDINATE VALUES ARE NAD/83 (1995), AND ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009, AND ARE TIED TO THE TENNESSEE GEODETIC REFERENCE NETWORK. ALL ELEVATIONS ARE REFERENCED TO NAVD 1988.

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 2 INCHES:
   a. WARNING SIGNS, UNEVEN PAVEMENT (W8-11) AND/OR SHOULDER DROP-OFF (W8-9A), 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 2 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 PAVEMENT AND/OR LOW SHOULDER) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF TWO 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 3.5 INCHES, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE ENGINEER. SEE PARAGRAPH A REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN PAVEMENT AND/OR LOW SHOULDER) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY. IN THESE SITUATIONS THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 2 MILES IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.
3. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 6 INCHES, BUT NOT EXCEEDING 18 INCHES, THE CONTRACTOR, WITH THE ENGINEER'S APPROVAL, MAY UTILIZE ONE OF THE FOLLOWING:
   a. THE CONTRACTOR SHALL ACCOMPLISH SEPARATION BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
      (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
      (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER. IN ORDER TO USE THIS METHOD, THE CONTRACTOR MUST REDUCE THE DIFFERENCE IN ELEVATION TO 6 INCHES OR LESS BY THE END OF THE WORK DAY THAT THE CONDITION IS CREATED.
   b. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH A, AND CONSTRUCT A STONE WEDGE WITH A 4:1 SLOPE, OR FLATTER, TO ELIMINATE THE VERTICAL OFFSET IF THE LOWER ELEVATION IS AT OR BELOW SUBGRADE AT THE END OF EACH DAY.
   c. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH A, AND IF THE LOWER ELEVATION IS BASE STONE OR ASPHALT PAVEMENT, PLACEMENT OF SUBSEQUENT LAYERS OF PAVEMENT MUST BEGIN THE NEXT WORK DAY AND PROGRESS CONTINUOUSLY UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED OR REDUCED TO 6 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 (W8-9A). IT 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. 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 THE 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.

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING) W/ TYPE A WARNING LIGHTS
	SIGN (CONSTRUCTION)

SPECIAL NOTE:
FLEXIBLE DRUM SPACING = 20' FOR TRANSITION SECTIONS
50' FOR TANGENT SECTIONS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
S.R. 95 AND BETHEL VALLEY ROAD
SCALE: 1"=50'

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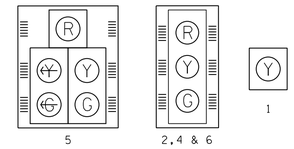
NOTES:

1. EXISTING DESTINATION SIGN, "NO THRU TRAFFIC" SIGN, AND WINDING ROAD AHEAD SIGN WITH SPEED ADVISORY PLAQUE TO BE RELOCATED DURING CONSTRUCTION. SIGNS SHALL REMAIN VISIBLE TO ONCOMING TRAFFIC AT ALL TIMES.
2. SIGNAL POLES MAY BE ADJUSTED UP TO 2' TO AVOID CONFLICTS WITH UTILITIES AS APPROVED BY THE ENGINEER. CONTRACTOR SHALL VERIFY THE APPROPRIATE MAST ARM LENGTH WHEN ADJUSTING SIGNAL POLES.
3. CONTRACTOR IS RESPONSIBLE FOR STAKING POLE LOCATIONS. THESE LOCATIONS MUST BE APPROVED BY THE ENGINEER PRIOR TO WORK COMMENCING.
4. SEE SHEET 4B FOR PROPOSED PAVEMENT MARKINGS.
5. REMOVE EXISTING STOP SIGN, STOP AHEAD WARNING SIGN, AND INTERSECTION AHEAD WARNING SIGN ON BETHEL VALLEY ROAD ONCE SIGNAL IS OPERATIONAL. REMOVE EXISTING INTERSECTION AHEAD WARNING SIGNS ON S.R. 95 ONCE SIGNAL IS OPERATIONAL.
6. CONTRACTOR SHALL COORDINATE WITH SCOTT MCGILL OR GREG HAMBY WITH THE DEPARTMENT OF ENERGY (865-576-0586) BEFORE CONSTRUCTION BEGINS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	6
CONST.	2014	STP-SIP-95(9)	7

PROPOSED SIGNAL HEADS

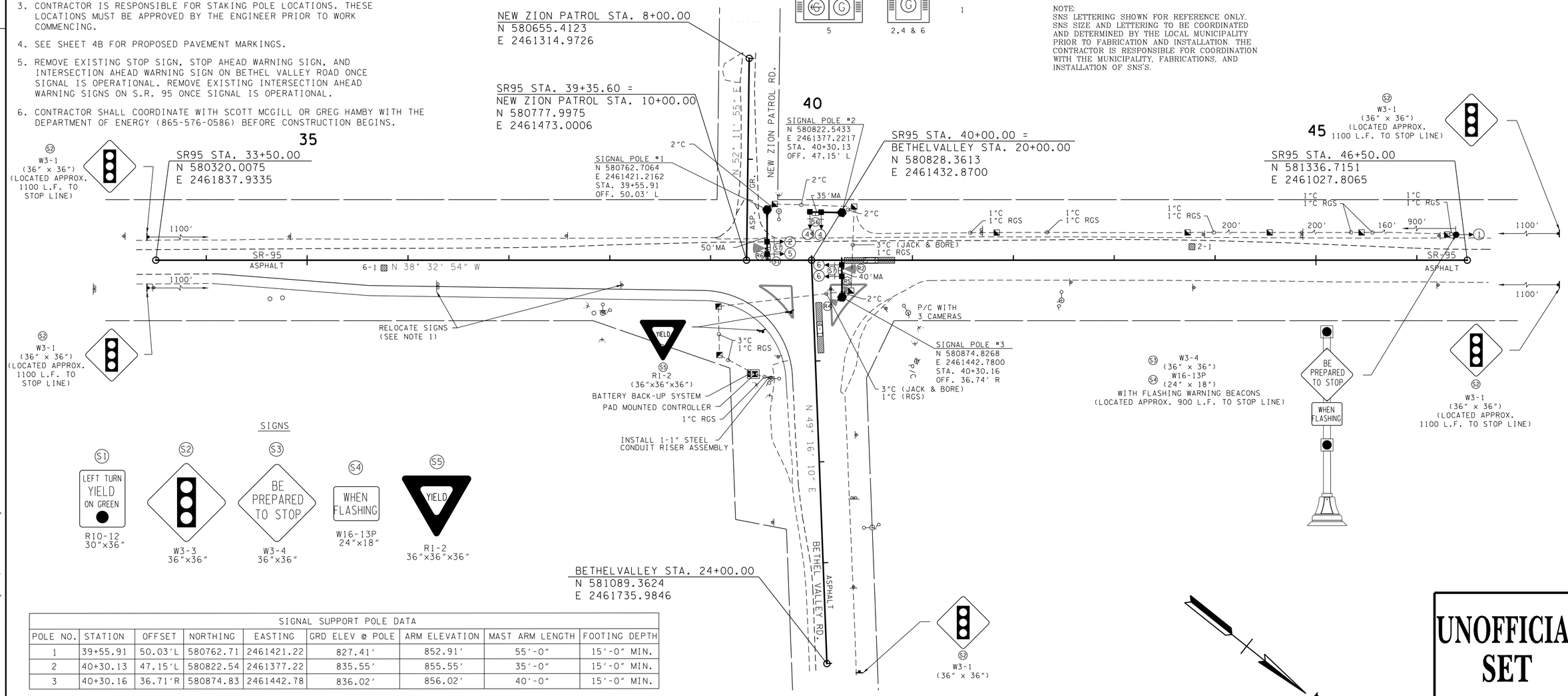


OVERHEAD STREET NAME SIGNS

SIGN S6 Tennessee 95

SIGN S7 Bethel Valley Rd

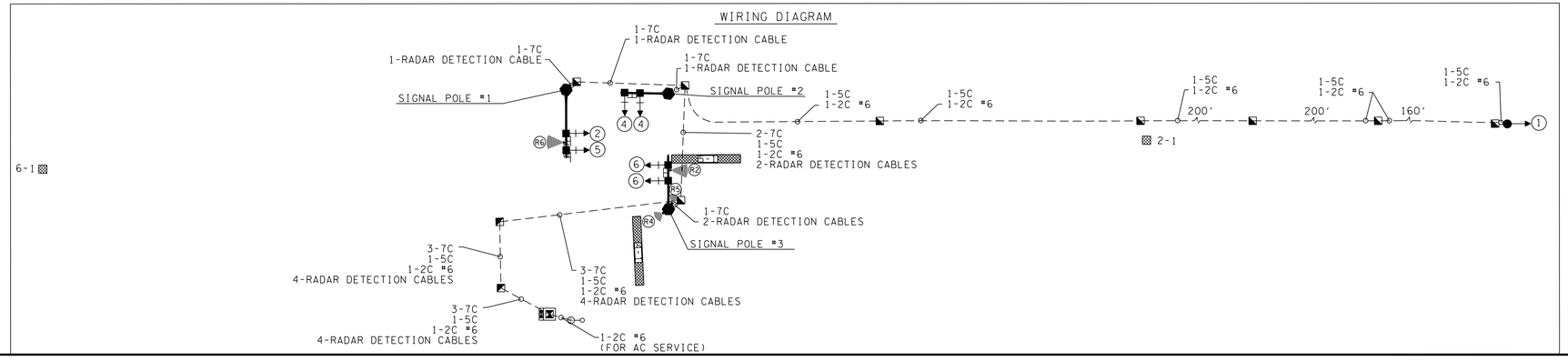
NOTE:
SNS LETTERING SHOWN FOR REFERENCE ONLY. SNS SIZE AND LETTERING TO BE COORDINATED AND DETERMINED BY THE LOCAL MUNICIPALITY PRIOR TO FABRICATION AND INSTALLATION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THE MUNICIPALITY, FABRICATIONS, AND INSTALLATION OF SNS'S.



SIGNS

SIGNAL SUPPORT POLE DATA								
POLE NO.	STATION	OFFSET	NORTHING	EASTING	GRD ELEV @ POLE	ARM ELEVATION	MAST ARM LENGTH	FOOTING DEPTH
1	39+55.91	50.03'L	580762.71	2461421.22	827.41'	852.91'	55'-0"	15'-0" MIN.
2	40+30.13	47.15'L	580822.54	2461377.22	835.55'	855.55'	35'-0"	15'-0" MIN.
3	40+30.16	36.71'R	580874.83	2461442.78	836.02'	856.02'	40'-0"	15'-0" MIN.

WIRING DIAGRAM



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED SIGNAL LAYOUT
S.R. 95 AND BETHEL VALLEY ROAD
SCALE: 1"= 50'

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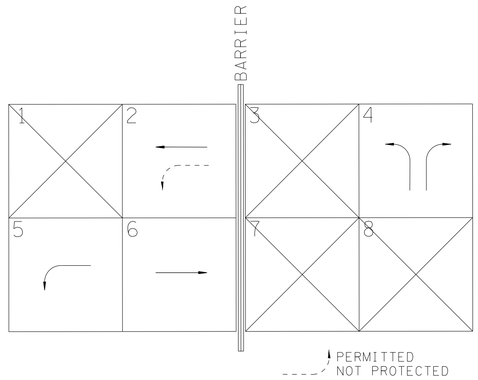
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-SIP-95(9)	8

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.



EIGHT PHASE DESIGNATIONS

PHASING NOTES

(1) MIN RECALL: Ø2,Ø6
(2) PROTECTED/PERMITTED LEFT TURN: Ø5
(3) ALL SIGNAL DISPLAYS AND CLEARANCES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

BASIC OR SEMI-ACTUATED TIMING (SECS)

PHASE	INITIAL INTERVAL	VEHICLE INTERVAL	MAX I (AM)	MAX I (PM)	CLEARANCE		PEDESTRIAN		RECALL TO	MEMORY POSITION (1)	LEFT TURN OPERATION (2)
					YELLOW	ALL RED	WALK	FLASHING DON'T WALK			
1	–	–	–	–	–	–	–	–	–	–	–
2	10.0	3.0	68.5	42.0	5.0	1.0	–	–	MIN.	–	–
3	–	–	–	–	–	–	–	–	–	–	–
4	7.0	3.0	21.5	38.0	3.0	2.5	–	–	–	L	PROT
5	7.0	3.0	24.0	15.5	3.0	2.5	–	–	–	NL	P/P
6	10.0	3.0	44.5	26.5	5.0	1.0	–	–	MIN.	–	–
7	–	–	–	–	–	–	–	–	–	–	–
8	–	–	–	–	–	–	–	–	–	–	–

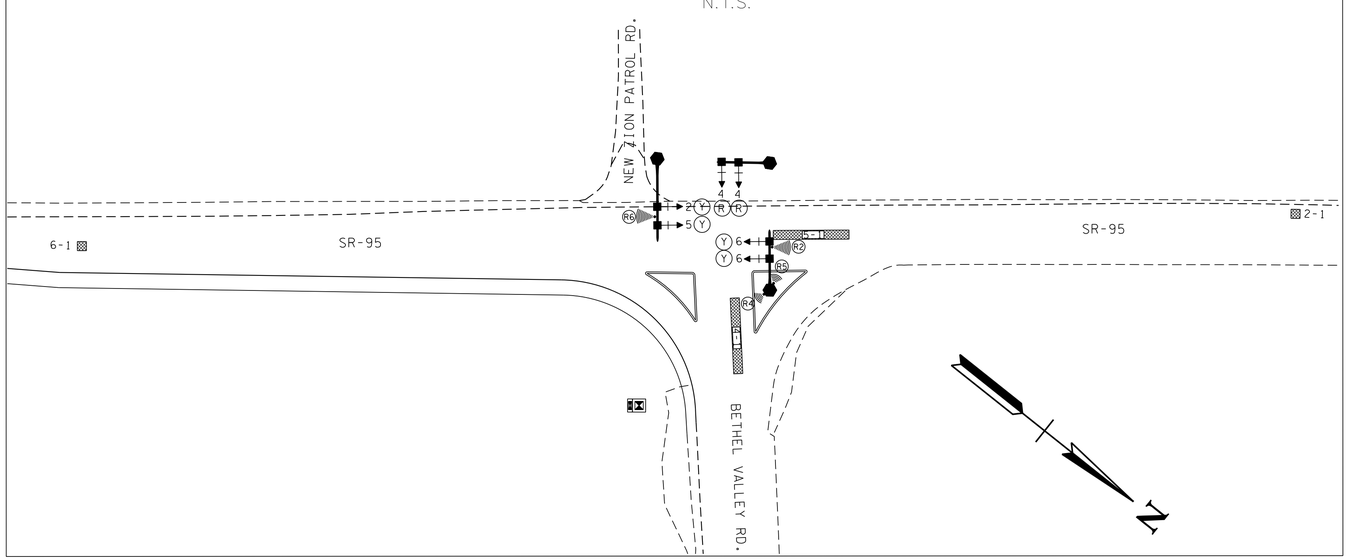
NOTE: TIMINGS ARE INITIAL AND MAY BE ADJUSTED BY THE CONTRACTOR BASED ON FIELD OBSERVATIONS TO PROVIDE EFFICIENT OPERATION.

(1)NL = NON LOCK
L = LOCK

(2) PERM = PERMITTED
PROT = PROTECTED
P/P = PROT/PERM

DETECTION LOOP NUMBERING AND FLASHING OPERATION

N.T.S.



RADAR DETECTOR ASSIGNMENT CHART

ZONE ASSIGNMENT	SIZE	DETECTION UNIT	PHASE	MODE	DISTANCE FROM STOP BAR
2-1	6'X6'	R2	2	PULSE	340'
4-1	6'X50'	R4	4	PRESENCE	-4'
5-1	6'X50'	R5	5	PRESENCE	-4'
6-1	6'X6'	R6	6	PULSE	340'

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNAL DETAILS

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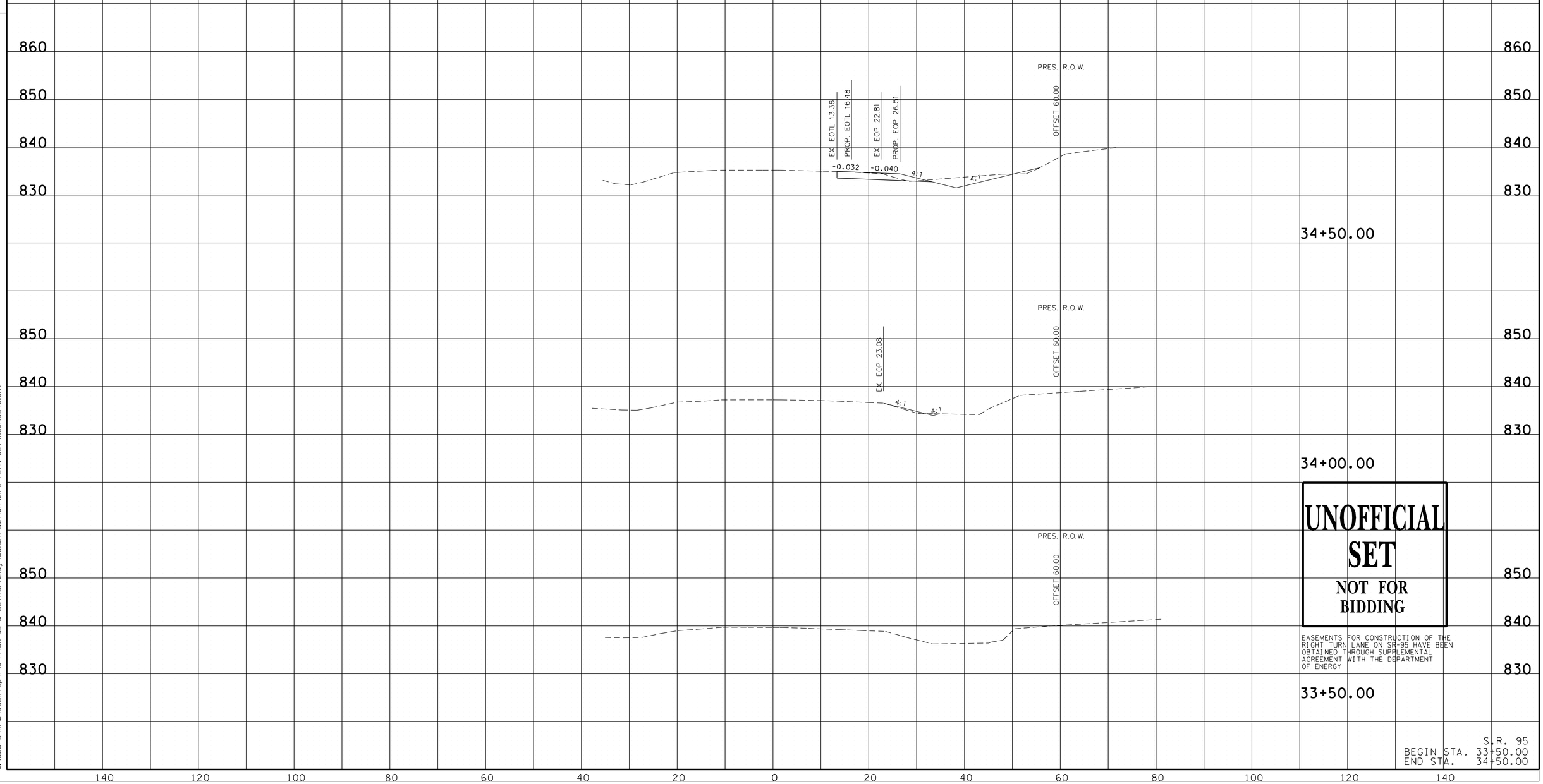
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	7
CONST.	2014	STP-SIP-95(9)	9

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.



UNOFFICIAL SET
NOT FOR BIDDING

EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLEMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY

S.R. 95
BEGIN STA. 33+50.00
END STA. 34+50.00

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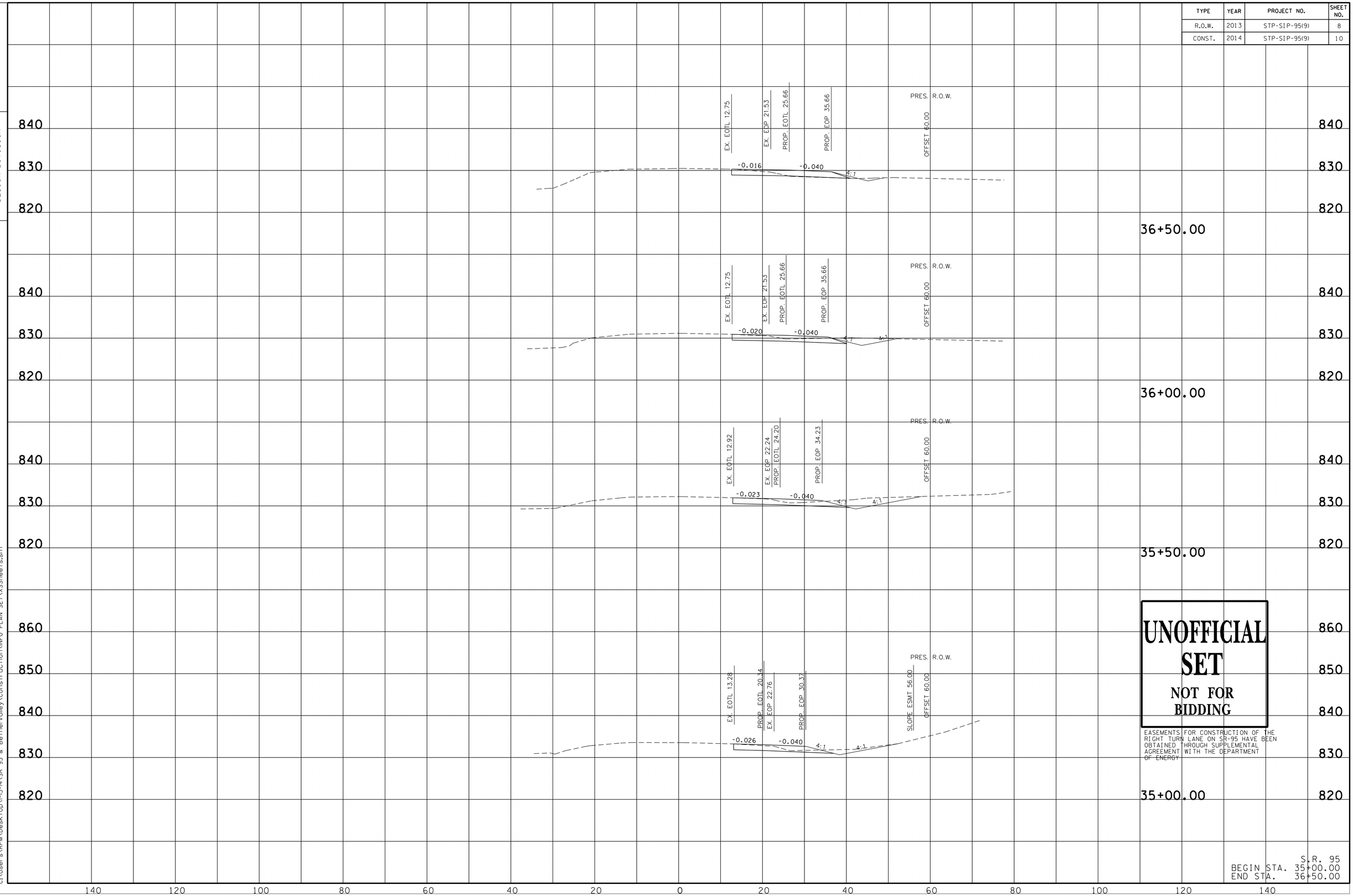
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	8
CONST.	2014	STP-SIP-95(9)	10



UNOFFICIAL SET
NOT FOR BIDDING

EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLEMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY

S.R. 95
BEGIN STA. 35+00.00
END STA. 36+50.00

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

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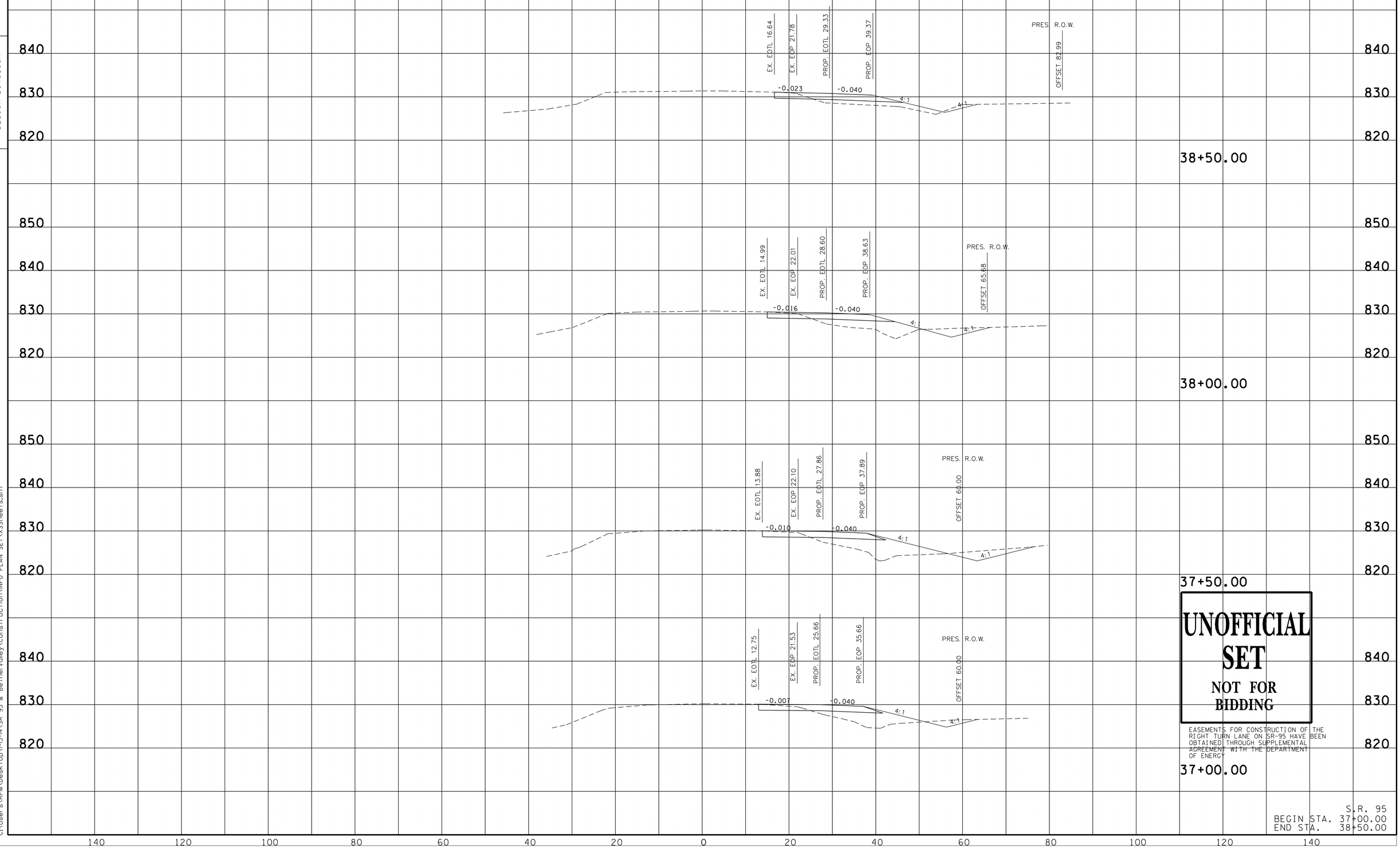
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	9
CONST.	2014	STP-SIP-95(9)	11

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



UNOFFICIAL SET
NOT FOR BIDDING

EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLEMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY

S.R. 95
BEGIN STA. 37+00.00
END STA. 38+50.00

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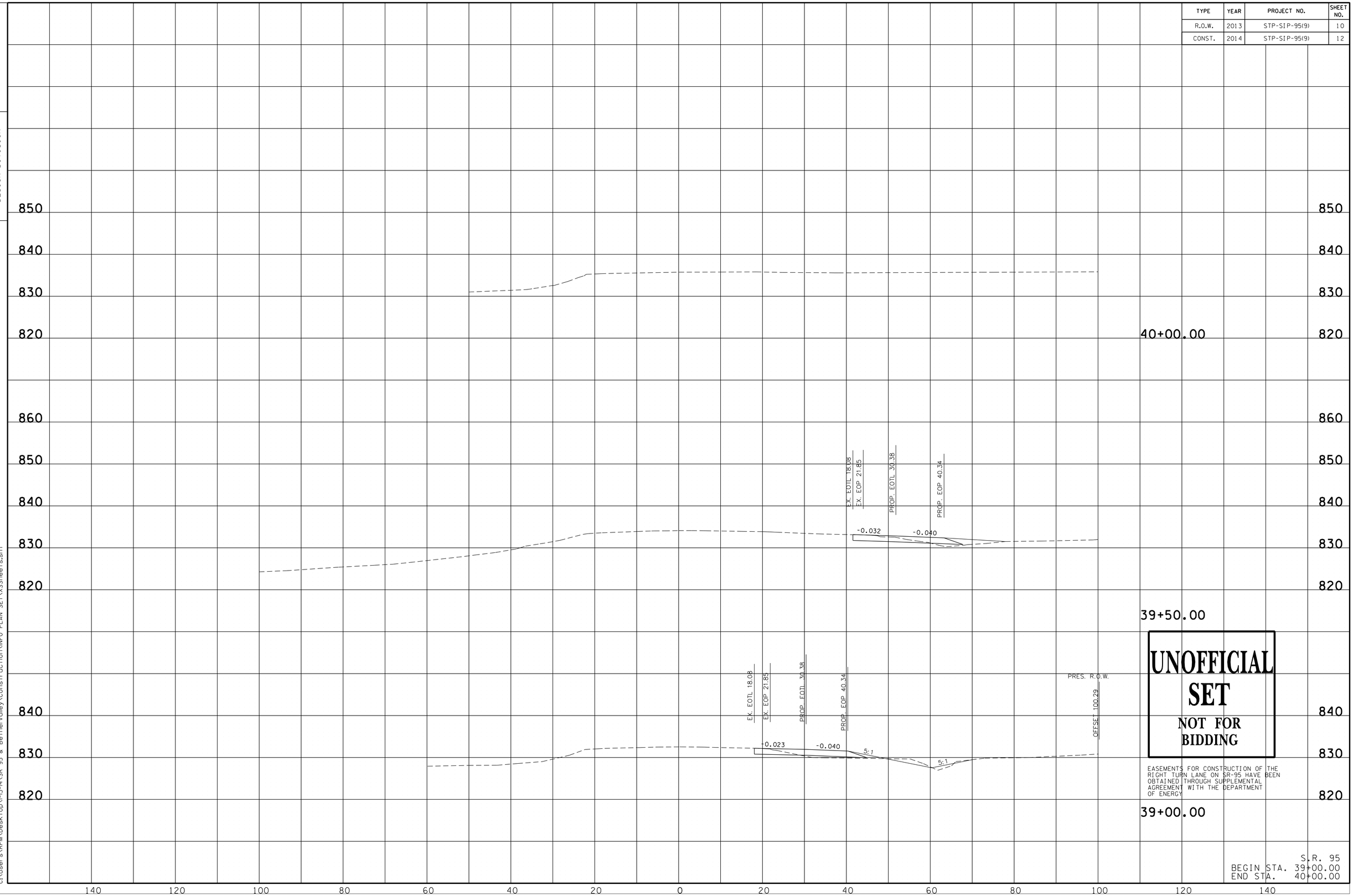
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	STP-SIP-95(9)	10
CONST.	2014	STP-SIP-95(9)	12

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



UNOFFICIAL SET
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EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLEMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY

S.R. 95
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TYPE	YEAR	PROJECT NO.	SHEET NO.
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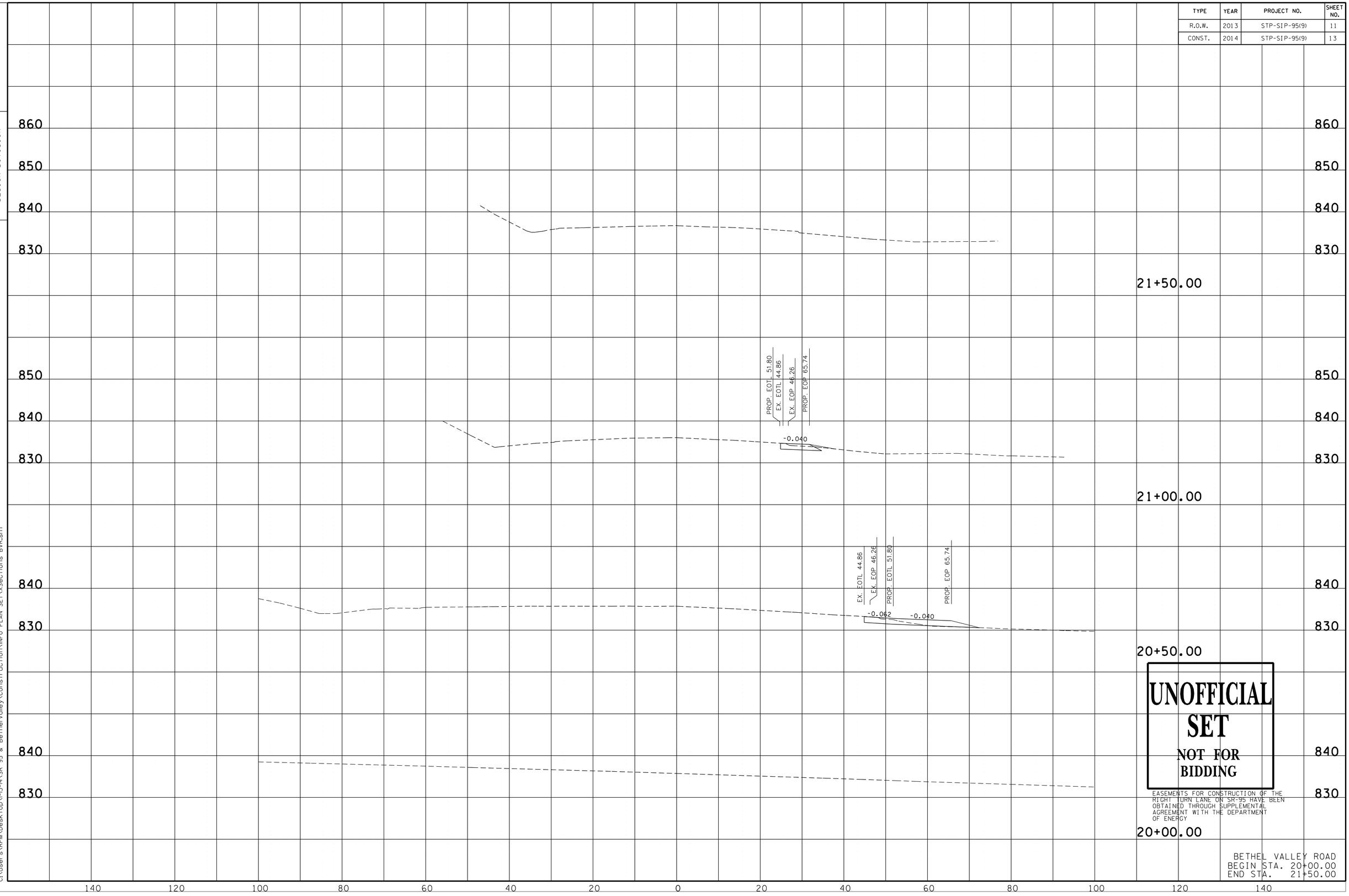
CONST.	2014	STP-SIP-95(9)	13



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EASEMENTS FOR CONSTRUCTION OF THE RIGHT TURN LANE ON SR-95 HAVE BEEN OBTAINED THROUGH SUPPLEMENTAL AGREEMENT WITH THE DEPARTMENT OF ENERGY

BETHEL VALLEY ROAD
BEGIN STA. 20+00.00
END STA. 21+50.00

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

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