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

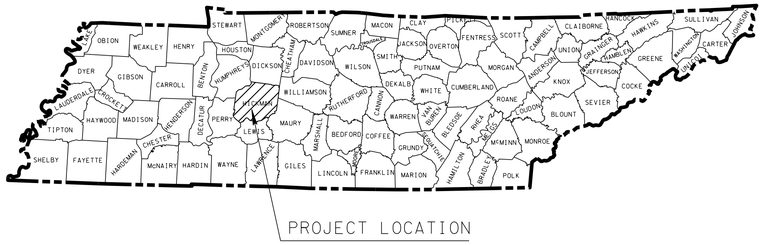
Index Of Sheets
SEE SHEET IA

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

TENN.	YEAR	SHEET NO.
	2014	1
FED. AID PROJ. NO.	BR-STP-50(29)	
STATE PROJ. NO.	41056-3217-94	

HICKMAN COUNTY

STATE ROUTE 50, BRIDGE OVER DUCK RIVER @ L.M. 14.04



CONSTRUCTION

STATE HIGHWAY NO. 50 F.A.H.S. NO. N/A

BEGIN PROJ. BR-STP-50(29)
CONST. STA. 21+23.00
N 531397.3445
E 1515128.6273

END PROJ. BR-STP-50(2
CONST. STA. 53+77.92
N 531450.4286
E 1518242.5127

N

SCALE: 1"= 5280'

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 SHANE HESTER, P.E.

DESIGNER BRAD ABEL, P.E. CHECKER ROBERT BRAUN, P.E.

P.E. NO. 41056-1217-94

PIN NO. 105351.00

ROADWAY LENGTH	0.390 MILES
BRIDGE LENGTH	0.226 MILES
PROJECT LENGTH	0.616 MILES

TRAFFIC DATA	
ADT (2014)	2,000
ADT (2034)	3,200
DHV (2034)	320
D	65 - 35
T (ADT)	7 %
T (DHV)	4 %
V	50 MPH

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NO EXCLUSIONS
NO EQUATIONS

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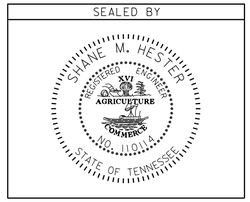

APPROVED: Paul D. Degges
CHIEF ENGINEER

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	1A

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NOTE: NO PROJECT COMMITMENTS SHEET INCLUDED IN THIS SET OF PLANS.

STANDARD ROADWAY DRAWINGS

DWG. NO	REV.	DESCRIPTION
BRIDGE APPURTENANCES ENGLISH (BOX CULVERTS)		
STD-15-1	11-06-08	INDEX OF DRAWINGS AND TERMINOLOGY
STD-15-2	3-28-08	GENERAL NOTES
STD-15-3	2-28-03	DESIGN SECTION LIMITS
STD-15-4	12-07-01	TYPICAL SECTION AND DETAILS
STD-15-5	2-28-03	TYPICAL ELEVATION
STD-15-6	3-28-08	CURB AND RAIL DETAILS - SKEW NOT LESS THAN 45 DEG.
STD-15-8	12-07-01	INTERIOR WALL END TREATMENTS
STD-15-9	2-28-03	TYPICAL WINGWALL DETAILS AND NOTES
STD-15-11		WINGWALL DIMENSIONS AND QUANTITIES
STD-15-12	3-28-08	WINGWALL & SPECIAL RETAINING WALL DESIGN SECTION
STD-15-13		WINGWALL DESIGN SECTION
STD-15-14	2-28-03	BACKFILL AND DRAINAGE DETAILS
STD-15-15		BACKFILL AND DRAINAGE DETAILS
STD-15-19		SIDEWALK AND MISCELLANEOUS DETAILS
STD-15-20		WARPED SLOPE DETAIL
STD-15-25	11-01-10	PRECAST BOX CULVERT DETAILS
STD-15-26		PRECAST BOX CULVERT DETAILS
STD-15-27		PRECAST BOX CULVERT DETAILS
STD-15-28		PRECAST BOX CULVERT DETAILS
STD-15-29		PRECAST BOX CULVERT DETAILS
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-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 DESIGN AND CONSTRUCTION
RD01-SD-1		INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES
RD01-SD-2		INTERSECTION SIGHT DISTANCE LANDSCAPE AND OBSTRUCTION
RD01-SD-3		INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS
RD01-SE-3	10-15-02	RURAL SUPERELEVATION DETAILS
RD01-TS-1	10-15-02	DESIGN STANDARDS FOR LOCAL ROADS AND STREETS
RD01-TS-2	10-15-02	DESIGN STANDARDS FOR COLLECTOR ROADS AND STREETS
DRAINAGE - CULVERTS AND ENDWALL		
D-PB-1	01-02-13	STANDARD DETAILS CLASS "B" BEDDING AND CULVERT EXCAVATION
D-PB-2	01-29-14	STANDARD DETAILS FOR FLEXIBLE PIPE INSTALLATION
D-PG-3	04-15-97	FERROUS AND ALUMINUM CORRUGATED METAL PIPE
ROADWAY AND PAVEMENT APPURTENANCES		
RP-R-1	05-27-01	STANDARD RAMPS TO SIDE ROADS
SAFETY DEVICES AND FENCES		
S-CZ-1		CLEAR ZONE CRITERIA
S-PL-1		SAFETY PLAN AT ROADSIDE HAZARDS
S-PL-3		SAFETY PLAN: MINIMUM INSTALLATION AT BRIDGE ENDS
S-GR-31-1		W-BEAM GUARDRAIL
S-GRS-1		SPECIAL CASE: LONG SPAN GUARDRAIL, ONE POST OMITTED
S-GRC-1		GUARDRAIL CONNECTION TO BRIDGE ENDS OR BARRIER WALL
S-GRT-2		TYPE 38 GUARDRAIL TERMINAL
S-GRT-2P		EARTH PAD FOR TYPE 38 TERMINAL
S-GRT-4		TYPE 13 GUARDRAIL TERMINAL (TRAILING END)
S-GRA-3		GUARDRAIL ANCHOR FOR TYPE 21, 13, AND IN-LINE TERMINALS
S-F-1	05-24-12	HIGH VISIBILITY FENCE
S-RP-2	01-19-99	STANDARD CONCRETE RIGHT-OF-WAY MARKERS
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-15A	11-01-11	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED ROUTES
T-PBR-1	06-30-09	INTERCONNECTED PORTABLE BARRIER RAIL
T-PBR-2	10-10-06	DETAIL FOR VERTICAL PANELS AND FLEXIBLE DELINEATORS
T-S-10	04-04-12	STANDARD MOUNTING DETAILS FLAT SHEET SIGNS
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-18	02-14-14	END OF ROADWAY, AND DEAD END SIGNS AND METAL BARRICADES (TYPE III)
T-S-19	07-19-13	STANDARD STEEL SIGN SUPPORTS
T-S-23A	07-19-13	MULTI-DIRECTIONAL SLIP BASE BREAKAWAY SQUARE TUBE SIGN SUPPORT
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND
T-WZ-30	09-01-05	TRAFFIC CONTROL 2-LANE, 2-WAY DIVERSION (40 MPH OR LESS)
T-WZ-31	09-01-05	TRAFFIC CONTROL 2-LANE, 2-WAY DIVERSION

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DEPARTMENT OF TRANSPORTATION

INDEX AND STANDARD DRAWINGS

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	1B

STANDARD ROADWAY DRAWINGS

DWG. NO	REV.	DESCRIPTION
EROSION PREVENTION AND SEDIMENT CONTROL		
EC-STR-2	08-01-12	SEDIMENT FILTER BAG
EC-STR-3B	08-01-12	SILT FENCE
EC-STR-3C	08-01-12	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-6	08-01-12	ROCK CHECK DAM
EC-STR-6A	08-01-12	ENHANCED ROCK CHECK DAM
EC-STR-8	08-01-12	FILTER SOCK
EC-STR-11A	08-01-12	CULVERT PROCTECTION TYPE 2
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-33	08-01-12	SUSPENDED PIPE DIVERSON (DOWNSTREAM)
EC-STR-33A	08-01-12	SUSPENDED PIPE DIVERSON (UPSTREAM)
EC-STR-34	08-01-12	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION
EC-STR-37	08-01-12	SEDIMENT TUBE

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DEPARTMENT OF TRANSPORTATION

INDEX AND STANDARD DRAWINGS

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	2A

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
	201-01	CLEARING AND GRUBBING	LS	1
1.), 19.)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	16979
2.)	203-02.01	BORROW EXCAVATION (GRADED SOLID ROCK)	TON	18545
3.)	203-03	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	6287
	203-06	WATER	M.G.	21
	203-08	CHANNEL EXCAVATION (UNCLASSIFIED)	C.Y.	6
4.)	209-03	CHECK DAMS	S.F.	256
4.)	209-05	SEDIMENT REMOVAL	C.Y.	552
4.), 13.)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	911
4.)	209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	410
	209-08.08	ENHANCED ROCK CHECK DAM	EACH	2
4.)	209-09.01	SANDBAGS	BAG	500
4.)	209-09.03	SEDIMENT FILTER BAG (15' X 15')	EACH	2
5.)	209-09.22	POLYACRYLAMIDE POWDER	LB.	275
	209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	200
	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	7552
6.)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	41
	307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	938
	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	614
	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	14
	402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	55
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	4
	411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	293
7.)	411-01.10	ACS MIX(PG64-22) GRADING D	TON	395
	411-12.02	SCORING SHOULDERS (NON-CONTINUOUS) (16IN WIDTH)	L.M.	1
	607-39.03	24" PIPE CULVERT (SIDE DRAIN)	L.F.	37
8.)	610-07.03	18" PIPE DRAIN (BRIDGE DRAIN)	L.F.	140
	611-07.01	CLASS A CONCRETE (PIPE ENDWALLS)	C.Y.	31
	611-07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)	LB.	7041
9.)	621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	150
	705-01.01	GUARDRAIL AT BRIDGE ENDS	L.F.	108
	705-02.02	SINGLE GUARDRAIL (TYPE 2)	L.F.	588
	705-04.07	TAN ENERGY ABSORBING TERM (NCHRP 350, TL3)	EACH	4
	705-08.51	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	EACH	2
	707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	1782
8.)	709-01.01	RUBBLE STONE RIP-RAP	C.Y.	6
10.)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	101
11.)	709-05.08	MACHINED RIP-RAP (CLASS B)	TON	433
12.)	709-05.09	MACHINED RIP-RAP (CLASS C)	TON	8348

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	712-01	TRAFFIC CONTROL	LS	1
14.)	712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	2300
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	47
	712-04.50	PORTABLE BARRIER RAIL DELINEATOR	EACH	22
	712-06	SIGNS (CONSTRUCTION)	S.F.	160
	713-11.01	"U" SECTION STEEL POSTS	LB.	154
	713-11.02	PERFORATED/KNOCKOUT SQUARE TUBE POST	LB.	203
	713-11.21	P POST SLIP BASE	EACH	2
	713-13.02	FLAT SHEET ALUMINUM SIGNS (0.080" THICK)	S.F.	23
	713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	S.F.	54
15.)	713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
	713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	2
	716-01.21	Snwplwble Pvmt Mrkrs (Bi-Dir)(1 Color)	EACH	41
	716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	2.5
	716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	2.5
	717-01	MOBILIZATION	LS	1
16.)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	718
17.)	740-10.04	GEOTEXTILE (TYPE IV)(STABILIZATION)	S.Y.	10637
	740-11.03	TEMPORARY SEDIMENT TUBE 18IN (DESCRIPTION)	L.F.	360
	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	266
	801-03	WATER (SEEDING & SODDING)	M.G.	148
	803-01	SODDING (NEW SOD)	S.Y.	14769
18.)	805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	350

FOOT NOTES:

1.) INCLUDES 17 C.Y. FOR PRIVATE DRIVES, AND 11838 C.Y. FOR HAUL ROADS.
2.) INCLUDES 2058 TON FOR 5' DEEP GRADED SOLID ROCK. *SEE SOIL REPORT
3.) INCLUDES 132 C.Y. FOR PRIVATE DRIVES.
4.) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTAINENCE REPLACEMENT.
5.) BASED ON 3 APPLICATIONS AT 30 LB/ACRE .
6.) INCLUDES 8 TON FOR TYPE II CULVERT PROTECTION, AND 33 TON FOR CONSTRUCTION OF SEDIMENT FILTER BAGS.
7.) INCLUDES 34 TON FOR PRIVATE DRIVES.
8.) STANDARD DRAWING STD-1-7 IS TO BE USED FOR BURIAL OF THE OUTLET PIPE AND FOR END TREATMENT DETAILS.
9.) TO BE USED FOR HAUL ROADS AND SUSPENDED PIPE DIVERSION.
10.) FOR CONSTRUCTION OF TEMPORARY CONSTRUCTION EXITS.
11.) INCLUDES 109 TON FOR CULVERT RIP RAP APRON, AND 324 TON FOR BRIDGE ABUTMENTS.
12.) TO BE USED FOR HAUL ROAD CONSTRUCTION 100' PRIOR TO STREAM BANK AND EXTENDING TO THE LIMIT OF HAUL ROAD IN THE RIVER. INCLUDES 1080 TONS TO STABILIZE EASTERN BANK HAUL ROADS
13.) INCLUDES 200 L.F. FOR SEDIMENT FILTER BAGS.
14.) INCLUDES 600 L.F. FOR CONSTRUCTION OF EAST BANK HAUL ROADS.
15.) REMOVE SIGN & SUPPORT (NO FOOTINGS ON THESE SIGNS) ON SIGN NO. 8 AND APPROXIMATELY SIXTEEN SIGNS WITHIN THE GRADING LIMITS OR AS DIRECTED BY THE ENGINEER.
16.) INCLUDES 24 S.Y. FOR TYPE II CULVERT PROTECTION, 172 S.Y. FOR CONSTRUCTION EXITS, 186 S.Y. FOR SEDIMENT FILTER BAGS, AND 336 S.Y. FOR CHECK DAMS.
17.) INCLUDES 9937 S.Y. FOR HAUL ROADS, AND 700 S.Y. FOR SLOPE STABILIZATION. *SEE SOIL REPORT
18.) TO BE USED FOR STABILIZATION OF STOCK PILE EARTHEN MATERIAL AND/OR AS DIRECTED BY ENGINEER.
19.) INCLUDES COST OF TEMPORARY SOIL NAIL/ANCHOR WALLS WITH SHOTCRETE FACING FOR EAST BANK HAUL ROAD CONSTRUCTION. SEE NOTE ON SHEET 21C FOR ADDITIONAL DETAILS.

NOTE: ALL QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER.

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DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

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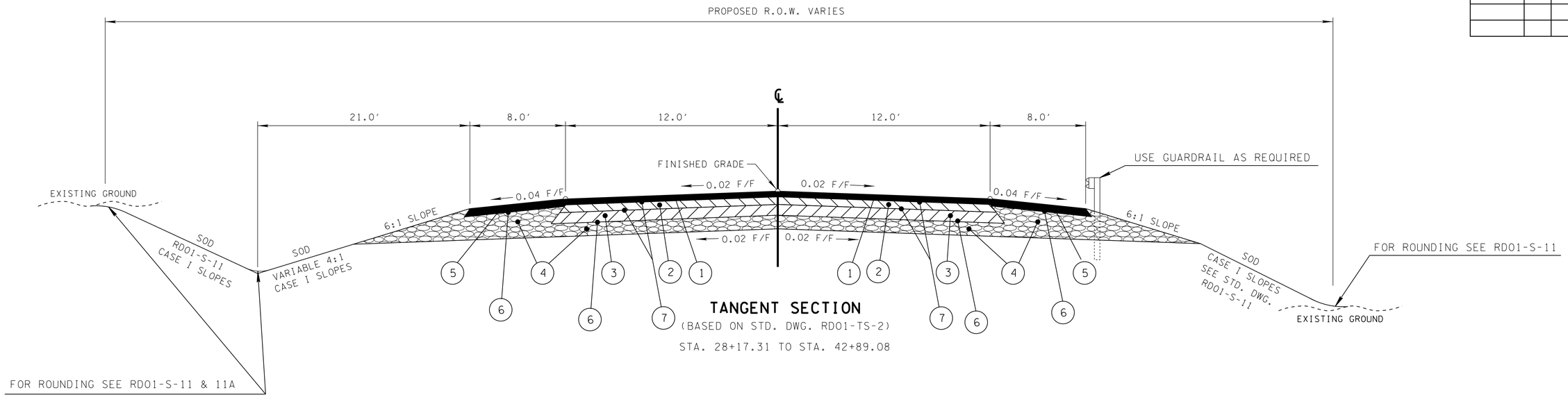
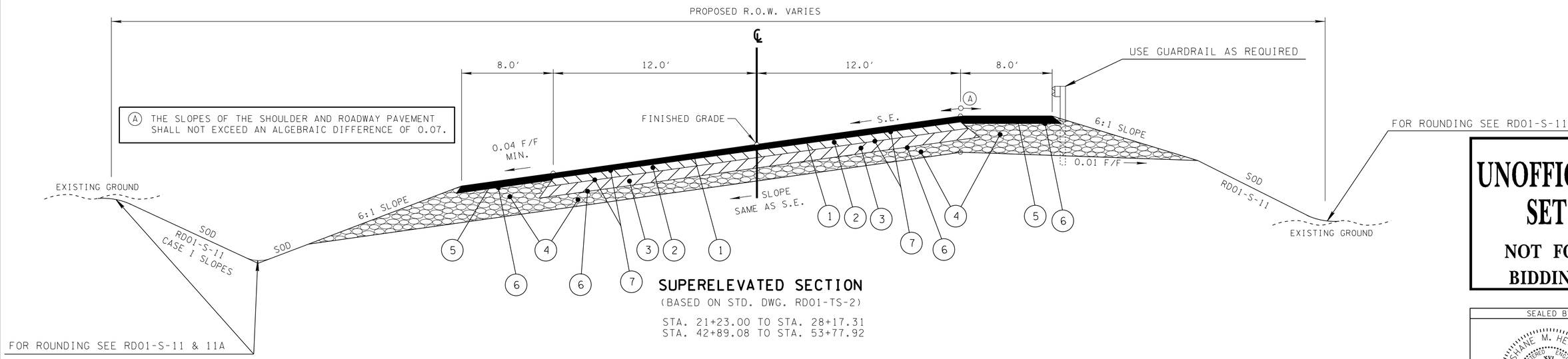
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	2
CONST.	2014	BR-STP-50(29)	2B





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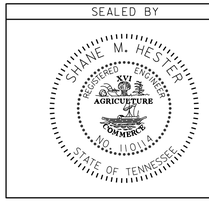

PROPOSED PAVEMENT SCHEDULE

(1) SURFACE (ROADWAY) @ 1.25" THICK (132.5 LB/S.Y.) 411-01.10 ASPHALT CONCRETE MIX (PG64-22) (ACS) GRADING "D"	(4) MINERAL AGGREGATE BASE 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D (TON) (10" THICK ON ROADWAY, 14.75" THICK ON SHOULDER)	(7) TACK COAT ⚠ 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)(0.07 GAL./S.Y.)
(2) BINDER @ 2.00" THICK (226.0 LB/S.Y.) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (ACS) GRADING "B-M2"	(5) SURFACE (SHOULDERS) @ 1.50" THICK (154.5 LB/S.Y.) 411-01.07 ASPHALT CONCRETE MIX (PG64-22) (ACS) GRADING "E"	⚠ NOTE: TACK COAT SHALL NOT BE APPLIED ON TOP OF EITHER GRADING AS OR TREATED PERMEABLE BASE MIXTURES
(3) BLACK BASE @ 3.00" THICK (460.0 LB/S.Y.) 307-01.01 ASPHALT CONCRETE MIX (PG64-22) (ACS) GRADING "A"	(6) PRIME COAT 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC)(0.30-0.35 GAL./S.Y.) 402-02 AGGREGATE FOR COVER MATERIAL (PC)(8-12 LB/S.Y.)	

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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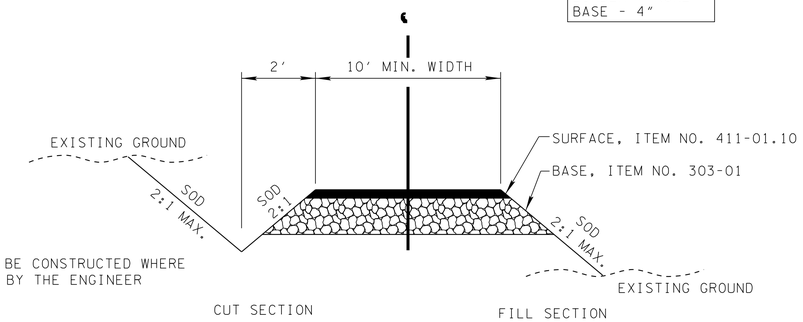
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	2C

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

FIELD OR RESIDENTIAL

SURFACE - 1½"
BINDER - NONE
BASE - 4"

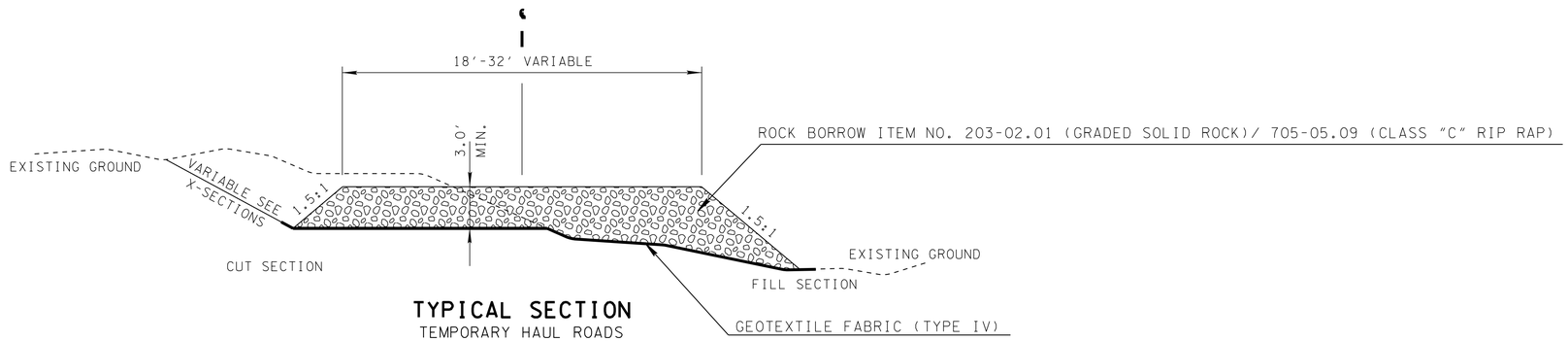


NOTE: DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER

TYPICAL SECTION

PRIVATE DRIVE TO FIELD,
OR RESIDENTIAL PROPERTY

NOTE: WHERE SURFACE OF EXISTING DRIVE IS CONCRETE, SUBSTITUTE 6 INCHES OF CONCRETE FOR BASE AND SURFACE.



TYPICAL SECTION

TEMPORARY HAUL ROADS

NOTE: GEOTEXTILE TO BE EXTENDED PAST TOE OF HAUL ROAD SLOPES FOR STABILIZATION.

NOTE: HAUL ROADS TO BE REMOVED AND AREA TO BE RETURNED TO EXISTING CONDITION UPON COMPLETION OF EACH PHASE OF WORK WHICH HAUL ROADS ARE REQUIRED.

NOTE: NOTICE TO CONTRACTOR, CLASS C MACHINED RIP-RAP SHALL BE THE MATERIAL USED TO CONSTRUCT HAUL ROAD INSTEAD OF GRADED SOLID ROCK BEGINNING AT A POINT 100' PRIOR TO THE STREAM BANK AND EXTENDING TO THE LIMIT OF THE HAUL ROAD IN THE RIVER.

UNOFFICIAL SET

NOT FOR BIDDING

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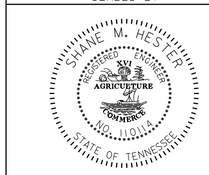

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	2D

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

GENERAL NOTES

GRADING

(1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE 0F THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

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

(3) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. 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

(4) ALL EXISTING ROADS WITHIN THE RIGHT-OF-WAY AND NOT IN THE GRADED AREA THAT ARE TO BE ABANDONED SHALL BE SCARIFIED, OBLITERATED, TOPSOILED AND SEEDED. SCARIFYING AND OBLITERATING THE PAVEMENT WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS. TOPSOIL, IN ACCORDANCE WITH SECTION 203 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEMS 203-04 AND/OR 203-07. SEEDING, IN ACCORDANCE WITH SECTION 801 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEM 801-01.

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

GUARDRAIL

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

DRAINAGE

(7) 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.

(8) EXCAVATION FOR PIPE CULVERTS 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).

(9) 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.

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

(11) 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.

(12) 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

(13) 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.

(14) 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.

(15) 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.

(16) 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.

(17) 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.

MISCELLANEOUS

(18) THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.

(19) 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 MARKING ON INTERMEDIATE LAYERS

(20) 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 DAYS WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01, PAINTED PAVEMENT MARKING (4" LINE), L.M.

FINAL PAVEMENT MARKING IF 6" ENHANCED FLATLINE THERMOPLASTIC IS USED

(21) 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..

PAVEMENT

PAVING

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

GRADED SOLID ROCK

(23) THE ROCK FILL (GRADED SOLID ROCK) MATERIAL SHALL CONSIST OF SOUND, NON-DEGRADABLE LIMESTONE OR SANDSTONE WITH A MAXIMUM SIZE OF 3'-0". AT LEAST 50% (BY WEIGHT) OF THE ROCK SHALL BE UNIFORMLY DISTRIBUTED BETWEEN 1'-0" AND 3'-0" IN DIAMETER, AND NO GREATER THAN 10% (BY WEIGHT) SHALL BE LESS THAN 2" IN DIAMETER. THE MATERIAL SHALL BE ROUGHLY EQUIDIMENSIONAL; THIN, SLABBY MATERIALS WILL NOT BE ACCEPTED. THE CONTRACTOR SHALL BE REQUIRED TO PROCESS THE MATERIAL WITH AN ACCEPTABLE MECHANICAL MEANS (A SCREENING PROCESS CAPABLE OF PRODUCING THE REQUIRED GRADATION). THE ROCK SHALL BE APPROVED BY A REPRESENTATIVE OF THE DIVISION OF MATERIALS AND TESTS BEFORE USE.

(24) THIS GRADED SOLID ROCK MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING FIVE FEET IN DEPTH.

SIGNING

(25) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUTOUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND. THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL EXTRUDED PANEL SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE, AS OUTLINED IN THE STANDARD SPECIFICATIONS. ALL SHIELDS ON GUIDE SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE AS OUTLINED IN THE STANDARD SPECIFICATIONS.

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

(27) 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.

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

(29) THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ERECTION.

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

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

(31) 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.

(32) 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.

(33) 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.

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

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	2E

GENERAL NOTES

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

(35) 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.

(36) 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.

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

(38) ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED AND THE VERTICAL PANELS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.

EROSION PREVENTION AND SEDIMENT CONTROL

DISTURBED AREA

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

(40) 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.

(41) 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.

(42) 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.

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

(44) NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT. OFF-SITE BORROW OR WASTE AREAS ARE TO BE INCLUDED IN THE TOTAL DISTURBED AREA IF THE BORROW OR WASTE AREA IS EXCLUSIVE TO THE PROJECT PER TDOT'S WASTE AND BORROW MANUAL.

SEDIMENT CONTROL

(45) 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.

(46) 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.

(47) WATER PUMPED FROM WORK AREAS AND EXCAVATION MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION OR CHEMICAL TREATEMENT AFTER FILTRATION PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. 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.

(48) CHECK DAMS SHALL BE USED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, BRUSH, GABION, OR SANDBAG CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO REDUCE VELOCITY AND CONTROL EROSION.

(49) FOR AN OUTFALL IN A DRAINAGE AREA OF 10 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/ 24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.

(50) IF PERMANENT OR TEMPORARY VEGETATION IS TO BE USED AS AN EPSC MEASURE, THEN THE TIMING OF PLANTING OF VEGETATION SHALL BE SHOWN IN THE SWPPP. DELAYING PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.

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

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

STREAM/WETLAND

(53) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT WATER QUALITY MUST 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 STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS IN ACCORDANCE WITH TDOT STANDARDS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.

(54) 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.

(55) INSTREAM EPSC DEVICES ARE NOT APPROVED, UNLESS SPECIFIED IN WRITING BY THE ENVIRONMENTAL DIVISION.

(56) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS, SHALL BE ONLY AS SHOWN ON THE PROJECT PLANS AND/OR AS SO SPECIFIED IN THE ARAP/401, SECTION 404 PERMIT(S) AND/OR TVA26(A), IF APPLICABLE. ANY ADDITIONAL PERMITS REQUIRED BY THE CONTRACTOR'S METHOD OF OPERATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, AFTER RECEIVING THE APPROVAL OF TDOT ENVIRONMENTAL DIVISION.

(57) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING.

(58) STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CROSSINGS MUST BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES MUST BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK MUST 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 MUST BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO THEIR PREEXISTING ELEVATION. ALL TEMPORARY CROSSINGS MUST BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. NO. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (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.

SPECIES

(59) 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. THE SWPPP SHALL BE MODIFIED TO INCLUDE EPSC MEASURES TO PREVENT NEGATIVE IMPACTS TO LEGALLY PROTECTED STATE OR FEDERAL FAUNA OR FLORA OR AS INDICATED IN THE ECOLOGICAL STUDIES OR ON THE PERMIT(S).

INSPECTION, MAINTENANCE, REPAIR

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

(61) 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.

(62) 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.

(63) 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.

(64) 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.

UNOFFICIAL SET
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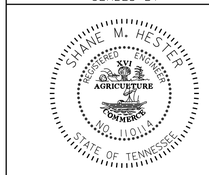

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	2F

GENERAL NOTES

INSPECTION, MAINTENANCE, REPAIR

(65) 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.

(66) 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.

(67) 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.

MATERIALS

(68) 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.

SWPPP, PERMITS, PLANS, RECORDS

(69) 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.

(70) 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, 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.

(71) 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, QUALITY ASSURANCE SITE ASSESSMENT RECORDS, PRECIPITATION RECORDS, SWPPP, PROJECT ENVIRONMENTAL PERMITS, AND A COPY OF THE PROJECT EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION.

(72) ALL WATER QUALITY AND STORM WATER PERMITS, INCLUDING A COPY OF THE NOC WITH NPDES PERMIT TRACKING NUMBER AND THE LOCATION OF THE SWPPP, 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 BREIF 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.

(73) 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 DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

(74) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION 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. THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED WHEN MAJOR DESIGN REVISIONS ARE REQUESTED BY CONSTRUCTION. THE ENVIRONMENTAL DIVISION MAY BE CONTACTED FOR GUIDANCE ON SPECIFIC SWPPP NEEDS. A COPY OF ANY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS SHALL BE RETAINED IN THE SWPPP.

(75) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER A CHANGE IN CHEMICAL TREATMENT METHODS IS MADE INCLUDING USE OF A DIFFERENT CHEMICAL, DIFFERENT DOSAGE OR APPLICATION RATE, OR A DIFFERENT AREA OF APPLICATION.

(76) IF A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION) THE SWPPP SHALL BE MODIFIED OR UPDATED.

(77) 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. A COPY OF CERTIFICATION RECORDS FOR THIS COURSE SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

LITTER, DEBRIS, WASTE, PETROLEUM

(78) 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. THESE MATERIALS WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED FOR EPSC WILL BE REMOVED FROM THE SITE.

(79) 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.

SPECIAL NOTES

GRADING

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

(2) BORING DEPICTIONS SHOWN ON THE FOUNDATION DATA SHEETS, SOILS SHEETS, PLANS, AND CROSS-SECTIONS INDICATE SOIL AND ROCK CONDITIONS AT THE SPECIFIC BORING LOCATIONS. ANY SOIL PROFILE AND/OR ROCK LINE IS INTERPRETIVE BASED ON THE JUDGMENT OF THE GEOTECHNICAL ENGINEER/GEOLOGIST. THE TRANSITION BETWEEN BORINGS AND LAYERS MAY VARY SIGNIFICANTLY DEPENDING ON THE GEOLOGIC FORMATIONS ENCOUNTERED.

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

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

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

EROSION PREVENTION AND SEDIMENT CONTROL

NPDES

(6) REFER TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN, SHEETS 13-13A, FOR NOTES REGARDING SEASONAL WORK LIMITATION OR LIMITATION ON THE TOTAL AREA OF EXPOSED SOIL.

ENVIRONMENTAL

ECOLOGY

(7) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE WILL ADVISE THE CONTRACTOR DURING THE PRE-CONSTRUCTION MEETING CONCERNING WHEN ENVIRONMENTAL DIVISION PERSONNEL OR DESIGNATED CONSULTANT WILL NEED TO BE ON-SITE FOR WORK BEING DONE WHICH COULD AFFECT THE STREAM OR SPECIES.

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

(9) ALL BRIDGE PROJECTS WITH THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITAT IDENTIFIED MUST HAVE MEASURES IN PLACE TO CONTAIN CONCRETE DUST, CEMENT DUST AND ALL OTHER MATERIALS. THESE MATERIALS ARE NOT ALLOWED TO ENTER THE STREAM.

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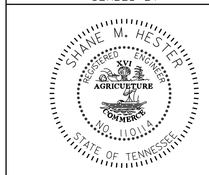

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND SPECIAL NOTES

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	2G

PROPOSED GUARDRAIL

SHEET NO.	LOCATION	SIDE		STATION		GUARDRAIL				TERMINAL ANCHORS					REMARKS
		LT	RT	FROM	TO	BRIDGE ENDS 705-01.01 (L.F.)	BRIDGE PIERS 705-01.02 (L.F.)	SINGLE TYPE 2 705-02.02 (L.F.)	MEDIAN TYPE 2 705-03.03 (L.F.)	TYPE 12 705-04.02 (EACH)	TYPE 13 705-04.03 (EACH)	TYPE 21 705-04.04 (EACH)	TYPE IN-LINE 705-04.05 (EACH)	TYPE 38 705-04.07 (EACH)	
4B,5B	S.R. 50		X	24+37.00	31+00.00	27		588						1	
5B	S.R. 50	X		30+21.00	31+00.00	27								1	
6B	S.R. 50	X		43+20.00	44+00.00	27								1	
6B	S.R. 50		X	43+20.00	44+00.00	27								1	
TOTALS						108	0	588	0	0	0	0	0	4	

BOX CULVERT TABULATION

STATION	LOCATION	SPAN	HEIGHT	LENGTH	SKEW	DRAINAGE AREA ACRES	BOX CULVERT					CULVERT EXC. CU. YD.	DRAWING NO.	BACKFILLING ITEM 303-01.01 DWG. STD-10-1 TONS	FOUNDATION FILL MATERIAL CU. YD.
							BOX		APRON						
							CLASS "A" CONC. CU. YD.	REINF. STEEL LBS.	CLASS "A" CONC. CU. YD.	WIRE FABRIC LBS.	STEEL BAR REINF. LBS.				
26+53.42	S.R. 50	3'	4'	50'	60°	23	31				7041	72			10
TOTALS							31	0	0	0	7041	72		0	10

SIDE DRAIN TABULATION

STATION	LOCATION		DESCRIPTION	SURFACE WIDTH	RCP CLASS III OR CMP 16 GA. OR HDPE OR PVC (L.F.) FILL HEIGHT < OR = 10 FT.					RCP CLASS III OR CMP 14 GA. OR HDPE OR PVC (LF) FILL HEIGHT > 10 FT. AND < OR = 18 FT.					END TREATMENT					REMARKS
	LT	RT		(L.F.)	18"	24"	30"	36"	48"	18"	24"	30"	36"	48"	TYPE	DRAWING NO.	CLASS A CONC. 611-07.01 (C.Y.)	REINF. STEEL 611-07.02 (LB.)	STRUC. STEEL 611-07.03 (LB.)	
24+47.61	X		S.R. 50 PRIVATE DRIVE	30		37														
TOTALS					0	37	0	0	0	0	0	0	0	0			0	0	0	

R.O.W. MARKERS

SHEET NO.	QUANTITIES "A"	"B"	"C"	TOTALS
4A	2	1		3
5A	1			1
6A	1			1
				0
				0
TOTALS	4	1	0	5

ESTIMATED GRADING QUANTITIES

STATION TO STATION	ROAD & DRAINAGE EXC. (UNCL.)		BORROW EXCAVATION		CHANNEL EXC. C.Y.	EMB. C.Y.
	COMMON - C.Y.	S. ROCK - C.Y.	UNCL. - C.Y.	S. ROCK - C.Y.		
21+23.00 TO 53+77.92	5124		6155			11279
PRIVATE DRIVES	17		132			149
HAUL ROADS	11838			9421		
29+50.00 TO 30+90.00				1167		
4X3 BOX CULVERT					6	
TOTALS	16979	0	6287	10588	6	11428

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DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

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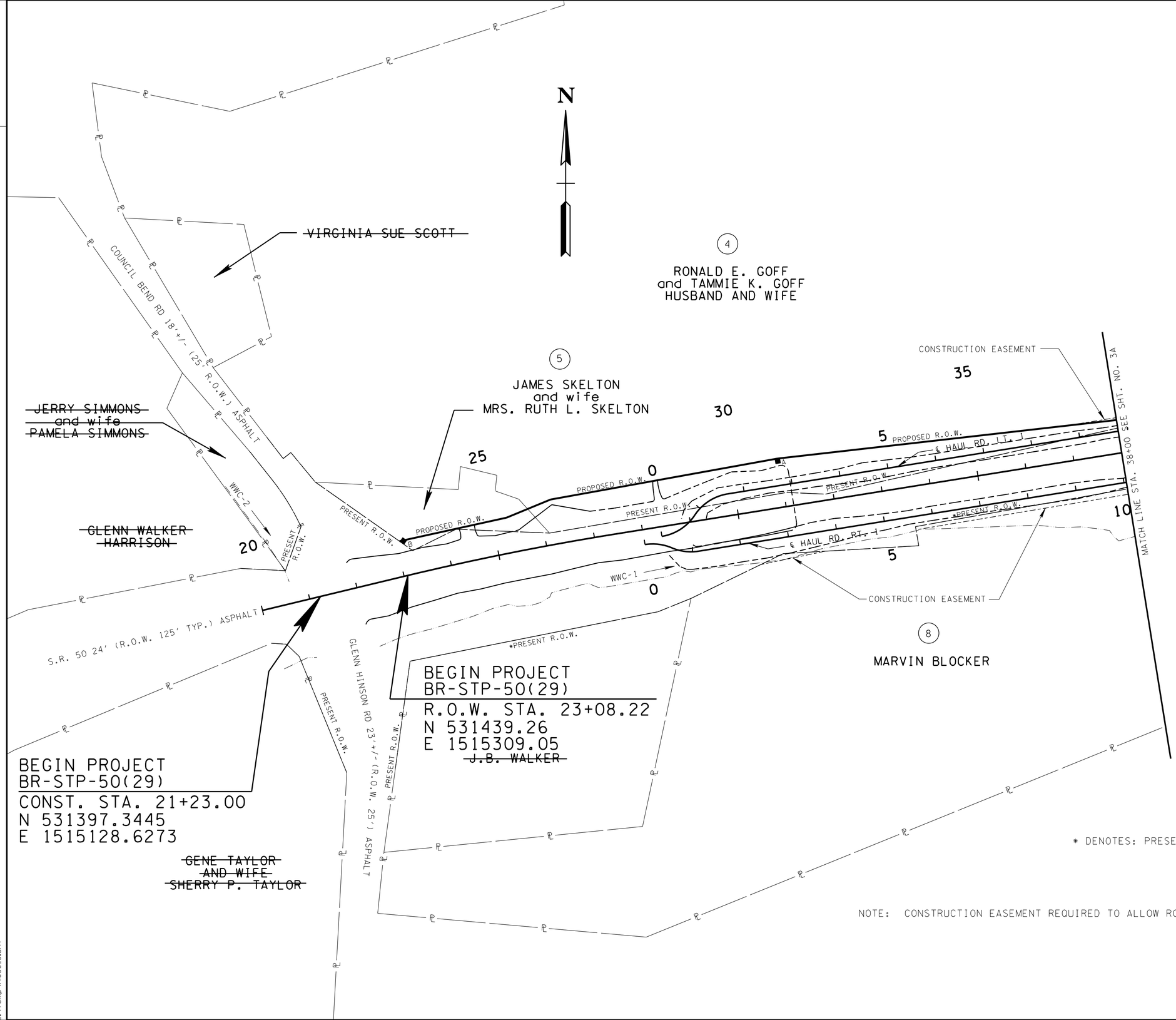
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	3
CONST.	2014	BR-STP-50(29)	3

REV. 1-11-11:
CORRECTED TRACT NO. 8 PROPERTY OWNER.



* DENOTES: PRESENT AND PROPOSED R.O.W.

NOTE: CONSTRUCTION EASEMENT REQUIRED TO ALLOW ROOM FOR TEMPORARY HAUL ROADS.

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SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
XVI
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP

BEGIN PROJ. TO STA.38+00

SCALE: 1"=100'

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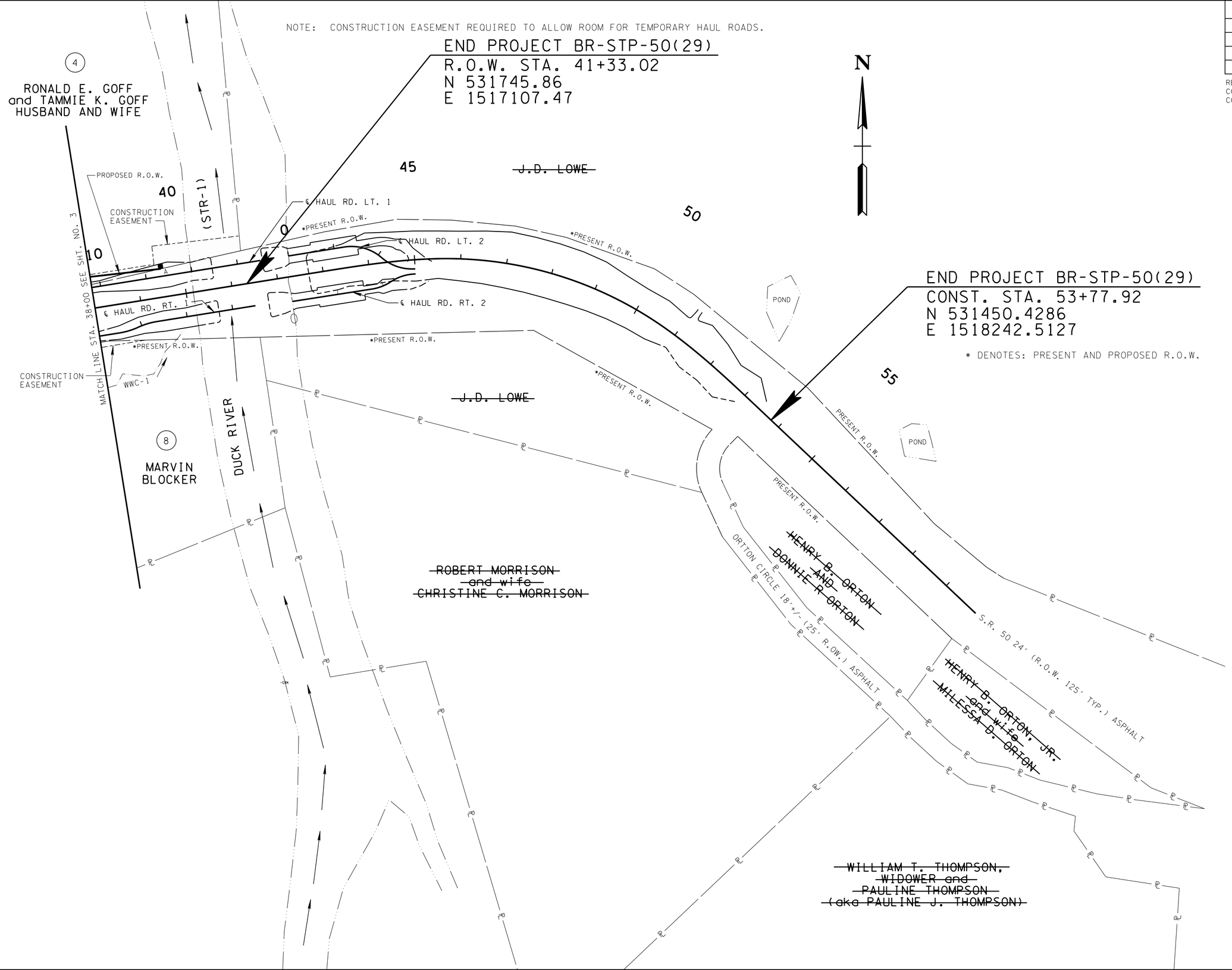
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	3A
CONST.	2014	BR-STP-50(29)	3A

REV. 1-11-11:
CORRECTED R.O.W. END PROJECT STATION.
CORRECTED TRACT NO. 8 PROPERTY OWNER.

NOTE: CONSTRUCTION EASEMENT REQUIRED TO ALLOW ROOM FOR TEMPORARY HAUL ROADS.



UNOFFICIAL SET

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SHANE M. HESTER
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AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP

STA.38+00 TO END PROJ.

SCALE: 1"=100'

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	3B
CONST.	2014	BR-STP-50(29)	3B

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.
	~~GLENN WALKER HARRISON~~	~~106~~	~~007.00~~	~~21~~	~~159~~	~~50.550~~		~~50.550~~				~~50.550~~				
	~~JERRY SIMMONS AND WIFE PAMELA SIMMONS~~	~~106~~	~~008.00~~	~~14~~	~~5689~~	~~0.760~~		~~0.760~~				~~0.760~~				
	~~VIRGINIA SUE SCOTT~~	~~106~~	~~011.00~~	~~69~~	~~68~~	~~1.200~~		~~1.200~~				~~1.200~~				
4	RONALD E. GOFF AND TAMMIE K. GOFF HUSBAND AND WIFE	106	014.00	98	381	63.120		63.120	1.705		1.705	61.415				1883*
5	JAMES SKELTON AND WIFE MRS. RUTH L SKELTON	106	010.00	S002, L-2	438, 292	0.870		0.870	0.133		0.133	0.737				
	~~GENE TAYLOR AND WIFE SHERRY P. TAYLOR~~	~~106~~	~~023.00~~	~~27~~	~~47~~		~~28.900~~	~~28.900~~					~~28.900~~			
	~~J.B. WALKER~~	~~106~~	~~021.06~~	~~12~~	~~657~~		~~5.260~~	~~5.260~~					~~5.260~~			
8	MARVIN BLOCKER	106	021.08	110	659		19.620	19.620					19.620			0.124 AC*
	~~J.D. LOWE~~	~~106~~	~~015.00~~	~~F002~~	~~483~~	~~229.730~~		~~229.730~~				~~229.730~~				
	~~J.D. LOWE~~	~~106~~	~~015.00~~	~~F002~~	~~483~~		~~4.040~~	~~4.040~~					~~4.040~~			
	~~ROBERT MORRISON AND WIFE CHRISTINE C. MORRISON~~	~~106~~	~~020.00~~	~~113~~	~~449~~		~~25.800~~	~~25.800~~					~~25.800~~			
	~~HENRY B. ORTON AND DONNIE B. ORTON~~	~~106~~	~~015.01~~	~~113~~	~~449~~		~~2.180~~	~~2.180~~					~~2.180~~			
	~~HENRY B. ORTON, JR. AND WIFE MILESSA D ORTON~~	~~106~~	~~015.03~~	~~113~~	~~449~~		~~1.730~~	~~1.730~~					~~1.730~~			
	~~WILLIAM T. THOMPSON WIDOWER AND PAULINE THOMPSON~~	~~106~~	~~019.00~~	~~114~~	~~55~~		~~17.640~~	~~17.640~~					~~17.640~~			

* FOR CONSTRUCTION OF TEMPORARY HAUL ROADS

UTILITY OWNERS LIST

PROJECT # 41056-1217-94
BRIDGE OVER DUCK RIVER
(CHARLES THOMPSON BRIDGE), LM 14.04
HICKMAN COUNTY, TN

ELECTRIC: MERIWETHER LEWIS ELECTRIC
1625 HWY 100
CENTERVILLE, TN 37033
STEVE SKELTON
STEVE.SKELTON@MLEC.COM
O: 931-623-1636

TELEPHONE: AT&T
116 SOUTH CANON AVE.
MURFREESBORO, TN 37129
KENNETH L. KORNEGAY
KK4096@ATT.COM
O: 615-848-2082
C: 615-631-7221

WATER: TOWN OF CENTERVILLE - WATER,GAS, & SEWER
102 E. SWAN STREET
CENTERVILLE, TN 37033
DANNY HUDGINS
O: 931-729-3029
C: 931-994-9145
F: 931-729-3528

RIGHT-OF-WAY

1. 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 AND THE CIVIL ENGINEERING MANAGER 1, REGIONAL DESIGN OFFICE, IS TO BE NOTIFIED IN SUFFICIENT TIME TO PERMIT HAVING SUCH REMOVALS DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.

2. WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY EXCEEDS 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED TO A TOUCHDOWN POINT OR UNTIL THE GRADE IS LESS THAN 7 PERCENT.

3. WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVE WAY IS LESS THAN 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED A SHOULDER WIDTH FROM THE EDGE OF PAVEMENT AND THE REMAINDER OF THAT DRIVEWAY REPLACED IN KIND TO A TOUCHDOWN POINT.

4. ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.

5. NEW DRIVEWAYS PROVIDED IN THE PLANS WILL BE PAVED BASED ON THE 7 PERCENT CRITERIA. THOSE 7 PERCENT OR STEEPER IN GRADE WILL BE PAVED AND THOSE FLATTER THAN 7 PERCENT WILL BE COVERED WITH BASE STONE.

6. 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.

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY ACQUISITION TABLE

02-MAY-2014 10:22
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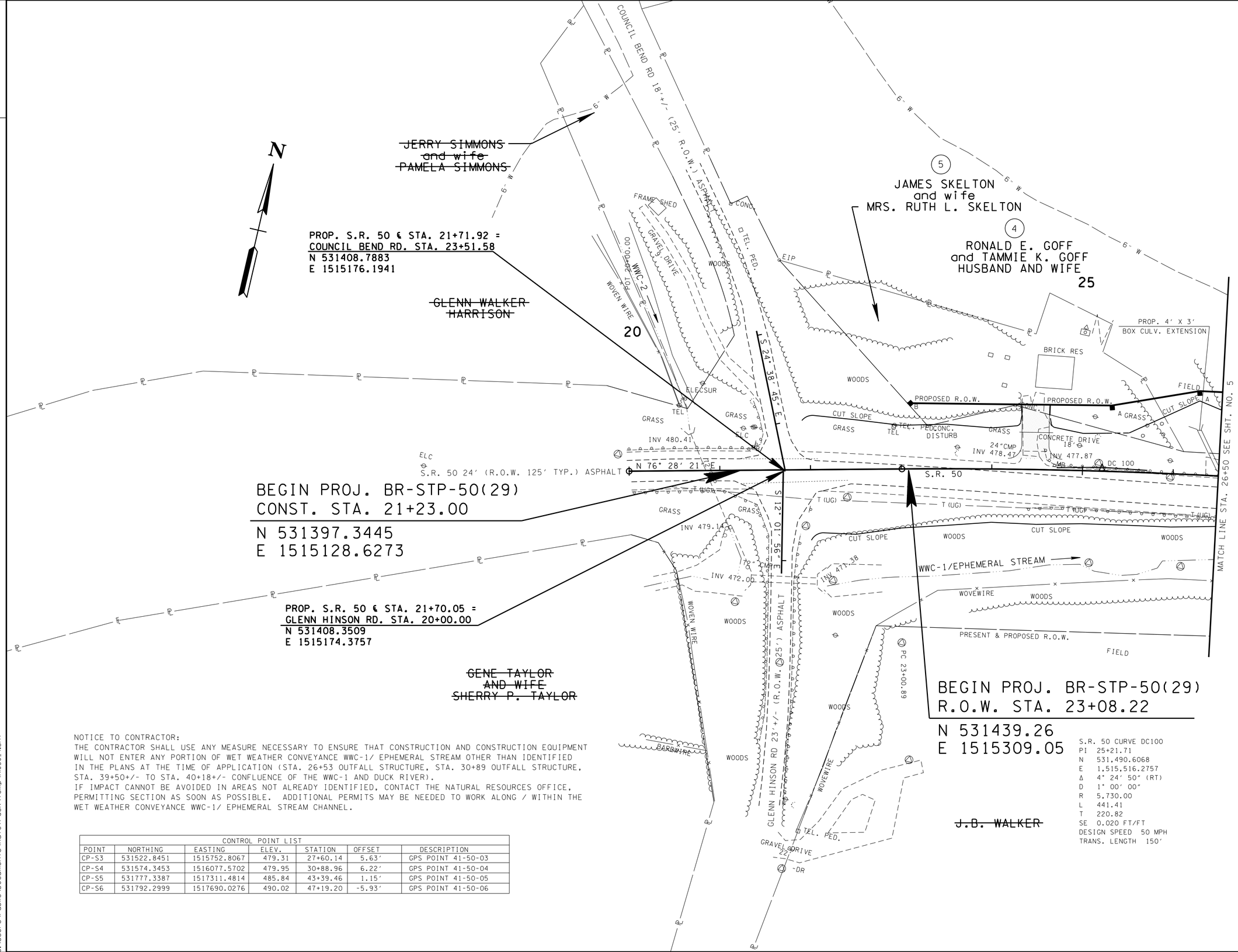
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	4
CONST.	2014	BR-STP-50(29)	4



NOTICE TO CONTRACTOR:
THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION AND CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF WET WEATHER CONVEYANCE WWC-1/ EPHEMERAL STREAM OTHER THAN IDENTIFIED IN THE PLANS AT THE TIME OF APPLICATION (STA. 26+53 OUTFALL STRUCTURE, STA. 30+89 OUTFALL STRUCTURE, STA. 39+50+/- TO STA. 40+18+/- CONFLUENCE OF THE WWC-1 AND DUCK RIVER).
IF IMPACT CANNOT BE AVOIDED IN AREAS NOT ALREADY IDENTIFIED, CONTACT THE NATURAL RESOURCES OFFICE, PERMITTING SECTION AS SOON AS POSSIBLE. ADDITIONAL PERMITS MAY BE NEEDED TO WORK ALONG / WITHIN THE WET WEATHER CONVEYANCE WWC-1/ EPHEMERAL STREAM CHANNEL.

CONTROL POINT LIST

POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET	DESCRIPTION
CP-S3	531522.8451	1515752.8067	479.31	27+60.14	5.63'	GPS POINT 41-50-03
CP-S4	531574.3453	1516077.5702	479.95	30+88.96	6.22'	GPS POINT 41-50-04
CP-S5	531777.3387	1517311.4814	485.84	43+39.46	1.15'	GPS POINT 41-50-05
CP-S6	531792.2999	1517690.0276	490.02	47+19.20	-5.93'	GPS POINT 41-50-06

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

BEGIN PROJ. TO STA.26+50

SCALE: 1"=50'

24-SEP-2014 08:34
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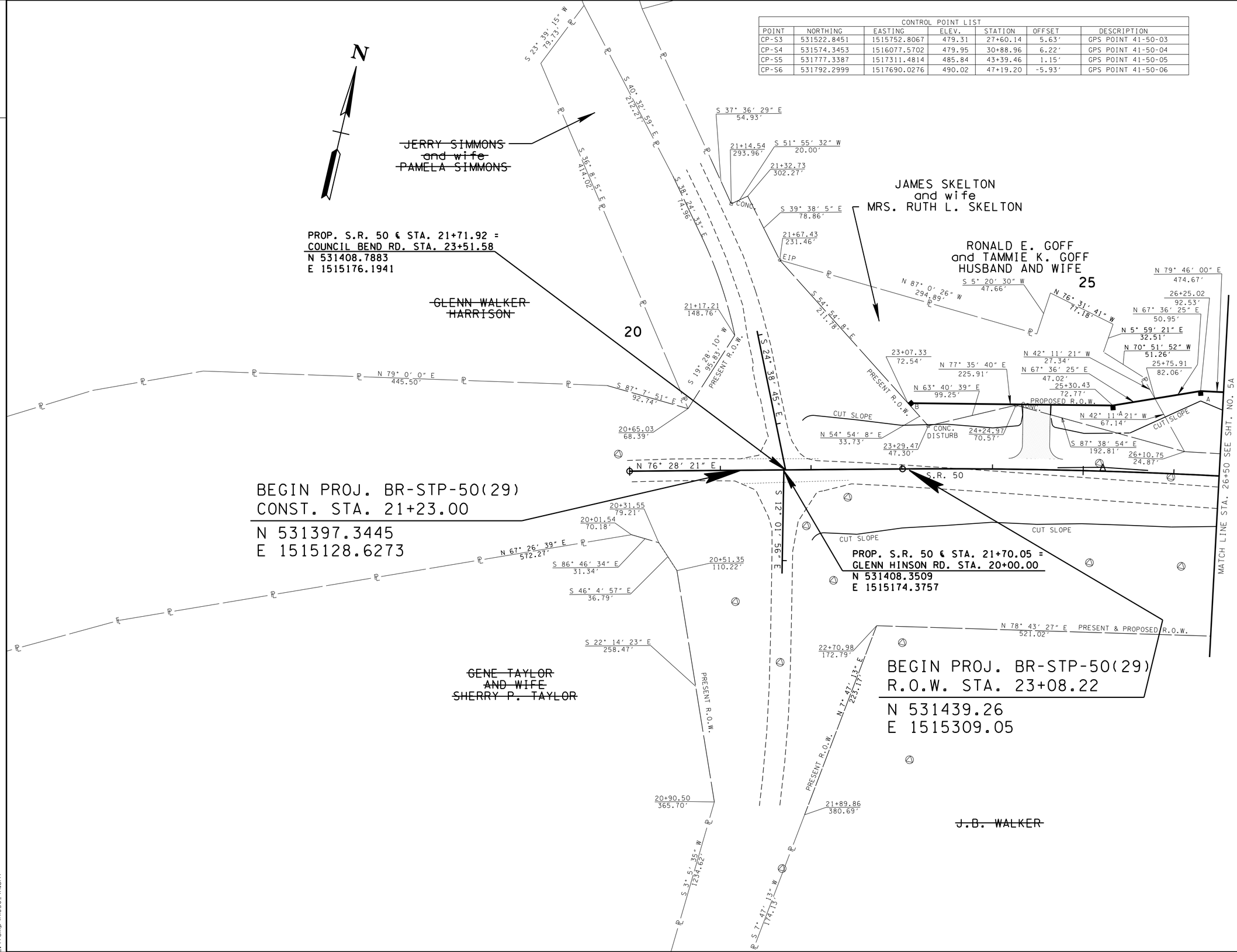
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	4A
CONST.	2014	BR-STP-50(29)	4A

CONTROL POINT LIST

POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET	DESCRIPTION
CP-S3	531522.8451	1515752.8067	479.31	27+60.14	5.63'	GPS POINT 41-50-03
CP-S4	531574.3453	1516077.5702	479.95	30+88.96	6.22'	GPS POINT 41-50-04
CP-S5	531777.3387	1517311.4814	485.84	43+39.46	1.15'	GPS POINT 41-50-05
CP-S6	531792.2999	1517690.0276	490.02	47+19.20	-5.93'	GPS POINT 41-50-06



UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

R.O.W. DETAILS

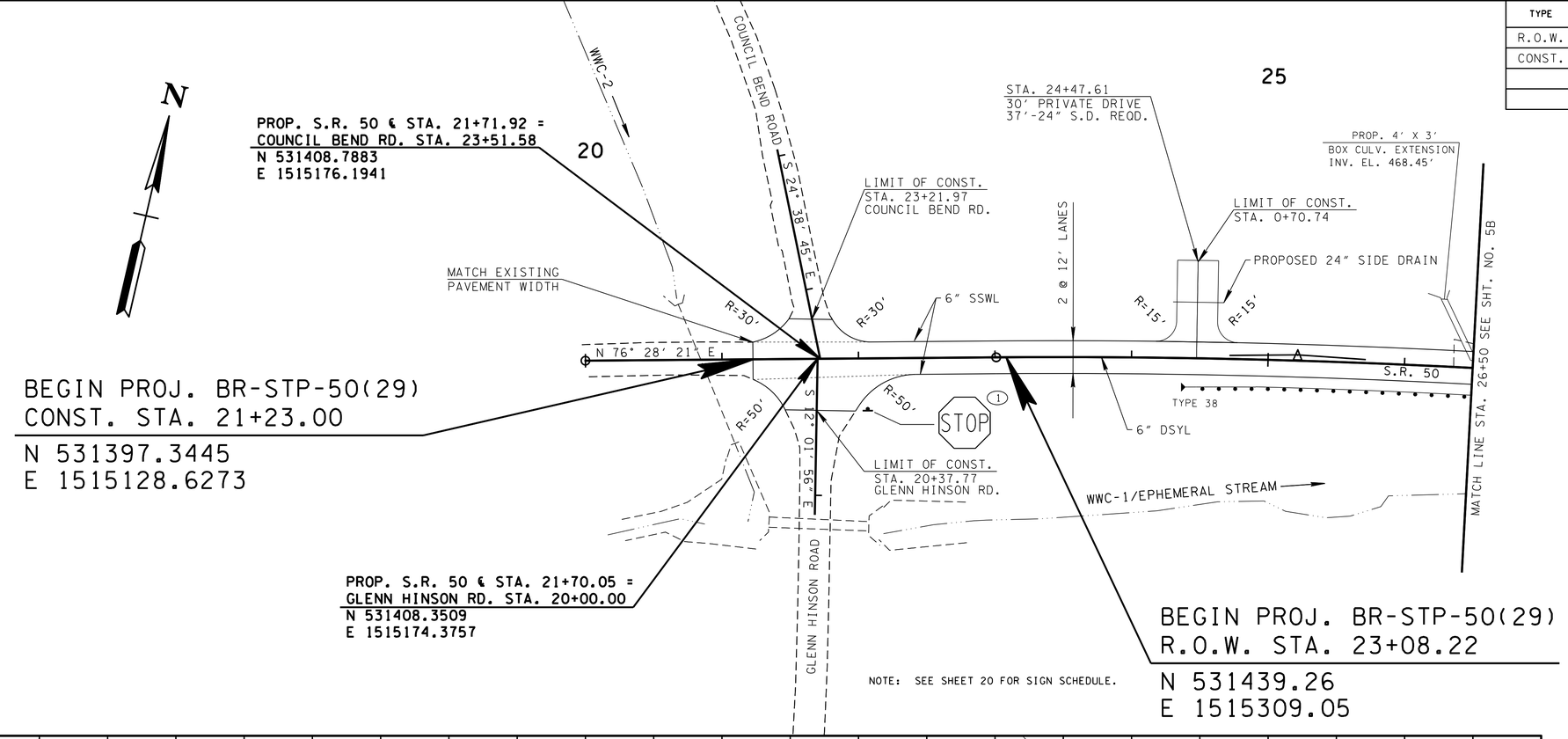
BEGIN PROJ. TO STA.26+50

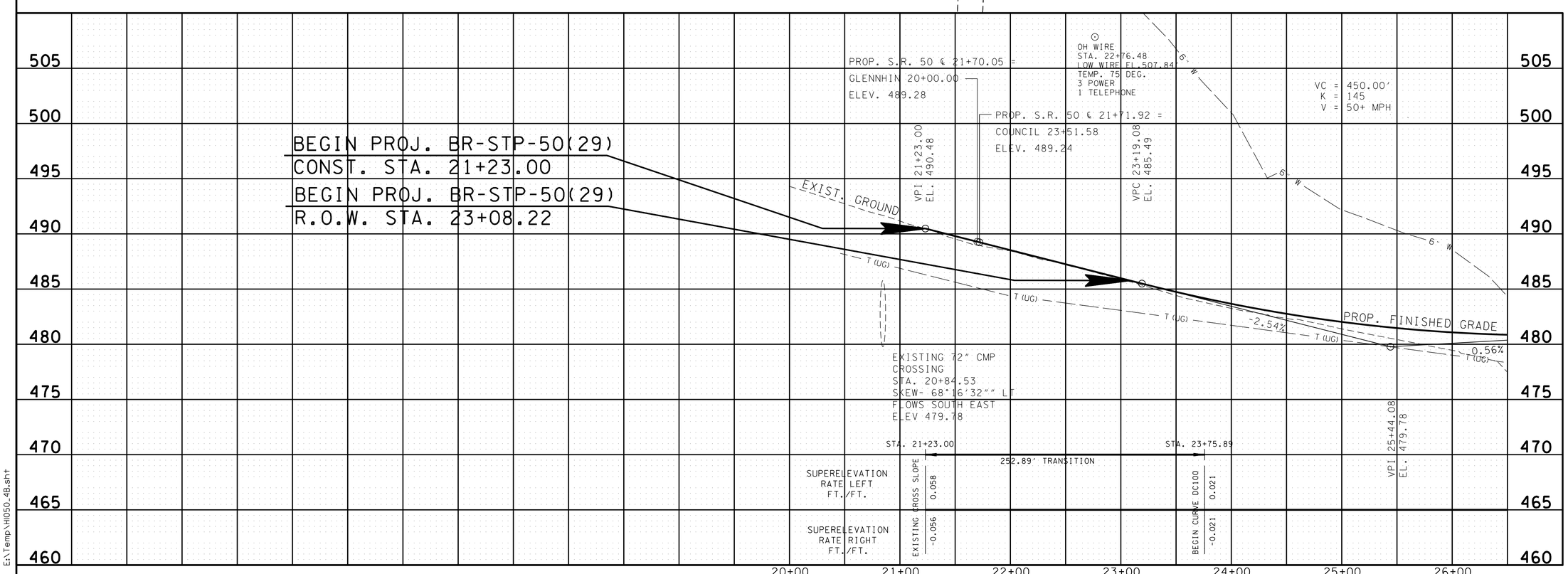
SCALE: 1"=50'

02-MAY-2014 07:51
E:\Temp\VH050-4A.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	4B
CONST.	2014	BR-STP-50(29)	4B

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





UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT AND PROFILE
BEGIN PROJ. TO STA.26+50
SCALE: 1"=50' HORIZ.
1"=5' VERT.

01-MAY-2014 14:41
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	5
CONST.	2014	BR-STP-50(29)	5

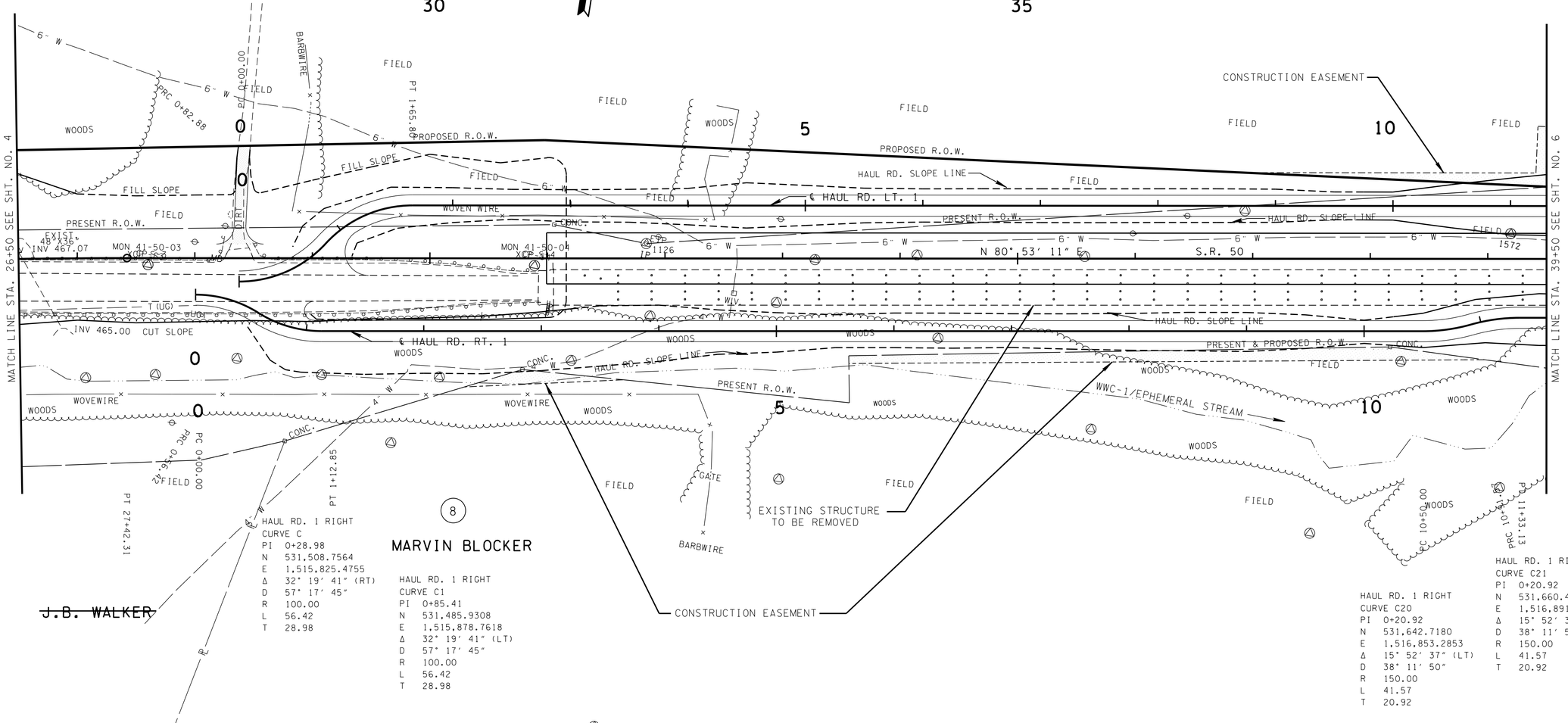
REV. 1-11-11:
CORRECTED TRACT NO. 8 PROPERTY OWNER.

CONTROL POINT LIST

POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET	DESCRIPTION
CP-S3	531522.8451	1515752.8067	479.31	27+60.14	5.63′	GPS POINT 41-50-03
CP-S4	531574.3453	1516077.5702	479.95	30+88.96	6.22′	GPS POINT 41-50-04
CP-S5	531777.3387	1517311.4814	485.84	43+39.46	1.15′	GPS POINT 41-50-05
CP-S6	531792.2999	1517690.0276	490.02	47+19.20	-5.93′	GPS POINT 41-50-06

HAUL RD. 1 LEFT
CURVE C10
PI 0+43.99
N 531,528.0174
E 1,515,875.0672
Δ 47° 29′ 07″ (LT)
D 57° 17′ 45″
R 100.00
L 82.88
T 43.99

HAUL RD. 1 LEFT
CURVE C11
PI 1+26.89
N 531,601.5044
E 1,515,923.4766
Δ 47° 30′ 41″ (RT)
D 57° 17′ 45″
R 100.00
L 82.92
T 44.01



HAUL RD. 1 RIGHT
CURVE C
PI 0+28.98
N 531,508.7564
E 1,515,825.4755
Δ 32° 19′ 41″ (RT)
D 57° 17′ 45″
R 100.00
L 56.42
T 28.98

8
MARVIN BLOCKER

HAUL RD. 1 RIGHT
CURVE C1
PI 0+85.41
N 531,485.9308
E 1,515,878.7618
Δ 32° 19′ 41″ (LT)
D 57° 17′ 45″
R 100.00
L 56.42
T 28.98

~~J.B. WALKER~~

HAUL RD. 1 RIGHT
CURVE C20
PI 0+20.92
N 531,642.7180
E 1,516,853.2853
Δ 15° 52′ 37″ (LT)
D 38° 11′ 50″
R 150.00
L 41.57
T 20.92

HAUL RD. 1 RIGHT
CURVE C21
PI 0+20.92
N 531,660.4089
E 1,516,891.1945
Δ 15° 52′ 37″ (RT)
D 38° 11′ 50″
R 150.00
L 41.57
T 20.92

NOTICE TO CONTRACTOR:
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UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY
SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.26+50 TO STA.39+50

SCALE: 1"=50'

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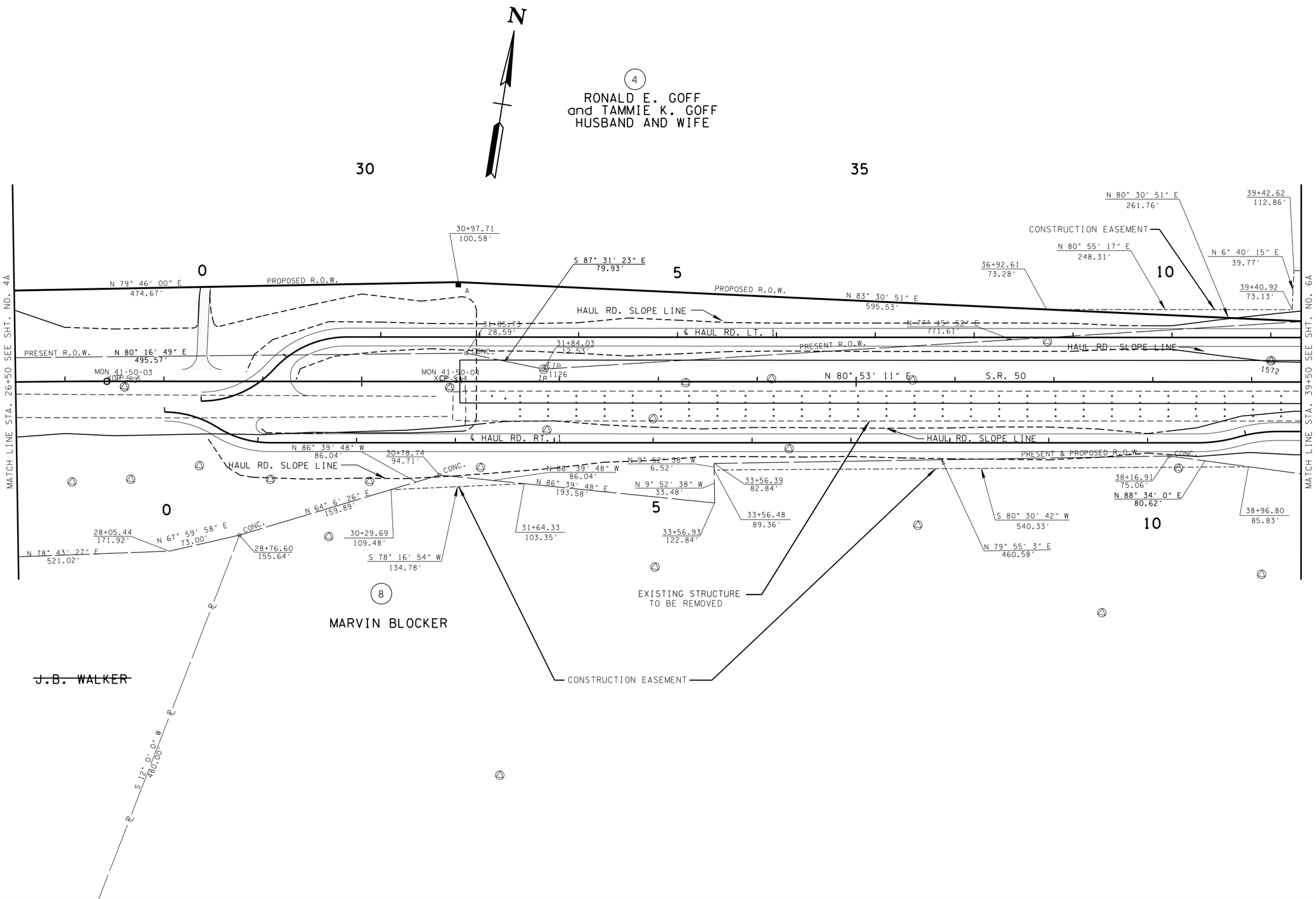
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

CONTROL POINT LIST						
POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET	DESCRIPTION
CP-S3	531522.8451	1515752.8067	479.31	27+60.14	5.63′	GPS POINT 41-50-03
CP-S4	531574.3453	1516077.5702	479.95	30+88.96	6.22′	GPS POINT 41-50-04
CP-S5	531777.3387	1517311.4814	485.84	43+39.46	1.15′	GPS POINT 41-50-05
CP-S6	531792.2999	1517690.0276	490.02	47+19.20	-5.93′	GPS POINT 41-50-06

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	5A
CONST.	2014	BR-STP-50(29)	5A

REV. 1-11-11:
CORRECTED TRACT NO. 8 PROPERTY OWNER.



UNOFFICIAL SET

NOT FOR BIDDING

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

R.O.W. DETAILS

STA.26+50 TO STA.39+50

SCALE: 1"=50′

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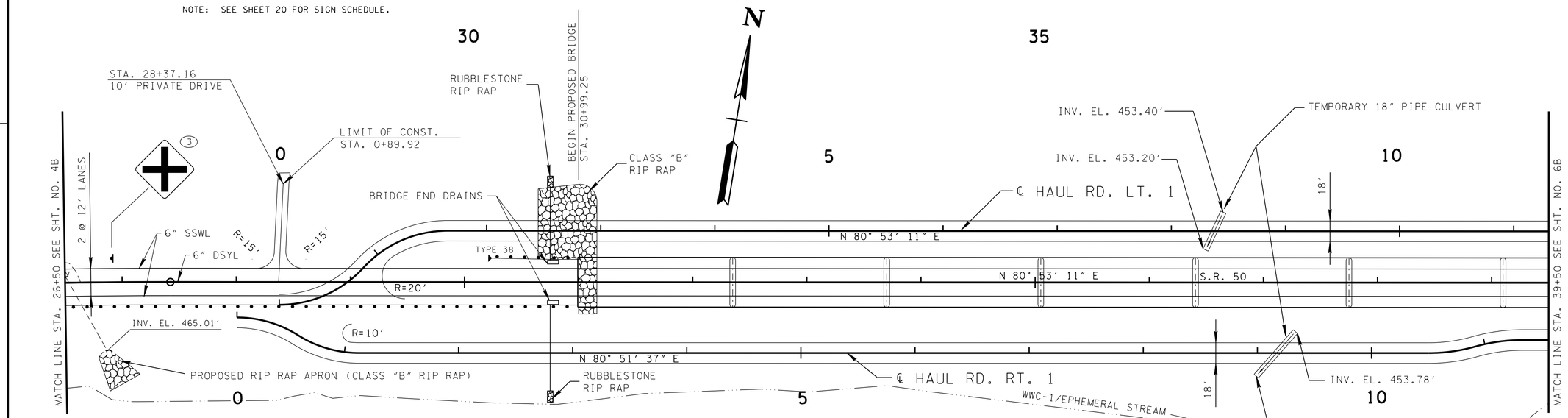
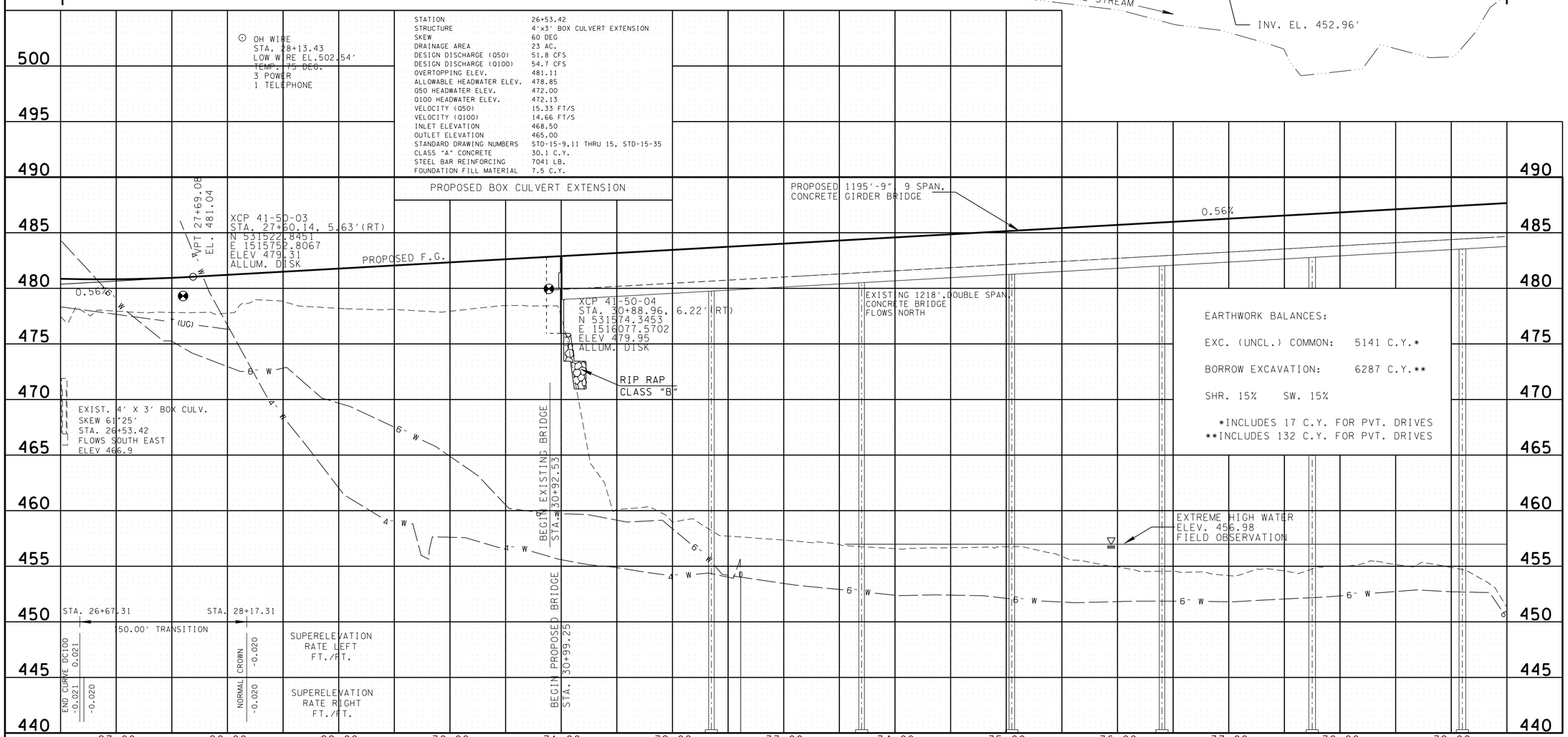
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	5B
CONST.	2014	BR-STP-50(29)	5B

NOTE: SEE SHEET 20 FOR SIGN SCHEDULE.





EARTHWORK BALANCES:

EXC. (UNCL.) COMMON: 5141 C.Y.*

BORROW EXCAVATION: 6287 C.Y.**

SHR. 15% SW. 15%

*INCLUDES 17 C.Y. FOR PVT. DRIVES
**INCLUDES 132 C.Y. FOR PVT. DRIVES

UNOFFICIAL SET

NOT FOR BIDDING

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT AND PROFILE

STA.26+50 TO STA.39+50

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

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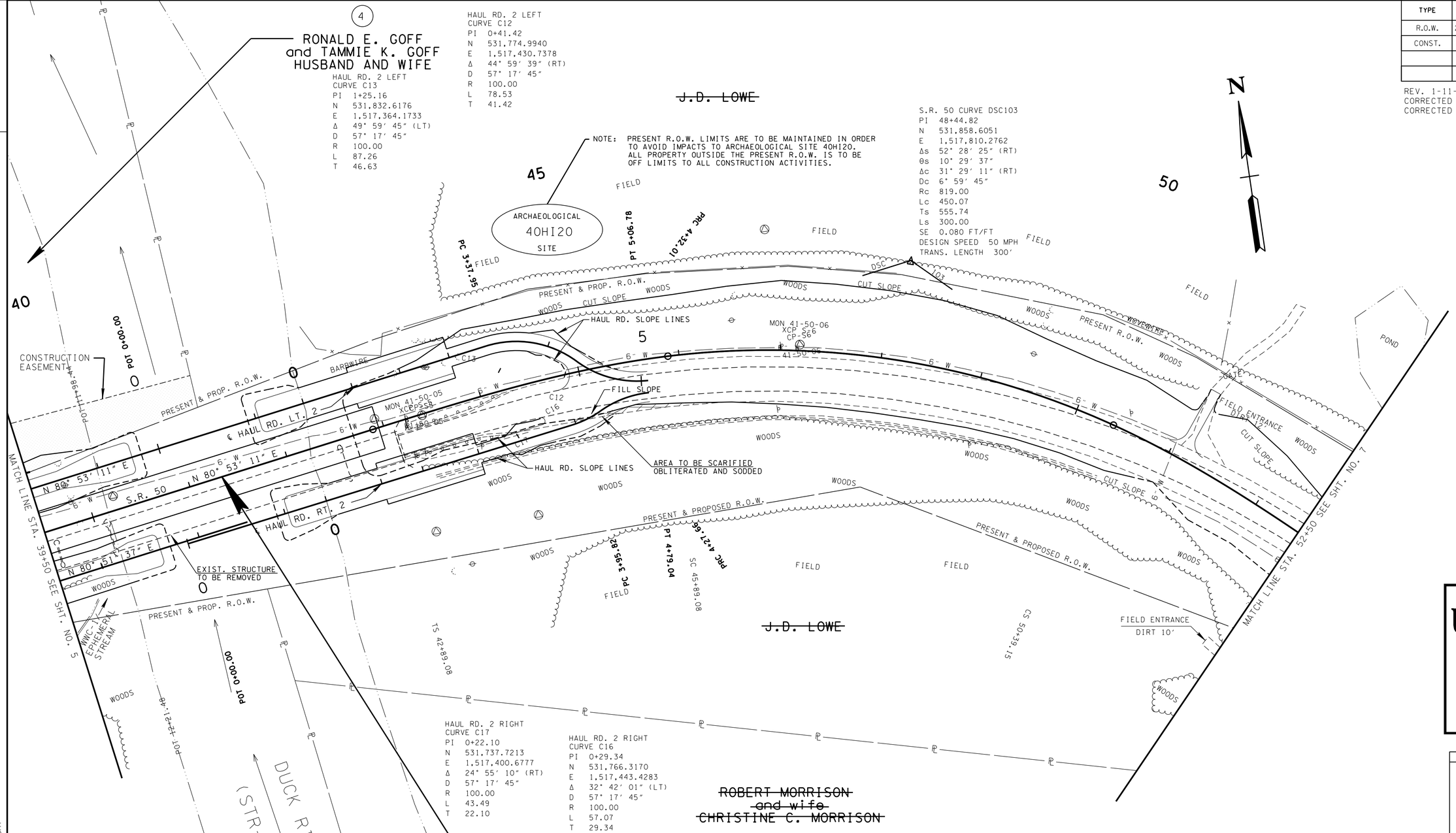
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	6
CONST.	2014	BR-STP-50(29)	6

REV. 1-11-11:
CORRECTED R.O.W. END PROJECT STATION.
CORRECTED TRACT NO. 8 PROPERTY OWNER.



END PROJ. BR-STP-50(29)
R.O.W. STA. 41+33.02
N 531745.86
E 1517107.47

NOTICE TO CONTRACTOR:
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CONTROL POINT LIST

POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET	DESCRIPTION
CP-S3	531522.8451	1515752.8067	479.31	27+60.14	5.63′	GPS POINT 41-50-03
CP-S4	531574.3453	1516077.5702	479.95	30+88.96	6.22′	GPS POINT 41-50-04
CP-S5	531777.3387	1517311.4814	485.84	43+39.46	1.15′	GPS POINT 41-50-05
CP-S6	531792.2999	1517690.0276	490.02	47+19.20	-5.93′	GPS POINT 41-50-06

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.39+50 TO STA.52+50

SCALE: 1"=50′

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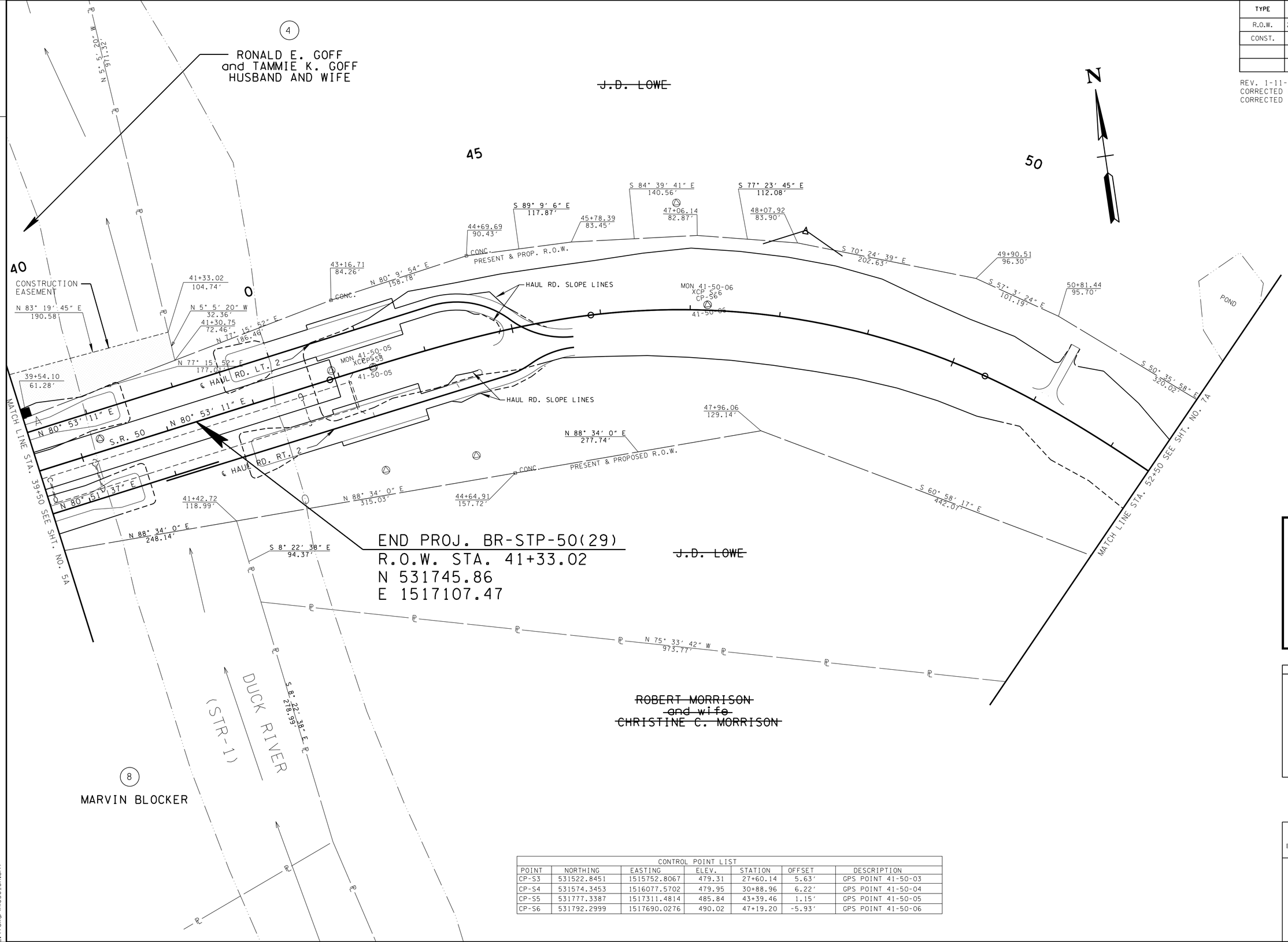
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	6A
CONST.	2014	BR-STP-50(29)	6A

REV. 1-11-11:
CORRECTED R.O.W. END PROJECT STATION.
CORRECTED TRACT NO. 8 PROPERTY OWNER.



CONTROL POINT LIST						
POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET	DESCRIPTION
CP-S3	531522.8451	1515752.8067	479.31	27+60.14	5.63'	GPS POINT 41-50-03
CP-S4	531574.3453	1516077.5702	479.95	30+88.96	6.22'	GPS POINT 41-50-04
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CP-S6	531792.2999	1517690.0276	490.02	47+19.20	-5.93'	GPS POINT 41-50-06

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 110111
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

R.O.W. DETAILS

STA.39+50 TO STA.52+50

SCALE: 1"=50'

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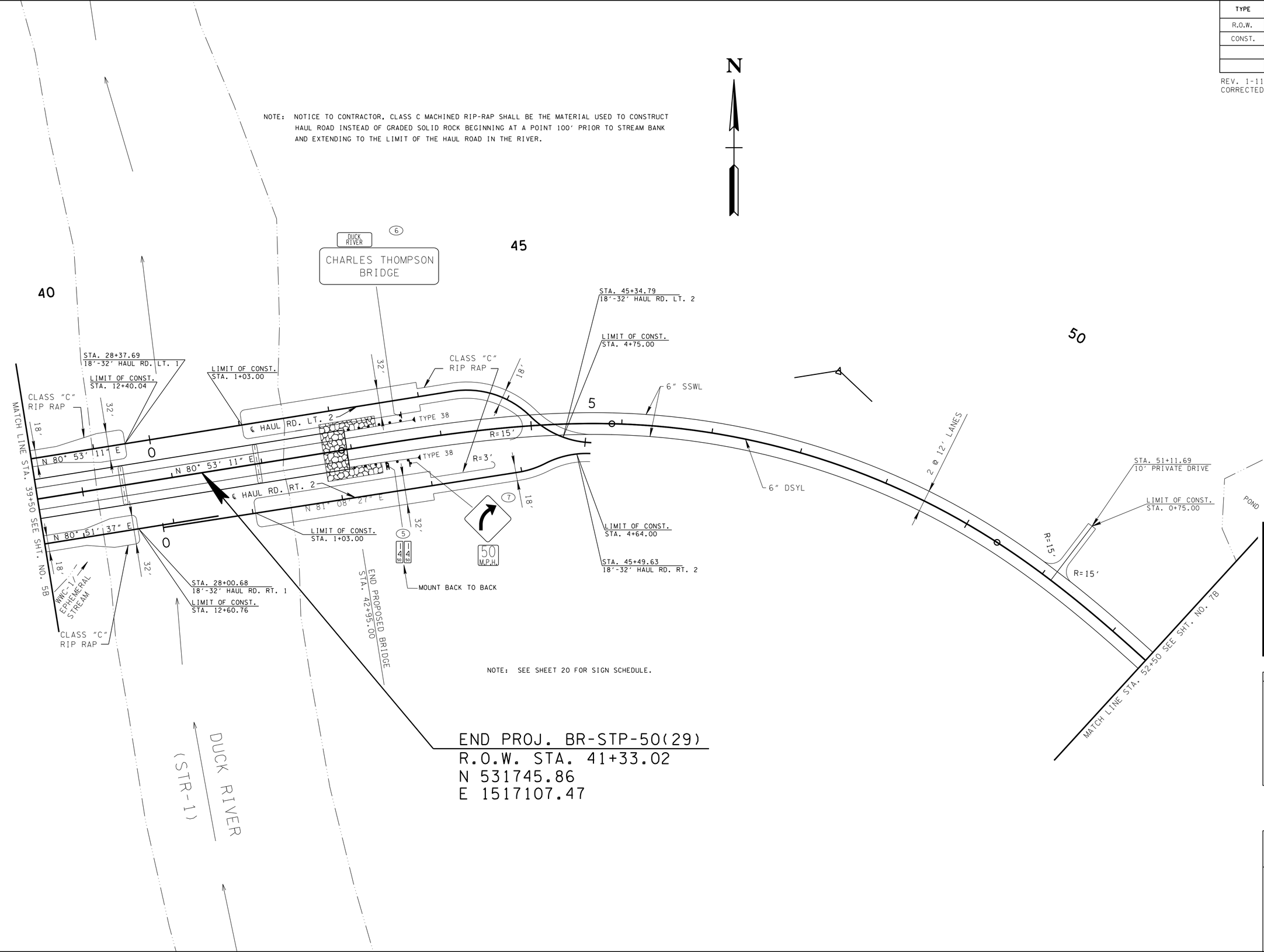
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	6B
CONST.	2014	BR-STP-50(29)	6B

REV. 1-11-11:
CORRECTED R.O.W. END PROJECT STATION.

NOTE: NOTICE TO CONTRACTOR, CLASS C MACHINED RIP-RAP SHALL BE THE MATERIAL USED TO CONSTRUCT HAUL ROAD INSTEAD OF GRADED SOLID ROCK BEGINNING AT A POINT 100' PRIOR TO STREAM BANK AND EXTENDING TO THE LIMIT OF THE HAUL ROAD IN THE RIVER.



NOTE: SEE SHEET 20 FOR SIGN SCHEDULE.

END PROJ. BR-STP-50(29)
R.O.W. STA. 41+33.02
N 531745.86
E 1517107.47

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.39+50 TO STA.52+50

SCALE: 1"=50'

01-MAY-2014 14:41
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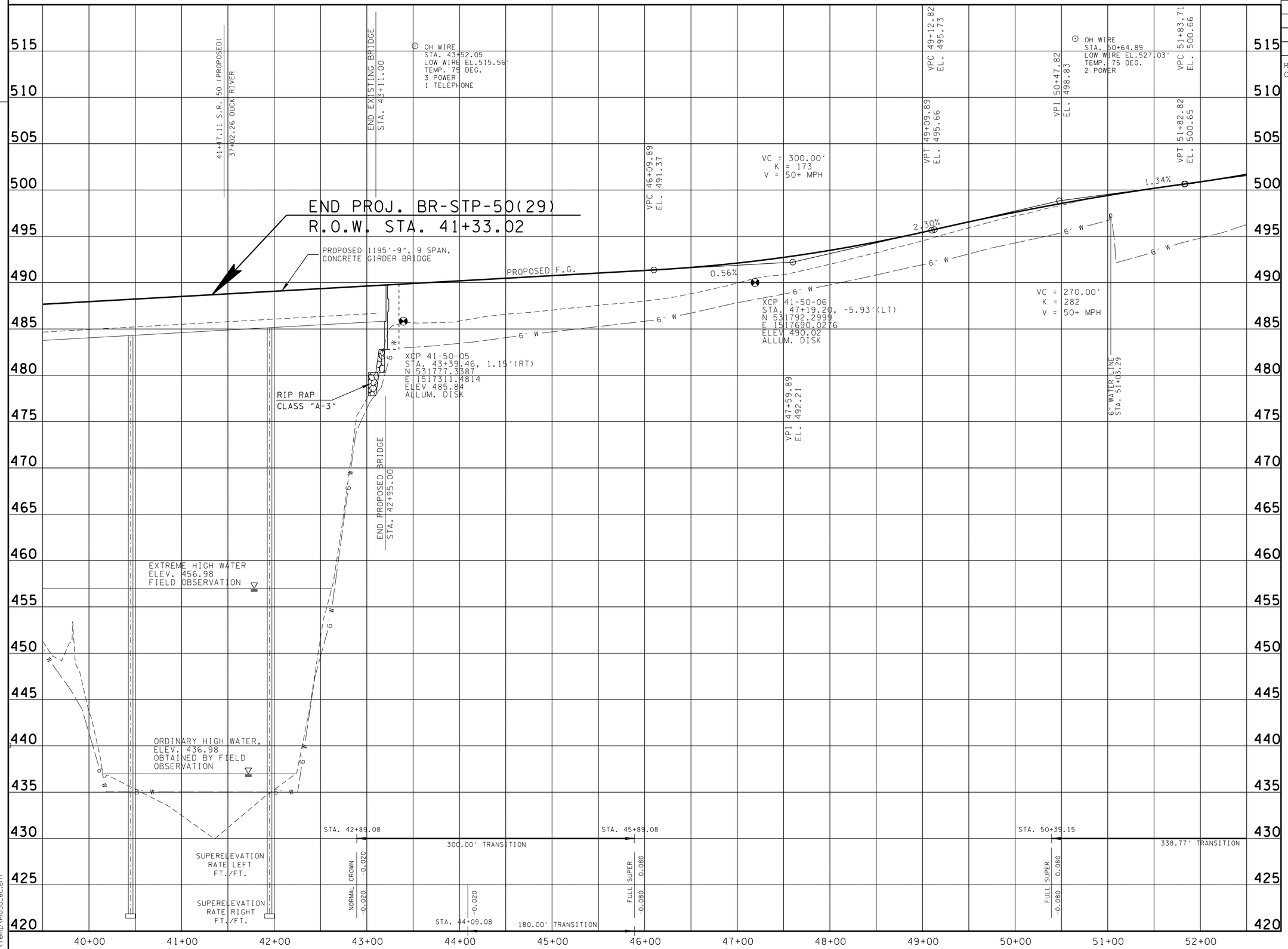
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	6C
CONST.	2014	BR-STP-50(29)	6C

REV. 1-11-11:
CORRECTED R.O.W. END PROJECT STATION.



UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE COMMERCE
NO. 110114
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA.39+50 TO STA.52+50

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

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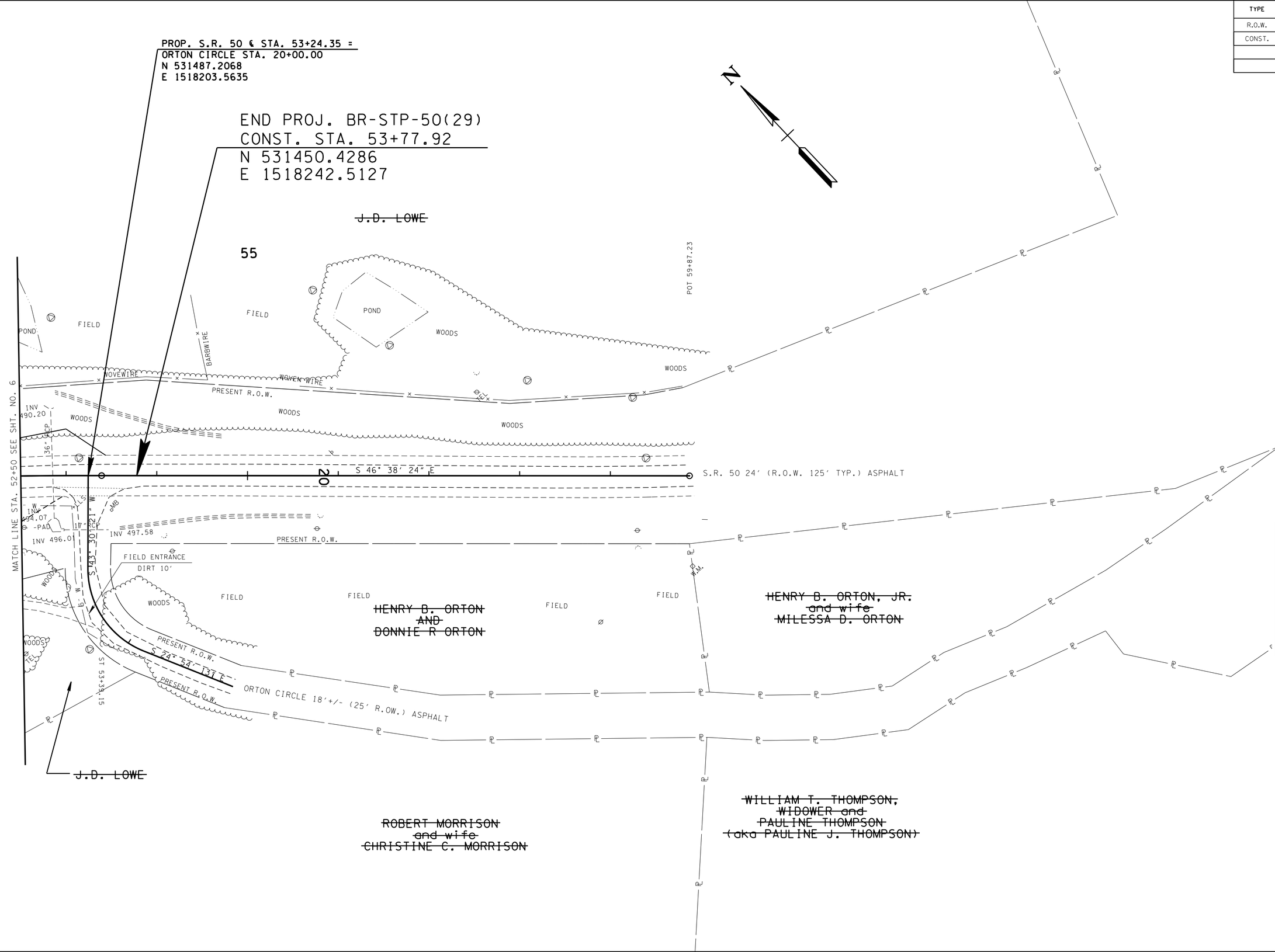
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	7
CONST.	2014	BR-STP-50(29)	7



UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.52+50 TO STA.53+68

SCALE: 1"=50'

01-MAY-2014 14:41
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

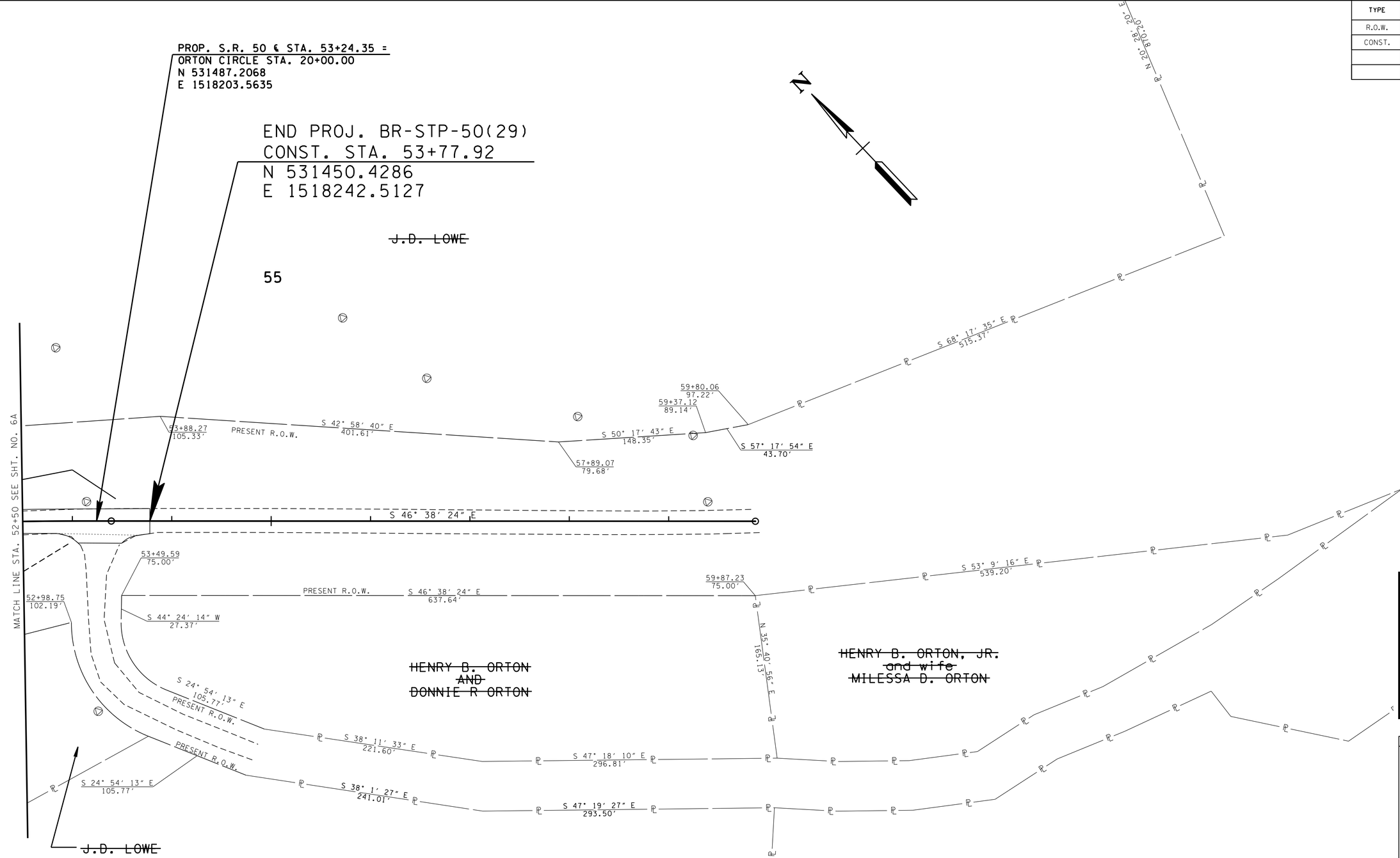
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	7A
CONST.	2014	BR-STP-50(29)	7A

PROP. S.R. 50 ℄ STA. 53+24.35 =
ORTON CIRCLE STA. 20+00.00
N 531487.2068
E 1518203.5635

END PROJ. BR-STP-50(29)
CONST. STA. 53+77.92
N 531450.4286
E 1518242.5127

~~J.D. LOWE~~

55



CONTROL POINT LIST						
POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET	DESCRIPTION
CP-S3	531522.8451	1515752.8067	479.31	27+60.14	5.63'	GPS POINT 41-50-03
CP-S4	531574.3453	1516077.5702	479.95	30+88.96	6.22'	GPS POINT 41-50-04
CP-S5	531777.3387	1517311.4814	485.84	43+39.46	1.15'	GPS POINT 41-50-05
CP-S6	531792.2999	1517690.0276	490.02	47+19.20	-5.93'	GPS POINT 41-50-06

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

R.O.W. DETAILS

STA.52+50 TO STA.53+68

SCALE: 1"=50'

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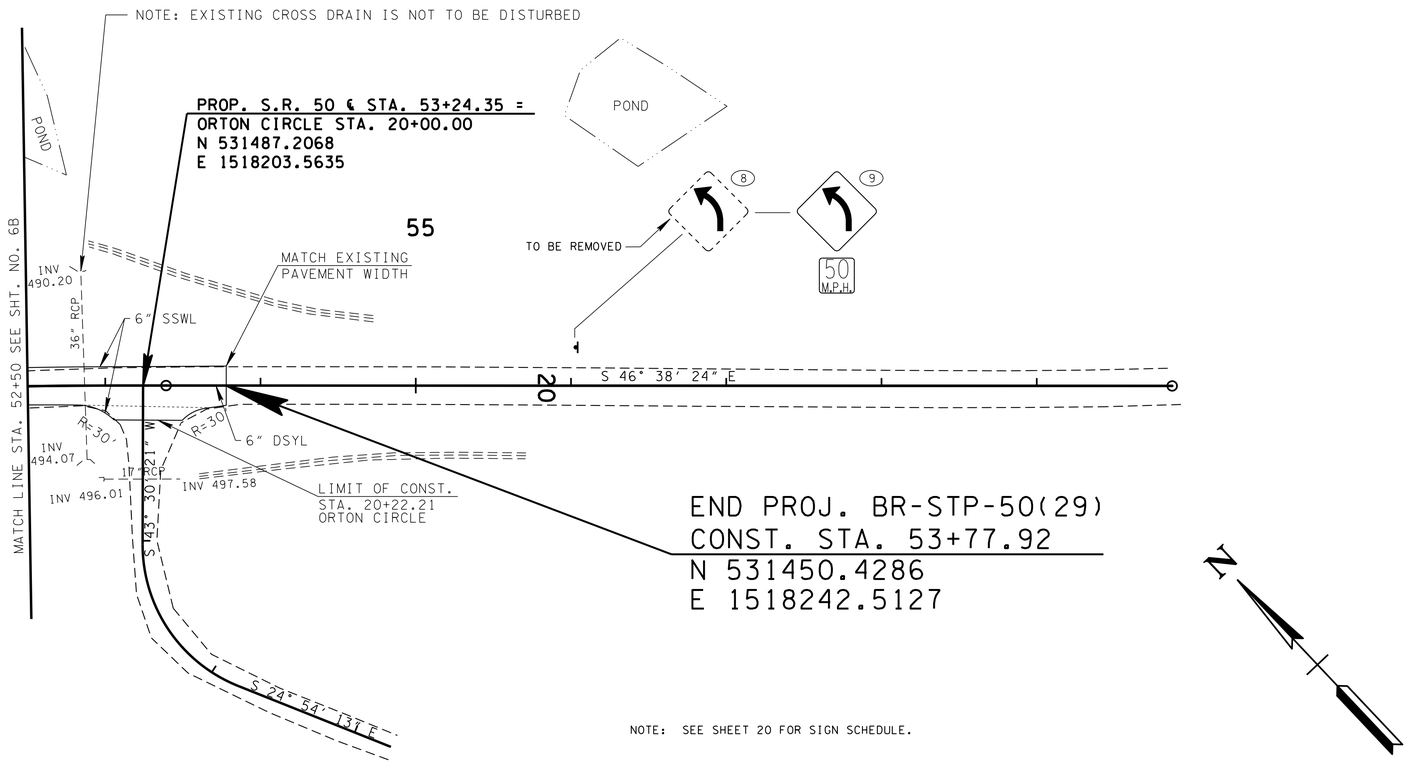
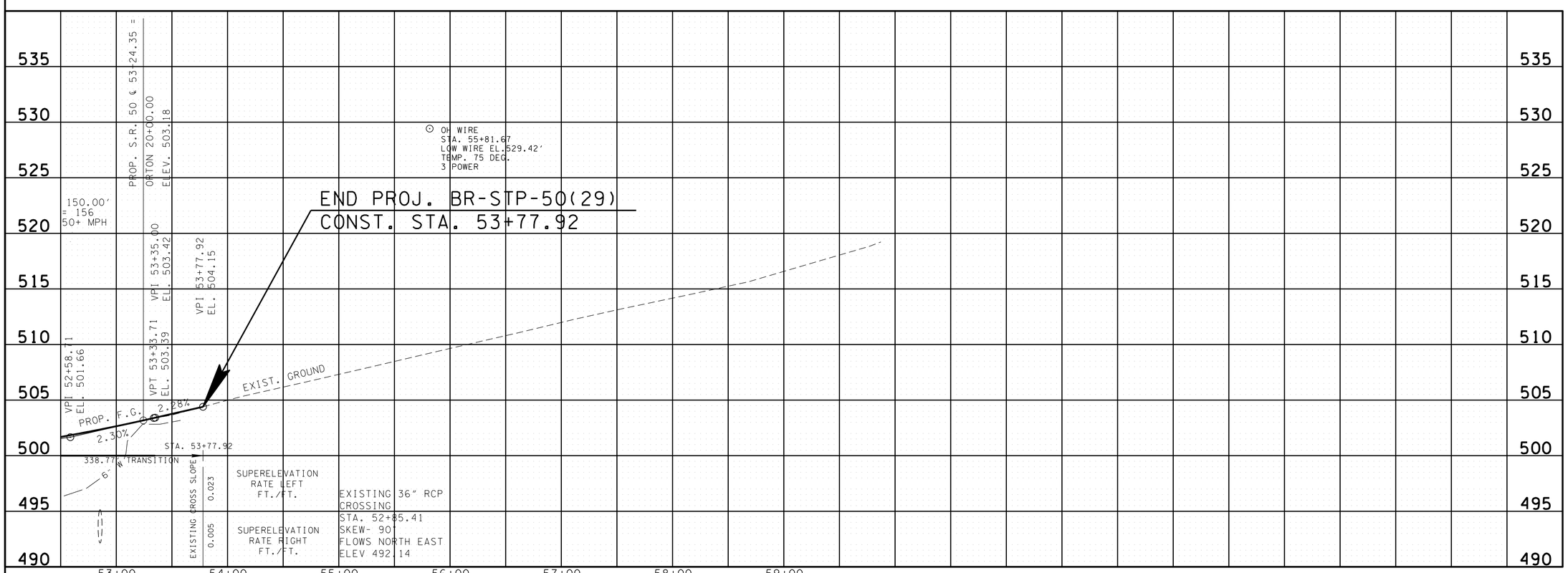
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	7B
CONST.	2014	BR-STP-50(29)	7B



NOTE: SEE SHEET 20 FOR SIGN SCHEDULE.



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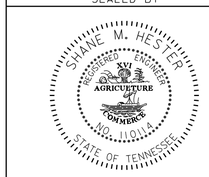

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT AND PROFILE
STA.52+50 TO STA.53+68
SCALE: 1"=100' HORIZ.
1"=10' VERT.

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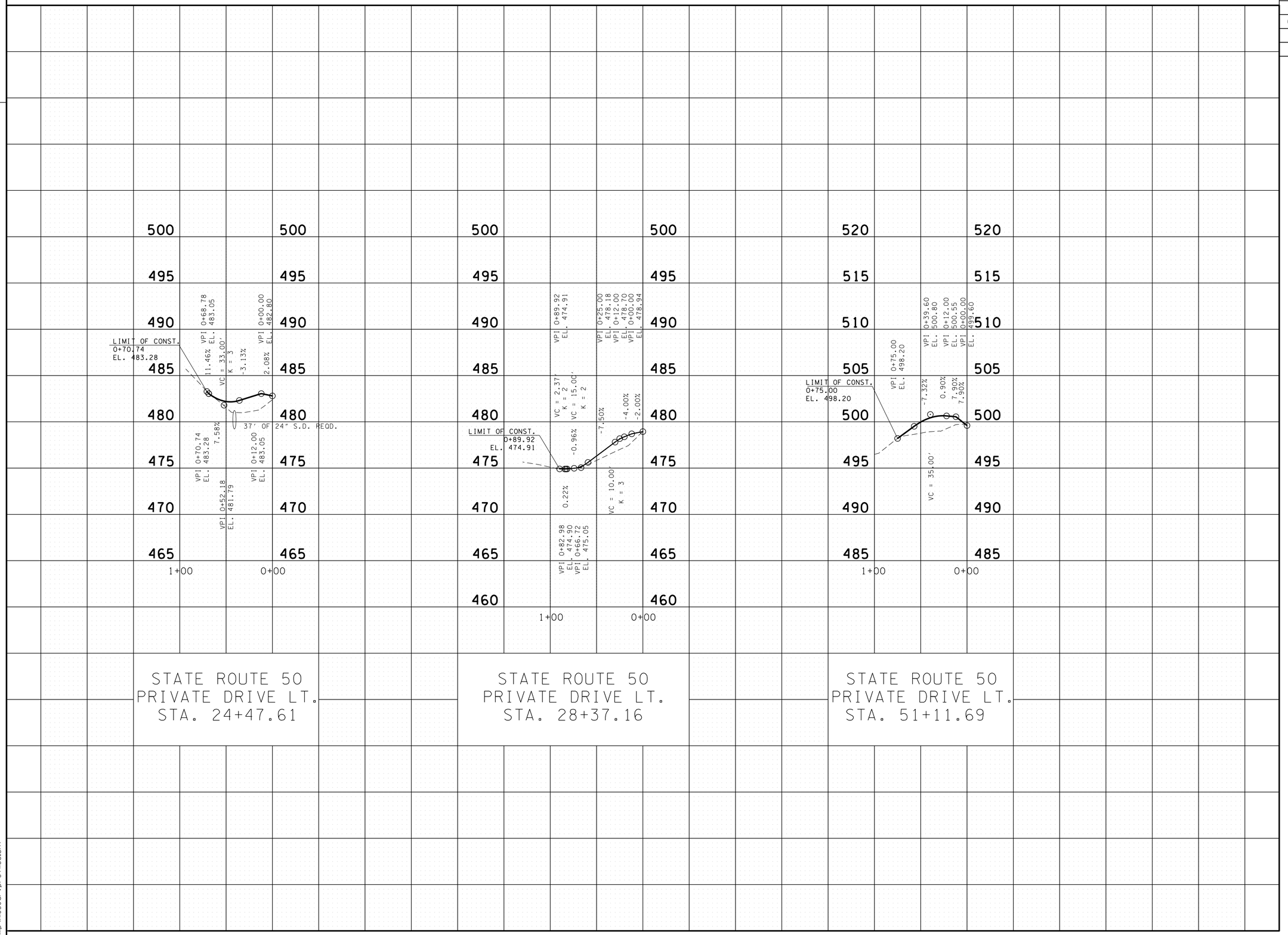
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	8
CONST.	2014	BR-STP-50(29)	8



UNOFFICIAL SET

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SEALED BY

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DEPARTMENT OF TRANSPORTATION

PROFILE OF PRIVATE DRIVES

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

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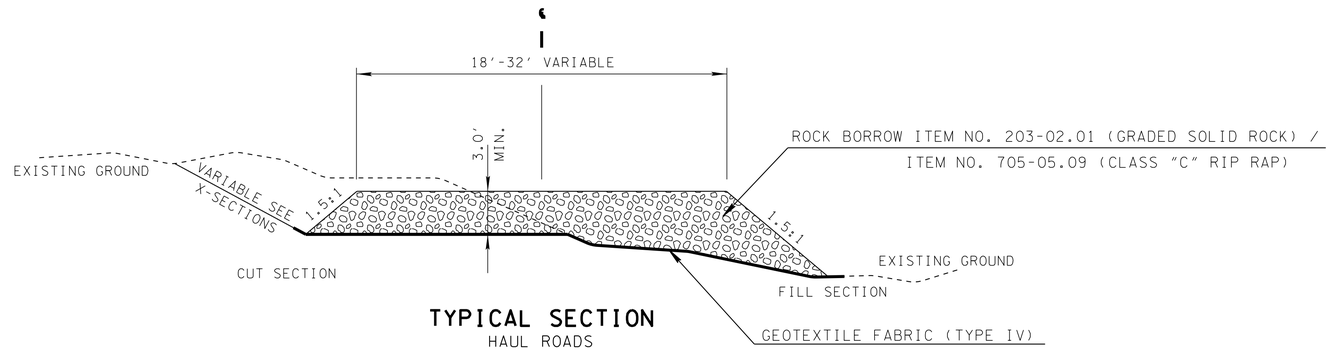
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	9
CONST.	2014	BR-STP-50(29)	9



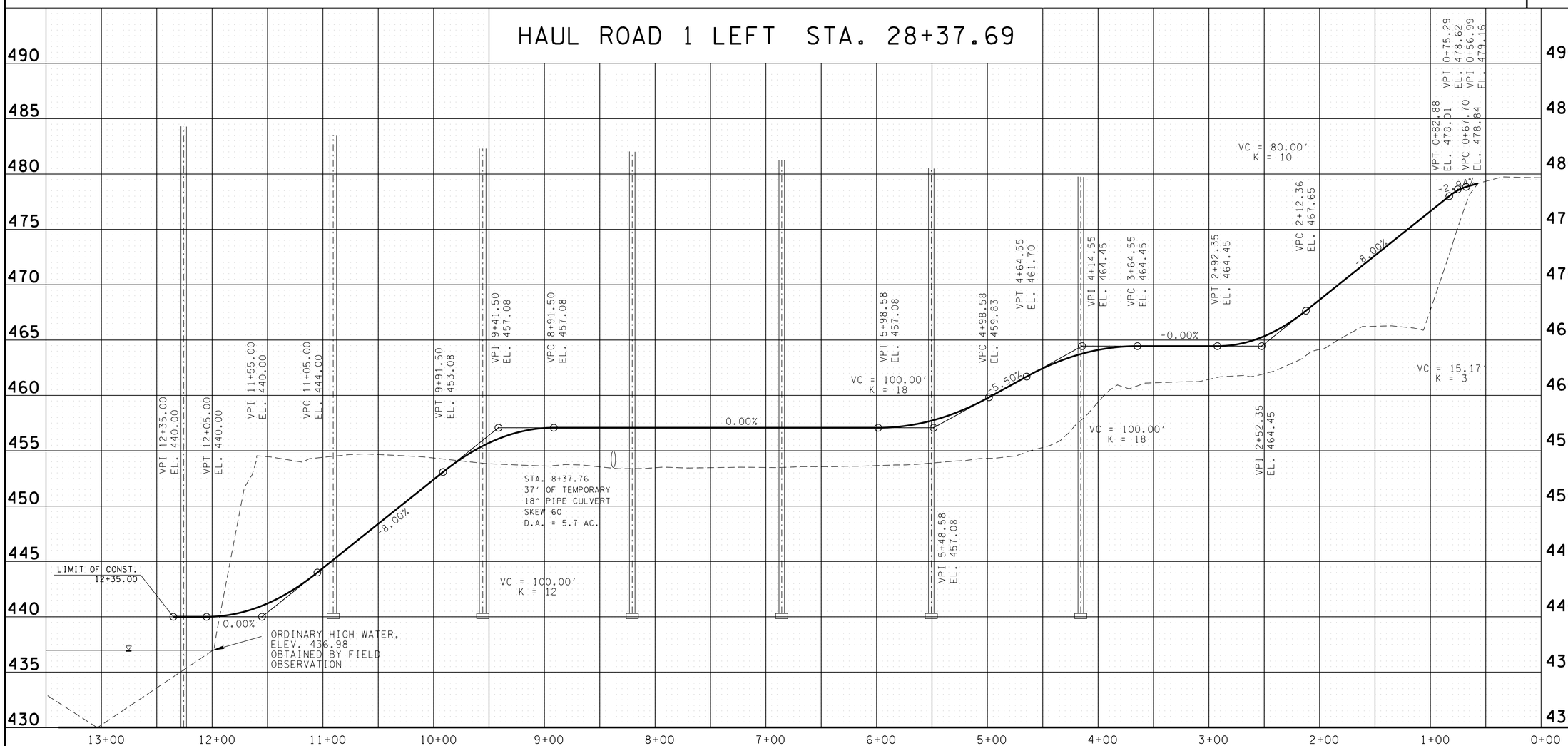
TYPICAL SECTION
HAUL ROADS

NOTE: GEOTEXTILE TO BE EXTENDED PAST TOE OF HAUL ROAD SLOPES FOR STABILIZATION.

NOTE: HAUL ROADS TO BE REMOVED AND AREA TO BE RETURNED TO EXISTING CONDITION UPON COMPLETION OF EACH PHASE OF WORK WHICH HAUL ROADS ARE REQUIRED.

NOTE: NOTICE TO CONTRACTOR, CLASS C MACHINED RIP-RAP SHALL BE THE MATERIAL USED TO CONSTRUCT HAUL ROAD INSTEAD OF GRADED SOLID ROCK BEGINNING AT A POINT 100' PRIOR TO THE STREAM BANK AND EXTENDING TO THE LIMIT OF THE HAUL ROAD IN THE RIVER.

NOTE: SEE SOILS SHEETS FOR ADDITONAL DETAILS.



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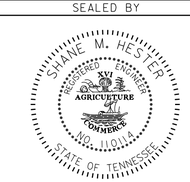

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

HAUL ROAD DETAILS

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

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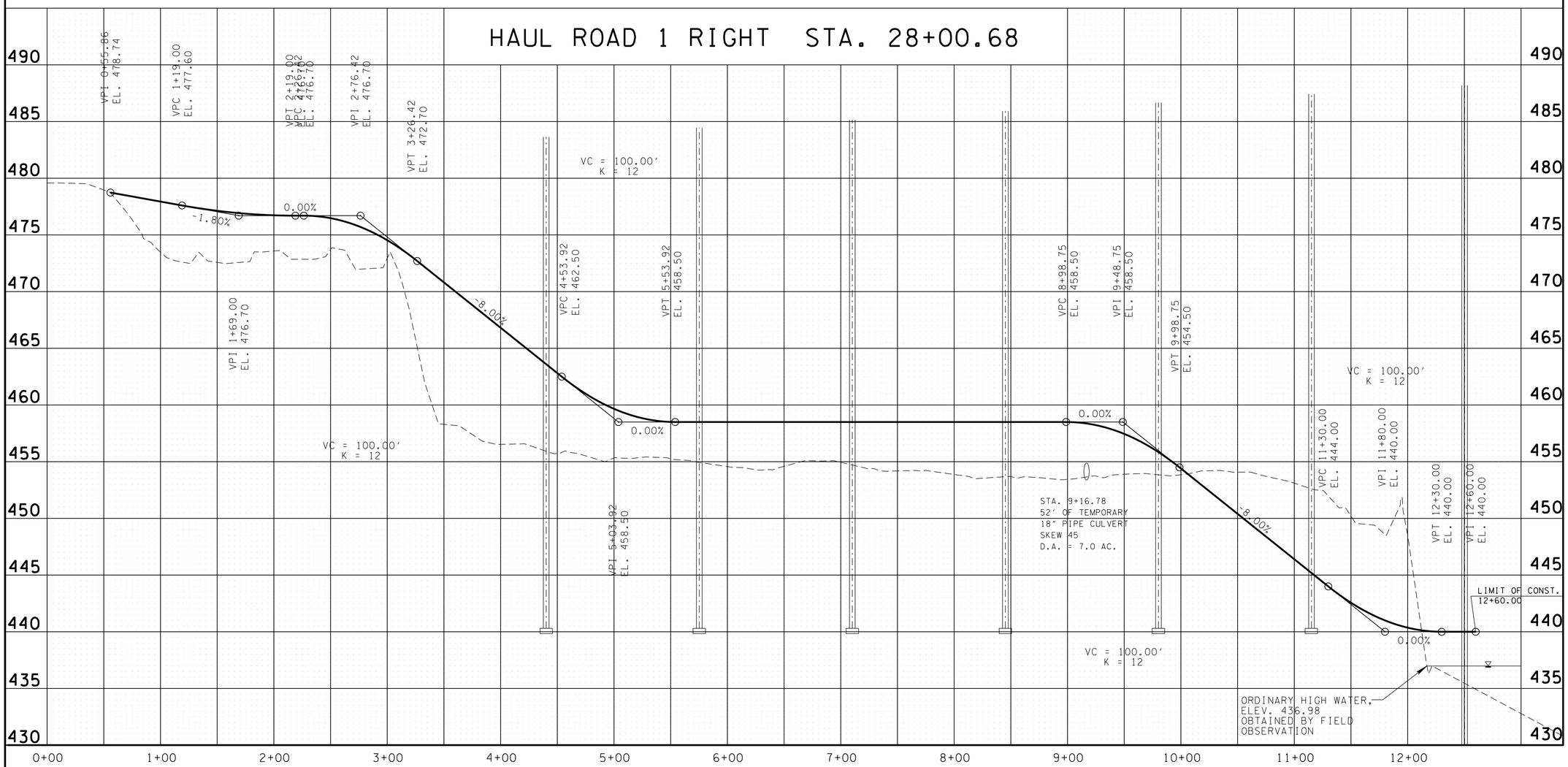
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	9A
CONST.	2014	BR-STP-50(29)	9A



UNOFFICIAL SET

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DEPARTMENT OF TRANSPORTATION

HAUL ROAD DETAILS

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

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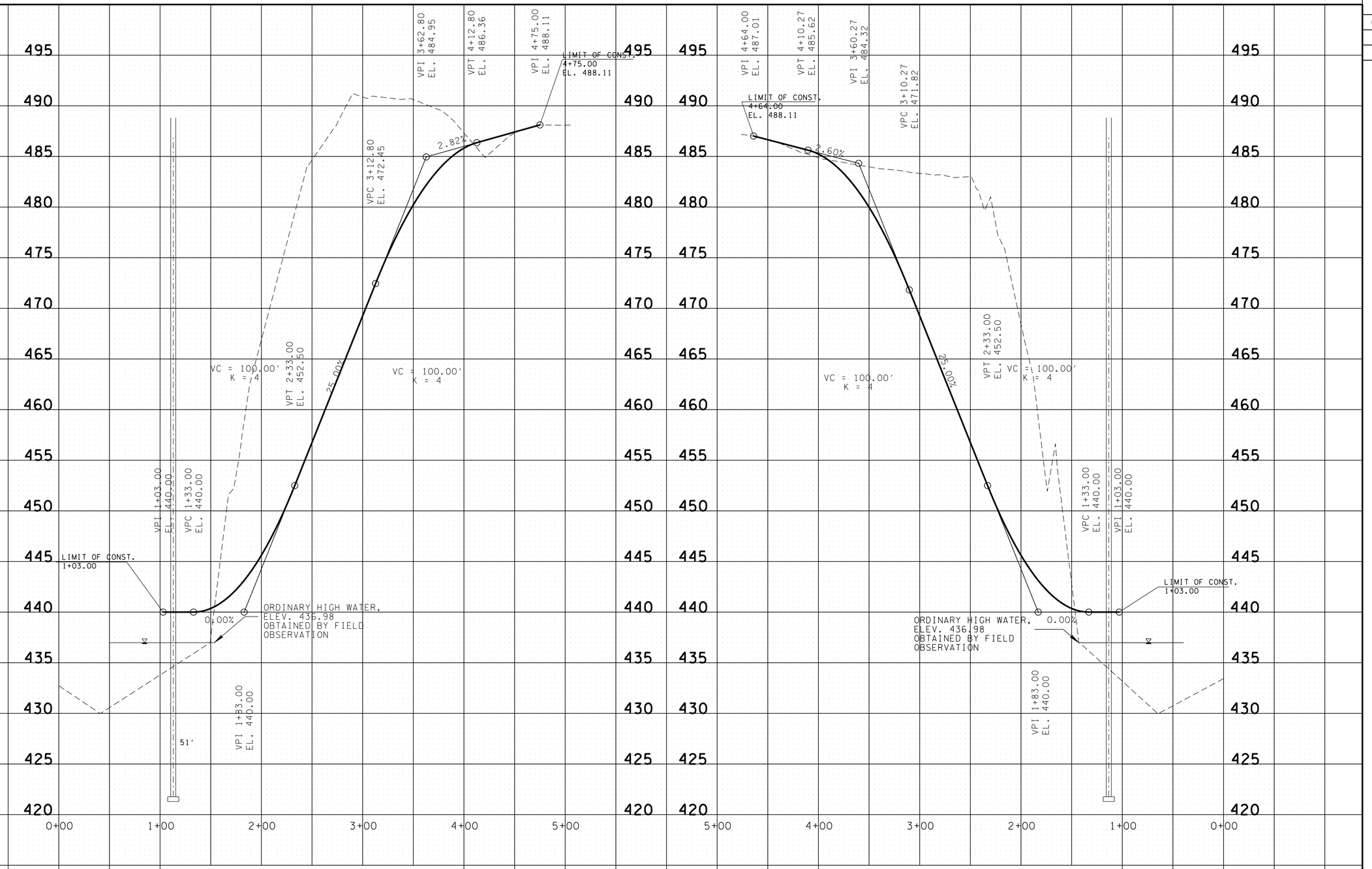
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	9B
CONST.	2014	BR-STP-50(29)	9B



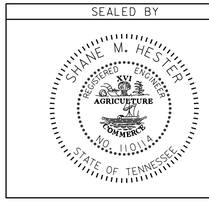
HAUL ROAD 2 LEFT
STA. 45+34.79

HAUL ROAD 2 RIGHT
STA. 45+49.63

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

HAUL ROAD DETAILS

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

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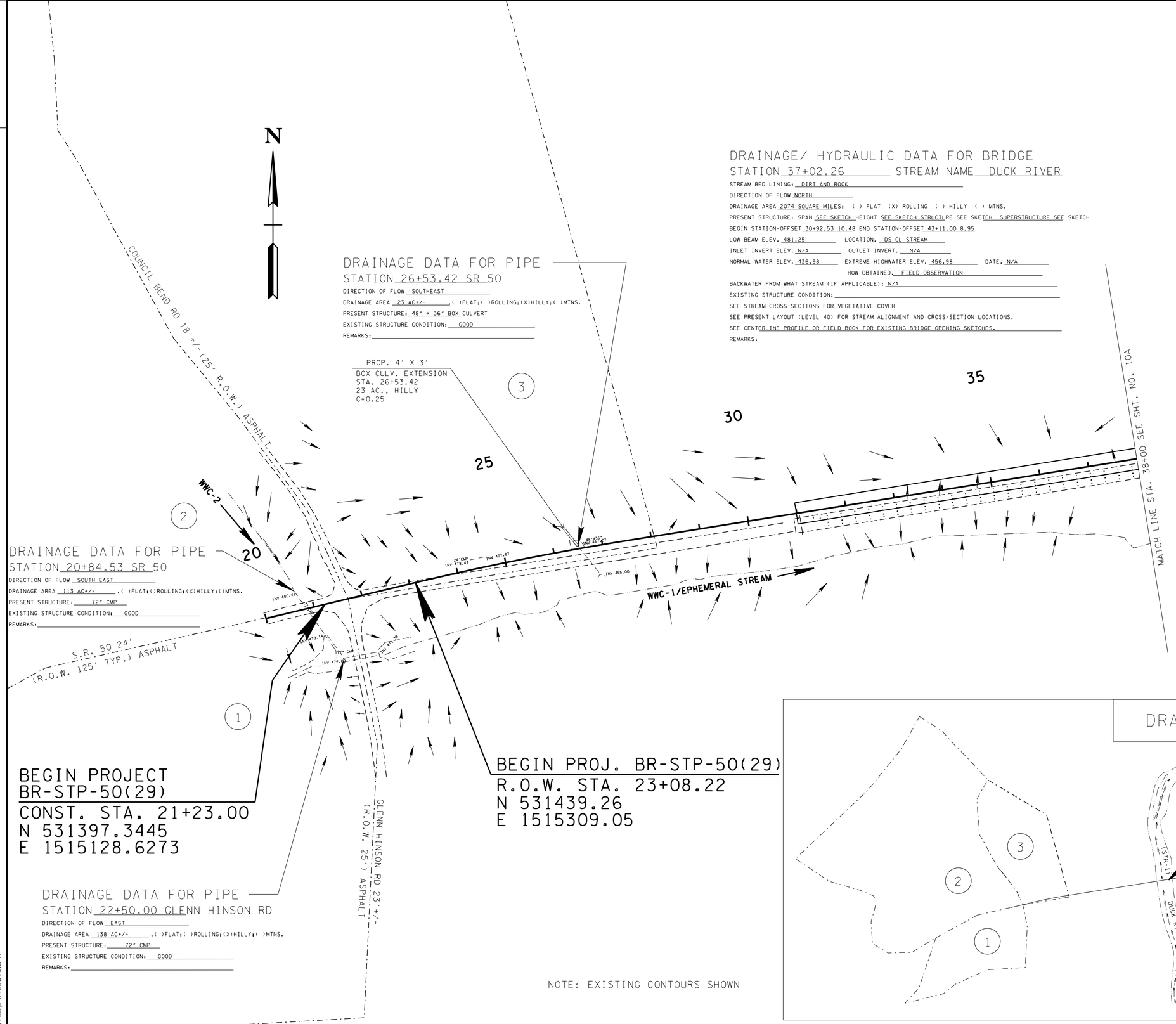
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	10
CONST.	2014	BR-STP-50(29)	10



DRAINAGE/ HYDRAULIC DATA FOR BRIDGE

STATION 37+02.26 STREAM NAME DUCK RIVER

STREAM BED LINING: DIRT AND ROCK

DIRECTION OF FLOW NORTH

DRAINAGE AREA 2074 SQUARE MILES: ( ) FLAT (X) ROLLING ( ) HILLY ( ) MTNS.

PRESENT STRUCTURE: SPAN SEE SKETCH HEIGHT SEE SKETCH STRUCTURE SEE SKETCH SUPERSTRUCTURE SEE SKETCH

BEGIN STATION-OFFSET 30+92.53 10.48 END STATION-OFFSET 43+11.00 8.95

LOW BEAM ELEV. 481.25 LOCATION. DS CL STREAM

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

NORMAL WATER ELEV. 436.98 EXTREME HIGHWATER ELEV. 456.98 DATE. N/A

HOW OBTAINED. FIELD OBSERVATION

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

EXISTING STRUCTURE CONDITION:

SEE STREAM CROSS-SECTIONS FOR VEGETATIVE COVER

SEE PRESENT LAYOUT (LEVEL 40) FOR STREAM ALIGNMENT AND CROSS-SECTION LOCATIONS.

SEE CENTERLINE PROFILE OR FIELD BOOK FOR EXISTING BRIDGE OPENING SKETCHES.

REMARKS:

DRAINAGE DATA FOR PIPE

STATION 26+53.42 SR 50

DIRECTION OF FLOW SOUTHEAST

DRAINAGE AREA 23 AC+/- ( )FLAT;( )ROLLING;(X)HILLY;( )MTNS.

PRESENT STRUCTURE: 48" X 36" BOX CULVERT

EXISTING STRUCTURE CONDITION: GOOD

REMARKS:

PROP. 4' X 3'
BOX CULV. EXTENSION
STA. 26+53.42
23 AC., HILLY
C=0.25

DRAINAGE DATA FOR PIPE

STATION 20+84.53 SR 50

DIRECTION OF FLOW SOUTH EAST

DRAINAGE AREA 113 AC+/- ( )FLAT;()ROLLING;(X)HILLY;()MTNS.

PRESENT STRUCTURE: 72" CMP

EXISTING STRUCTURE CONDITION: GOOD

REMARKS:

BEGIN PROJECT
BR-STP-50(29)
CONST. STA. 21+23.00
N 531397.3445
E 1515128.6273

BEGIN PROJ. BR-STP-50(29)
R.O.W. STA. 23+08.22
N 531439.26
E 1515309.05

DRAINAGE DATA FOR PIPE

STATION 22+50.00 GLENN HINSON RD

DIRECTION OF FLOW EAST

DRAINAGE AREA 138 AC+/- ( )FLAT;( )ROLLING;(X)HILLY;( )MTNS.

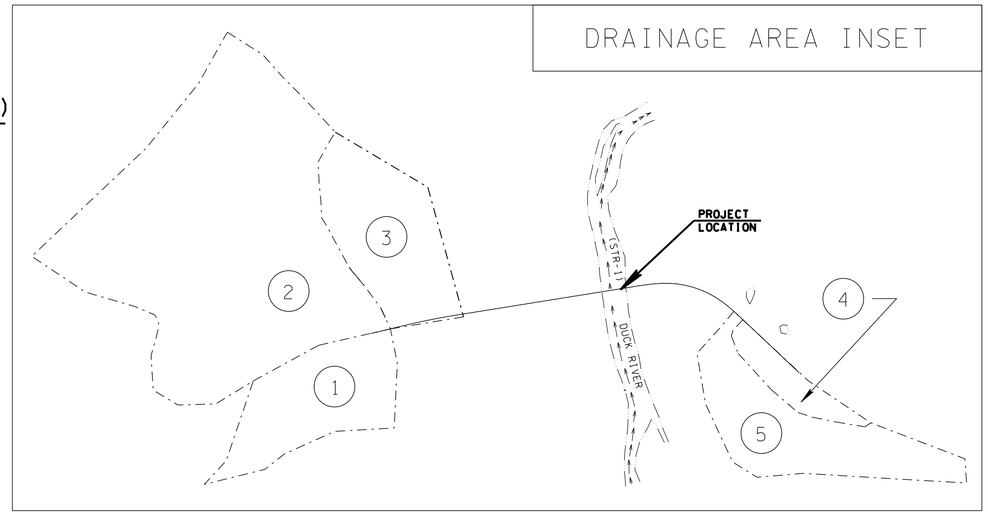
PRESENT STRUCTURE: 72" CMP

EXISTING STRUCTURE CONDITION: GOOD

REMARKS:

NOTE: EXISTING CONTOURS SHOWN

DRAINAGE AREA INSET



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DEPARTMENT OF TRANSPORTATION

DRAINAGE MAP

BEGIN PROJ. TO STA.38+00

SCALE: 1"=100'

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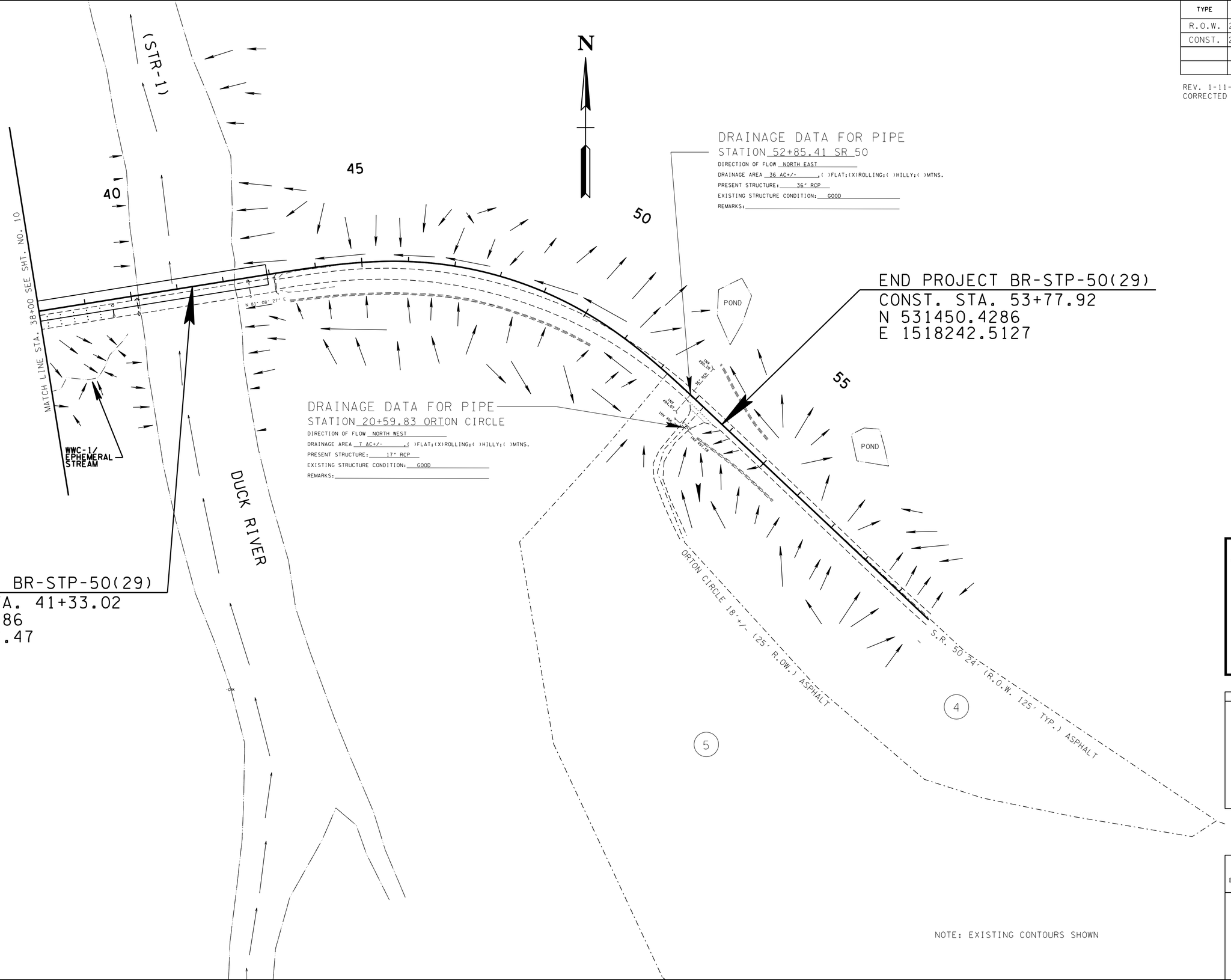
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	83950-2552-04	10A
CONST.	2014	BR-STP-50(29)	10A

REV. 1-11-11:
CORRECTED R.O.W. END PROJECT STATION.



NOTE: EXISTING CONTOURS SHOWN

UNOFFICIAL SET

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DRAINAGE MAP

STA.38+00 TO STA.53+68

SCALE: 1"=100'

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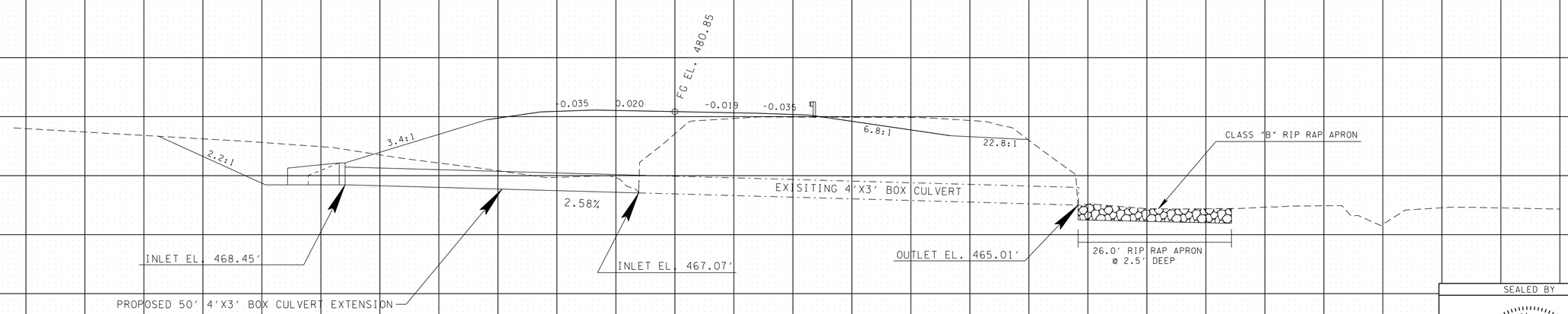
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	11
CONST.	2014	BR-STP-50(29)	11

STATION	26+53.42
STRUCTURE	4'x3' BOX CULVERT EXTENSION
SKEW	60 DEG
DRAINAGE AREA	23 AC.
DESIGN DISCHARGE (Q50)	51.8 CFS
DESIGN DISCHARGE (Q100)	54.7 CFS
OVERTOPPING ELEV.	481.11
ALLOWABLE HEADWATER ELEV.	478.85
Q50 HEADWATER ELEV.	472.00
Q100 HEADWATER ELEV.	472.13
VELOCITY (Q50)	15.33 FT/S
VELOCITY (Q100)	14.66 FT/S
INLET ELEVATION	468.50
OUTLET ELEVATION	465.00
STANDARD DRAWING NUMBERS	STD-15-9,11 THRU 15, STD-15-35
CLASS "A" CONCRETE	30.1 C.Y.
STEEL BAR REINFORCING	7041 LB.
FOUNDATION FILL MATERIAL	7.5 C.Y.



PROPOSED S.R. 50
26+53.42

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DEPARTMENT OF TRANSPORTATION

CULVERT CROSS-SECTION

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

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	12
CONST.	2014	BR-STP-50(29)	13

EROSION PREVENTION AND SEDIMENT CONTROL SPECIAL NOTES

STREAM/WETLAND

(1) ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., FOR PIER FOOTING, RIP-RAP PLACEMENT, MULTI-BARREL 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.

KNOWN EXCEPTIONAL TENNESSEE WATERS

(2) FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, AN OUTFALL IN A DRAINAGE AREA OF 5 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/ 24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT.

(3) 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. BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD 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. 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. 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. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

NPDES

(4) NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EPSC DEVICES ON THE EPSC PLAN CONTAINED IN THE APPROVED SWPPP.

(5) THE EPSC MEASURES AND/OR PLAN SHALL BE MODIFIED AS NECESSARY SO THAT THEY ARE EFFECTIVE AT ALL TIMES THROUGHOUT THE COURSE OF THE PROJECT.

(6) THE ACCEPTED EPSC PLAN SHALL REQUIRE THAT EPSC MEASURES BE IN PLACE BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES, INCLUDING WITHOUT LIMITATION AS FOLLOWS:

A. INITIAL CLEARING AND GRUBBING SHALL BE LIMITED TO THAT NECESSARY FOR THE INSTALLATION OF APPLICABLE EPSC MEASURES IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

B. NO OTHER CLEARING AND GRUBBING OPERATIONS SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

C. NO CULVERT OR BRIDGE CONSTRUCTION SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

D. NO GRADING, EXCAVATION, CUTTING, FILLING, OR OTHER EARTHWORK SHALL BE STARTED BEFORE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

(7) PERMANENT EPSC MEASURES SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OF ANY SEQUENCE OR PHASE. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR 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 WITH PERENNIAL VEGETATION OR OTHER PERMANENTLY STABLE NON-ERODING SURFACE SHALL REPLACE ANY TEMPORARY MEASURES AS SOON AS PRACTICABLE. UNPACKED GRAVEL CONTAINING FINES (SILT AND CLAY SIZED PARTICLES) OR CRUSHER RUNS WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE.

UTILITY RELOCATION

(8) RAIN WATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND MAINTAINED.

(9) SILT FENCE SHALL BE INSTALLED ON THE DOWNSTREAM SIDE OF STOCKPILED SOIL. TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING NO FLOW CONDITIONS AND STABILIZED BY THE END OF THE WORK DAY.

(10) UTILITY CROSSINGS FOR PERENNIAL STREAMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) REGULATIONS APPLY TO UTILITIES IN THIS PROJECT IN REGARD TO EROSION PREVENTION AND SEDIMENT CONTROL (EPSC). THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STORM WATER POLLUTION PREVENTION PLANS (SWPPP).

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

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

(13) IN REGARD TO EROSION PREVENTION AND SEDIMENT CONTROL (EPSC), TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS IN THIS PROJECT, THEREFORE, THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STORM WATER POLLUTIONS PREVENTION PLANS (SWPPP). THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT WORK.

(14) TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORM WATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE TDOT PROJECT ENGINEER.

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

(16) THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS (AS APPROVED BY THE TDOT PROJECT ENGINEER).

(17) THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES TO REPLACE IN-PLACE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE TDOT PROJECT ENGINEER BEFORE COMMENCING WORK.

POLYACRYLAMIDE

(22) ENSURE POLYACRYLAMIDE (PAM) EMULSIONS AND POWDERS ARE OF THE ANIONIC TYPE AND MEET THE FOLLOWING REQUIREMENTS:

(23) MEETS THE EPA AND FDA ACRYLABIDE MONOMER LIMITS OF EQUAL TO OR GREATER THAN 0.005% ACRYLAMIDE MONOMER

(24) HAS A DENSITY OF 10% TO 55% BY WEIGHT AND A MOLECULAR WEIGHT OF 16 TO 24 MG/MOLE

(25) MIXTURE IN NON-COMBUSTIBLE

(26) CONTAINS ONLY MANUFACTURED RECOMMENDED ADDITIVES

(27) PAM SHALL BE MIXED AND APPLIED IN ACCORDANCE WITH ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) MATERIAL SAFETY DATA SHEET (MSDS) REQUIREMENTS AND THE MANUFACTURE'S RECOMMENDATIONS FOR THE SPECIFIED USED CONFORMING TO ALL FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS.

(28) ALL VENDERS AND SUPPLIERS OF PAM, PAM MIX, OR PAM BLENDS SHALL PRESENT OR SUPPLY A WRITTEN TOXICITY REPORT WHICH VERIFIES THAT THE PAM, PAM MIX, PAM BLEND EXHIBITS ACCEPTABLE TOXICITY PARAMETERS WHICH MEET OR EXCEED THE EPA REQUIREMENTS FOR THE STATE AND FEDERAL WATER QUALITY STANDARDS. WHOLE EFFLUENT TESTING DOES NOT MEET THIS REQUIREMENT AS PRIMARY REACTIONS HAVE OCCURRED AND TOXIT POTENTIALS HAVE BEEN REDUCED. CATIONIC FORMS OF PAM ARE NOT ALLOWED FOR UNDER THIS GUIDELINE DUE TO THEIR HIGH LEVELS OF TOXICITY TO AQUATIC ORGANISMS. PAM EMULSIONS SHALL NEVER BE APPLIED DIRECTLY TO STORMWATER RUNOFF OR RIPARIAN WATERS DUE TO SURFACTANT TOXITY. CONTRACTOR MUST SEEK THE APPROVAL OF THE EPSC DEISGN ENGINEER AND TDOT IF CHITOSAN IS PROPOSED FOR USE ON THIS PROJECT.

(29) ALL VENDORS AND SUPPLIERS OF PAM, PAM MIX, OR PAM BLENDS SHALL SUPPLY WRITTEN "SITE SPECIFIC" TESTING RESULTS DEMONSTRATING THAT A PERFORMANCE OF 95% OR GREATER REDUCTION OF NTU OR TSS FROM STORMWATER DISCHARGES.

(30) EMULSION BATCHES SHALL BE MIXED FOLLOWIGN RECOMMENDATIONS OF A TESTING LABORATORY THAT DETERMINES THE PROPER PRODUCT AND RATE TO MEET SITE REQUIREMENTS. APPLICATION METHOD SHALL INSURE UNIFORM COVERAGE TO THE TARGET AREA. EMULSIONS SHALL NEVER BE APPLIED DIRECTLY TO STORMWATER FUNOFF OR RIPARIAN WATERS.

(31) PAM POWDER MAY BE APPLIED BY A HAND SPREADER OR A MECHANICAL SPREADER. MIXING PAM POWDER WITH DRY SILICA SAND WILL AID IN SPREADING.

(32) PREMIXING OF PAM POWDER INTO FERTILIXER, SEED, OR OTHER SOIL AMENDMENTS IS ALLOWED WHEN SPECIFIED IN THE DESIGN PLAN. APPLICATION METHDON SHALL INSURE UNIFORM COVERAGE TO THE TARGET AREA.

(33) PAM LOGS OR BLOCKS SHALL BE APPLLED FOLLOWING SITE TESTING RESULTS TO ENSURE PROPER PLACEMENT AND PERFORMANCE AND SHALL MEET OR EXCEED STATE AND FEDERAL WATER QUALITY REQUIREMENTS.

NOTICE TO CONTRACTORS

(34) TEMPORARY CONSTRUCTION ENTRANCES AND/OR EXITS SHALL BE CONSTRUCTED PER TDOT STANDARD DRAWING NO. EC-STR-25 AT LOCATIONS APPROVED BY THE PROJECT ENGINEER.

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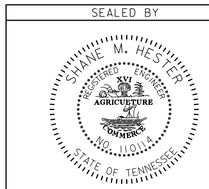

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL SPECIAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	13A

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

EROSION PREVENTION AND SEDIMENT CONTROL SPECIAL NOTES CONTINUED

TERMS AND CONDITIONS

IN ORDER TO BE EXEMPT FROM THE PROHIBITIONS OF SECTION 9 OF THE ACT, THE FEDERAL HIGHWAY ADMINISTRATION MUST COMPLY WITH THE FOLLOWING TERMS AND CONDITIONS, WHICH CARRY OUT THE REASONABLE AND PRUDENT MEASURES DESCRIBED ABOVE AND OUTLINE REQUIRED REPORTING/MONITORING REQUIREMENTS. WHILE THESE TERMS AND CONDITIONS WERE SPECIFICALLY DESIGNED TO ADDRESS POTENTIAL IMPACTS TO THE PYGMY MADTOM, WE BELIEVE THAT IMPLEMENTATION OF THESE MEASURES WOULD ALSO MINIMIZE POTENTIAL FOR HARM TO THE SLABSIDE PEARLYMUSSEL AND RABBITSFOOT. THESE TERMS AND CONDITIONS ARE NON-DISCRETIONARY.

1. TDOT PERSONNEL WILL CONDUCT PRE-PROJECT SWEEPS OF THE UPSTREAM AND DOWNSTREAM SHOALS AIMED AT SALVAGING AS MANY PYGMY MADTOMS AS POSSIBLE FROM THE AFFECTED SHOALS. IDEALLY, COLLECTION OF INDIVIDUALS WOULD TAKE PLACE SOMETIME BETWEEN AUGUST 1 AND APRIL 30. HOWEVER, WE REALIZE THAT THIS TIMEFRAME WOULD BE DICTATED BY AVAILABLE FUNDING ONCE THE PROJECT IS AWARDED. DEPENDING UPON THE NUMBER OF INDIVIDUALS COLLECTED, THEY WILL EITHER BE RELEASED AT APPROPRIATE SHOAL HABITATS UPSTREAM OF THE PROJECT OR MAINTAINED IN CAPTIVITY FOR EVENTUAL RELEASE BACK INTO THE AFFECTED SHOALS FOLLOWING PROJECT COMPLETION, OR BOTH. INDIVIDUALS SURVEYING FOR AND COLLECTING PYGMY MADTOMS SHOULD POSSESS APPROPRIATE STATE AND FEDERAL PERMITS FOR THIS ACTIVITY. PYGMY MADTOMS COLLECTED FOR RELOCATION SHOULD BE CAREFULLY MAINTAINED DURING COLLECTION, TRANSPORTED AS QUICKLY AS POSSIBLE TO RELOCATION SITE, AND ACCLIMATED TO NEW ENVIRONMENT APPROPRIATELY. CATCH PER UNIT EFFORT AND/OR DENSITY OF INDIVIDUALS COLLECTED SHOULD BE DOCUMENTED AND DEPOSITION OF RELOCATED PYGMY MADTOMS SHOULD BE REPORTED TO THE TENNESSEE FIELD OFFICE. DETAILS REPORTED SHOULD INCLUDE MICROHABITAT (SURVEYORS PARTICIPATING IN THE EFFORT, WATER TEMPERATURE, DEPTH, SUBSTRATE TYPES AND PERCENTAGES, FLOW AT SUBSTRATE, NUMBER OF INDIVIDUALS RELEASED, AND LATITUDE/LONGITUDE). THE NUMBER OF INDIVIDUALS (IF ANY) MAINTAINED IN CAPTIVITY SHOULD ALSO BE INCLUDED IN THE REPORT. THIS SUPPORTS REASONABLE AND PRUDENT MEASURE #1.

2. AN INDEPENDENT CONTRACTOR SHALL BE ONSITE DAILY DURING ACTIVE CONSTRUCTION TO ENSURE THAT BMPS AND WATER QUALITY CONTROL MEASURES ARE IN PLACE AND PROPERLY FUNCTIONING. A DAILY ONSITE INSPECTION SHALL BE COMPLETED BY THIS INDIVIDUAL AND FINDINGS MADE AVAILABLE TO OUR OFFICE AND/OR PERMITTING AGENCY(S) UPON REQUEST. THIS SUPPORTS REASONABLE AND PRUDENT MEASURE #1.

3. DURING ALL ACTIVITIES INVOLVING POURING OF CONCRETE AND DRILLING PIERS AT THE SITE, A TDOT INSPECTOR OR APPOINTEE WITH AUTHORITY TO HALT CONSTRUCTION WILL BE ON SITE TO OBSERVE AND MONITOR THE OPERATION. IF CONCRETE OR SOME UNDETERMINED SUBSTANCE IS OBSERVED ENTERING THE RIVER, POURING WILL CEASE IMMEDIATELY AND ACTIONS WILL BE IMPLEMENTED TO STOP FURTHER LEAKAGE, INCLUDING LOCATION AND REPAIR OF THE SOURCE OF THE LEAK. TDOT SHALL CEASE ACTIVE CONSTRUCTION IMMEDIATELY AND CONTACT OUR OFFICE AND PERMITTING AGENCY(S) WITHIN 24 HOURS TO DETERMINE THE APPROPRIATE ACTION. THE AREA OF IMPACT FROM THE SPILL SHALL BE QUANTIFIED AND SAMPLES OF THE LEAKED MATERIAL WILL BE COLLECTED FOR ANALYSIS AT AN INDEPENDENT LAB. FINDINGS OF THE ANALYSIS SHALL BE PROVIDED TO THE SERVICE AND PERMITTING AGENCY(S) WITHIN FIVE (5) WORKING DAYS TO DETERMINE THE APPROPRIATE ACTION. CONSTRUCTION WILL NOT RESUME UNTIL OUR OFFICE AND PERMITTING AGENCY(S) AGREE WITH TDOT THAT ALL CORRECTIVE AND PREVENTATIVE MEASURES HAVE BEEN IMPLEMENTED. THIS SUPPORTS REASONABLE AND PRUDENT MEASURE #2.

4. TDOT PERSONNEL WILL CONDUCT A POST-PROJECT MONITORING OF THE BIOLOGICAL COMMUNITY WITHIN THE SHOALS UP AND DOWNSTREAM OF THE BRIDGE. MONITORING WILL BE CONDUCTED ANNUALLY FOR A PERIOD OF FOUR YEARS OR UNTIL TDOT HAS DETERMINED THAT THE SITE IS STABLE, THE SHOALS HAVE RECOVERED, AND THAT THERE ARE NO RESIDUAL IMPACTS FROM CONSTRUCTION. RESULTS OF THE EVALUATIONS WILL BE SUBMITTED ANNUALLY TO THE TENNESSEE FIELD OFFICE. THIS SUPPORTS REASONABLE AND PRUDENT MEASURE #3.

UPON LOCATING A DEAD, INJURED, OR SICK INDIVIDUAL OF AN ENDANGERED OR THREATENED SPECIES, INITIAL NOTIFICATION MUST BE MADE TO THE FISH AND WILDLIFE SERVICE LAW ENFORCEMENT OFFICE AT 220 GREAT CIRCLE ROAD, NASHVILLE, TENNESSEE 37228; TELEPHONE 615/736-5532. ADDITIONAL NOTIFICATION MUST BE MADE TO THE FISH AND WILDLIFE SERVICE ECOLOGICAL SERVICES FIELD OFFICE AT 446 NEAL STREET, COOKEVILLE, TENNESSEE 38501; TELEPHONE 931/528-6481. CARE SHOULD BE TAKEN IN HANDLING SICK OR INJURED INDIVIDUALS AND IN THE PRESERVATION OF SPECIMENS IN THE BEST POSSIBLE STATE FOR LATER ANALYSIS OF CAUSE OF DEATH OR INJURY.

THE REASONABLE AND PRUDENT MEASURES, WITH THEIR IMPLEMENTING TERMS AND CONDITIONS, ARE DESIGNED TO MINIMIZE THE IMPACT OF INCIDENTAL TAKE THAT MIGHT OTHERWISE RESULT FROM THE PROPOSED ACTION.

WE HAVE INSUFFICIENT INFORMATION TO ESTIMATE NUMBERS OF PYGMY MADTOMS THAT MAY OCCUR WITHIN THE PROPOSED ACTION AREA. CONSIDERING THE SCOPE OF THE PROJECT AND RECENT RECORDS BOTH UPSTREAM AND DOWNSTREAM OF THE SITE (TENNESSEE DEPARTMENT OF ENVIRONMENT CONSERVATION 2013; AND TABLE 2), WE BELIEVE THAT BOTH SHOALS WITHIN THE ACTION AREA LIKELY CONTAIN PYGMY MADTOMS AND THAT ALL INDIVIDUALS IN THESE TWO SHOALS WOULD BE INCIDENTALLY TAKEN BY CAPTURE EFFORTS OR AS A RESULT OF CONSTRUCTION ACTIVITIES.

AS A RESULT OF UPPER DUCK RIVER SURVEYS CONDUCTED FROM 2000-2002, AHLSTEDT ET AL. (2004) ESTIMATED SLABSIDE PEARLYMUSSEL AND RABBITSFOOT TO COMPRISE 2.98% AND 3.83% OF THE 314 MUSSELS COLLECTED AT 112 SITES. HUBBS (2011) ESTIMATED SLABSIDE PEARLYMUSSEL AND RABBITSFOOT DENSITIES AT 0.07-0.28 AND 0.08-0.41 INDIVIDUALS/M^2, RESPECTIVELY, AT FOUR UPPER DUCK RIVER SITES (RMI 160.1-174.8). AHLSTEDT ET AL. (2004) INDICATED THAT THE RABBITSFOOT PRIMARILY OCCURRED BETWEEN RM 130 AND 179, AND WAS SCATTERED IN THE LOWER PORTION OF THE RIVER AND FURTHER CONFIRMED THE SLABSIDE PEARLYMUSSEL TO BE EXTANT BETWEEN RM 208 DOWNSTREAM TO RM 128.2. SCHILLING AND WILLIAMS (2002) CONFIRMED PRESENCE OF THE SLABSIDE PEARLYMUSSEL DOWNSTREAM TO APPROXIMATELY RM 15.7 BASED ON CURSORY SURVEYS, INVOLVING QUALITATIVE SEARCHES BY HAND COLLECTION IN SHOALS, GRAVEL BARS, MUSKRAT MIDDENS, AND SHALLOW POOLS ALONG THE RIVER MARGINS. WE ARE ONLY AWARE ONE COMPREHENSIVE MUSSEL SURVEY PERFORMED AT THE PROJECT SITE. HOWEVER, BASED ON THE INFORMATION AVAILABLE, WE BELIEVE THAT SLABSIDE PEARLYMUSSEL AND RABBITSFOOT LIKELY CONSTITUTE A SMALL PORTION OF THE MUSSEL FAUNA IN THE AREA, WITH ONLY A FEW INDIVIDUALS POTENTIALLY BEING PRESENT WITHIN THE ACTION AREA. ALL INDIVIDUALS OF EITHER SPECIES PRESENT IN THE 14.46 AC OF AQUATIC HABITAT WITHIN THE ACTION AREA WOULD POTENTIALLY BE AFFECTED.

IF, DURING THE COURSE OF THE ACTION, EFFECTS EXTEND BEYOND THE 14.46 AC OF AQUATIC HABITAT AS PREVIOUSLY DESCRIBED, SUCH INCIDENTAL TAKE REPRESENTS NEW INFORMATION REQUIRING REINITIATION OF CONSULTATION AND REVIEW OF THE REASONABLE AND PRUDENT MEASURES PROVIDED. THE FEDERAL AGENCY MUST IMMEDIATELY PROVIDE AN EXPLANATION OF THE CAUSES OF THE TAKING AND REVIEW WITH THE SERVICE THE NEED FOR POSSIBLE MODIFICATION OF THE REASONABLE AND PRUDENT MEASURES.

PROTECTIVE MEASURES:

1. CONSTRUCTION OF RIVER HAUL ROADS WILL BE LIMITED TO PERIODS OF LOW FLOW IN THE DUCK RIVER. IN-STREAM WORK ON HAUL ROADS WILL NOT TAKE PLACE WHEN FLOW IN DUCK RIVER EXCEEDS A LEVEL OF 5.0 (OR 1,900 CUBIC FEET PER SECOND) ON THE USGS CENTERVILLE GAUGE.

2. HAUL ROADS IN THE RIVER WILL NOT EXTEND BEYOND LIMITS SHOWN ON FINAL CONSTRUCTION PLANS. HAUL ROADS IN THE RIVER HAVE BEEN REDUCED TO THE EXTENT PRACTICABLE TO ALLOW A MORE TYPICAL FLOW PATTERN AND LESS SEDIMENT AND SCOUR PROBLEMS.

3. THE TDOT REGION 3 BIOLOGIST (DENNIS CRUMBY) SHALL BE NOTIFIED AT LEAST 2 WEEKS PRIOR TO ANY PLANNED CONSTRUCTION OF HAUL ROADS IN THE RIVER TO DOCUMENT INSTALLATION.

4. TDOT OR CONTRACTOR FORCES WILL PROVIDE CLOSE SUPERVISION OF CONCRETE POURING ON BRIDGE STRUCTURES AND IN ALL CONSTRUCTION AREAS WITHIN 100' OF DUCK RIVER.

5. FUELING REQUIREMENTS/RESTRICTIONS:

   FUELING AREAS SHALL BE LOCATED OUTSIDE THE 100-YEAR FLOODPLAIN AND AT LEAST 300' FROM THE DUCK RIVER. FUELING AREAS SHALL BE DESIGNED AND MAINTAINED TO ENSURE THAT OIL, GAS, OR OTHER PETROLEUM POLLUTANTS TO DO NOT ENTER THE DUCK RIVER.

   VEHICLES LEFT OVERNIGHT WITHIN 100' OF DUCK RIVER WILL REQUIRE SECONDARY CONTAINMENT DEVICES.

   NO CONSTRUCTION VEHICLES WILL BE PARKED ON THE RIVER HAUL ROADS UNATTENDED DURING NON-WORKING HOURS.

6. THERE WILL BE NO TREE OR SHRUB REMOVAL ALONG THE DUCK RIVER EXCEPT WITHIN PROJECT LIMITS, AND THEN ONLY IF ESSENTIAL. WHERE POSSIBLE, TREES AND SHRUBS ON STREAM BANKS WILL BE CLEARED BY CUTTING RATHER THAN BY MECHANIZED METHODS, LEAVING THE ROOTS IN PLACE. ALL AREAS DISTURBED DURING CONSTRUCTION WILL BE STABILIZED AS SOON AS POSSIBLE BY USE OF RIPRAP, SEEDING, OR MULCHING, IN COMPLIANCE WITH ARAP, SECTION 404, NPDES, OR OTHER PERMIT SPECIFICATIONS.

7. ALL ROCK/RIPRAP USED FOR HAUL ROADS OR ROCK PADS IN THE DUCK RIVER MUST BE CLEAN, WASHED STONE.

8. ALL DEBRIS OR WASTE GENERATED DURING WORK ON THE BRIDGE DECK, PIER CAPS, AND PARAPET MUST BE PREVENTED FROM FALLING OR WASHING IN TO THE DUCK RIVER. THIS INCLUDES CONCRETE SLURRY OR OTHER MATERIAL GENERATED DURING CONCRETE SAWING OR OTHER DEMOLITION PROCESS.

9. ALL TEMPORARY STOCKPILED SOILS WILL BE PROTECTED FROM RUN-ON AND RUN-OFF.
   NO TEMPORARY SOIL STOCKPILES WILL BE ALLOWED WITHIN THE 100-YEAR FLOOD PLAIN.

10. SOD WILL BE INSTALLED ON COMPLETED SLOPES.

11. SILT FENCE WITH BACKING WILL BE PROPERLY INSTALLED PRIOR TO ANY EARTHWORK AND WILL BE MAINTAINED UNTIL THE SITE IS PROPERLY STABILIZED FOLLOWING CONSTRUCTION.

12. SEDIMENT TRAPS OR SMALL BASINS WILL BE INSTALLED WHERE APPROPRIATE TO CAPTURE CONSTRUCTION-RELATED SEDIMENT.

13. CONSTRUCTION OF DRILLED-SHAFTS IS REQUIRED INSTEAD OF BRIDGE PIER FOOTERS TO AVOID DOWNSTREAM SCOUR.

14. THE EXISTING SR-50 BRIDGE STRUCTURE OVER DUCK RIVER WILL BE REMOVED BY DROP AND DRAG METHODS. THE TIME FRAME FOR THE DROP AND DRAG PROCESS WILL NOT EXCEED 5 DAYS.

15. IF DEAD FISH OR OTHER AQUATIC ANIMALS ARE OBSERVED IN THE DUCK RIVER DURING IN-STREAM CONSTRUCTION ACTIVITIES, NOTIFY THE TDOT REGION 3 BIOLOGIST (DENNIS CRUMBY) IMMEDIATELY.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL SPECIAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	13B

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

EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1.)	209-03	CHECK DAMS	S.F.	256
1.)	209-05	SEDIMENT REMOVAL	C.Y.	552
1.)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	911
1.)	209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	410
	209-08.08	ENHANCED ROCK CHECK DAM	EACH	2
1.)	209-09.01	SANDBAGS	BAG	500
1.)	209-09.03	SEDIMENT FILTER BAG (15' X 15')	EACH	2
2.)	209-09.22	POLYACRYLAMIDE POWDER	LB.	275
3.)	209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	200
4.)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	41
5.)	621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	150
6.)	707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	1782
7.)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	101
8.)	709-05.08	MACHINED RIP-RAP (CLASS B)	TON	433
9.)	709-05.09	MACHINED RIP-RAP (CLASS C)	TON	7268
10.)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	718
11.)	740-10.04	GEOTEXTILE (TYPE IV)(STABILIZATION)	S.Y.	10637
	740-11.03	TEMPORARY SEDIMENT TUBE 18IN (DESCRIPTION)	L.F.	360
	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	266
	803-01	SODDING (NEW SOD)	S.Y.	14769
12.)	805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	350

FOOTNOTES:

1.) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTAINENCE REPLACEMENT.
2.) BASED ON 3 APPLICATIONS AT 30 LB/ACRE .
3.) FOR CONSTRUCTION OF SUSPENDED PIPE DIVERSION.
4.) INCLUDES 8 TON FOR TYPE II CULVERT PROTECTION, AND 33 TON FOR CONSTRUCTION OF SEDIMENT FILTER BAGS.
5.) TO BE USED FOR HAUL ROADS AND SUSPENDED PIPE DIVERSION.
6.) TO PROTECT "DO NOT DISTURB" AREA
7.) FOR CONSTRUCTION OF TEMPORARY CONSTRUCTION EXITS.
8.) INCLUDES 109 TON FOR CULVERT RIP RAP APRON, AND 324 TON FOR BRIDGE ABUTMENTS.
9.) TO BE USED FOR HAUL ROAD CONSTRUCTION 100' PRIOR TO STREAM BANK AND EXTENDING TO THE LIMIT OF HAUL ROAD IN THE RIVER.
10.) INCLUDES 24 S.Y. FOR TYPE II CULVERT PROTECTION, 336 S.Y. FOR CHECK DAMS, 172 S.Y. FOR CONSTRUCTION EXITS, 186 S.Y. FOR SEDIMENT FILTER BAGS.
11.) INCLUDES 9937 S.Y. FOR HAUL ROADS, AND 700 S.Y. FOR SLOPE STABILIZATION. *SEE SOIL REPORT
12.) TO BE USED FOR STABILIZATION OF STOCK PILE EARTHEN MATERIAL AND/OR AS DIRECTED BY ENGINEER.

NOTE: ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
SFB SFB SFB SFB	SEDIMENT FILTER BAG	EC-STR-2
* SF * SF * SF *	SILT FENCE	EC-STR-3B
* SFB * SFB * SFB *	SILT FENCE WITH WIRE BACKING	EC-STR-3C
	ROCK CHECK DAM V-DITCH	EC-STR-6
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
	CULVERT PROTECTION (TYPE 2)	EC-STR-11A
TCE	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	RIPRAP	EC-STR-27
	SUSPENDED PIPE DIVERSION	EC-STR-33 EC-STR-33A
	EROSION CONTROL BLANKET	EC-STR-34
** TUBE ** TUBE **	SEDIMENT TUBE	EC-STR-37
* HVF * HVF	HIGH VISIBILITY FENCE	S-F-1

OUTFALL DRAINAGE AREAS

SHEET NO.	OUTFALL NO.	DRAINAGE AREA (ACRES)
14	1A	21.7
14B	1	19.7
14B	2	2.3
14B	3	4.2

CHECK DAM WEIR HEIGHT = 2.0 FT.

DITCH R	DITCH L	STA. TO STA.	SLOPE %	CHECK DAM SPACING (FT)
	X	23+00 TO 30+00	3.0	65
	X	44+00 TO 50+50	2.0	100
X		44+00 TO 52+00	2.0	100

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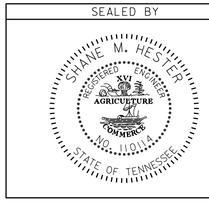

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL LEDGEND AND QUANTITIES

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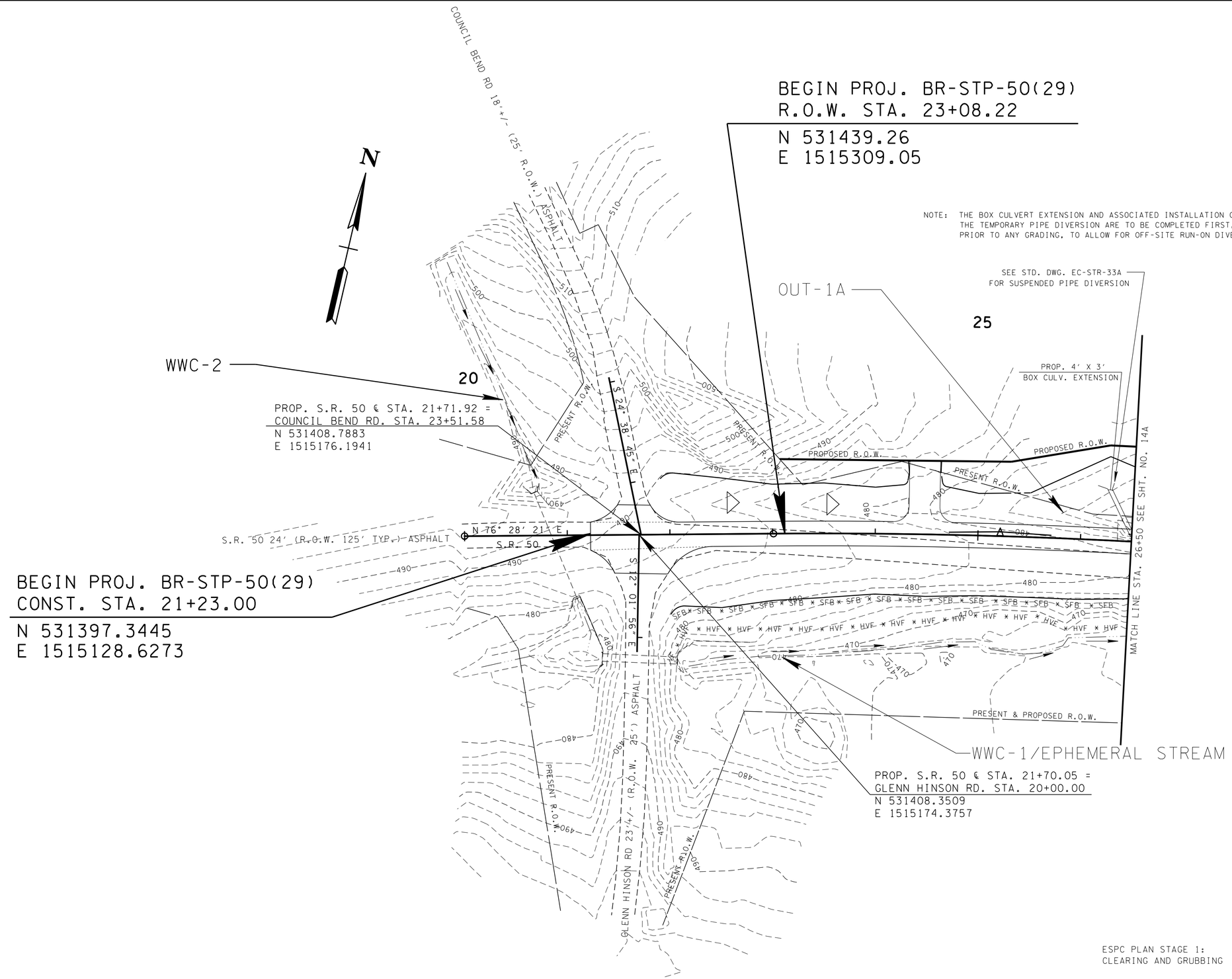
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	13
CONST.	2014	BR-STP-50(29)	14



ESPC PLAN STAGE 1:
CLEARING AND GRUBBING

NOTE: EXISTING CONTOURS SHOWN

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SHANE M. HESTER
REGISTERED ENGINEER
NO. 111011
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

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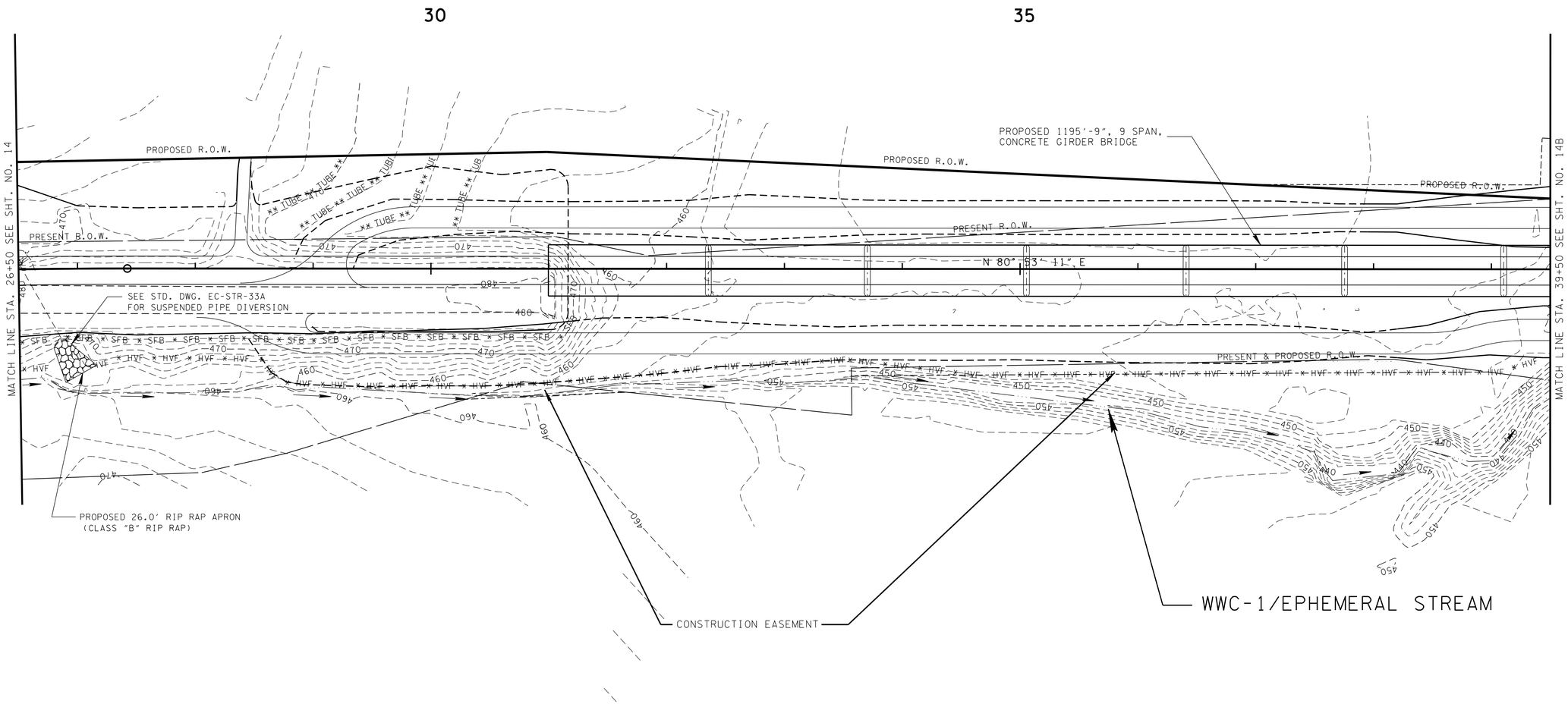
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	14
CONST.	2014	BR-STP-50(29)	14A



ESPC PLAN STAGE 1:
CLEARING AND GRUBBING

NOTE: EXISTING CONTOURS SHOWN

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.26+50 TO STA.39+50

SCALE: 1"=50'

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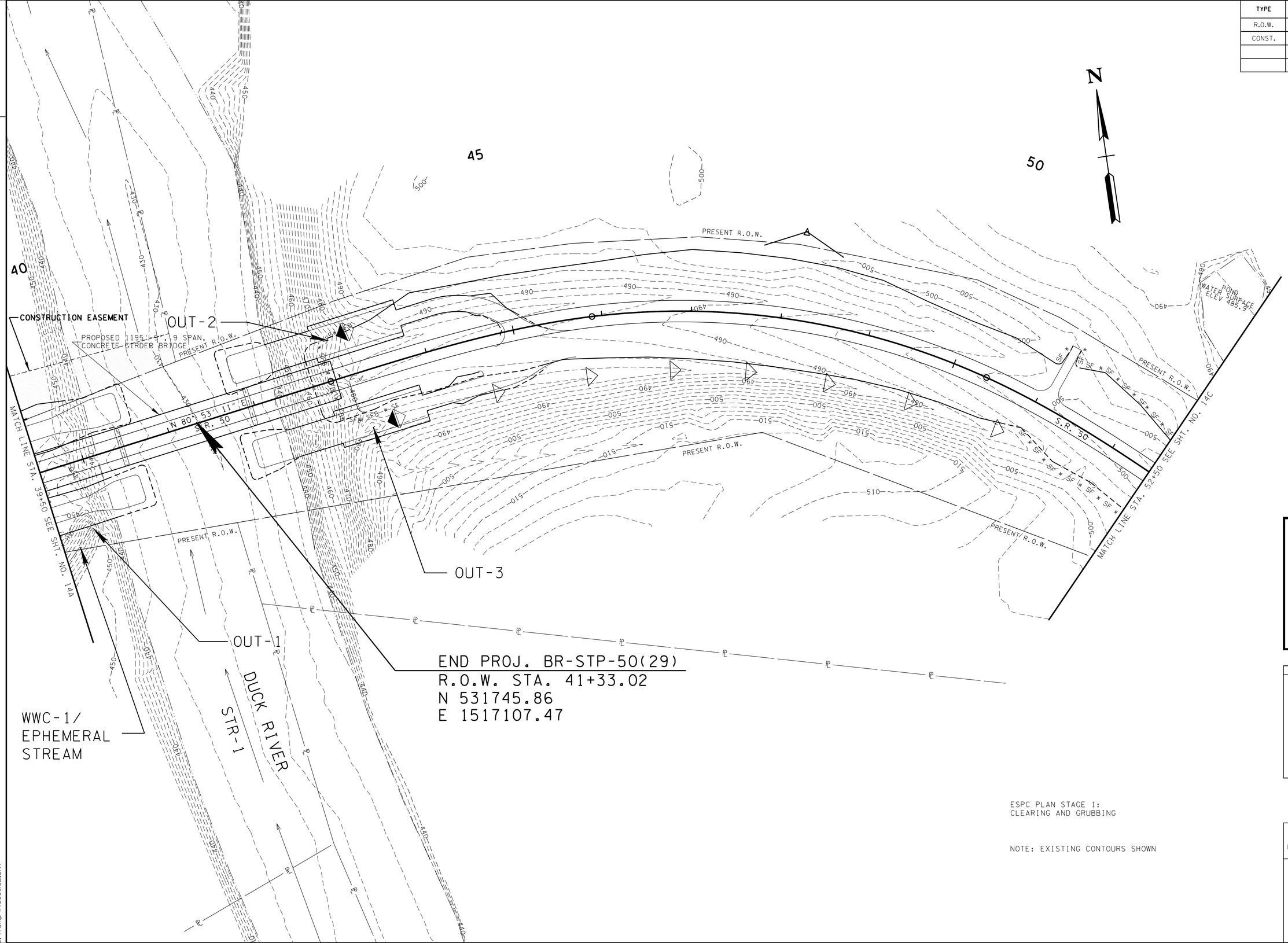
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	15
CONST.	2014	BR-STP-50(29)	14B



ESPC PLAN STAGE 1:
CLEARING AND GRUBBING

NOTE: EXISTING CONTOURS SHOWN

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STATE OF TENNESSEE
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EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.39+50 TO STA.52+50

SCALE: 1"=50'

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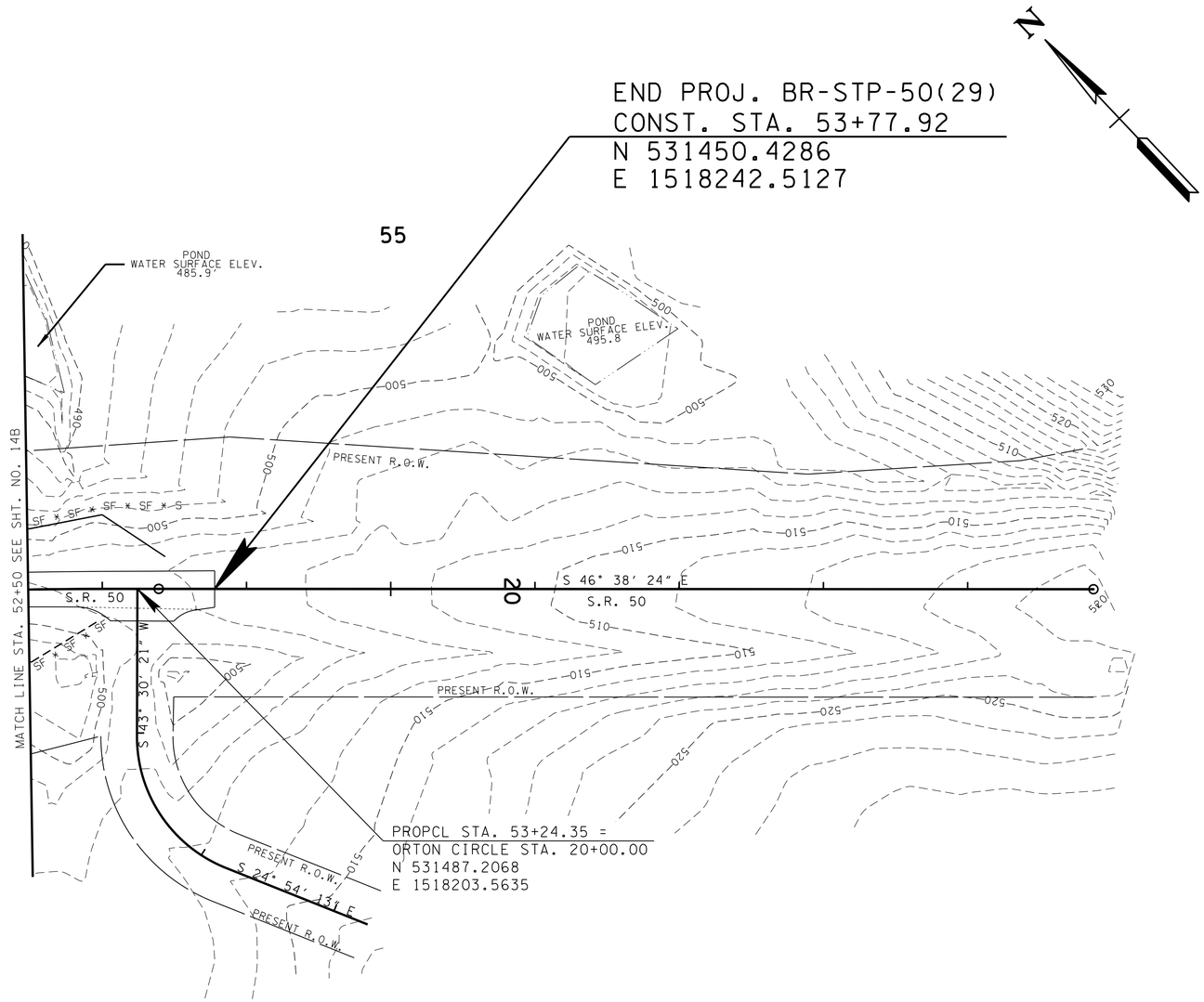
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	16
CONST.	2014	BR-STP-50(29)	14C



NOTE: EXISTING CONTOURS SHOWN

ESPC PLAN STAGE 1:
CLEARING AND GRUBBING

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DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.52+50 TO STA.53+68

SCALE: 1"=50'

01-MAY-2014 14:44
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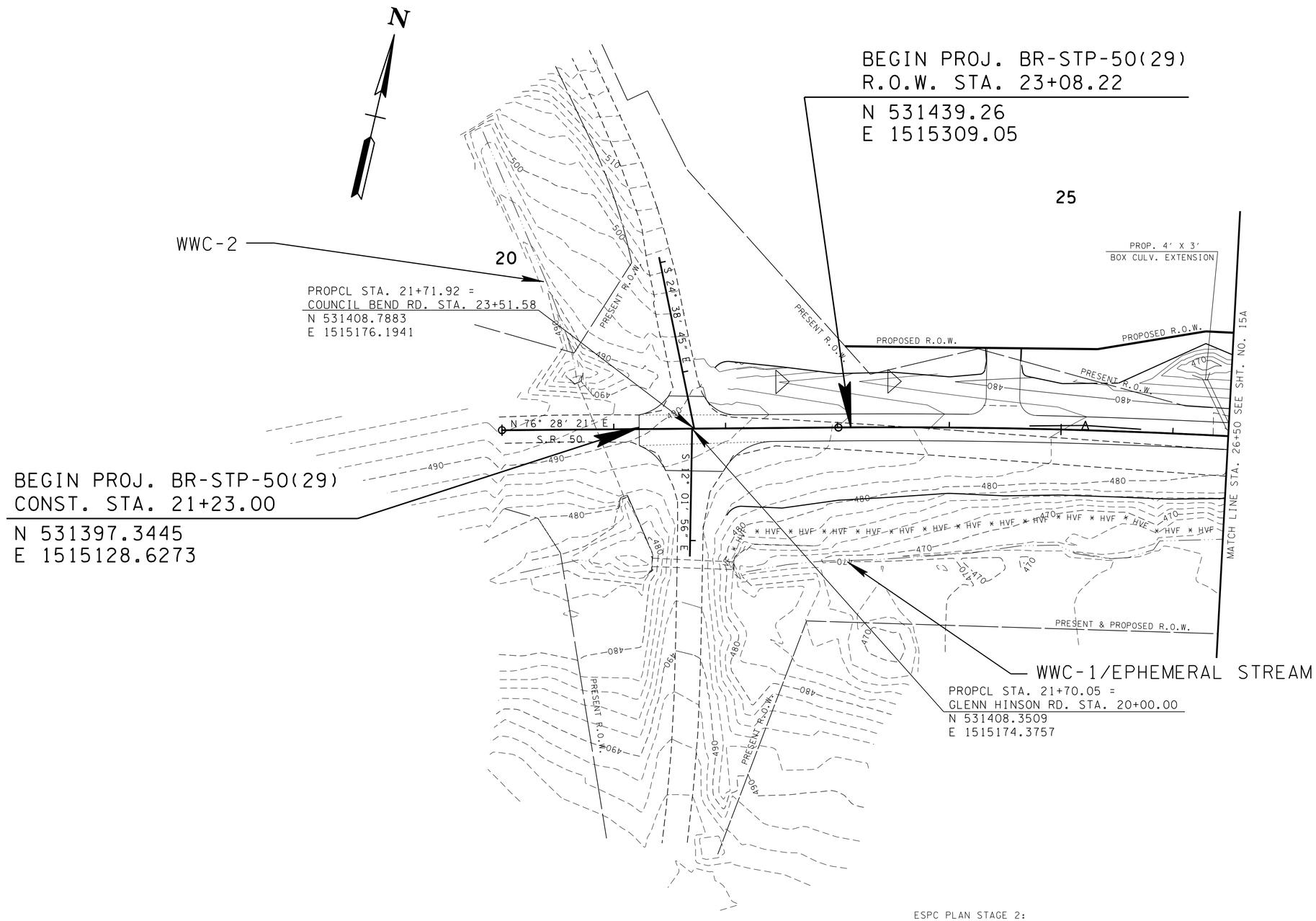
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	15



ESPC PLAN STAGE 2:
TO COINCIDE WITH TRAFFIC CONTROL PLAN PHASE 1

NOTE: BOTH PROPOSED AND EXISTING CONTOURS SHOWN

UNOFFICIAL SET

NOT FOR BIDDING

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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

BEGIN PROJ. TO STA.26+50

SCALE: 1"=50'

01-MAY-2014 14:44
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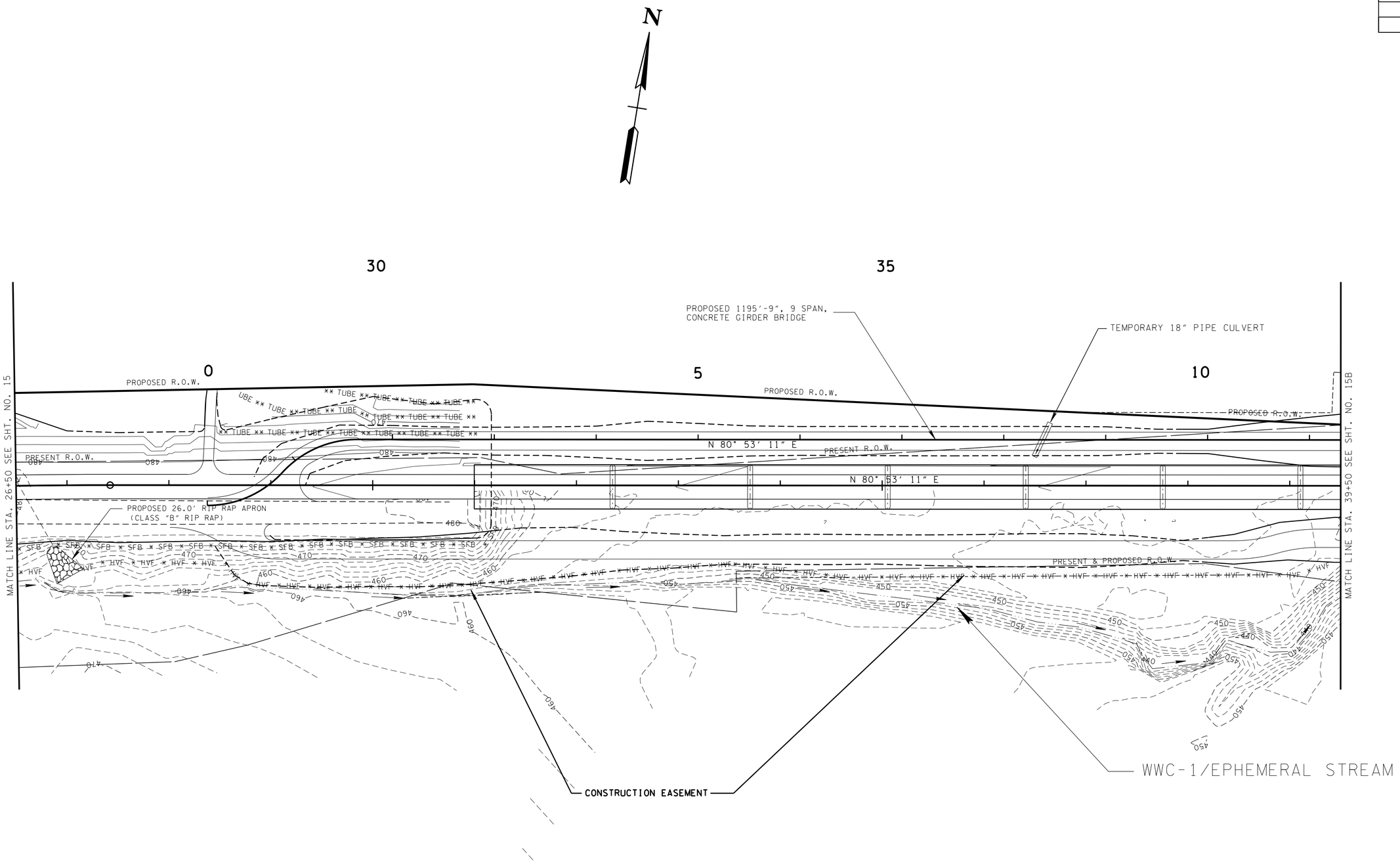
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	15A



ESPC PLAN STAGE 2:
TO COINCIDE WITH TRAFFIC CONTROL PLAN PHASE 1

NOTE: BOTH PROPOSED AND EXISTING CONTOURS SHOWN

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SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.26+50 TO STA.39+50

SCALE: 1"=50'

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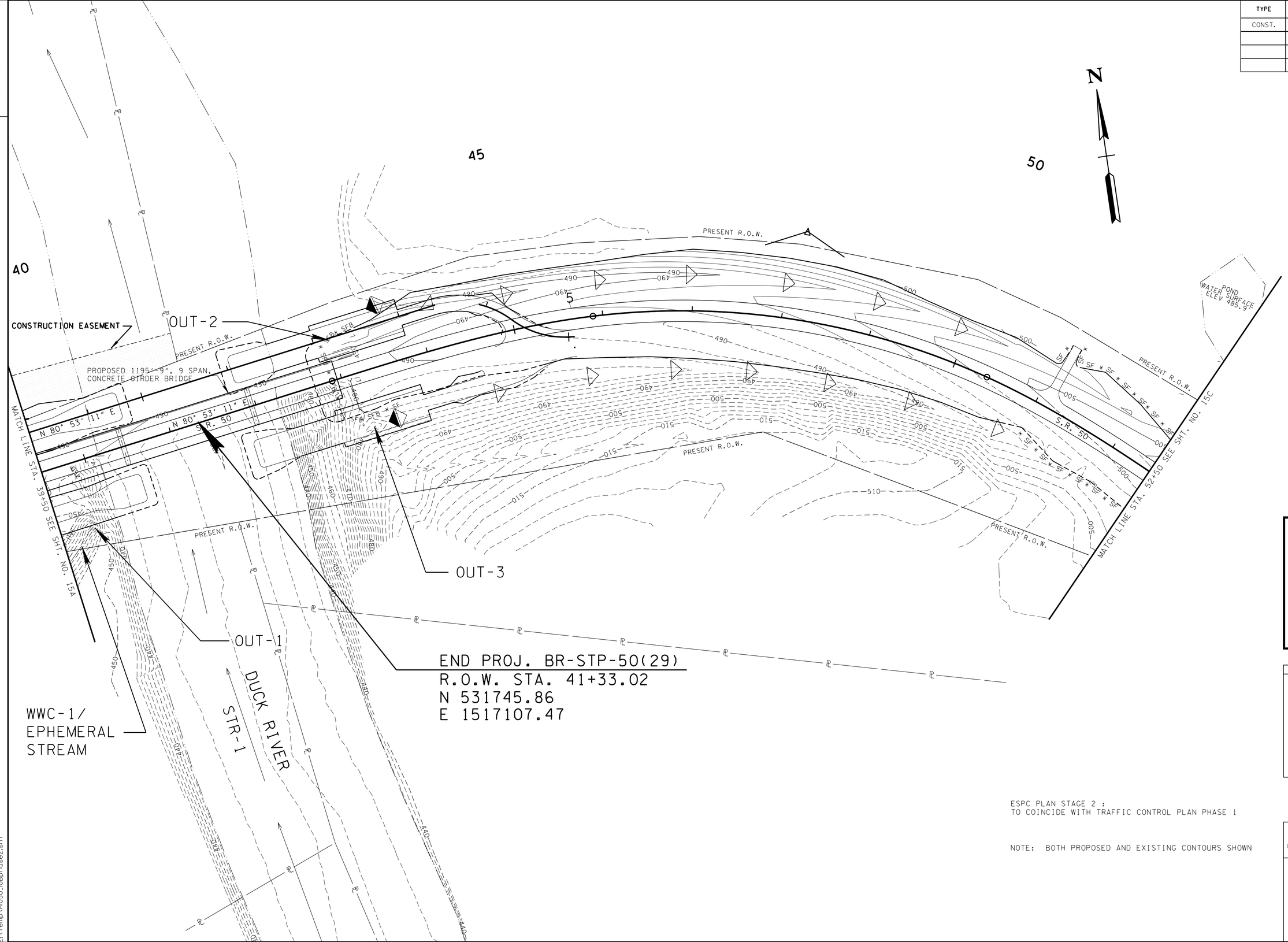
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	15B



ESPC PLAN STAGE 2 :
TO COINCIDE WITH TRAFFIC CONTROL PLAN PHASE 1

NOTE: BOTH PROPOSED AND EXISTING CONTOURS SHOWN

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.39+50 TO STA.52+50

SCALE: 1"=50'

01-MAY-2014 14:44
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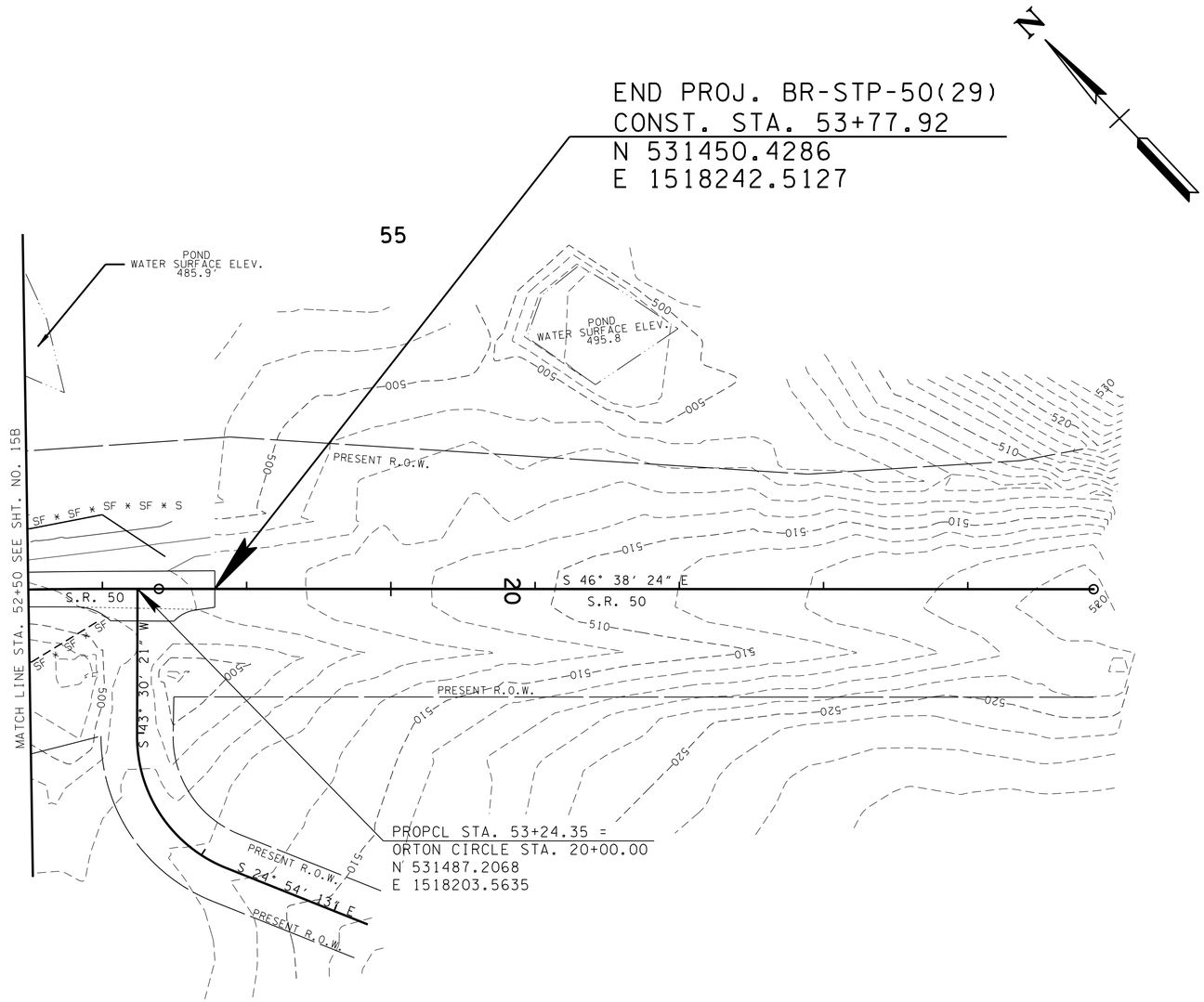
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	15C

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



ESPC PLAN STAGE 2:
TO COINCIDE WITH TRAFFIC CONTROL PLAN PHASE 1

NOTE: BOTH PROPOSED AND EXISTING CONTOURS SHOWN

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.52+50 TO STA.53+68

SCALE: 1"=50'

01-MAY-2014 14:44
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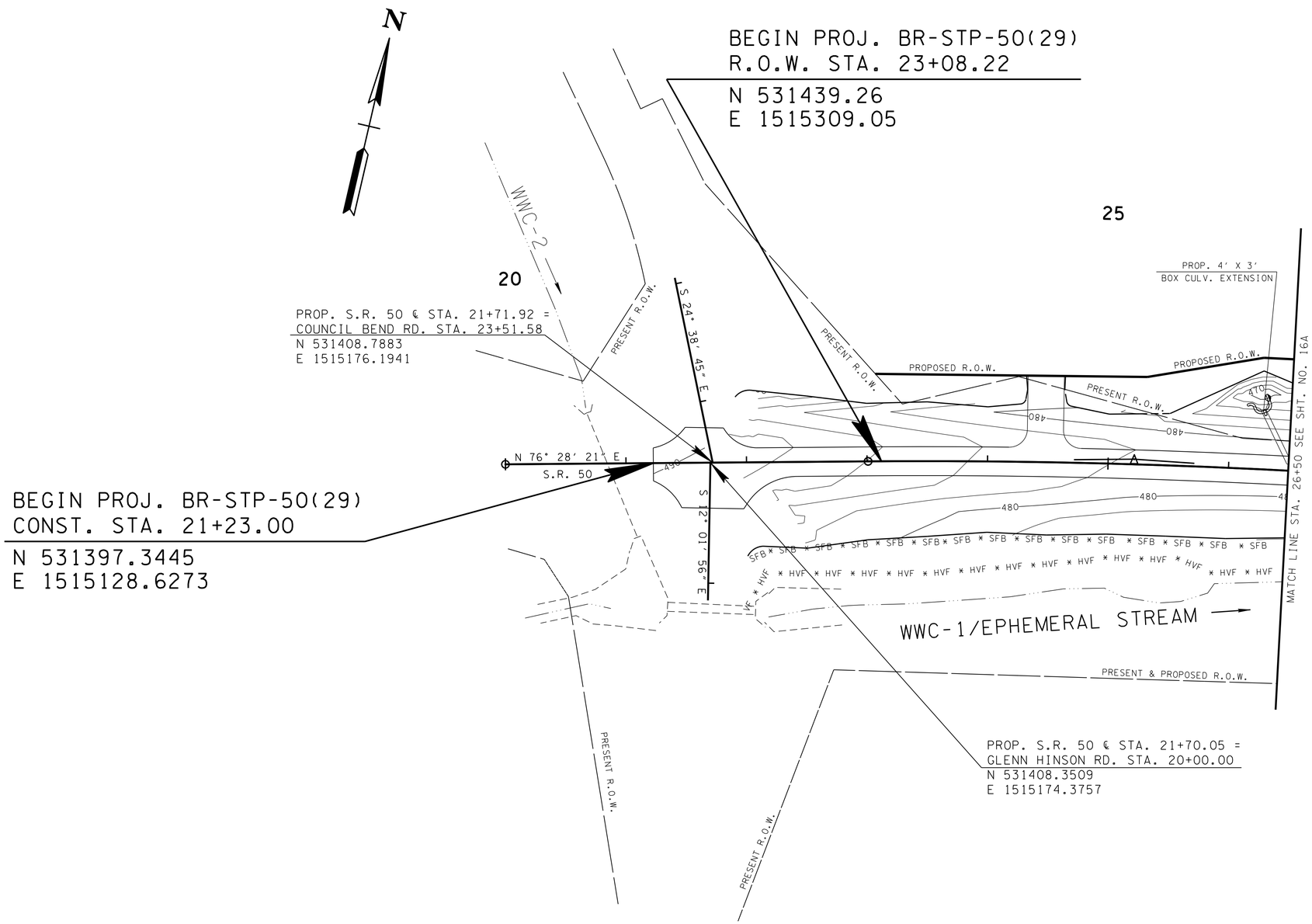
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	13A
CONST.	2014	BR-STP-50(29)	16

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



ESPC PLAN STAGE 3:
FINAL CONSTRUCTION PHASE

NOTE: PROPOSED CONTOURS SHOWN

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SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE COMMERCE
NO. 110014
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

BEGIN PROJ. TO STA.26+50

SCALE: 1"=50'

01-MAY-2014 14:44
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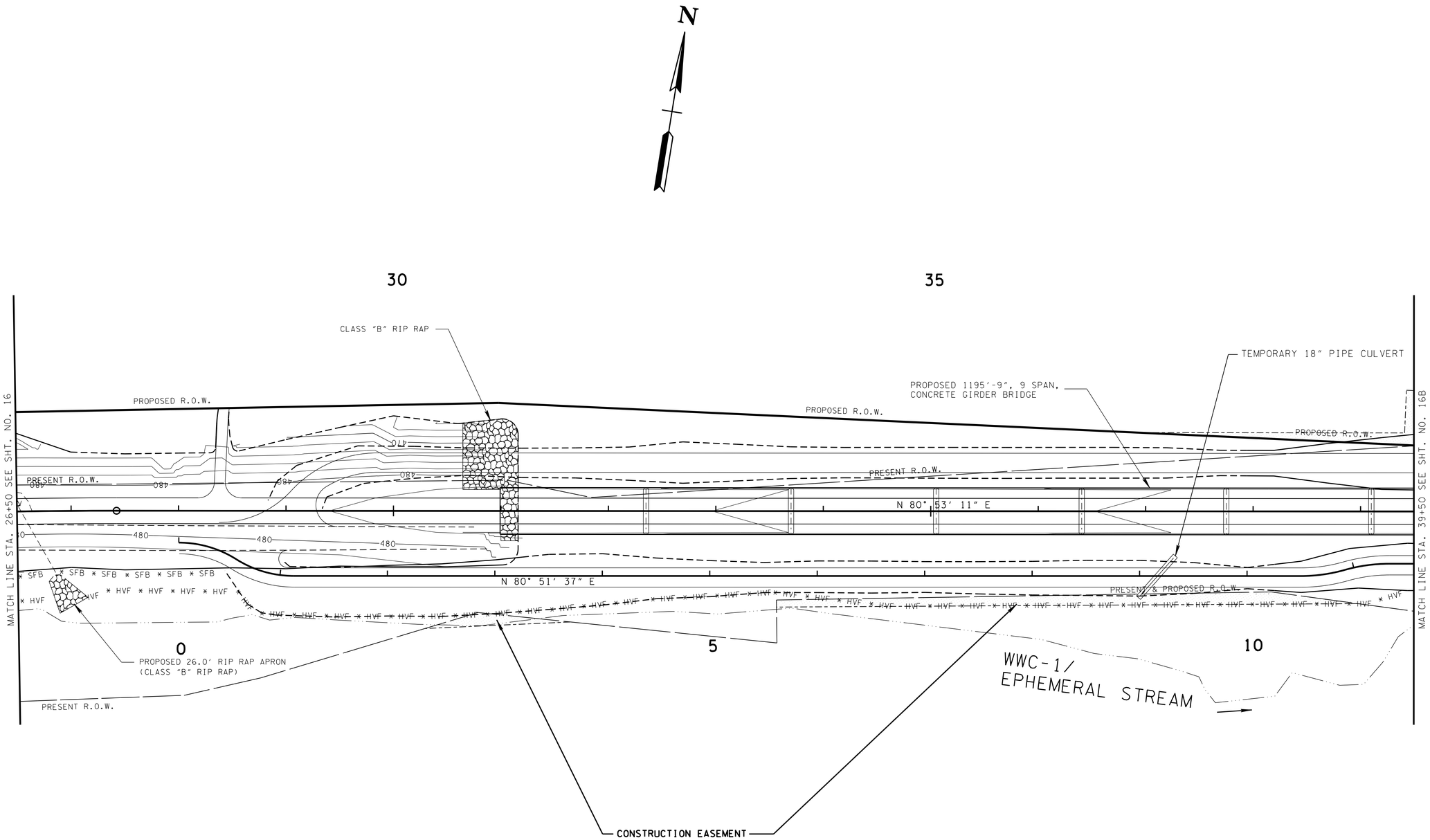
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	14A
CONST.	2014	BR-STP-50(29)	16A



ESPC PLAN STAGE 3:
FINAL CONSTRUCTION PHASE

NOTE: PROPOSED CONTOURS SHOWN

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.26+50 TO STA.39+50

SCALE: 1"=50'

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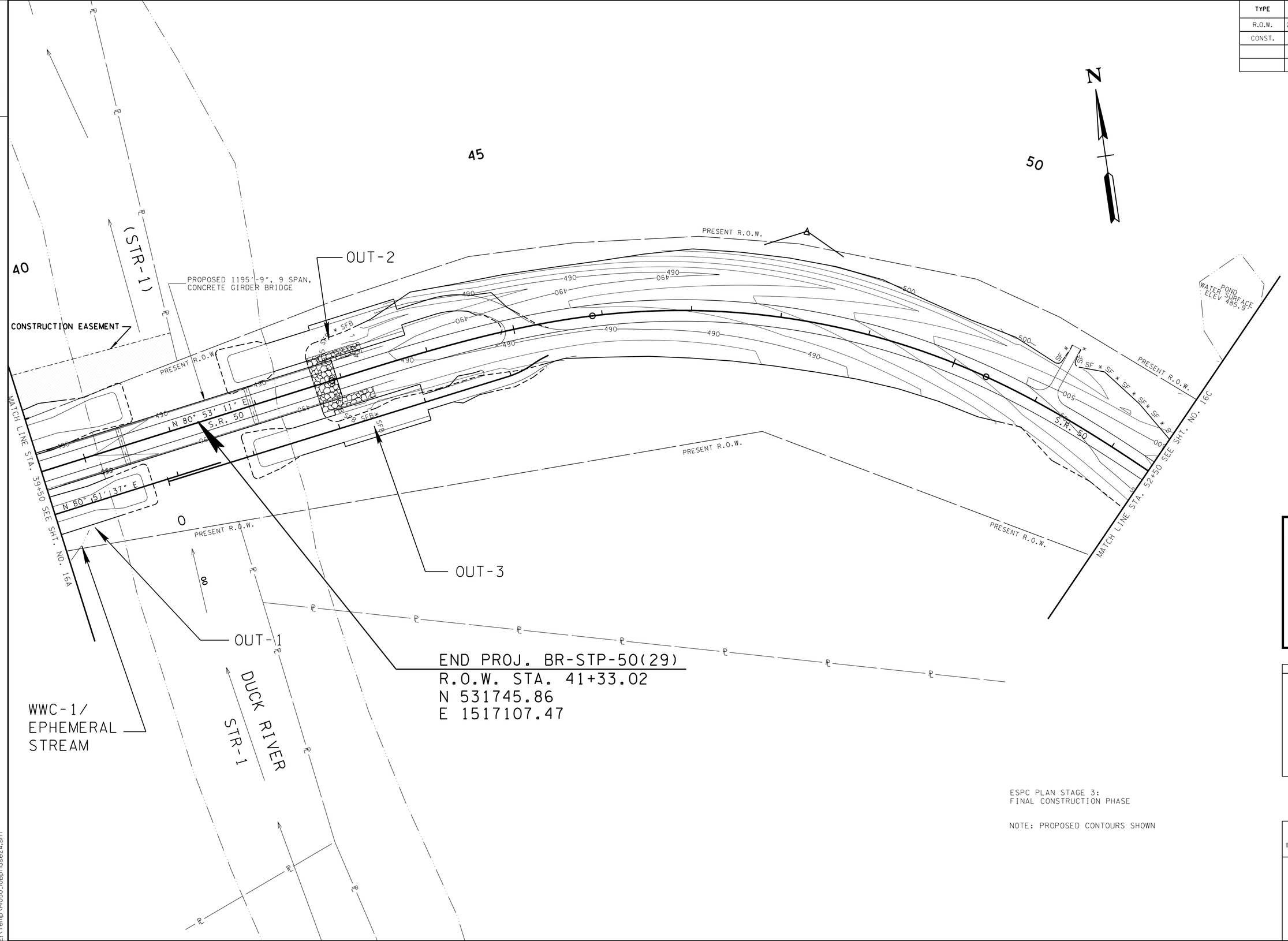
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	15A
CONST.	2014	BR-STP-50(29)	16B



ESPC PLAN STAGE 3:
FINAL CONSTRUCTION PHASE

NOTE: PROPOSED CONTOURS SHOWN

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.39+50 TO STA.52+50

SCALE: 1"=50'

01-MAY-2014 14:44
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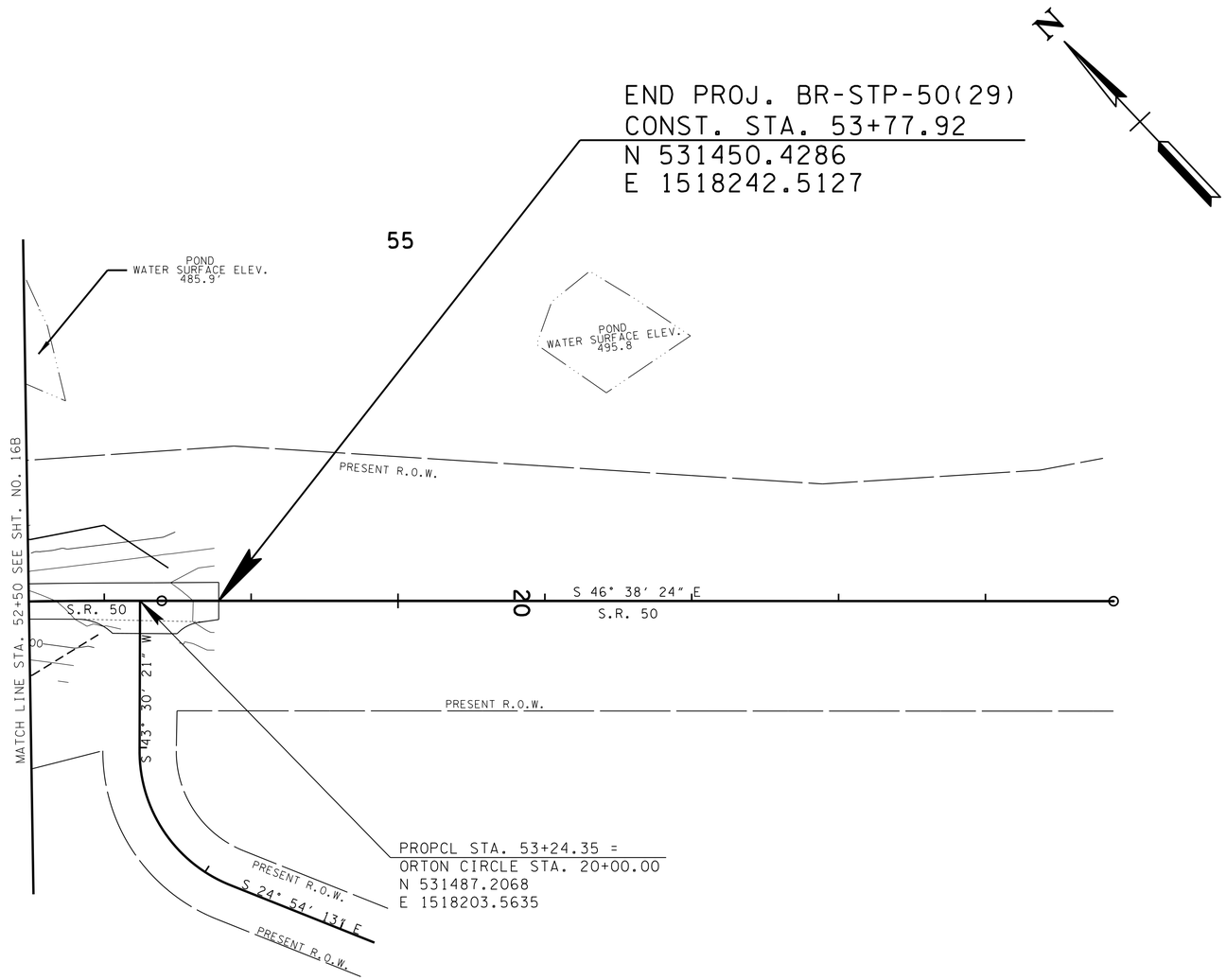
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	16A
CONST.	2014	BR-STP-50(29)	16C



ESPC PLAN STAGE 3:
FINAL CONSTRUCTION PHASE

NOTE: PROPOSED CONTOURS SHOWN

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.52+50 TO STA.53+68

SCALE: 1"=50'

01-MAY-2014 14:44
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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	17

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

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 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 3.5 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 WORKDAY THAT THE CONDITION IS CREATED.

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

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

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

FOR PRECEDING CONDITIONS a, b, AND c, THE CONTRACTOR SHALL USE THE SHOULDER DROP-OFF WARNING SIGN (W8-9A). 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 ONE MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

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

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

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 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.

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DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL NOTES

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	17A

TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
→	TRAFFIC FLOW
	CHANGEABLE MESSAGE SIGN
	CHANGEABLE MESSAGE SIGN

TRAFFIC CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	ITEM NO. 712-06 (S.F.)	SIZE	M.U.T.C.D. NO.
705-08.51	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	EACH	2			
712-01	TRAFFIC CONTROL	LS	1			
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	1700			
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	47			
712-04.50	PORTABLE BARRIER RAIL DELINEATOR	EACH	22			
	END ROAD WORK		2	16	48" X 24"	G20-2A
	ROAD WORK AHEAD		3	48	48" X 48"	W20-1
	ROAD WORK 1000 FT		2	32	48" X 48"	W20-1
	ROAD WORK 1/2 MILE		2	32	48" X 48"	W20-1
	ROAD WORK 1 MILE		2	32	48" X 48"	W20-1
712-06	SIGNS (CONSTRUCTION)	S.F. TOTAL:		160		
713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	2			
716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	2.5			
717-01	MOBILIZATION	LS	1			

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TRAFFIC CONTROL LEDGEND AND QUANTITIES

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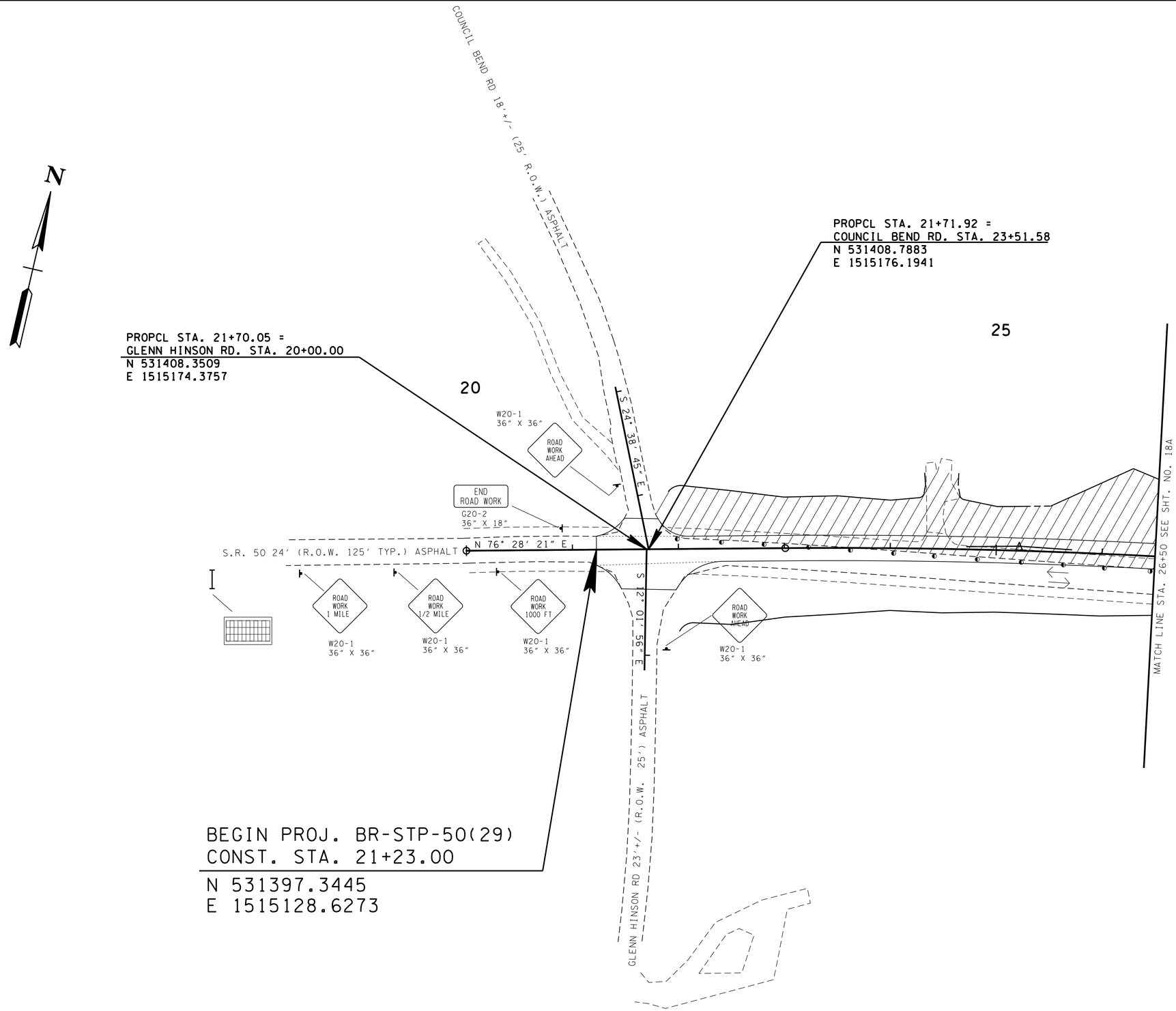
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	18



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TRAFFIC CONTROL PLAN PHASE I

BEGIN PROJ. TO STA.26+50

SCALE: 1"=50'

01-MAY-2014 14:46
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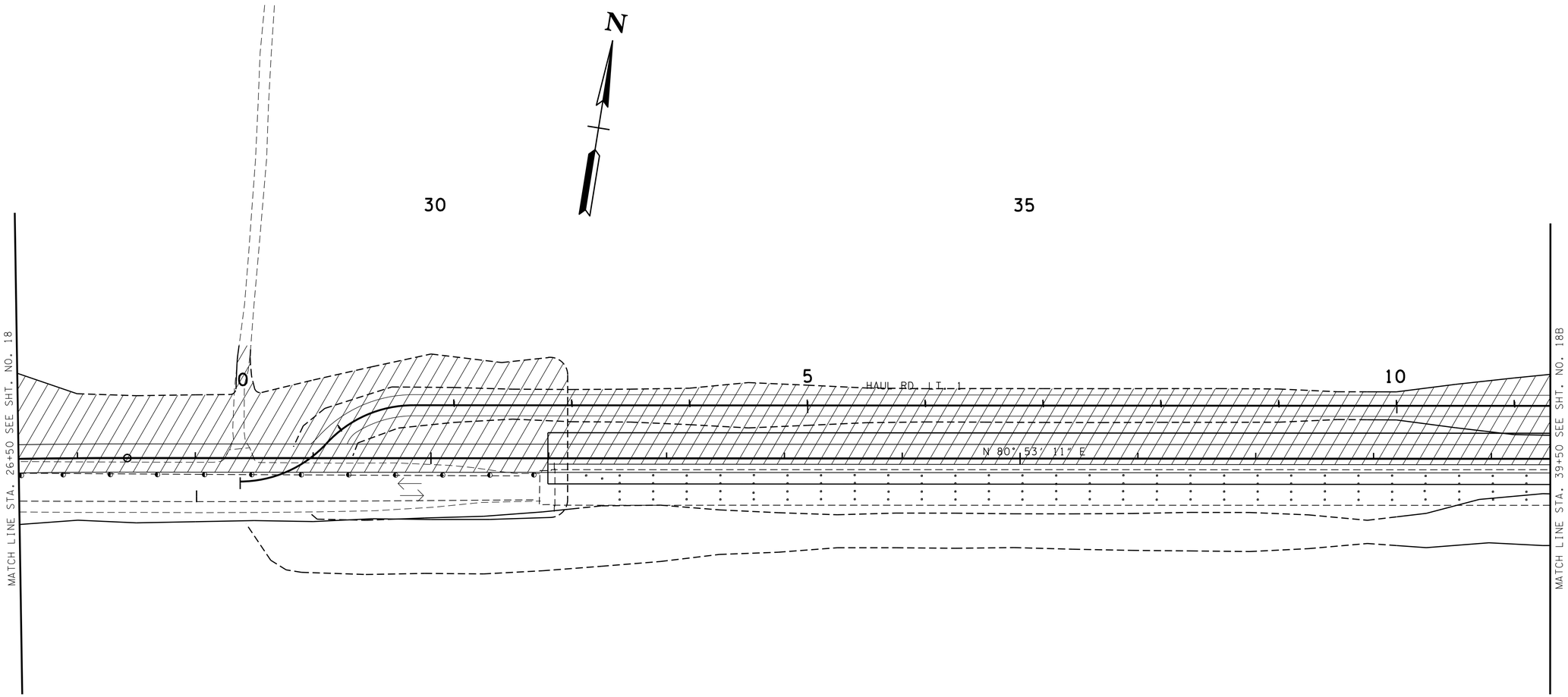
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	18A



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TRAFFIC CONTROL PLAN PHASE I

STA.26+50 TO STA.39+50

SCALE: 1"=50'

01-MAY-2014 15:10
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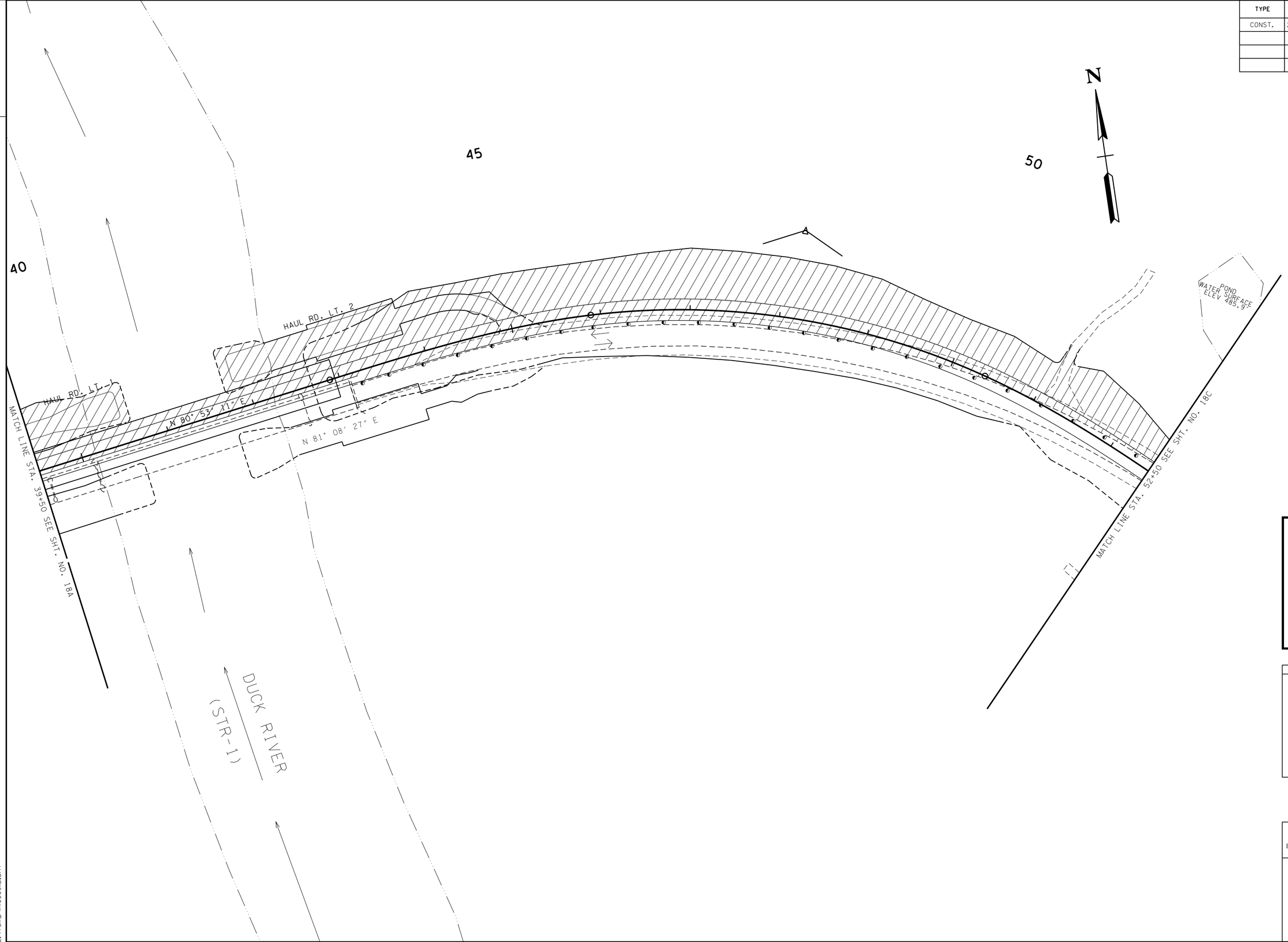
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	18B

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



UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

SHANE M. HESTER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 110114
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE I

STA.39+50 TO STA.52+50

SCALE: 1"=50'

02-MAY-2014 07:51
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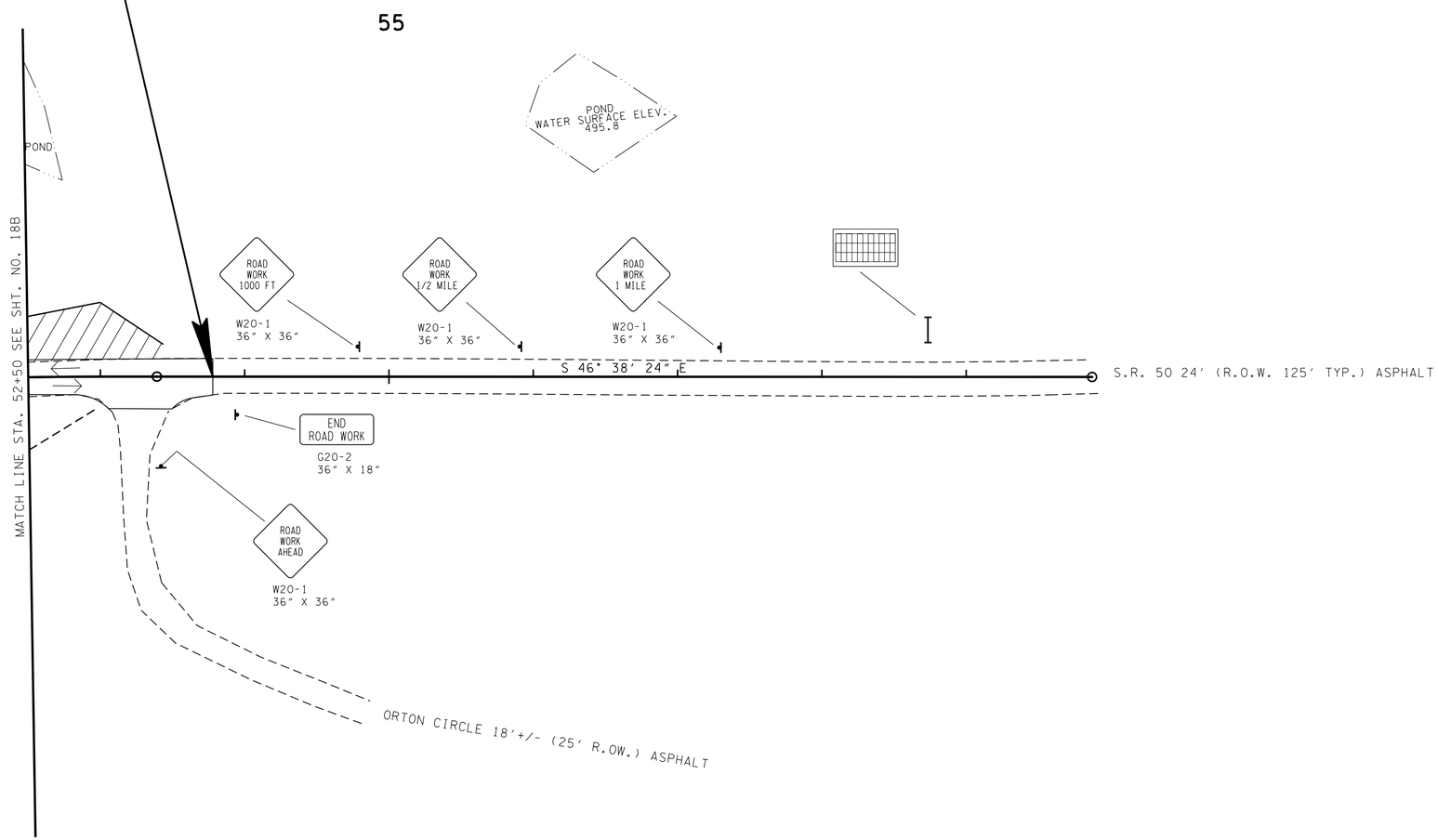
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	18C

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

END PROJ. BR-STP-50(29)
CONST. STA. 53+77.92
N 531450.4286
E 1518242.5127



UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE I

STA.52+50 TO END PROJ.

SCALE: 1"=50'

01-MAY-2014 14:46
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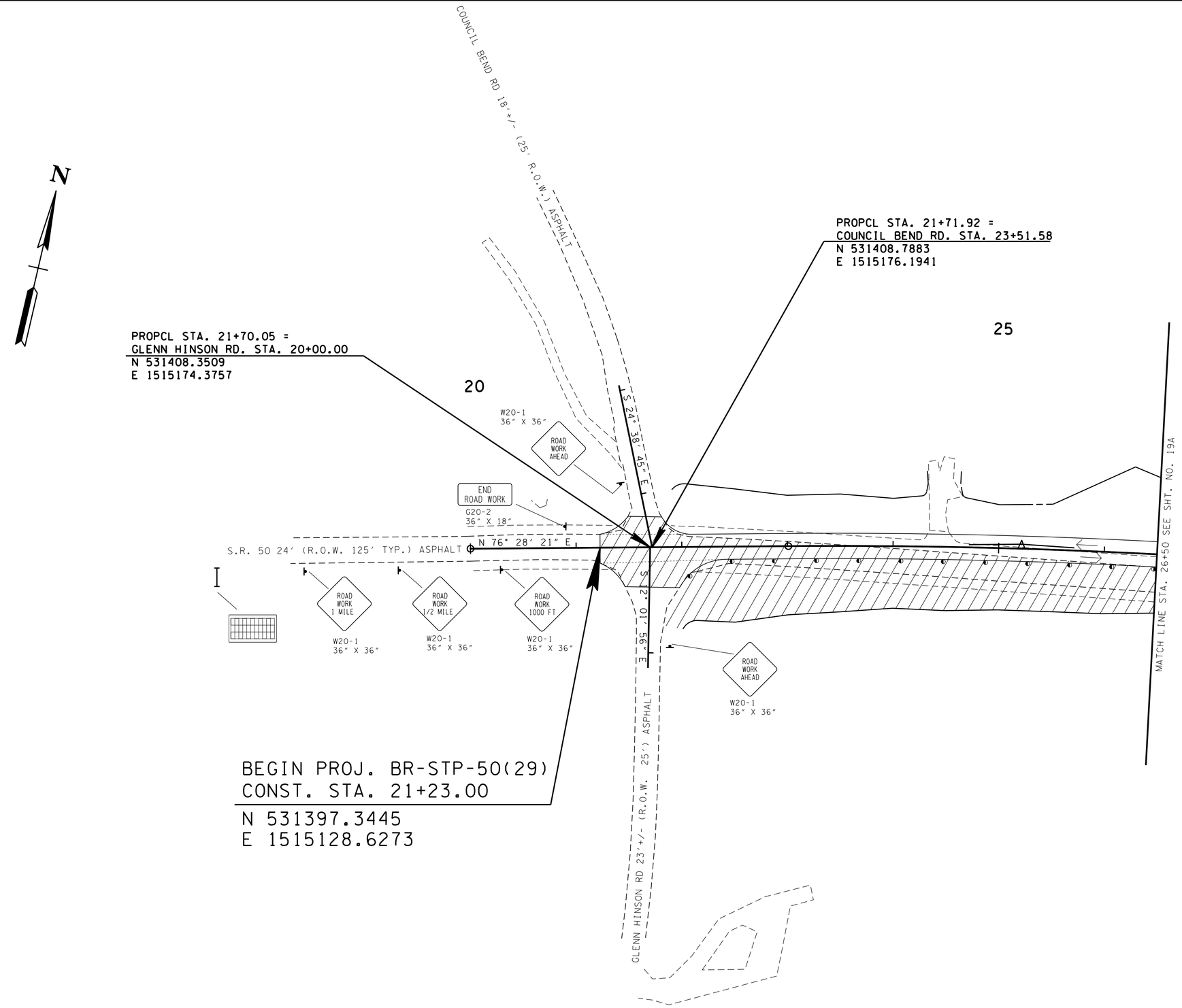
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	19



UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE II

BEGIN PROJ. TO STA.26+50

SCALE: 1"=50'

01-MAY-2014 14:46
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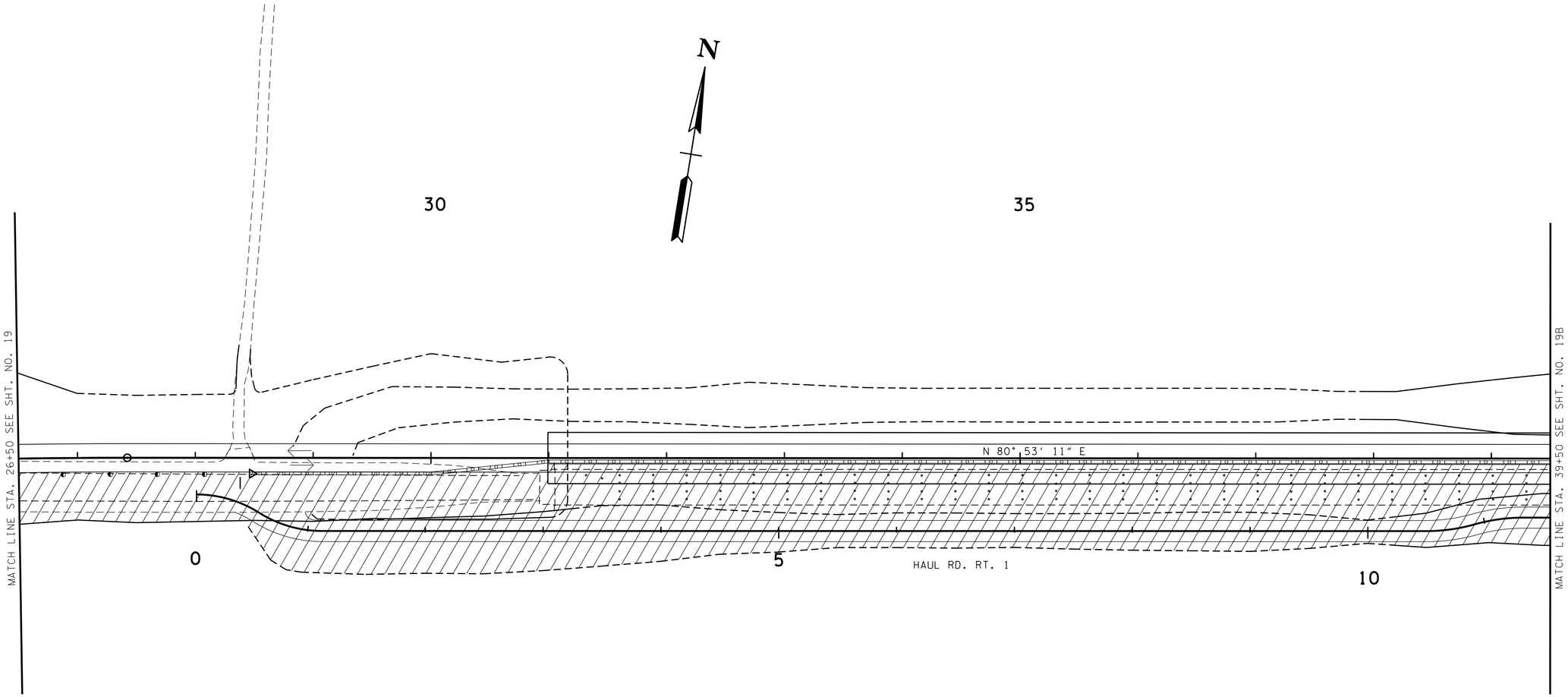
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	19A



UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE II

STA.26+50 TO STA.39+50

SCALE: 1"=50'

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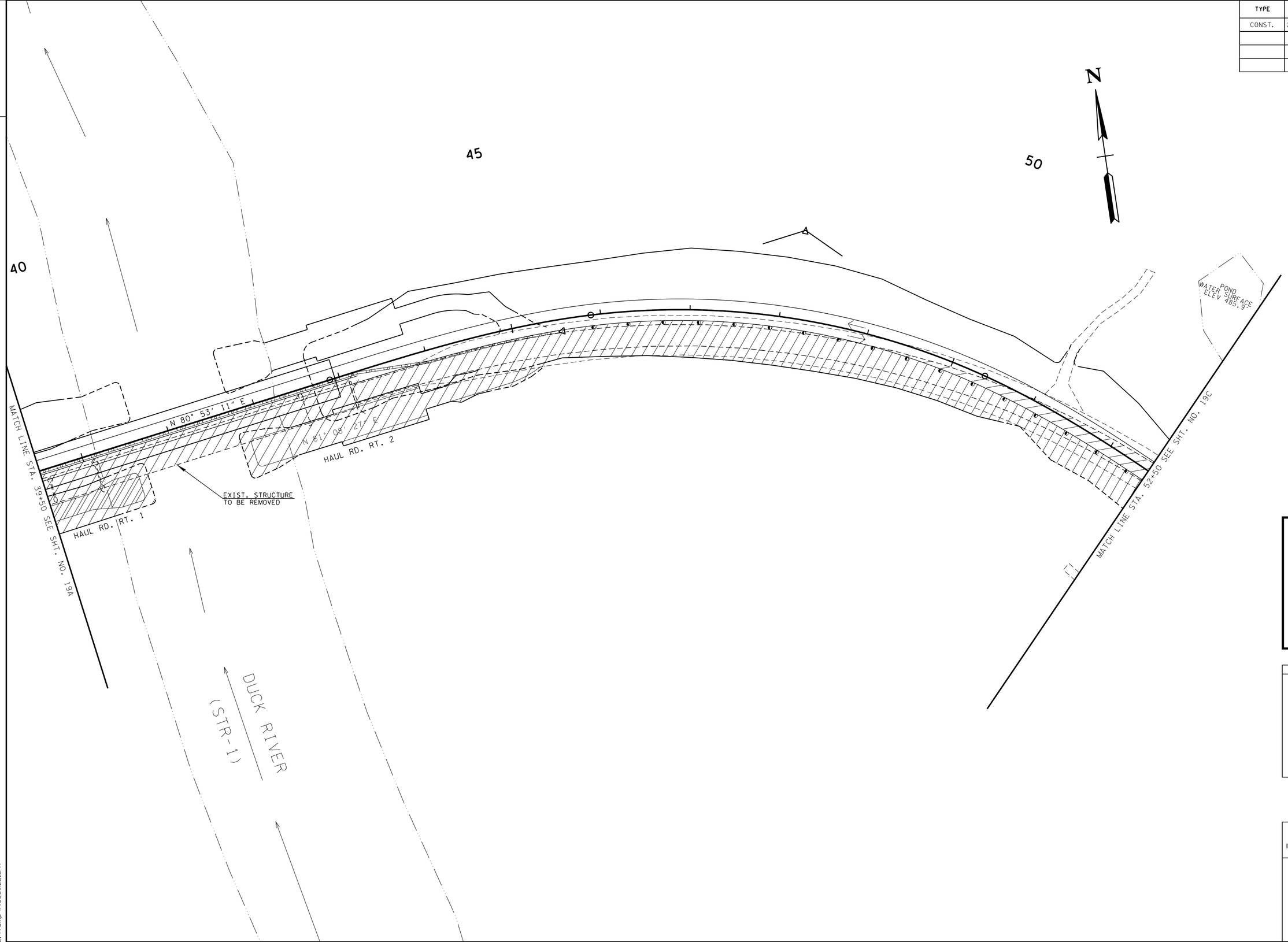
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	19B

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



UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00007 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE II

STA.39+50 TO STA.52+50

SCALE: 1"=50'

01-MAY-2014 14:46
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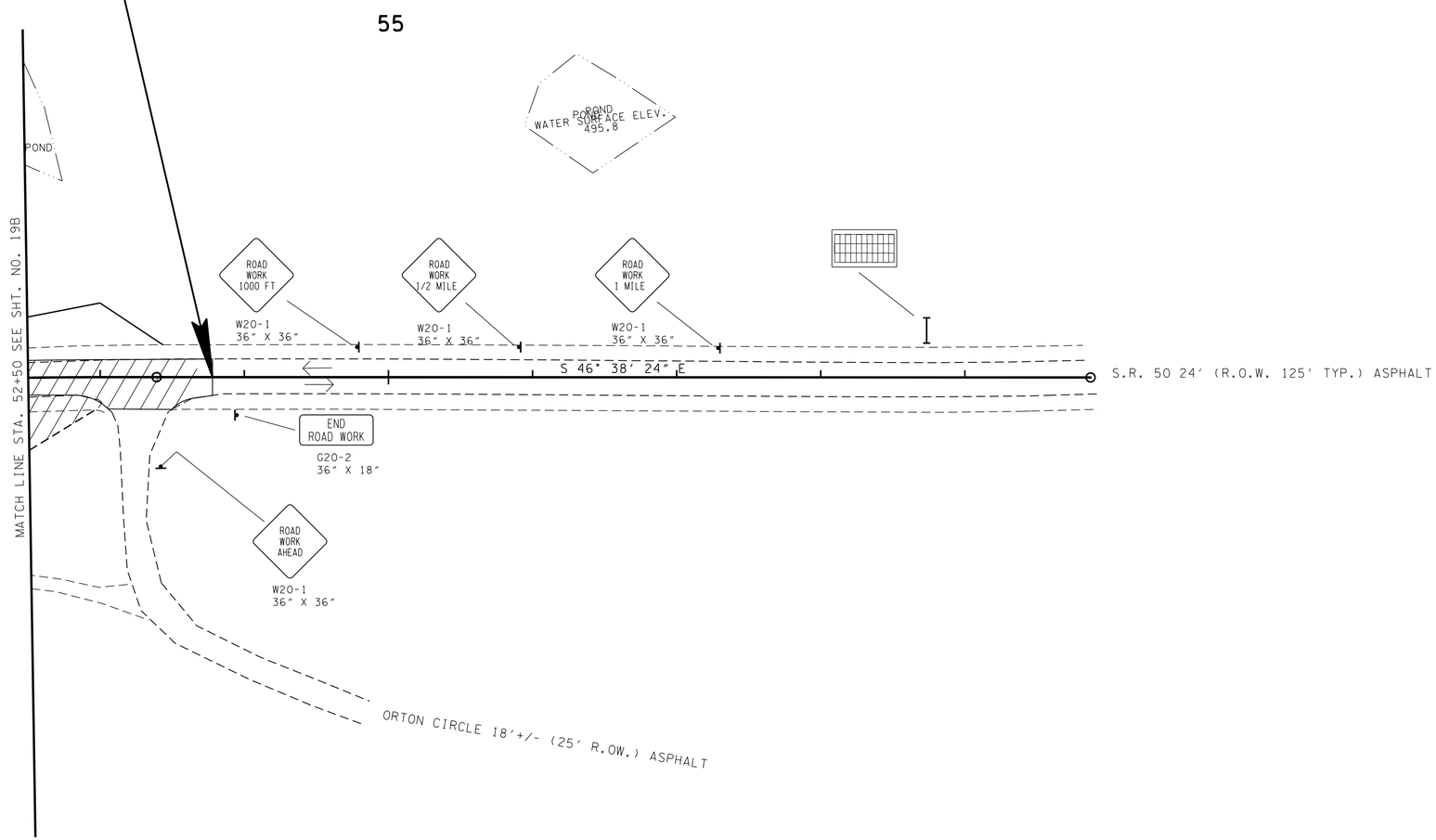
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	19C

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

END PROJ. BR-STP-50(29)
CONST. STA. 53+77.92
N 531450.4286
E 1518242.5127



UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE II

STA.52+50 TO END PROJ.

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2014	BR-STP-50(29)	20

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SEE STD. DWG. NO. T-S-19

SIGN NO	LEGEND	SHEET NO	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. C.Y.	REIN STEEL LBS.		
1	STOP R1-1		36"	36"									WHITE (REF.)	RED (REF.)	0.080" SHEET ALUMINUM	P8	h=13'-0"				5'-0"	
2	W1-2(L)		36"	36"									BLACK	YELLOW (REF.)	0.100" SHEET ALUMINUM	P8	13'-6"				5'- 0"	
7	W1-2(R) 50 M.P.H. W13-1		36" 24"	36" 24"									BLACK	YELLOW (REF.)	0.100" SHEET ALUMINUM 0.080" SHEET ALUMINUM	P5	12'- 6"				5'- 0"	REQUIRES SLIP BASE. SEE STD. DRAWING T-S-23A. USE ITEM NO. 713-11.21.
9	W1-2(L) 50 M.P.H. W13-1		36" 24"	36" 24"									BLACK	YELLOW (REF.)	0.100" SHEET ALUMINUM 0.080" SHEET ALUMINUM	P5	12'- 6"				5'- 0"	REQUIRES SLIP BASE. SEE STD. DRAWING T-S-23A. USE ITEM NO. 713-11.21.
3	W2-1		36"	36"									BLACK	YELLOW (REF.)	0.100" SHEET ALUMINUM	P8	h=13'-6"				5'-0"	
4	DUCK RIVER TN-5		24"	18"									WHITE (REF.)	GREEN (REF.)	0.080" SHEET ALUMINUM	U3	h1=13'-0" h2=13'-6"				5'-0"	
6	CHARLES THOMPSON BRIDGE TN-26		72"	18"											0.100" SHEET ALUMINUM		h1=13'-0" h2=13'-6"					
5	14 50 TN-17B 14 50 TN-17B		6"	19"									WHITE (REF.)	GREEN (REF.)	0.080" SHEET ALUMINUM	U1	h=10'-6"				4'-0"	MOUNT SIGNS BACK TO BACK

U-POST SUBSTITUTION TABLE

BID ITEM 713M11.01	SUBSTITUTION ALLOWED
2#/FT U1	2#/FT MU1 or 2#/FT R1
2.5#/FT U3	2.5#/FT MU3 or 3#/FT R2*
3#/FT U6	

* PAID AT A RATE OF 2.5#/FT

ROLAND LEE JONES REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 17640 STATE OF TENNESSEE

UNOFFICIAL SET

NOT FOR BIDDING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SIGN SCHEDULE

FILE NO.

AT L.M 14.04
P.E. NO. 41056-1217-94
COMPRISED IN OCT 2011 BY LES/DAL

PREPARED BY LES/DAL

01-MAY-2014 14:46
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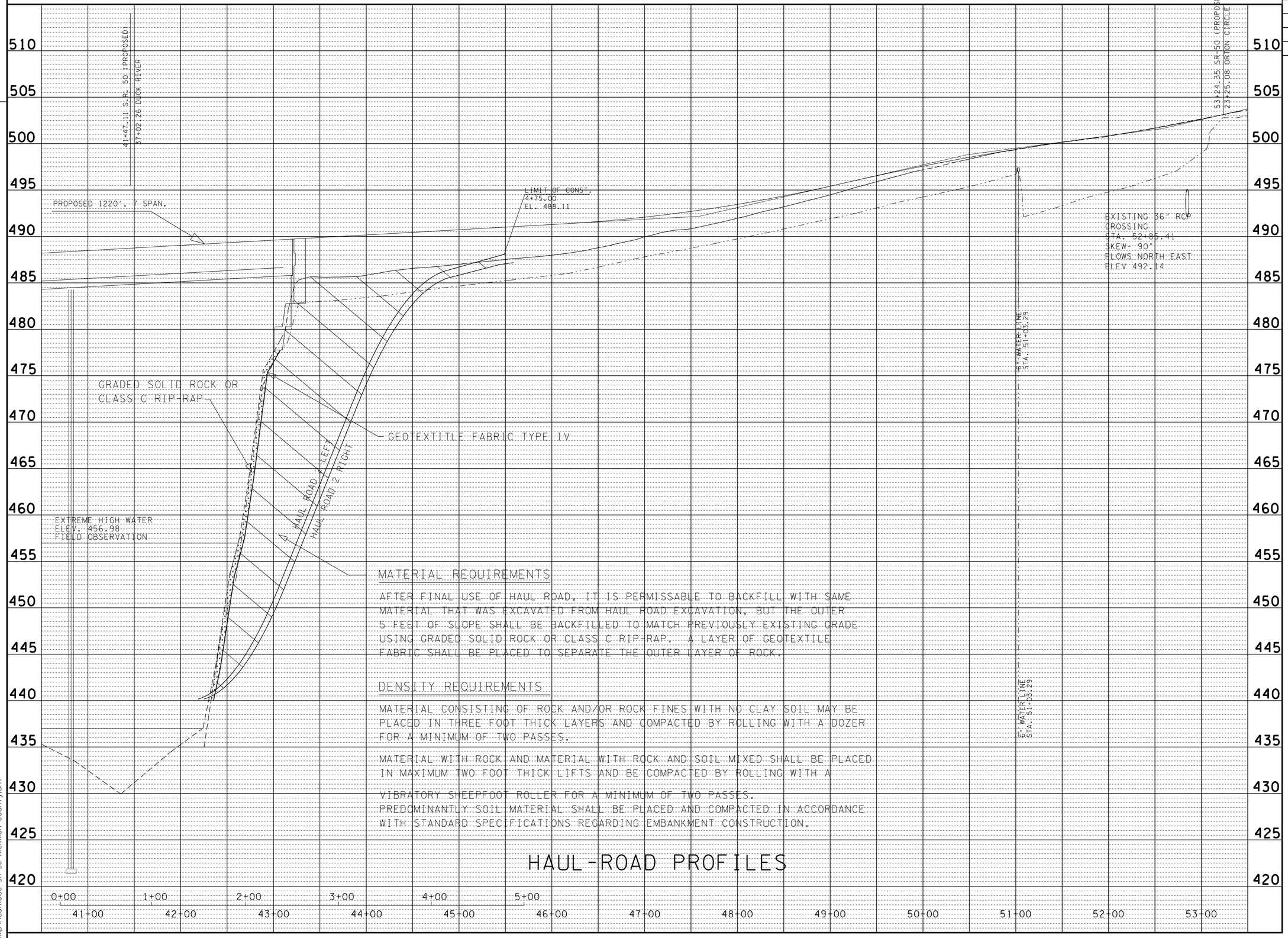
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	21

DESIGN DIVISION

FILE NO.



MATERIAL REQUIREMENTS

AFTER FINAL USE OF HAUL ROAD, IT IS PERMISSABLE TO BACKFILL WITH SAME MATERIAL THAT WAS EXCAVATED FROM HAUL ROAD EXCAVATION, BUT THE OUTER 5 FEET OF SLOPE SHALL BE BACKFILLED TO MATCH PREVIOUSLY EXISTING GRADE USING GRADED SOLID ROCK OR CLASS C RIP-RAP. A LAYER OF GEOTEXTILE FABRIC SHALL BE PLACED TO SEPARATE THE OUTER LAYER OF ROCK.

DENSITY REQUIREMENTS

MATERIAL CONSISTING OF ROCK AND/OR ROCK FINES WITH NO CLAY SOIL MAY BE PLACED IN THREE FOOT THICK LAYERS AND COMPACTED BY ROLLING WITH A DOZER FOR A MINIMUM OF TWO PASSES.

MATERIAL WITH ROCK AND MATERIAL WITH ROCK AND SOIL MIXED SHALL BE PLACED IN MAXIMUM TWO FOOT THICK LIFTS AND BE COMPACTED BY ROLLING WITH A VIBRATORY SHEEPFOOT ROLLER FOR A MINIMUM OF TWO PASSES.

PREDOMINANTLY SOIL MATERIAL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS REGARDING EMBANKMENT CONSTRUCTION.

HAUL-ROAD PROFILES

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

ROBERT JOWERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 100906
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BACKFILL PLACEMENT

STATE ROUTE 50

HAUL ROAD 2

LEFT AND RIGHT

HICKMAN COUNTY

01-MAY-2014 14:46
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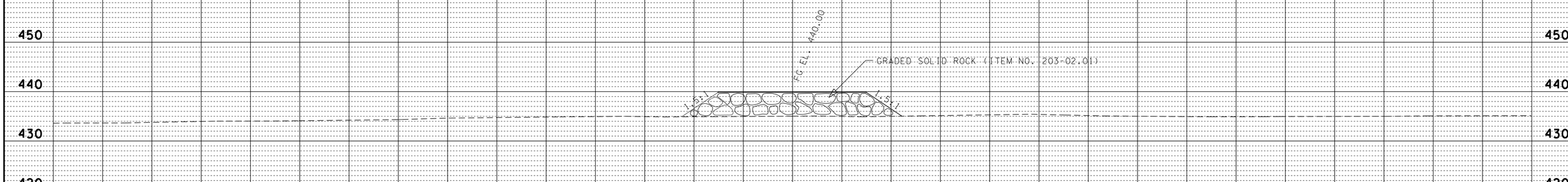
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	21A

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

REPRESENTATIVE FOR STATION 1+20 TO STATION 1+50



ITEM NO. 203-02.01 GRADED SOLID ROCK

BORROW EXCAVATION (GRADED SOLID ROCK) SHALL CONSIST OF THE REMOVAL AND SATISFACTORY PLACEMENT OF SOUND, NON-DEGRADABLE ROCK WITH A MAXIMUM SIZE OF 3 FT. (1 M). AT LEAST 50 PERCENT OF THE ROCK SHALL BE UNIFORMLY DISTRIBUTED BETWEEN 1 FT. (30 CM) AND 3 FT. (1 M) IN DIAMETER AND NO GREATER THAN 10 PERCENT SHALL BE LESS 2 IN. (50 MM) IN DIAMETER. THE MATERIAL SHALL BE ROUGHLY EQUI-DIMENSIONAL IN SHAPE. THIN, SLABBY MATERIAL WILL NOT BE ACCEPTED. THE CONTRACTOR SHALL BE REQUIRED TO PROCESS THE MATERIAL WITH AN ACCEPTABLE MECHANICAL SCREENING PROCESS THAT PRODUCES THE REQUIRED GRADATION. WHEN THE MATERIAL IS SUBJECTED TO FIVE ALTERATIONS OF THE SODIUM SULFATE SOUNDNESS TEST (AASHTO T 104), THE WEIGHTED PERCENTAGE OF LOSS SHALL BE NOT MORE THAN 12. THE MATERIAL SHALL BE APPROVED BY THE ENGINEER BEFORE USE.

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

ROBERT JOWERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 103008
STATE OF TENNESSEE

STATE ROUTE 50
HAUL ROAD 2 LEFT
HICKMAN COUNTY

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 120 130

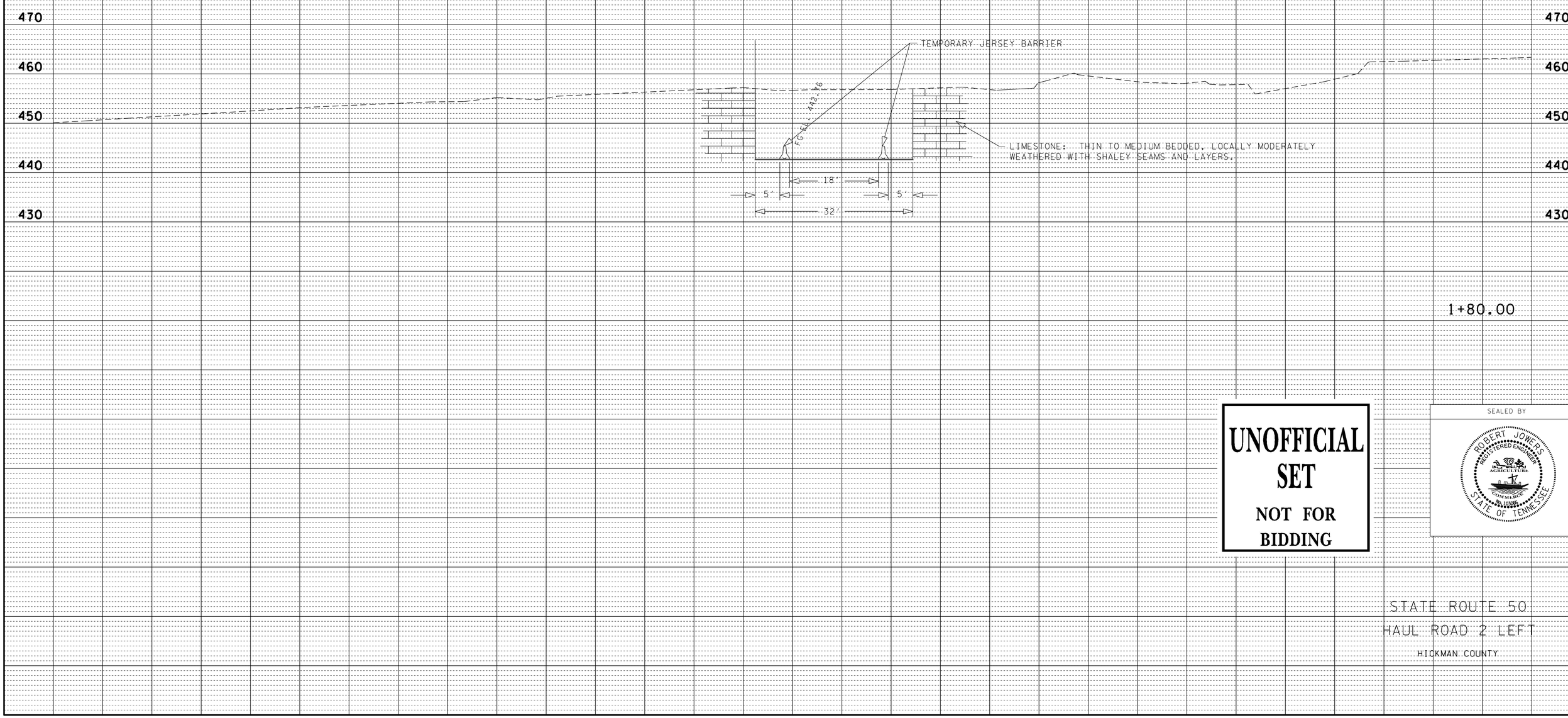
01-MAY-2014 14:46
E:\Temp\haul road left sections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	21B

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

REPRESENTATIVE FOR STATION 1+50 TO STATION 2+00



UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

ROBERT JOWERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 103008
STATE OF TENNESSEE

STATE ROUTE 50
HAUL ROAD 2 LEFT
HICKMAN COUNTY

01-MAY-2014 14:46
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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	21C

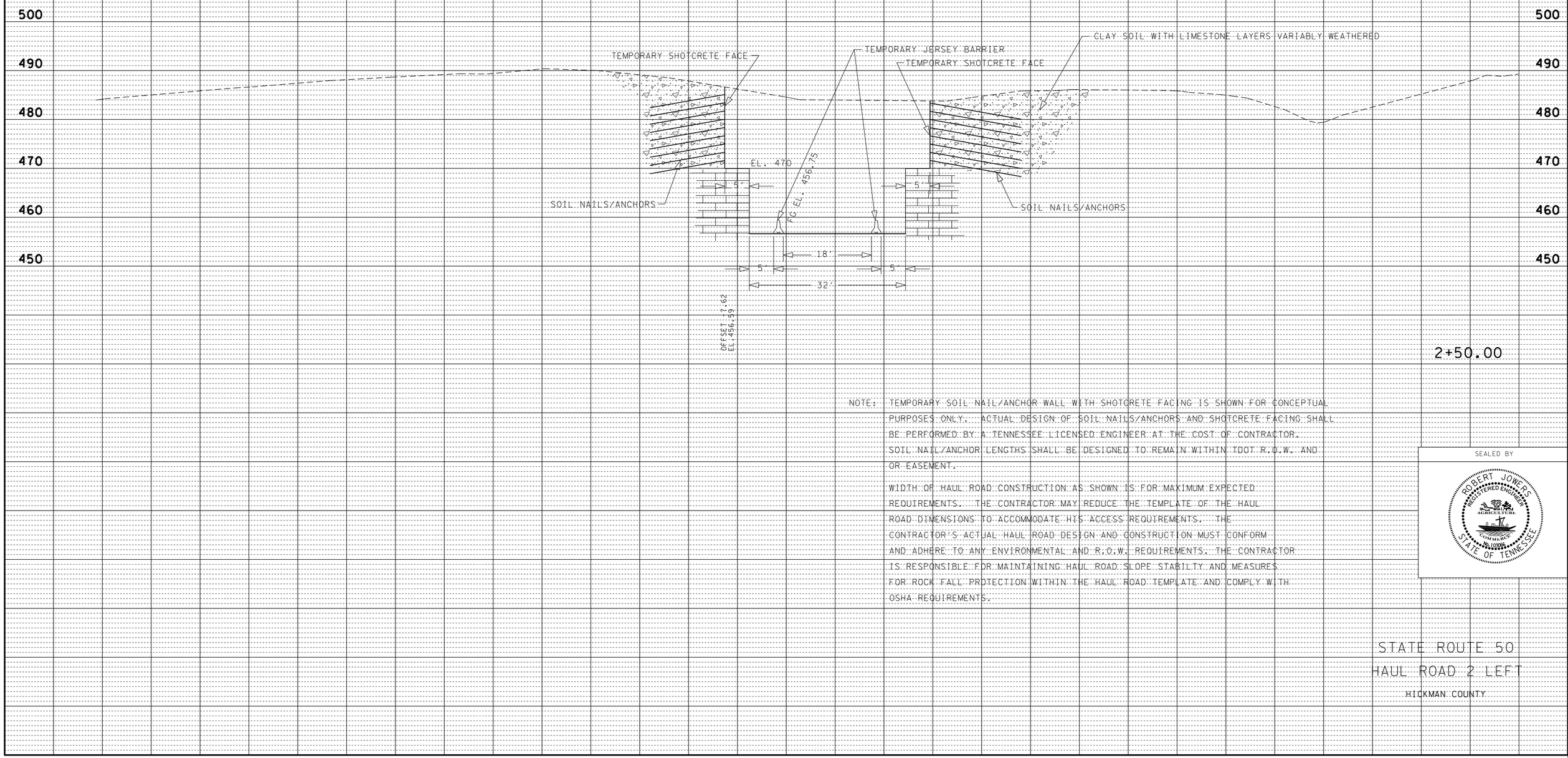
UNOFFICIAL SET

NOT FOR BIDDING

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

REPRESENTATIVE FOR STATION 2+00 TO STATION 3+00



2+50.00

NOTE: TEMPORARY SOIL NAIL/ANCHOR WALL WITH SHOTCRETE FACING IS SHOWN FOR CONCEPTUAL PURPOSES ONLY. ACTUAL DESIGN OF SOIL NAILS/ANCHORS AND SHOTCRETE FACING SHALL BE PERFORMED BY A TENNESSEE LICENSED ENGINEER AT THE COST OF CONTRACTOR. SOIL NAIL/ANCHOR LENGTHS SHALL BE DESIGNED TO REMAIN WITHIN TDOT R.O.W. AND OR EASEMENT.

WIDTH OF HAUL ROAD CONSTRUCTION AS SHOWN IS FOR MAXIMUM EXPECTED REQUIREMENTS. THE CONTRACTOR MAY REDUCE THE TEMPLATE OF THE HAUL ROAD DIMENSIONS TO ACCOMMODATE HIS ACCESS REQUIREMENTS. THE CONTRACTOR'S ACTUAL HAUL ROAD DESIGN AND CONSTRUCTION MUST CONFORM AND ADHERE TO ANY ENVIRONMENTAL AND R.O.W. REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING HAUL ROAD SLOPE STABILTY AND MEASURES FOR ROCK FALL PROTECTION WITHIN THE HAUL ROAD TEMPLATE AND COMPLY W.TH OSHA REQUIREMENTS.

SEALED BY

STATE ROUTE 50

HAUL ROAD 2 LEFT

HICKMAN COUNTY

01-MAY-2014 14:46
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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	21D

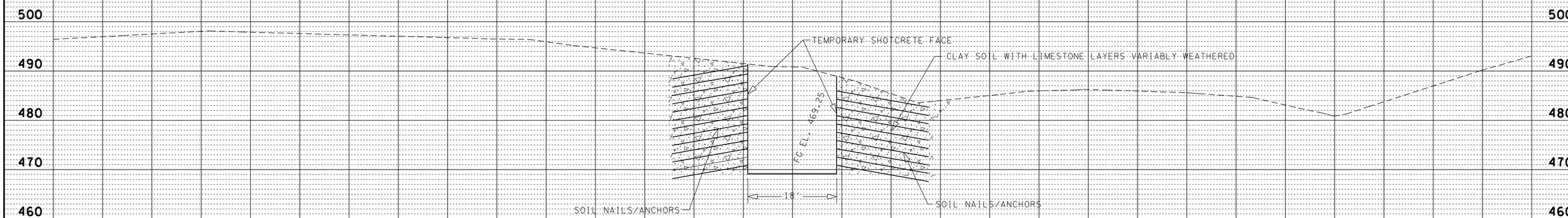
UNOFFICIAL SET

NOT FOR BIDDING

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

REPRESENTATIVE FOR STATION 3+00 TO STATION 3+80



3+00.00

NOTE: TEMPORARY SOIL NAIL/ANCHOR WALL WITH SHOTCRETE FACING IS SHOWN FOR CONCEPTUAL PURPOSES ONLY. ACTUAL DESIGN OF SOIL NAILS/ANCHORS AND SHOTCRETE FACING SHALL BE PERFORMED BY A TENNESSEE LICENSED ENGINEER AT THE COST OF CONTRACTOR. SOIL NAIL/ANCHOR LENGTHS SHALL BE DESIGNED TO REMAIN WITHIN TDOT R.O.W. AND OR EASEMENT.

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SEALED BY

STATE ROUTE 50

HAUL ROAD 2 LEFT

HICKMAN COUNTY

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 120 130 140 150

01-MAY-2014 14:46
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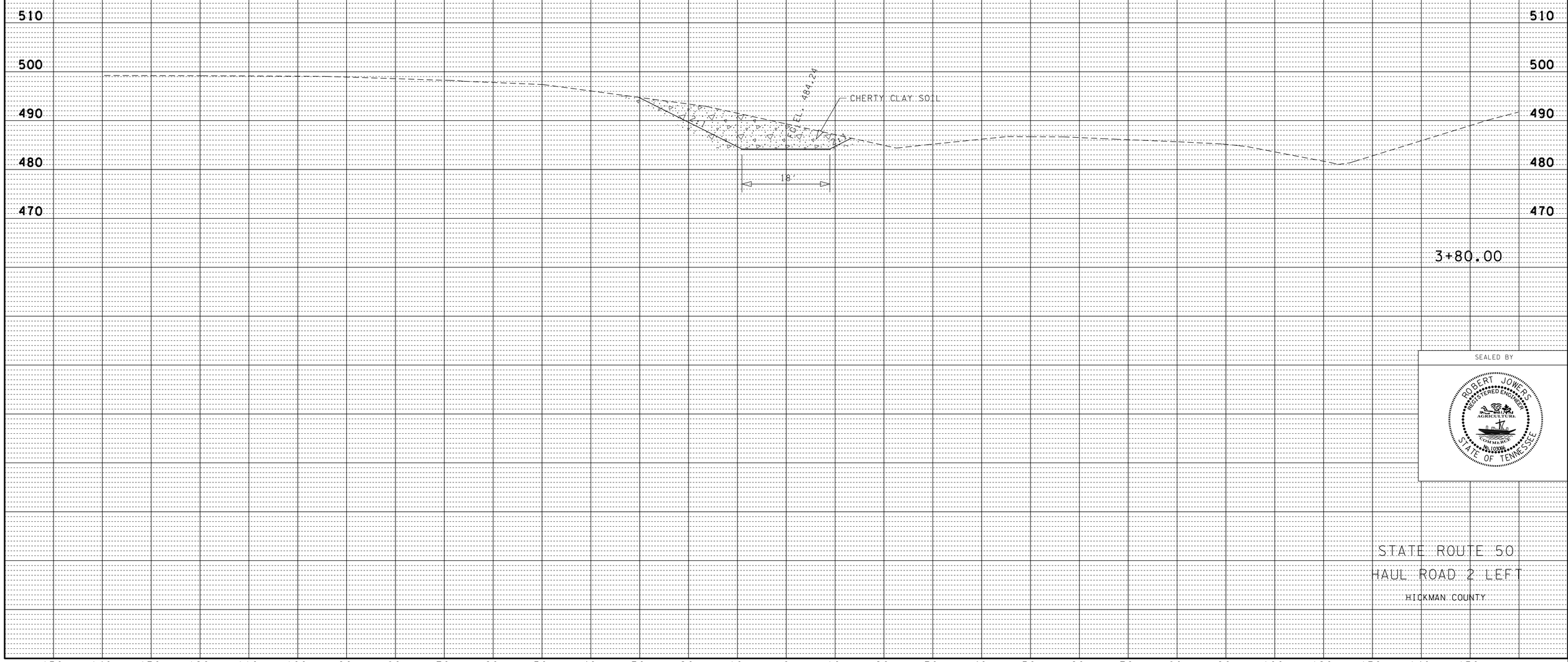
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	21E

UNOFFICIAL SET

NOT FOR BIDDING

REPRESENTATIVE FOR STATION 3+80 TO END OF HAUL ROAD 2 LEFT



SEALED BY

ROBERT JOWERS
REGISTERED ENGINEER
TENNESSEE DEPARTMENT OF AGRICULTURE
COMMERCE
No. 10008
STATE OF TENNESSEE

STATE ROUTE 50

HAUL ROAD 2 LEFT

HICKMAN COUNTY

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

01-MAY-2014 14:46
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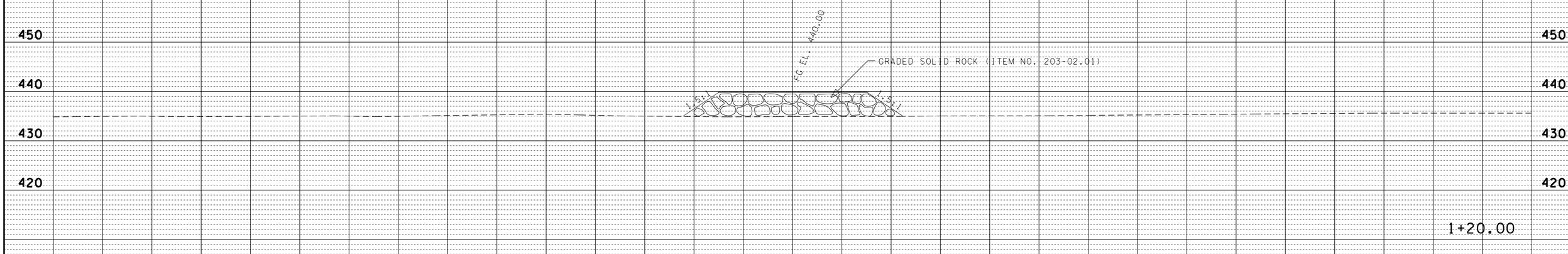
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	21F

UNOFFICIAL SET

NOT FOR BIDDING

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

REPRESENTATIVE FOR STATION 1+10 TO STATION 1+40



ITEM NO. 203-02.01 GRADED SOLID ROCK

BORROW EXCAVATION (GRADED SOLID ROCK) SHALL CONSIST OF THE REMOVAL AND SATISFACTORY PLACEMENT OF SOUND, NON-DEGRADABLE ROCK WITH A MAXIMUM SIZE OF 3 FT. (1 M). AT LEAST 50 PERCENT OF THE ROCK SHALL BE UNIFORMLY DISTRIBUTED BETWEEN 1 FT. (30 CM) AND 3 FT. (1 M) IN DIAMETER AND NO GREATER THAN 10 PERCENT SHALL BE LESS 2 IN. (50 MM) IN DIAMETER. THE MATERIAL SHALL BE ROUGHLY EQUI-DIMENSIONAL IN SHAPE. THIN, SLABBY MATERIAL WILL NOT BE ACCEPTED. THE CONTRACTOR SHALL BE REQUIRED TO PROCESS THE MATERIAL WITH AN ACCEPTABLE MECHANICAL SCREENING PROCESS THAT PRODUCES THE REQUIRED GRADATION. WHEN THE MATERIAL IS SUBJECTED TO FIVE ALTERATIONS OF THE SODIUM SULFATE SOUNDNESS TEST (AASHTO T 104), THE WEIGHTED PERCENTAGE OF LOSS SHALL BE NOT MORE THAN 12. THE MATERIAL SHALL BE APPROVED BY THE ENGINEER BEFORE USE.

SEALED BY

STATE ROUTE 50

HAUL ROAD 2 RIGHT

HICKMAN COUNTY

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 120 130 140 150

01-MAY-2014 14:46
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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	21G

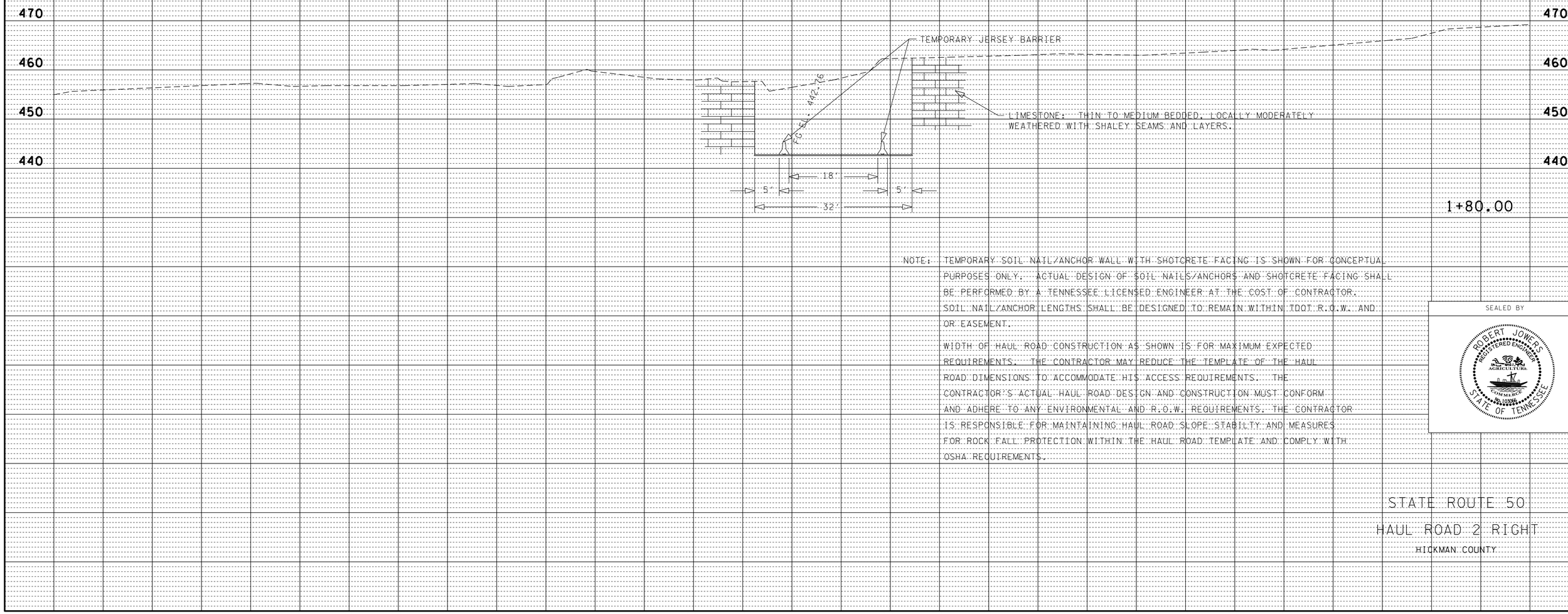
UNOFFICIAL SET

NOT FOR BIDDING

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

REPRESENTATIVE FOR STATION 1+50 TO STATION 2+00



NOTE: TEMPORARY SOIL NAIL/ANCHOR WALL WITH SHOTCRETE FACING IS SHOWN FOR CONCEPTUAL PURPOSES ONLY. ACTUAL DESIGN OF SOIL NAILS/ANCHORS AND SHOTCRETE FACING SHALL BE PERFORMED BY A TENNESSEE LICENSED ENGINEER AT THE COST OF CONTRACTOR. SOIL NAIL/ANCHOR LENGTHS SHALL BE DESIGNED TO REMAIN WITHIN TDOT R.O.W. AND OR EASEMENT.

WIDTH OF HAUL ROAD CONSTRUCTION AS SHOWN IS FOR MAXIMUM EXPECTED REQUIREMENTS. THE CONTRACTOR MAY REDUCE THE TEMPLATE OF THE HAUL ROAD DIMENSIONS TO ACCOMMODATE HIS ACCESS REQUIREMENTS. THE CONTRACTOR'S ACTUAL HAUL ROAD DESIGN AND CONSTRUCTION MUST CONFORM AND ADHERE TO ANY ENVIRONMENTAL AND R.O.W. REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING HAUL ROAD SLOPE STABILTY AND MEASURES FOR ROCK FALL PROTECTION WITHIN THE HAUL ROAD TEMPLATE AND COMPLY WITH OSHA REQUIREMENTS.

SEALED BY

STATE ROUTE 50

HAUL ROAD 2 RIGHT

HICKMAN COUNTY

01-MAY-2014 14:46
E:\Temp\haulroad right sections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	21H

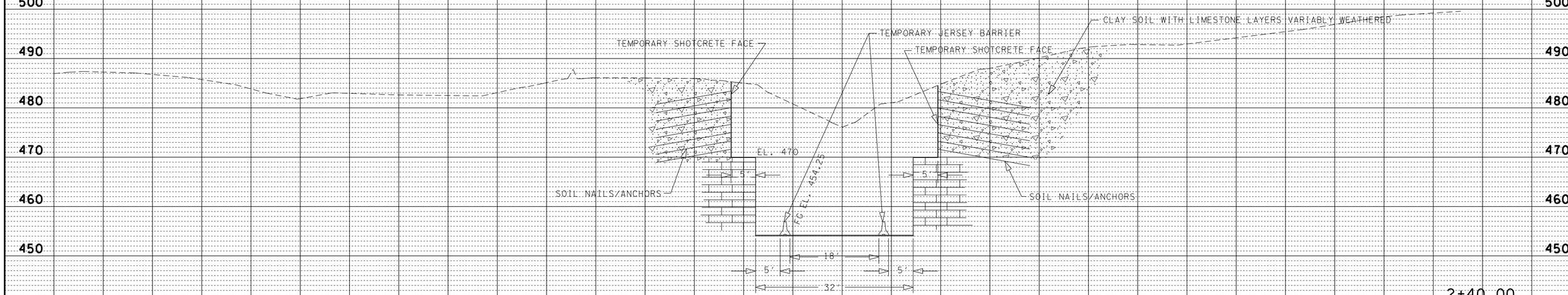
UNOFFICIAL SET

NOT FOR BIDDING

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

REPRESENTATIVE FOR STATION 2+00 TO STATION 3+00



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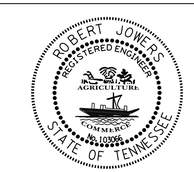
SEALED BY



STATE ROUTE 50

HAUL ROAD 2 RIGHT

HICKMAN COUNTY

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 120 130 140 150

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E:\Temp\haulroad right sections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	21I

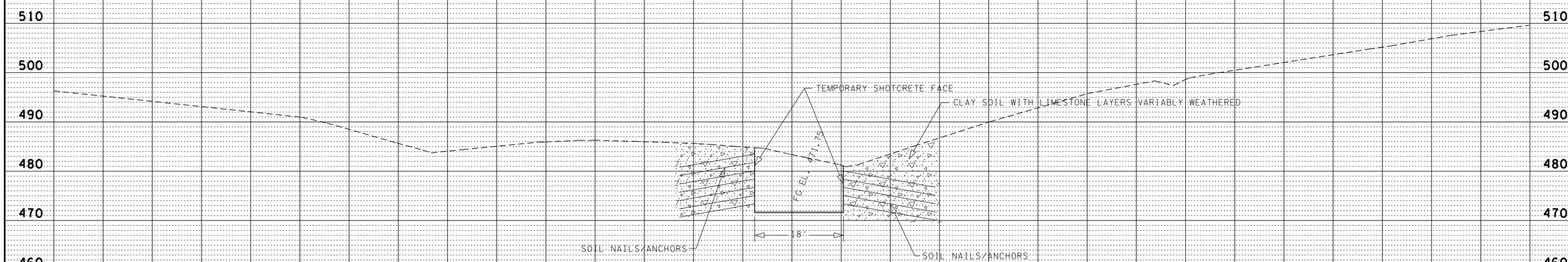
UNOFFICIAL SET

NOT FOR BIDDING

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

REPRESENTATIVE FOR STATION 3+00 TO STATION 3+30



NOTE: TEMPORARY SOIL NAIL/ANCHOR WALL WITH SHOTCRETE FACING IS SHOWN FOR CONCEPTUAL PURPOSES ONLY. ACTUAL DESIGN OF SOIL NAILS/ANCHORS AND SHOTCRETE FACING SHALL BE PERFORMED BY A TENNESSEE LICENSED ENGINEER AT THE COST OF CONTRACTOR. SOIL NAIL/ANCHOR LENGTHS SHALL BE DESIGNED TO REMAIN WITHIN TDOT R.O.W. AND OR EASEMENT.

WIDTH OF HAUL ROAD CONSTRUCTION AS SHOWN IS FOR MAXIMUM EXPECTED REQUIREMENTS. THE CONTRACTOR MAY REDUCE THE TEMPLATE OF THE HAUL ROAD DIMENSIONS TO ACCOMMODATE HIS ACCESS REQUIREMENTS. THE CONTRACTOR'S ACTUAL HAUL ROAD DESIGN AND CONSTRUCTION MUST CONFORM AND ADHERE TO ANY ENVIRONMENTAL AND R.O.W. REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING HAUL ROAD SLOPE STABILTY AND MEASURES FOR ROCK FALL PROTECTION WITHIN THE HAUL ROAD TEMPLATE AND COMPLY WITH OSHA REQUIREMENTS.

SEALED BY

STATE ROUTE 50

HAUL ROAD 2 RIGHT

HICKMAN COUNTY

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 120 130 140 150

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	21J

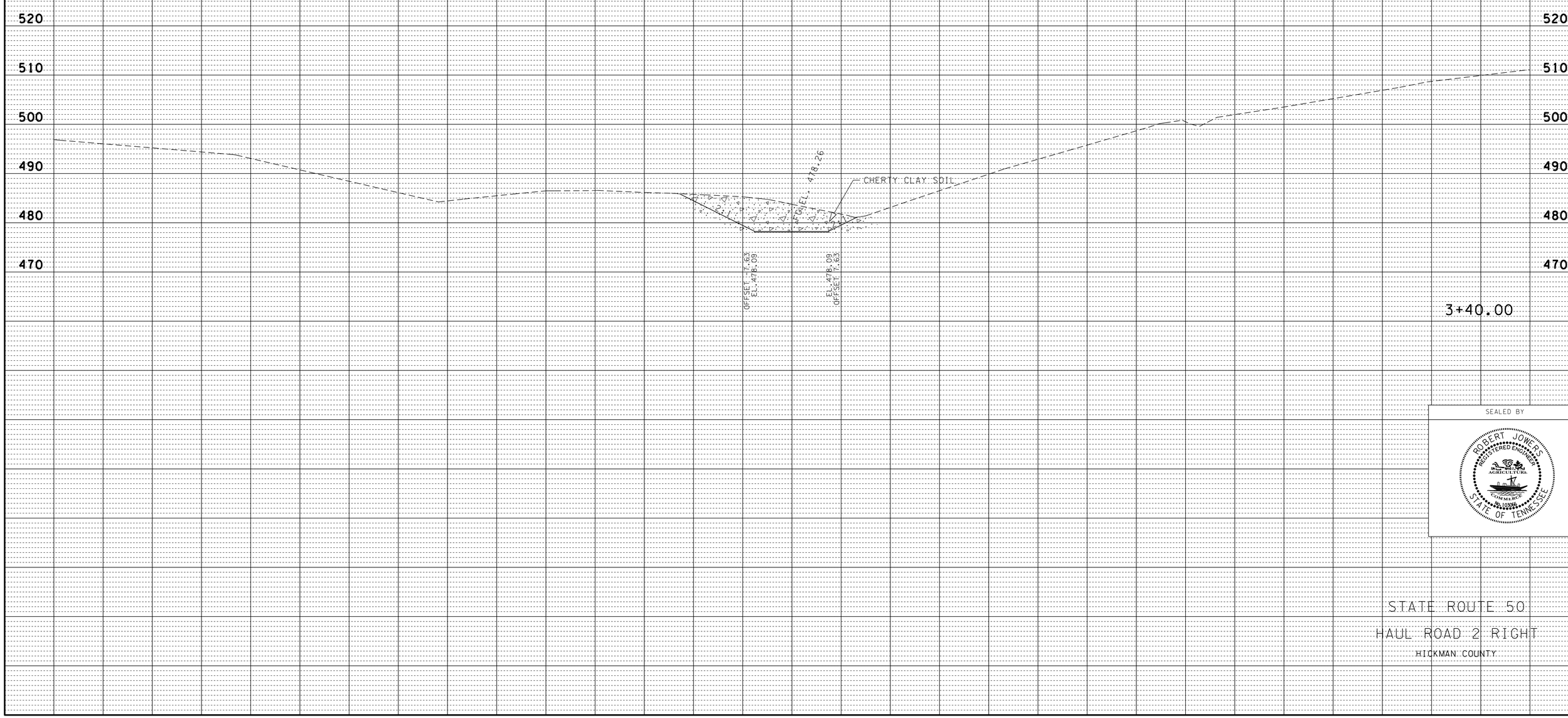
UNOFFICIAL SET

NOT FOR BIDDING

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

REPRESENTATIVE FOR STATION 3+40 TO STATION 3+70



SEALED BY

ROBERT JOWERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 10006
STATE OF TENNESSEE

STATE ROUTE 50

HAUL ROAD 2 RIGHT

HICKMAN COUNTY

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	21K

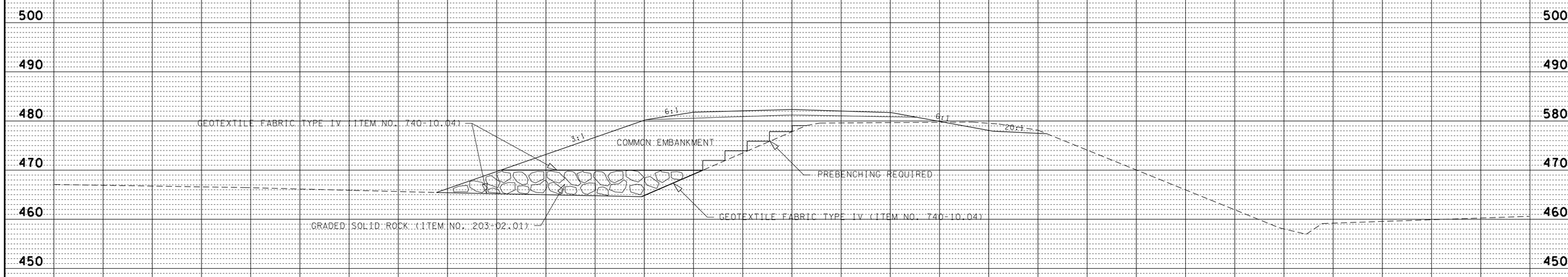
UNOFFICIAL SET

NOT FOR BIDDING

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION

REPRESENTATIVE FOR STATION 29+50 TO STATION 30+90



NOTE:

EXISTING EMBANKMENT TO BE PREBENCHED ACCORDING TO TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SUB SECTION 205.03 PARAGRAPH 6 (MARCH 1, 2006).

ITEM NO. 203-02.01 GRADED SOLID ROCK

BORROW EXCAVATION (GRADED SOLID ROCK) SHALL CONSIST OF THE REMOVAL AND SATISFACTORY PLACEMENT OF SOUND, NON-DEGRADABLE ROCK WITH A MAXIMUM SIZE OF 3 FT. (1 M). AT LEAST 50 PERCENT OF THE ROCK SHALL BE UNIFORMLY DISTRIBUTED BETWEEN 1 FT.(30 CM) AND 3 FT. (1 M) IN DIAMETER AND NO GREATER THAN 10 PERCENT SHALL BE LESS THAN 2 IN. (50 MM) IN DIAMETER. THE MATERIAL SHALL BE ROUGHLY EQUI-DIMENSIONAL IN SHAPE. THIN, SLABBY MATERIAL WILL NOT BE ACCEPTED. THE CONTRACTOR SHALL BE REQUIRED TO PROCESS THE MATERIAL WITH AN ACCEPTABLE MECHANICAL SCREENING PROCESS THAT PRODUCES THE REQUIRED GRADATION. WHEN THE MATERIAL IS SUBJECTED TO FIVE ALTERATIONS OF THE SODIUM SULFATE SOUNDNESS TEST (AASHTO T 104), THE WEIGHTED PERCENTAGE OF LOSS SHALL BE NOT MORE THAN 12. THE MATERIAL SHALL BE APPROVED BY THE ENGINEER BEFORE USE.

SEALED BY

STATE ROUTE 50
OVER
DUCK RIVER L.M. 14.04

HICKMAN COUNTY

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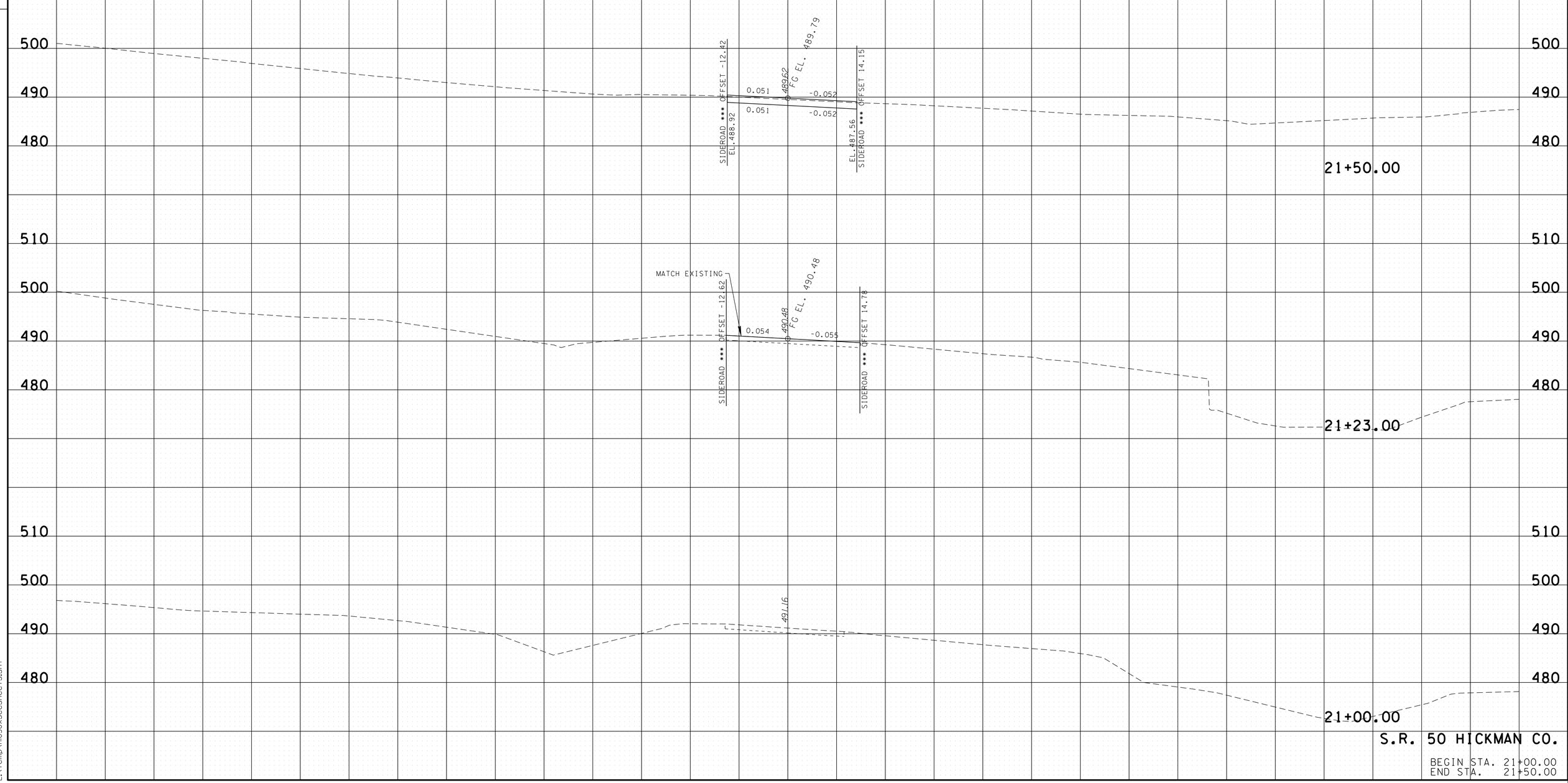
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	17
CONST.	2014	BR-STP-50(29)	22

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 21+00.00
END STA. 21+50.00

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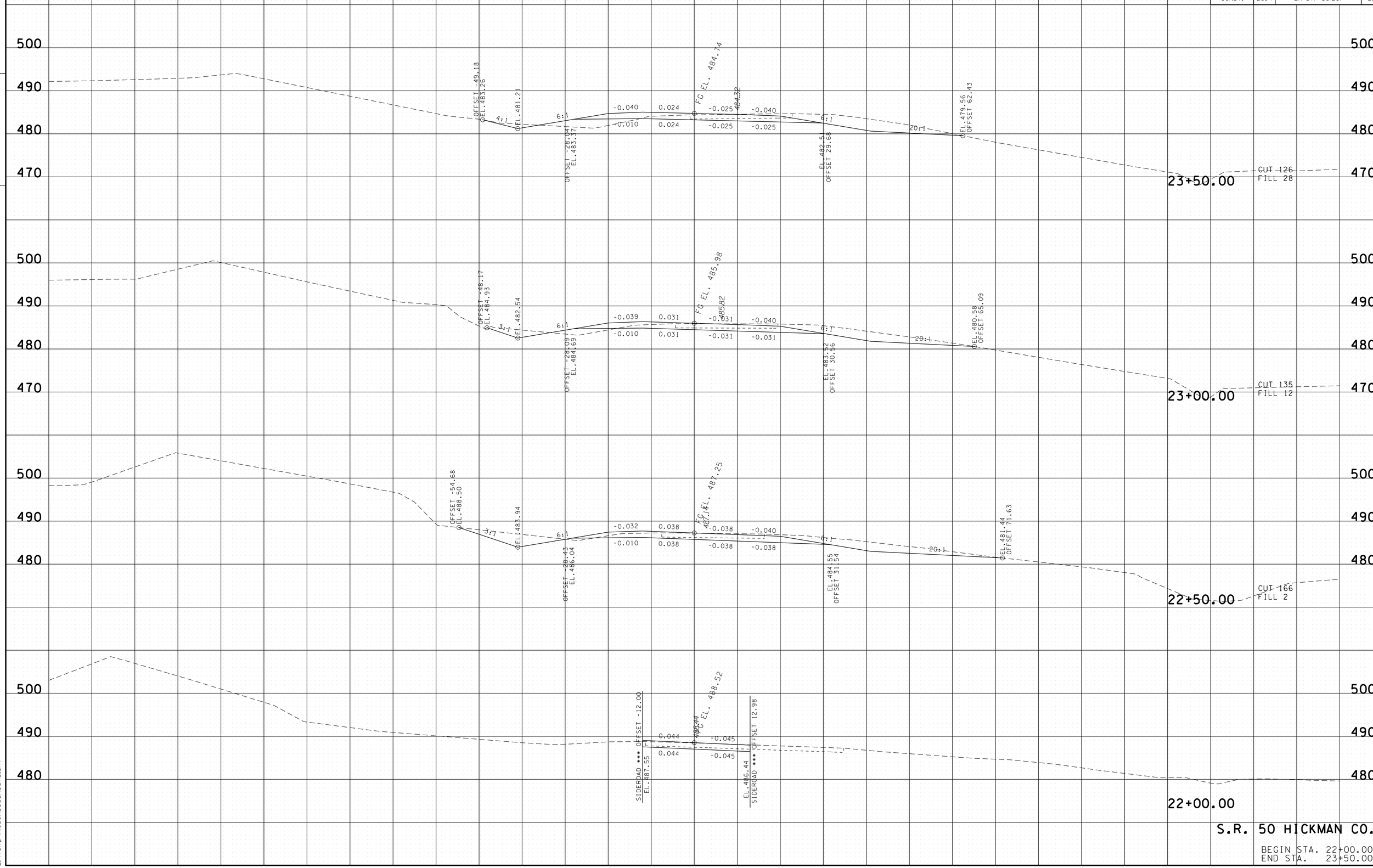
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	18
CONST.	2014	BR-STP-50(29)	23

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 22+00.00
END STA. 23+50.00

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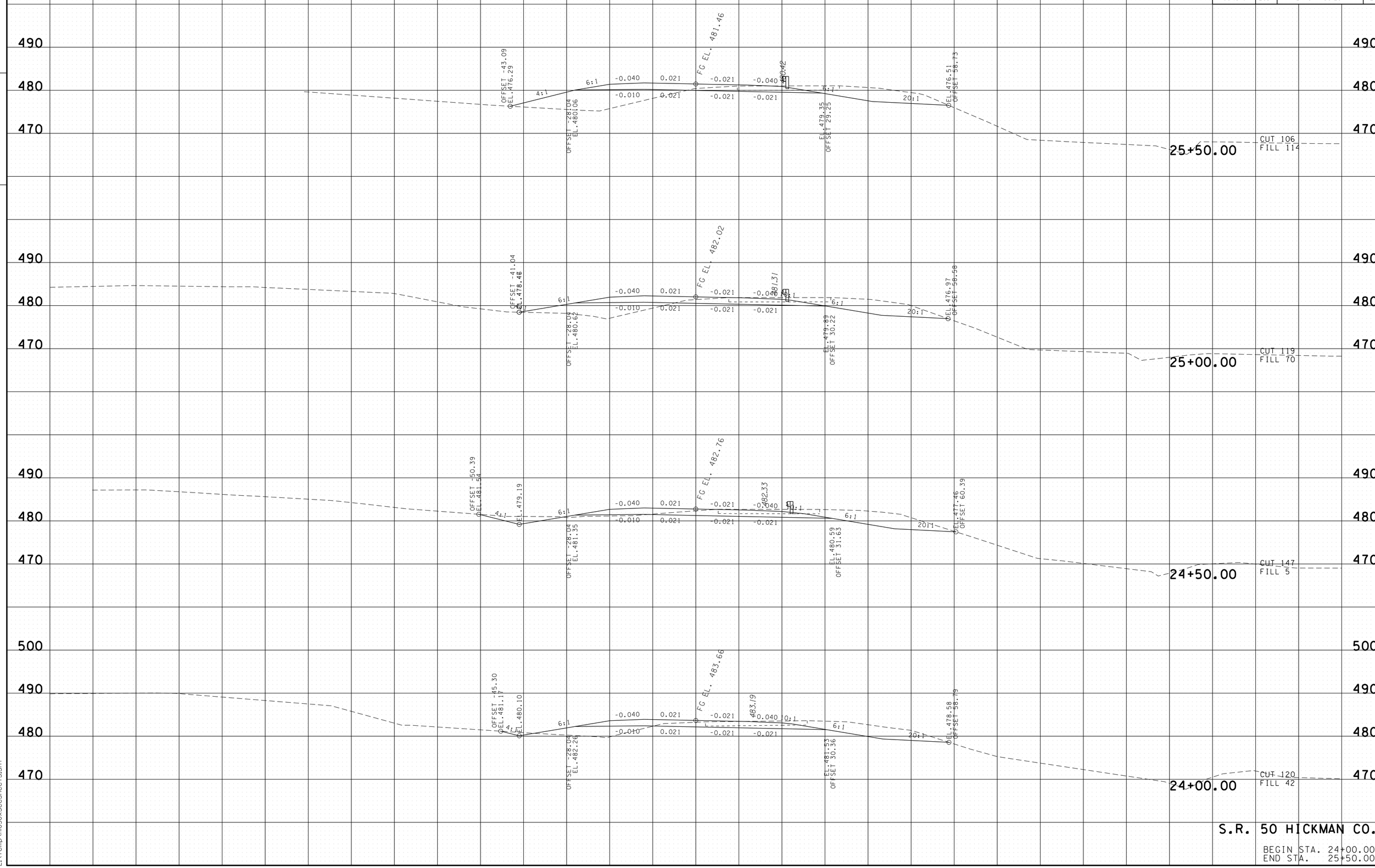
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	19
CONST.	2014	BR-STP-50(29)	24

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 24+00.00
END STA. 25+50.00

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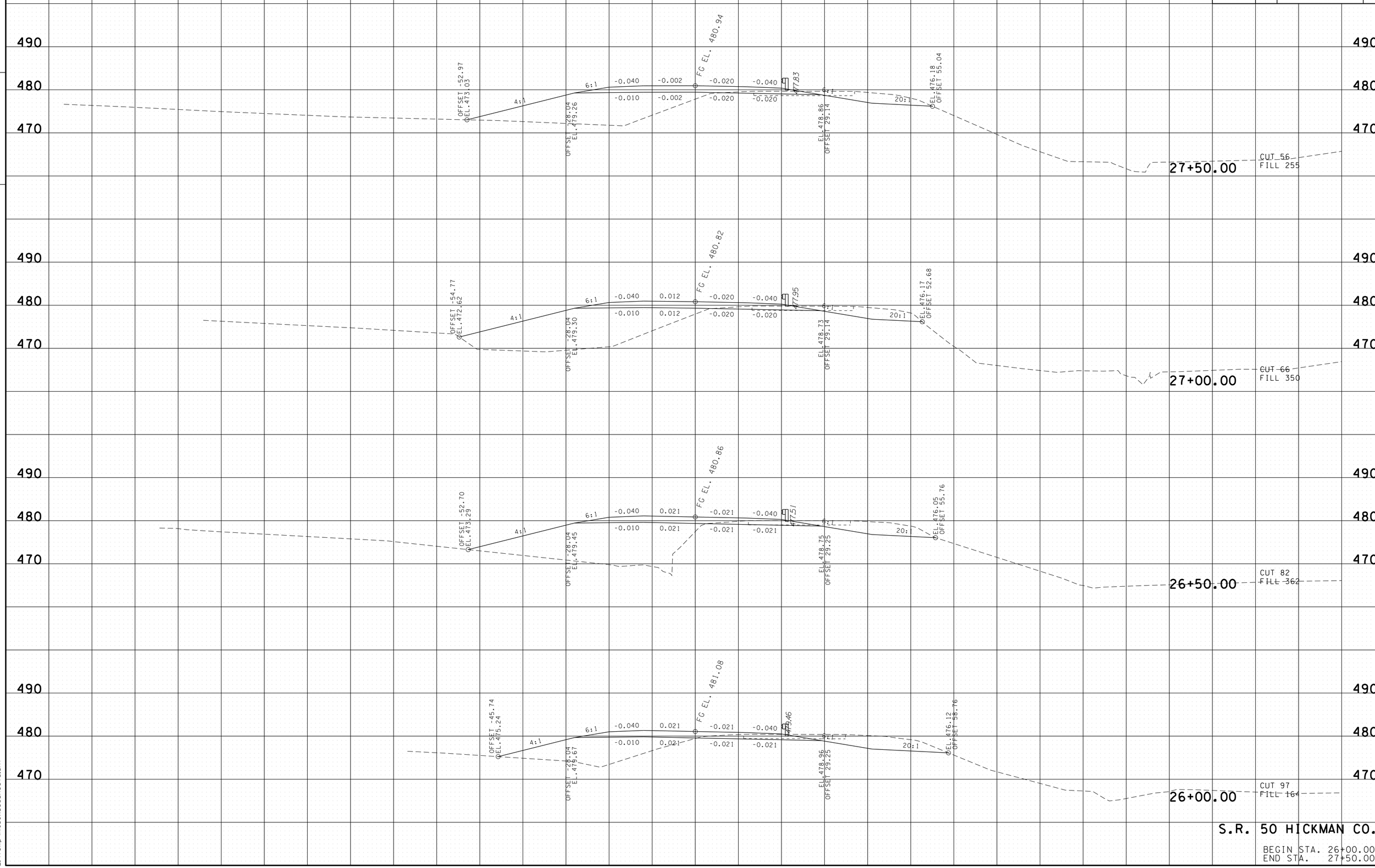
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	20
CONST.	2014	BR-STP-50(29)	25

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 26+00.00
END STA. 27+50.00

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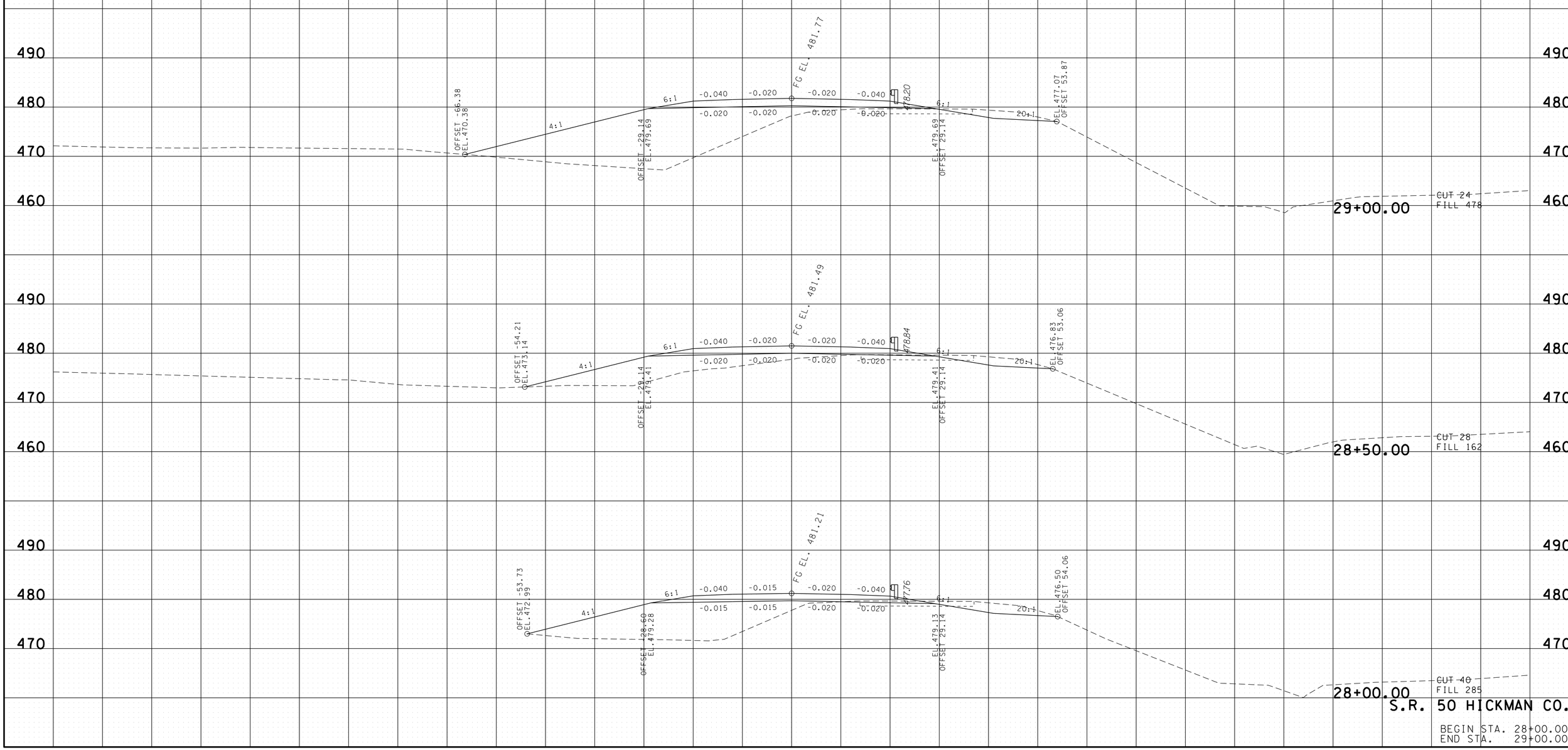
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	21
CONST.	2014	BR-STP-50(29)	26

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 28+00.00
END STA. 29+00.00

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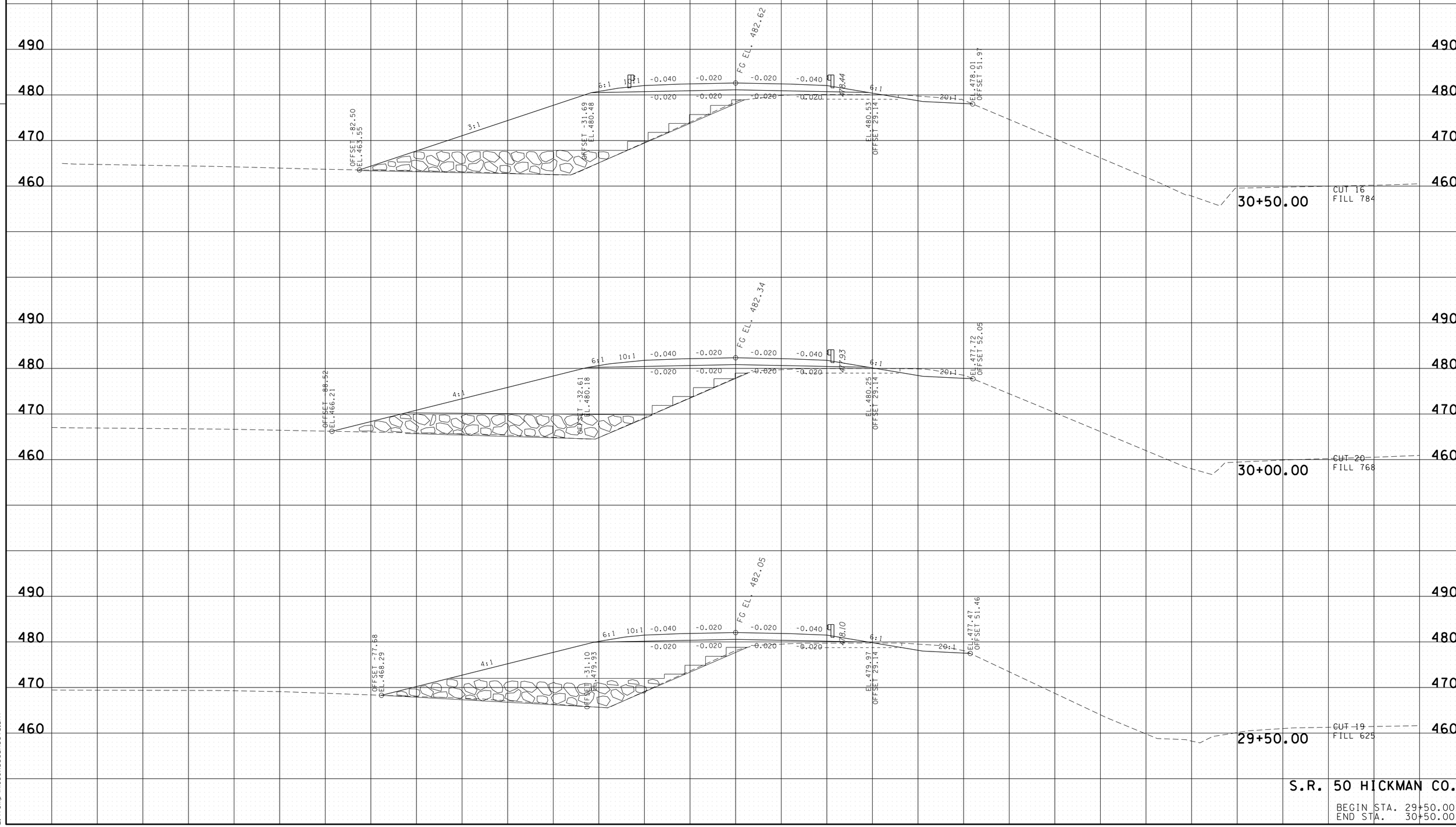
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	22
CONST.	2014	BR-STP-50(29)	27

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 29+50.00
END STA. 30+50.00

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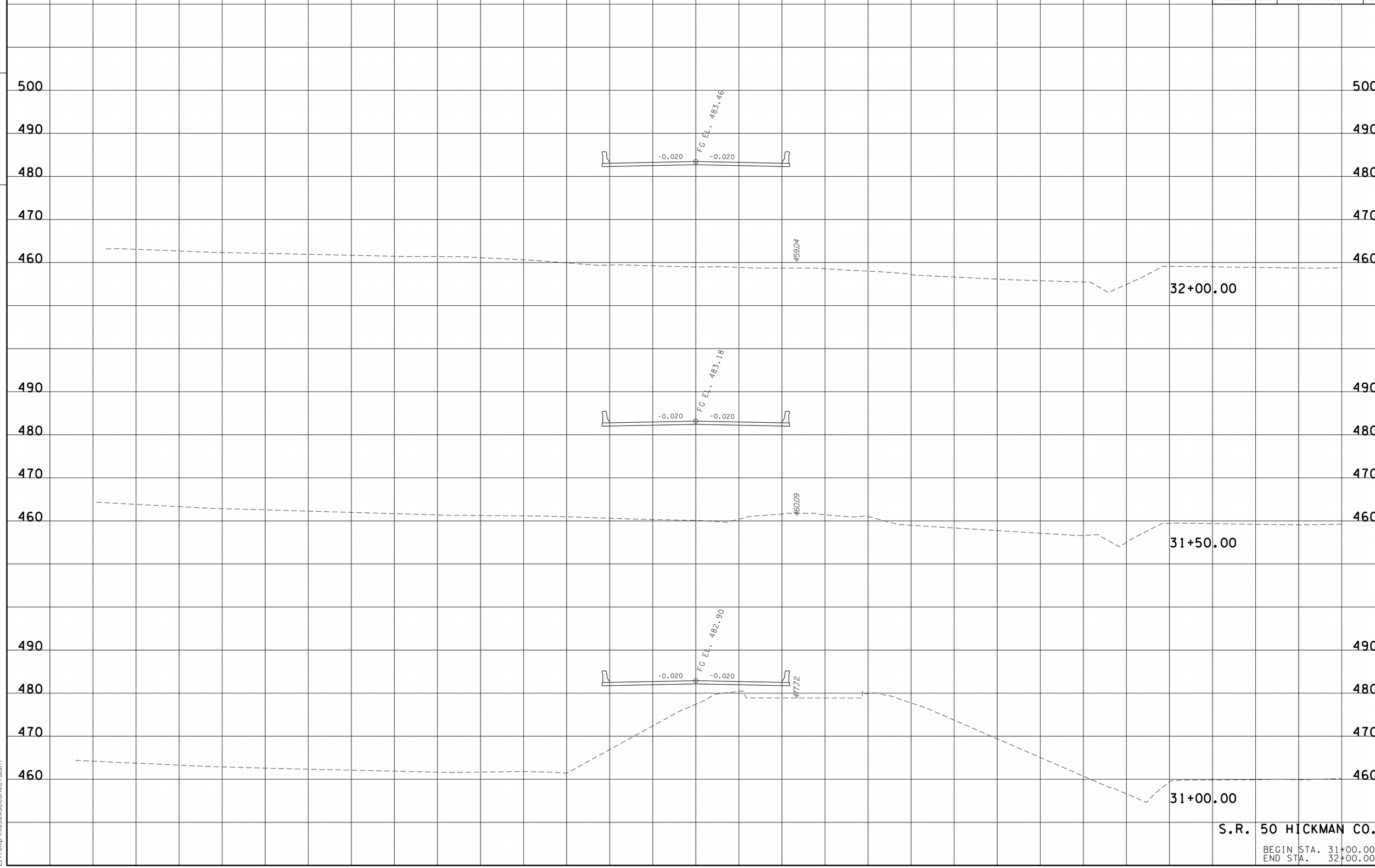
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	23
CONST.	2014	BR-STP-50(29)	28

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 31+00.00
END STA. 32+00.00

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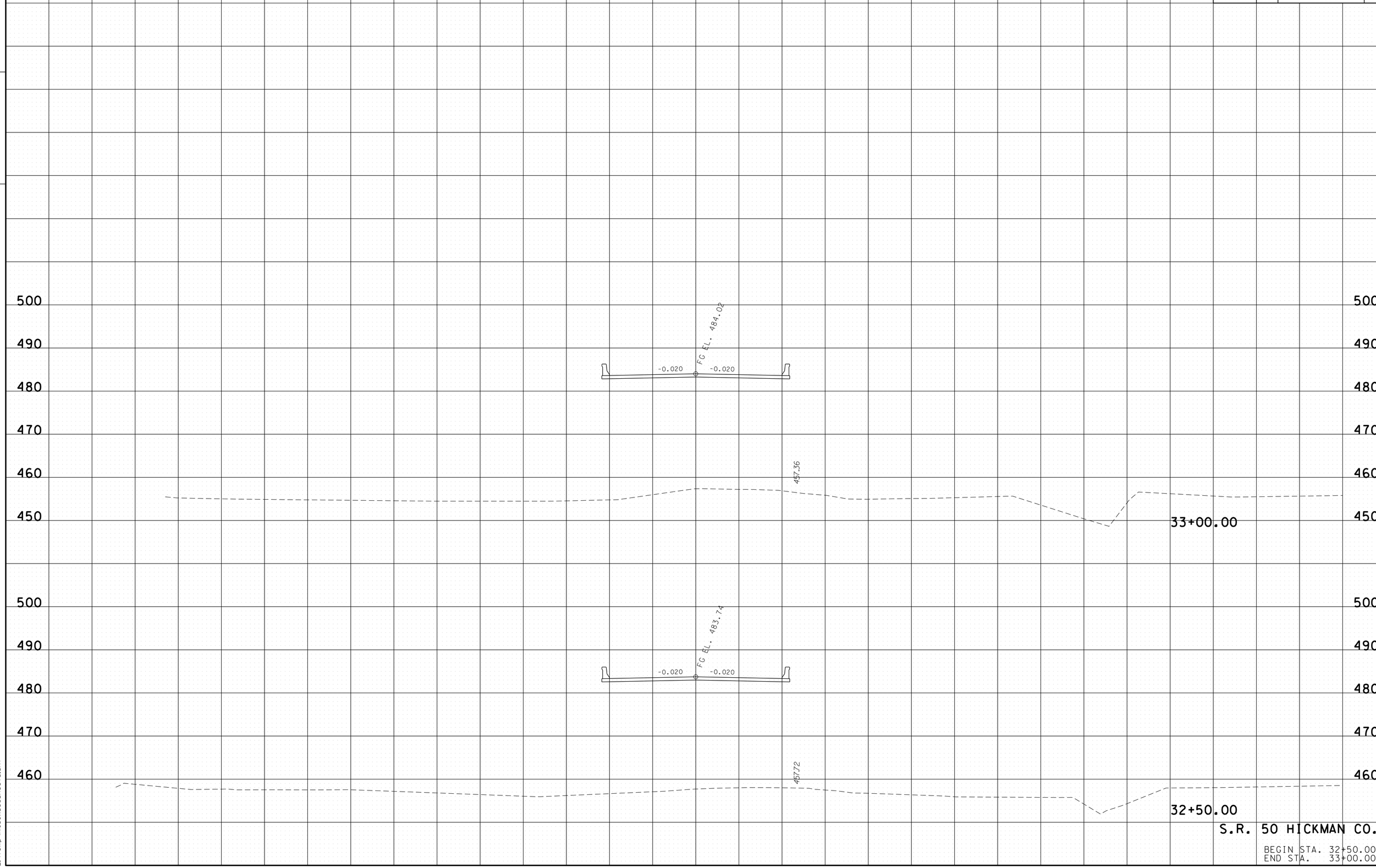
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	24
CONST.	2014	BR-STP-50(29)	29

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 32+50.00
END STA. 33+00.00

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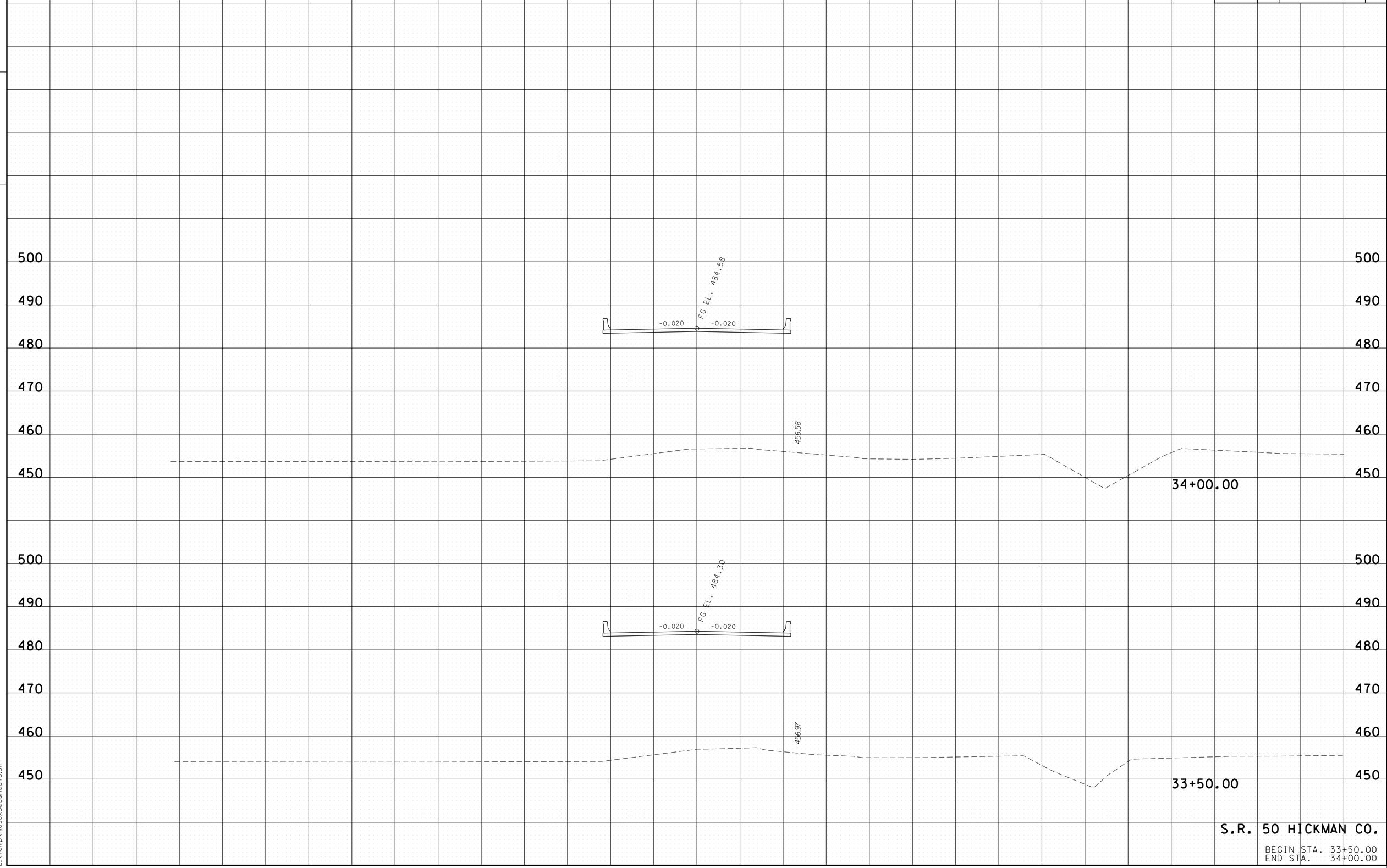
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	25
CONST.	2014	BR-STP-50(29)	30

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 33+50.00
END STA. 34+00.00

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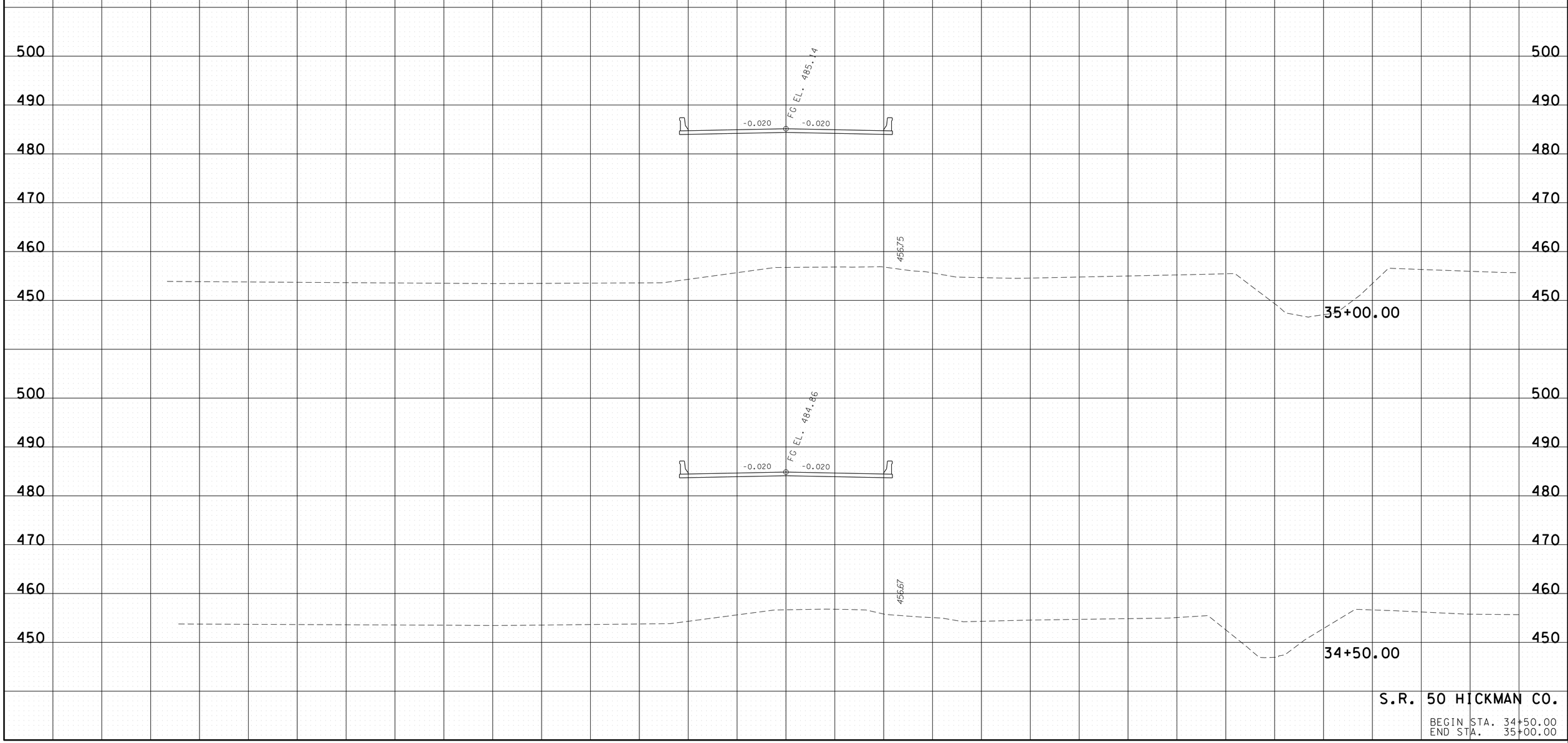
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	26
CONST.	2014	BR-STP-50(29)	31

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 34+50.00
END STA. 35+00.00

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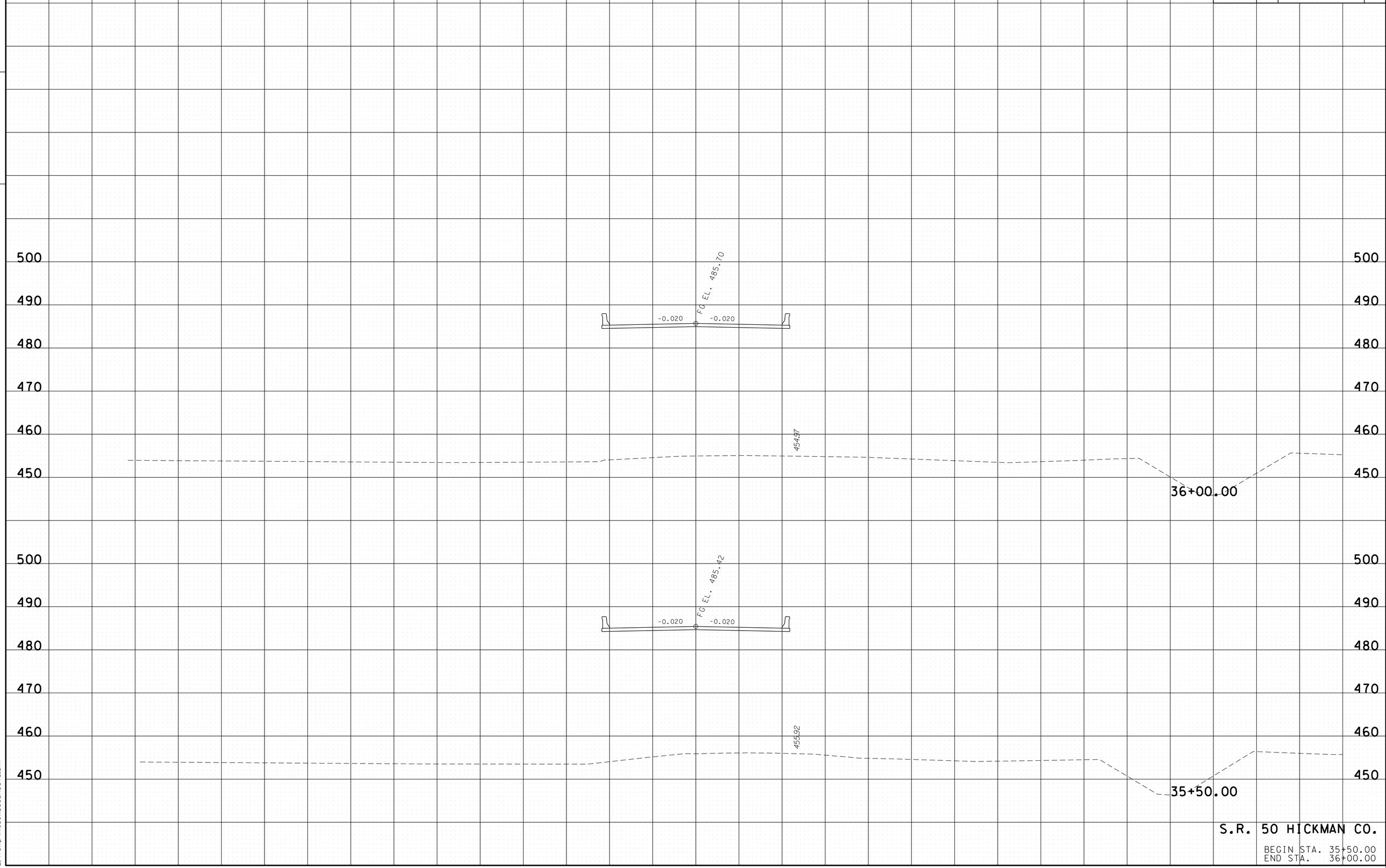
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	27
CONST.	2014	BR-STP-50(29)	32

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 35+50.00
END STA. 36+00.00

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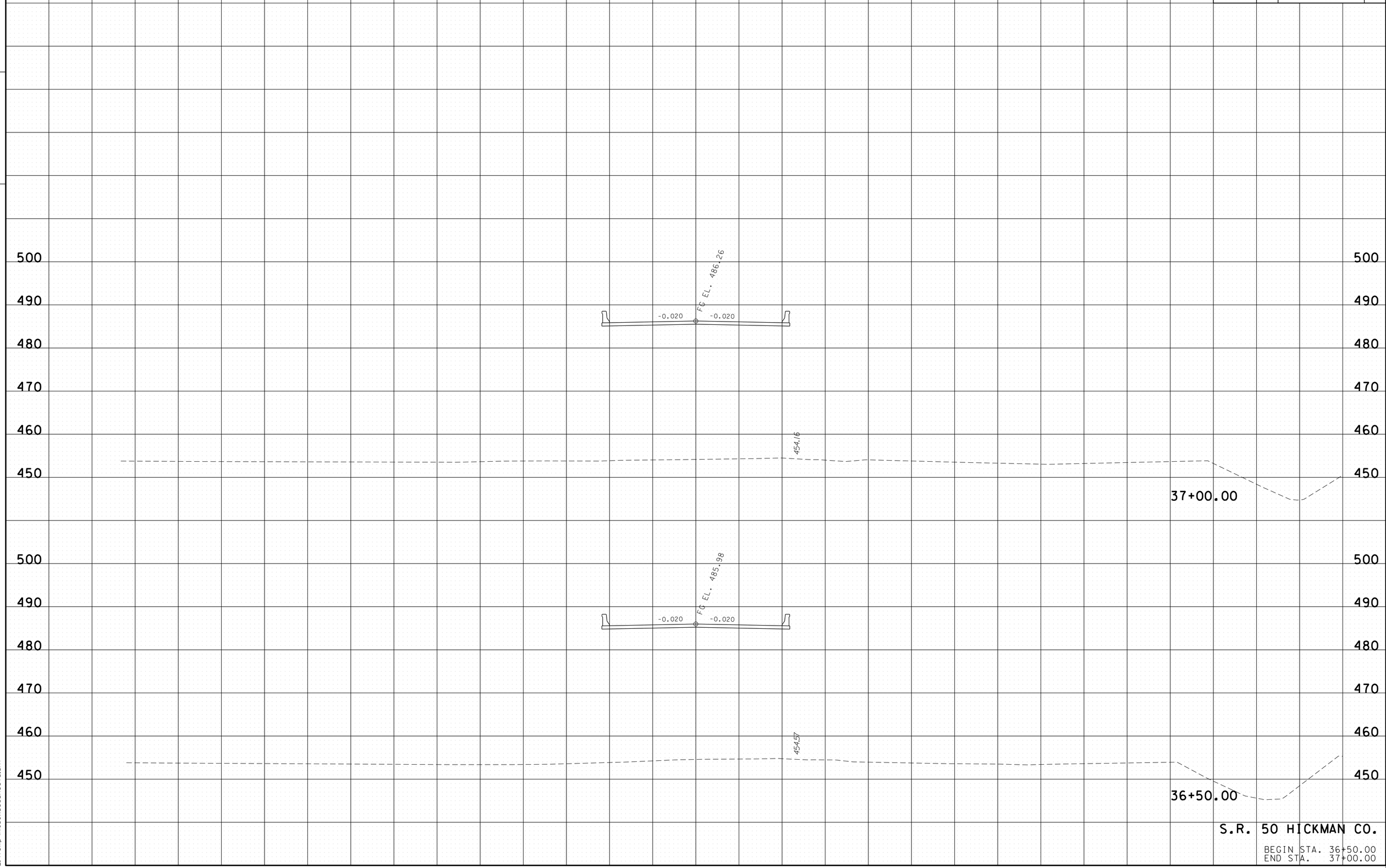
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	28
CONST.	2014	BR-STP-50(29)	33

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.



S.R. 50 HICKMAN CO.

BEGIN STA. 36+50.00
END STA. 37+00.00

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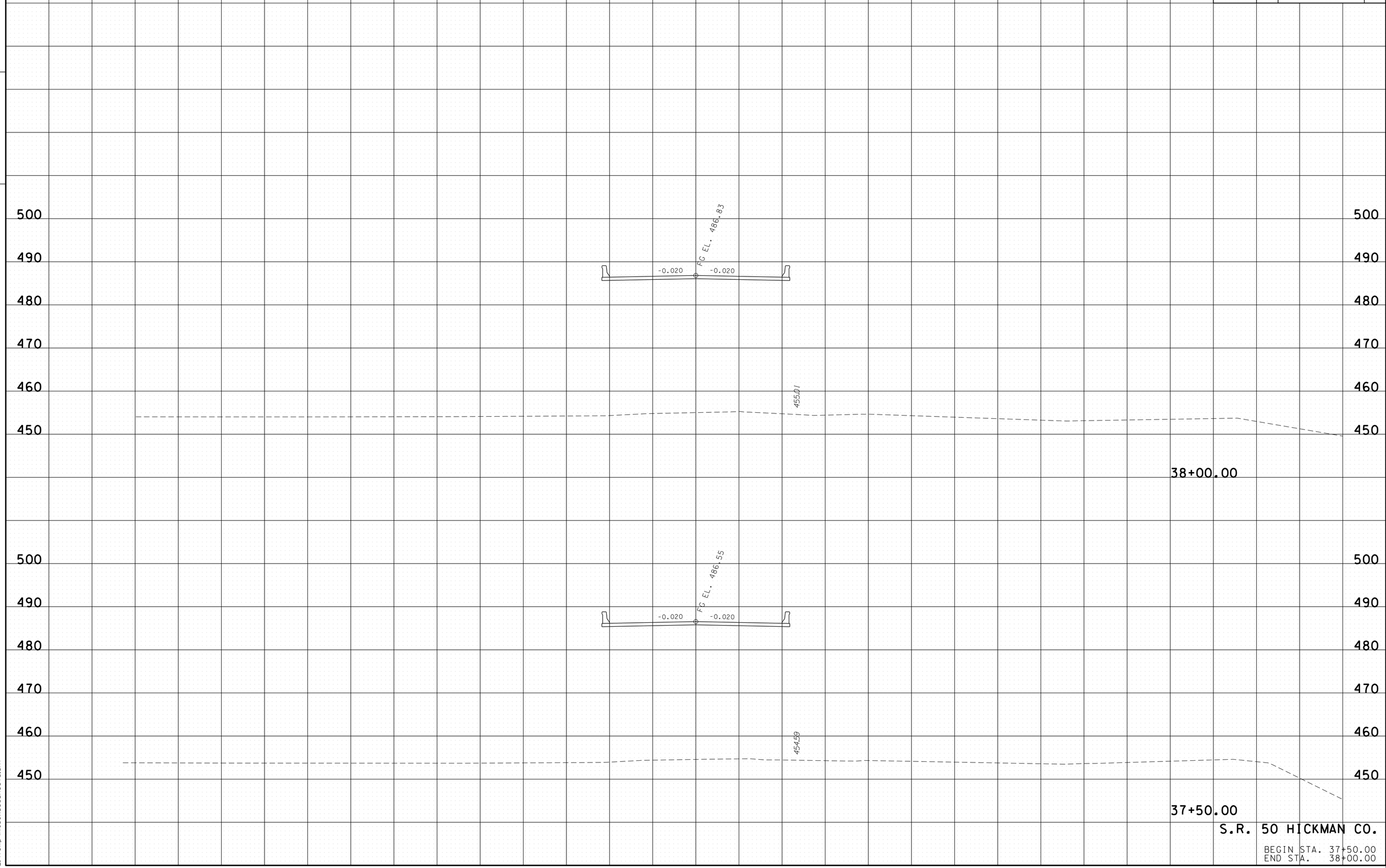
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	29
CONST.	2014	BR-STP-50(29)	34

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 37+50.00
END STA. 38+00.00

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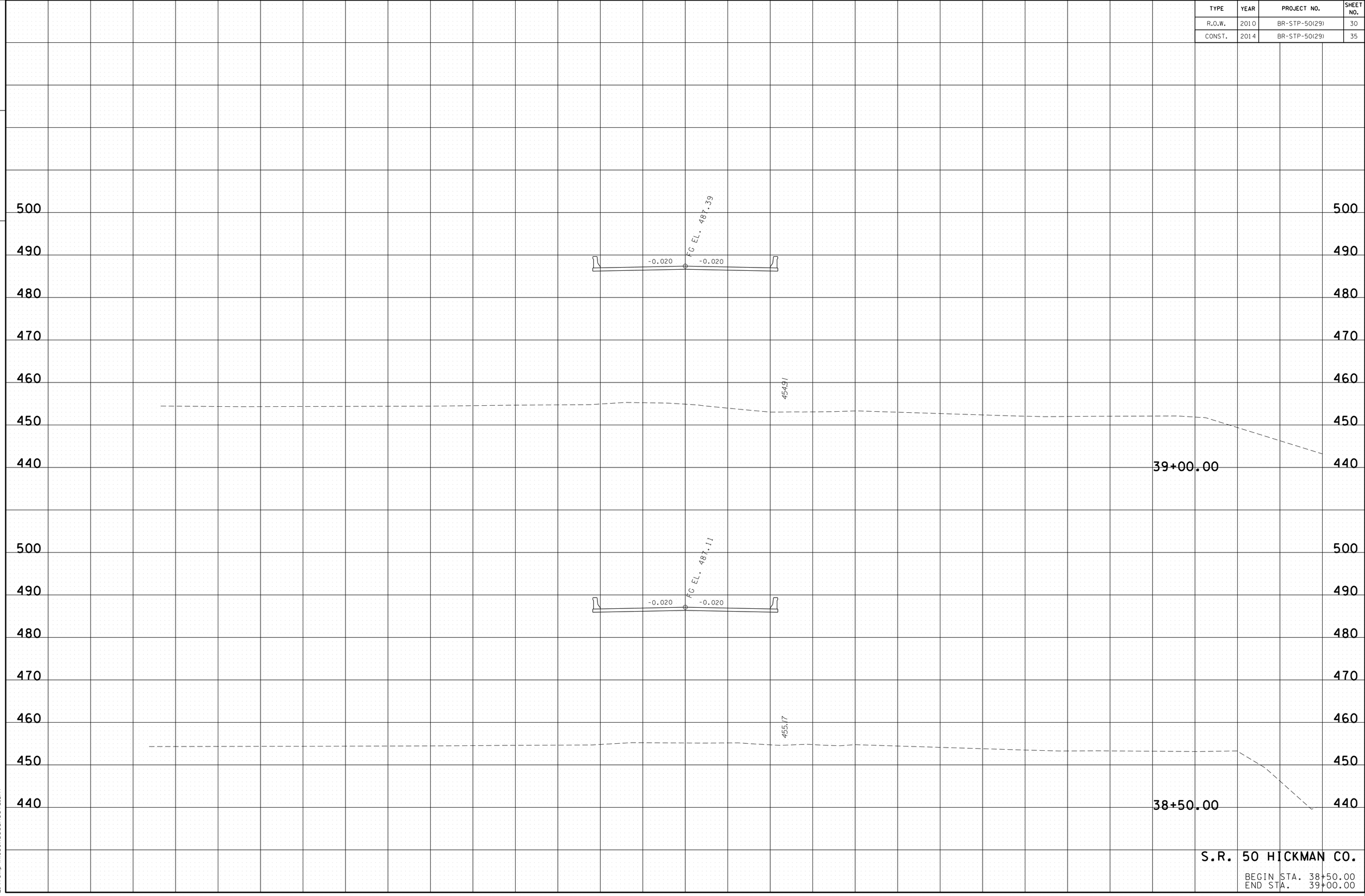
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	30
CONST.	2014	BR-STP-50(29)	35

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 38+50.00
END STA. 39+00.00

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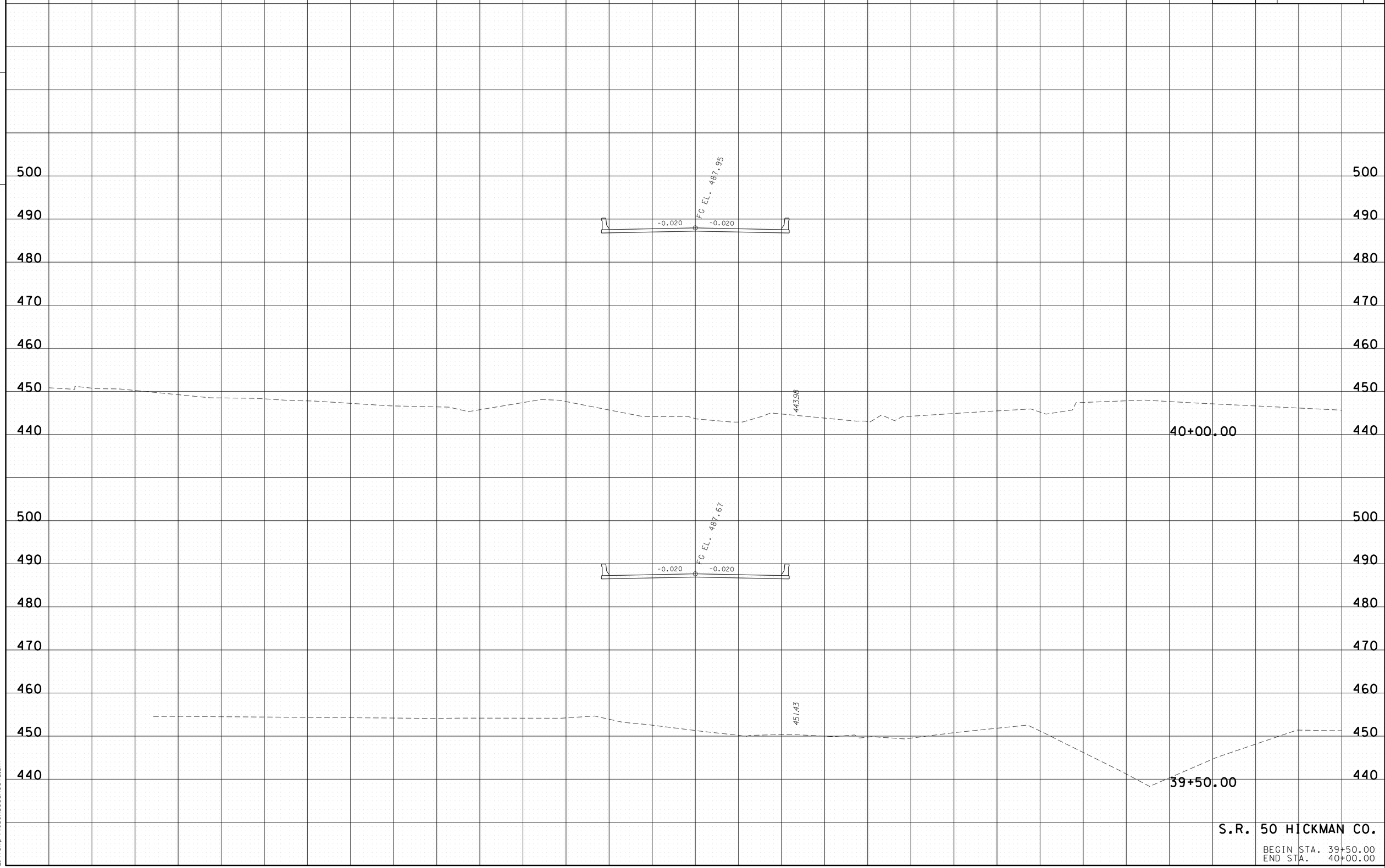
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	31
CONST.	2014	BR-STP-50(29)	36

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 39+50.00
END STA. 40+00.00

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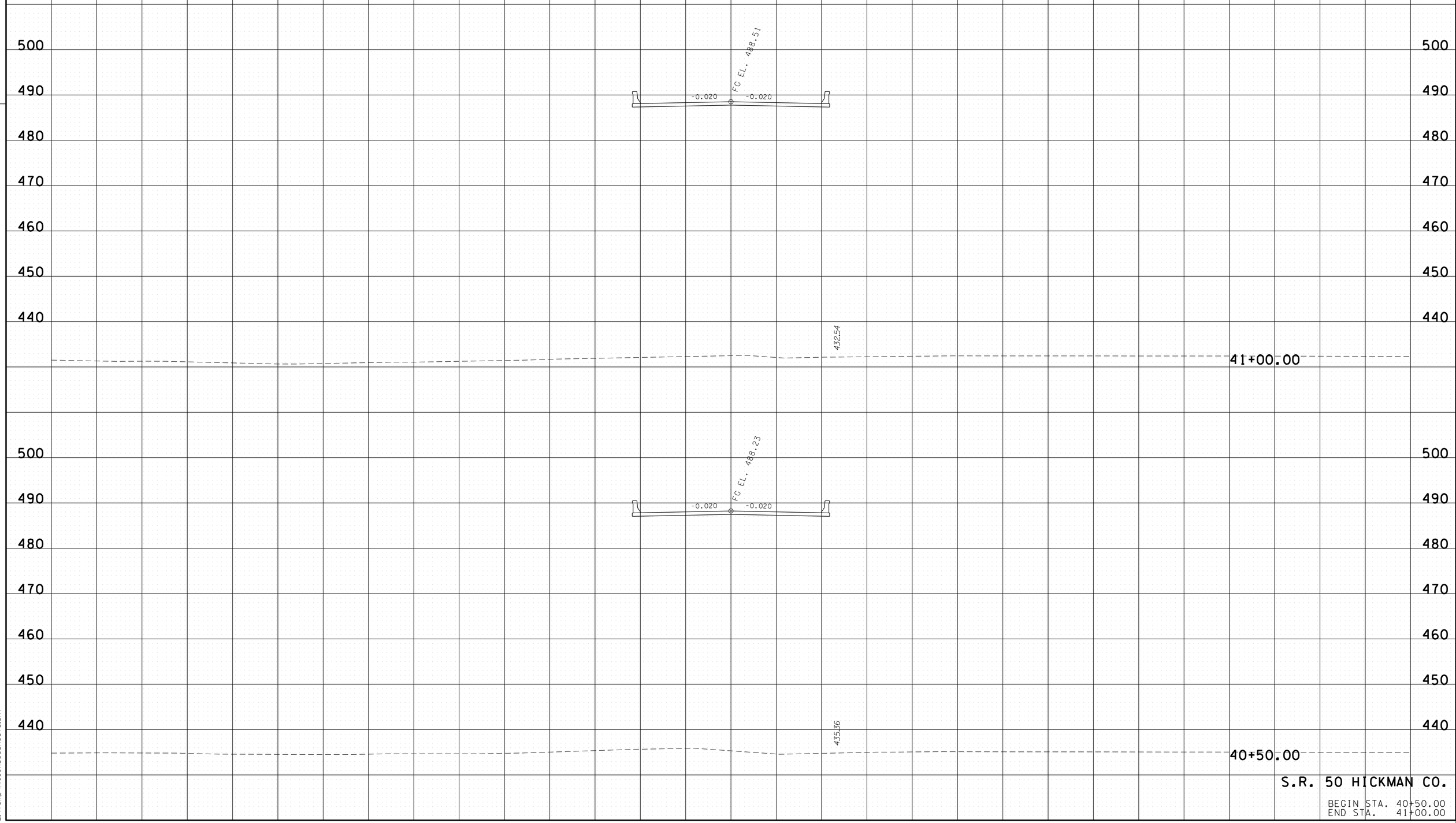
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	32
CONST.	2014	BR-STP-50(29)	37

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 40+50.00
END STA. 41+00.00

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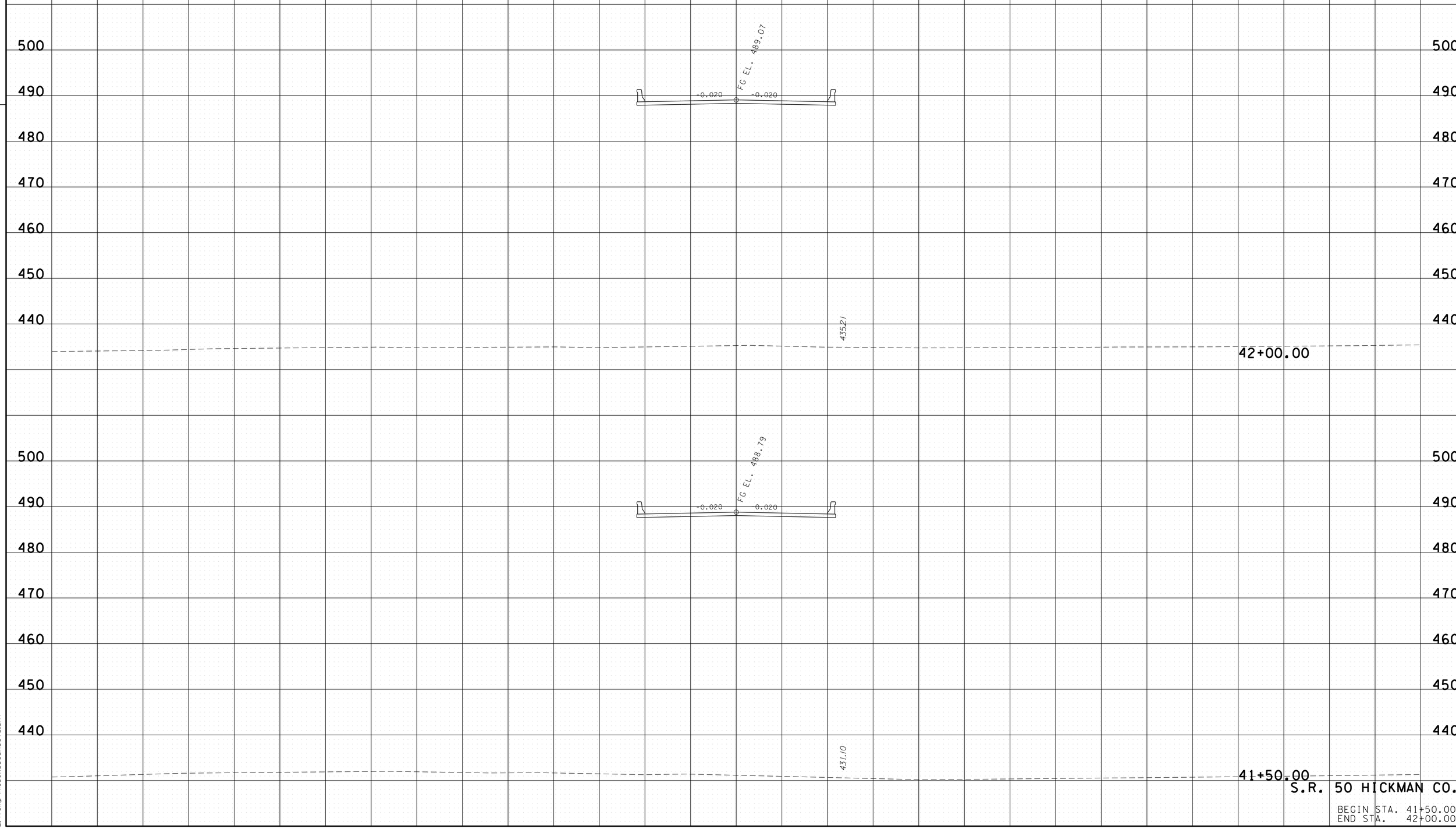
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	33
CONST.	2014	BR-STP-50(29)	38

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 41+50.00
END STA. 42+00.00

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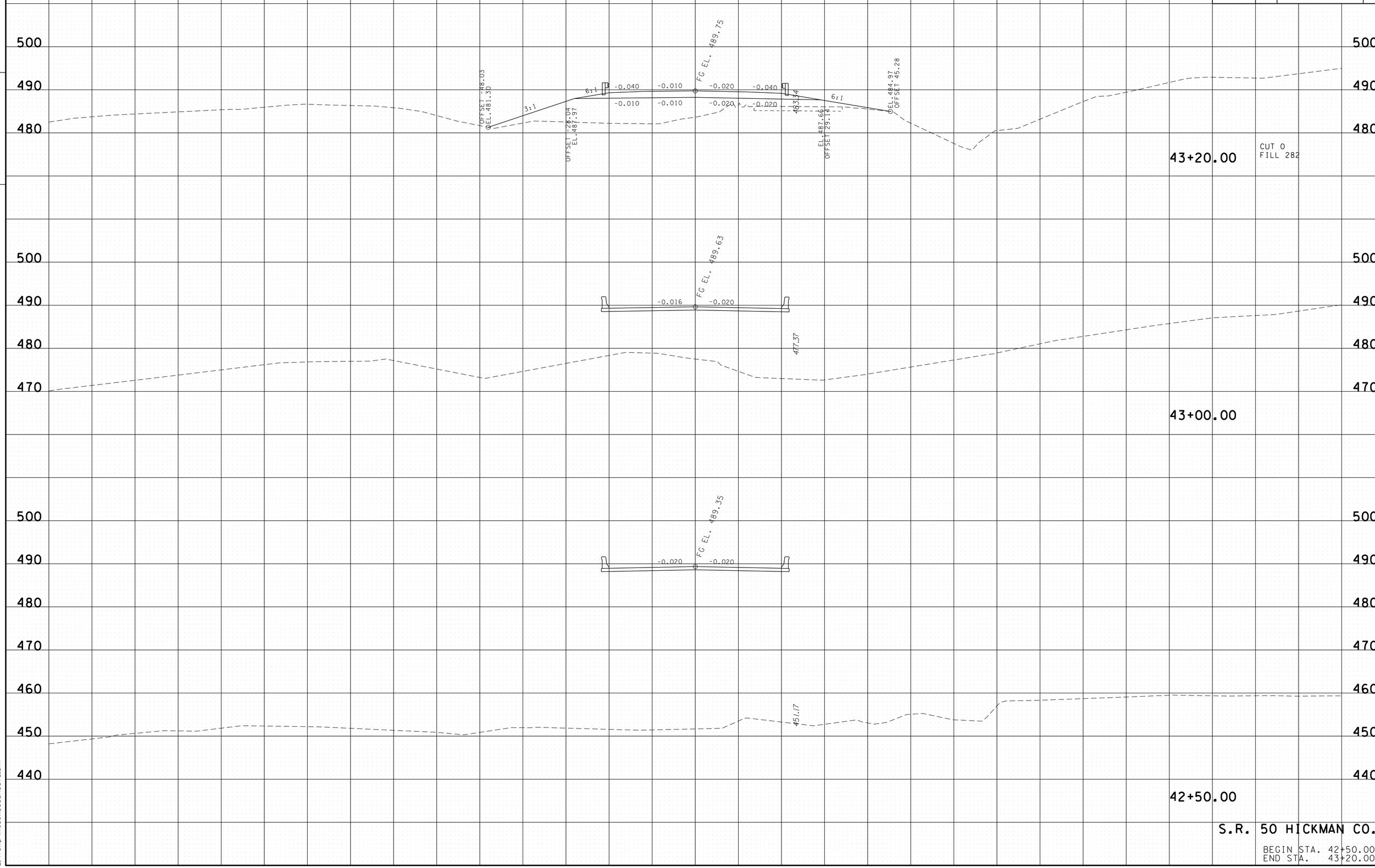
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	34
CONST.	2014	BR-STP-50(29)	39

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 42+50.00
END STA. 43+20.00

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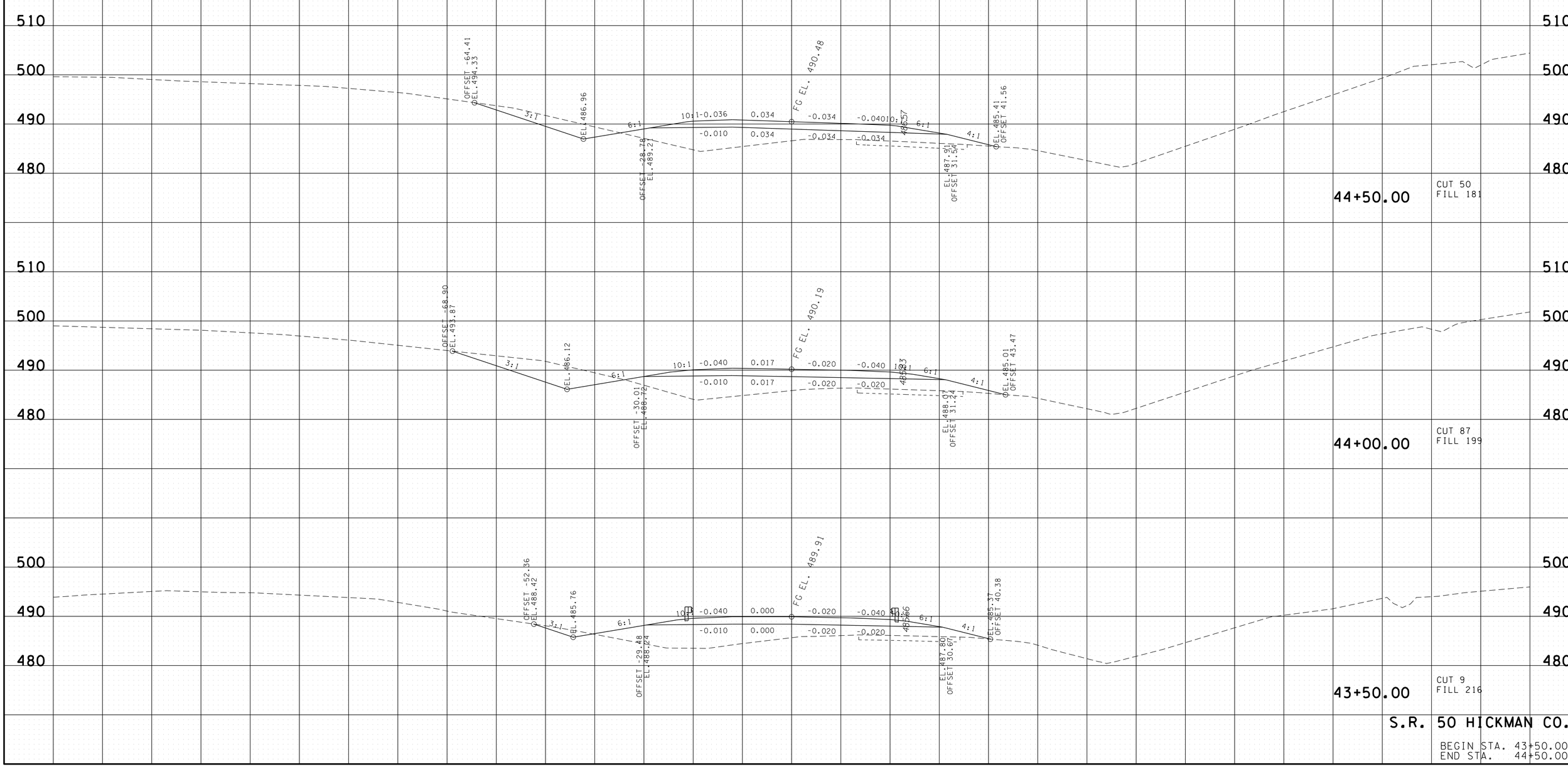
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	35
CONST.	2014	BR-STP-50(29)	40

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 43+50.00
END STA. 44+50.00

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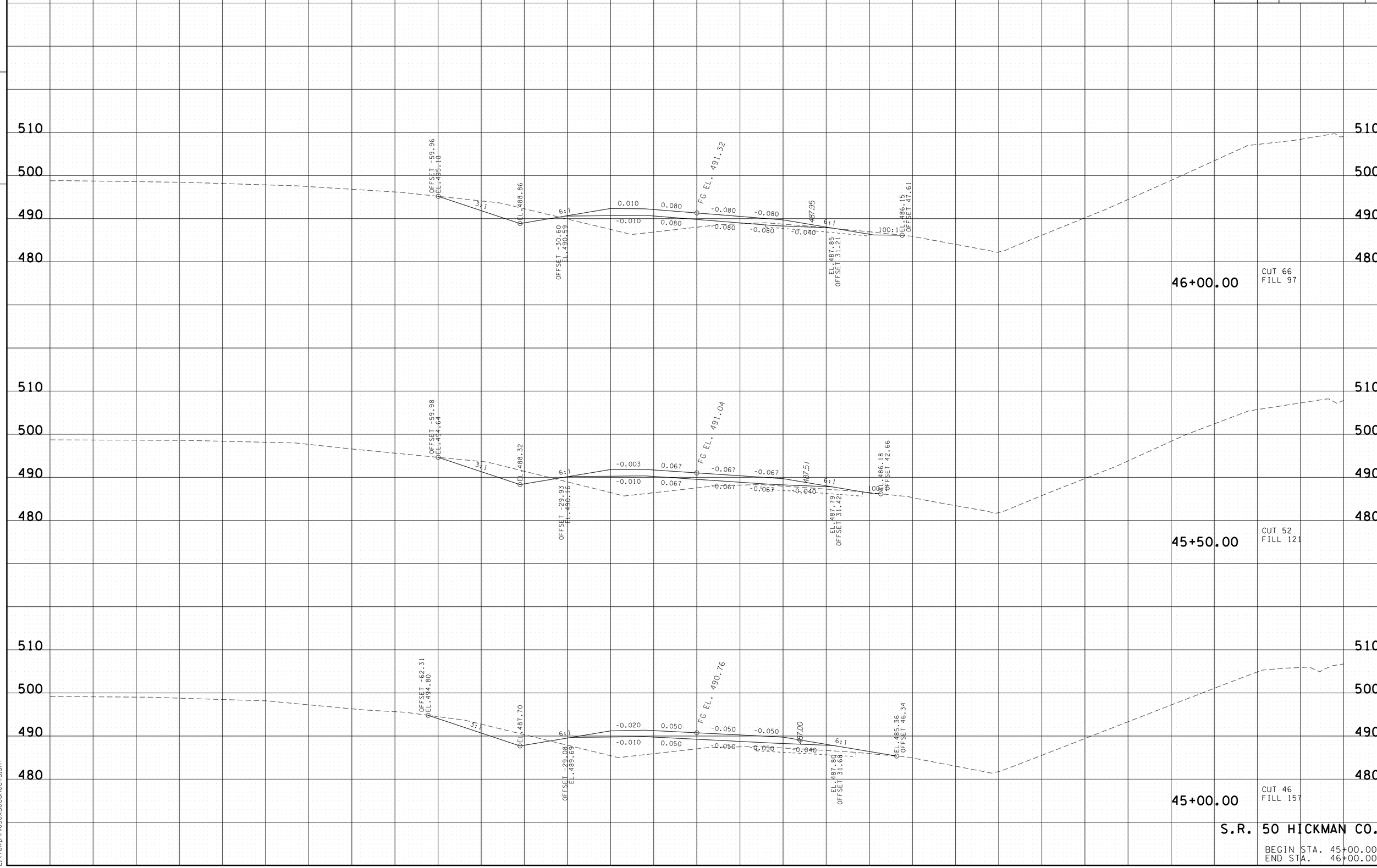
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	36
CONST.	2014	BR-STP-50(29)	41

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.



S.R. 50 HICKMAN CO.

BEGIN STA. 45+00.00
END STA. 46+00.00

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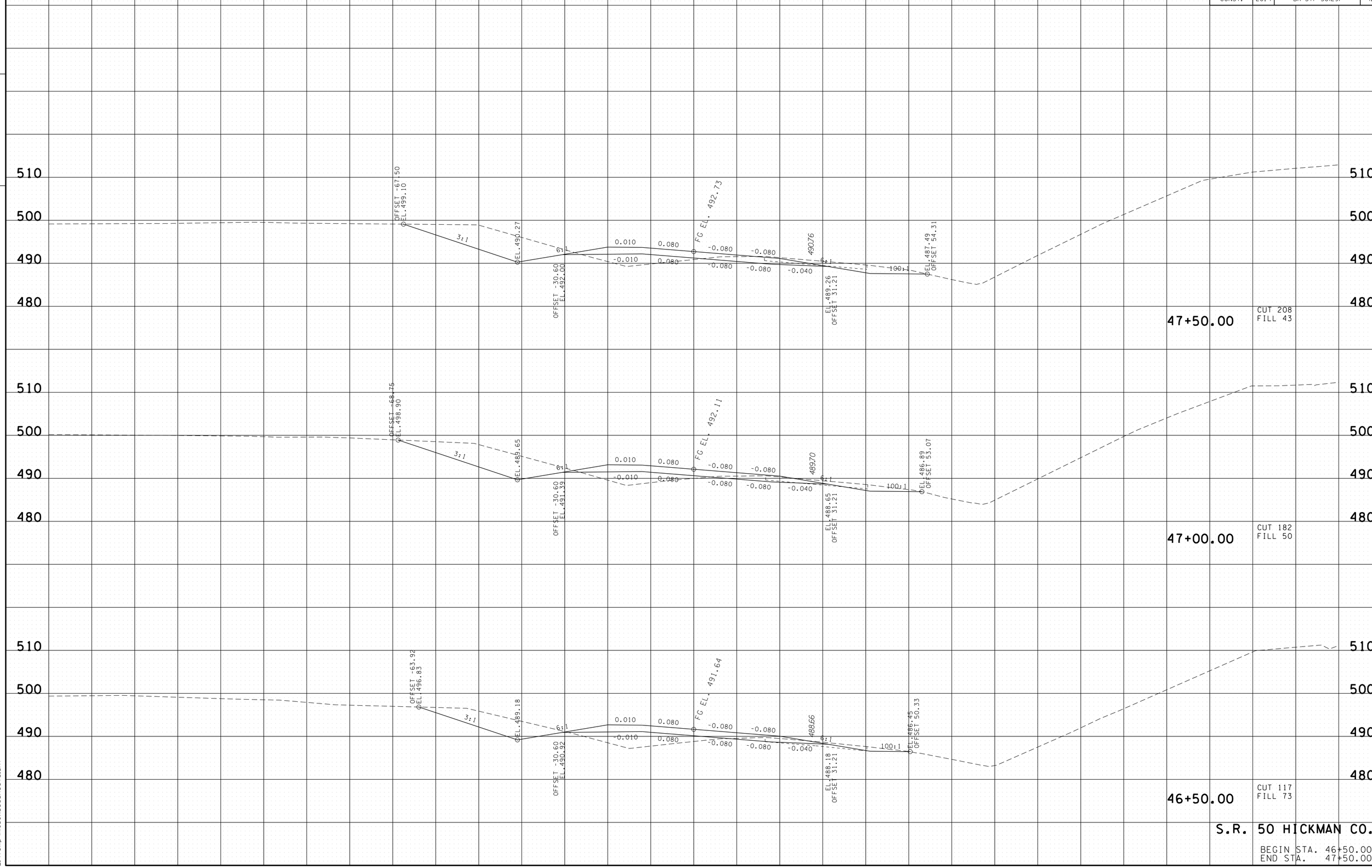
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	37
CONST.	2014	BR-STP-50(29)	42

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.



S.R. 50 HICKMAN CO.

BEGIN STA. 46+50.00
END STA. 47+50.00

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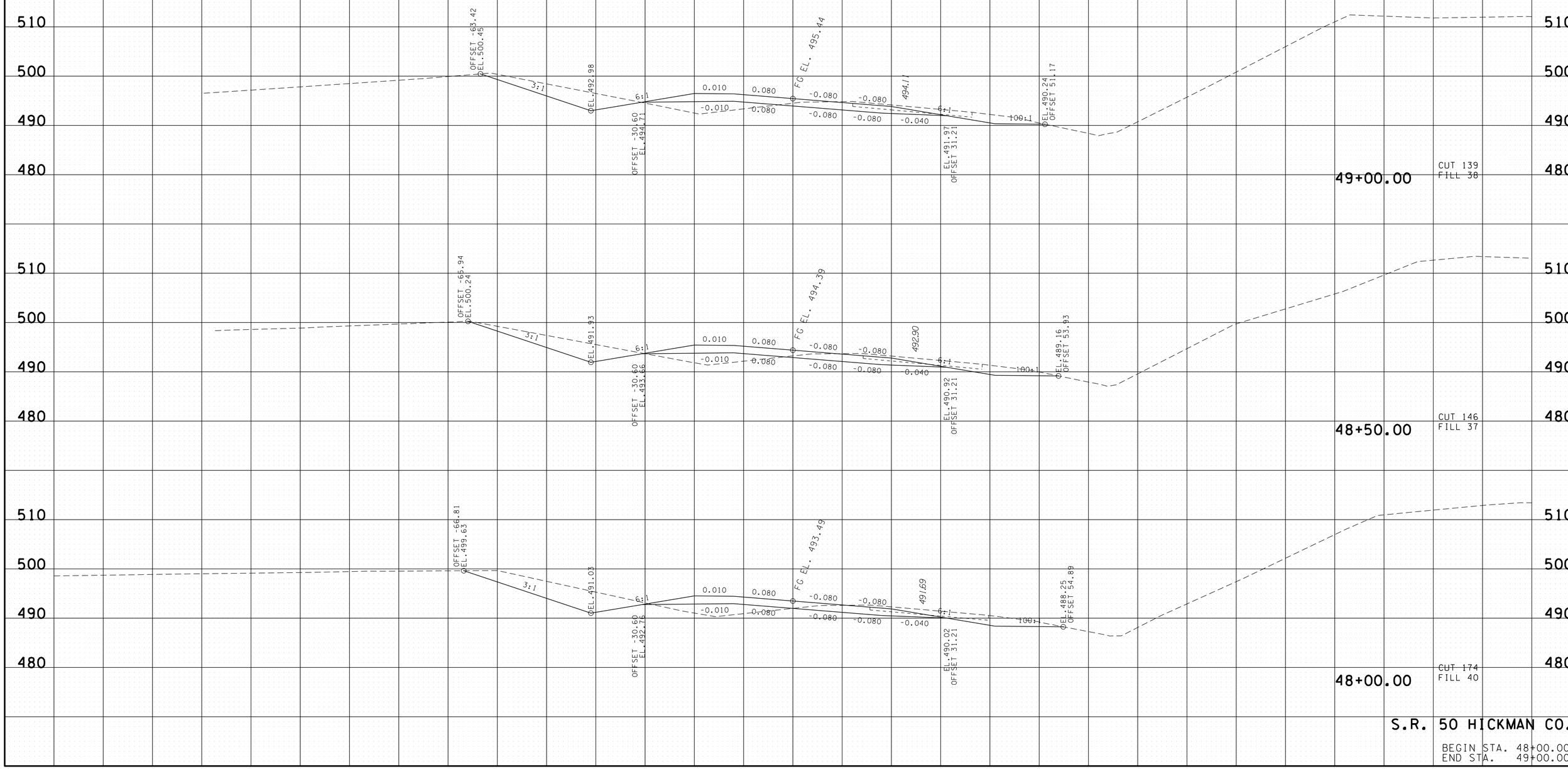
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	38
CONST.	2014	BR-STP-50(29)	43

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.



S.R. 50 HICKMAN CO.

BEGIN STA. 48+00.00
END STA. 49+00.00

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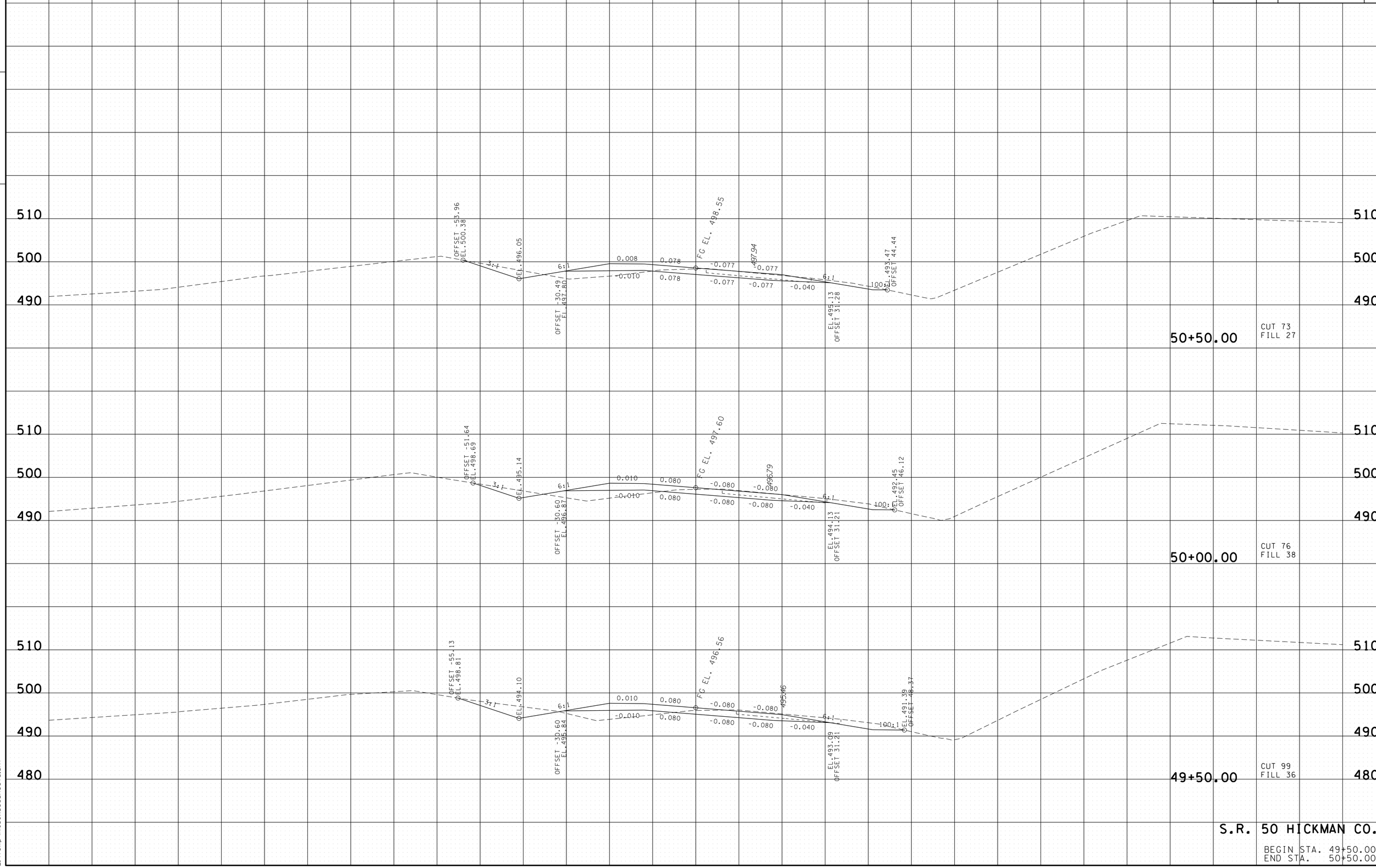
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	39
CONST.	2014	BR-STP-50(29)	44

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 49+50.00
END STA. 50+50.00

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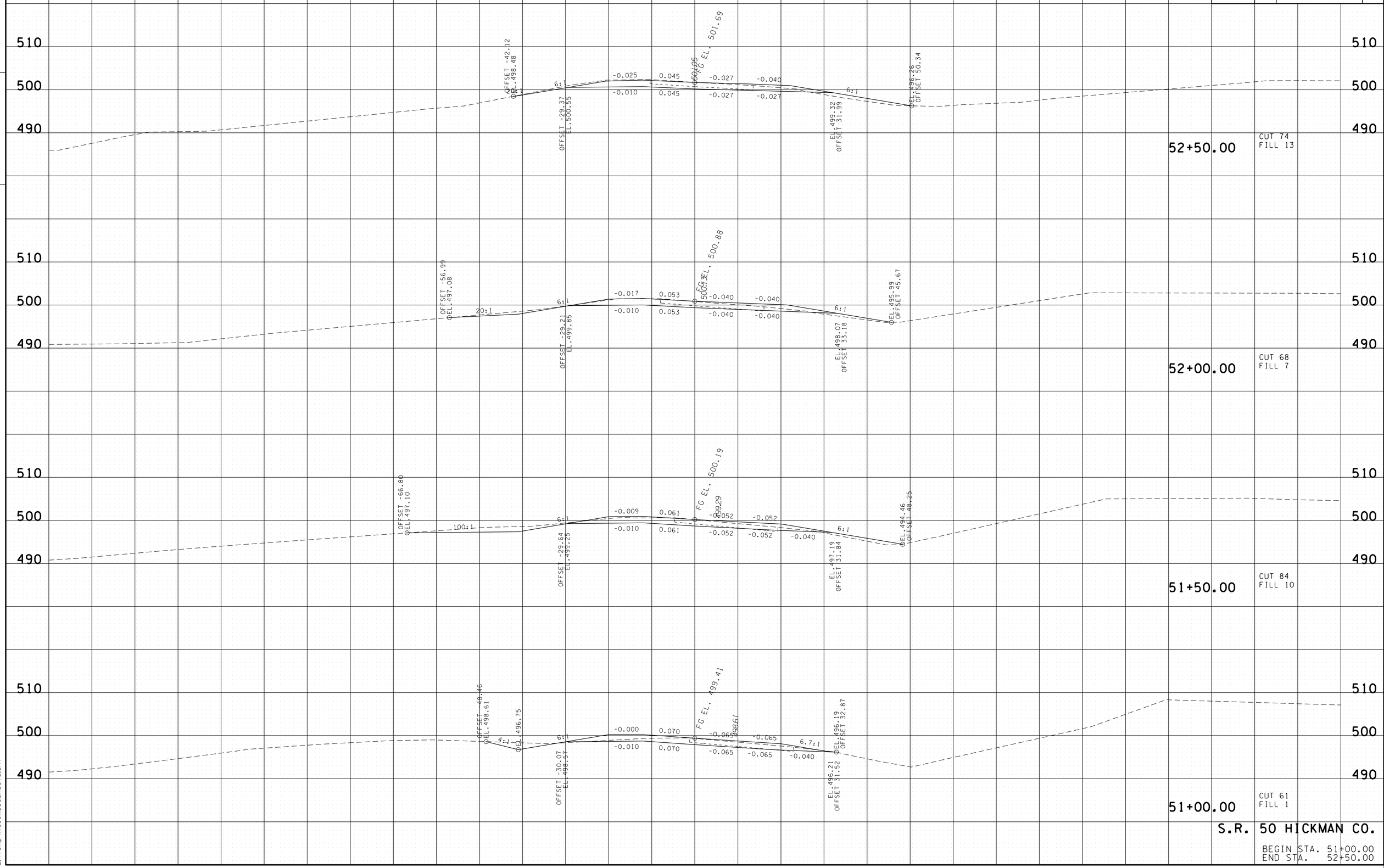
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	40
CONST.	2014	BR-STP-50(29)	45

FILE NO.

TENNESSEE D.O.T.
DESIGN DIVISION



S.R. 50 HICKMAN CO.

BEGIN STA. 51+00.00
END STA. 52+50.00

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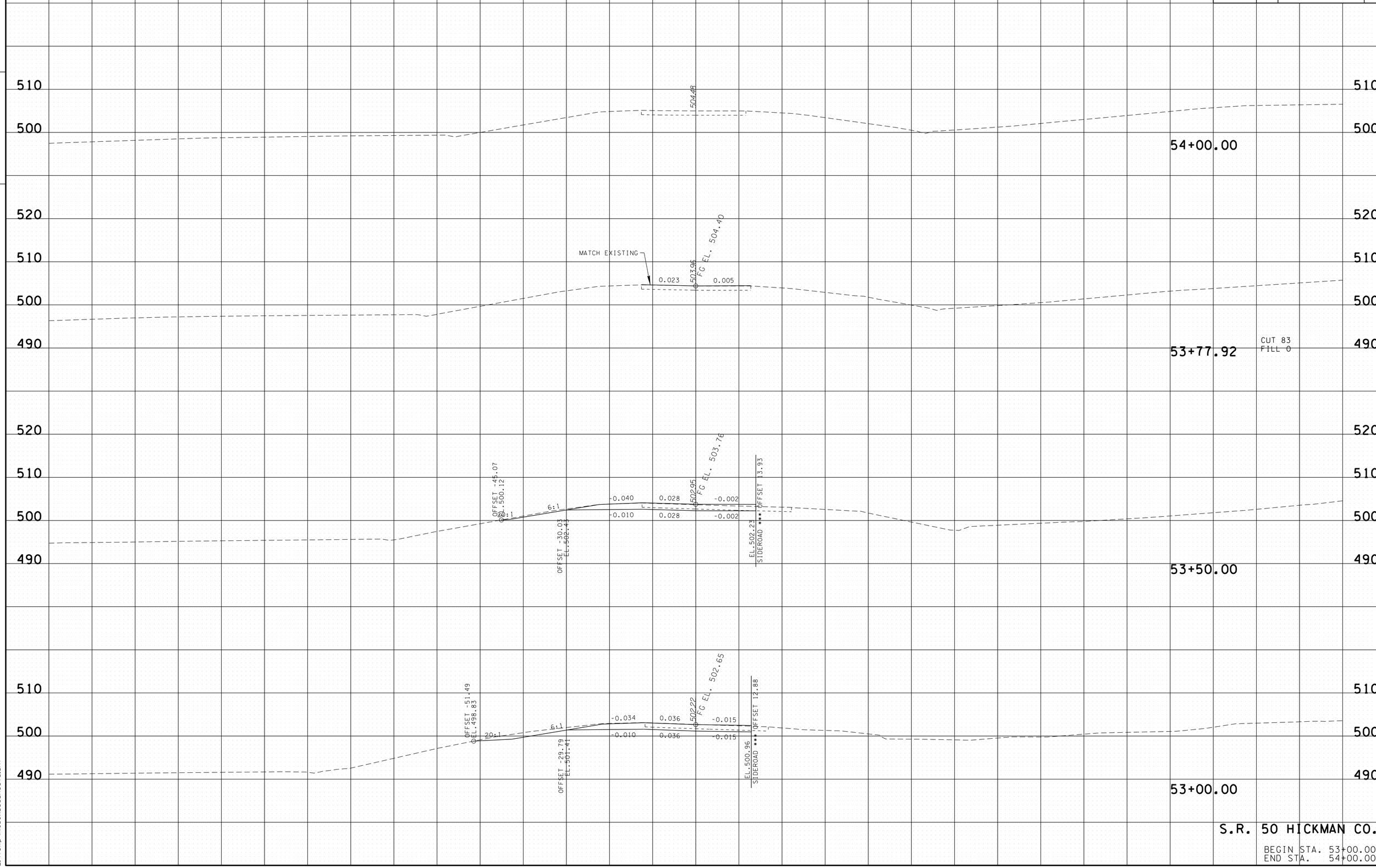
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	BR-STP-50(29)	41
CONST.	2014	BR-STP-50(29)	46

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



S.R. 50 HICKMAN CO.

BEGIN STA. 53+00.00
END STA. 54+00.00

01-MAY-2014 15:39
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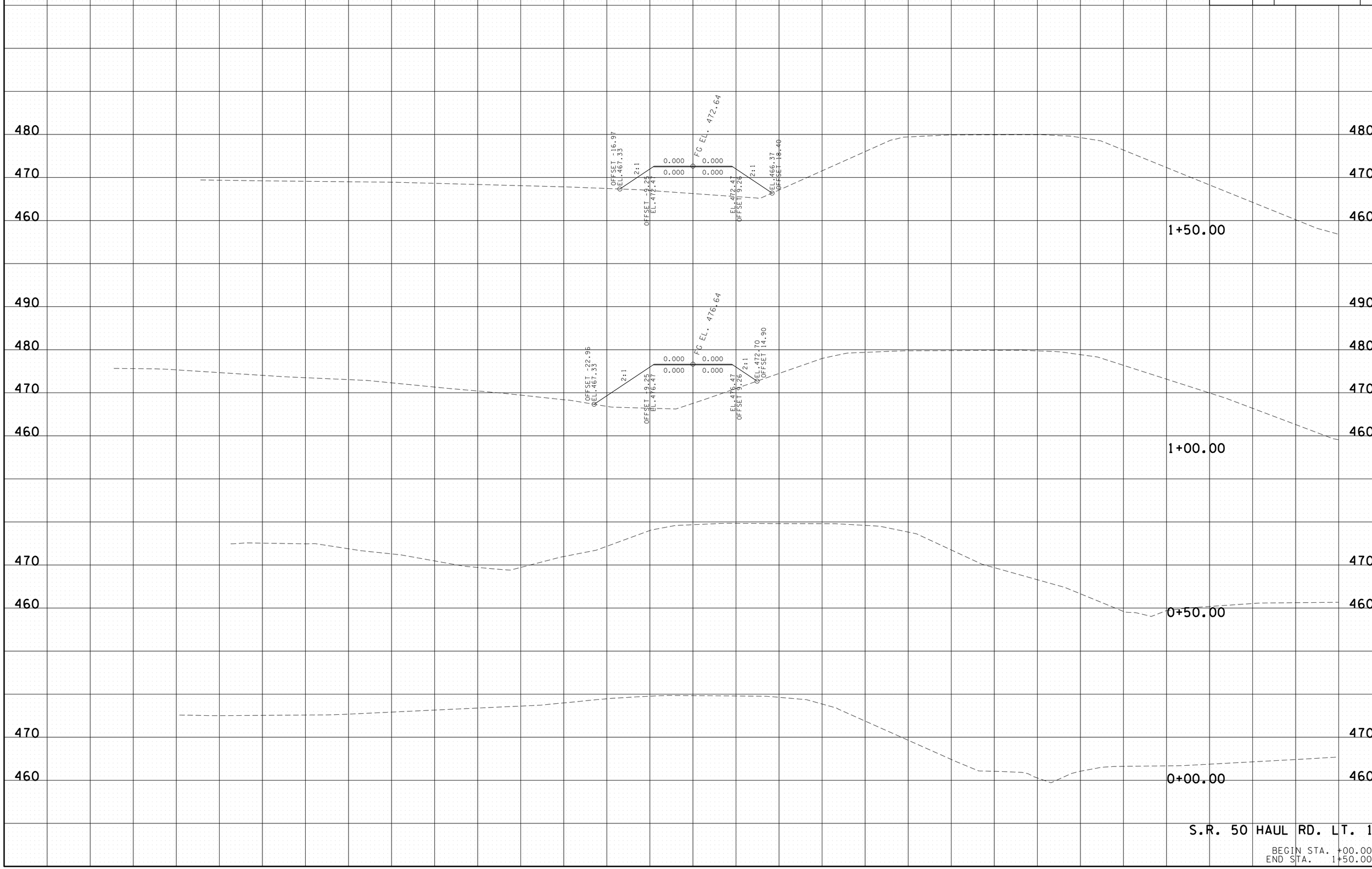
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	47



S.R. 50 HAUL RD. LT. 1

BEGIN STA. +00.00
END STA. 1+50.00

29-APR-2014 11:27
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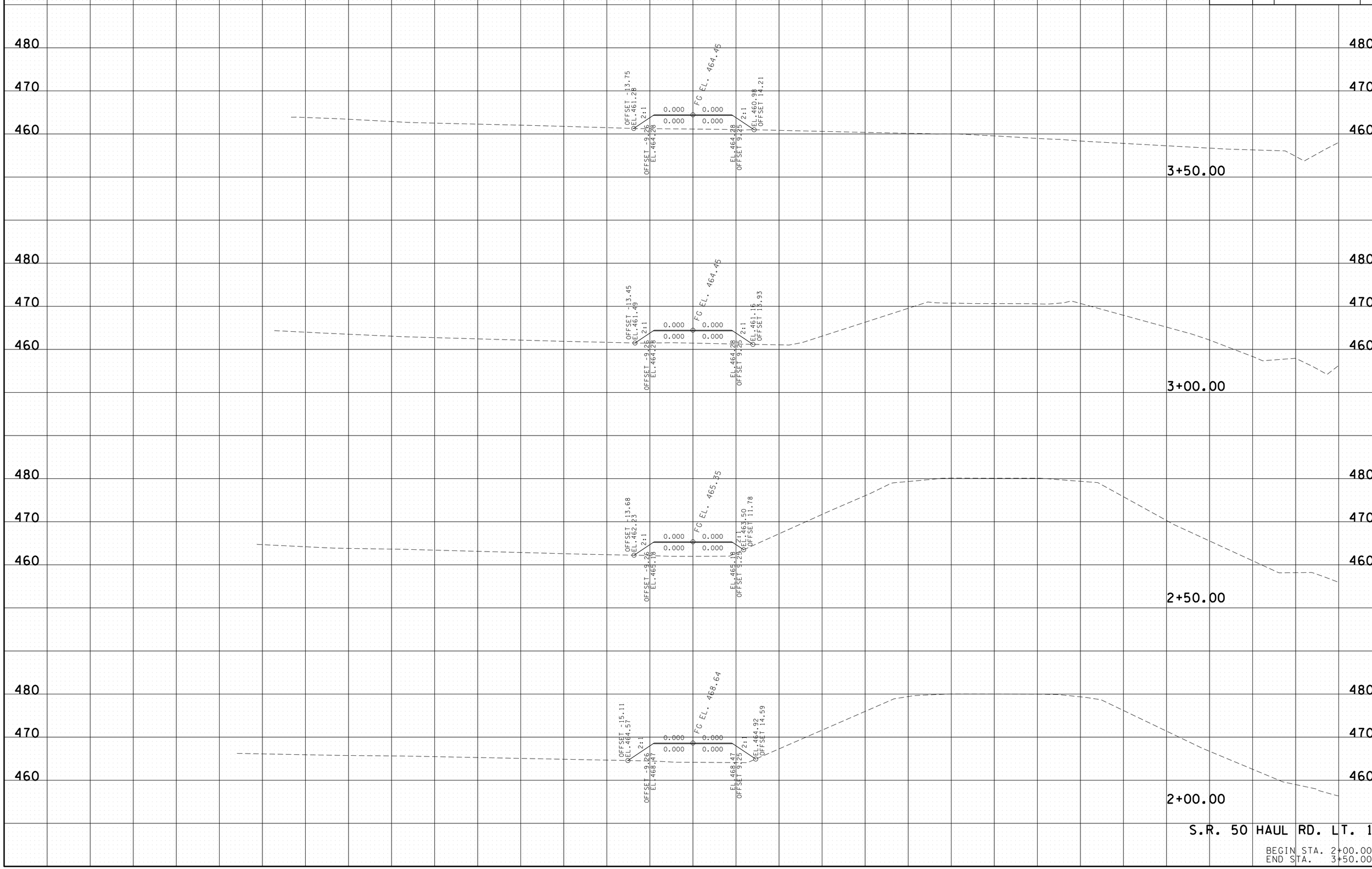
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	48



S.R. 50 HAUL RD. LT. 1

BEGIN STA. 2+00.00
END STA. 3+50.00

29-APR-2014 11:27
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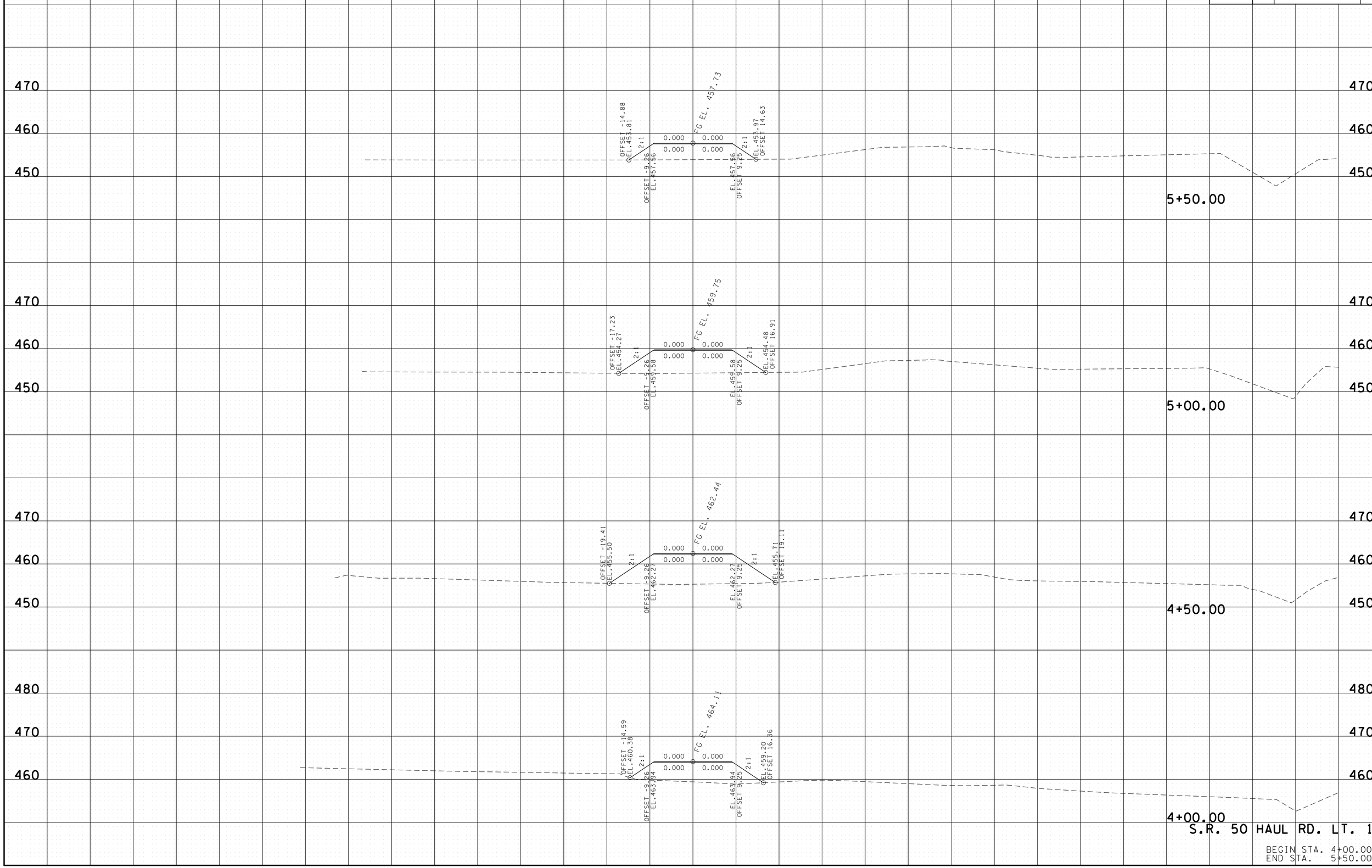
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	49



S.R. 50 HAUL RD. LT. 1

BEGIN STA. 4+00.00
END STA. 5+50.00

29-APR-2014 11:27
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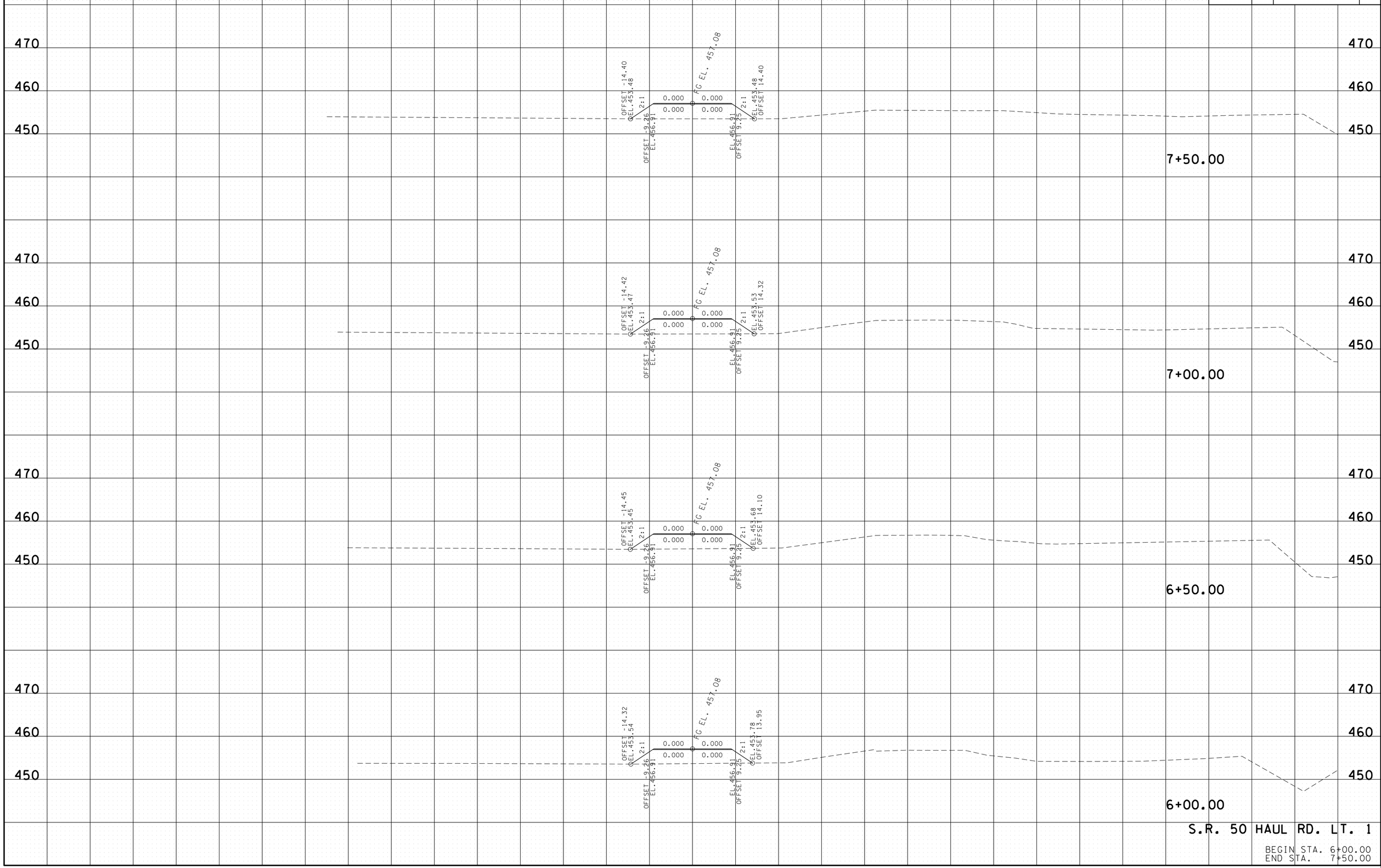
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	50



S.R. 50 HAUL RD. LT. 1

BEGIN STA. 6+00.00
END STA. 7+50.00

29-APR-2014 11:27
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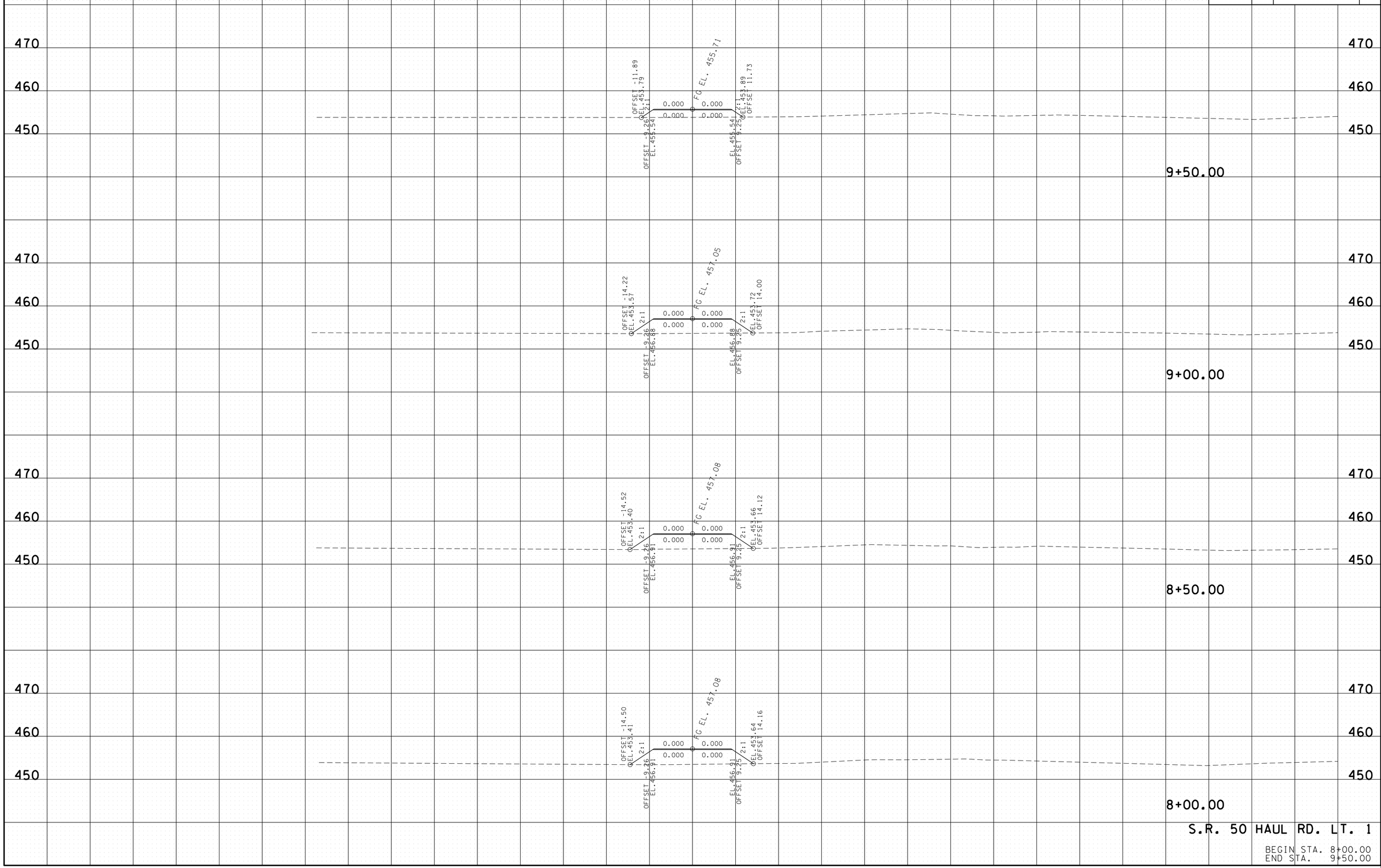
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	51



S.R. 50 HAUL RD. LT. 1

BEGIN STA. 8+00.00
END STA. 9+50.00

29-APR-2014 11:27
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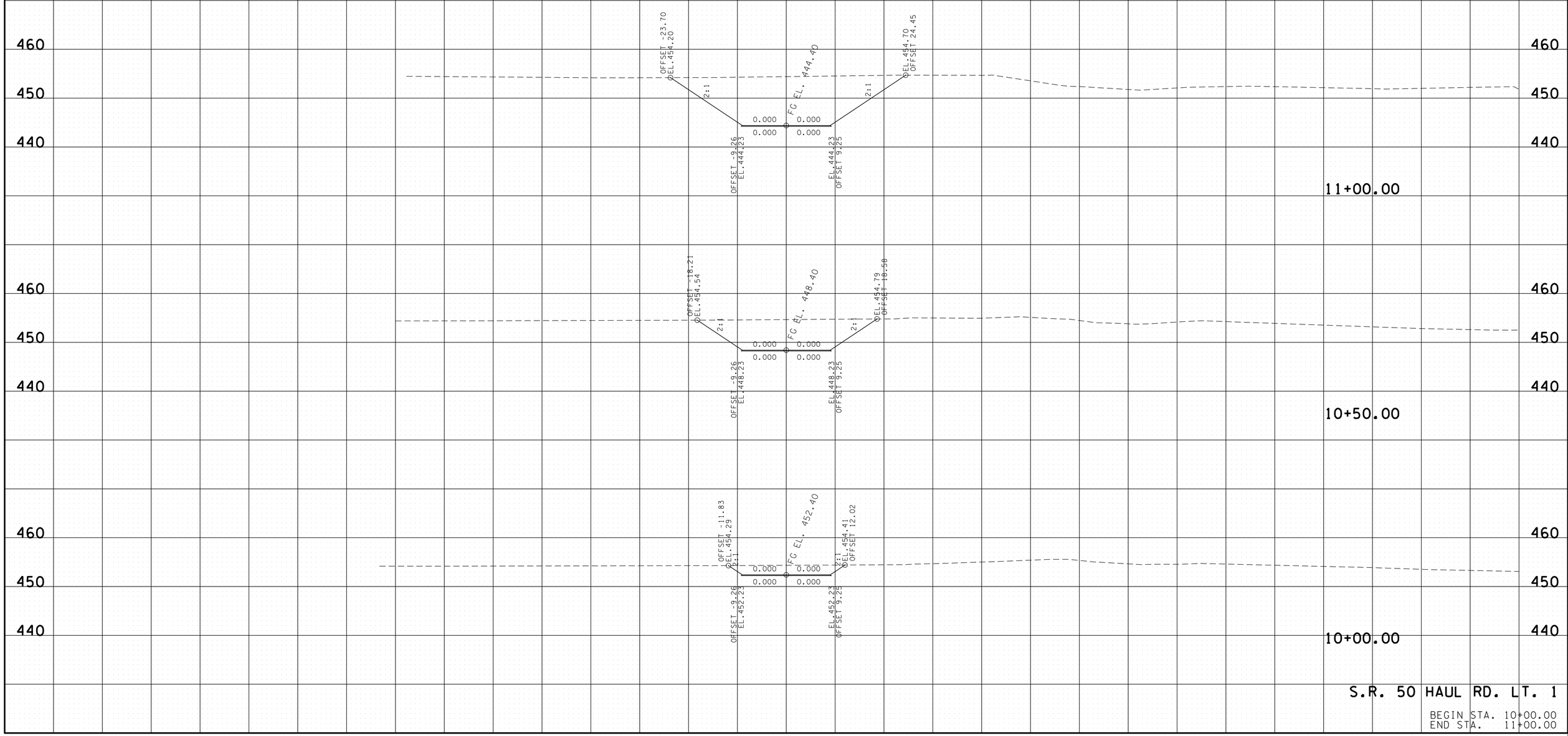
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	52



S.R. 50 HAUL RD. LT. 1

BEGIN STA. 10+00.00
END STA. 11+00.00

29-APR-2014 11:27
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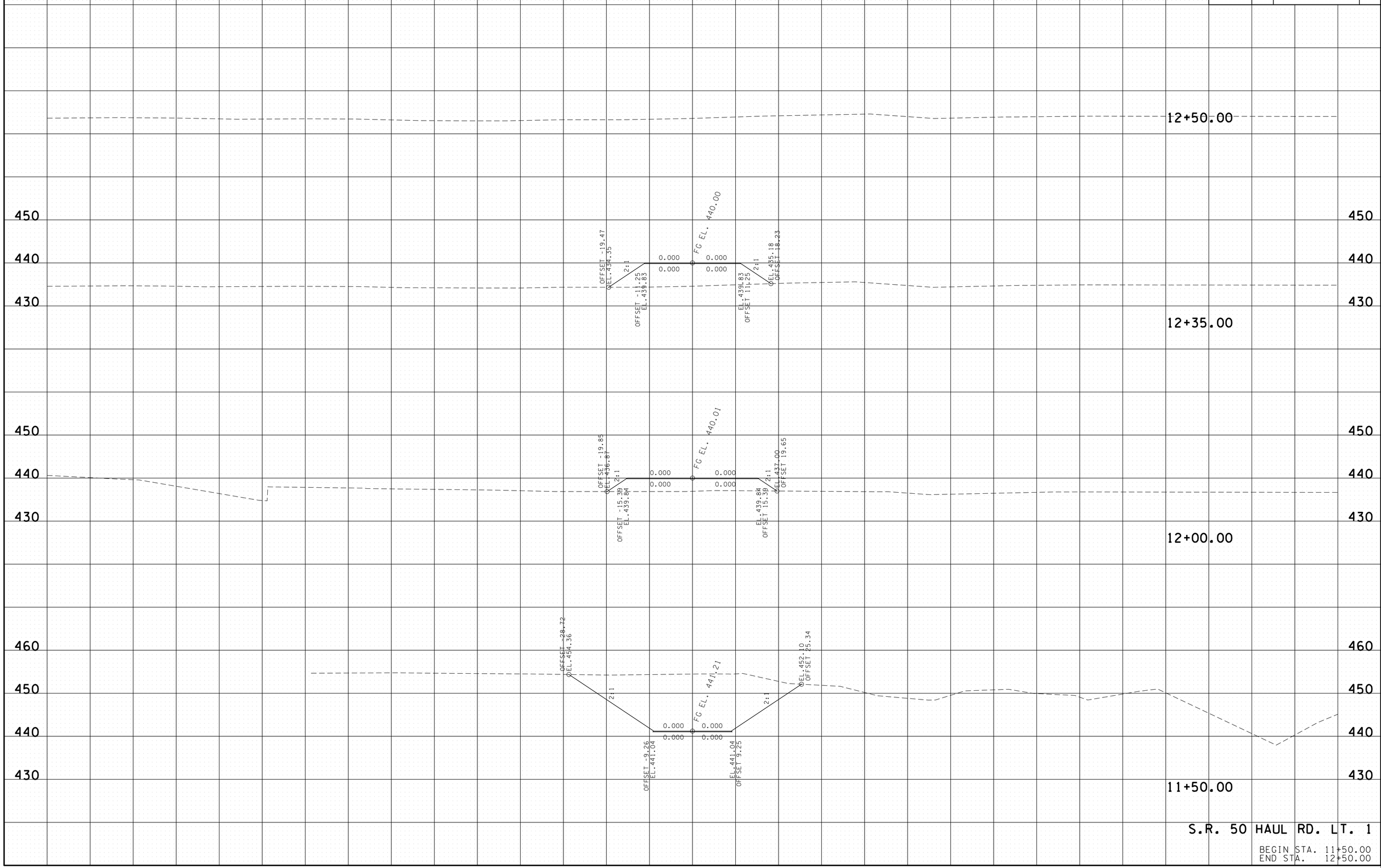
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	53



S.R. 50 HAUL RD. LT. 1

BEGIN STA. 11+50.00
END STA. 12+50.00

29-APR-2014 11:27
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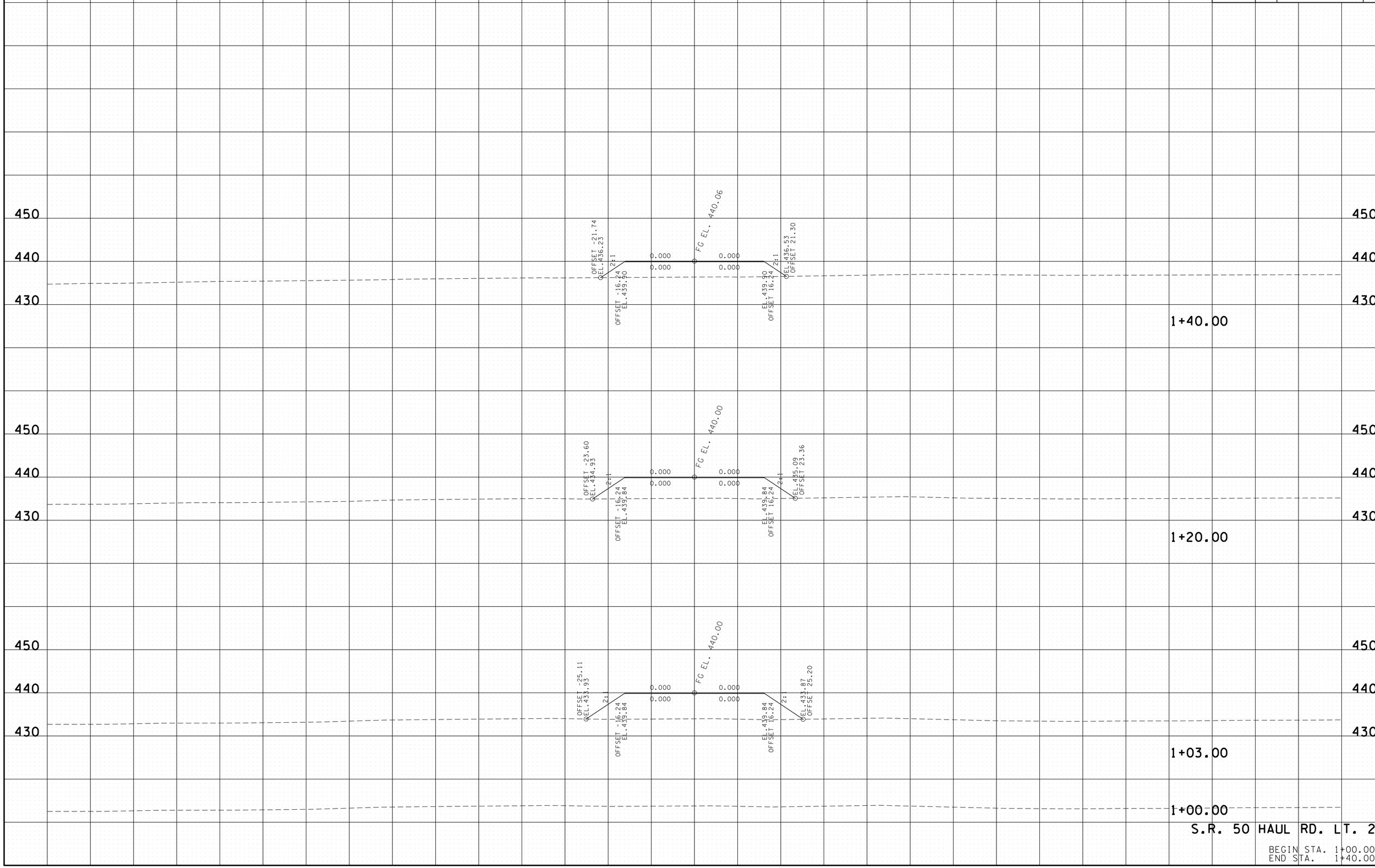
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	54



S.R. 50 HAUL RD. LT. 2

BEGIN STA. 1+00.00
END STA. 1+40.00

29-APR-2014 11:27
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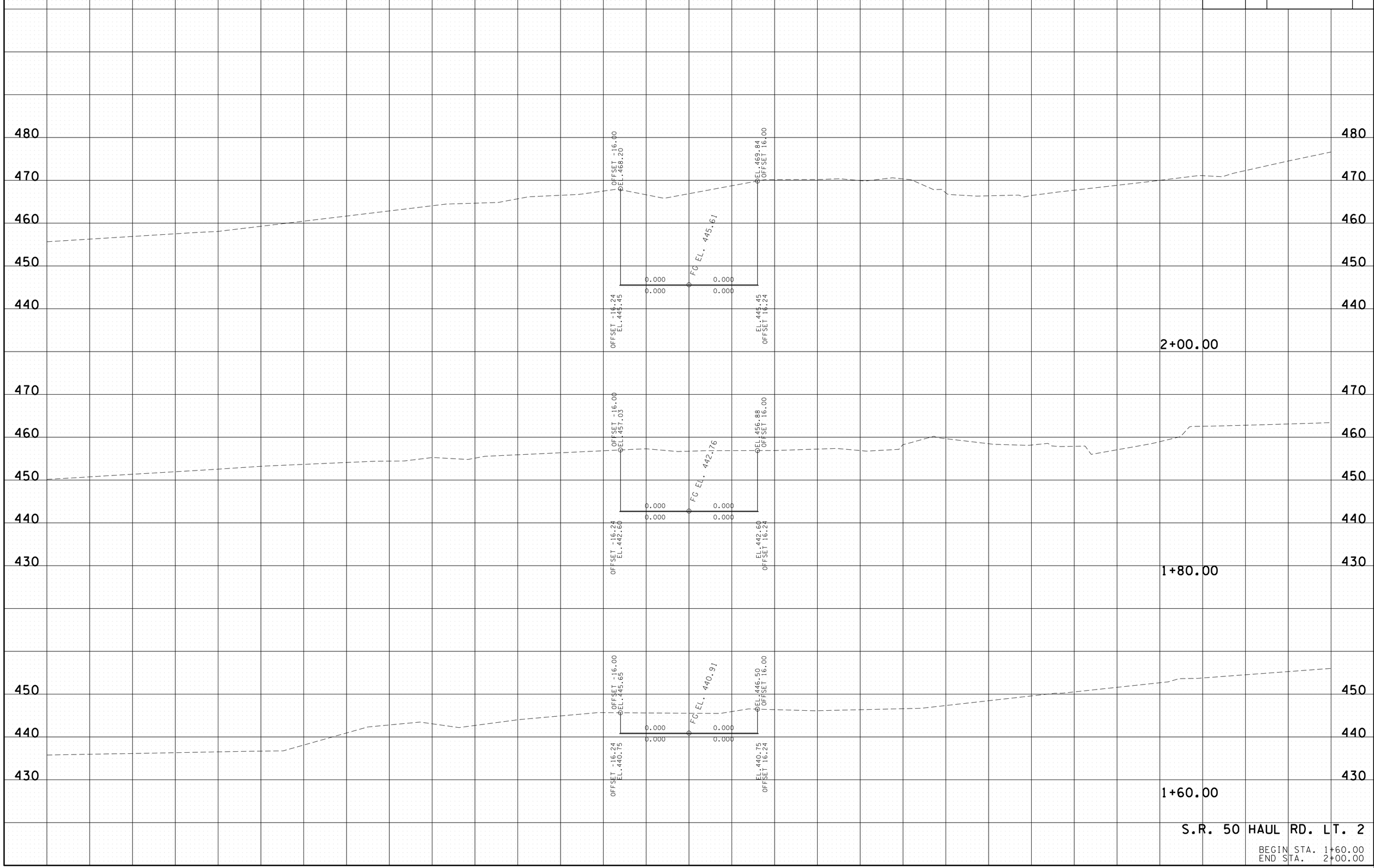
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	55



S.R. 50 HAUL RD. LT. 2

BEGIN STA. 1+60.00
END STA. 2+00.00

29-APR-2014 11:27
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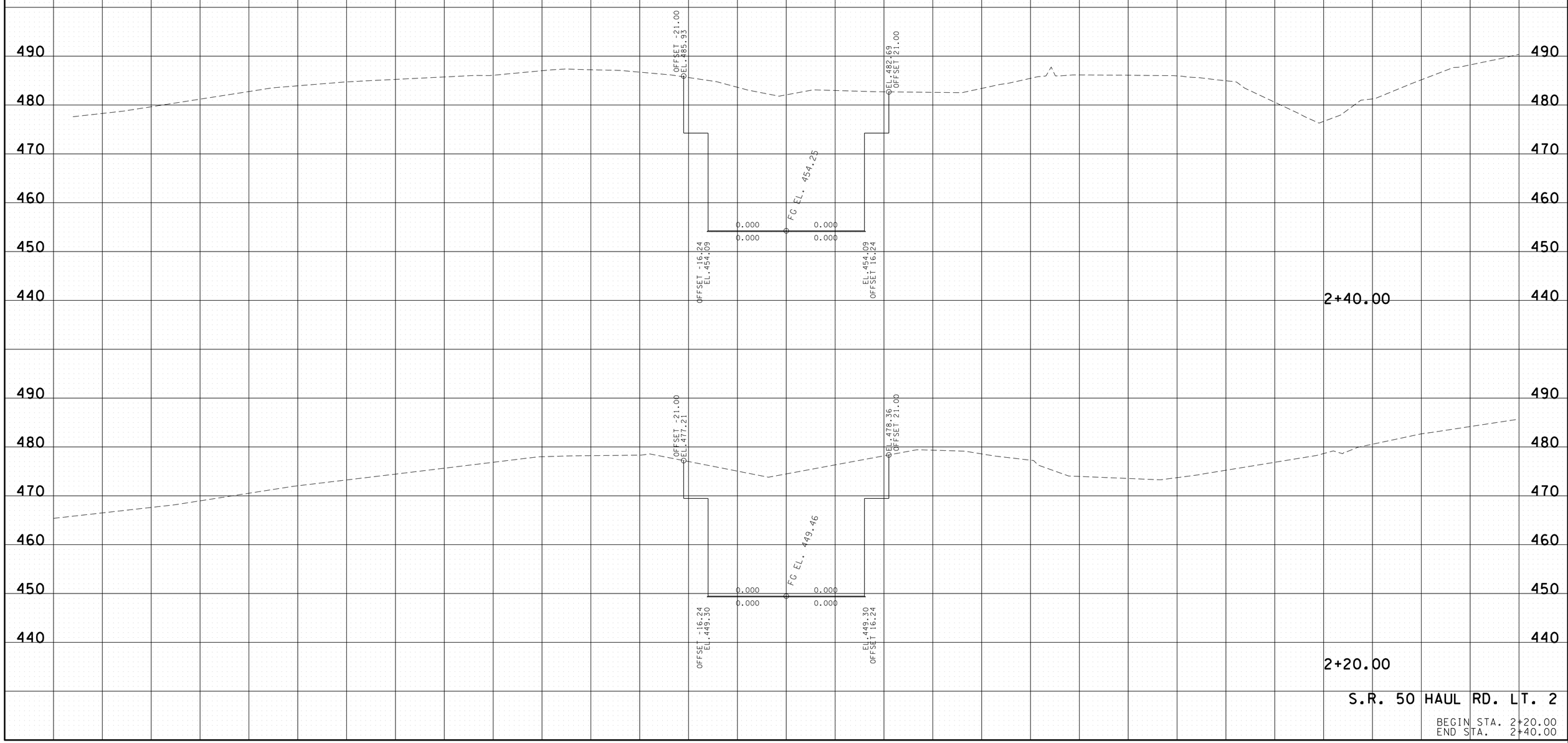
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	56



S.R. 50 HAUL RD. LT. 2

BEGIN STA. 2+20.00
END STA. 2+40.00

29-APR-2014 11:27
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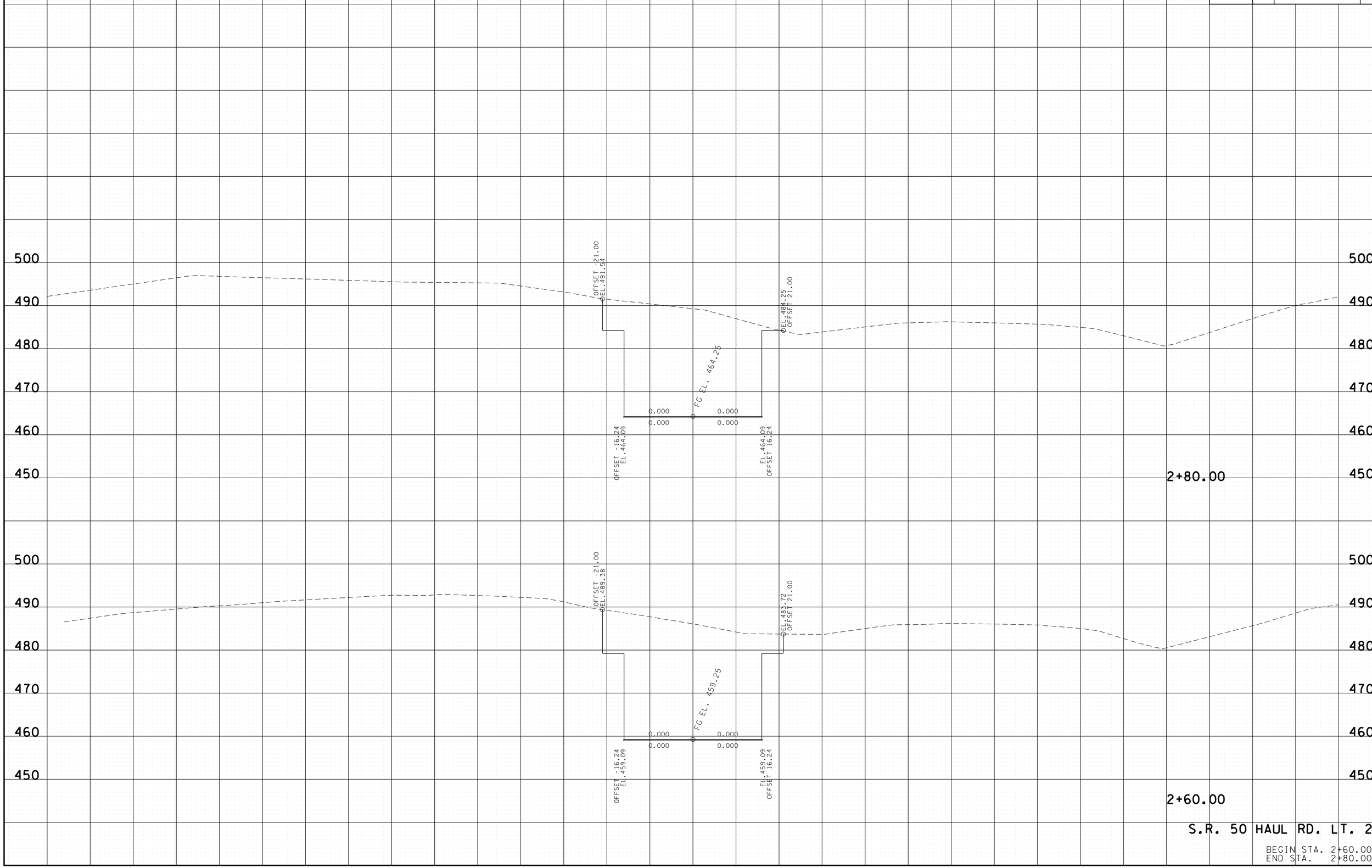
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	57



S.R. 50 HAUL RD. LT. 2

BEGIN STA. 2+60.00
END STA. 2+80.00

29-APR-2014 11:27
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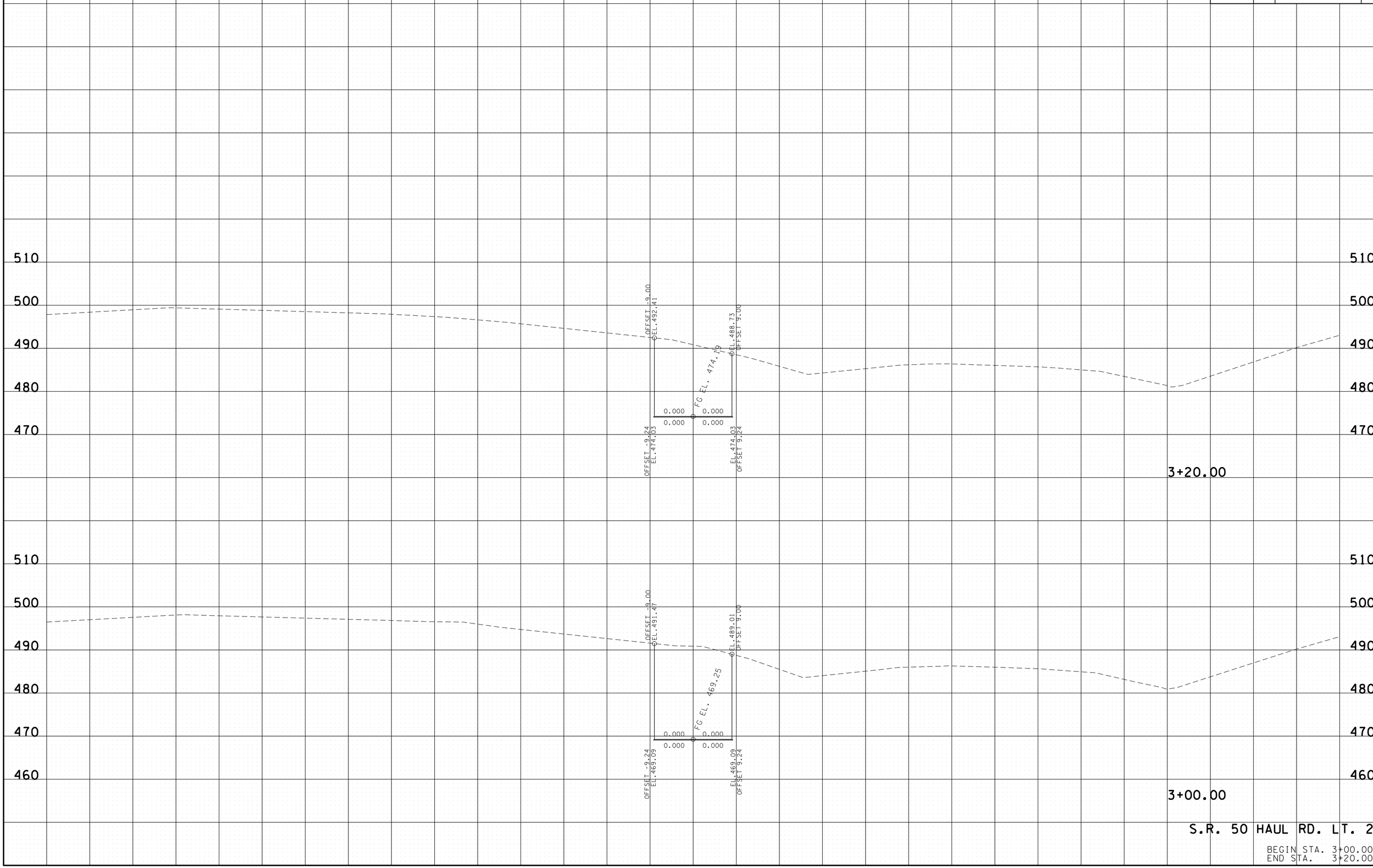
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	58



S.R. 50 HAUL RD. LT. 2

BEGIN STA. 3+00.00
END STA. 3+20.00

29-APR-2014 11:27
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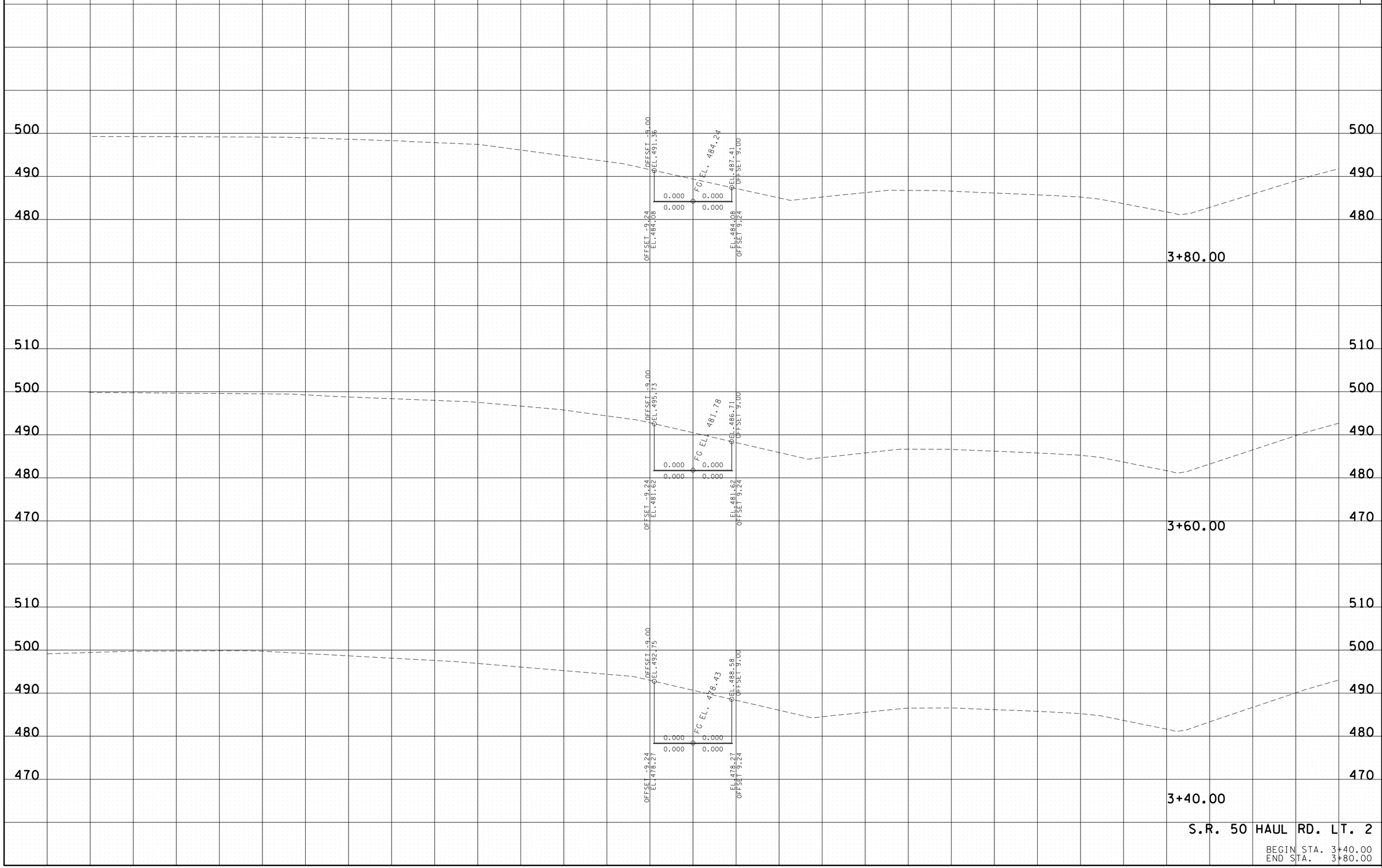
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	59



S.R. 50 HAUL RD. LT. 2

BEGIN STA. 3+40.00
END STA. 3+80.00

29-APR-2014 11:27
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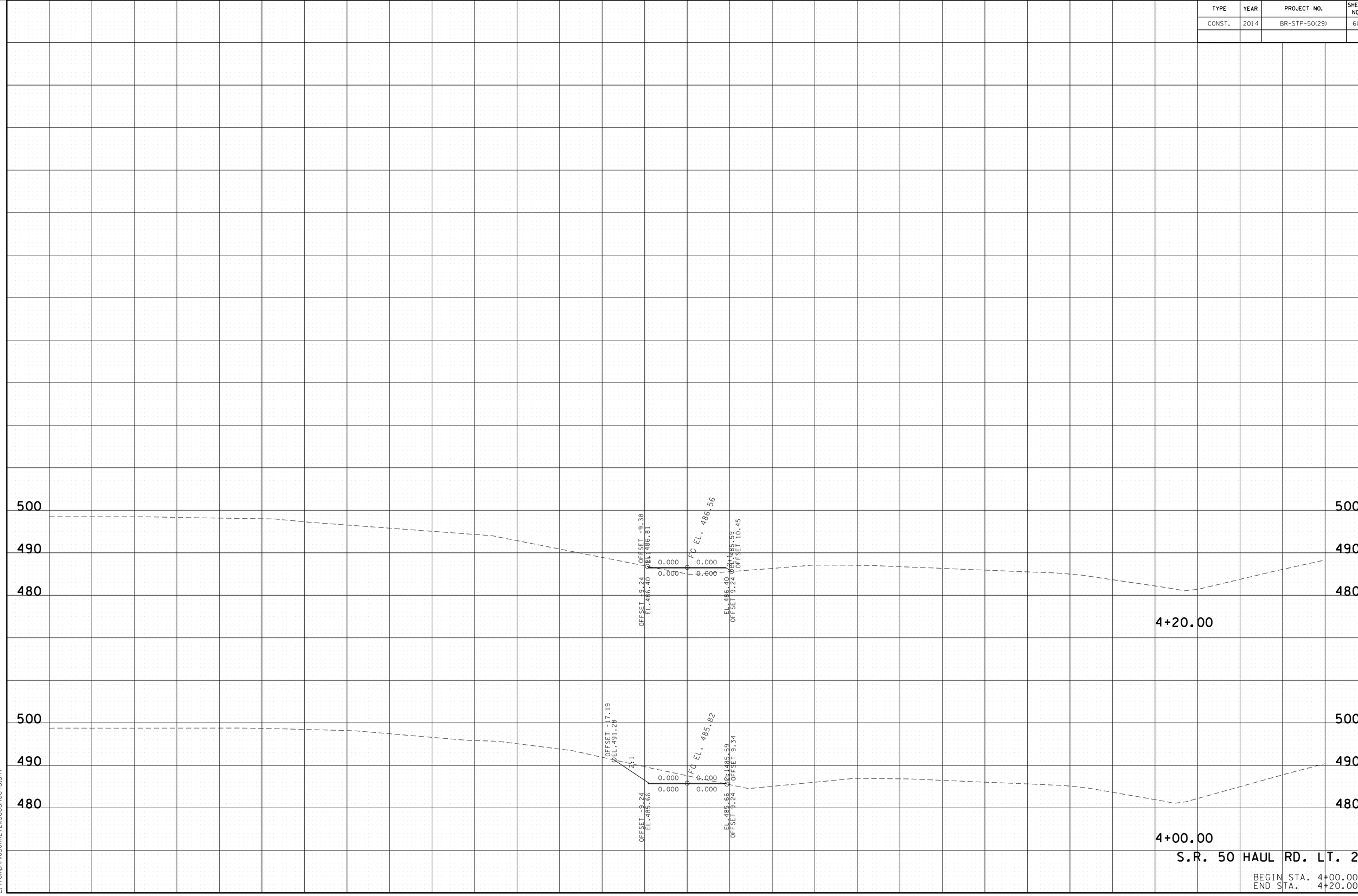
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	60

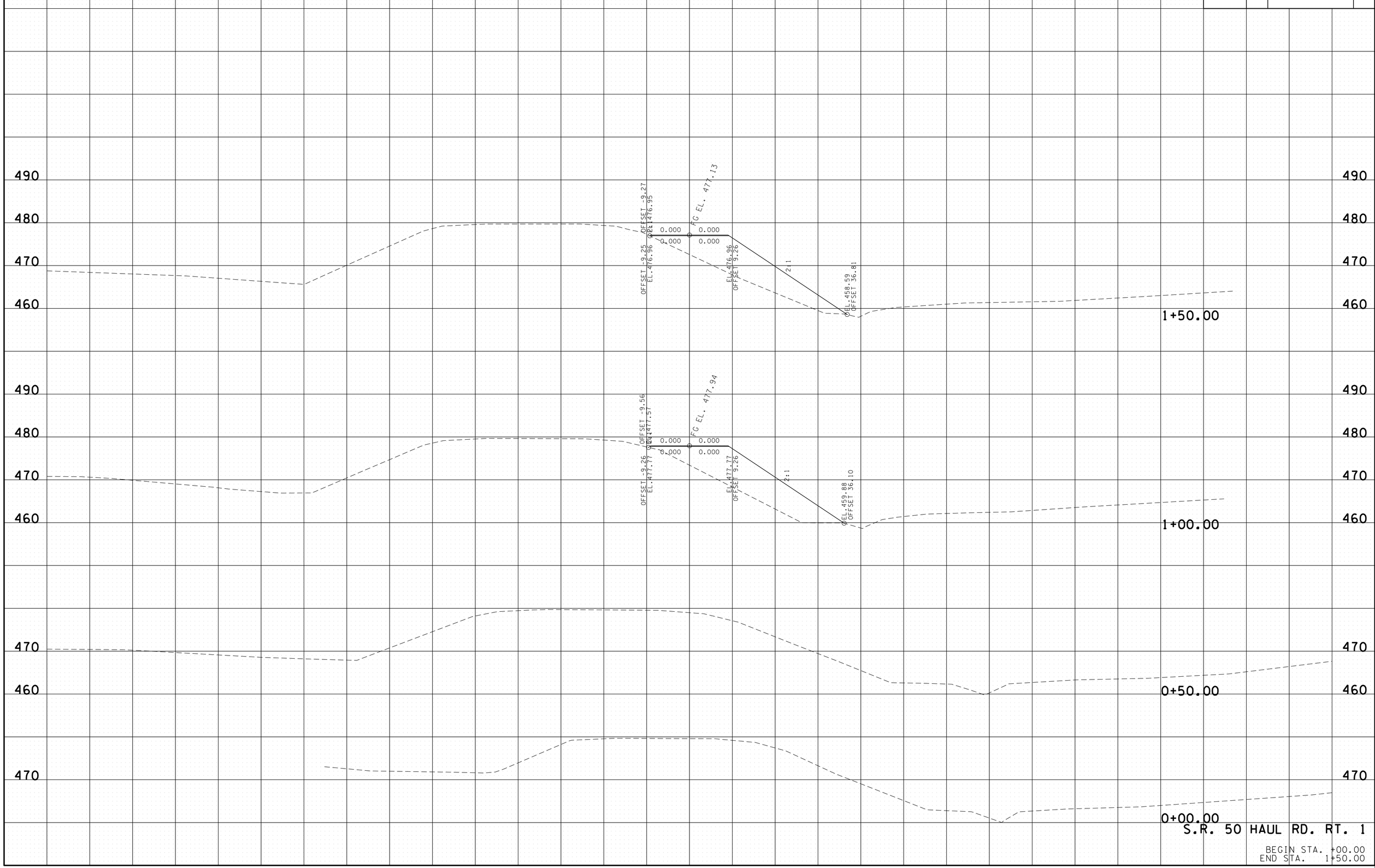


S.R. 50 HAUL RD. LT. 2

BEGIN STA. 4+00.00
END STA. 4+20.00

29-APR-2014 11:27
E:\Temp\HI050HRLT2xsecsheets.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	61



S.R. 50 HAUL RD. RT. 1

BEGIN STA. +00.00
END STA. 1+50.00

29-APR-2014 11:27
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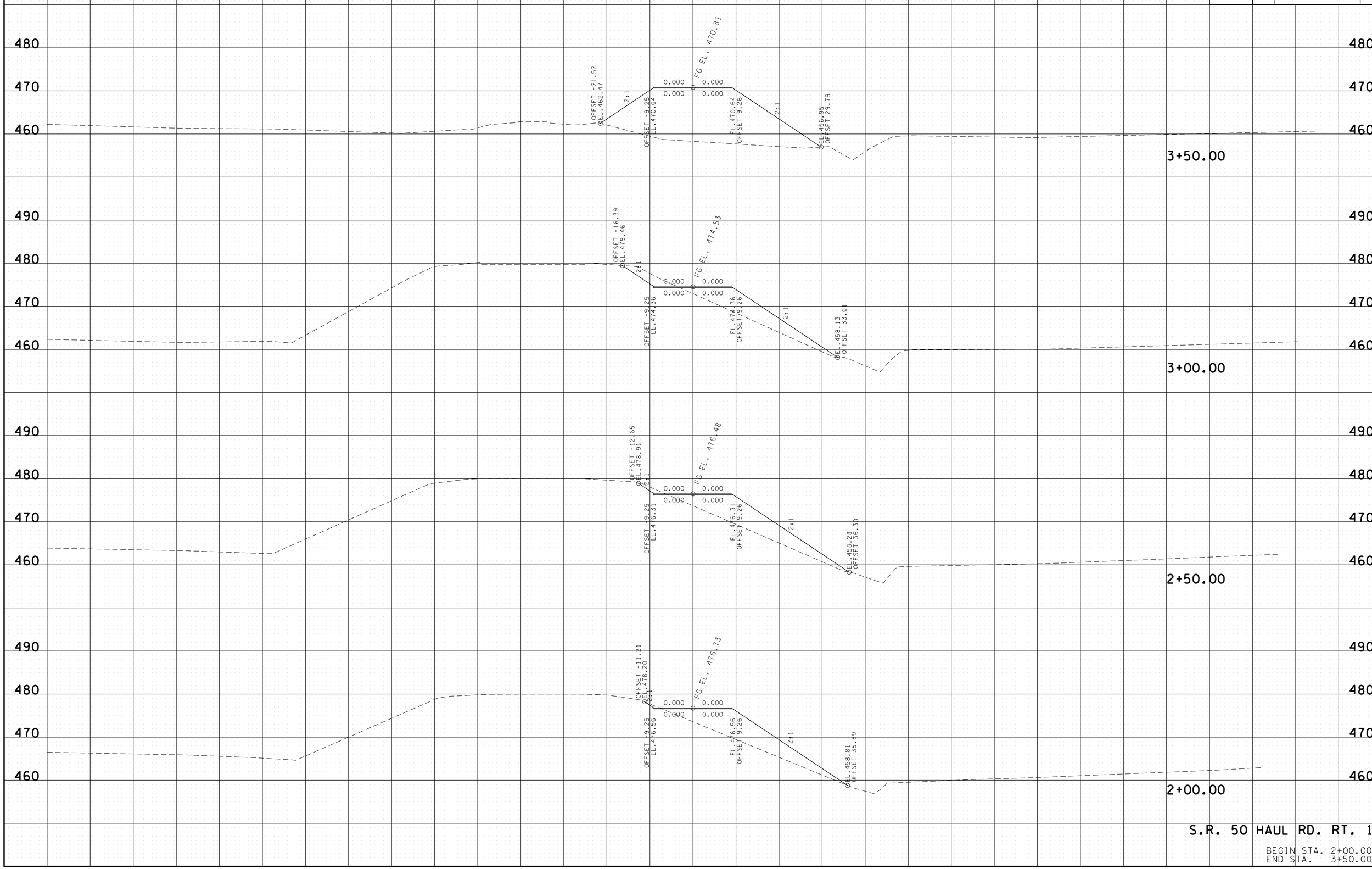
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	62

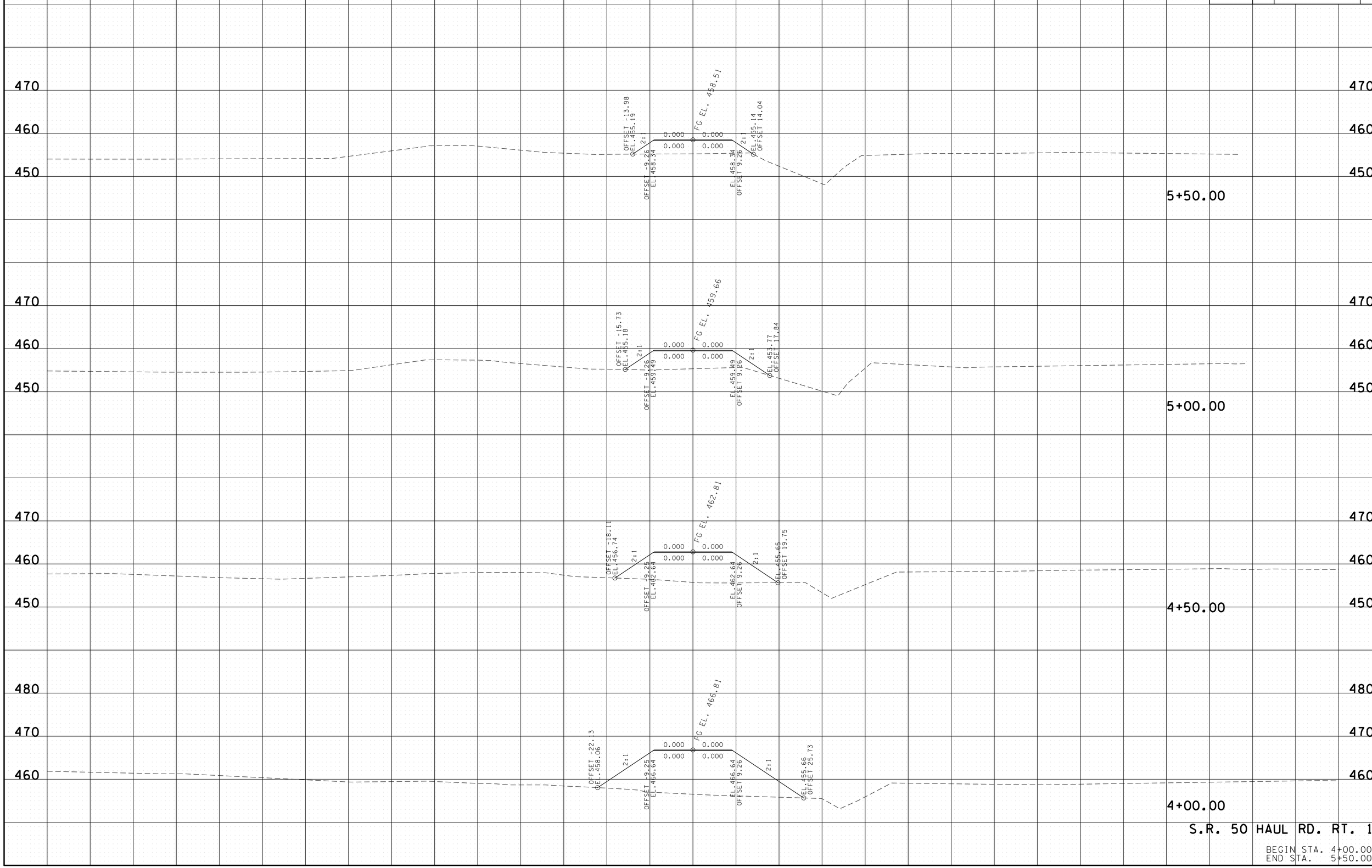


S.R. 50 HAUL RD. RT. 1

BEGIN STA. 2+00.00
END STA. 3+50.00

29-APR-2014 11:27
E:\Temp\H1050HRRTIAxsecsheets.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	63



S.R. 50 HAUL RD. RT. 1

BEGIN STA. 4+00.00
END STA. 5+50.00

29-APR-2014 11:27
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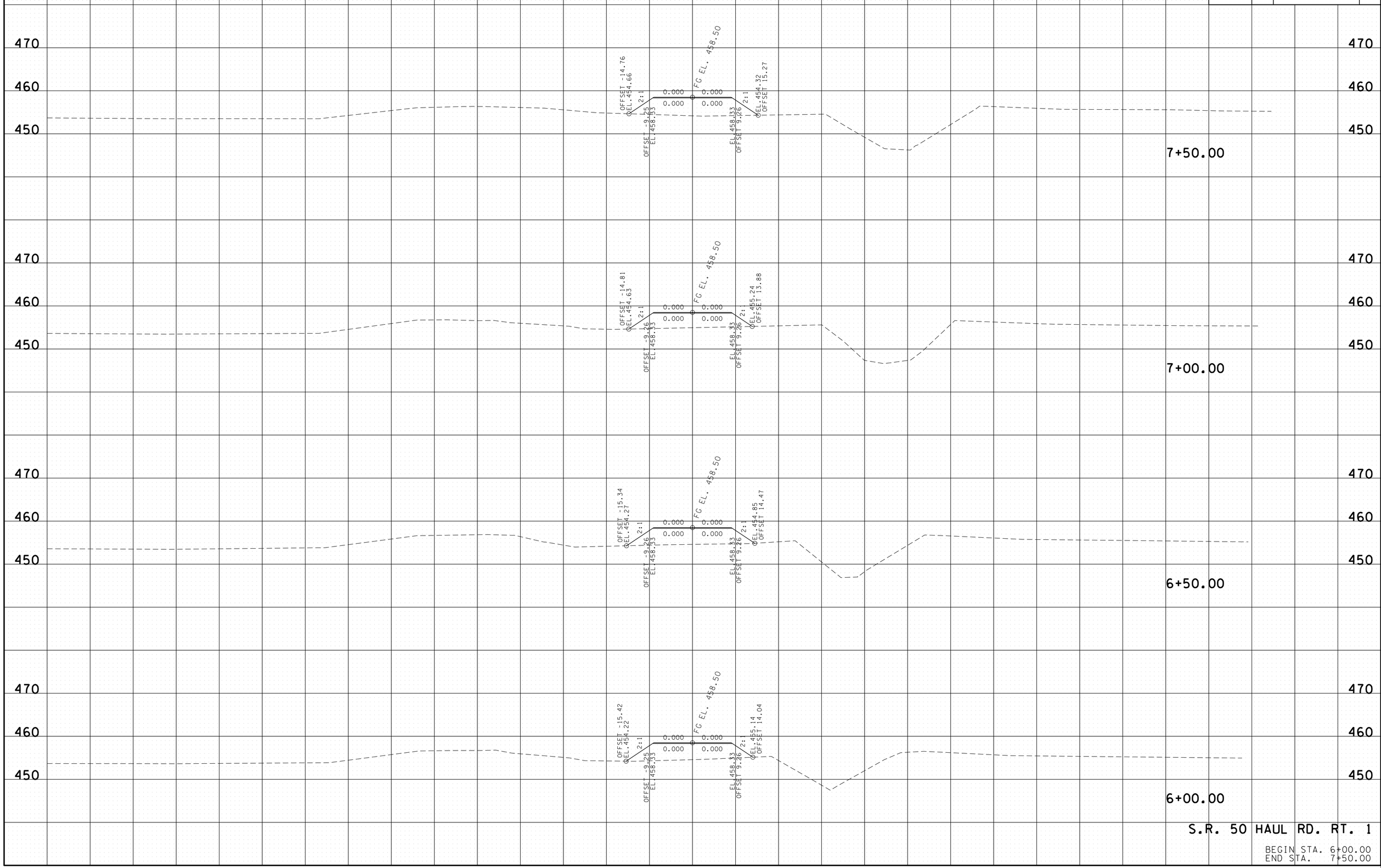
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	64



S.R. 50 HAUL RD. RT. 1

BEGIN STA. 6+00.00
END STA. 7+50.00

29-APR-2014 11:27
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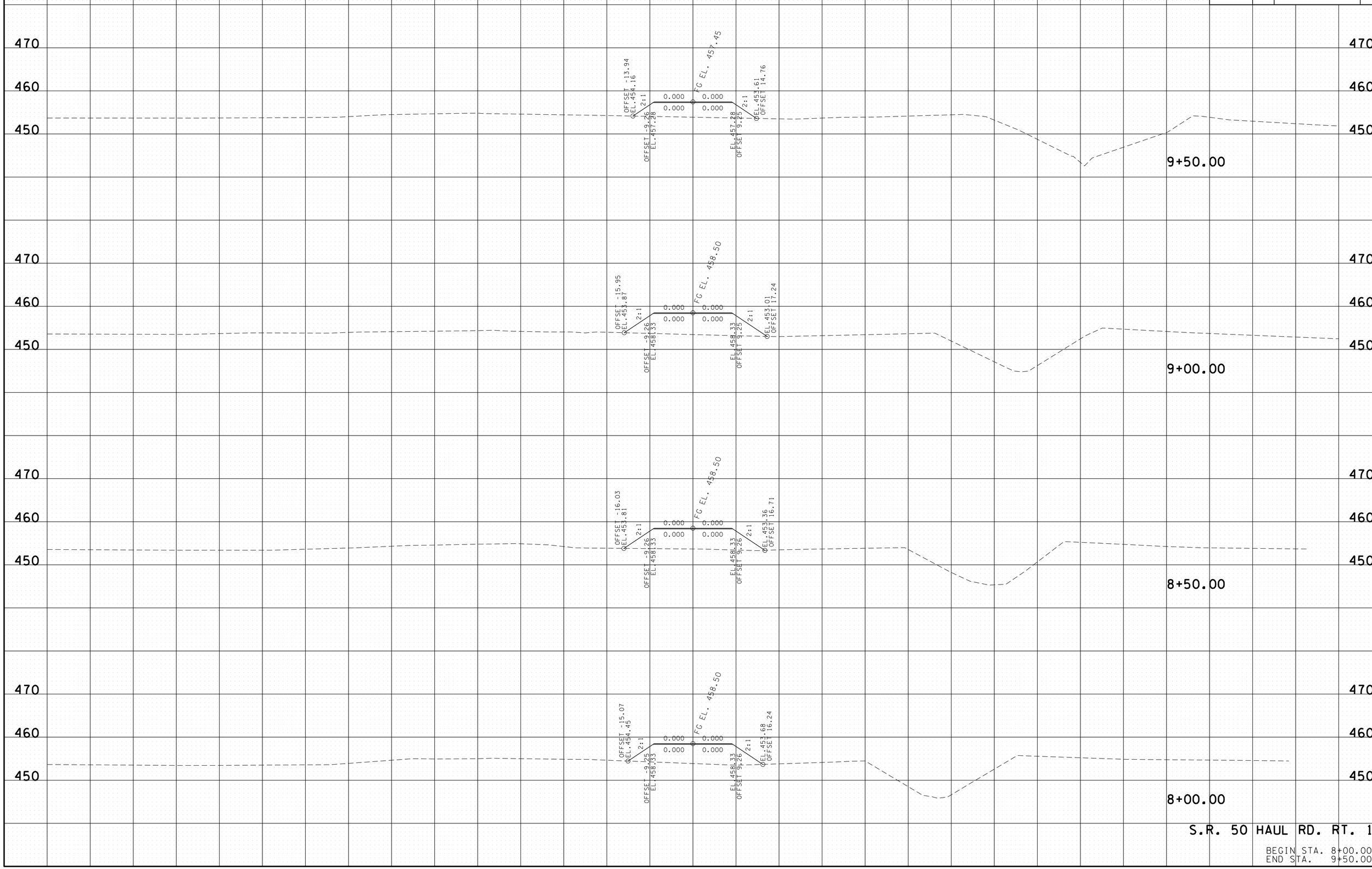
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	65



S.R. 50 HAUL RD. RT. 1

BEGIN STA. 8+00.00
END STA. 9+50.00

29-APR-2014 11:27
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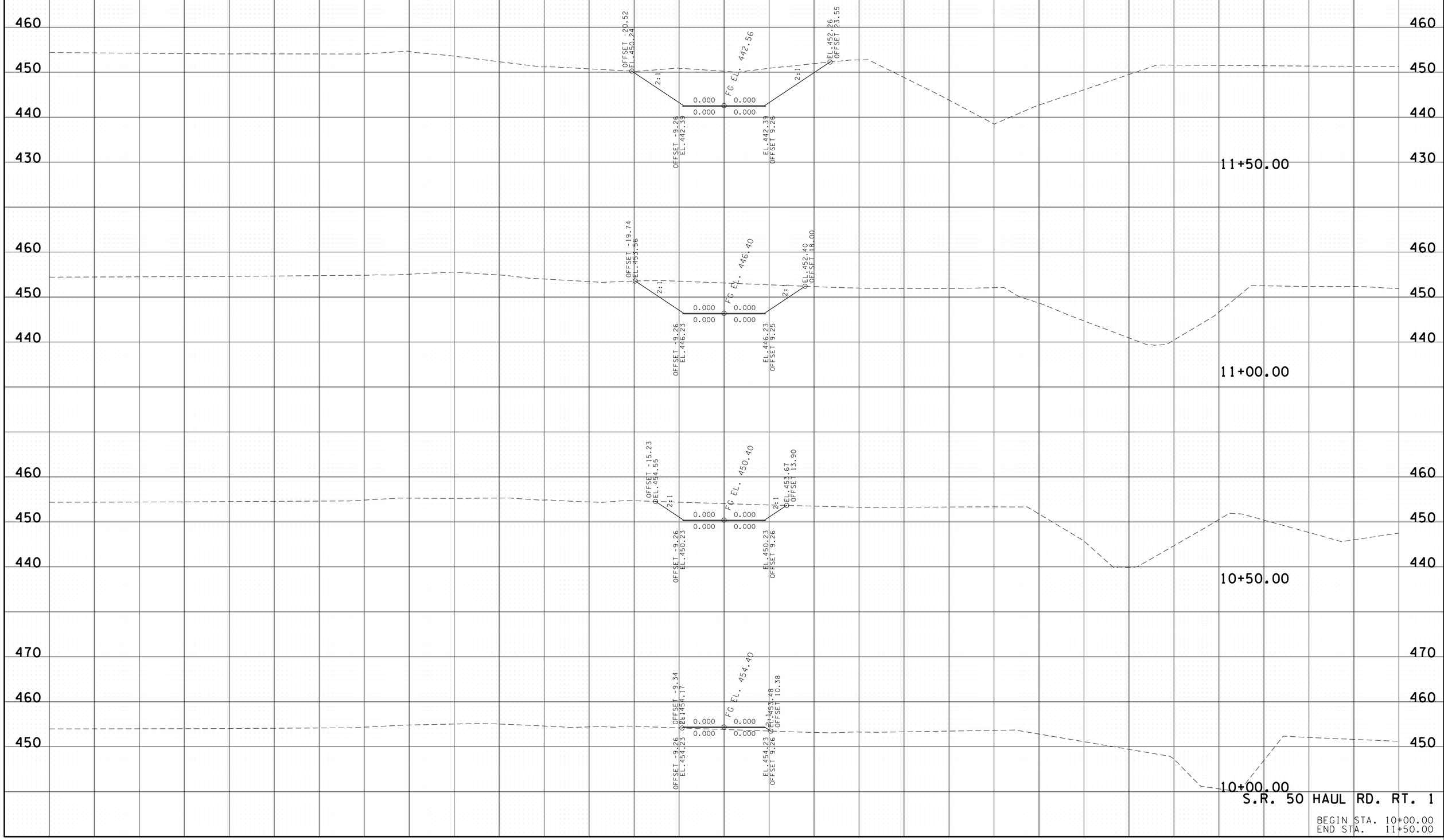
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	66



S.R. 50 HAUL RD. RT. 1

BEGIN STA. 10+00.00
END STA. 11+50.00

29-APR-2014 11:27
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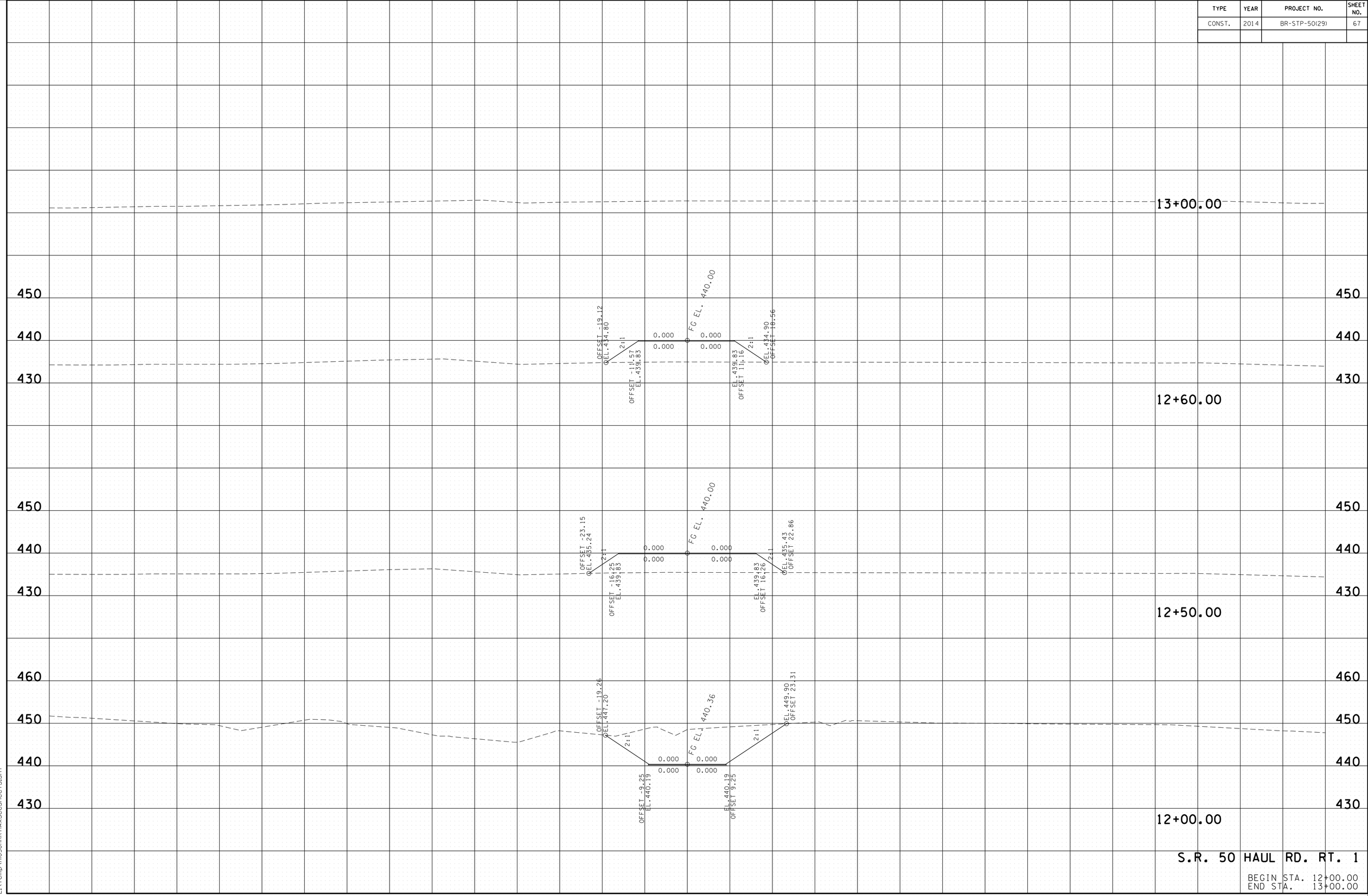
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	67

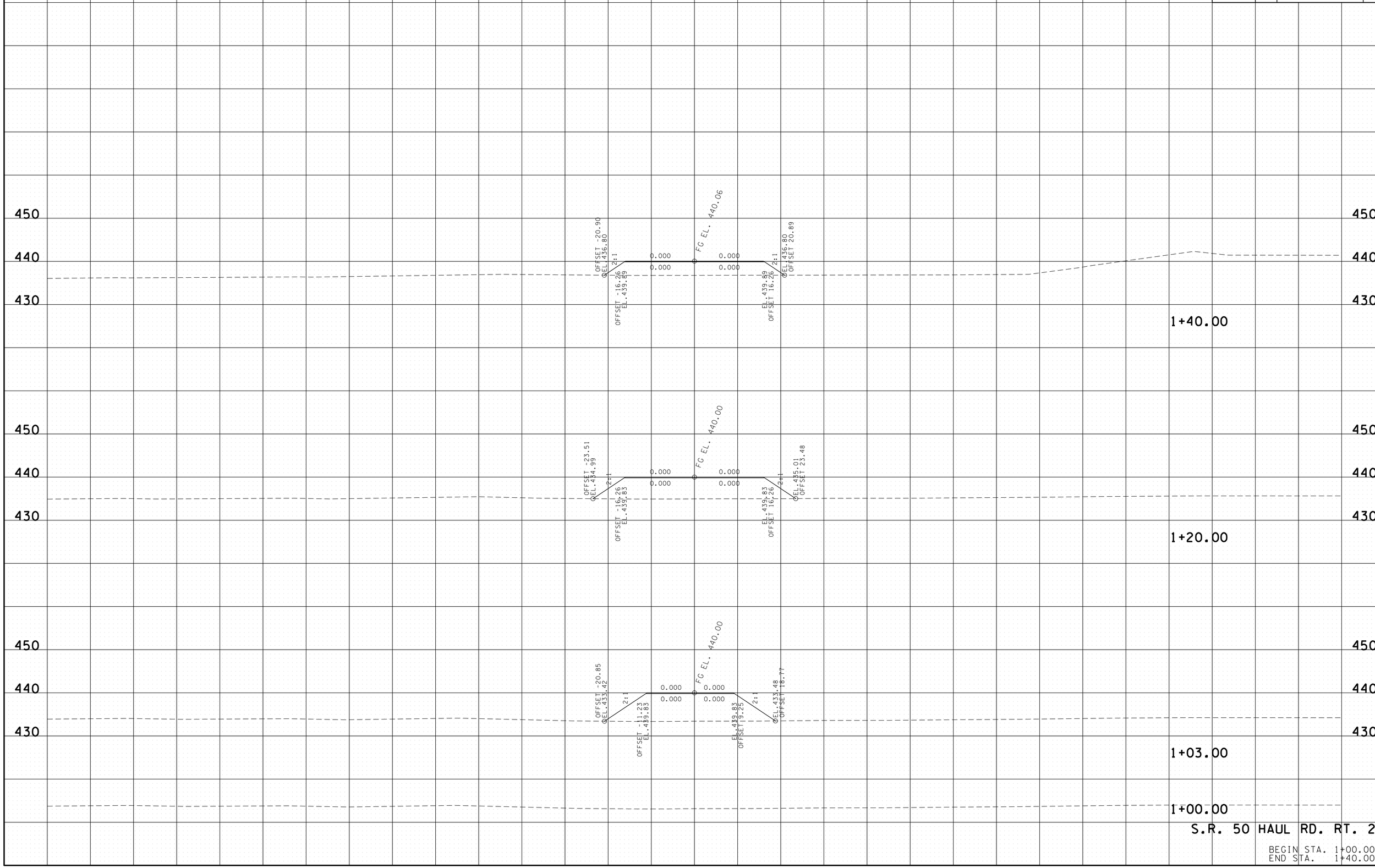


S.R. 50 HAUL RD. RT. 1

BEGIN STA. 12+00.00
END STA. 13+00.00

29-APR-2014 11:27
E:\Temp\HI05DHRRT1Axsecsheets.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	68

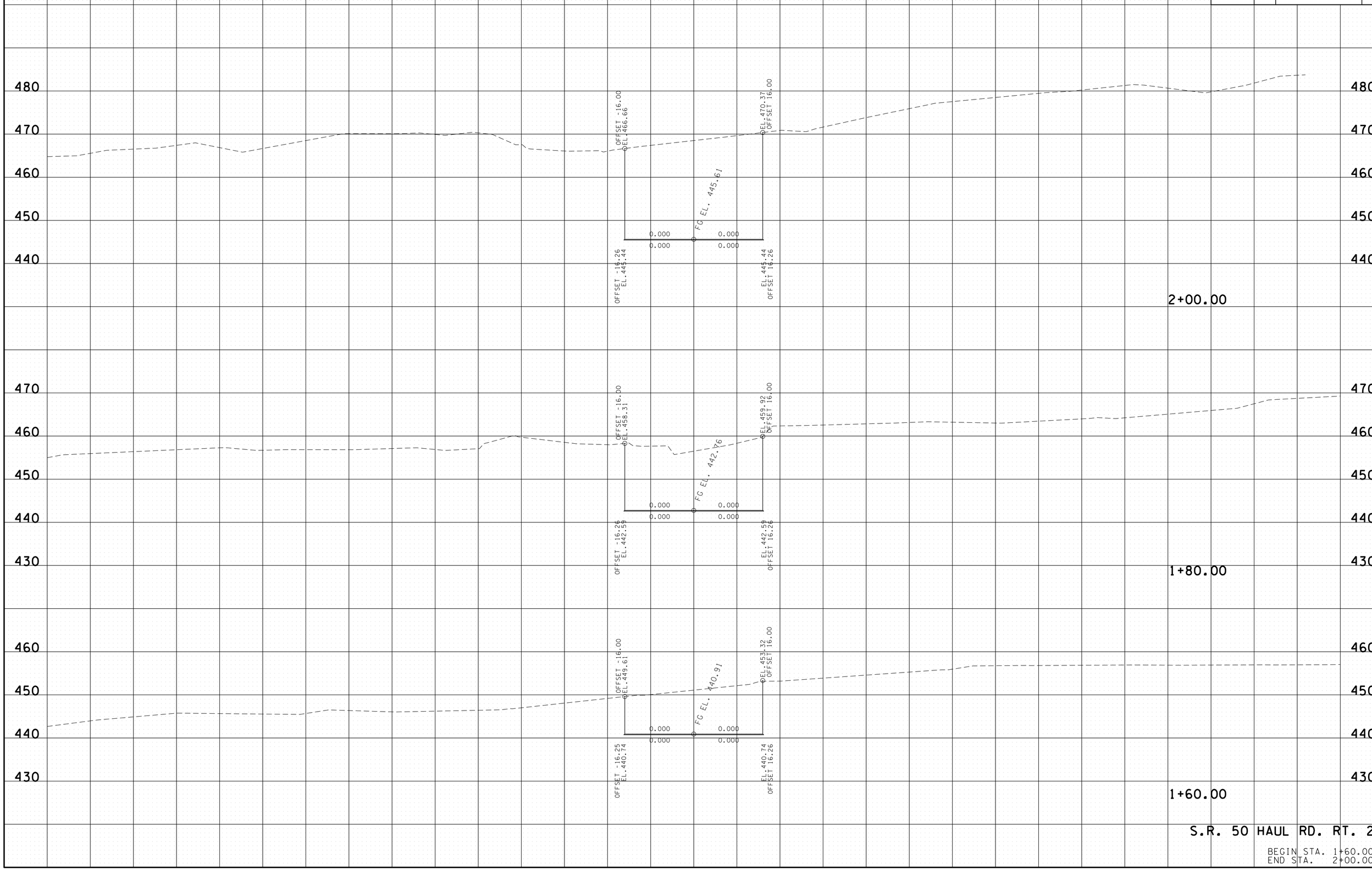


S.R. 50 HAUL RD. RT. 2

BEGIN STA. 1+00.00
END STA. 1+40.00

29-APR-2014 11:27
E:\Temp\H050HRRT2xsecsheets.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	69



S.R. 50 HAUL RD. RT. 2

BEGIN STA. 1+60.00
END STA. 2+00.00

29-APR-2014 11:27
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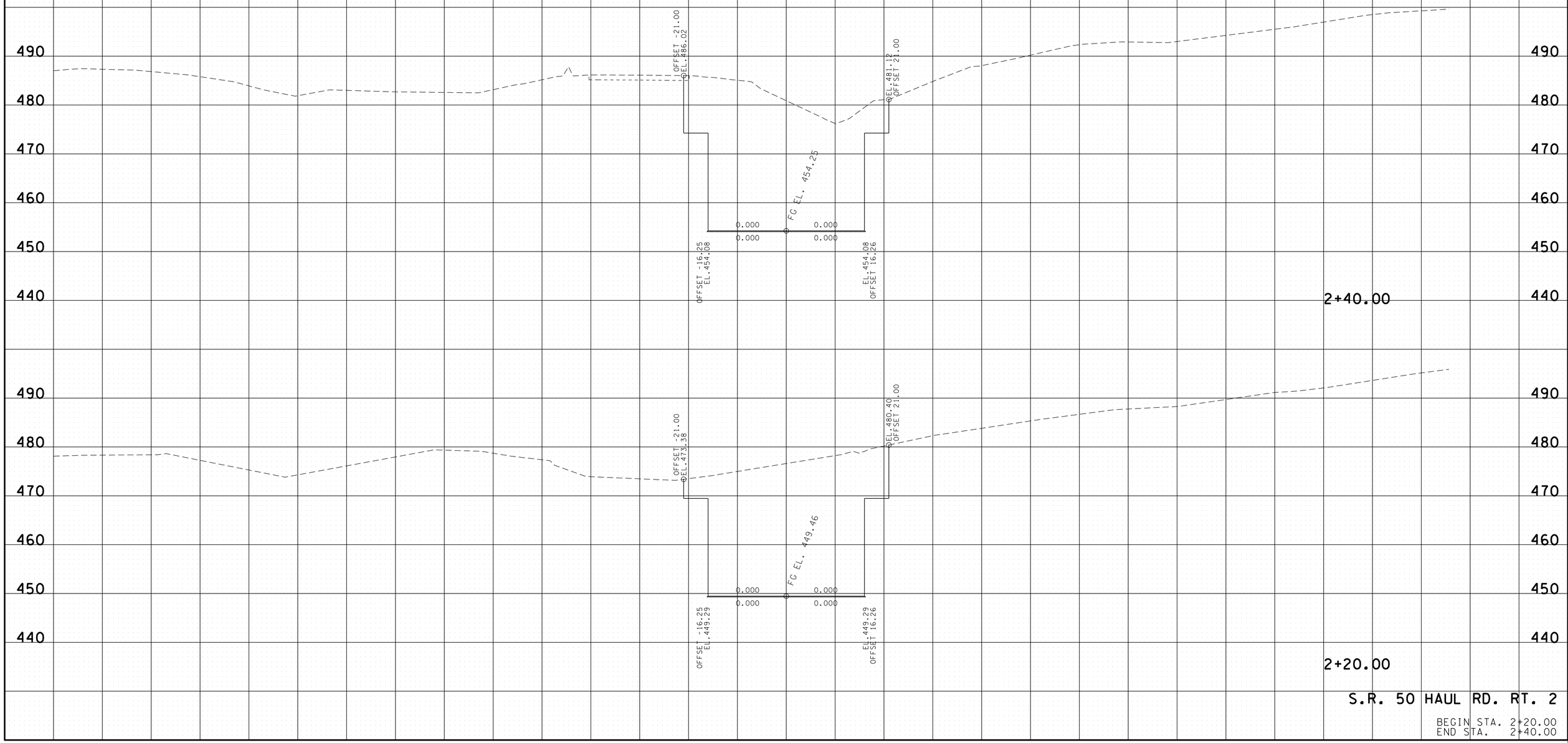
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	70



S.R. 50 HAUL RD. RT. 2

BEGIN STA. 2+20.00
END STA. 2+40.00

29-APR-2014 11:27
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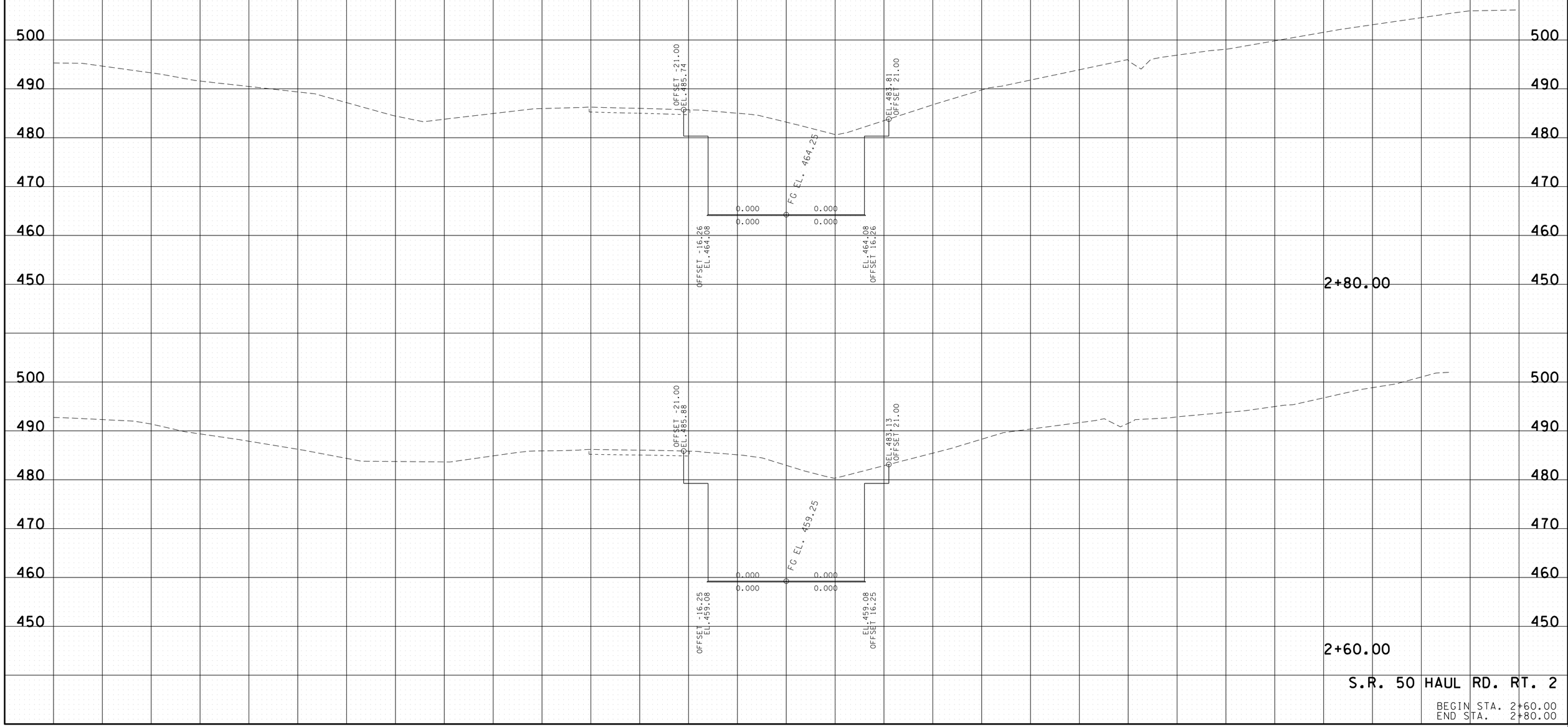
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	71



S.R. 50 HAUL RD. RT. 2

BEGIN STA. 2+60.00
END STA. 2+80.00

29-APR-2014 11:27
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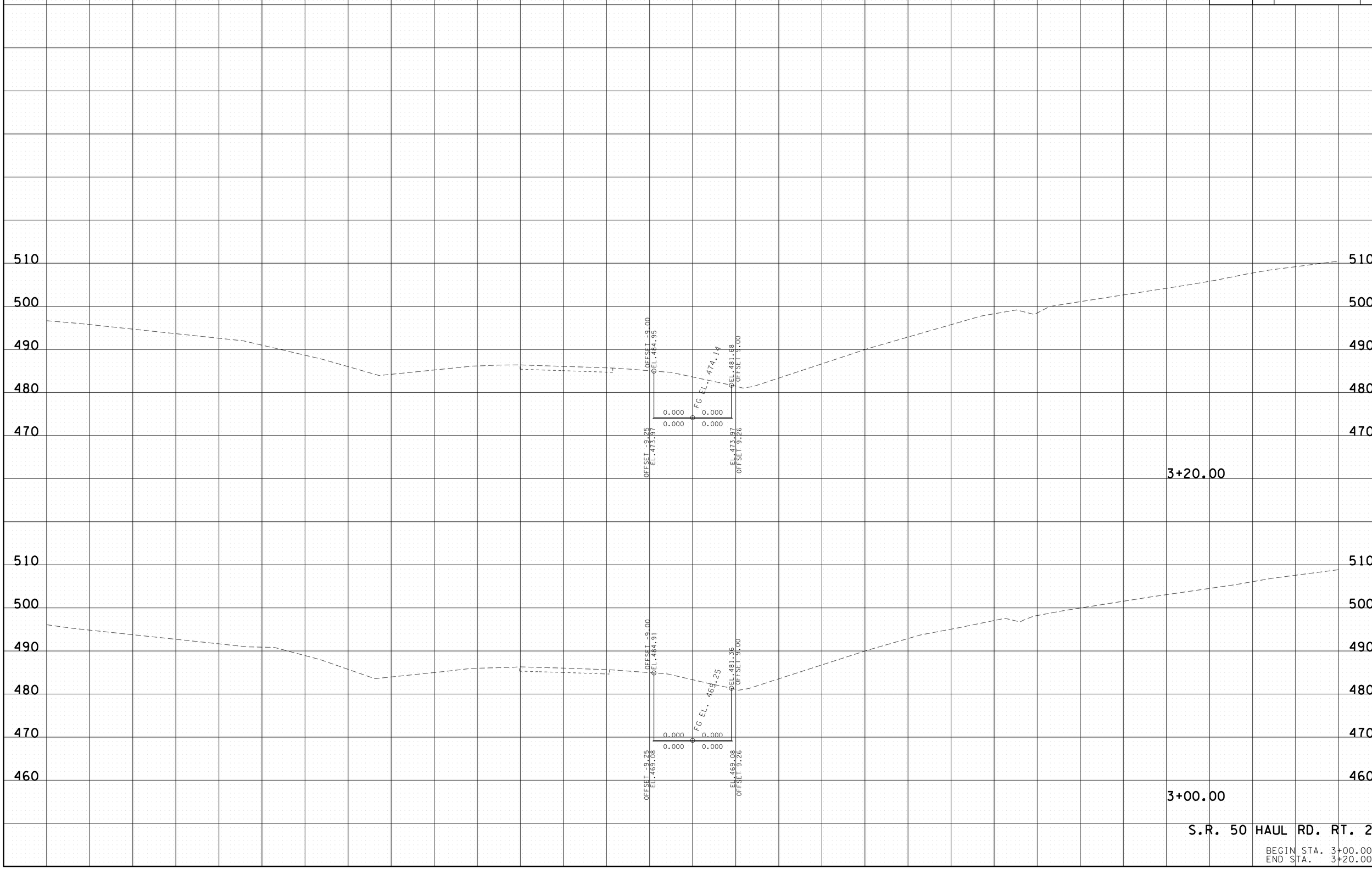
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	72



S.R. 50 HAUL RD. RT. 2

BEGIN STA. 3+00.00
END STA. 3+20.00

29-APR-2014 11:27
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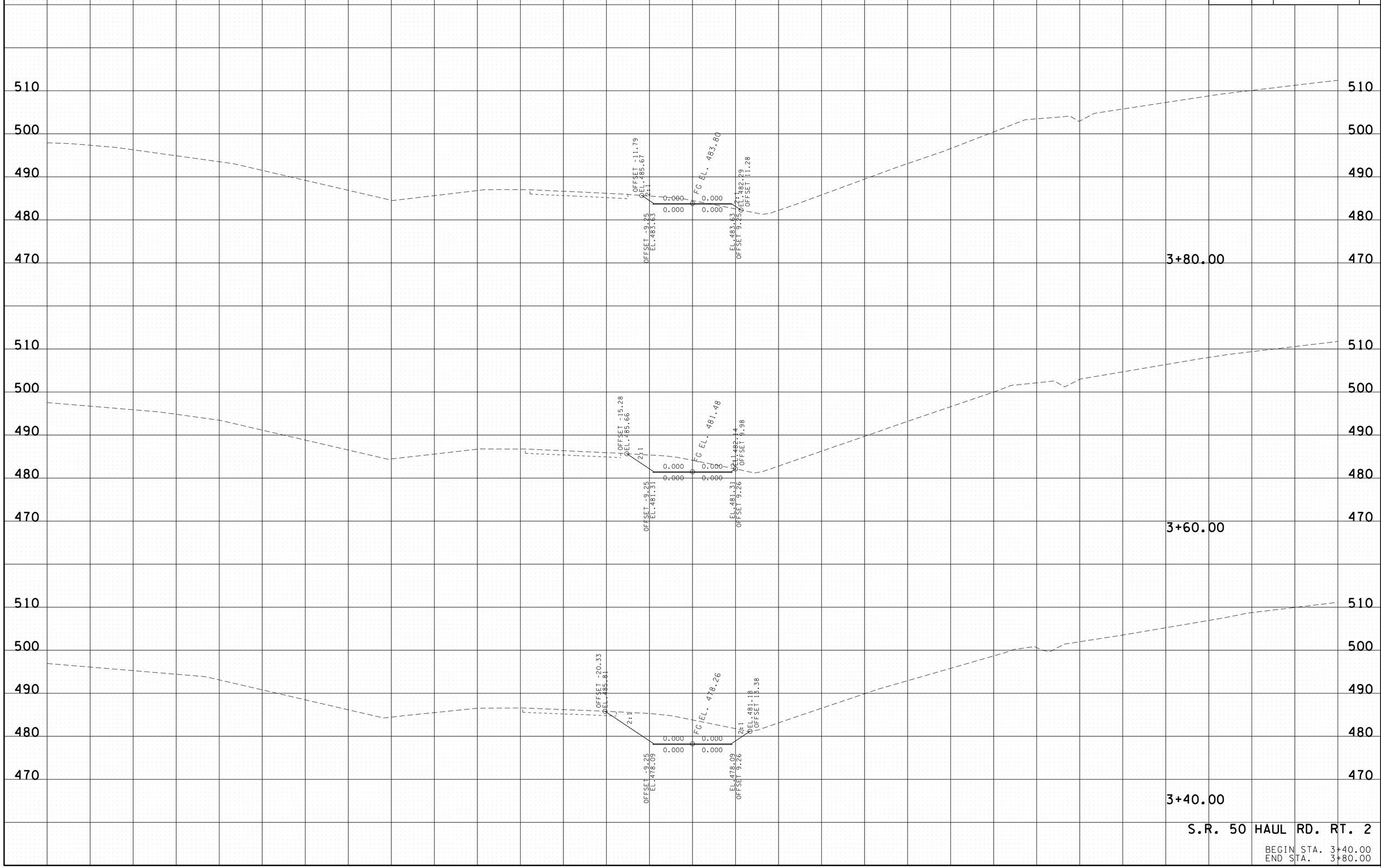
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	73



S.R. 50 HAUL RD. RT. 2

BEGIN STA. 3+40.00
END STA. 3+80.00

29-APR-2014 11:27
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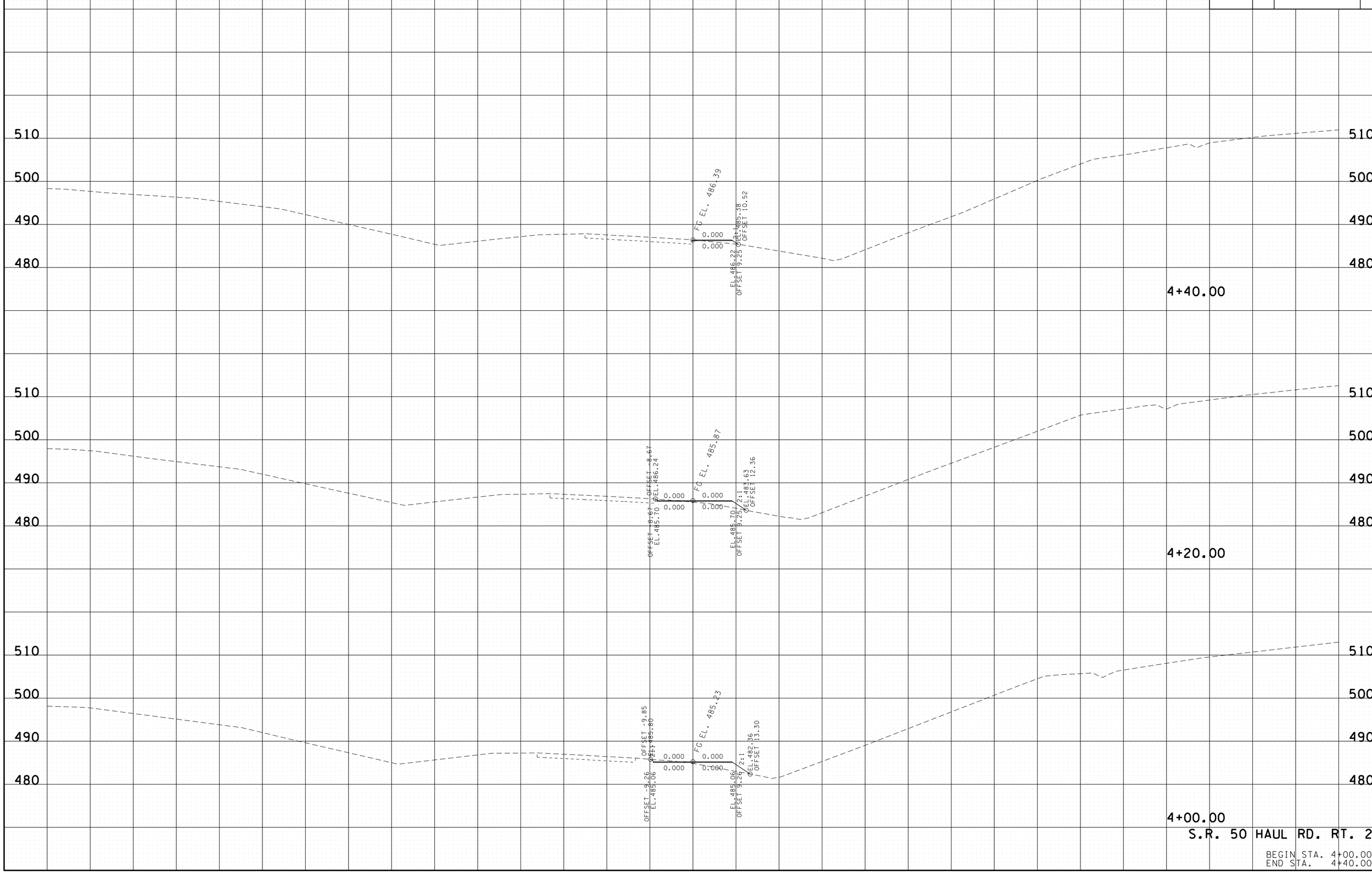
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	74



S.R. 50 HAUL RD. RT. 2

BEGIN STA. 4+00.00
END STA. 4+40.00

29-APR-2014 11:27
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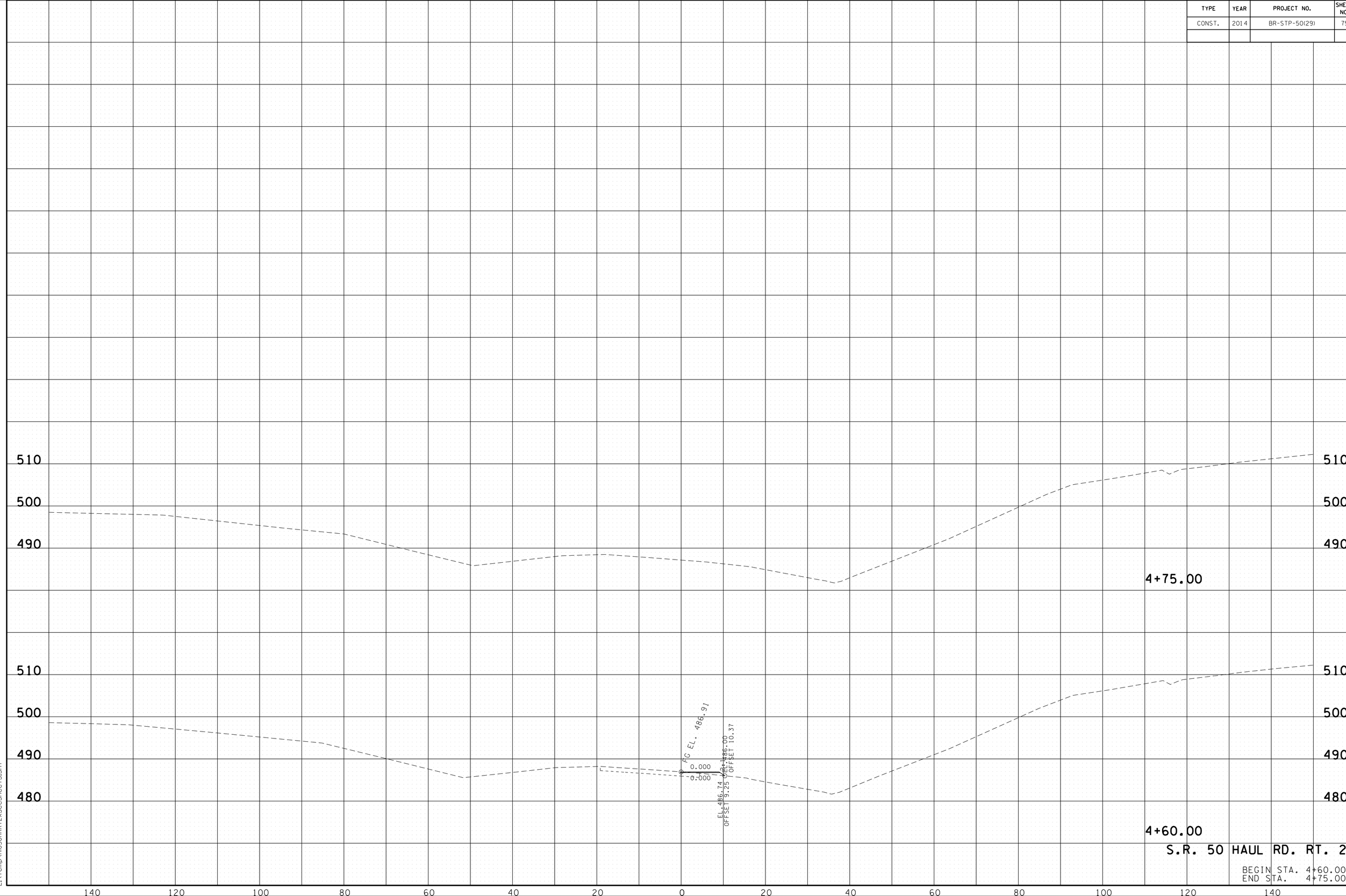
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-STP-50(29)	75



29-APR-2014 11:27
E:\Temp\H1050HRRT2xsecsheets.sht