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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

MARION COUNTY

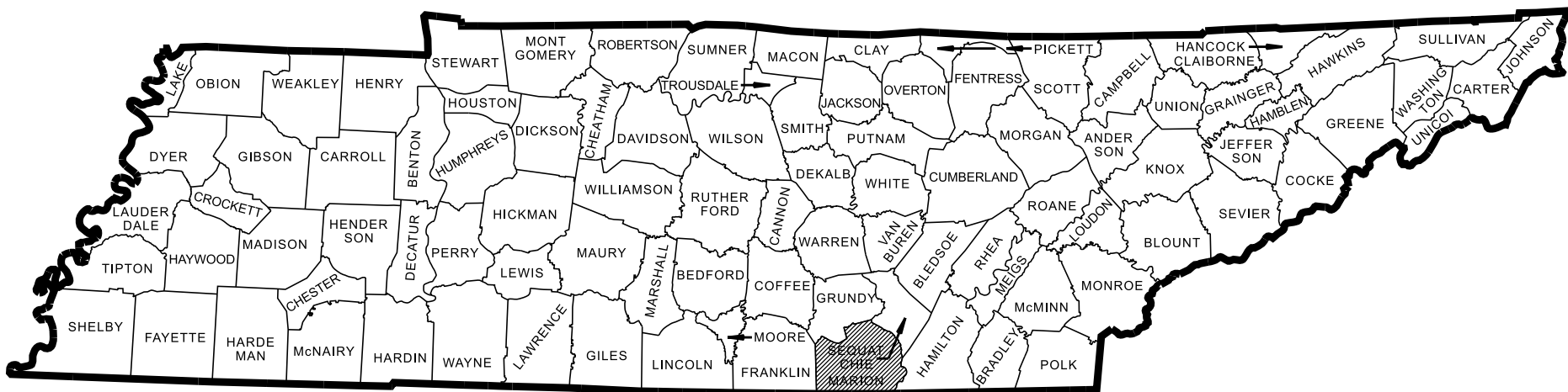
SHELLMOUND ROAD,
BRIDGE OVER I-24 EASTBOUND (TMA) BRIDGE REPLACEMENT
(LOG MILE 1.36)

LINE AND GRADE
BRIDGE REPLACEMENT

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

DOES THIS PROJECT QUALIFY FOR UTILITY CHAPTER 86	YES X	NO
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TENN.	YEAR	SHEET NO.
	2025	1
FED. AID PROJ. NO.	BR-I-24-2(184)	
STATE PROJ. NO.	58100-0187-44	



MARION COUNTY
BRIDGE ID. # 58100240039

NO EXCLUSIONS

ROAD TO BE CLOSED
DURING CONSTRUCTION

LINE
AND
GRADE

SEALED BY

APPROVED: 
WILL REID, DEPUTY COMMISSIONER /
CHIEF ENGINEER

DATE:

APPROVED: 
HOWARD H. ELEY, DEPUTY GOVERNOR &
COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

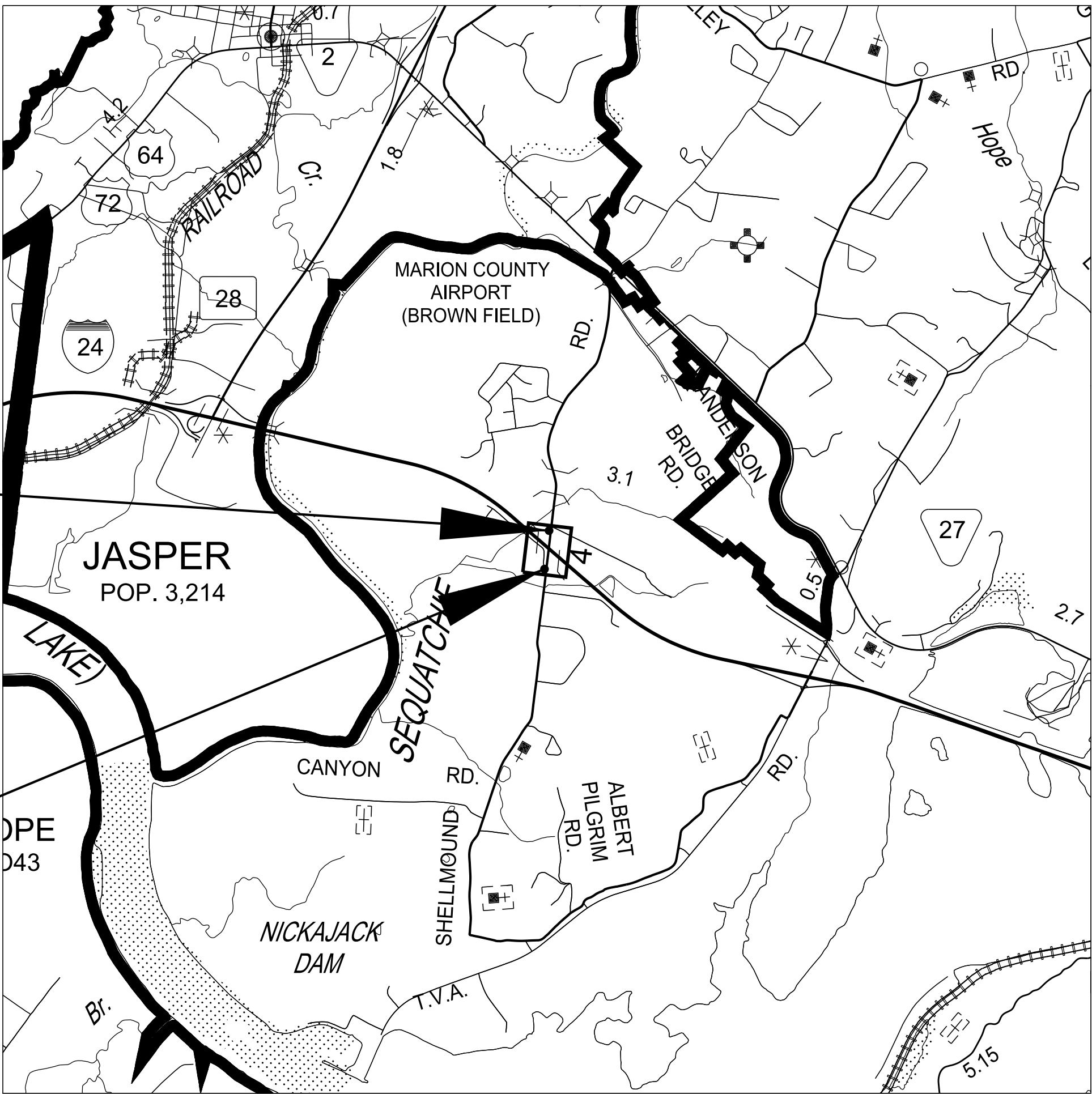
APPROVED:

DIVISION ADMINISTRATOR

DATE

SURVEY 05-06-24	TRAFFIC DATA	
	ADT (2026)	1,750
	ADT (2046)	1,930
	DHV (2046)	232
	D	65 - 35
	T (ADT)	3 %
	T (DHV)	2 %
	V	30 MPH

COORDINATES ARE NAD/83(2011) ADJUSTED BY
THE FACTOR OF 0.99998 AND TIED TO THE TGRN. ALL ELEVATIONS
ARE REFERENCED TO THE NAVD 1988 USING GEOID18 MODEL



SCALE: 1"= 2640'

R.O.W. LENGTH	0.000 MILES
ROADWAY LENGTH	0.148 MILES
BRIDGE LENGTH	0.029 MILES
BOX BRIDGE LENGTH	0.000 MILES
BOX BRIDGE LENGTH	0.000 MILES ▲
PROJECT LENGTH	0.177 MILES

Not included in the project length (Non Riding Surface).

58100-0187-44
END PROJECT NO. BR-I-24-2(184) PRELIMINARY
STA. 65+89.96 SHELLMOUND RD
N 258108.0988 E 2087221.8924

58100-0187-44
BEGIN PROJECT NO. BR-I-24-2(184) PRELIMINARY
STA. 56+50.00 SHELLMOUND RD
N 257174.6896 E 2087111.1073

SPECIAL NOTES

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

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

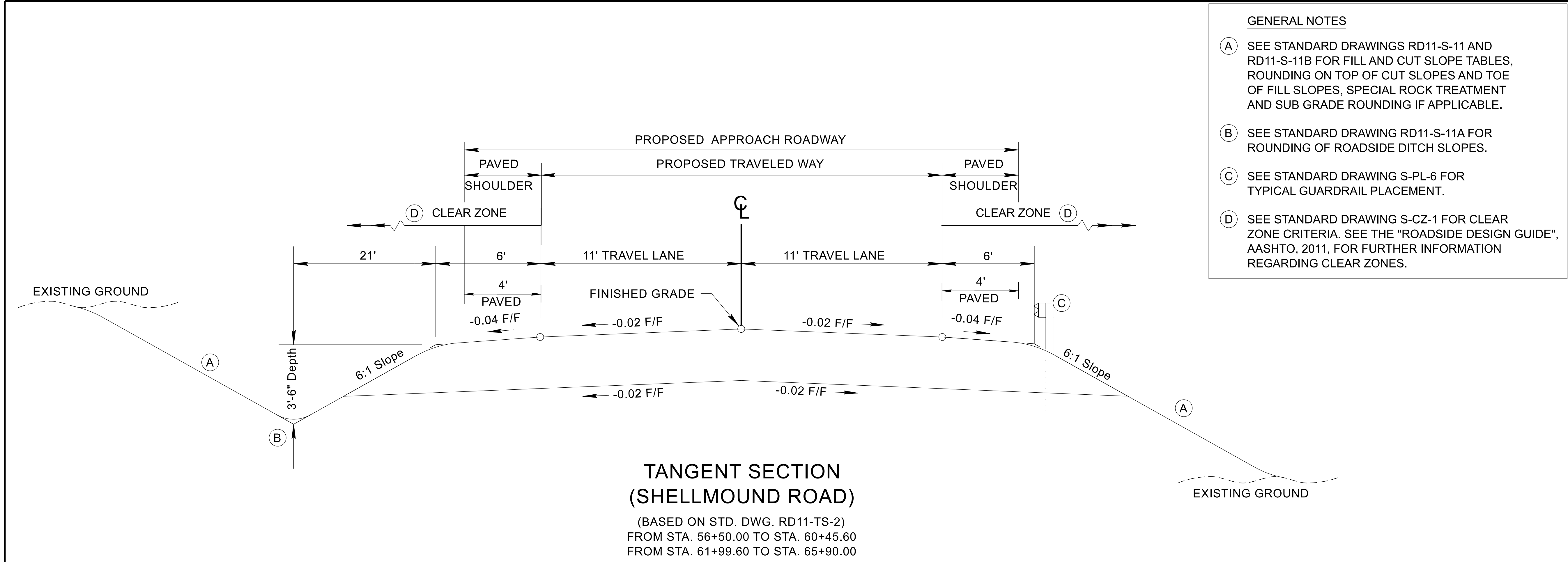
TDOT PROJECT MANAGER: CHANEL HIPPIX, PMP

DESIGNED BY: ARCADIS U.S., INC.

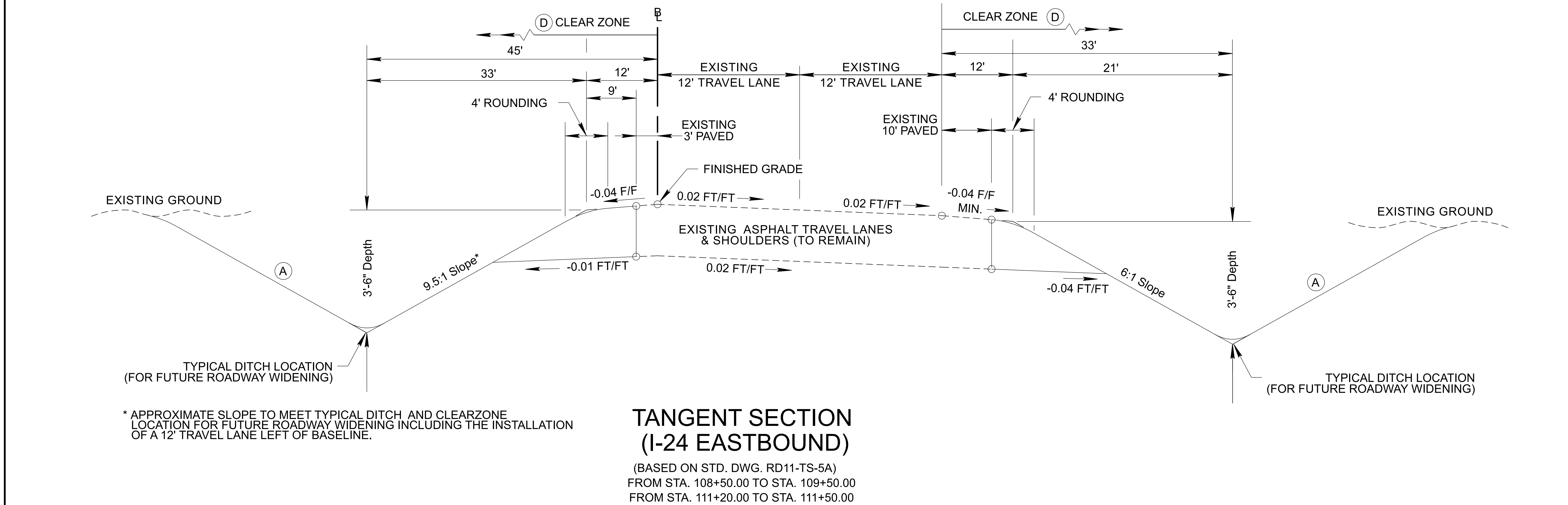
DESIGNER : MARC HAWKINS, P.E. CHECKED BY : FRITZ BROGDON, P.E.

P.E. NO. 58100-0187-44 (NEPA)

PIN NO. 130902.00

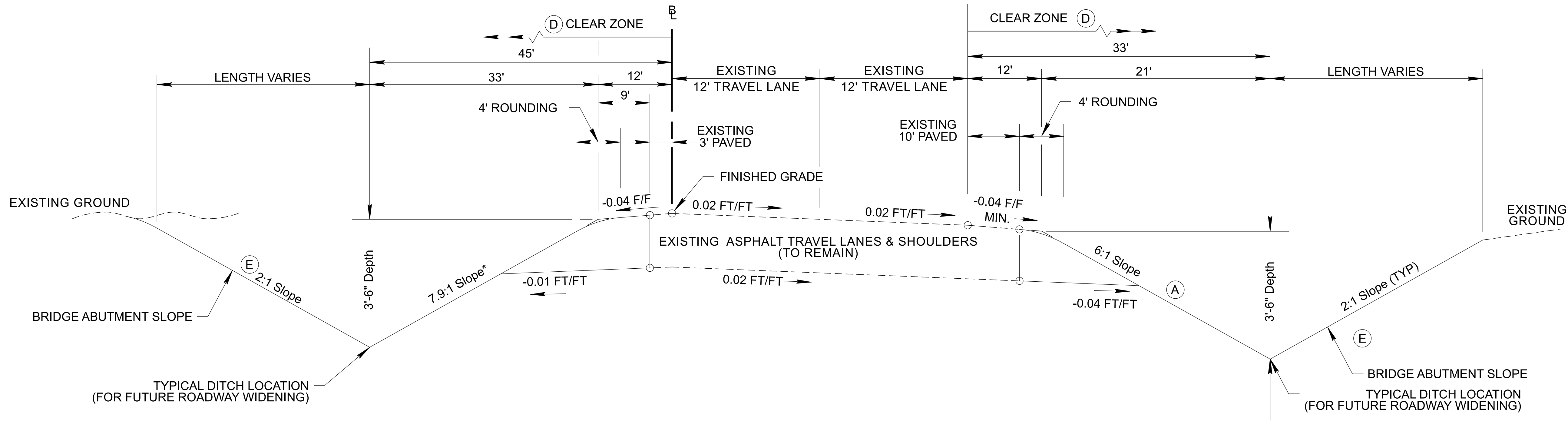


- GENERAL NOTES**
- (A) SEE STANDARD DRAWINGS RD11-S-11 AND RD11-S-11B FOR FILL AND CUT SLOPE TABLES, ROUNDING ON TOP OF CUT SLOPES AND TOE OF FILL SLOPES, SPECIAL ROCK TREATMENT AND SUB GRADE ROUNDING IF APPLICABLE.
 - (B) SEE STANDARD DRAWING RD11-S-11A FOR ROUNDING OF ROADSIDE DITCH SLOPES.
 - (C) SEE STANDARD DRAWING S-PL-6 FOR TYPICAL GUARDRAIL PLACEMENT.
 - (D) SEE STANDARD DRAWING S-CZ-1 FOR CLEAR ZONE CRITERIA. SEE THE "ROADSIDE DESIGN GUIDE", AASHTO, 2011, FOR FURTHER INFORMATION REGARDING CLEAR ZONES.



* APPROXIMATE SLOPE TO MEET TYPICAL DITCH AND CLEARZONE LOCATION FOR FUTURE ROADWAY WIDENING INCLUDING THE INSTALLATION OF A 12' TRAVEL LANE LEFT OF BASELINE.

TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	2B
SEALED BY			
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION			
TYPICAL SECTIONS			



* APPROXIMATE SLOPE TO MEET TYPICAL DITCH AND CLEARZONE LOCATION FOR FUTURE ROADWAY WIDENING INCLUDING THE INSTALLATION OF A 12' TRAVEL LANE LEFT OF BASELINE.

TANGENT SECTION (I-24 EASTBOUND)

(BASED ON STD. DWG. RD11-TS-5A)
FROM STA. 109+50.00 TO STA. 111+20.00

GENERAL NOTES

- (A) SEE STANDARD DRAWINGS RD11-S-11 AND RD11-S-11B FOR FILL AND CUT SLOPE TABLES, ROUNDING ON TOP OF CUT SLOPES AND TOE OF FILL SLOPES, SPECIAL ROCK TREATMENT AND SUB GRADE ROUNDING IF APPLICABLE.
- (D) SEE STANDARD DRAWING S-CZ-1 FOR CLEAR ZONE CRITERIA. SEE THE "ROADSIDE DESIGN GUIDE", AASHTO, 2011, FOR FURTHER INFORMATION REGARDING CLEAR ZONES.
- (E) SEE STANDARD DRAWING S-PL-4A FOR SAFETY PLAN FOR BRIDGE PIERS/ ABUTMENTS OUTSIDE OF SHOULDER WHEN BRIDGE ABUTMENT SLOPE IS OUTSIDE THE CLEARZONE.

TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	2B1
SEALED BY			
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION			
TYPICAL SECTIONS			

TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2025	BR-I-24-2(184)	3B

BEGIN PROJECT NO. BR-I-24-2(184) PRELIMINARY
STA. 56+50.00
N 257174.6896 E 2087111.1071

LIMIT OF CONST.
STA. 108+50.00

END PROJECT NO.
STA. 65+90.00
N 258108.1342 E 2087221.9274

LIMIT OF CONST.
STA. 111+50.00

STA. 61+36.98
STA. 110+13.27
N 257658.2707 E 2087168.5188

Shellmound Rd=
I-24 EB

LEGEND

 DRAINAGE EASEMENT

SEALED BY

COORDINATES ARE NAD 83(2011), ARE
DATUM ADJUSTED BY THE FACTOR
OF 0.99998 AND TIED TO THE TGRN.
ALL ELEVATIONS ARE REFERENCED
TO THE NAVD 1988 WITH GEOID 18.

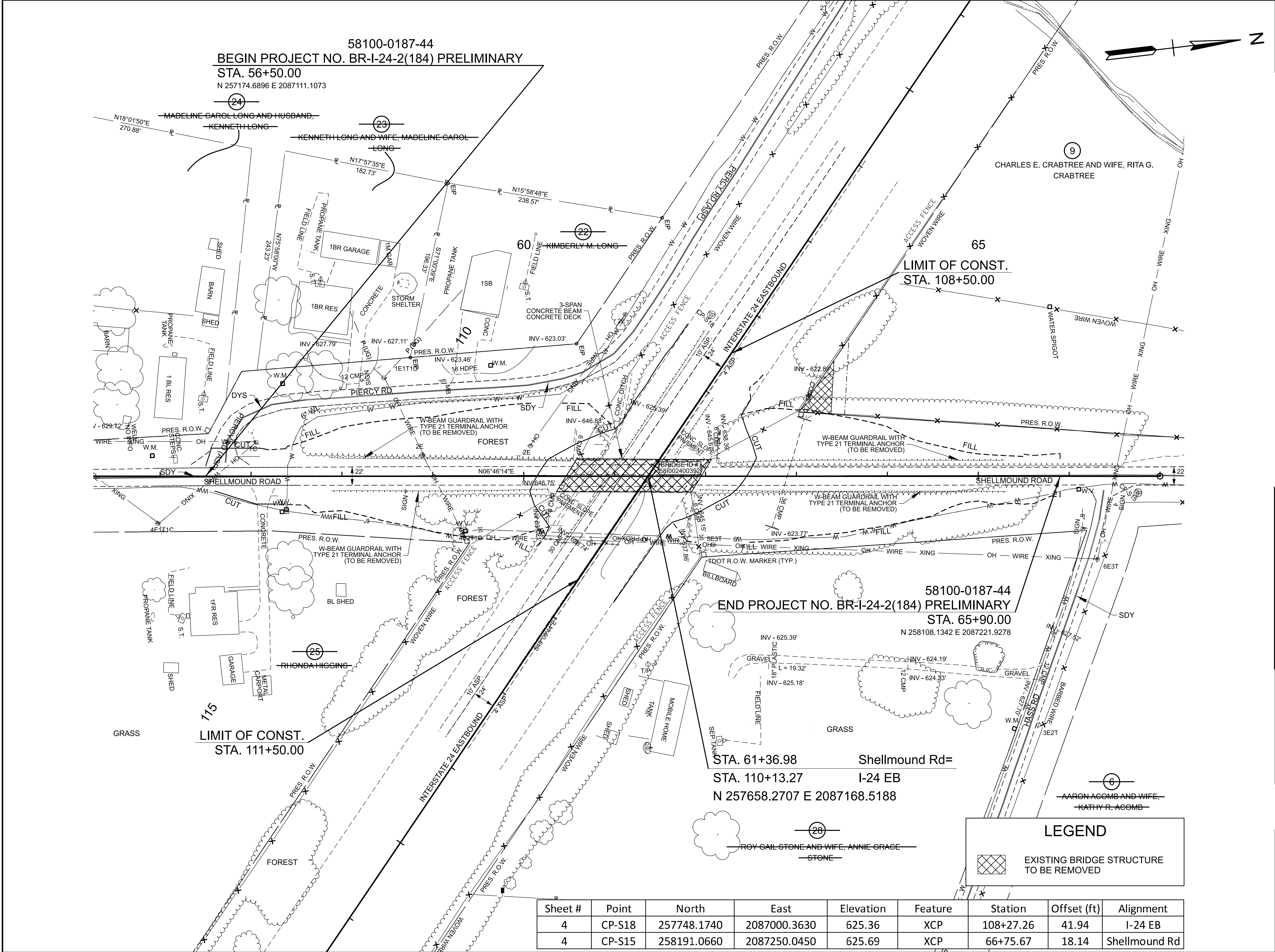
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY
MAP

STA. 57+00.00 TO STA. 67+00.00
SCALE: 1" = 200'

INSET A
N.T.S.

TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	4



LINE AND GRADE

SEALED BY

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 0.99998 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 18.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

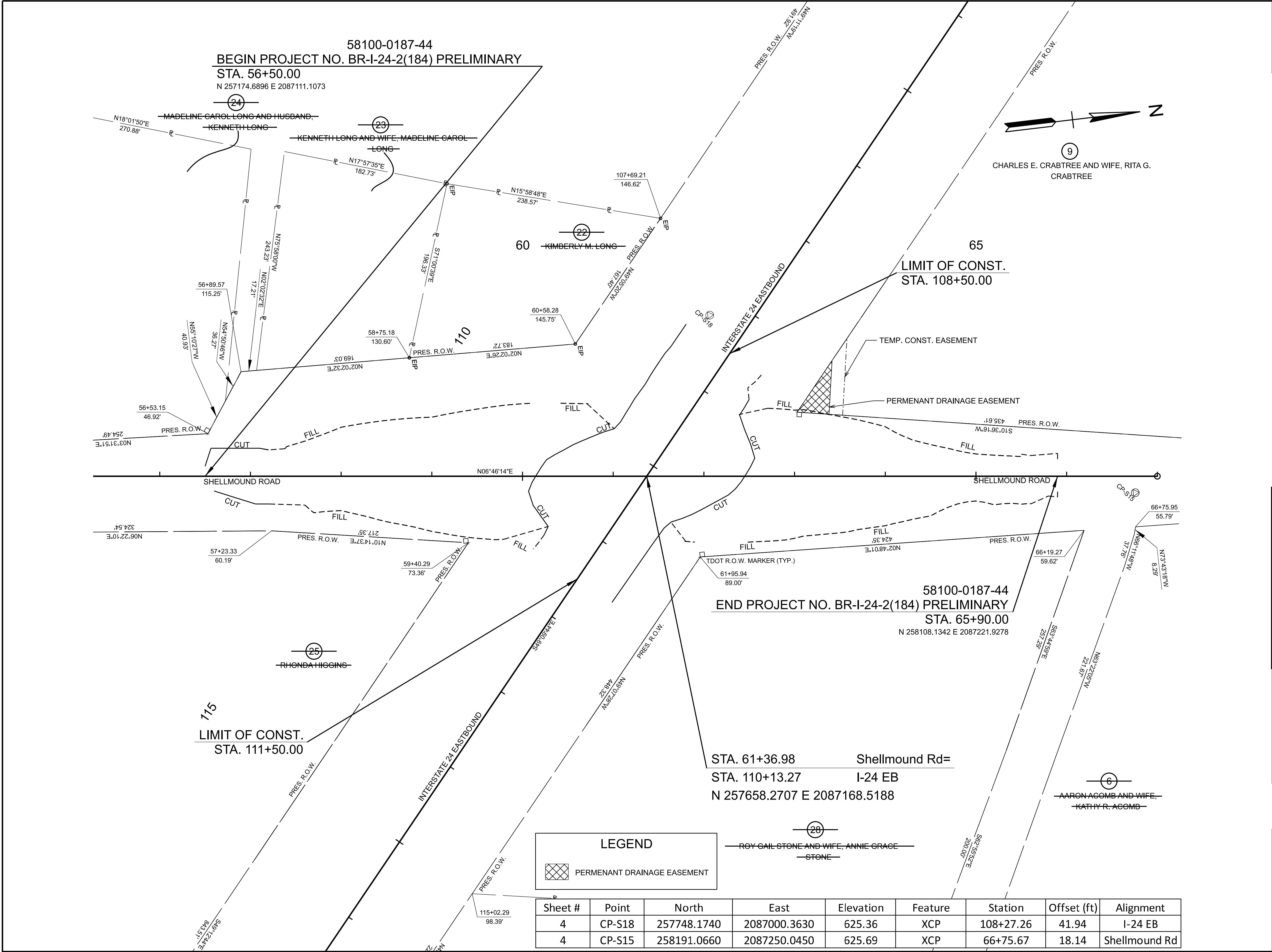
STA. 57+00.00 TO STA. 67+00.00
SCALE: 1" = 50'

LEGEND

EXISTING BRIDGE STRUCTURE TO BE REMOVED

Sheet #	Point	North	East	Elevation	Feature	Station	Offset (ft)	Alignment
4	CP-S18	257748.1740	2087000.3630	625.36	XCP	108+27.26	41.94	I-24 EB
4	CP-S15	258191.0660	2087250.0450	625.69	XCP	66+75.67	18.14	Shellmound Rd

TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	4A



LINE AND GRADE

SEALED BY

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 0.99998 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 18.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ROW
DETAILS

STA. 57+00.00 TO STA. 67+00.00
SCALE: 1" = 50'

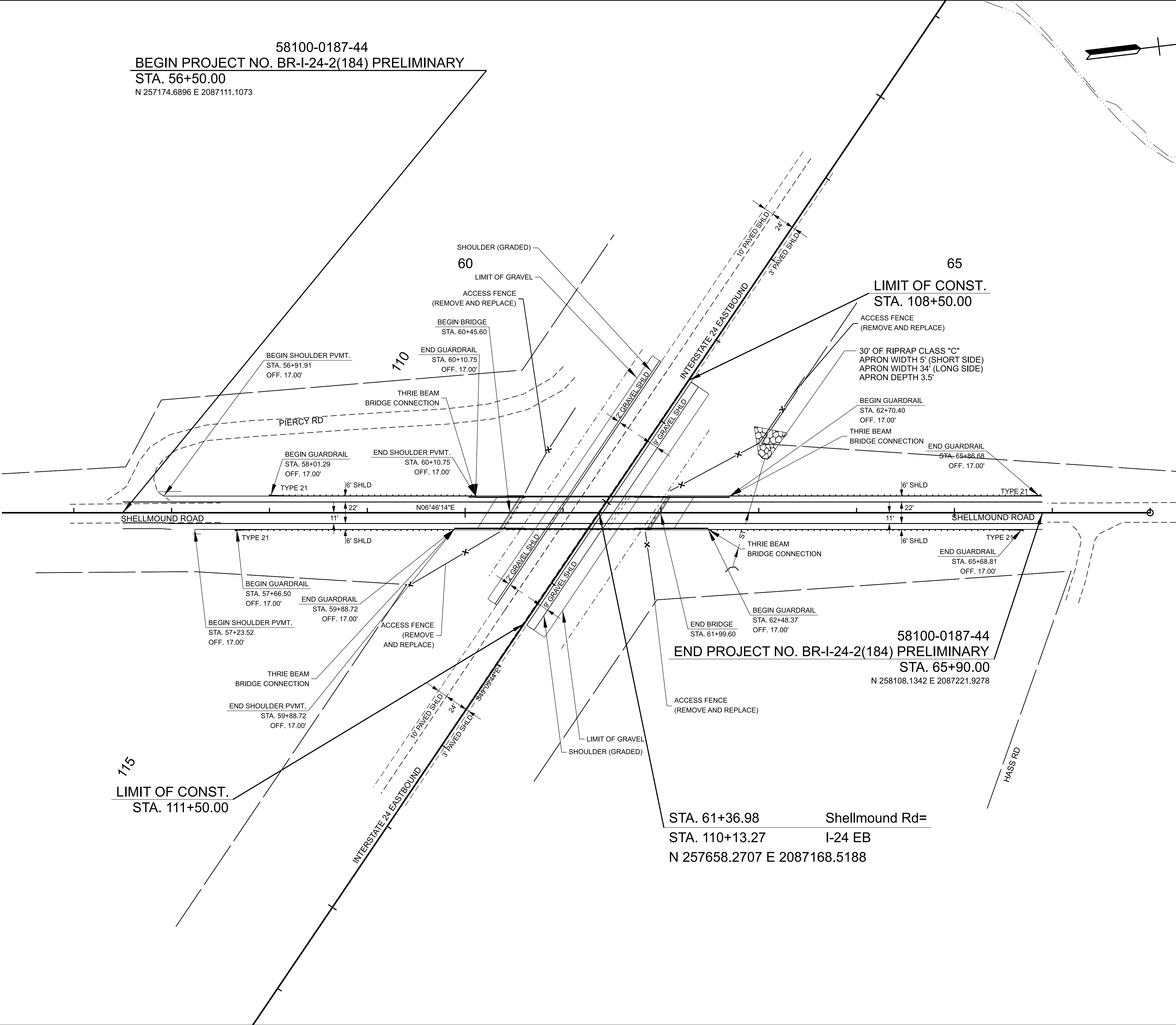
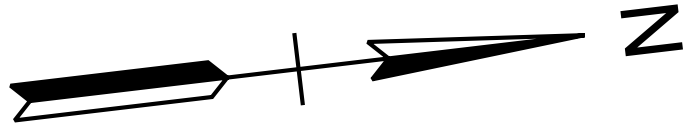
LEGEND

PERMENANT DRAINAGE EASEMENT

Sheet #	Point	North	East	Elevation	Feature	Station	Offset (ft)	Alignment
4	CP-S18	257748.1740	2087000.3630	625.36	XCP	108+27.26	41.94	I-24 EB
4	CP-S15	258191.0660	2087250.0450	625.69	XCP	66+75.67	18.14	Shellmound Rd

TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	4B

58100-0187-44
BEGIN PROJECT NO. BR-I-24-2(184) PRELIMINARY
STA. 56+50.00
N 257174.6896 E 2087111.1073



LINE AND GRADE

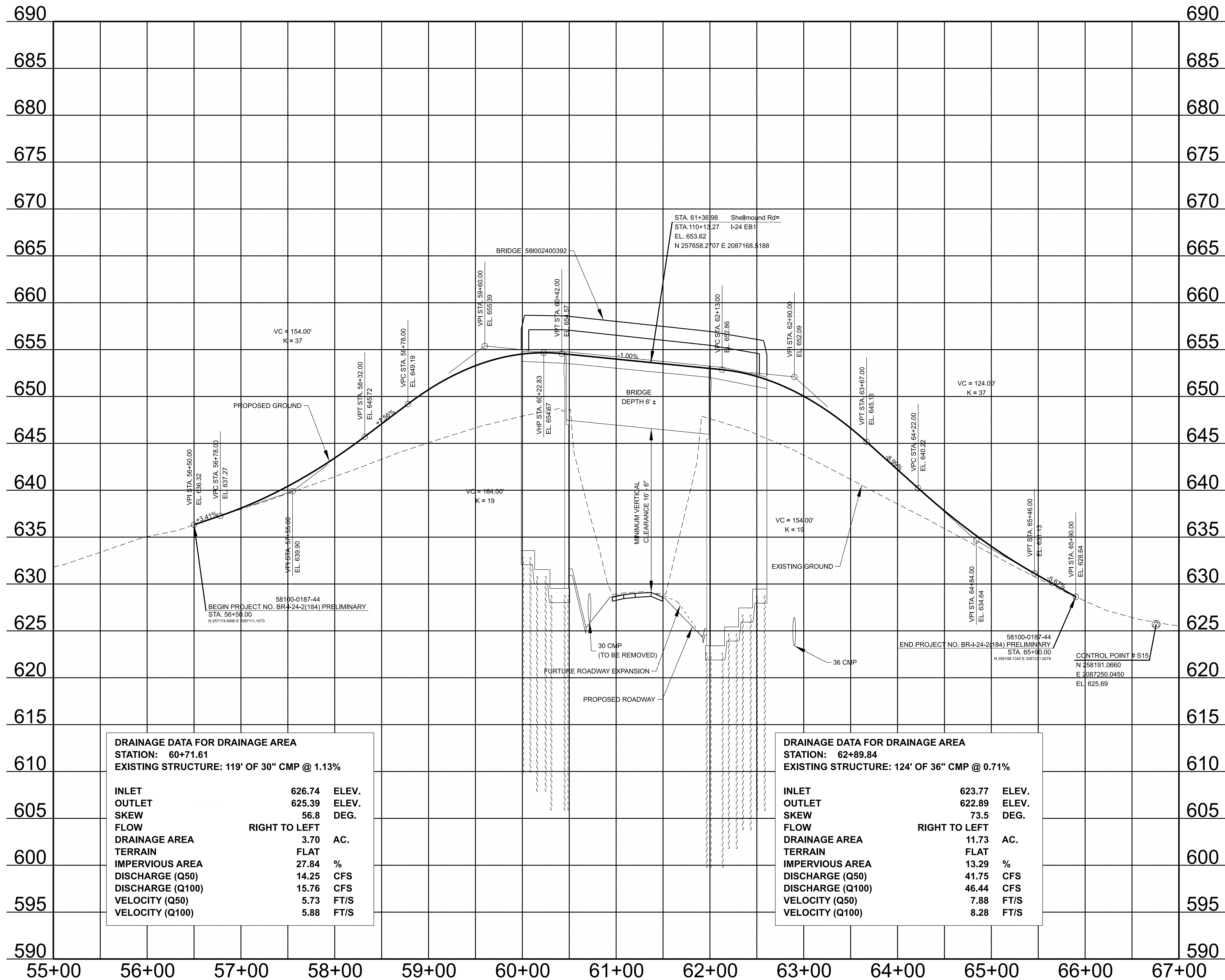
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COORDINATES ARE NAD 83(2011), ARE
DATUM ADJUSTED BY THE FACTOR
OF 0.99998 AND TIED TO THE TGRN.
ALL ELEVATIONS ARE REFERENCED
TO THE NAVD 1988 WITH GEOID 18.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED
LAYOUT

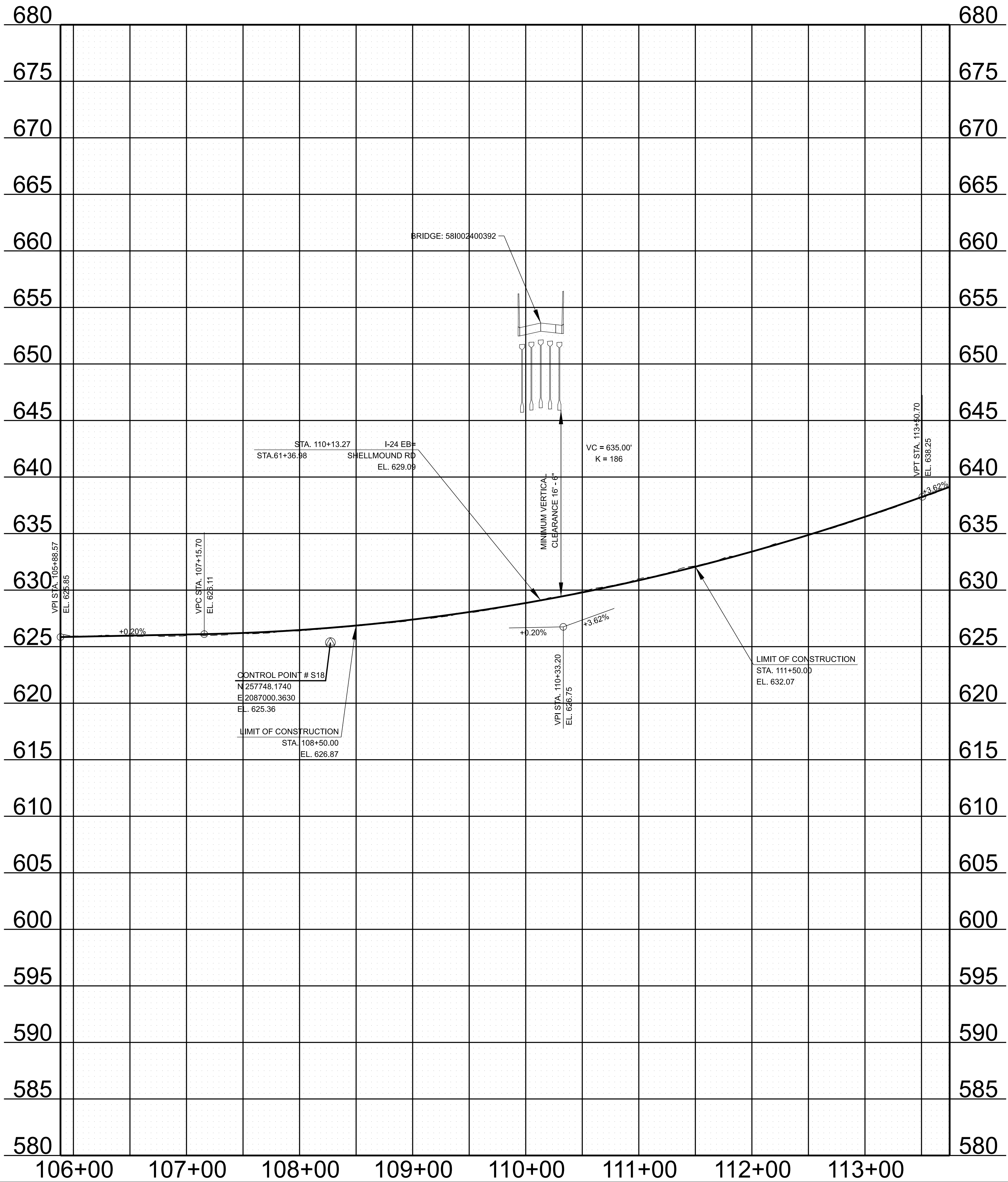
STA. 57+00.00 TO STA. 67+00.00
SCALE: 1" = 50'



TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	4C

SEALED BY

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
PROPOSED PROFILE
STA. 55+50.00 TO STA. 67+00.00
SCALE: 1" = 50' HORIZ. 1" = 5' VERT.



TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	5

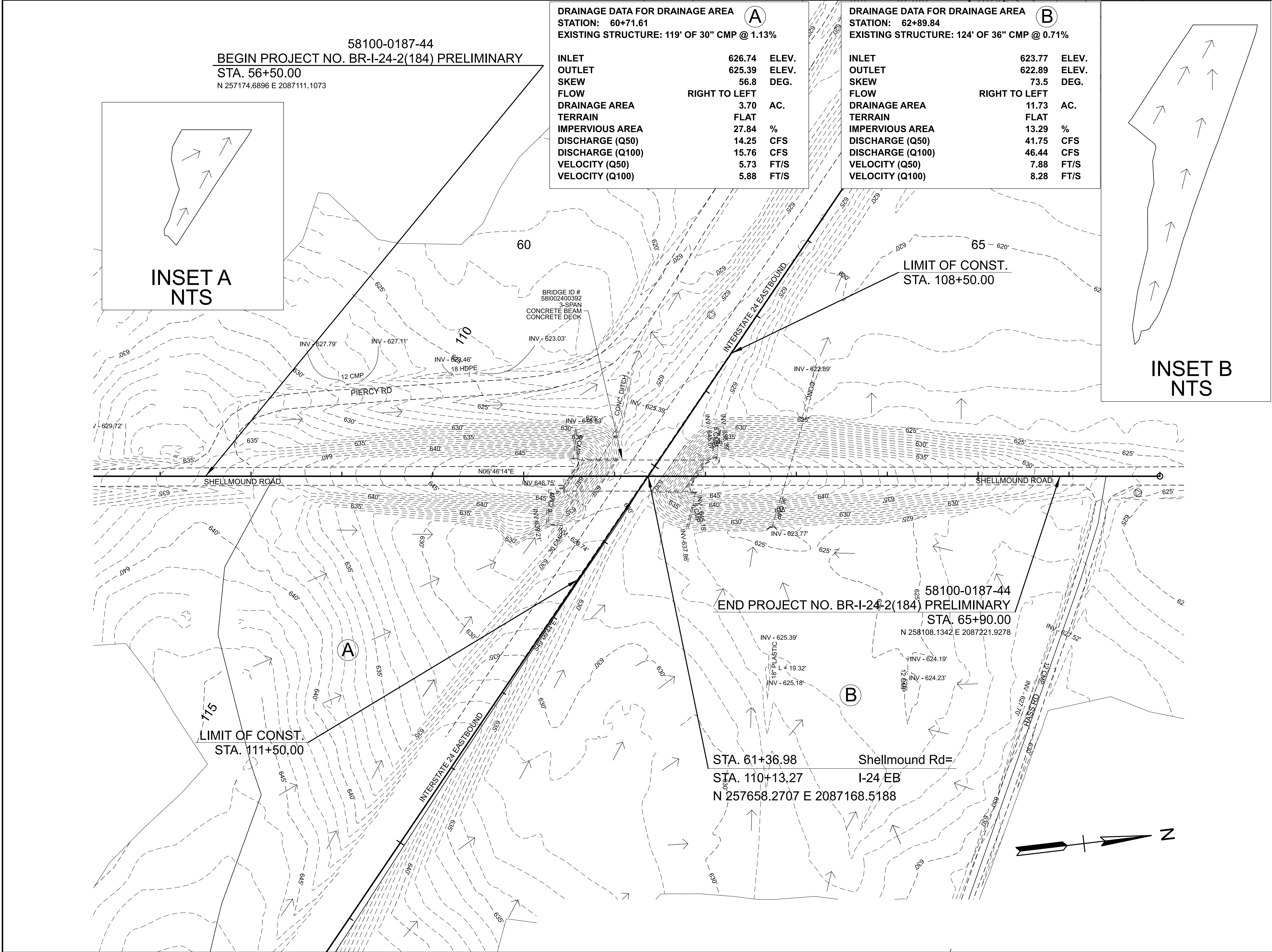
SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIDE ROAD
PROFILE

STA. 105+88.57 TO STA. 113+74.88

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



DRAINAGE DATA FOR DRAINAGE AREA A			
STATION: 60+71.61			
EXISTING STRUCTURE: 119' OF 30" CMP @ 1.13%			
INLET	626.74	ELEV.	
OUTLET	625.39	ELEV.	
SKEW	56.8	DEG.	
FLOW	RIGHT TO LEFT		
DRAINAGE AREA	3.70	AC.	
TERRAIN	FLAT		
IMPERVIOUS AREA	27.84	%	
DISCHARGE (Q50)	14.25	CFS	
DISCHARGE (Q100)	15.76	CFS	
VELOCITY (Q50)	5.73	FT/S	
VELOCITY (Q100)	5.88	FT/S	

DRAINAGE DATA FOR DRAINAGE AREA B			
STATION: 62+89.84			
EXISTING STRUCTURE: 124' OF 36" CMP @ 0.71%			
INLET	623.77	ELEV.	
OUTLET	622.89	ELEV.	
SKEW	73.5	DEG.	
FLOW	RIGHT TO LEFT		
DRAINAGE AREA	11.73	AC.	
TERRAIN	FLAT		
IMPERVIOUS AREA	13.29	%	
DISCHARGE (Q50)	41.75	CFS	
DISCHARGE (Q100)	46.44	CFS	
VELOCITY (Q50)	7.88	FT/S	
VELOCITY (Q100)	8.28	FT/S	

TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	6

LINE AND GRADE

SEALED BY

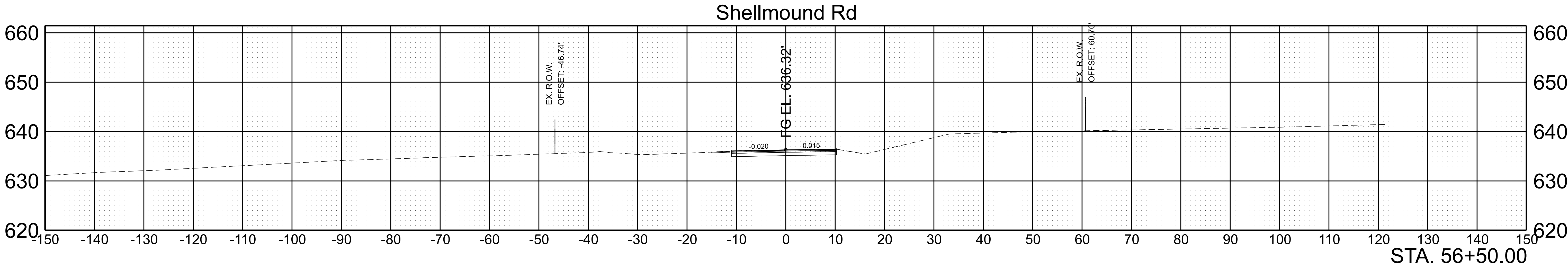
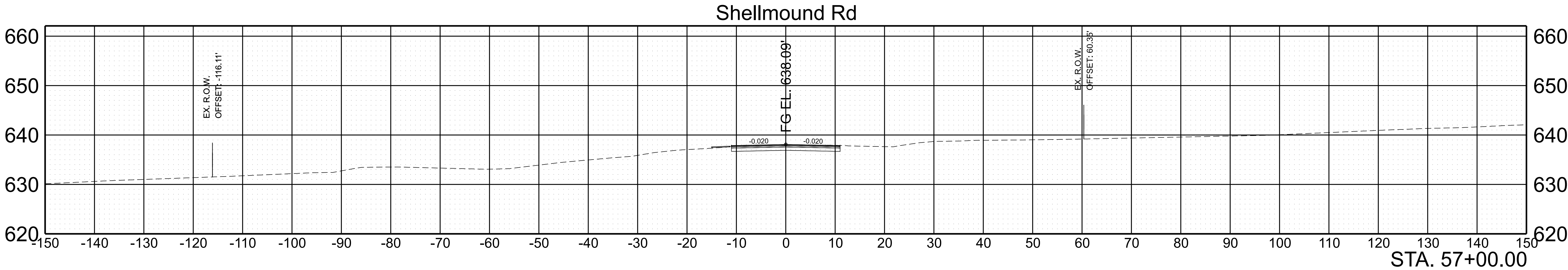
COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 0.99998 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 18.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DRAINAGE MAP

STA. 57+00.00 TO STA. 67+00.00
SCALE: 1" = 50'

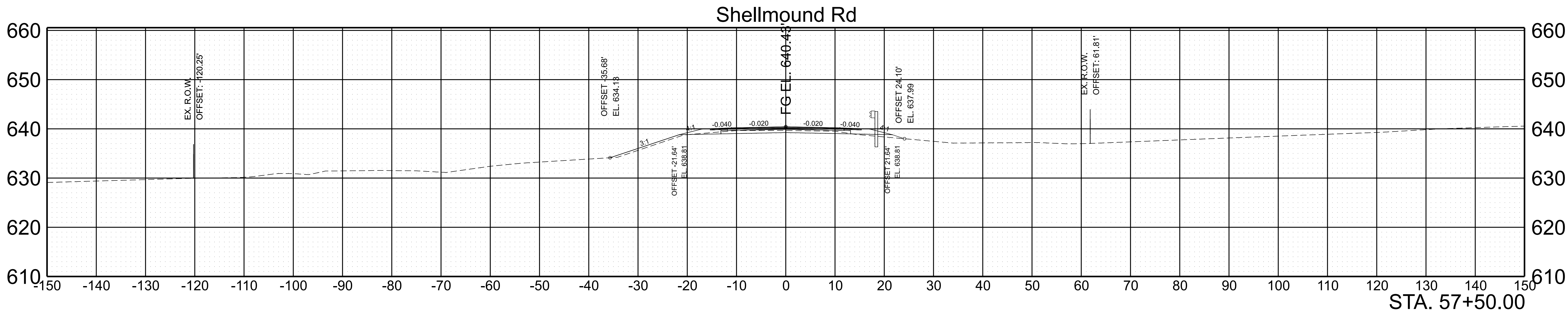
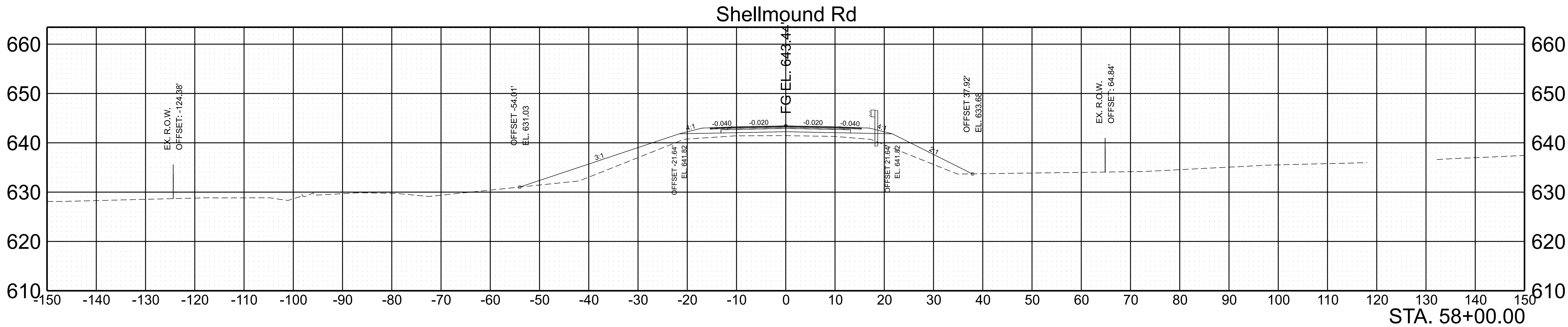
TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	7



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

BEGIN STA. 56+50.00
END STA. 57+00.00

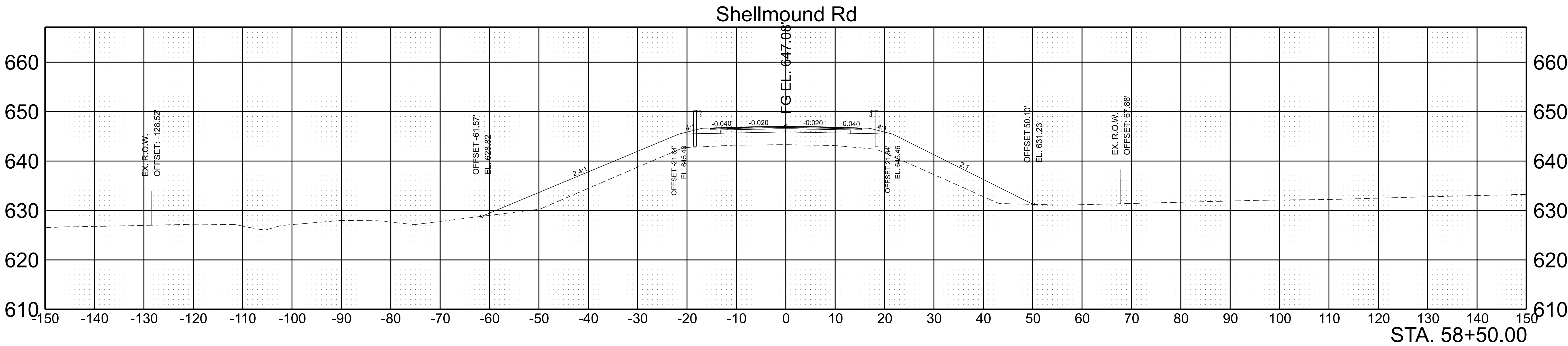
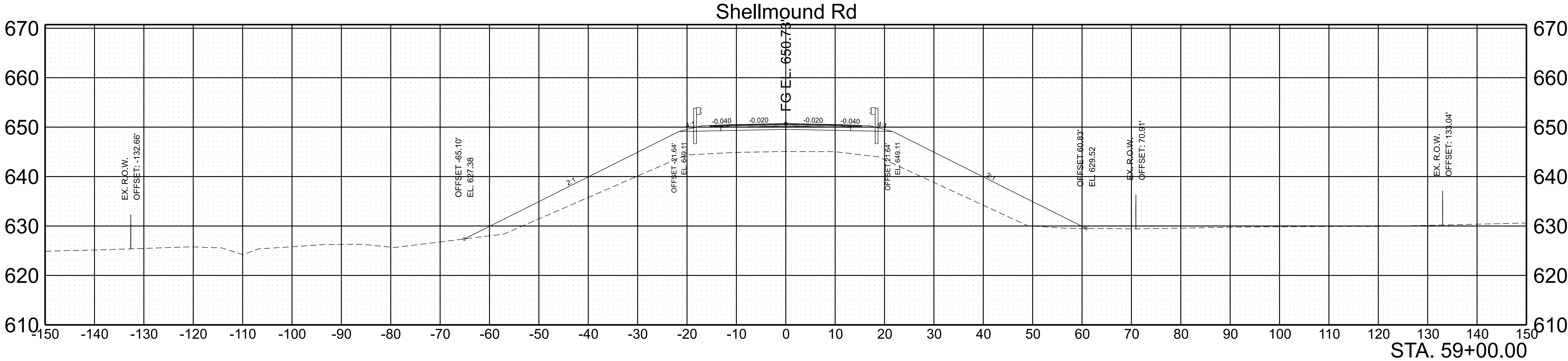
TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	8



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

BEGIN STA. 57+50.00
END STA. 58+00.00

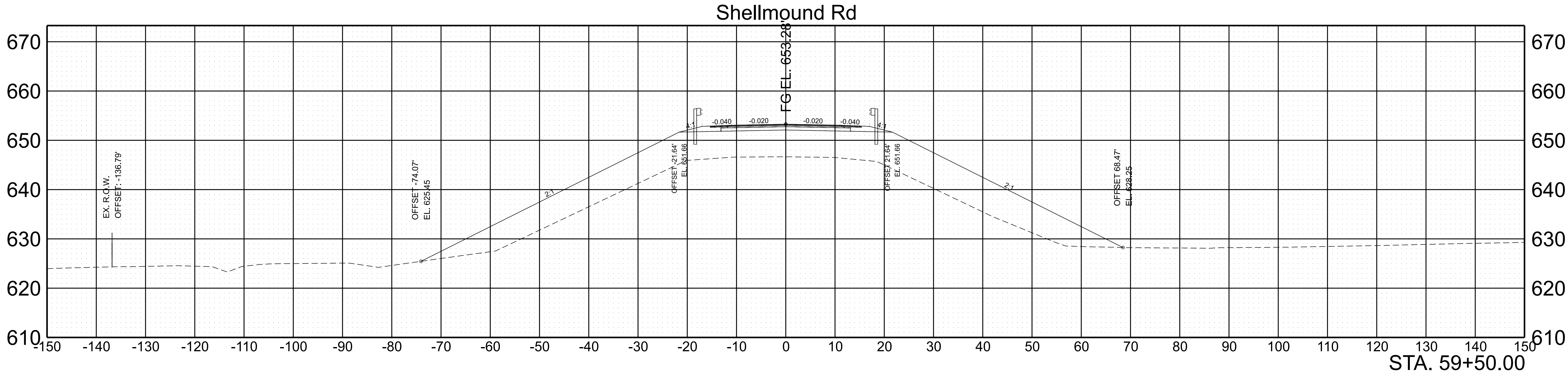
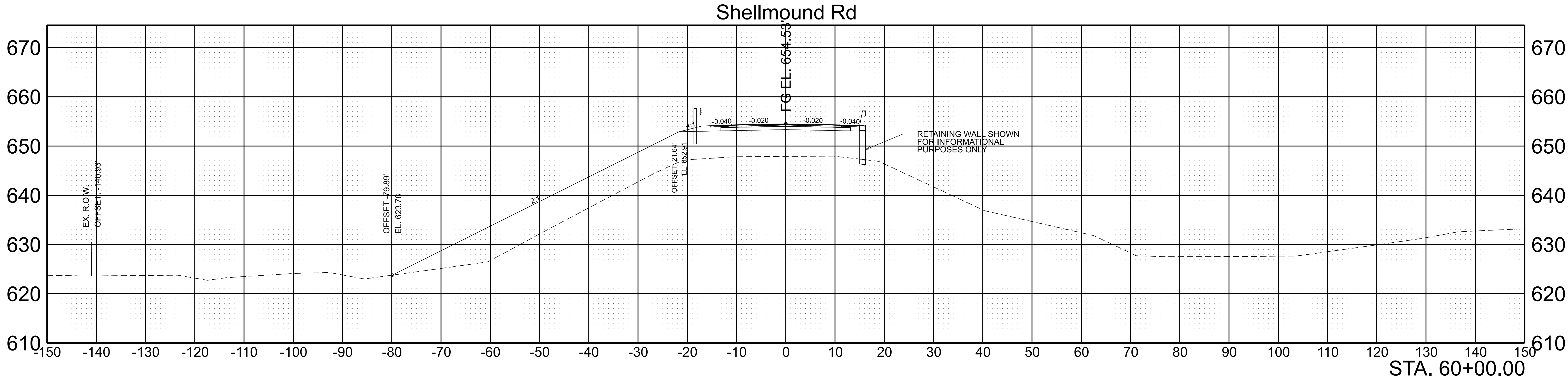
TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	9



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

BEGIN STA. 58+50.00
END STA. 59+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	10

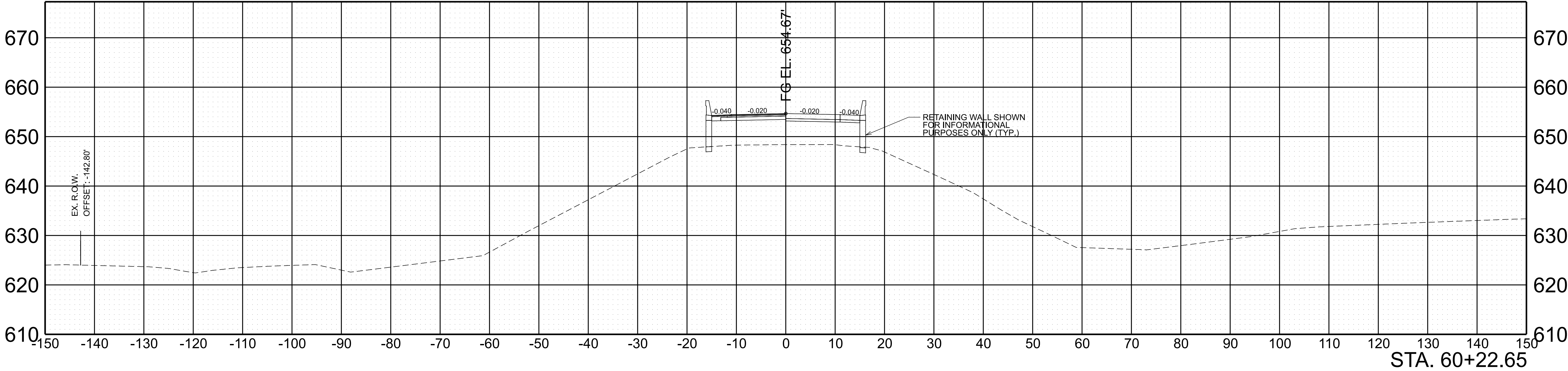


SCALE: 1"=10' HORIZ.
1"=10' VERT.

BEGIN STA. 59+50.00
END STA. 60+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	11

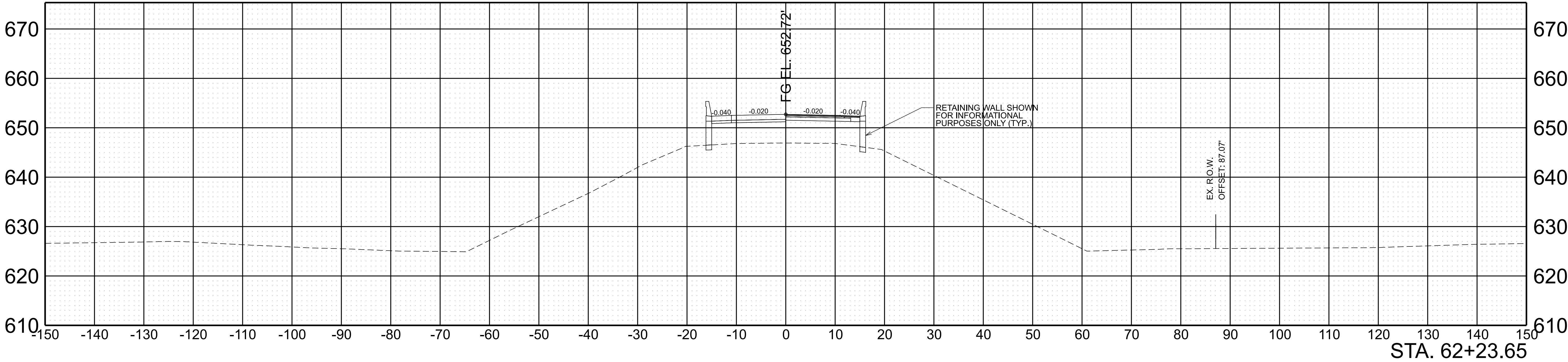
Shellmound Rd



SCALE:	1"=10' HORIZ.	BEGIN STA. 60+22.65
	1"=10' VERT.	END STA. 60+22.65

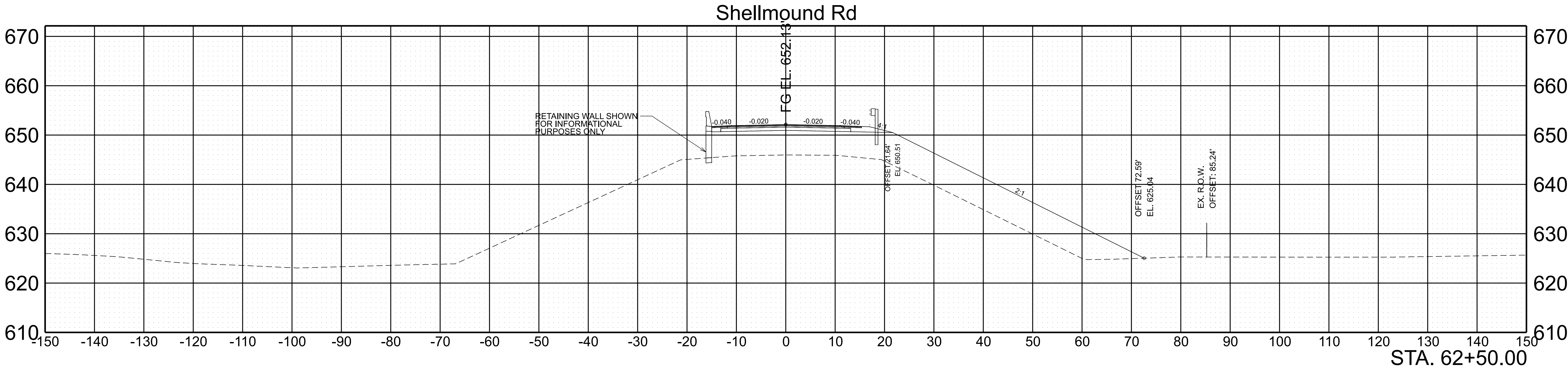
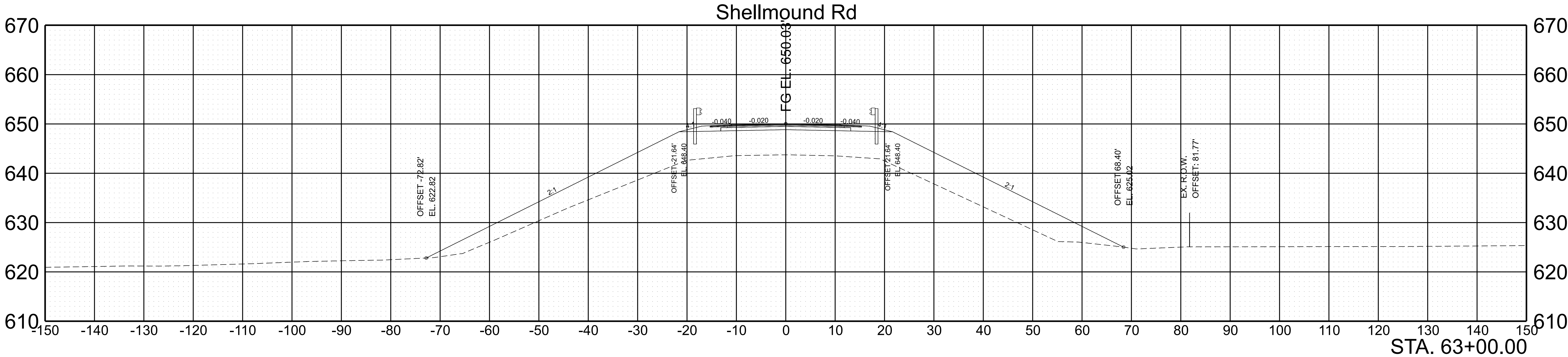
TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	12

Shellmound Rd



SCALE:	1"=10' HORIZ.	BEGIN STA. 62+23.65
	1"=10' VERT.	END STA. 62+23.65

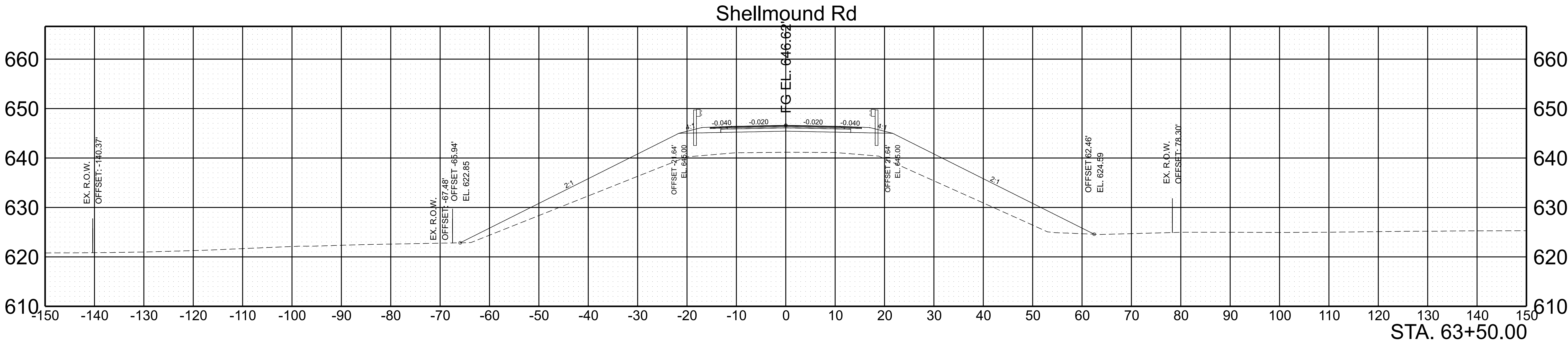
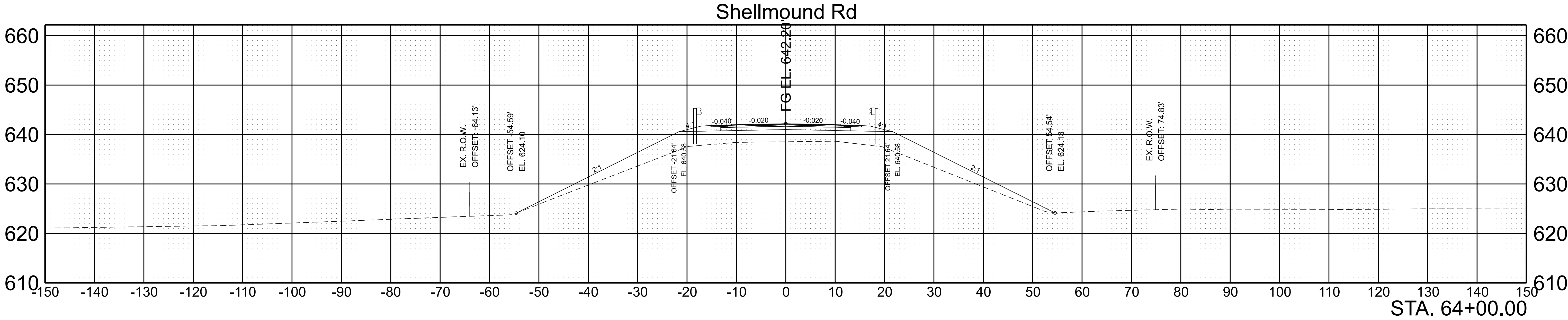
TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	13



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

BEGIN STA. 62+50.00
END STA. 63+00.00

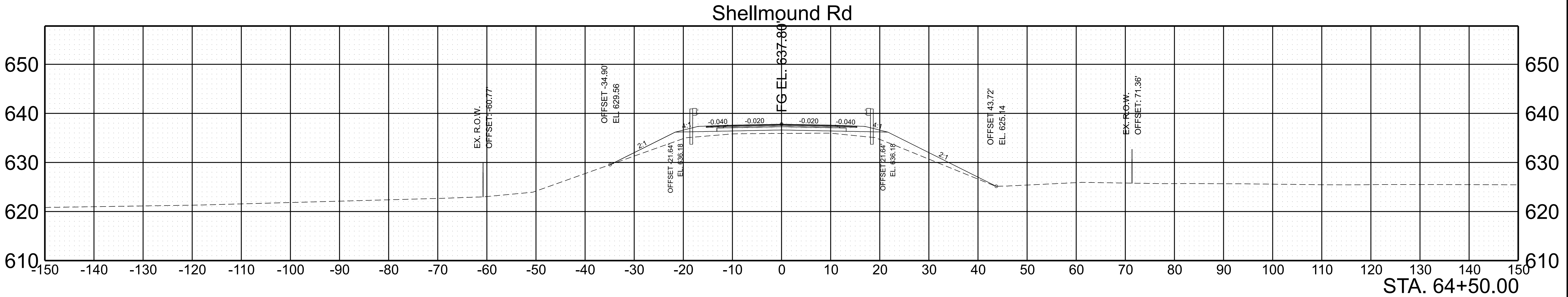
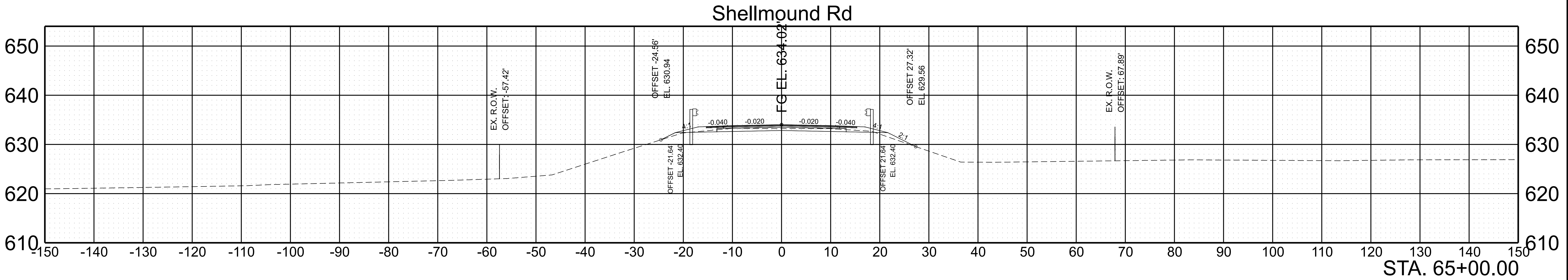
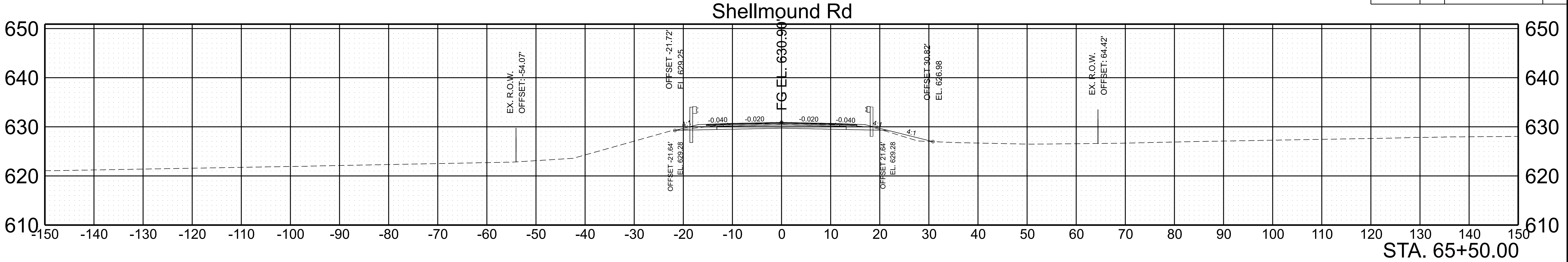
TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	14



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

BEGIN STA. 63+50.00
END STA. 64+00.00

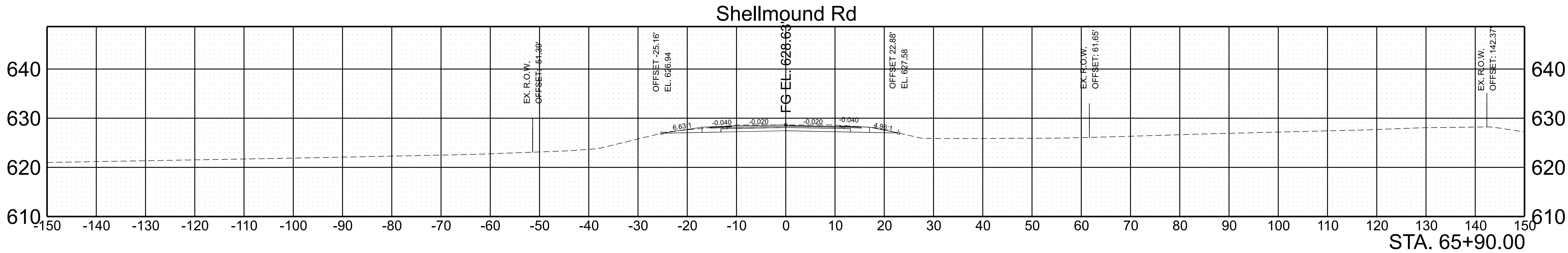
TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	15



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

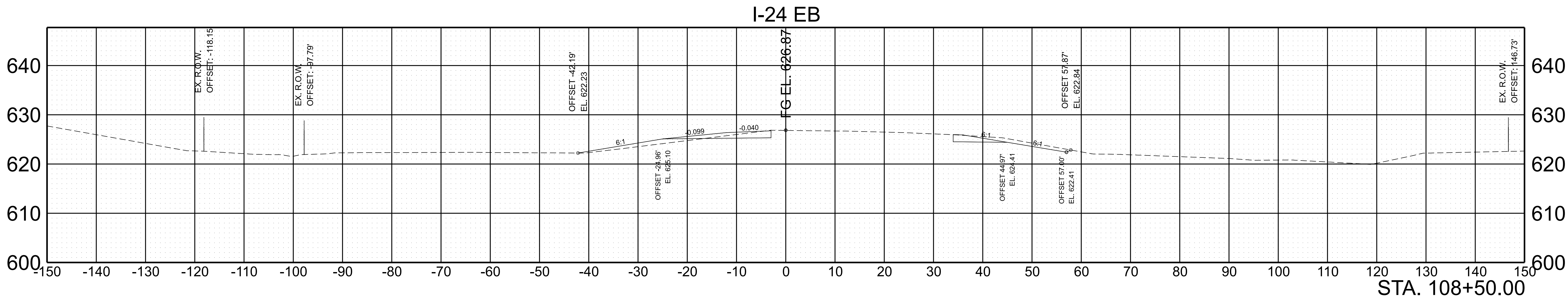
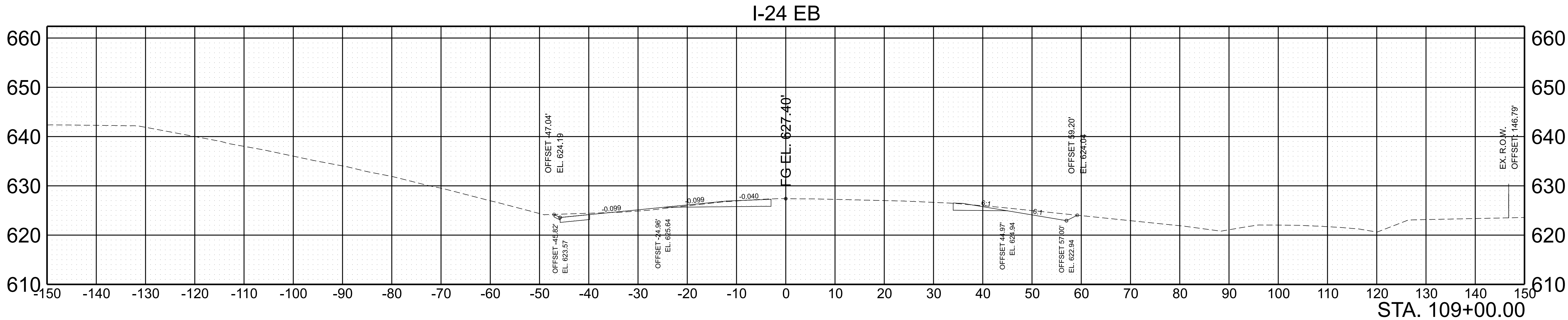
BEGIN STA. 64+50.00
END STA. 65+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	16



SCALE:	1"=10' HORIZ.	BEGIN STA. 65+90.00
	1"=10' VERT.	END STA. 65+90.00

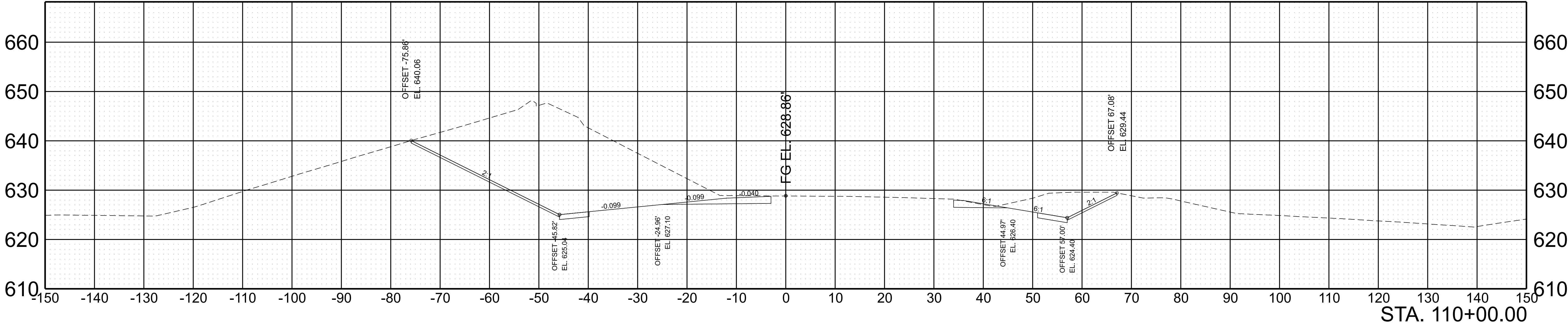
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L & G	2025	BR-I-24-2(184)	17



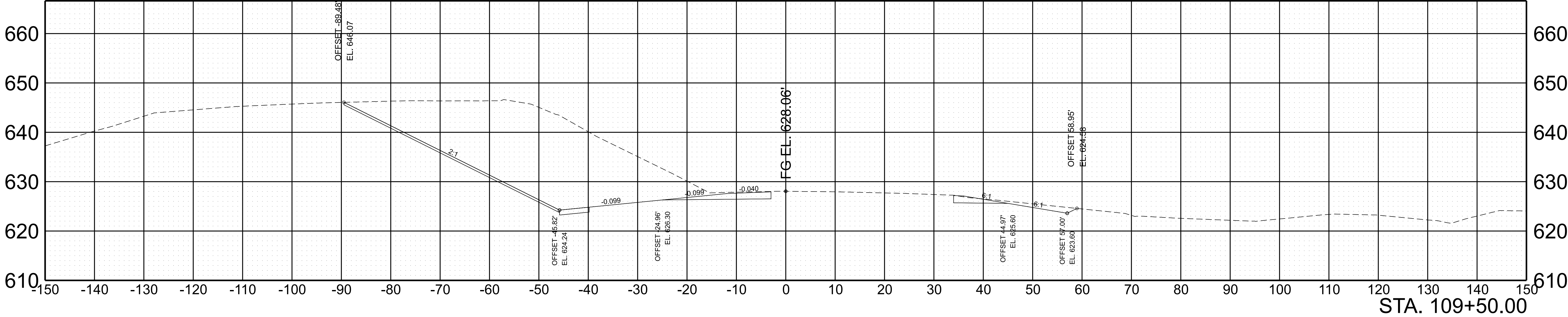
SCALE: 1"=10' HORIZ.	BEGIN STA. 108+50.00
1"=10' VERT.	END STA. 109+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	18

I-24 EB



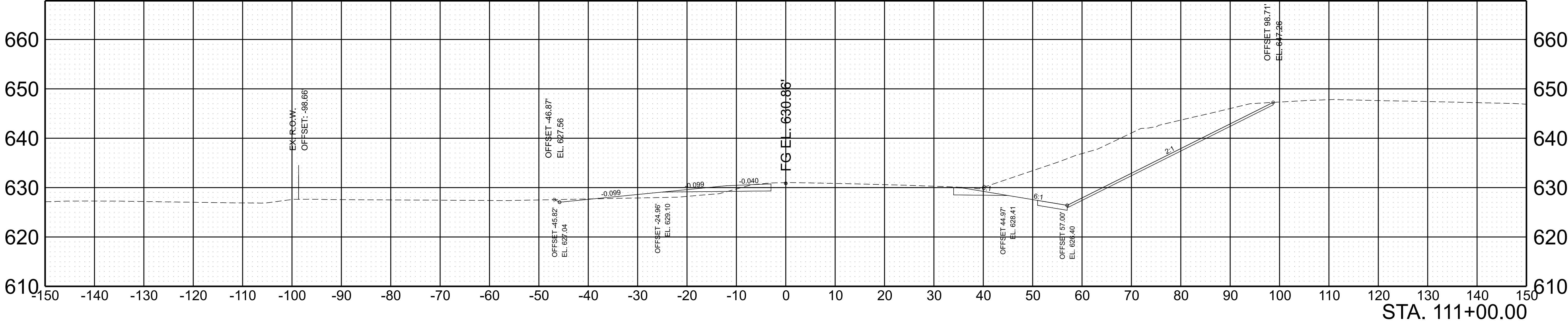
I-24 EB



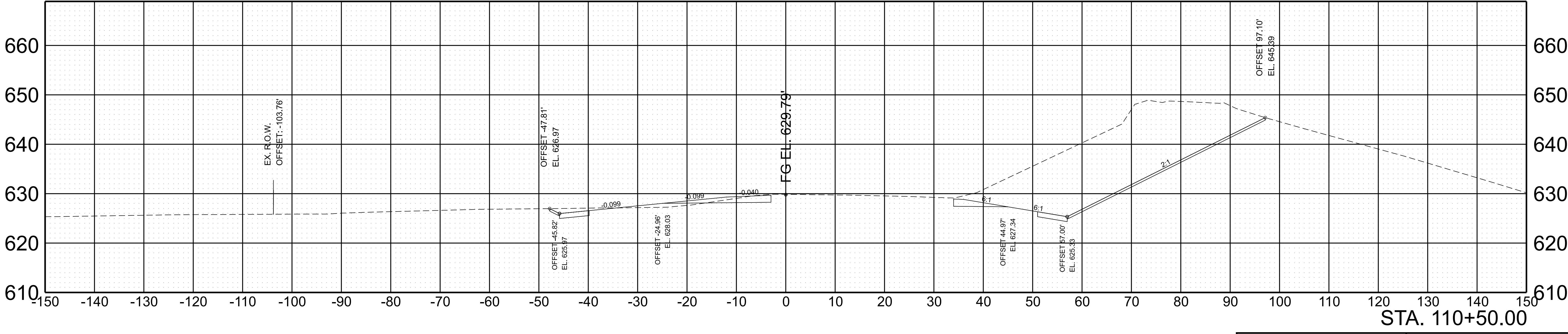
SCALE:	1"=10' HORIZ.	BEGIN STA. 109+50.00
	1"=10' VERT.	END STA. 110+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	19

I-24 EB



I-24 EB



SCALE: 1"=10' HORIZ. 1"=10' VERT.	BEGIN STA. 110+50.00 END STA. 111+00.00
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TYPE	YEAR	PROJECT NO.	SHEET NO.
L & G	2025	BR-I-24-2(184)	20

7/8/2025 4:52:38 PM C:\PW\WORK\ARCADISPW01\STEFFAN\HOLDER\0237516\581024-SHT-XS-I-24.DGN

