Index Of Sheets
SEE SHEET IA

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

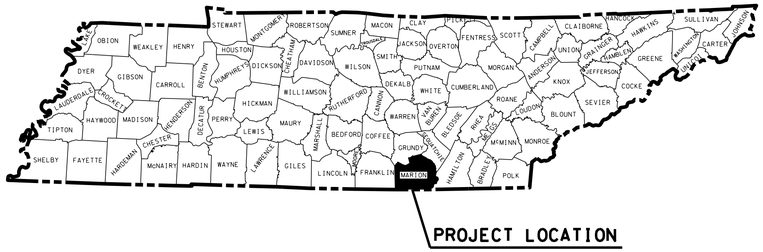
TENN.	YEAR	SHEET NO.
	2014	1
FED. AID PROJ. NO.	BR-I-24-2(142)	
STATE PROJ. NO.	58100-3165-94	

MARION COUNTY

MURPHY HOLLOW ROAD
BRIDGE OVER I-24 @ L.M. 0.07

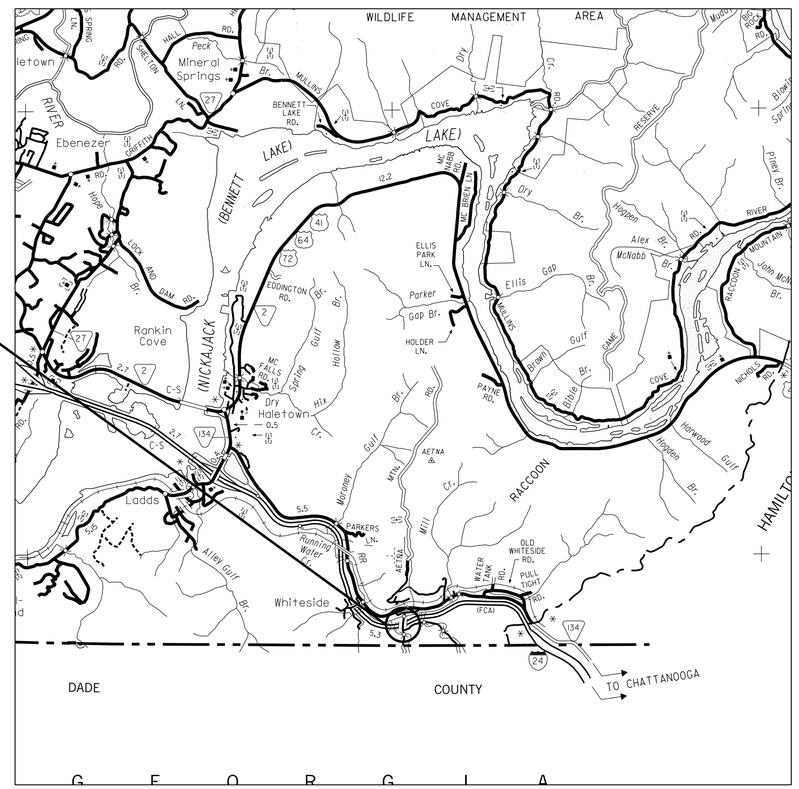
CONSTRUCTION

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



NO PROPOSED RIGHT-OF-WAY OR EASEMENTS
TO BE ACQUIRED ON THIS PROJECT

BR-I-24-2(142)
PROJECT NO. 58100-3165-94 (CONST.)
BEGIN PROJECT STA. 53+50.00
END PROJECT STA. 63+30.11



SCALE: 1"= 1 MILE

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KATHERINE J. LLOYD
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 106423
STATE OF TENNESSEE

0 ½ MI 1 MI

NO EXCLUSIONS
NO EQUATIONS

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

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

SPECIAL NOTES

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

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT C.E. MANAGER 2 JENNIFER LLOYD, P.E.

DESIGNER BRADLEY MARTIN, P.E. CHECKED BY WAYNE HALL

P.E. NO. 58100-1165-94 (DESIGN)

PIN NO. 115641.00

ROADWAY LENGTH	0.142 MILES
BRIDGE LENGTH	0.043 MILES
* BOX BRIDGE LENGTH	0.016 MILES
PROJECT LENGTH	0.185 MILES

* NOT INCLUDED IN PROJECT LENGTH

TRAFFIC DATA	
ADT (2016)	320
ADT (2036)	350
DHV (2036)	46
D	65 - 35
T (ADT)	2 %
T (DHV)	1 %
V	50 MPH

SURVEY DATE: 08-17-2012

DESIGN EXCEPTION FOR 35 MPH
VERTICAL CURVE APPROVED: 03-22-2013

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-I-24-2(142)	1A

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STANDARD BRIDGE DRAWINGS

DWG. NO.	REV.	DESCRIPTION
STD-1-5	08-08-08	PAVEMENT AT BRIDGE ENDS
STD-1-10	3-28-94	BRIDGE END DRAIN W/O PABE
STD-1-11	5-21-99	BRIDGE END DRAIN W/O PABE
STD-1-12	3-28-94	BRIDGE END DRAIN 2'x8'7" W/O PABE

BRIDGE APPURTENANCES ENGLISH (LRFD BOX CULVERTS)

STD-17-1	INDEX OF DRAWINGS
STD-17-2	TERMINOLOGY
STD-17-3	GENERAL NOTES
STD-17-4	DESIGN SECTION LIMITS
STD-17-5	TYPICAL SECTION AND DETAILS

STANDARD ROADWAY DRAWINGS

DWG. NO	REV.	DESCRIPTION
STD-17-6		TYPICAL ELEVATIONS
STD-17-7		CURB, RAIL & EDGE BEAM DETAILS - SKEW NOT LESS THAN 45 DEG
STD-17-8		EDGE BEAM DETAILS FOR FILLS GREATER THAN 3' – 6"
STD-17-9		INTERIOR WALL END TREATMENTS
STD-17-10		TYPICAL WINGWALL DETAILS AND NOTES
STD-17-15		WINGWALL & SPECIAL RETAINING WALL DESIGN SECTIONS
STD-17-16		WINGWALL DESIGN SECTION
STD-17-17		BACKFILL AND DRAINAGE DETAILS
STD-17-18		BACKFILL DETAILS
STD-17-23		SIDEWALK AND MISCELLANEOUS DETAILS
STD-17-24		WARPED SLOPE DETAIL
STD-17-29		PRECAST BOX CULVERT DETAILS
STD-17-13		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-14		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-26		EXTENSION DETAILS
STD-17-27		EXTENSION DETAILS FOR SCOURED OUTLET
STD-17-28		END SECTION DETAILS
STD-17-98		BOX BRIDGE, 3 BARRELS AT 12', CLEAR HTS. 10' - 12', 0 - 60' FILL
STD-17-101		BOX BRIDGE, 3 BARRELS AT 14', CLEAR HTS. 12' - 14', 0 - 60' FILL

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-SA-1	10-15-02	SAFETY APPROACH TO UNDERPASSES GRADING DESIGN & SLOPE PROTECTION
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-1A		DESIGN STANDARDS FOR LOW-VOLUME LOCAL ROADS (ADT<=400)

DWG. NO	REV.	DESCRIPTION
DRAINAGE - CULVERTS AND ENDWALL		
D-PB-1	01-02-13	STANDARD DETAILS CLASS "B" BEDDING AND CULVERT EXCAVATION
D-PB-2	01-02-13	STANDARD DETAILS FOR PLASTIC PIPE INSTALLATION
D-PB-3		INDUCED TRENCH SOIL EMBANKMENT FOR PIPE CULVERT INSTALLATION
D-PE-4	01-15-13	STRAIGHT CONCRETE ENDWALL
D-PG-3	04-15-97	FERROUS AND ALUMINUM CORRUGATED METAL PIPE
D-PS-1	03-15-76	STRUTTING DETAILS FOR CORR. METAL & STRUCTURAL PLATE ROUND PIPE
SAFETY APPURTENANCES AND FENCE		
S-CB-1		CABLE BARRIERS
S-CZ-1		CLEAR ZONE CRITERIA
S-F-10B	05-14-10	STANDARD RIGHT-OF-WAY CHAIN LINK FENCE
S-GR31-1		W-BEAM GUARDRAIL
S-GRC-1		GUARDRAIL CONNECTION TO BRIDGE ENDS OR BARRIER WALL
S-GRA-3		GUARDRAIL ANCHOR FOR TYPE 21, 13, AND IN-LINE TERMINALS
S-GRT-3		TYPE 21 GUARDRAIL TERMINAL
S-GRT-3D		TYPE 21 GUARDRAIL TERMINAL (DETAILS)
S-GRT-3P		EARTH PAD FOR TYPE 21 TERMINAL
S-PL-1		SAFETY PLAN AT ROADSIDE HAZARDS
S-PL-2		SAFETY PLAN AT SIDE ROADS OR PRIVATE DRIVES
S-PL-3		SAFETY PLAN: MINIMUM INSTALLATION AT BRIDGE ENDS
S-PL-4		SAFETY PLAN FOR PIERS IN CLEAR ZONE
S-PL-6		SAFETY PLAN: SAFETY HARDWARE PLACEMENT
S-SSMB-2	08-19-13	51" SINGLE SLOPE CONCRETE BARRIER WALL
S-SSMB-6	10-24-13	GUARDRAIL ATTACHMENT TO SINGLE SLOPE CONCRETE BARRIER WALL

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DEPARTMENT OF TRANSPORTATION

INDEX AND STANDARD DRAWINGS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-I-24-2(142)	1B

STANDARD ROADWAY DRAWINGS

DWG. NO	REV.	DESCRIPTION
TRAFFIC CONTROL APPURTENANCES		
T-M-1	11-01-11	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-4	11-01-11	STANDARD INTERSECTION PAVEMENT MARKINGS
T-PBR-1	06-30-09	INTERCONNECTED PORTABLE BARRIER RAIL
T-S-20	11-01-11	SIGN DETAILS
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-18	03-13-09	SHOULDER CLOSURE DETAIL FOR FREEWAYS AND DIVIDED HIGHWAYS
T-WZ-32	03-03-06	TRAFFIC CONTROL PLAN SIGNAL LAYOUT FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
T-WZ-33	05-27-98	TRAFFIC CONTROL PLAN FOR CLOSE INTERSECTION CONDITIONS USING TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
T-WZ-34	09-01-05	TRAFFIC CONTROL PLAN GENERAL NOTES FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
T-WZ-35	04-02-12	TRAFFIC CONTROL PLAN PAY ITEM AND SIGN DETAILS FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
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-19	04-01-08	CATCH BASIN PROTECTION
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-30		INSTREAM DIVERSION (WITHOUT TRAFFIC)
EC-STR-34	08-01-12	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION

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INDEX AND STANDARD DRAWINGS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-I-24-2(142)	1C

PROJECT COMMITMENTS

COMMITMENT ID	SOURCE DIVISON	DESCRIPTION	STA. / LOCATION
EDEC001	ENVIRONMENTAL	Due to concerns for the Indiana Bat, Myotis sodalis, removal of trees greater than 5" diameter at breast height (DBH) is limited to period of 15 October through 31 March.	STA. 53+50.00 TO STA. 63+30.11/ MURPHY HOLLOW ROAD STA. 10+00.00 TO STA. 11+32.30/ EGYPT HOLLOW ROAD

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PROJECT COMMITMENTS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-I-24-2(142)	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.), 2.), 3.)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	1374
4.)	203-02.01	BORROW EXCAVATION (GRADED SOLID ROCK)	TON	572
	203-03	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	11409
	203-06	WATER	M.G.	70
	204-08	FOUNDATION FILL MATERIAL	C.Y.	119
	209-03.22	FILTER SOCK (18 INCH)	L.F.	2380
	209-05	SEDIMENT REMOVAL	C.Y.	56
5.)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	1809
	209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	217
1.),2.)	209-08.07	ROCK CHECK DAM PER	EACH	47
6.)	209-08.08	ENHANCED ROCK CHECK DAM	EACH	18
7.)	209-09.03	SEDIMENT FILTER BAG (15' X 15')	EACH	8
	209-40.34	CATCH BASIN PROTECTION (TYPE E)	EACH	1
	209-65.04	TEMPORARY IN STREAM DIVERSION	L.F.	200
8.)	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	2257
	303-01.01	GRANULAR BACKFILL (ROADWAY)	TON	924
1.), 2.), 9.)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	150
	307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	344
	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	226
	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	5
	402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	17
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	1
	411-01.10	ACS MIX(PG64-22) GRADING D	TON	192
	607-37.02	18" CORRUGATED METAL PIPE CULVERT	L.F.	33
	610-07.03	18" PIPE DRAIN (BRIDGE DRAIN)	L.F.	287
	611-07.01	CLASS A CONCRETE (PIPE ENDWALLS)	C.Y.	2
	611-07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)	LB.	40
1.), 2.), 3.)	621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	160
	703-01	CEMENT CONCRETE DITCH PAVING	C.Y.	2
	705-01.01	GUARDRAIL AT BRIDGE ENDS	L.F.	162
	705-02.02	SINGLE GUARDRAIL (TYPE 2)	L.F.	1100
	705-04.04	GUARDRAIL TERMINAL (TYPE 21)	EACH	4
	705-04.05	GUARDRAIL TERMINAL (TYPE-IN-LINE)	EACH	4
	705-04.07	TAN ENERGY ABSORBING TERM (NCHRP 350, TL3)	EACH	2
10.)	705-08.51	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	EACH	6
	705-80.01	LONGITUDINAL CABLE BARRIER	L.F.	227
	705-80.18	CABLE BARRIER TERMINAL	EACH	2
	706-01	GUARDRAIL REMOVED	L.F.	1200
	707-01.01	CHAIN-LINK FENCE (4-FOOT)	L.F.	80
	707-01.02	END & CORNER POST ASSEMBLY(CHAIN-LINK FENCE 4')	EACH	1
	709-01.01	RUBBLE STONE RIP-RAP	C.Y.	11
1.), 2.), 3.)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	200
	711-05.71	51IN SINGLE SLOPE CONCRETE BARRIER WALL	L.F.	620
	712-01	TRAFFIC CONTROL	LS	1
	712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	2120
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	50
	712-04.50	PORTABLE BARRIER RAIL DELINEATOR	EACH	110
	712-05.03	WARNING LIGHTS (TYPE C)	EACH	9
	712-06	SIGNS (CONSTRUCTION)	S.F.	809
	712-08.03	ARROW BOARD (TYPE C)	EACH	2
	712-09.01	REMOVABLE PAVEMENT MARKING LINE	L.F.	4000
11.)	712-09.02	REMOVABLE PAVEMENT MARKING (8" BARRIER LINE)	L.F.	1000
	712-09.04	REMOVABLE PAVEMENT MARKING (STOP LINE)	L.F.	30
	713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
	713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	6
	713-16.20	SIGNS (STOP SIGN, R1-1, 30" X 30")	EACH	2
	713-16.21	SIGNS (STOP AHEAD SYMBOL, W3-1, 30" X 30")	EACH	2

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
12.)	716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	2
	716-05.02	PAINTED PAVEMENT MARKING (8" BARRIER LINE)	L.F.	1730
13.)	716-05.05	PAINTED PAVEMENT MARKING (STOP LINE)	L.F.	30
	717-01	MOBILIZATION	LS	1
	730-40	TEMPORARY TRAFFIC SIGNAL SYSTEM	EACH	1
1.), 2.), 14.)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	1130
	740-10.04	GEOTEXTILE (TYPE IV)(STABILIZATION)	S.Y.	369
1.), 2.)	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	8
15.)	801-03	WATER (SEEDING & SODDING)	M.G.	43
1.)	803-01	SODDING (NEW SOD)	S.Y.	3855

ESTIMATED BOX BRIDGE QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
604-02.01	CLASS A CONCRETE (BOX BRIDGES)	C.Y.	353
604-02.02	STEEL BAR REINFORCEMENT (BOX BRIDGES)	LB.	71960

1.) QUANTITIES TO BE USED AS DIRECTED BY THE T.D.O.T. CONSTRUCTION ENGINEER.
2.) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
3.) INCLUDES QUANTITIES FOR FOUR (4) TEMPORARY CONSTRUCTION EXITS.
4.) REFER TO SPECIAL GRADING NOTES 1-5 ON SHEET 2F.
5.) 1406 L.F. TO BE USED AT THE FOOT OF SLOPES AND 403 L.F. TO BE USED FOR TEMPORARY SEDIMENT FILTER BAG.
6.) 6 EA. TO BE USED IN DITCHES AND 2 EA. TO BE USED FOR CULVERT PROTECTION (TYPE II).
7.) QUANTITY INCLUDES ONE REPLACEMENT OVER DURATION OF PROJECT.
8.) 500 TONS TO BE USED FOR MAINTENANCE PURPOSES.
9.) 74 TON TO BE USED FOR TEMPORARY SEDIMENT FILTER BAG AND 76 TON TO BE USED FOR CULVERT PROTECTION (TYPE II).
10.) THIS ITEM SHALL BE A PORTABLE ENERGY ABSORBING TERMINAL MEETING THE REQUIREMENTS OF NCHRP 350 FOR TEST LEVEL 3. EXAMPLES WOULD BE A QUAD-GUARD, A REACT 350 OR A TRACC. THE PAY ITEM WILL INCLUDE FURNISHING AND INSTALLING ALL COMPONENTS AS SHOWN ON THE MANUFACTURER'S DRAWING.
11.) TO BE USED FOR TEMPORARY PAVEMENT MARKINGS.
12.) 1 L.M. TO BE USED FOR TEMPORARY PAVEMENT MARKINGS AND 1 L.M. TO BE USED FOR PERMANENT PAVEMENT MARKINGS.
13.) SPECIALTY STRIPING ITEMS MAY BE EITHER PAINT OR THERMOPLASTIC.
14.) 426 S.Y. TO BE USED FOR TEMPORARY SEDIMENT FILTER BAG, 367 S.Y. TO BE USED FOR TEMPORARY CONSTRUCTION EXITS, AND 337 S.Y. TO BE USED FOR CULVERT PROTECTION (TYPE II).
15.) INCLUDES 4 THOUSAND GALLONS (M.G.) FOR EROSION PREVENTION AND SEDIMENT CONTROL.

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DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

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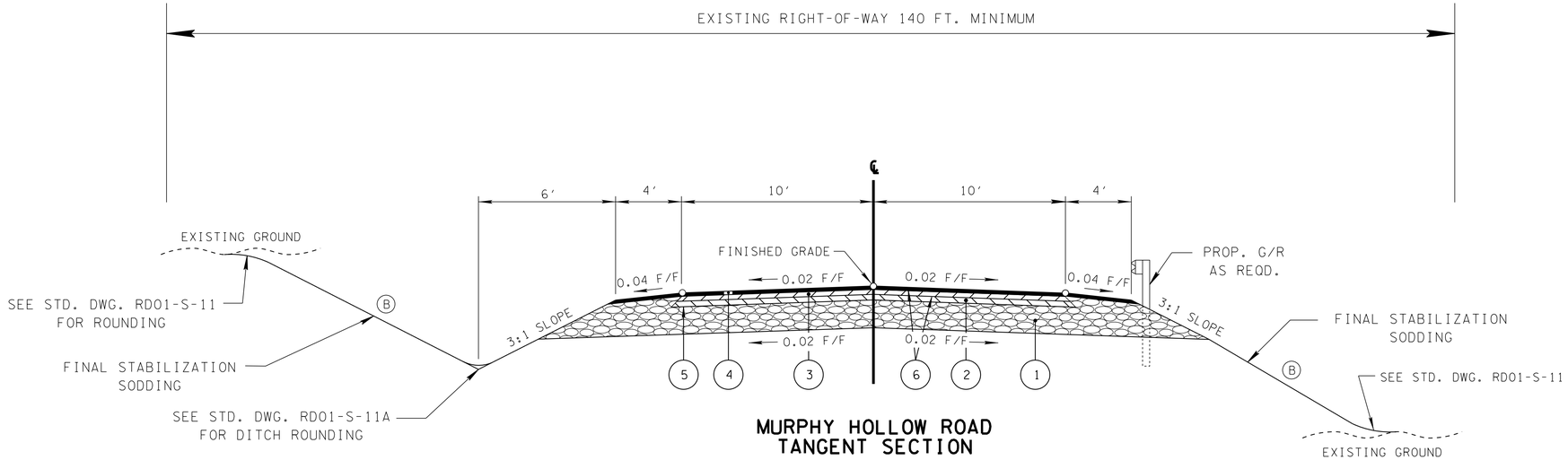
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	2
CONST.	2014	BR-I-24-2(142)	2B



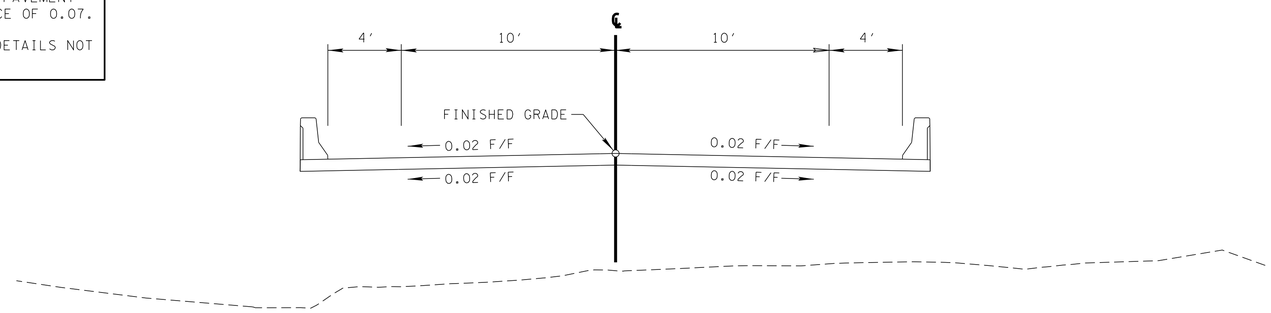
MURPHY HOLLOW ROAD
TANGENT SECTION

(BASED ON STD. DWG. RD01-TS-1)

STA. 57+20.56 TO STA. 57+18.00
STA. 59+49.00 TO STA. 62+00.50

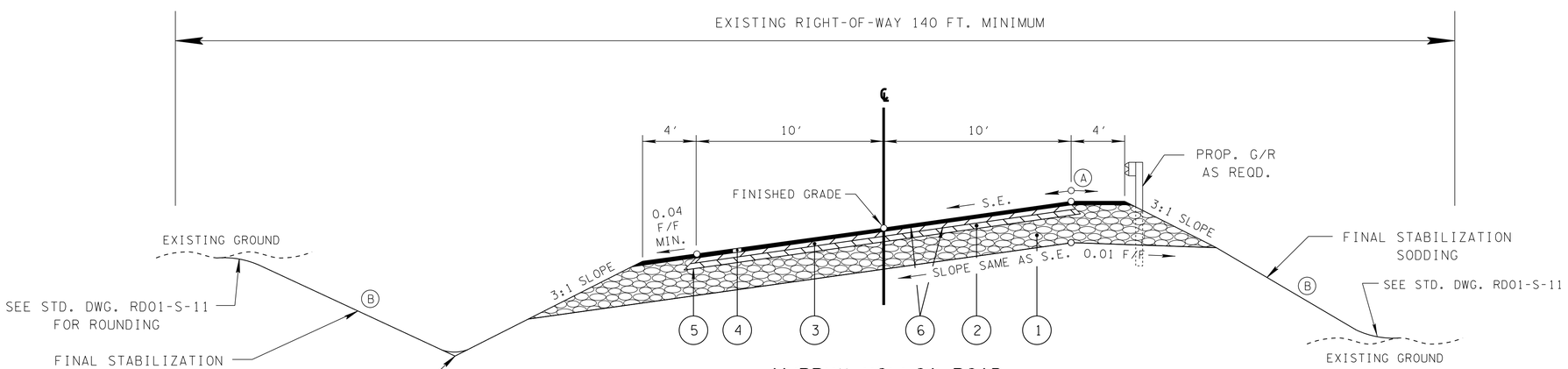
(A) THE SLOPES OF THE SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 0.07.

(B) SEE STD. DWG. RD01-S-11 (CASE II) FOR DETAILS NOT SHOWN



MURPHY HOLLOW ROAD
TANGENT BRIDGE SECTION

STA. 57+18.00 TO STA. 59+49.00



MURPHY HOLLOW ROAD
SUPERELEVATED SECTION

(BASED ON STD. DWG. RD01-TS-1)

STA. 53+50.00 TO STA. 57+20.56
STA. 62+00.50 TO STA. 63+30.11

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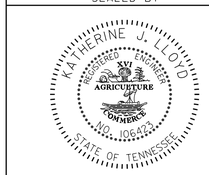

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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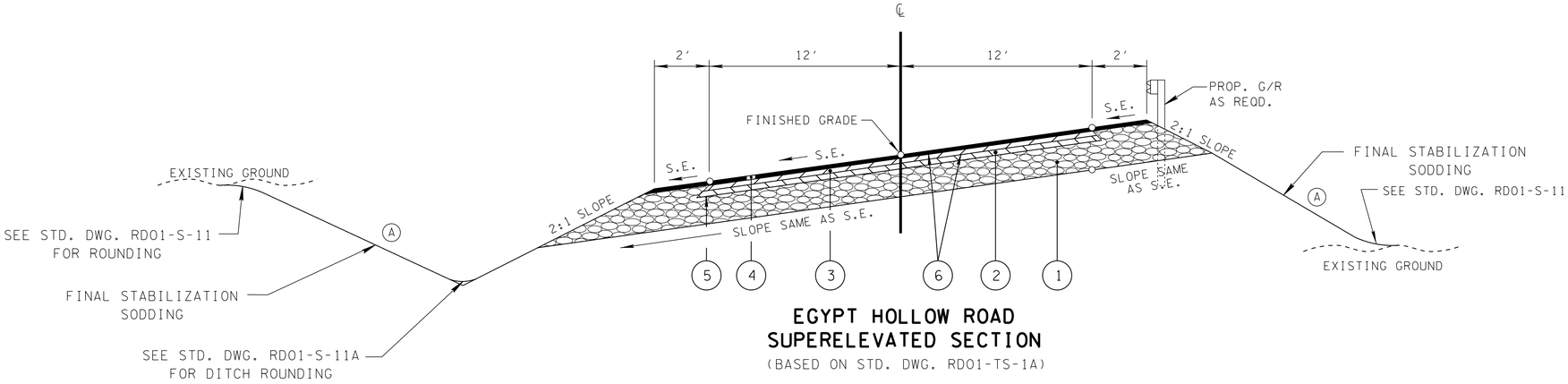
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	2A
CONST.	2014	BR-I-24-2(142)	2C



EGYPT HOLLOW ROAD SUPERELEVATED SECTION

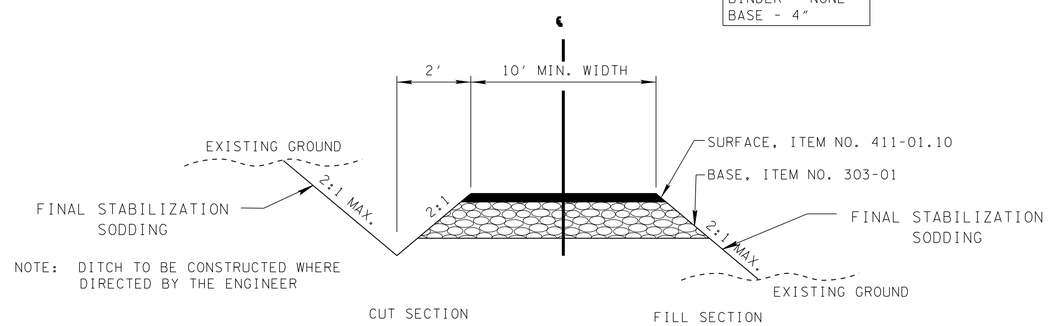
(BASED ON STD. DWG. RD01-TS-1A)

STA. 10+00.00 TO STA. 11+25.00

(A) SEE STD. DWG. RD01-S-11 (CASE II) FOR DETAILS NOT SHOWN

FIELD OR RESIDENTIAL

SURFACE - 1½″
BINDER - NONE
BASE - 4″



NOTE: DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER

TYPICAL SECTION

PRIVATE DRIVE TO BUSINESS, FIELD, OR RESIDENTIAL PROPERTY

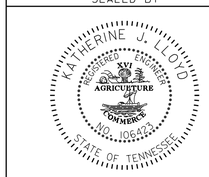
PROPOSED PAVEMENT SCHEDULE

(1) MINERAL AGGREGATE BASE (8″± DEPTH) 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D FULL DEPTH UNDER SHOULDERS	(4) BITUMINOUS SURFACE BITUMINOUS SURFACE @ 1.25″± THICK (APPROX. 132.5 LB/SY) 411-01.10 ASPHALT CEMENT (PG64-22) (ACS) GRADING D
(2) BITUMINOUS BASE BITUMINOUS BASE @ 3.00″± THICK (APPROX. 345 LB/SY) 307-01.01 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	(5) PRIME COAT 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) (0.30-0.35 GAL/SY) 402-02 AGGREGATE FOR COVER MATERIAL (PC) (8-12 LB/SY)
(3) BITUMINOUS BINDER BITUMINOUS BINDER @ 2.00″± THICK (APPROX. 226.00 LB/SY) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	(6) TACK COAT 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) (0.07 GAL/SY)

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-I-24-2(142)	2D

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

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

GUARDRAIL

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

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

DRAINAGE

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

(2) 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).

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

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

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

(6) 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

(1) FOR UTILITIES NOTES, SEE SHEET 3.

FENCING

(1) LOCATION OF THE FENCE SHALL BE ONE FOOT INSIDE THE RIGHT-OF-WAY EXCEPT WHERE SHOWN ON THE PLANS.

MISCELLANEOUS

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

(2) 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

RIGHT - OF – WAY

(1) FOR RIGHT-OF-WAY NOTES, SEE SHEET 3.

PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS

(1) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH 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

(2) 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. 716-05.02, PAINTED PAVEMENT MARKING (8" BARRIER LINE), L.F.

(3) WIDE (8 INCH) TEMPORARY PAVEMENT MARKING LINE WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.02 PAINTED PAVEMENT MARKING (8" BARRIER LINE), LIN. FT.

FINAL PAVEMENT MARKING IF REFLECTORIZED PAINT IS USED

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

DETOURS, LANE SHIFTS AND MEDIAN CROSS-OVERS

(5) BEFORE OPENING THE LANE SHIFT TO TRAFFIC, THE TRANSITIONAL MARKINGS ON THE EXISTING ROADWAY MUST BE IN PLACE. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM 712-09.01 REMOVABLE PAVEMENT MARKING LINE, LIN. FT. ALL EXISTING MARKINGS IN THE AREA OF THESE TRANSITIONAL MARKINGS SHALL BE OBLITERATED AND ALL EXISTING RAISED PAVEMENT MARKERS SHALL BE REMOVED TO ELIMINATE CONFLICTING MARKINGS. REMOVAL OF THE EXISTING CONFLICTING MARKINGS AND RAISED PAVEMENT MARKERS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN ITEM NO. 712-01 TRAFFIC CONTROL, LUMP SUM.

PAVEMENT

PAVING

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

GRADED SOLID ROCK

(1) 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.

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

SIGNING

(1) 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.

(2) 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.

(3) 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

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

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

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

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

(5) USE OF BARRICADES, PORTABLE BARRIER RAILS, 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.

(6) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF 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.

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

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

UNOFFICIAL SET

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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-I-24-2(142)	2E

GENERAL NOTES (CONT.)

EROSION PREVENTION AND SEDIMENT CONTROL

DISTURBED AREA

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

(2) 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.

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

(4) 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.

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

(6) 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

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

(8) 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.

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

(10) 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.

(11) 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 ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.

(12) 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.

(13) 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.

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

STREAM/WETLAND

(15) 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.

(16) 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.

(17) INSTREAM EPSC DEVICES REQUIRE THE ENVIRONMENTAL DIVISION'S PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN TDEC, USACE, AND TVA PERMITS.

(18) 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.

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

(20) 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. 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.

(21) HEAVY EQUIPMENT WORKING IN WETLANDS MUST BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT MUST BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED.

(22) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS PROVIDED FOR IN THE PLANS.

SPECIES

(23) 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

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

(25) 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.

(26) 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.

(27) 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.

(28) 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.

(29) 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.

(30) 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.

(31) 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

(32) 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.

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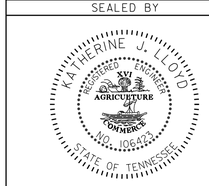

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
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GENERAL NOTES (CONT.)

EROSION PREVENTION AND SEDIMENT CONTROL (CONT.)

SWPPP, PERMITS, PLANS, RECORDS

(33) 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.

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

(35) 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.

(36) 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.

(37) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS OR MODIFICATIONS OF THE SWPPP ARE NEEDED. THE ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

(38) 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.

(39) 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.

(40) 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.

(41) 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 1 - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY REFRESHER COURSES AS REQUIRED TO MAINTAIN CERTIFICATION. A COPY OF CERTIFICATION RECORDS FOR THE COURSES SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

LITTER, DEBRIS, WASTE, PETROLEUM

(42) 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.

(43) 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

(1) REFER TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN, SHEET 9, FOR NOTES REGARDING SEASONAL WORK LIMITATION OR LIMITATION ON THE TOTAL AREA OF EXPOSED SOIL.

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GENERAL NOTES AND SPECIAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
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BOX BRIDGE EXTENSION TABULATION

STATION	LOCATION	SPAN	HEIGHT	LENGTH	SKEW	DRAINAGE AREA SQ. MILES	BOX CULVERT CLASS "A" CONC. 604-02.01 CU. YD.	BOX CULVERT REINF. STEEL 604-02.02 LBS.	DRAWING NO.	BACKFILL MATERIAL 303-01.01 TONS	FOUNDATION FILL MATERIAL 204-08 CU. YD.
55+14.25	MURPHY HOLLOW RD	3 @ 12'	10.5'	54'	40°	7.0	230	47520	STD-17-98 (USE DETAILS FOR 3 @ 12' X 12' BOX CULVERT)	530	87
60+73.09	MURPHY HOLLOW RD	3 @ 12'	13'	20'	60°	7.1	123	24440	STD-17-101 (USE DETAILS FOR 3 @ 14' X 14' BOX CULVERT, MODIFY WIDTHS TO FIT EXIST. BARREL WIDTH)	394	32
TOTALS							353	71960		924	119

PIPE CULVERT EXTENSION AND END TREATMENT

STATION	RCP CLASS III OR CMP 14 GA. OR HDPE OR PVC OR SRTRP (L.F.) FILL HEIGHT < OR = 16 FT.					SKEW	RIP-RAP 709-05.06 (TON)	END TREATMENT							REMARKS
								INLET		OUTLET		CLASS A CONC. 611-07.01 (C.Y.)	REINF. STEEL 611-07.02 (LB.)	STRUC. STEEL 611-07.03 (LB.)	
	18"	24"	30"	36"	48"					TYPE	DRAWING NO.				
57+11.25	33					60°		CONNECT TO EXIST. 18" CMP		STR	D-PE-4	2	40		
TOTALS	33	0	0	0	0		0					2	40	0	

SPECIAL DITCHES

ROAD	STATION		SLOPE			TYPE	CONCRETE DITCH PAVING 703-01 C.Y.
	FROM	TO	FORE (H/V)	BOTTOM WIDTH (FT.)	BACK (H/V)		
MURPHY HOLLOW ROAD	56+62.00	57+07.00	2:1	0	2:1	CONCRETE "V" DITCH	2
TOTALS							2

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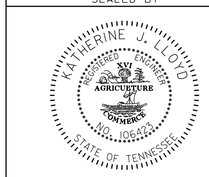

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
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ESTIMATED GRADING QUANTITIES

LOCATION	ROAD & DRAINAGE EXC. (UNCL.) 203-01 C.Y.	BORROW EXCAVATION UNCL. - C.Y.	BORROW EXCAVATION GRADED S. ROCK - TON	EXCESS EXC. C.Y.	EMB. C.Y.
MURPHY HOLLOW ROAD	1109	11326	572		10559
EGYPT HOLLOW ROAD	236				
PRIVATE DRIVE		83			69
TOTALS	**1345**	**11409**	**572**	**0**	**10628**

PROPOSED GUARDRAIL

SHEET NO.	LOCATION	SIDE LT	SIDE RT	STATION FROM	STATION TO	BRIDGE END GUARDRAIL 705-01.01 (L.F.)	SINGLE TYPE 2 GUARDRAIL 705-02.02 (L.F.)	TYPE 21 TERMINAL 705-04.04 (EACH)	TYPE IN-LINE TERMINAL 705-04.05 (EACH)	TYPE 38 TERMINAL 705-04.07 (EACH)	LONGITUDINAL CABLE BARRIER 705-80.01 (L.F.)	CABLE BARRIER TERMINAL 705-80.18 (EACH)	REMARKS
4A	MURPHY HOLLOW RD	X		53+50.00	54+27.57		62.50	1	1				
4A	MURPHY HOLLOW RD/EGYPT HOLLOW RD		X	53+75.00	11+25.00		275.00		1				BEGINS ON MURPHY HOLLOW/ENDS ON EGYPT HOLLOW
4A	MURPHY HOLLOW RD	X		54+46.21	57+12.92	26.90	262.50		1				
4A	EGYPT HOLLOW RD/MURPHY HOLLOW RD	X	X	11+32.30	57+28.08	26.90	200.00	1	1				BEGINS ON EGYPT HOLLOW/ENDS ON MURPHY HOLLOW
4A	MURPHY HOLLOW RD	X		59+37.43	62+39.32	26.90	250.00	1					
4A	MURPHY HOLLOW RD		X	59+55.58	60+57.47	26.90	50.00	1					
4A	I-24		X	292+38.07	293+14.97	26.90				1			
4A	I-24	X		299+08.16	299+85.06	26.90				1			
4A	I-24		X	291+48.00	292+51.00						103	1	
4A	I-24	X		299+72.32	300+96.32						124	1	
TOTALS						**161.40**	**1100.00**	**4**	**4**	**2**	**227**	**2**	

PAVEMENT QUANTITIES

LOCATION	PAY ITEMS 303-01 (TON)	307-01.01 (TON)	307-01.08 (TON)	402-01 (TON)	402-02 (TON)	403-01 (TON)	411-01.10 (TON)
MURPHY HOLLOW ROAD	1523.0	291.0	191.0	4.0	14.5	0.5	156.0
EGYPT HOLLOW ROAD	201.0	53.0	35.0	1.0	2.5	0.5	24.0
PRIVATE DRIVE	33.0						12.0
TOTALS	**1757.0**	**344.0**	**226.0**	**5.0**	**17.0**	**1.0**	**192.0**

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TABULATED QUANTITIES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	3
CONST.	2014	BR-I-24-2(142)	3

R.O.W. ACQUISITION TABLE

TRACT NO.	PROPERTY OWNERS	COUNTY RECORDS				TOTAL AREA ACRES			AREA TO BE ACQUIRED ACRES			AREA REMAINING ACRES		EASEMENT (SQUARE FEET)		
		TAX MAP NO.	PARCEL NO.	DEED DOCUMENT REFERENCE BK.	DEED DOCUMENT REFERENCE PAGE	LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM. DRAINAGE	SLOPE	CONST.
1	Carl Edward Gouger and wife Dorothy V. Gouger	151	96.00	379	1357	50.494		50.494				50.494				
2	William Helton Pullen Jr. and wife Sandra Thompson Pullen and William HeltonPullen III and Randolph Edwin Pullen and Elizabeth Jean Pullen	151	94	198	251		68.957	68.957					68.957			
3	Dave Long,Groer Doyle,Clifford Stines,Tom Sexton and Donald Keep,Trustees of the Whiteside Methodist Church	151	95	6Q	331	0.602		0.602				0.602				
4	James Edward Cunningham	151	70.02	310	397	0.356		0.356				0.356				
5	James Edward Cunningham						0.778	0.778					0.778			
6	Marion County	151	70.01	137	425	0.723		0.723				0.723				
7	Federal National Mortage Association	151	69.00	423	1338	2.366		2.366				2.366				
8	Cemetery	151	68.00			0.413		0.413				0.413				
9	Dan Hancock	151	70.00	405	542	0.294		0.294				0.294				

GENERAL NOTES

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 THERE FROM 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, ROADWAY DESIGN DIVISION IS TO BE NOTIFIED IN SUFFICIENT TIME TO PERMIT HAVING SUCH REMOVALS DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.

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

(3) EXISTING PAVED DRIVEWAY PER TRACT REMAINDER WILL BE REPLACED IN KIND TO A TOUCHDOWN POINT.

(4) 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.

(5) WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY 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.

(6) ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.

(7) 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.

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

UTILITIES

(1) 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.

(2) 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.

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

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

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

UTILITY OWNERS

TELEPHONE:
BELLSOUTH DBA. AT&T
MR. TIM MANLEY
300 EAST MARTIN LUTHER KING BOULEVARD
CHATTANOOGA, TN. 37403
PHONE (423)752-9144
(423)752-4339
FAX (423)267-0120

FIBER:
AT&T
MR. GARY COMBS
439 WEST DEPOT
KNOXVILLE, TN. 37917
PHONE (865)544-2700
FAX (770)918-2143

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RIGHT-OF-WAY ACQUISITION TABLE

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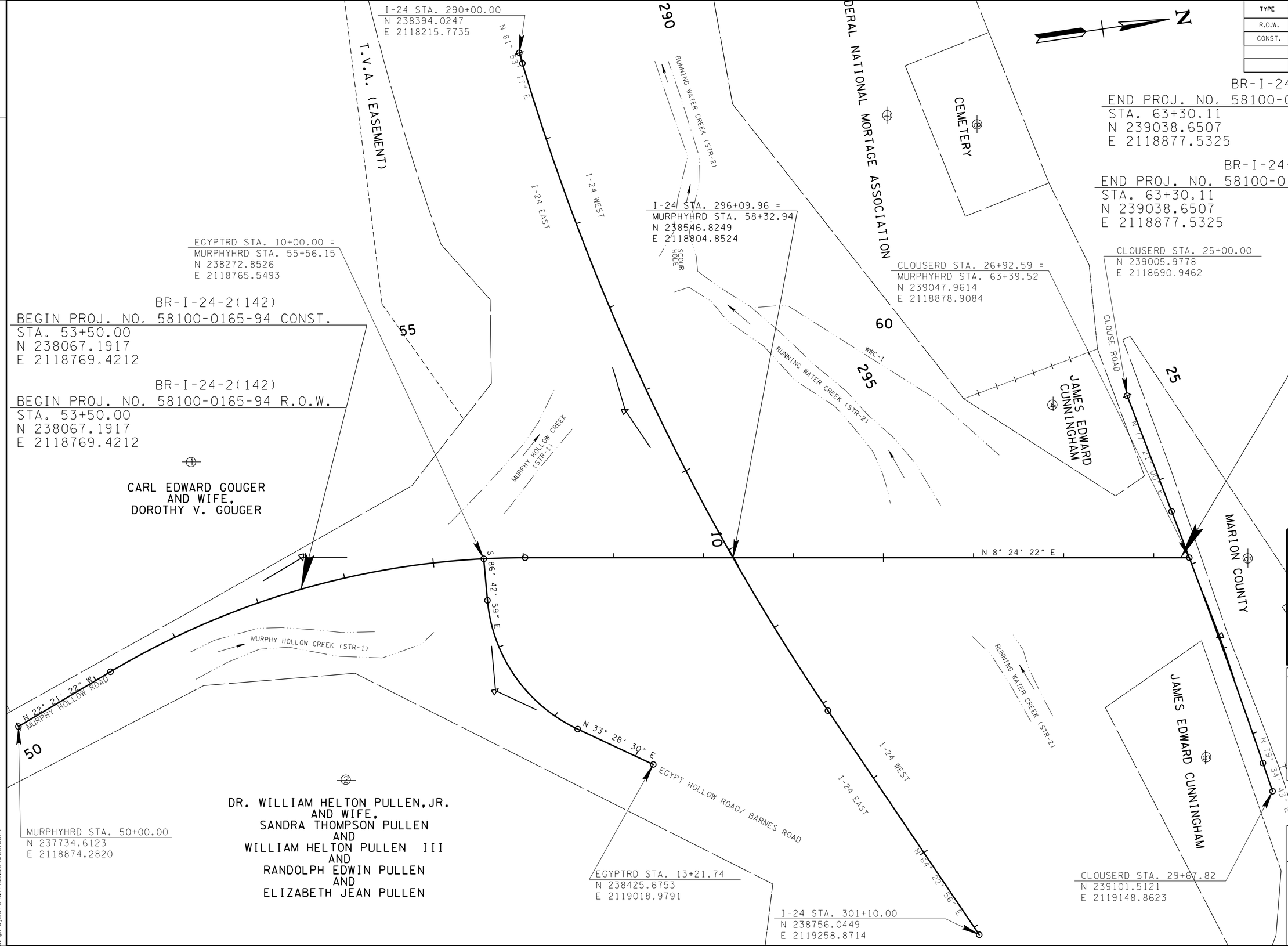
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	3A
CONST.	2014	BR-I-24-2(142)	3A



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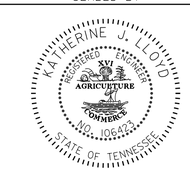

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00005675 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP

STA.53+50 TO STA.63+30.11

SCALE: 1"= 50'

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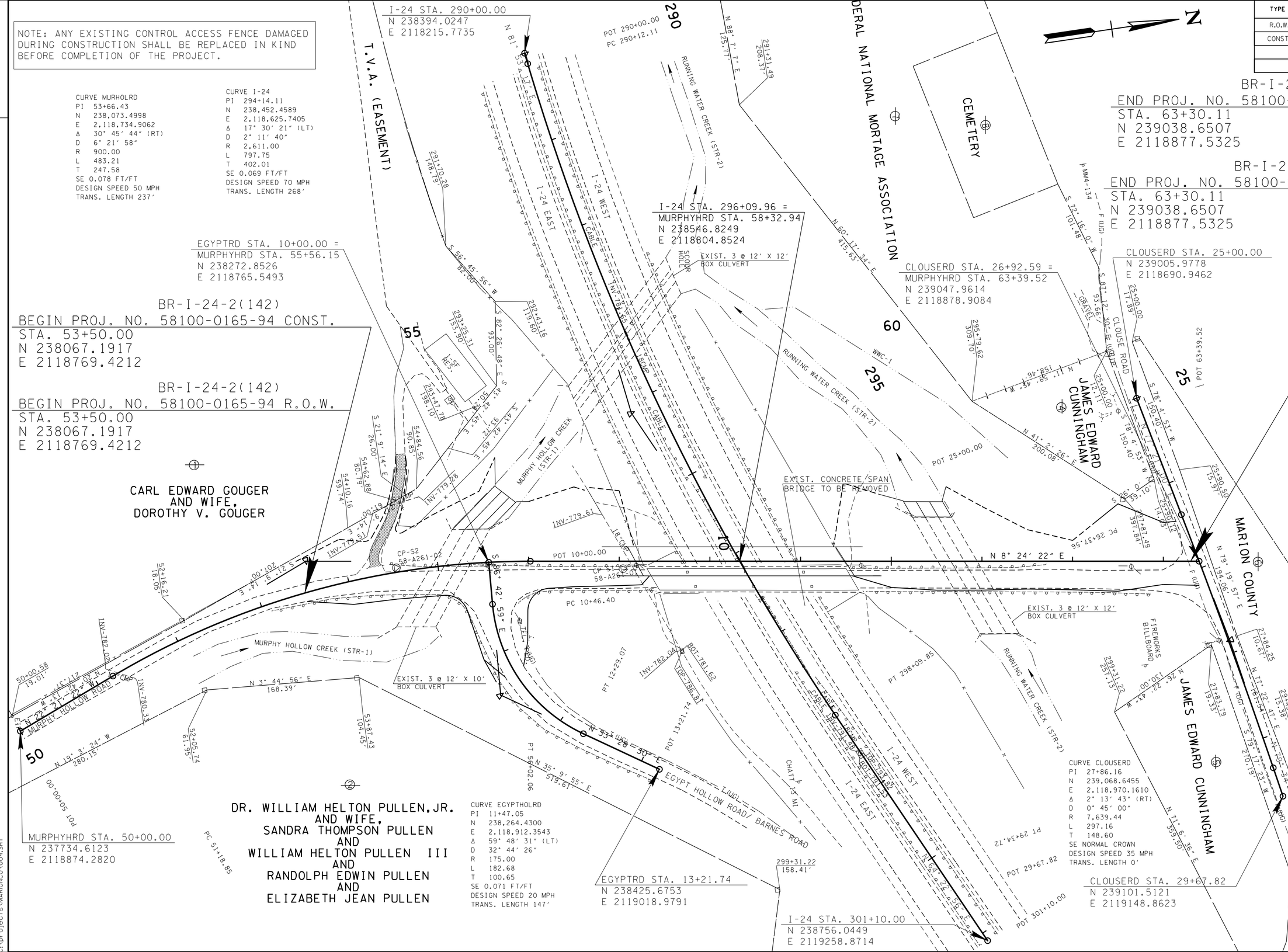
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	4
CONST.	2014	BR-I-24-2(142)	4

NOTE: ANY EXISTING CONTROL ACCESS FENCE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN KIND BEFORE COMPLETION OF THE PROJECT.

CURVE MURHOLRD
PI 53+66.43
N 238,073.4998
E 2,118,734.9062
Δ 30° 45′ 44″ (RT)
D 6° 21′ 58″
R 900.00
L 483.21
T 247.58
SE 0.078 FT/FT
DESIGN SPEED 50 MPH
TRANS. LENGTH 237′

CURVE I-24
PI 294+14.11
N 238,452.4589
E 2,118,625.7405
Δ 17° 30′ 21″ (LT)
D 2° 11′ 40″
R 2,611.00
L 797.75
T 402.01
SE 0.069 FT/FT
DESIGN SPEED 70 MPH
TRANS. LENGTH 268′



CURVE EGYPTHOLRD
PI 11+47.05
N 238,264.4300
E 2,118,912.3543
Δ 59° 48′ 31″ (LT)
D 32° 44′ 26″
R 175.00
L 182.68
T 100.65
SE 0.071 FT/FT
DESIGN SPEED 20 MPH
TRANS. LENGTH 147′

CURVE CLOUSERD
PI 27+86.16
N 239,068.6455
E 2,118,970.1610
Δ 2° 13′ 43″ (RT)
D 0° 45′ 00″
R 7,639.44
L 297.16
T 148.60
SE NORMAL CROWN
DESIGN SPEED 35 MPH
TRANS. LENGTH 0′

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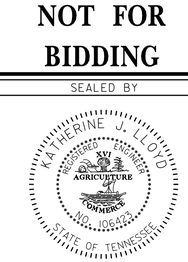

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF_L00005675 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.53+50 TO STA.63+30.11

SCALE: 1″= 50′

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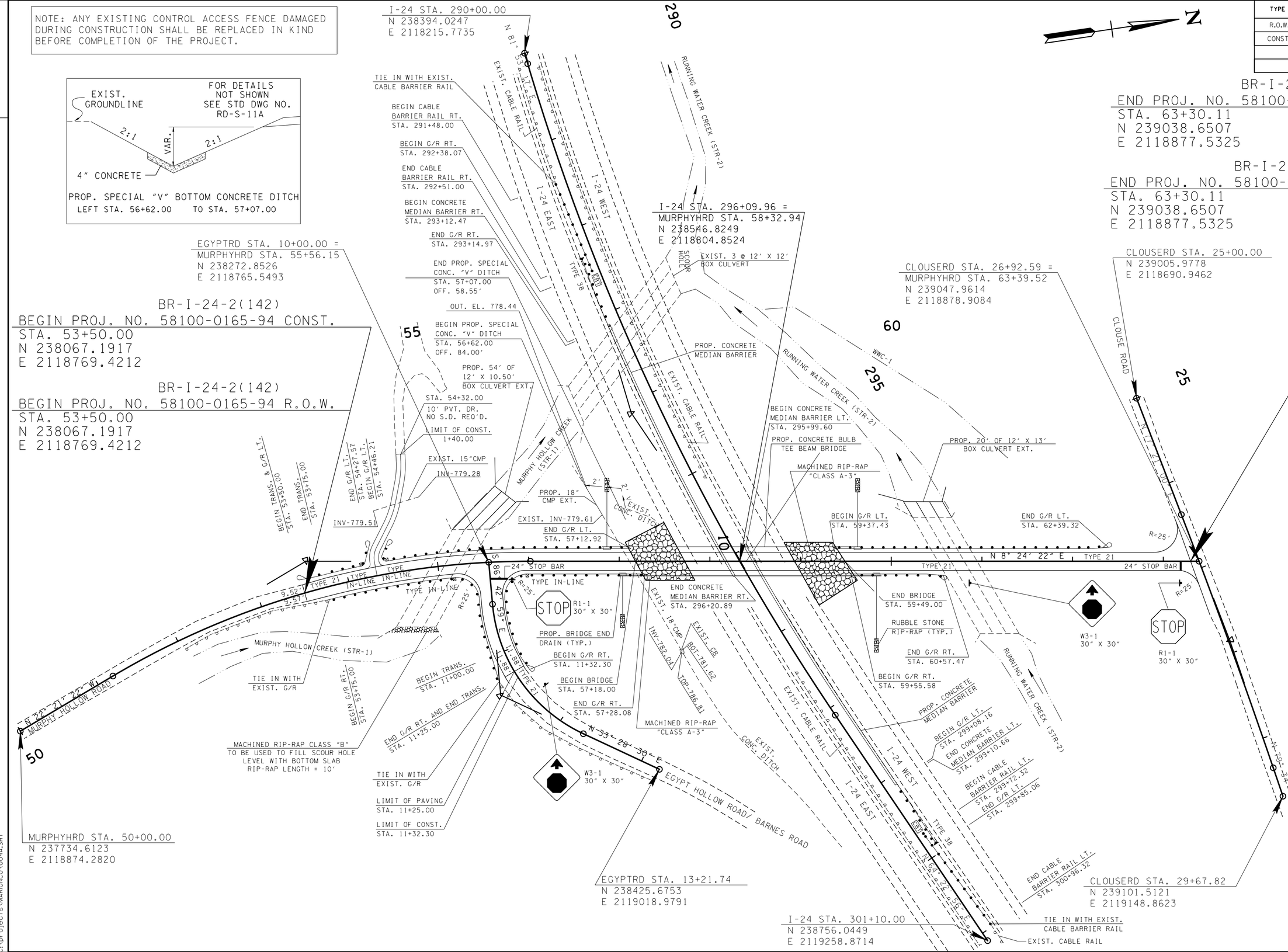
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

NOTE: ANY EXISTING CONTROL ACCESS FENCE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN KIND BEFORE COMPLETION OF THE PROJECT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	4A
CONST.	2014	BR-I-24-2(142)	4A



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KATHERINE J. LLOYD
REGISTERED ENGINEER
XVI
AGRICULTURE
OR
COMMERCE
No. 106423
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.53+50 TO STA. 63+30.11

SCALE: 1"= 50'

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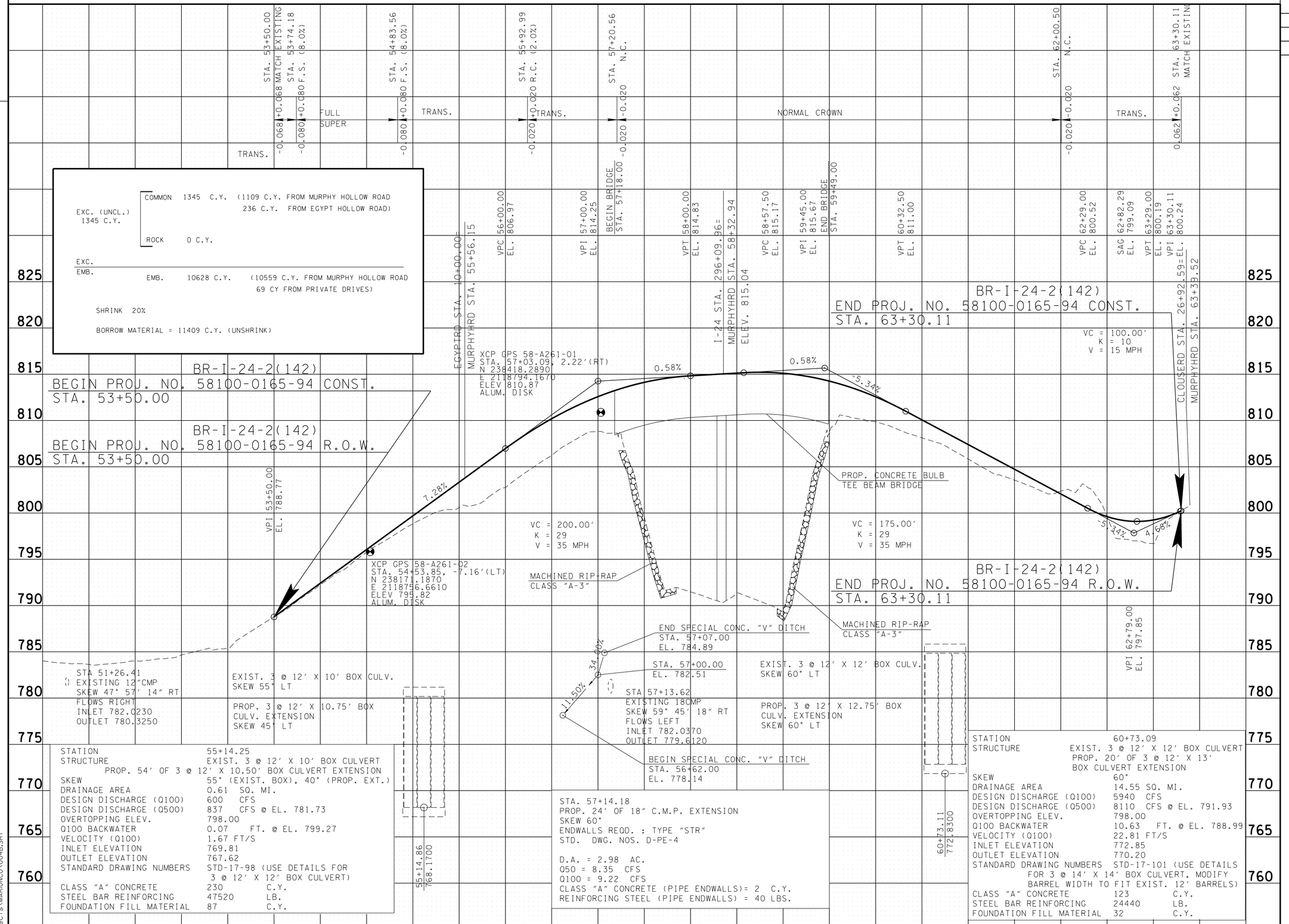
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	4B
CONST.	2014	BR-I-24-2(142)	4B



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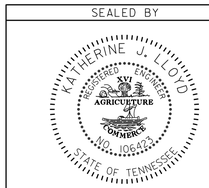


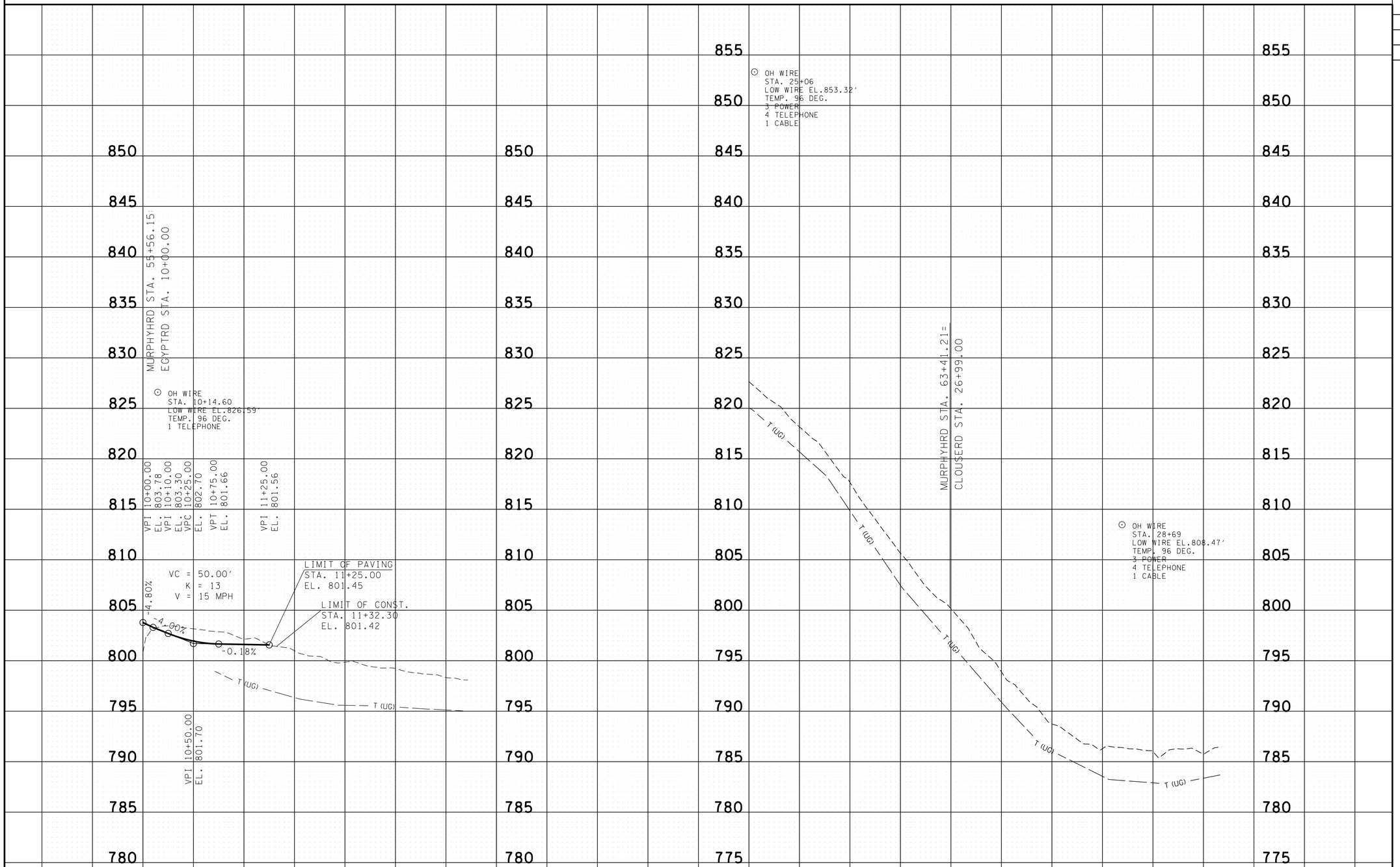
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

MURPHY HOLLOW ROAD PROFILE

STA.53+50 TO STA.63+30.11

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	5
CONST.	2014	BR-I-24-2(142)	5



EGYPT HOLLOW ROAD PROFILE

CLOUSE ROAD PROFILE (FOR REFERENCE ONLY)

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE OF SIDE ROADS AND STREETS

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

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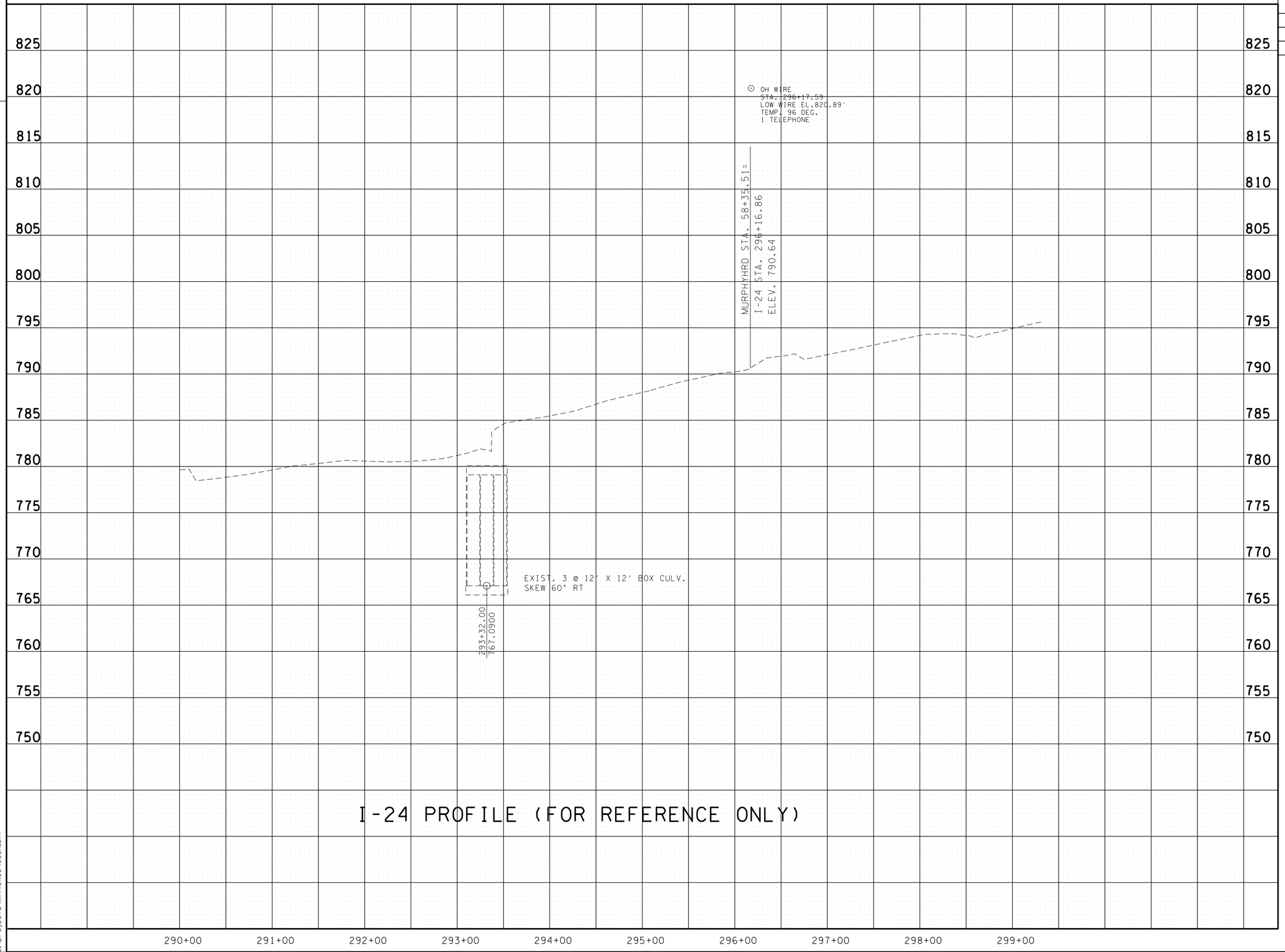
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	5A
CONST.	2014	BR-I-24-2(142)	5A



UNOFFICIAL SET

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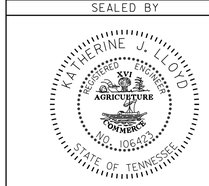
SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE OF SIDE ROADS AND STREETS

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

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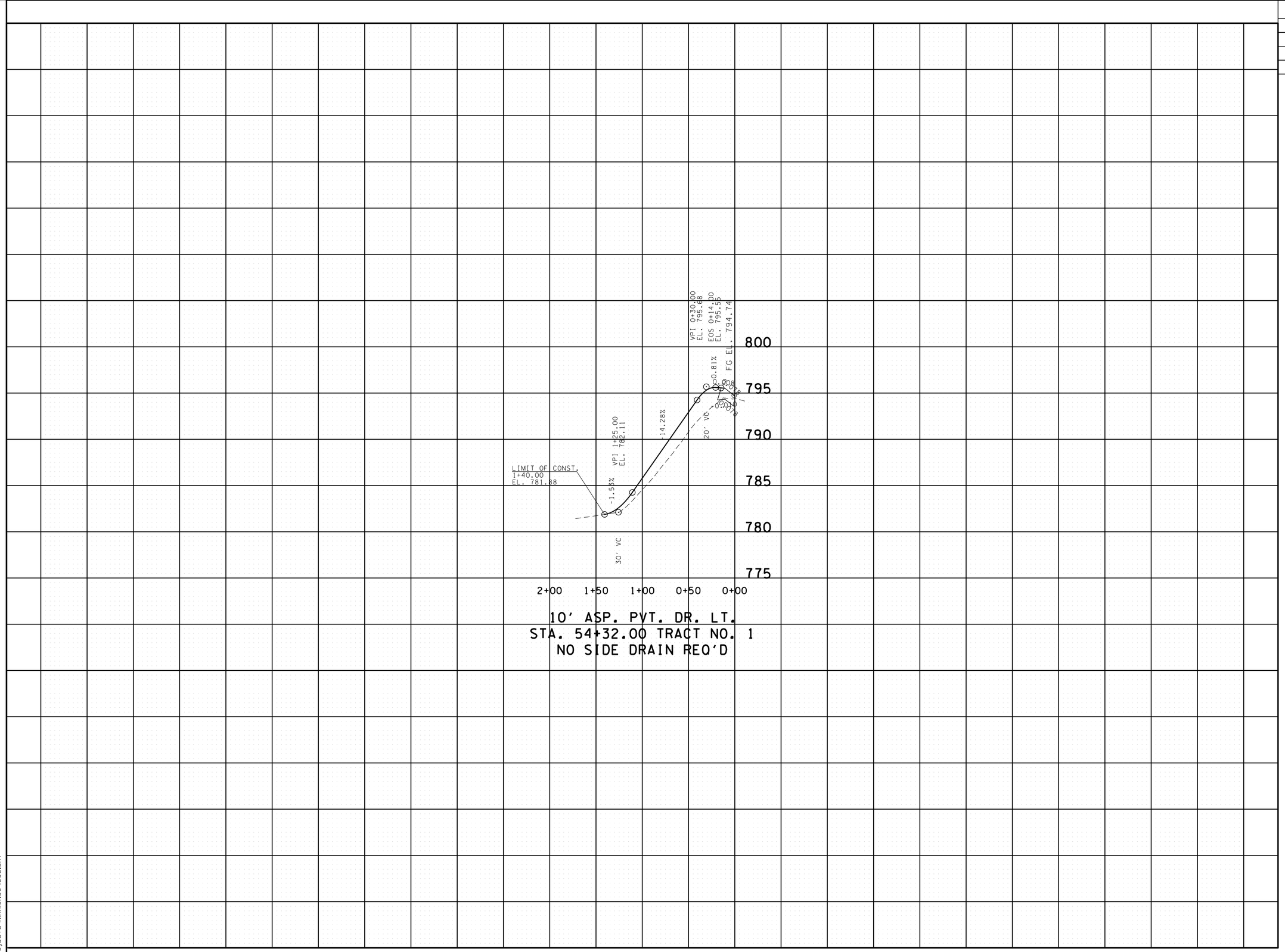
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	6
CONST.	2014	BR-I-24-2(142)	6



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STATE OF TENNESSEE
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.	2013	BR-I-24-2(142)	7
CONST.	2014	BR-I-24-2(142)	7

DRAINAGE/ HYDRAULIC DATA FOR BRIDGE

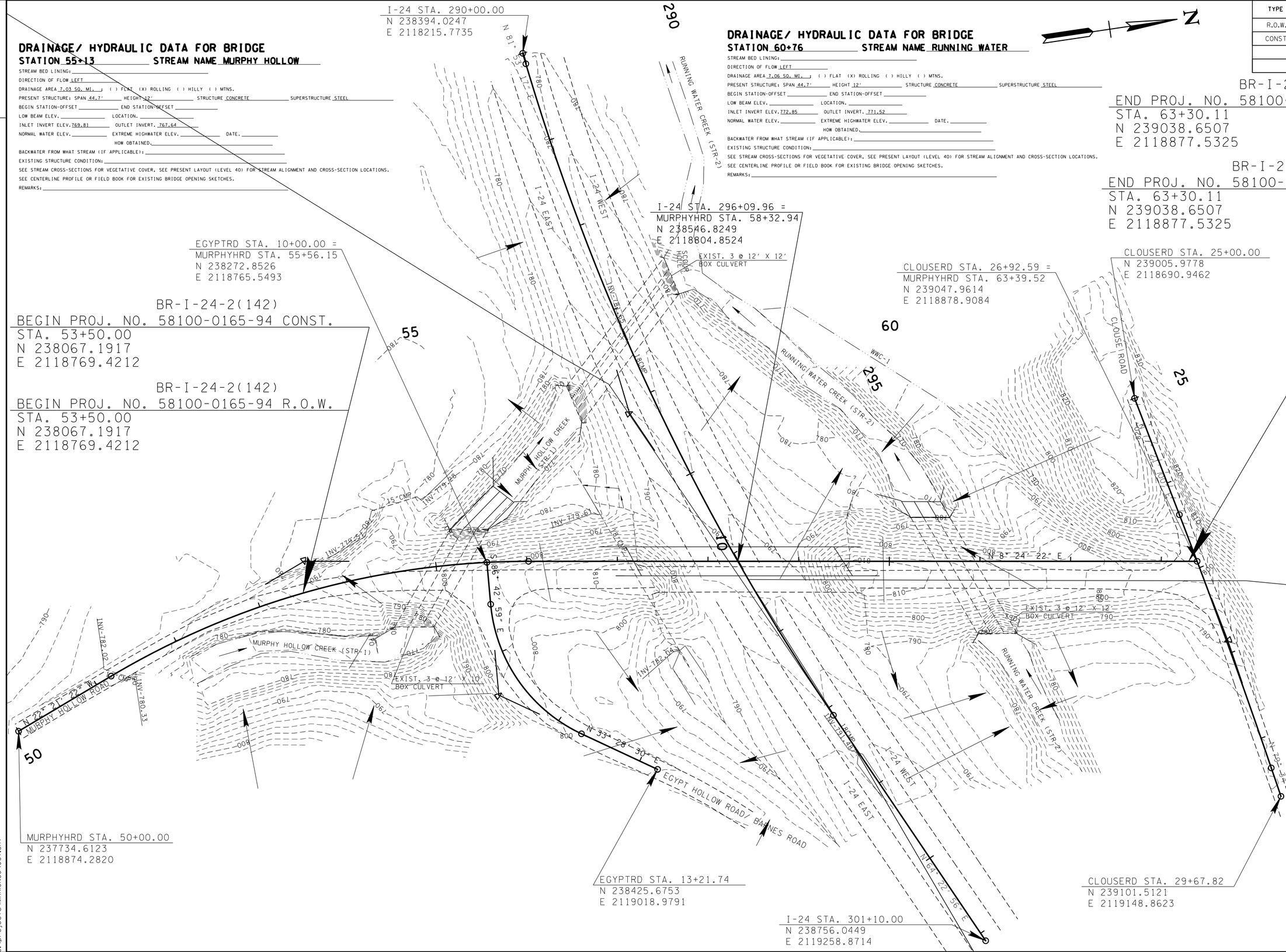
STATION 55+13 STREAM NAME MURPHY HOLLOW

STREAM BED LINING:
DIRECTION OF FLOW LEFT
DRAINAGE AREA 7.03 SQ. MI. ; ( ) FLAT (X) ROLLING ( ) HILLY ( ) MTNS.
PRESENT STRUCTURE: SPAN 44.7' HEIGHT 12' STRUCTURE CONCRETE SUPERSTRUCTURE STEEL
BEGIN STATION-OFFSET END STATION-OFFSET
LOW BEAM ELEV. LOCATION.
INLET INVERT ELEV. 769.81 OUTLET INVERT. 767.64
NORMAL WATER ELEV. EXTREME HIGHWATER ELEV. DATE.
HOW OBTAINED.
BACKWATER FROM WHAT STREAM (IF APPLICABLE):
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/ HYDRAULIC DATA FOR BRIDGE

STATION 60+76 STREAM NAME RUNNING WATER

STREAM BED LINING:
DIRECTION OF FLOW LEFT
DRAINAGE AREA 7.06 SQ. MI. ; ( ) FLAT (X) ROLLING ( ) HILLY ( ) MTNS.
PRESENT STRUCTURE: SPAN 44.7' HEIGHT 12' STRUCTURE CONCRETE SUPERSTRUCTURE STEEL
BEGIN STATION-OFFSET END STATION-OFFSET
LOW BEAM ELEV. LOCATION.
INLET INVERT ELEV. 772.85 OUTLET INVERT. 771.52
NORMAL WATER ELEV. EXTREME HIGHWATER ELEV. DATE.
HOW OBTAINED.
BACKWATER FROM WHAT STREAM (IF APPLICABLE):
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:



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KATHERINE J. LLOYD
REGISTERED ENGINEER
XV
AGRICULTURE
COMMERCE
NO. 106475
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DRAINAGE MAP

STA.53+50 TO STA.63+30.11

SCALE: 1"= 50'

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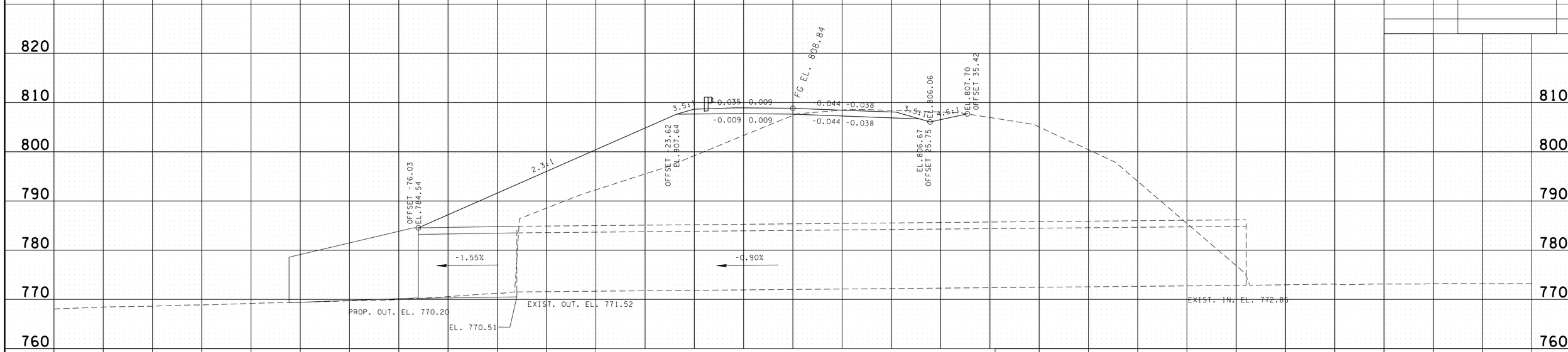
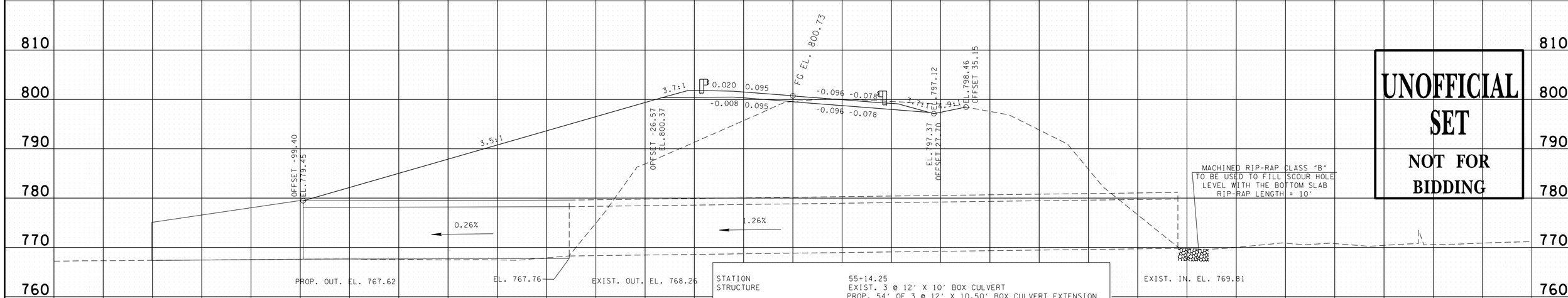
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	8
CONST.	2014	BR-I-24-2(142)	8



STATION	60+73.09
STRUCTURE	EXIST. 3 @ 12' X 12' BOX CULVERT PROP. 20' OF 3 @ 12' X 13' BOX CULVERT EXTENSION
SKEW	60°
DRAINAGE AREA	14.55 SQ. MI.
DESIGN DISCHARGE (Q100)	5940 CFS
DESIGN DISCHARGE (Q500)	8110 CFS @ EL. 791.93
OVERTOPPING ELEV.	798.00
Q100 BACKWATER	10.63 FT. @ EL. 788.99
VELOCITY (Q100)	22.81 FT/S
INLET ELEVATION	772.85
OUTLET ELEVATION	770.20
STANDARD DRAWING NUMBERS	STD-17-101 (USE DETAILS FOR 3 @ 14' X 14' BOX CULVERT, MODIFY BARREL WIDTHS TO FIT EXIST. 12' BARRELS
CLASS "A" CONCRETE	123 C.Y.
STEEL BAR REINFORCING	24440 LB.
FOUNDATION FILL MATERIAL	32 C.Y.

MURPHYHRD
60+73.09



STATION	55+14.25
STRUCTURE	EXIST. 3 @ 12' X 10' BOX CULVERT PROP. 54' OF 3 @ 12' X 10.50' BOX CULVERT EXTENSION
SKEW	55° (EXIST. BOX), 40° (PROP. EXT.)
DRAINAGE AREA	0.61 SQ. MI.
DESIGN DISCHARGE (Q50)	600 CFS
DESIGN DISCHARGE (Q100)	837 CFS @ EL. 781.73
OVERTOPPING ELEV.	798.00
Q100 BACKWATER	0.07 FT. @ EL. 799.27
VELOCITY (Q100)	1.67 FT/S
INLET ELEVATION	769.81
OUTLET ELEVATION	767.62
STANDARD DRAWING NUMBERS	STD-17-98 (USE DETAILS FOR 3 @ 12' X 12' BOX CULVERT) 3 @ 12' X 12' BOX CULVERT)
CLASS "A" CONCRETE	230 C.Y.
STEEL BAR REINFORCING	47520 LB.
FOUNDATION FILL MATERIAL	87 C.Y.

MURPHYHRD
55+14.25

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KATHERINE J. LLOYD
REGISTERED ENGINEER
XVI
AGRICULTURE
COMMERCE
NO. 106422
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CULVERT CROSS-SECTIONS

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

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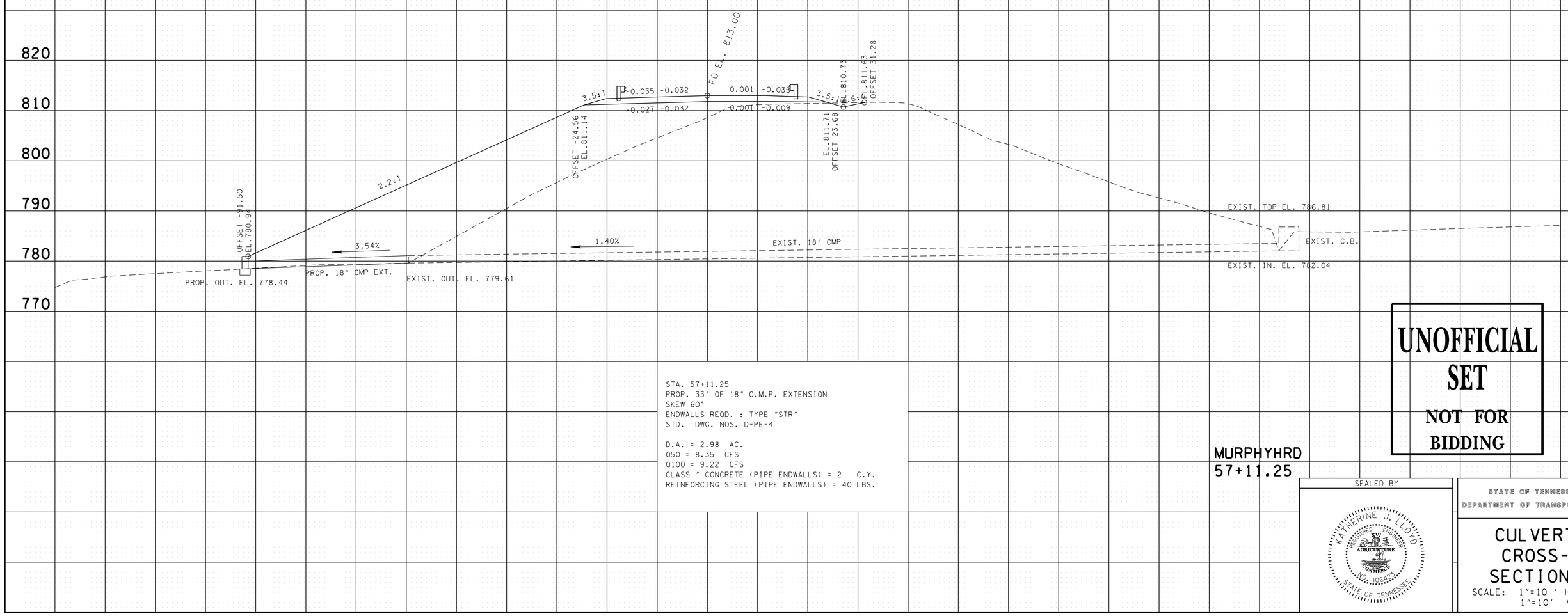
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	8A
CONST.	2014	BR-I-24-2(142)	8A



STA. 57+11.25
PROP. 33' OF 18" C.M.P. EXTENSION
SKEW 60°
ENDWALLS REQD. : TYPE "STR"
STD. DWG. NOS. D-PE-4

D.A. = 2.98 AC.
Q50 = 8.35 CFS
Q100 = 9.22 CFS
CLASS " CONCRETE (PIPE ENDWALLS) = 2 C.Y.
REINFORCING STEEL (PIPE ENDWALLS) = 40 LBS.

UNOFFICIAL SET

NOT FOR BIDDING

MURPHYHRD
57+11.25

SEALED BY

KATHERINE J. LLOYD
REGISTERED ENGINEER
XVI
AGRICULTURE
COMMERCE
NO. 106423
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CULVERT CROSS-SECTIONS

SCALE: 1"=10 ' 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.	2013	BR-I-24-2(142)	9
CONST.	2014	BR-I-24-2(142)	9

EROSION PREVENTION AND SEDIMENT CONTROL 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.

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

(3) 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.

(4) 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.

(5) 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.

(6) 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-RUN WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE.

(7) STEEP SLOPES (A NATURAL OR CREATED SLOPE OF 35% GRADE (2.8H:1V) OR GREATER REGARDLESS OF HEIGHT) SHALL BE TEMPORARILY STABILIZED NO LATER THAN 7 CALENDAR DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.

(8) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SUPPORT ACTIVITIES; TDOT PROJECTS ARE COVERED UNDER THE "WASTE AND BORROW" MANUAL PER THE SSWMP.

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

ECOLOGY

(10) ANY NECESSARY TREE CUTTING ACTIVITIES SHALL OCCUR FROM OCTOBER 15 THROUGH MARCH 31.

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
* SF * SF * SF *	SILT FENCE	EC-STR-3B
* SFB * SFB * SFB *	SILT FENCE WITH WIRE BACKING	EC-STR-3C
	EROSION CONTROL BLANKET	EC-STR-34
** SOCK ** SOCK **	FILTER SOCK	EC-STR-8
	ROCK CHECK DAM (V-DITCH)	EC-STR-6
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
	ROCK CHECK DAM (TRAPEZOIDAL DITCH)	EC-STR-6
	ENHANCED ROCK CHECK DAM (TRAPEZOIDAL DITCH)	EC-STR-6A
	CULVERT PROTECTION (TYPE 2)	EC-STR-11A
* SFB * SFB * SFB * SFB *	SEDIMENT FILTER BAG	EC-STR-2
E	CATCH BASIN PROTECTION (TYPE E)	EC-STR-19
IN DIV	INSTREAM DIVERSION	EC-STR-30 EC-STR-30A
* TCE	TEMPORARY CONSTRUCTION EXIT	EC-STR-25

* TO BE LOCATED BY THE T.D.O.T. CONSTRUCTION ENGINEER IN THE FIELD

EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY (PHASE I)	QUANTITY (PHASE II)	QUANTITY (TOTAL)
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	14.5	14.5	29
209-03.22	FILTER SOCK (18 INCH)	L.F.	2380	0	2380
209-05	SEDIMENT REMOVAL	C.Y.	28	28	56
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	1607	202	1809
209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	217	0	217
209-08.07	ROCK CHECK DAM PER	EACH	10	37	47
209-08.08	ENHANCED ROCK CHECK DAM	EACH	5	13	18
209-09.03	SEDIMENT FILTER BAG (15' X 15')	EACH	4	4	8
209-40.34	CATCH BASIN PROTECTION (TYPE E)	EACH	1	0	1
209-65.04	TEMPORARY IN STREAM DIVERSION	L.F.	0	200	200
303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	36	114	150
621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	80	80	160
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100	100	200
740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	395.5	734.5	1130
801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	1	7	8
801-03	WATER (SEEDING & SODDING)	M.G.	1	3	4

1.) 2.) 3.) 4.) 5.) 6.) 7.) 8.)

1.) QUANTITIES TO BE USED AS DIRECTED BY THE T.D.O.T. CONSTRUCTION ENGINEER.
2.) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
3.) INCLUDES QUANTITIES FOR FOUR (4) TEMPORARY CONSTRUCTION EXITS.
4.) 1406 L.F. TO BE USED AT THE FOOT OF SLOPES AND 403 L.F. TO BE USED FOR TEMPORARY SEDIMENT FILTER BAG.
5.) 6 EA. TO BE USED IN DITCHES AND 2 EA. TO BE USED FOR CULVERT PROTECTION (TYPE II).
6.) QUANTITY INCLUDES ONE REPLACEMENT OVER DURATION OF PROJECT.
7.) 74 TON TO BE USED FOR TEMPORARY SEDIMENT FILTER BAG AND 76 TON TO BE USED FOR CULVERT PROTECTION (TYPE II).
8.) 426 S.Y. TO BE USED FOR TEMPORARY SEDIMENT FILTER BAG, 367 S.Y. TO BE USED FOR TEMPORARY CONSTRUCTION EXITS, AND 337 S.Y. TO BE USED FOR CULVERT PROTECTION (TYPE II).

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY
KATHERINE J. LLOYD
REGISTERED ENGINEER
AGRICULTURE & COMMERCE
NO. 106423
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

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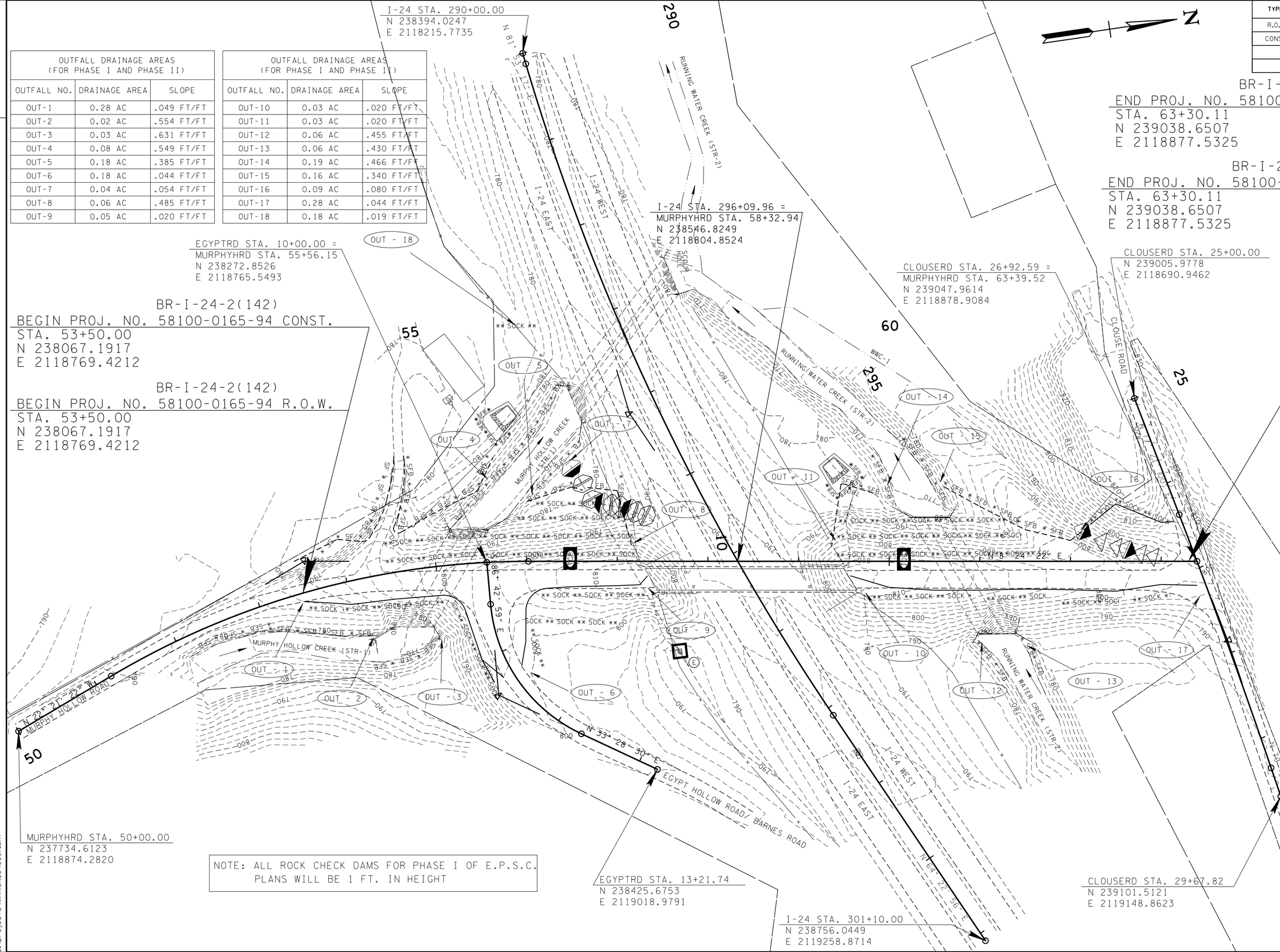
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	9A
CONST.	2014	BR-I-24-2(142)	9A

OUTFALL DRAINAGE AREAS (FOR PHASE I AND PHASE II)		
OUTFALL NO.	DRAINAGE AREA	SLOPE
OUT-1	0.28 AC	.049 FT/FT
OUT-2	0.02 AC	.554 FT/FT
OUT-3	0.03 AC	.631 FT/FT
OUT-4	0.08 AC	.549 FT/FT
OUT-5	0.18 AC	.385 FT/FT
OUT-6	0.18 AC	.044 FT/FT
OUT-7	0.04 AC	.054 FT/FT
OUT-8	0.06 AC	.485 FT/FT
OUT-9	0.05 AC	.020 FT/FT

OUTFALL DRAINAGE AREAS (FOR PHASE I AND PHASE II)		
OUTFALL NO.	DRAINAGE AREA	SLOPE
OUT-10	0.03 AC	.020 FT/FT
OUT-11	0.03 AC	.020 FT/FT
OUT-12	0.06 AC	.455 FT/FT
OUT-13	0.06 AC	.430 FT/FT
OUT-14	0.19 AC	.466 FT/FT
OUT-15	0.16 AC	.340 FT/FT
OUT-16	0.09 AC	.080 FT/FT
OUT-17	0.28 AC	.044 FT/FT
OUT-18	0.18 AC	.019 FT/FT



NOTE: ALL ROCK CHECK DAMS FOR PHASE I OF E.P.S.C. PLANS WILL BE 1 FT. IN HEIGHT

UNOFFICIAL SET

NOT FOR BIDDING

PHASE I
CLEARING
&
GRUBBING

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00005675 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

STA.53+50 TO STA.63+30.11

SCALE: 1"= 50'

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	9B
CONST.	2014	BR-I-24-2(142)	9B

SEQUENCE OF CONSTRUCTION FOR BOX CULVERT EXTENSIONS
(TO BE DONE FOR EACH CULVERT)

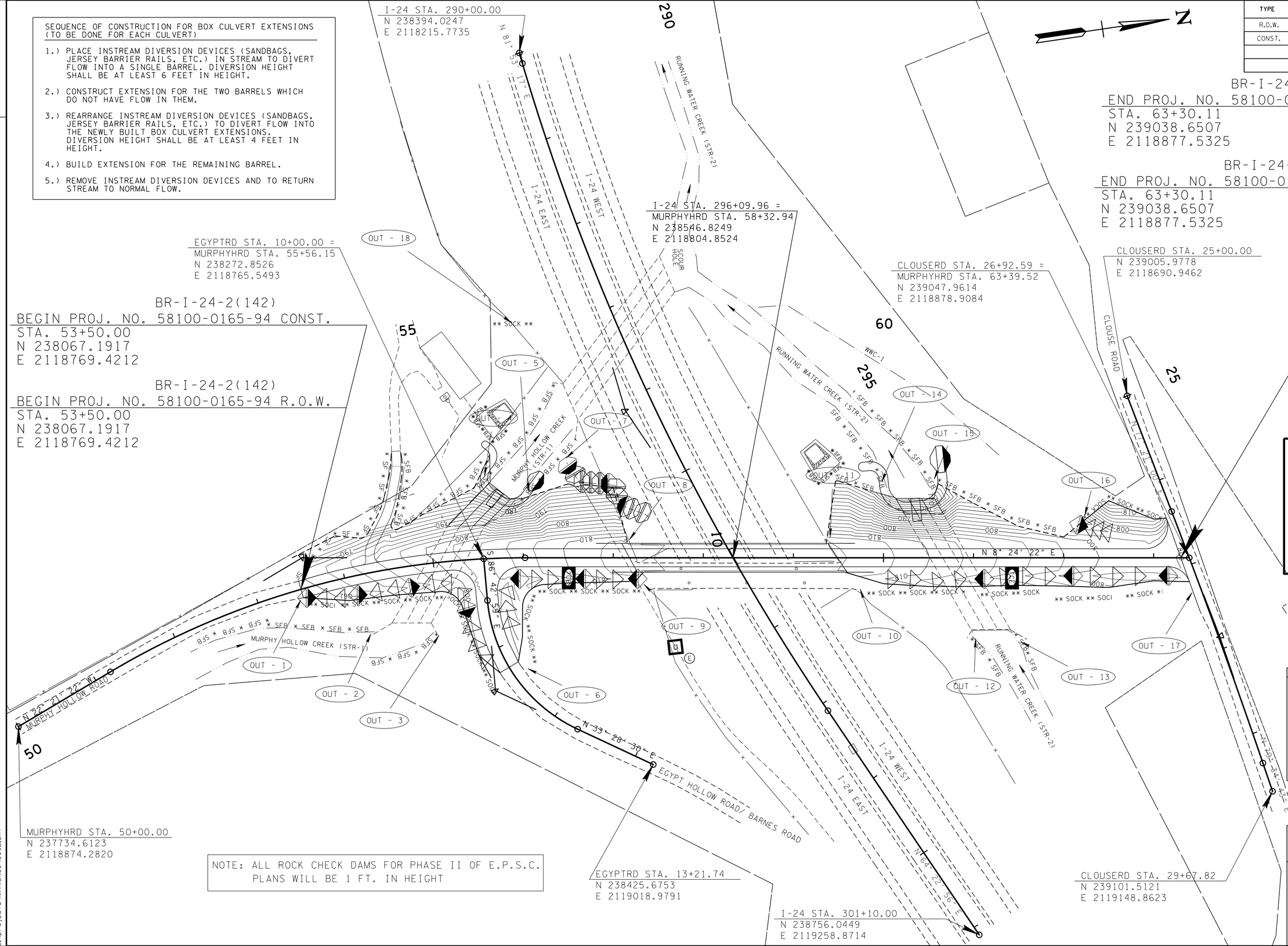
1.) PLACE INSTREAM DIVERSION DEVICES (SANDBAGS, JERSEY BARRIER RAILS, ETC.) IN STREAM TO DIVERT FLOW INTO A SINGLE BARREL. DIVERSION HEIGHT SHALL BE AT LEAST 6 FEET IN HEIGHT.

2.) CONSTRUCT EXTENSION FOR THE TWO BARRELS WHICH DO NOT HAVE FLOW IN THEM.

3.) REARRANGE INSTREAM DIVERSION DEVICES (SANDBAGS, JERSEY BARRIER RAILS, ETC.) TO DIVERT FLOW INTO THE NEWLY BUILT BOX CULVERT EXTENSIONS. DIVERSION HEIGHT SHALL BE AT LEAST 4 FEET IN HEIGHT.

4.) BUILD EXTENSION FOR THE REMAINING BARREL.

5.) REMOVE INSTREAM DIVERSION DEVICES AND TO RETURN STREAM TO NORMAL FLOW.



NOTE: ALL ROCK CHECK DAMS FOR PHASE II OF E.P.S.C. PLANS WILL BE 1 FT. IN HEIGHT

UNOFFICIAL SET

NOT FOR BIDDING

PHASE II
INTERMEDIATE/
FINAL

SEALED BY

KATHERINE J. LLOYD
REGISTERED ENGINEER
XVI
AGRICULTURE
COMMERCE
NO. 106473
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00005675 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

STA.53+50 TO STA.63+30.11

SCALE: 1"= 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-I-24-2(142)	10

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

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

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

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

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

   c. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE THROUGH TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 3.5 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 LANES AND/OR SHOULDER DROP-OFF) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

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

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

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

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

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

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

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

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

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

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

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

   SEPARATION WILL BE PROVIDED BY USE OF PORTABLE BARRIER RAIL.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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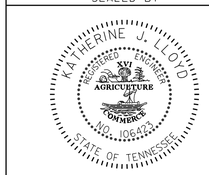

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-I-24-2(142)	10A

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	SIGN (CONSTRUCTION) (2-POST)
→	TRAFFIC FLOW
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C
	ARROW BOARD TYPE C (CAUTION)
C	WARNING LIGHT (TYPE C) (STEADY)
	CHANGEABLE MESSAGE SIGN
	CHANGEABLE MESSAGE SIGN
	TEMPORARY BARRICADE (TYPE III)

SPECIAL TRAFFIC CONTROL NOTES FOR DEMOLITION OF EXISTING MURPHY HOLLOW ROAD BRIDGE OVER I-24

(1) FOR DEMOLITION OF EXISTING BRIDGE:

(A) I-24 EASTBOUND/I-59 SOUTHBOUND TRAFFIC WILL BE DETOURED AROUND TN 134/GA 299 USING THE FOLLOWING DETOUR:

(I) I-24 EAST WILL BE CLOSED AT EXIT 161. SET UP MAESSAGE BOARDS INFORMING TRAFFIC THAT I-24 EASTBOUND AND I-59 SOUTHBOUND TRAFFIC MUST EXIT AT EXIT 161.

(II) FOR I-24 EASTBOUND TRAFFIC:
- (a) TURN LEFT AT THE END OF THE EXIT RAMP ONTO SR-156. & DRIVE 0.4 MILES.
- (b) TURN RIGHT ONTO J.E. CLOUSE HWY/TN 134 & DRIVE 6.1 MILES.
- (c) TN 134 BECOMES GA 299 & DRIVE 2.7 MILES TO I-24 EAST ON RAMP AT MM 169.
- (d) TURN RIGHT ONTO THE ENTRANCE RAMP TO I-24 EAST.
- (e) MERGE ONTO I-24 EAST (EXIT 169).

(III) FOR I-59 SOUTHBOUND TRAFFIC:
- (a) TURN LEFT AT THE END OF THE EXIT RAMP ONTO SR-156. & DRIVE 0.4 MILES.
- (b) TURN RIGHT ONTO J.E. CLOUSE HWY/TN 134 & DRIVE 6.1 MILES.
- (c) TN 134 BECOMES GA 299 & DRIVE 2.7 MILES TO I-24 WEST ON RAMP AT MM 169.
- (d) TURN RIGHT ONTO THE ENTRANCE RAMP TO I-24 WEST.
- (e) MERGE ONTO I-24 WEST (EXIT 169) & CONTINUE ON TO I-59 SOUTH.

(B) I-24 WESTBOUND TRAFFIC WILL BE DETOURED AROUND US 41/64/72/TN 2 USING THE FOLLOWING DETOUR:

(I) I-24 WEST WILL BE CLOSED AT THE I-24/I-59 INTERCHANGE. SET UP MESSAGE BOARDS INFORMING TRAFFIC THAT I-24 WESTBOUND TRAFFIC MUST EXIT AT EXIT 174 AND THAT I-59 SOUTHBOUND TRAFFIC WILL CONTINUE ON I-24 WEST TO I-59 SOUTH.

(II) FOR I-24 EASTBOUND TRAFFIC:
- (a) TURN RIGHT AT THE END OF THE EXIT RAMP ONTO CUMMINGS HWY/ US 41/64/72/TN 2 & DRIVE 16.9 MILES.
- (b) TURN LEFT ONTO TVA RD/TN 27 & DRIVE 0.3 MILES.
- (c) TURN RIGHT ONTO THE ENTRANCE RAMP TO I-24 WEST
- (d) MERGE ONTO I-24 WEST (EXIT 158).

(III) FOR I-24 WESTBOUND TRAFFIC:
- (a) CONTINUE ON I-24 WEST TO I-59 SOUTH.

(C) SEE SHEET 10E FOR DETOUR MAP.

(2) FOR ALL OTHER WORK NOT INVOLVING BRIDGE DEMOLTION OR THE SETTING OF NEW BRIDGE BEAMS, SEE SHEETS 10B - 10C FOR TRAFFIC CONTROL PLAN TO BE UTILIZED.

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DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL LEGEND AND SPECIAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-I-24-2(142)	10B

TRAFFIC CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	ITEM NO. 712-06 (S.F.)	SIZE	TOTAL	M.U.T.C.D. NO.	DESCRIPTION
705-08.51	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	EACH	6					
712-01	TRAFFIC CONTROL	LS	1					
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	2120					
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	50					
712-04.50	PORTABLE BARRIER RAIL DELINEATOR	EACH	110					
712-05.03	WARNING LIGHTS (TYPE C)	EACH	9					
712-06	SIGNS (CONSTRUCTION)	S.F.	809					
712-08.03	ARROW BOARD (TYPE C)	EACH	2					
712-09.01	REMOVABLE PAVEMENT MARKING LINE	L.F.	4000					
712-09.02	REMOVABLE PAVEMENT MARKING (8" BARRIER LINE)	L.F.	1000					
712-09.04	REMOVABLE PAVEMENT MARKING (STOP LINE)	L.F.	30					
713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	6					
716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	1					
716-05.02	PAINTED PAVEMENT MARKING (8" BARRIER LINE)	L.F.	1730					
730-40	TEMPORARY TRAFFIC SIGNAL SYSTEM	EACH	1					
				9	36" X 36"	1	W20-1	ROAD WORK 1500 FT (LOCAL ROADS)
				9	36" X 36"	1	W20-1	ROAD WORK 1000 FT (LOCAL ROADS)
				9	36" X 36"	1	W20-1	ROAD WORK 500 FT (LOCAL ROADS)
				36	36" X 36"	4	W20-1	ROAD WORK AHEAD (LOCAL ROADS)
				18	36" X 18"	4	G20-2	END ROAD WORK (LOCAL ROADS)
				9	36" X 36"	1	W20-4	ONE LANE ROAD 1500 FT (LOCAL ROADS)
				25	30" X 30"	4	W3-3	SIGNAL AHEAD SYMBOL (LOCAL ROADS)
				9	36" X 36"	1	W20-7	FLAGGER AHEAD SYMBOL (LOCAL ROADS)
				9	36" X 36"	1	W3-4	BE PREPARED TO STOP (LOCAL ROADS)
				8.75	30" X 42"	1	R10-6(MOD.)	STAY IN LANE TO EXTEND GREEN (LOCAL ROADS)
				6	24" X 36"	1	R10-6	STOP HERE ON RED (LOCAL ROADS)
				42	42" X 48"	3	SPECIAL (SPAN MOUNTED)	MAXIMUM 3 MINUTE RED (LOCAL ROADS)
				21	42" X 36"	2	SPECIAL	MAINTAIN 25 MPH SPEED (LOCAL ROADS)
				64	48" X 48"	4	W20-1	ROAD WORK 1 MILE (INTERSTATE)
				64	48" X 48"	4	W20-1	ROAD WORK 1/2 MILE (INTERSTATE)
				64	48" X 48"	4	W21-5B	LEFT SHOULDER CLOSED 1500 FT (INTERSTATE)
				64	48" X 48"	4	W21-5B	LEFT SHOULDER CLOSED 500 FT (INTERSTATE)
				64	48" X 48"	4	W21-5B	RIGHT SHOULDER CLOSED 1500 FT (INTERSTATE)
				64	48" X 48"	4	W21-5B	RIGHT SHOULDER CLOSED 500 FT (INTERSTATE)
				32	48" X 24"	4	G20-2	END ROAD WORK (INTERSTATE)
				20	48" X 30"	2	R11-2	ROAD CLOSED
				28	24" X 12"	14	M4-8	DETOUR
				52	24" X 24"	13	M1-1	I-24
				24	24" X 24"	6	M1-1	I-59
				12	24" X 12"	6	M3-2	EAST
				12	24" X 12"	6	M3-3	SOUTH
				14	24" X 12"	7	M3-4	WEST
				4.4	21" X 15"	5	M6-1R	ARROW - RIGHT
				10.9	21" X 15"	2	M6-1L	ARROW - LEFT
				4.4	21" X 15"	2	M6-2R	45° ARROW - RIGHT
TOTAL				**808.45**				

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TRAFFIC CONTROL QUANTITIES

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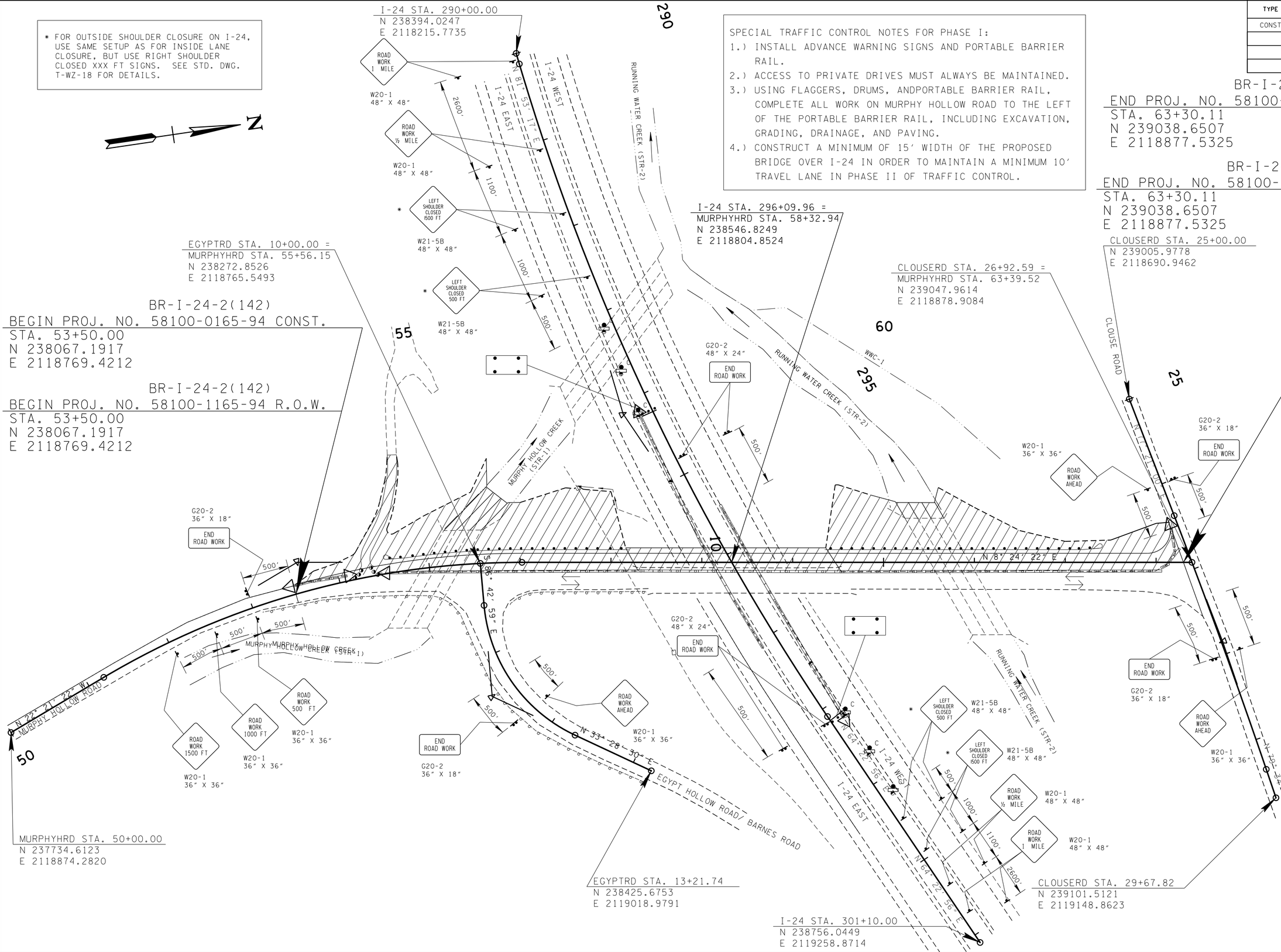
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-I-24-2(142)	10C

* FOR OUTSIDE SHOULDER CLOSURE ON I-24, USE SAME SETUP AS FOR INSIDE LANE CLOSURE, BUT USE RIGHT SHOULDER CLOSED XXX FT SIGNS. SEE STD. DWG. T-WZ-18 FOR DETAILS.

SPECIAL TRAFFIC CONTROL NOTES FOR PHASE I:

1.) INSTALL ADVANCE WARNING SIGNS AND PORTABLE BARRIER RAIL.
2.) ACCESS TO PRIVATE DRIVES MUST ALWAYS BE MAINTAINED.
3.) USING FLAGGERS, DRUMS, ANDPORTABLE BARRIER RAIL, COMPLETE ALL WORK ON MURPHY HOLLOW ROAD TO THE LEFT OF THE PORTABLE BARRIER RAIL, INCLUDING EXCAVATION, GRADING, DRAINAGE, AND PAVING.
4.) CONSTRUCT A MINIMUM OF 15' WIDTH OF THE PROPOSED BRIDGE OVER I-24 IN ORDER TO MAINTAIN A MINIMUM 10' TRAVEL LANE IN PHASE II OF TRAFFIC CONTROL.



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REGISTERED ENGINEER
NO. 106423
STATE OF TENNESSEE

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00005675 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.53+50 TO STA.63+30.11

SCALE: 1"= 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-I-24-2(142)	10D

SPECIAL TRAFFIC CONTROL NOTES FOR PHASE III:

1.) REMOVE ALL PORTABLE BARRIER RAIL.
2.) USING DRUMS, FLAGGERS, AND TEMPORARY SIGNALS, DO ALL REMAINING WORK FROM STATIONS 53+50 TO 54+75 AND STATIONS 63+00 TO 63+31.70 INCLUDING EXCAVATION, FILLING, GRADING, AND DRAINAGE.
3.) PUT DOWN FINAL STRIPING.

SPECIAL TRAFFIC CONTROL NOTES FOR PHASE II:

1.) INSTALL ADVANCE WARNING SIGNS, TEMPORARY SIGNALS, AND PORTABLE BARRIER RAIL.
2.) ACCESS TO PRIVATE DRIVES MUST ALWAYS BE MAINTAINED.
3.) USING FLAGGERS, DRUMS, PORTABLE BARRIER RAIL, AND TEMPORARY SIGNALS, COMPLETE ALL WORK ON MURPHY HOLLOW ROAD TO THE RIGHT OF THE PORTABLE BARRIER RAIL, INCLUDING EXCAVATION, GRADING, DRAINAGE, AND PAVING.
4.) CONSTRUCT THE REMAINING PORTION OF THE BRIDGE OVER I-24 AFTER REMOVAL OF THE EXISTING BRIDGE.
5.) USING FLAGGERS AND DRUMS, DO ALL WORK ON EGYPT HOLLOW ROAD INCLUDING EXCAVATION, FILLING, AND GRADING.
6.) SEE STD. DWGS. T-WZ-32, T-WZ-33, T-WZ-34, AND T-WZ-35 FOR DETAILS NOT SHOWN.

* FOR OUTSIDE SHOULDER CLOSURE ON I-24, USE SAME SETUP AS FOR INSIDE LANE CLOSURE, BUT USE RIGHT SHOULDER CLOSED XXX FT SIGNS. SEE STD. DWG. T-WZ-18 FOR DETAILS.

I-24 STA. 290+00.00
N 238394.0247
E 2118215.7735

BR-I-24-2(142)
END PROJ. NO. 58100-0165-94 CONST.
STA. 63+30.11
N 239038.6507
E 2118877.5325

BR-I-24-2(142)
END PROJ. NO. 58100-0165-94 R.O.W.
STA. 63+30.11
N 239038.6507
E 2118877.5325

I-24 STA. 296+09.96 =
MURPHYHRD STA. 58+32.94
N 238546.8249
E 2118804.8524

EGYPTRD STA. 10+00.00 =
MURPHYHRD STA. 55+56.15
N 238272.8526
E 2118765.5493

CLOUSERD STA. 26+92.59 =
MURPHYHRD STA. 63+39.52
N 239047.9614
E 2118878.9084

CLOUSERD STA. 25+00.00
N 239005.9778
E 2118690.9462

BR-I-24-2(142)
BEGIN PROJ. NO. 58100-0165-94 CONST.
STA. 53+50.00
N 238067.1917
E 2118769.4212

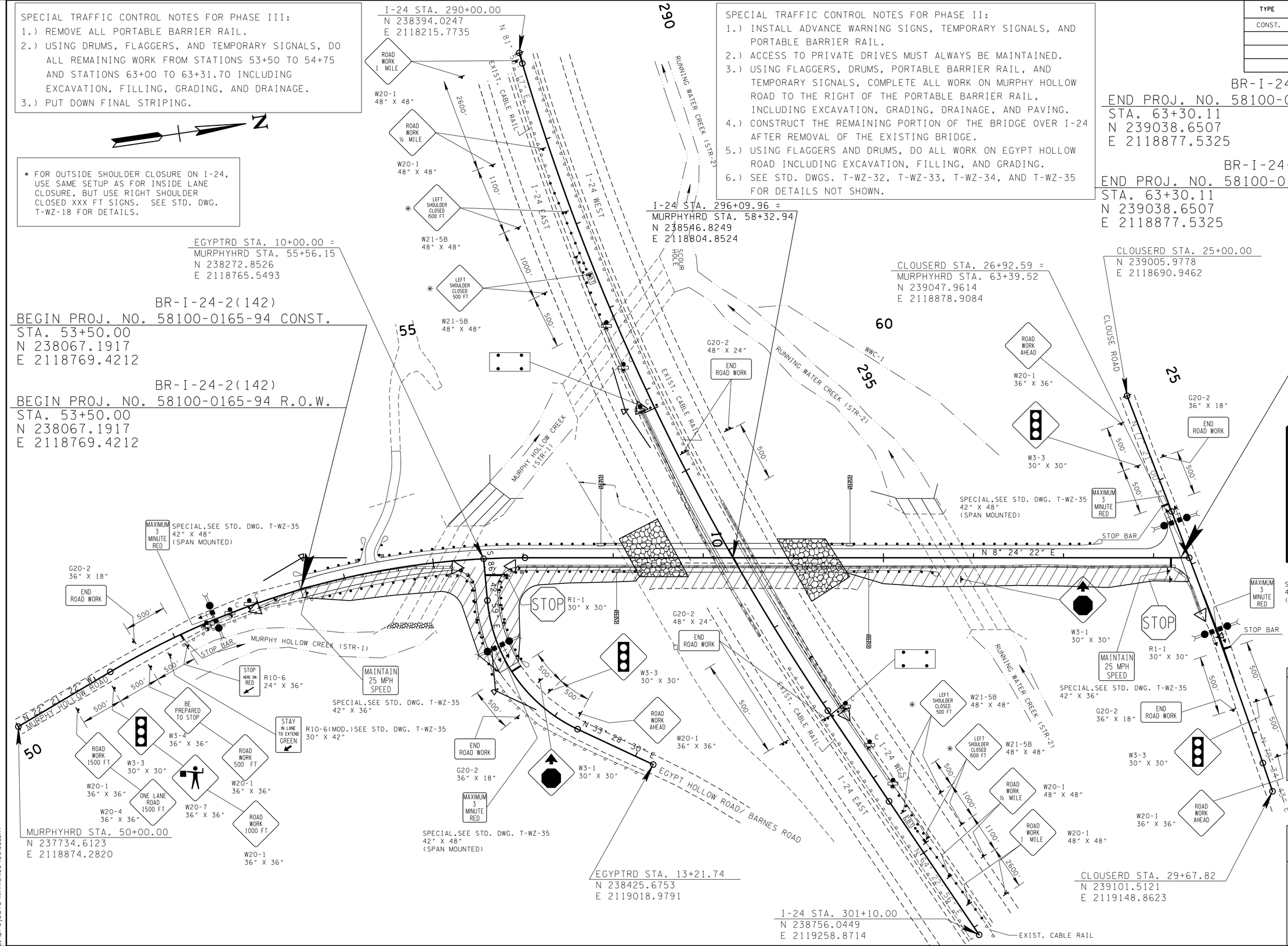
BR-I-24-2(142)
BEGIN PROJ. NO. 58100-0165-94 R.O.W.
STA. 53+50.00
N 238067.1917
E 2118769.4212

MURPHYHRD STA. 50+00.00
N 237734.6123
E 2118874.2820

EGYPTRD STA. 13+21.74
N 238425.6753
E 2119018.9791

I-24 STA. 301+10.00
N 238756.0449
E 2119258.8714

CLOUSERD STA. 29+67.82
N 239101.5121
E 2119148.8623



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REGISTERED ENGINEER
XVI
AGRICULTURE
COMMERCE
NO. 106475
STATE OF TENNESSEE

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DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE II & III

STA.53+50 TO STA.63+30.11

SCALE: 1"= 50'

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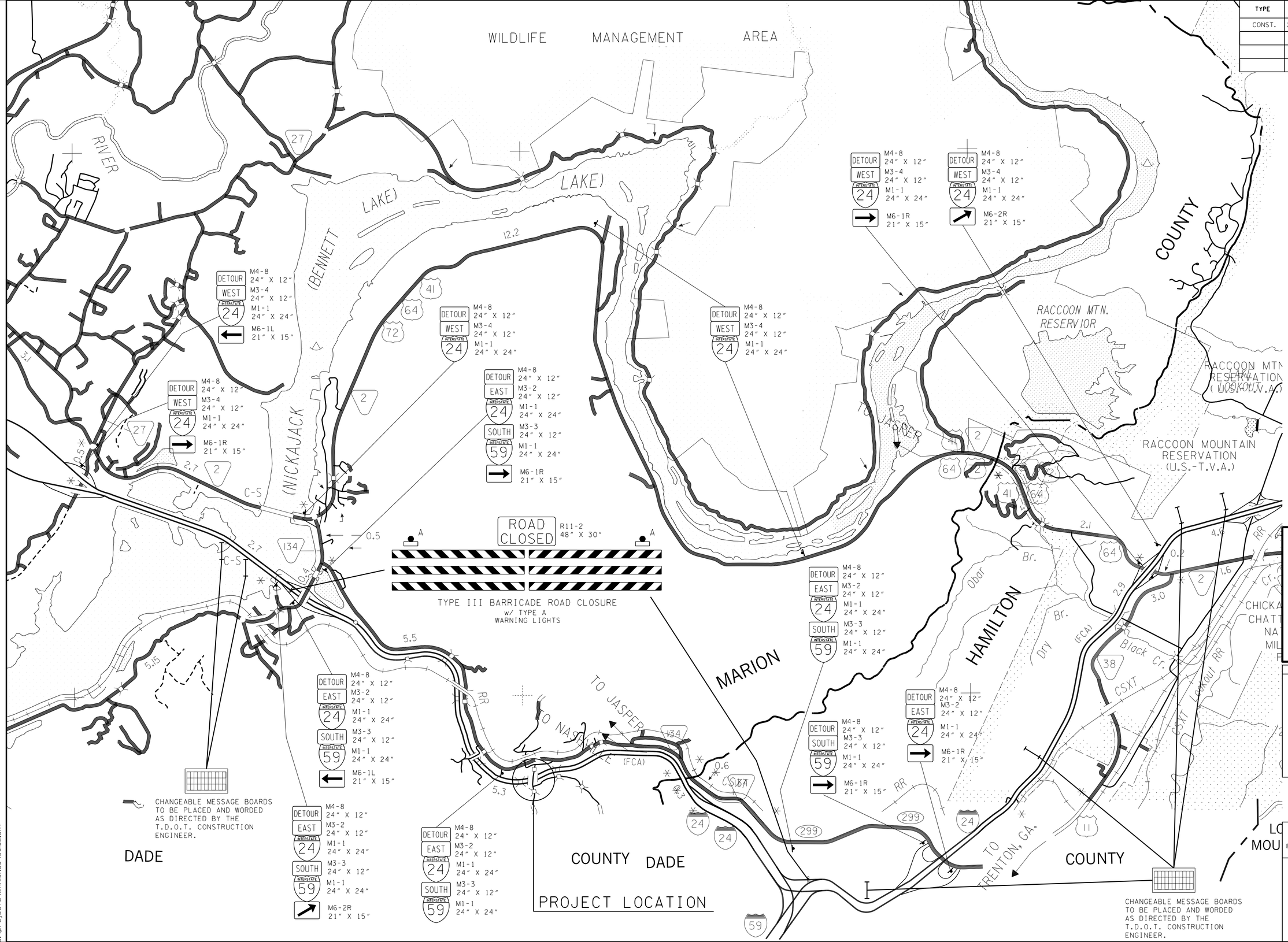
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	BR-I-24-2(142)	10E



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KATHERINE J. LLOYD
REGISTERED ENGINEER
XVI
AGRICULTURE
CIVIL
COMMERCE
No. 106423
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

I-24/I-59 DETOUR MAP

SCALE: 1" = 2000'

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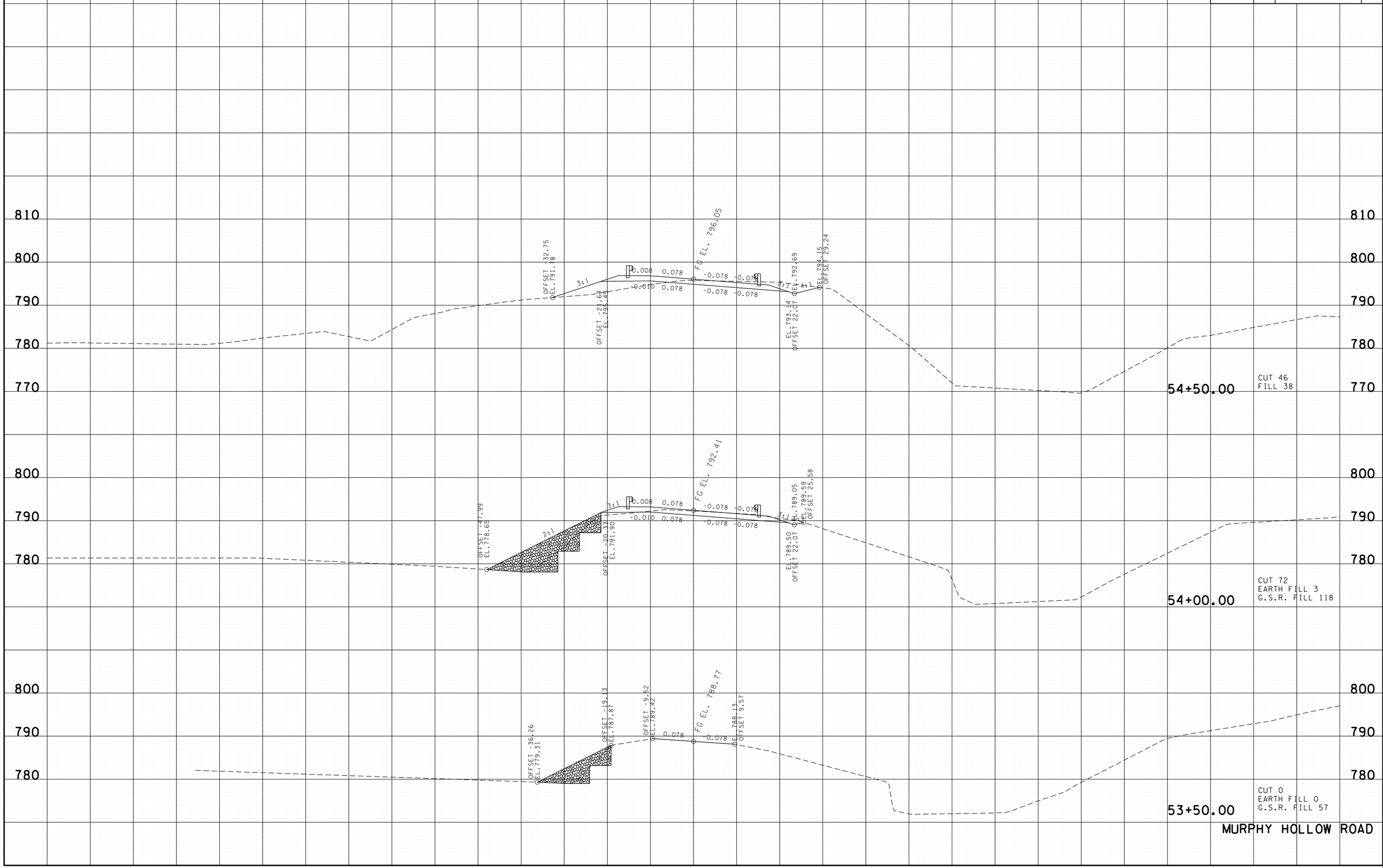
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	10
CONST.	2014	BR-I-24-2(142)	12



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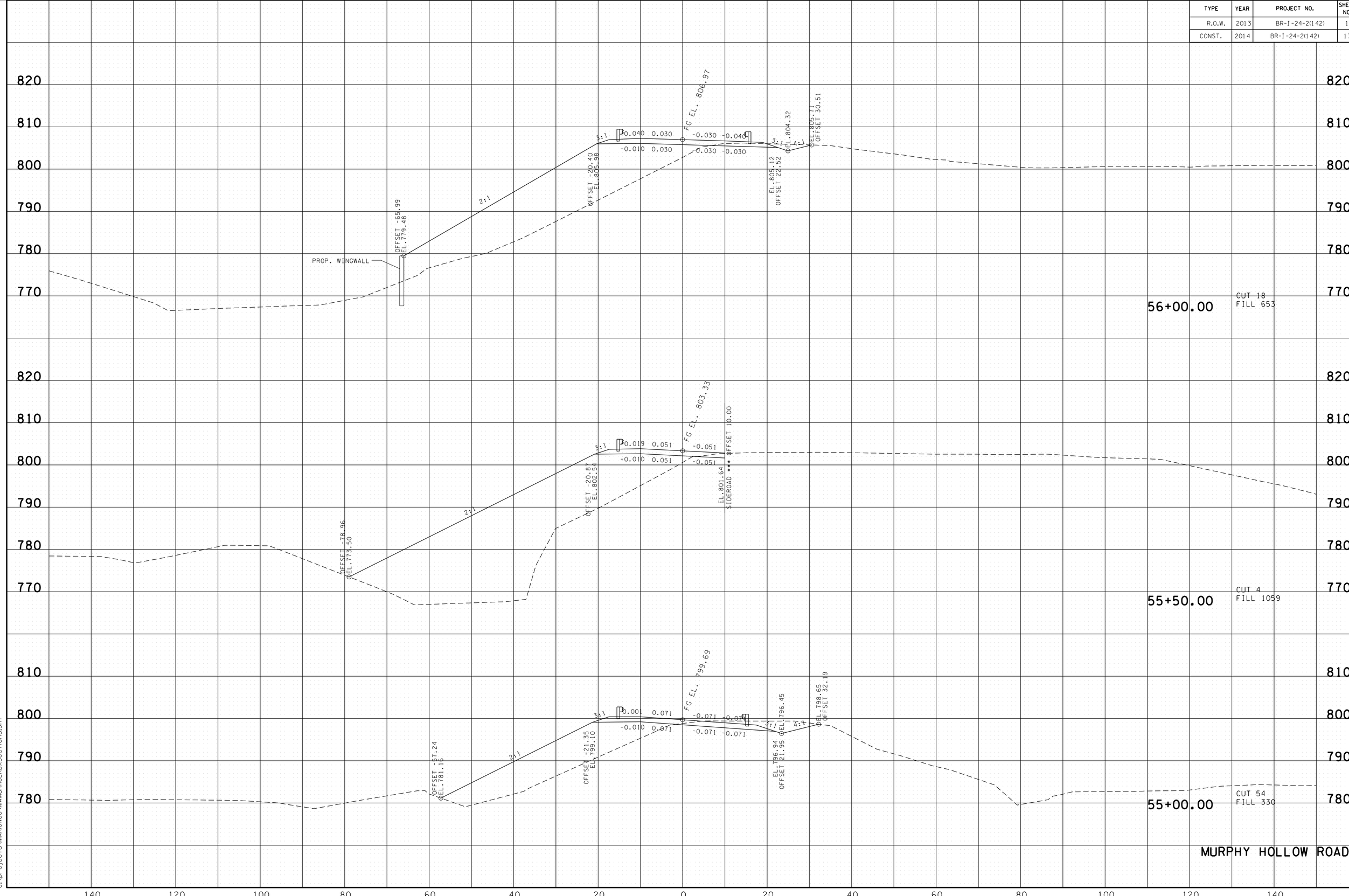
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	11
CONST.	2014	BR-I-24-2(142)	13



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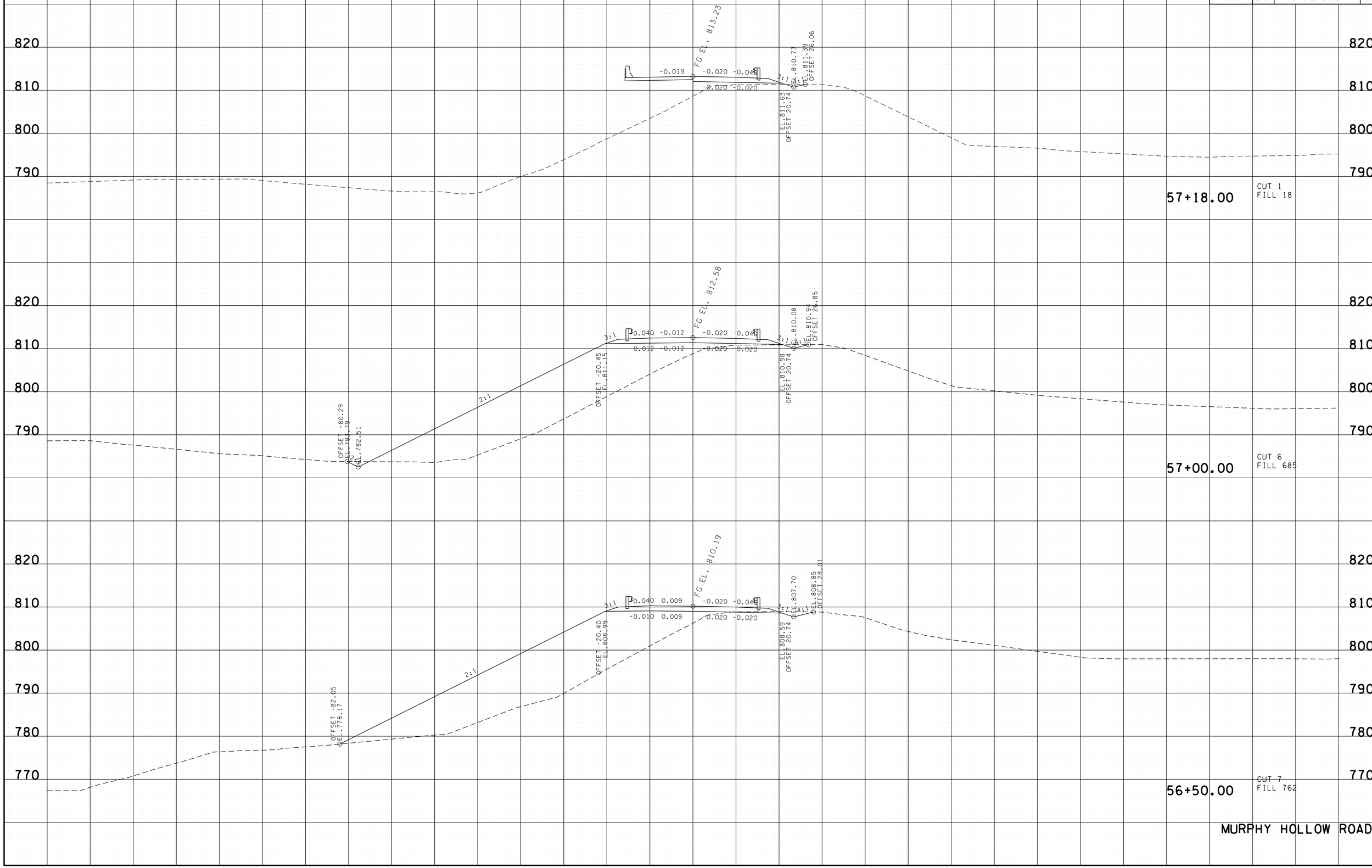
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	12
CONST.	2014	BR-I-24-2(142)	14



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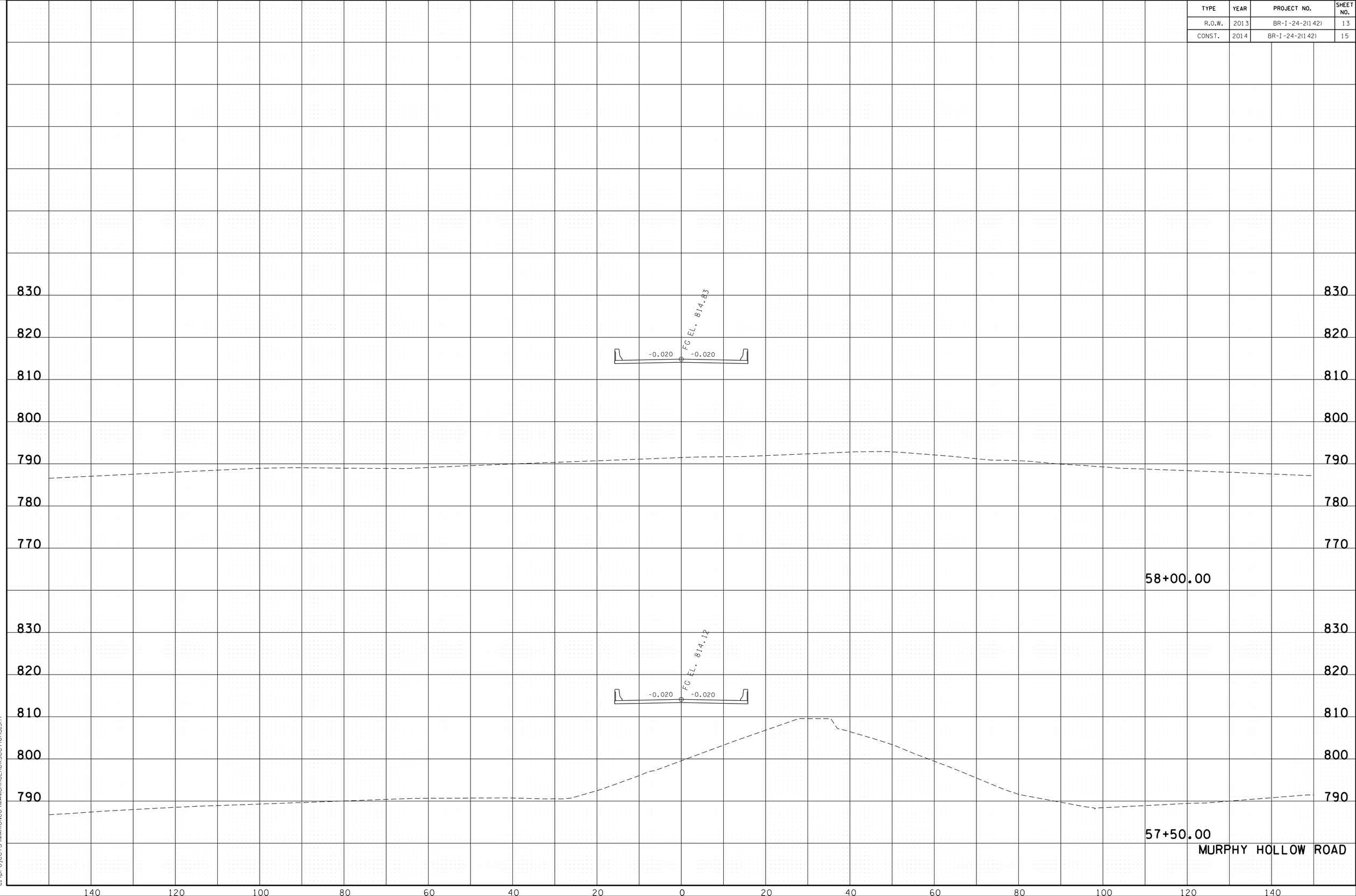
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	13
CONST.	2014	BR-I-24-2(142)	15



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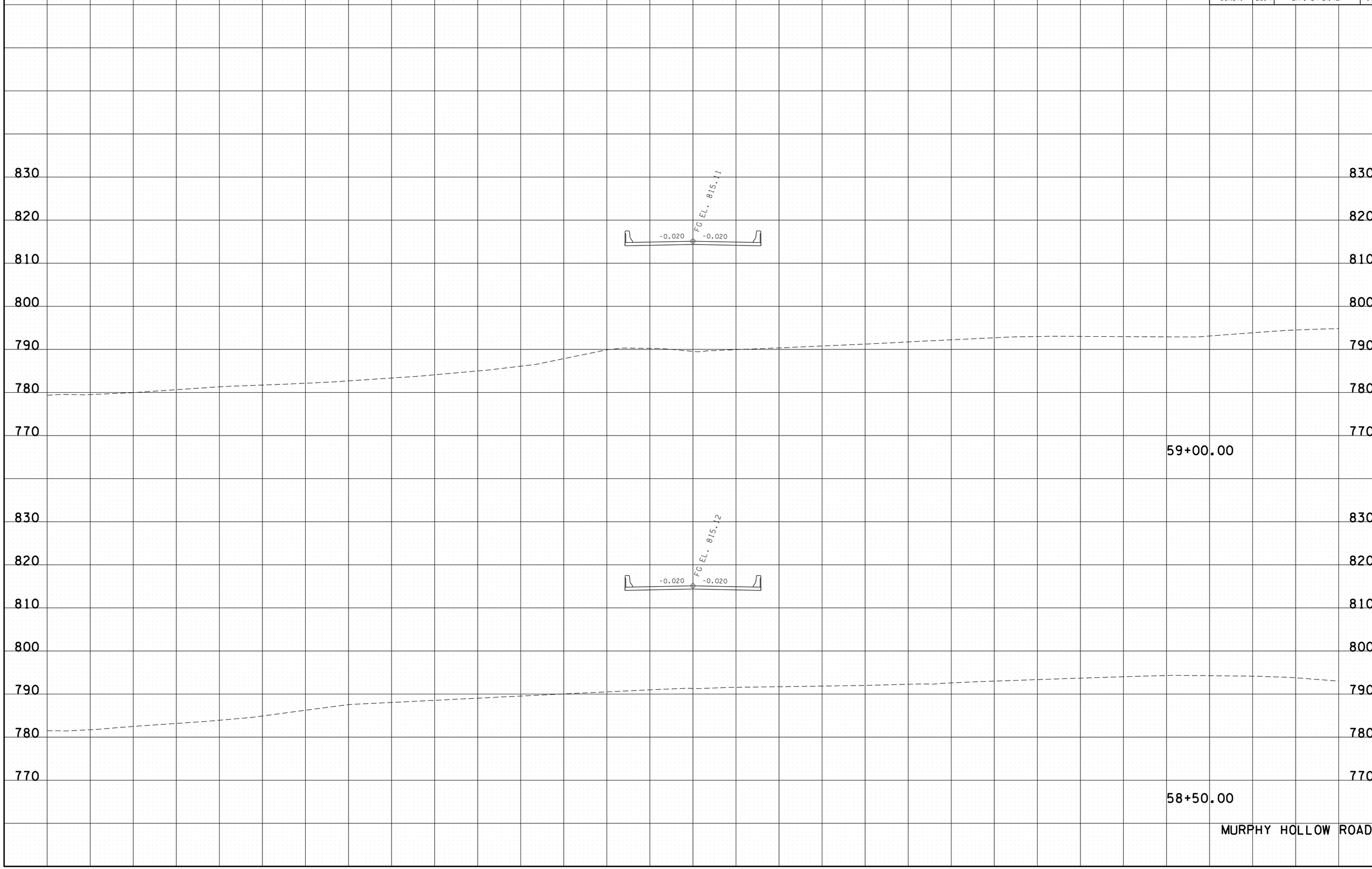
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	14
CONST.	2014	BR-I-24-2(142)	16



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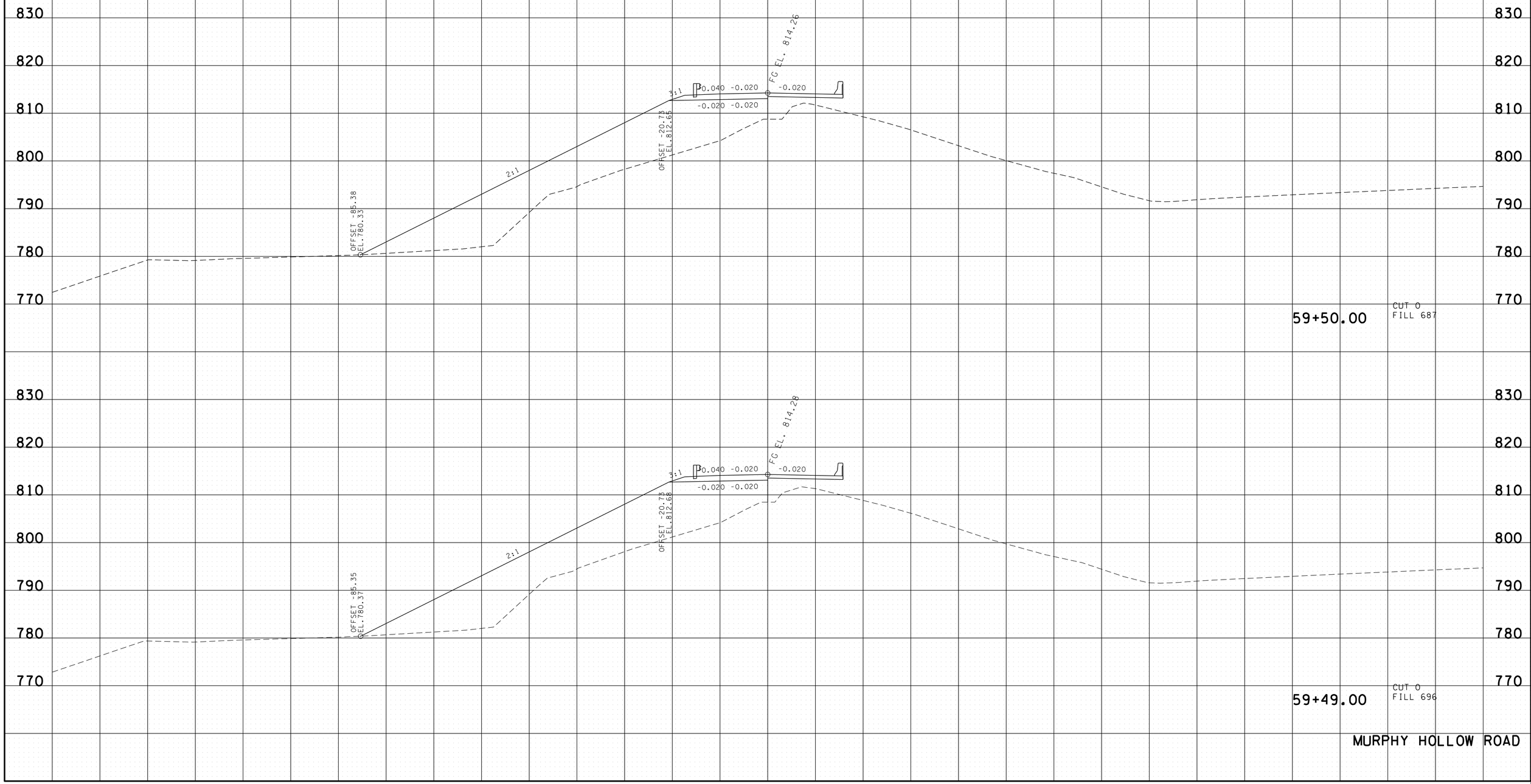
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	15
CONST.	2014	BR-I-24-2(142)	17



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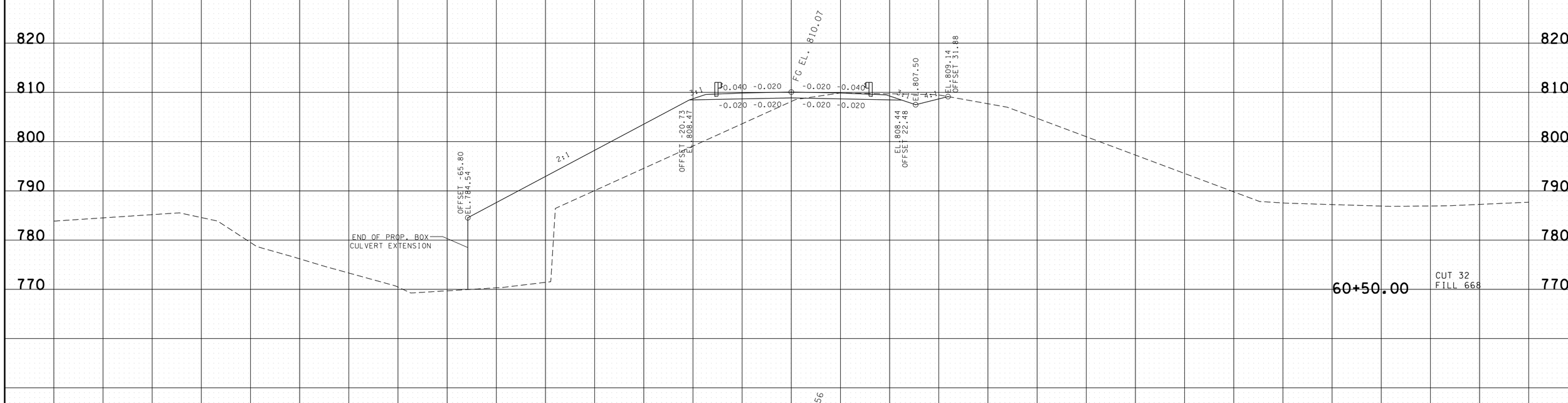
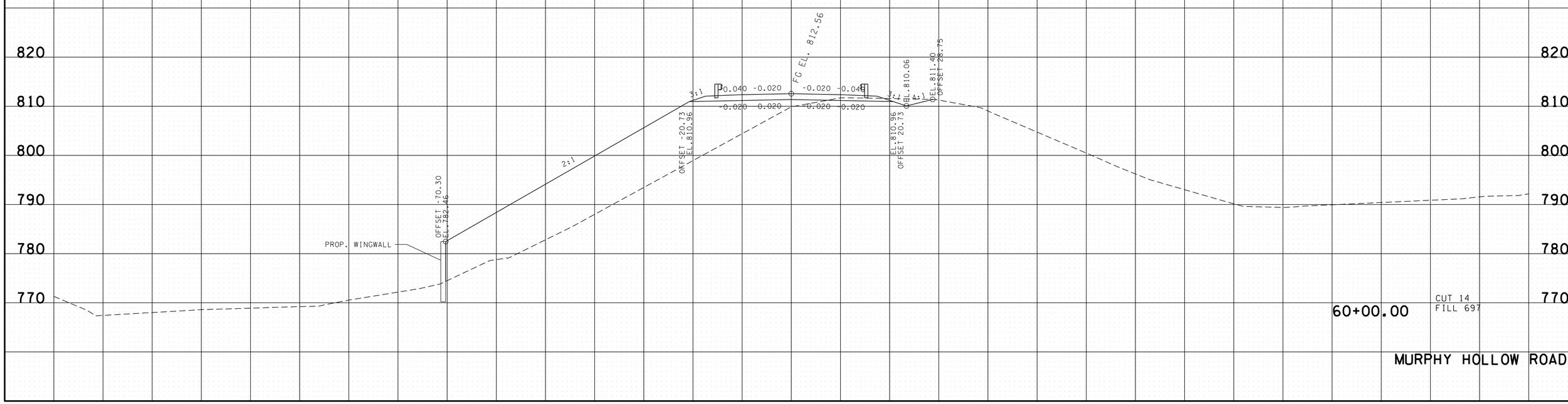
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	16
CONST.	2014	BR-I-24-2(142)	18





MURPHY HOLLOW ROAD

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

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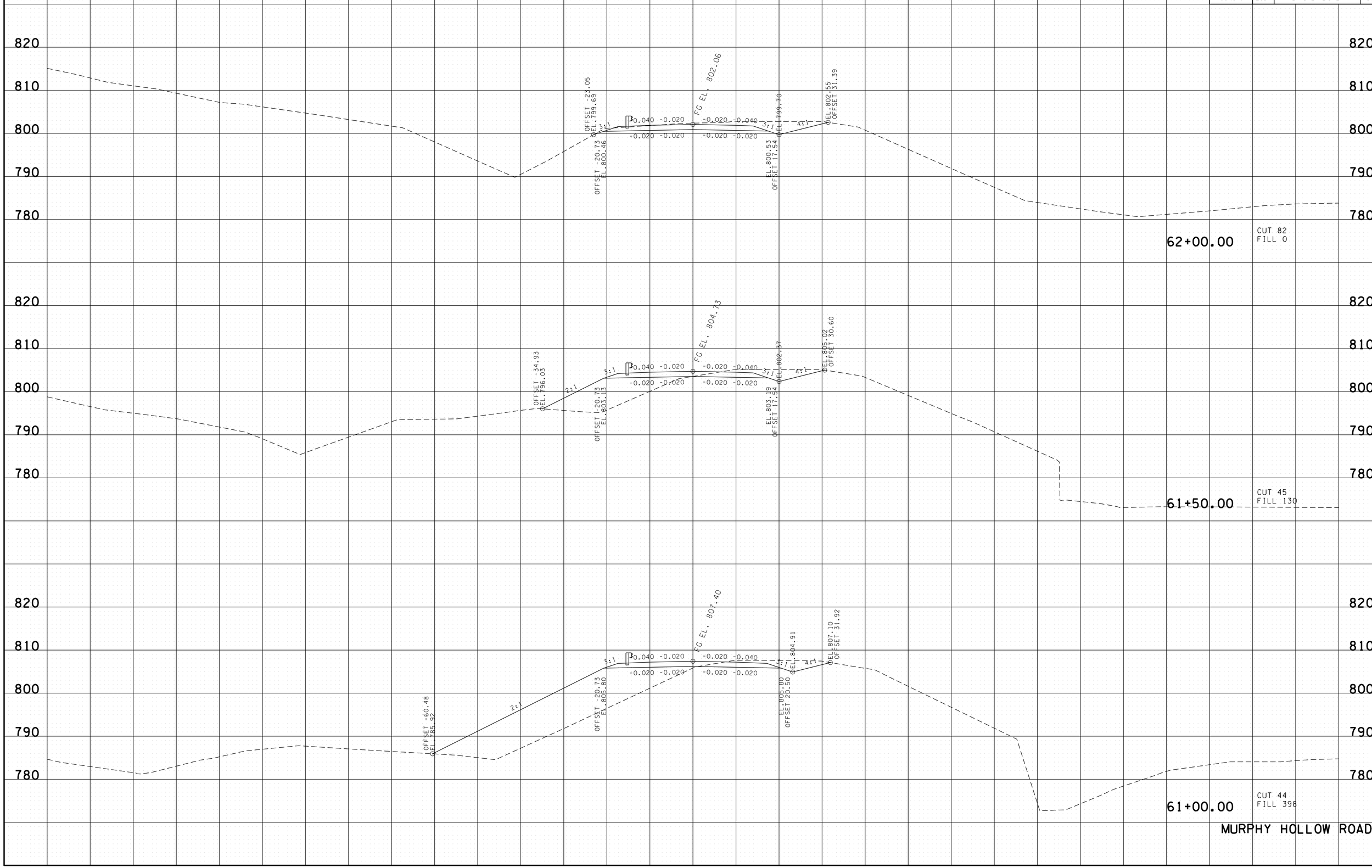
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	17
CONST.	2014	BR-I-24-2(142)	19



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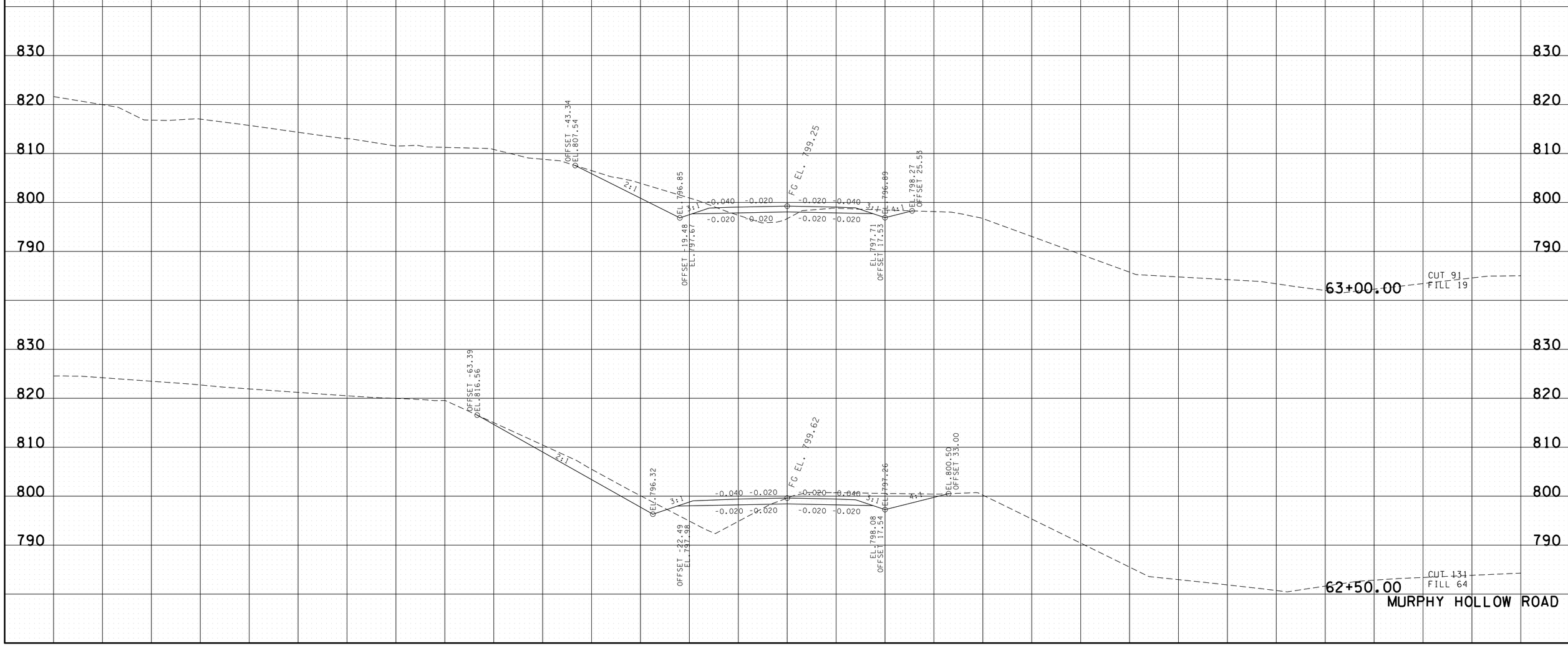
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	18
CONST.	2014	BR-I-24-2(142)	20



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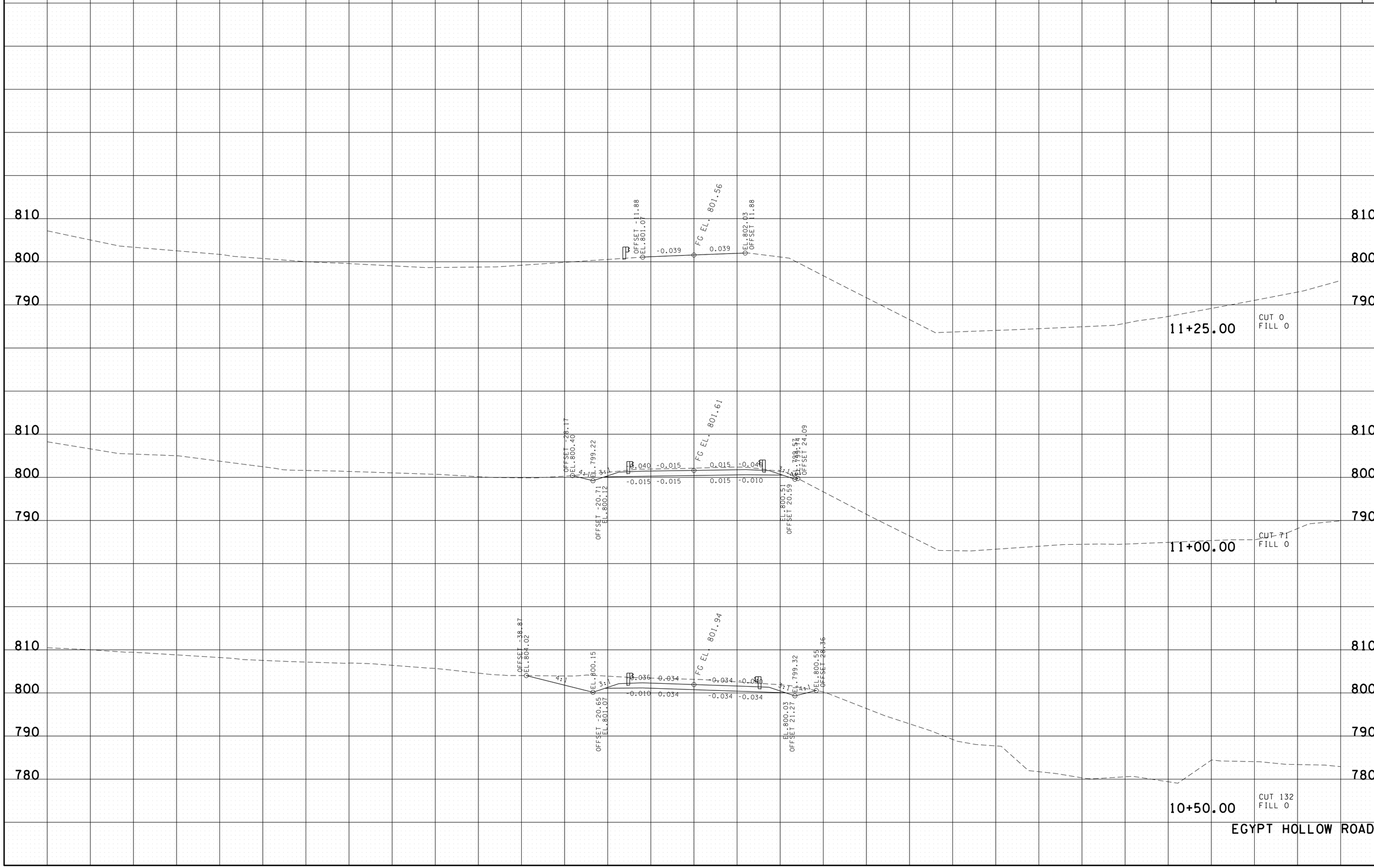
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	BR-I-24-2(142)	19
CONST.	2014	BR-I-24-2(142)	21



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