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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

WASHINGTON COUNTY

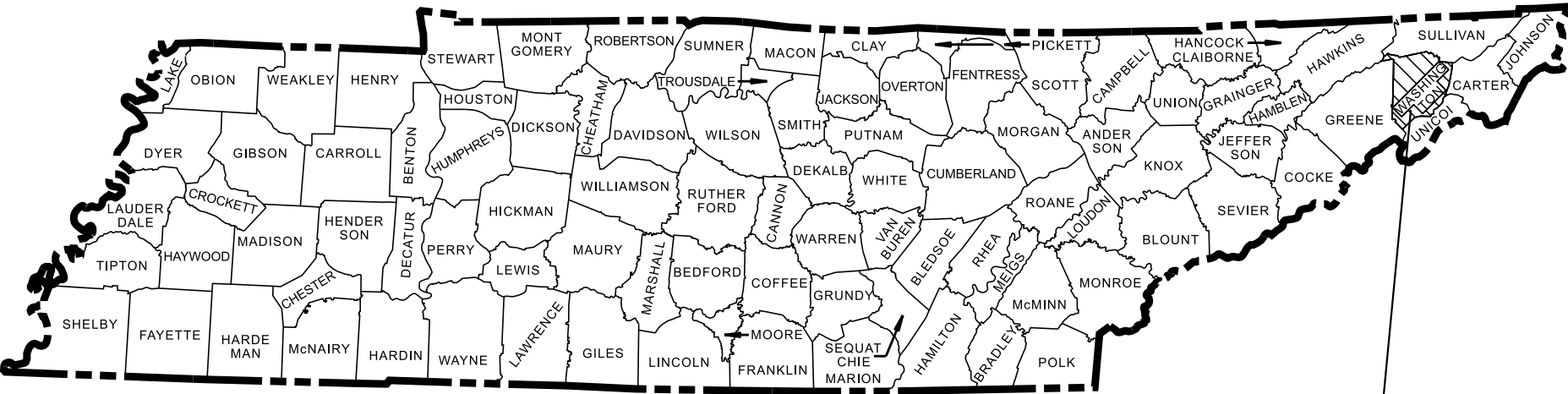
S.R. 353 (BAILEY BRIDGE RD)
BRIDGE OVER NOLICHUCKY
L.M. 0.44 NOLICHUCKY RIVER

LINE AND GRADE

STATE HIGHWAY NO. 353 F.A.H.S. NO. N/A

DOES THIS PROJECT QUALIFY FOR UTILITY CHAPTER 86	YES	NO
WORK ZONE SIGNIFICANCE DETERMINATION		
SIGNIFICANT	YES	NO

TENN.	YEAR	SHEET NO.
	2024	1
FED. AID PROJ. NO.	ER-BR-STP-353(13)	
STATE PROJ. NO.	90S353-M1-005	



WASHINGTON COUNTY
BRIDGE ID. # 90S23860001

END PROJECT NO. 90S353-M1-005 PRELIMINARY

STA. 33+00.00

N 682022.3610 E 2975726.9590

BEGIN PROJECT NO. 90S353-M1-005 PRELIMINARY

STA. 11+00.00

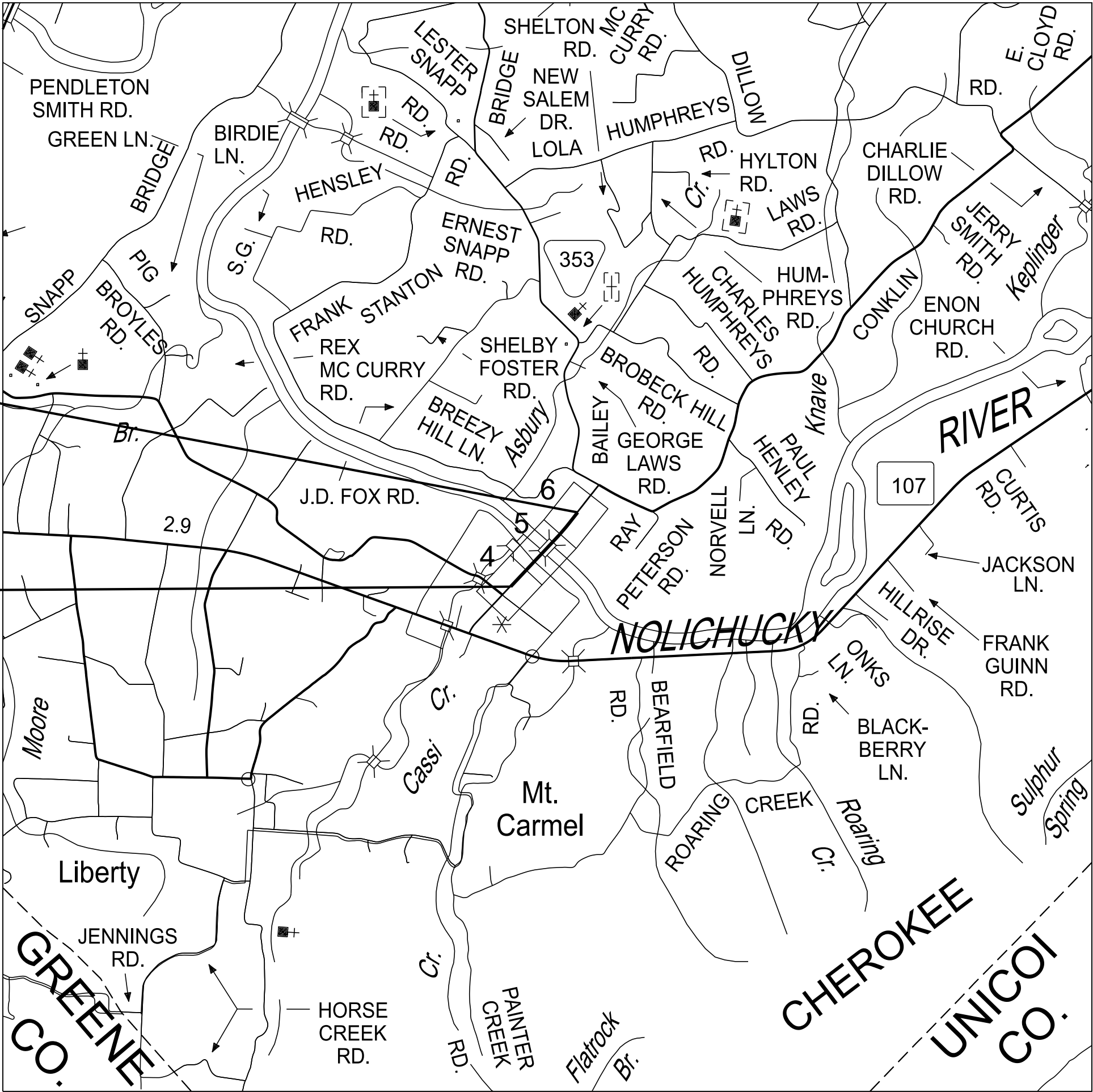
N 680393.4160 E 2974249.9285

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: AMBER WARREN
DESIGNER : PATRICK FIVEASH, P.E. CHECKED BY : MATT NEWMAN, P.E.
P.E. NO. 90S353-M1-005 (NEPA)
PIN NO. 135866.08



SCALE: 1"= 2640'

R.O.W. LENGTH	0.373 MILES
ROADWAY LENGTH	0.326 MILES
BRIDGE LENGTH	0.091 MILES
PROJECT LENGTH	0.417 MILES



NO EXCLUSIONS

ROAD TO BE CLOSED
DURING CONSTRUCTION

CONCEPTUAL
PLANS

SEALED BY

APPROVED: WILL REID, CHIEF ENGINEER

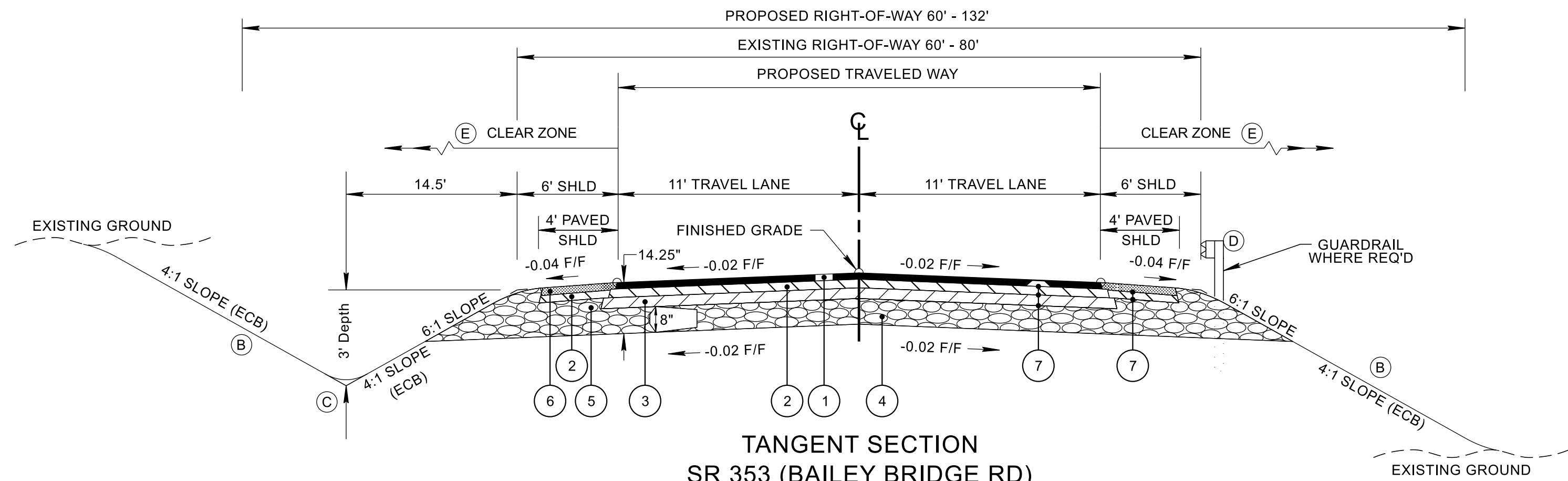
DATE:

APPROVED: HOWARD H. ELEY, COMMISSIONER

SURVEY 10-10-24	TRAFFIC DATA	
UPDATED 10-18-24	AADT (2025)	1,420
	AADT (2045)	1,820
	DHV (2045)	218
	D	65-35
	T (AADT)	5 %
	T (DHV)	3 %
	V	50 MPH

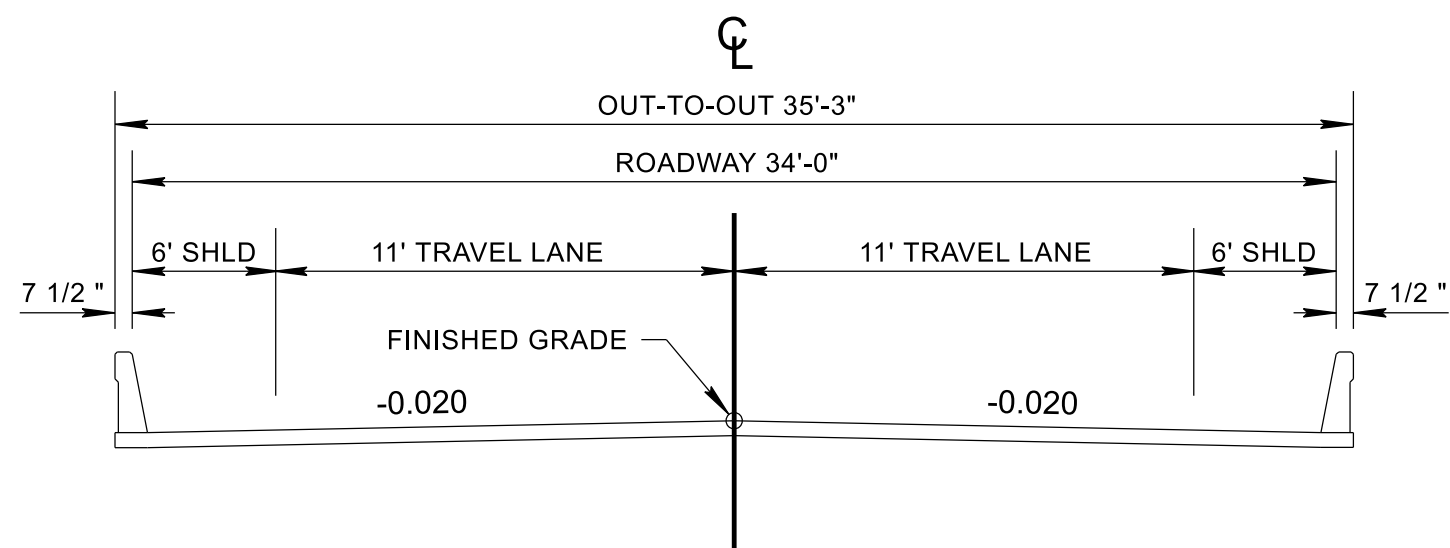
COORDINATES ARE NAD/83(2011), ARE ADJUSTED BY THE FACTOR OF 1.00000 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 USING GEOID 12B MODEL, OBTAINED ON 09-30-24.

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	2B



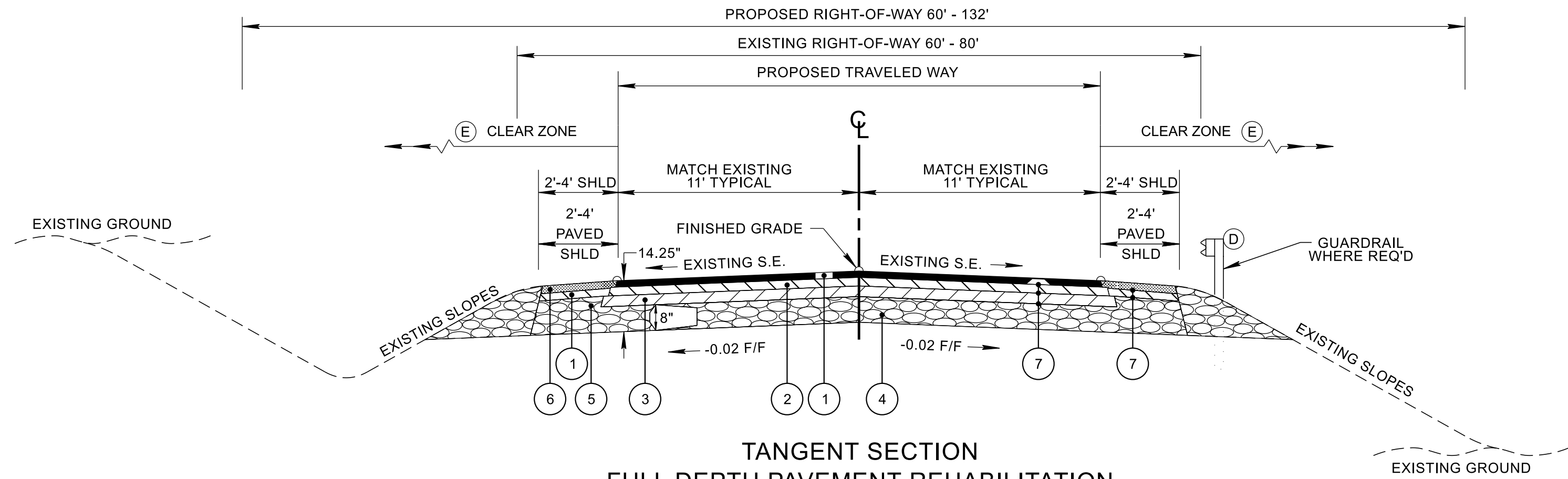
TANGENT SECTION
SR 353 (BAILEY BRIDGE RD)

(BASED ON STD. DWG. RD11-TS-2)
FROM STA. 11+00.00 TO STA. 17+62.00
FROM STA. 22+42.00 TO STA. 30+50.00



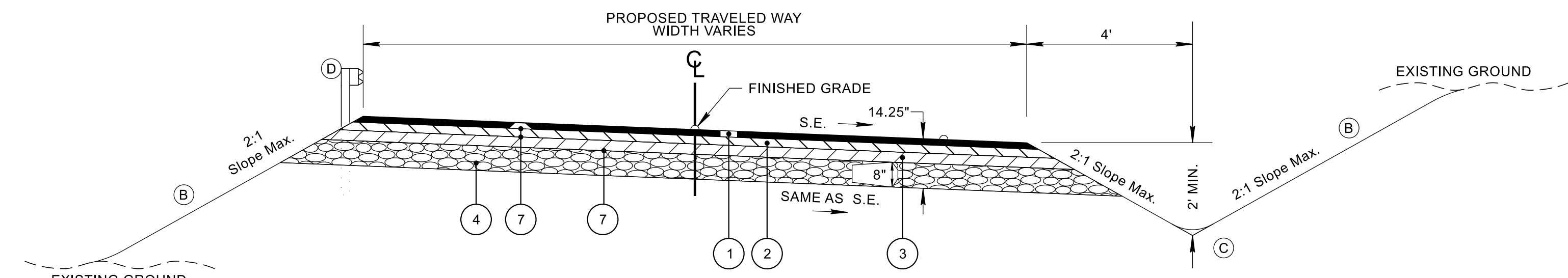
BRIDGE SECTION
SR 353 (BAILEY BRIDGE RD)

FROM STA. 17+62.00 TO STA. 22+42.00



TANGENT SECTION
FULL DEPTH PAVEMENT REHABILITATION
SR 353 (BAILEY BRIDGE RD)

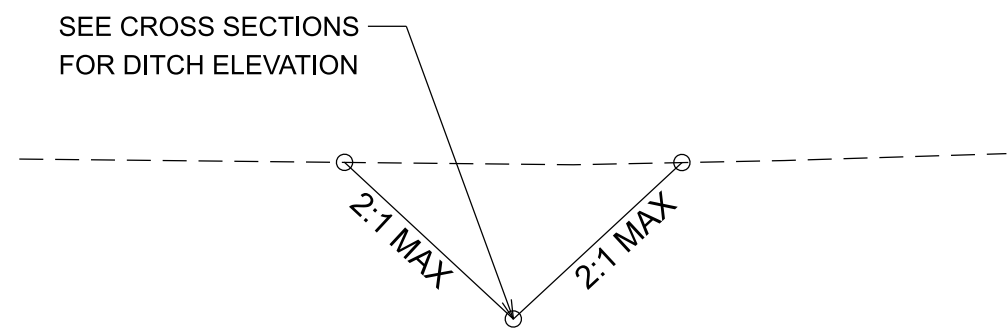
FROM STA. 30+50.00 TO STA. 33+00.00



SUPERELEVATED SECTION
(O.O. MOORE CUL-DE-SAC)

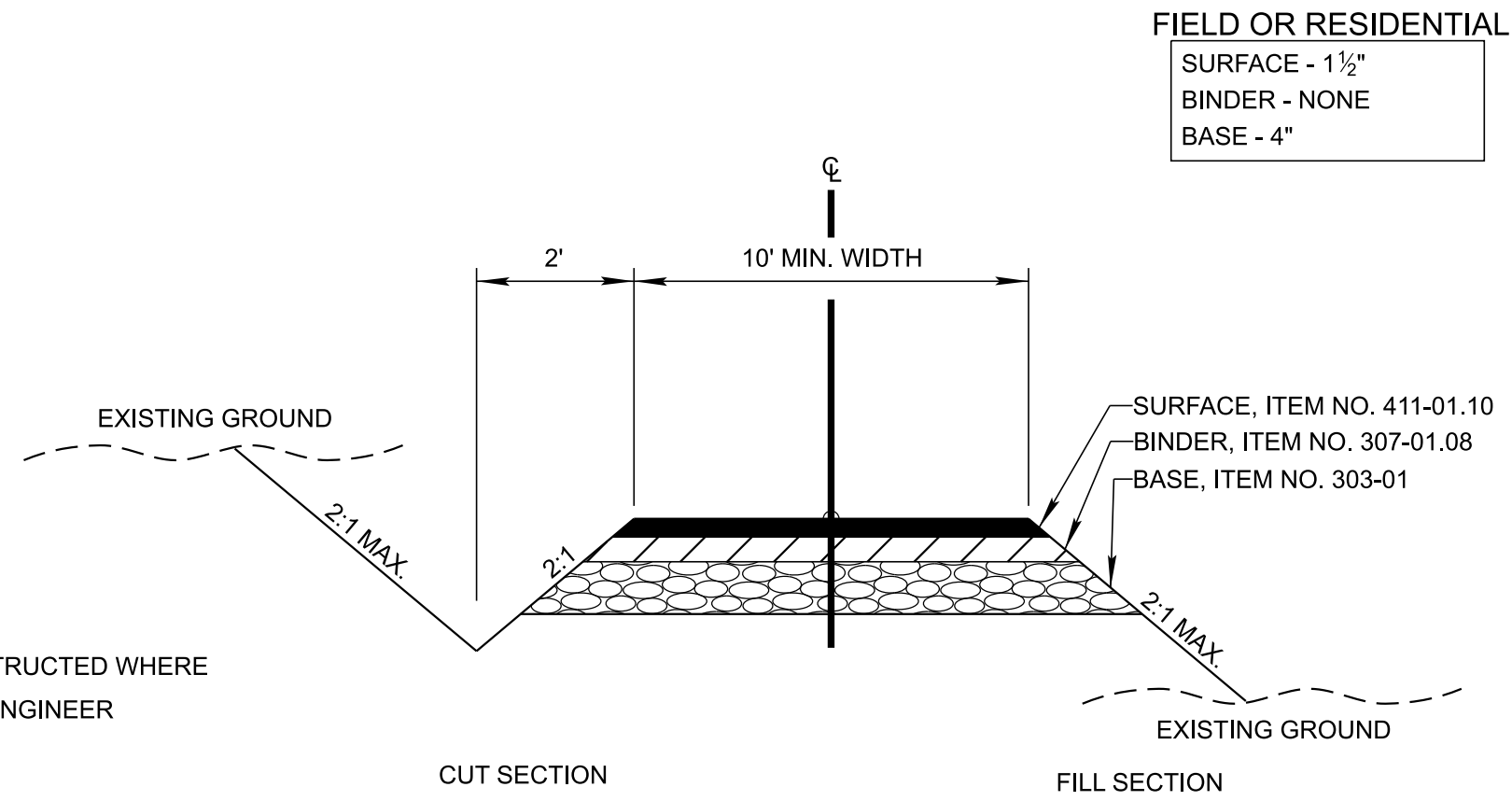
(BASED ON STD. DWG. RD11-TS-1A)

- (A) THE SLOPE OF THE SHOULDER AND THE ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7%.
- (B) 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.
- (C) SEE STANDARD DRAWING RD11-S-11A FOR ROUNDING OF ROADSIDE DITCH SLOPES.
- (D) SEE STANDARD DRAWING S-PL-6 FOR TYPICAL GUARDRAIL PLACEMENT.
- (E) SEE STANDARD DRAWING S-CZ-1 FOR CLEAR ZONE CRITERIA. SEE THE "ROADSIDE DESIGN GUIDE", AASHTO, 2011, FOR FURTHER INFORMATION REGARDING CLEAR ZONES.
- (F) FULL DEPTH SECTION PROVIDED FOR PAVEMENT REPAIR AREAS. DEPARTMENT REPRESENTATIVE TO DETERMINE LIMITS OR PAVEMENT SECTION.



INDEPENDENT SPECIAL DITCH
(SR-353)

FROM STA. 17+45.50 LT TO STA. 18+05.63 LT
FROM STA. 17+45.50 RT TO STA. 18+20.11 RT



TYPICAL SECTION
PRIVATE DRIVE TO BUSINESS,
FIELD, OR RESIDENTIAL PROPERTY

PROPOSED PAVEMENT SCHEDULE	
①	ASPHALTIC CONCRETE SURFACE (HOT MIX) PG64-22 GRADING "D" SURFACE @ 1.25" THICK (APPROX. 132.5 LB./S.Y.) 411-01.10 ACS MIX (PG64-22) GRADING "D"
②	BITUMINOUS PLANT MIX BASE (HOT MIX) PG64-22 GRADING "B-M2" @ 2.00" THICK (APPROX. 226 LB./S.Y.) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "B-M"
③	BITUMINOUS PLANT MIX BASE (HOT MIX) PG64-22 GRADING "A" @ 3.00" THICK (APPROX. 345 LB./S.Y.) 307-01.01 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "A"
④	MINERAL AGGREGATE @ 8"± THICK 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"
⑤	MINERAL AGGREGATE @ 11"± THICK 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"
⑥	ASPHALTIC CONCRETE SURFACE (HOT MIX) PG64-22 GRADING "E" SHOULDER @ 1.25" THICK (APPROX. 132.5 LB./S.Y.) 411-01.07 ACS MIX (PG64-22) GRADING "D"
⑦	TACK COAT 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) AT 0.15 GALLONS/S.Y. SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE		90S353-M1-005	3A

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		LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM DRAINAGE	PERM SLOPE	CONST
				BOOK	PAGE											
1A	JOHN A. & ANNA K. MOORE	100	018.00	644	75	16.583		16.583	0.362		0.362	16.221				
1B	JOHN A. & ANNA K. MOORE	100	018.00	644	75	0.167		0.167				0.167				
2	TERESA MOORE PAINTER	100	034.02	R600	I480		1.165	1.165		2597 S.F.	2597 S.F.		1.105			
3A	LLOYD F. FLEENOR JR. & SALLIE KATE IRR LIV TRUST	100	029.00	R919	I1749		22.014	22.014		0.587	0.587		21.427			
3B	LLOYD F. FLEENOR JR. & SALLIE KATE IRR LIV TRUST	100	029.00	R919	I1749		0.368	0.368		1522 S.F.	1522 S.F.		0.333			
4A	JONATHAN B. PHILLIPS	100	018.02	R1081	I2006	0.412		0.412	2443 S.F.		2443 S.F.	0.356				
4B	JONATHAN B. PHILLIPS	100	018.02	R1081	I2006	3877 S.F.		3877 S.F.				3877 S.F.				
5	STEVEN & MARY FRANCES SCOTT	100	020.03	R1089	I1729	13.209		13.209	0.590		0.590	12.619				
6A	STEVEN W. SCOTT	100	020.01	R1116	I1698	12.099		12.099				12.099				
6B	STEVEN W. SCOTT	100	020.01	R1116	I1698		21.388	21.388		0.655	0.655		20.733			
ACQUISITION TOTALS (ACRES)									2.344*							

* FEE SIMPLE ROW ACQUISITION AREAS WERE OBTAINED AS TEMPORARY CONSTRUCTION EASEMENT FOR RIGHT-OF-ENTRY PURPOSES.

DISTURBED AREA		
IN BETWEEN SLOPE LINES		3.085 (AC)
TOTAL DISTURBED AREA		5.251 (AC)
TOTAL PROJECT AREA		5.251 (AC)

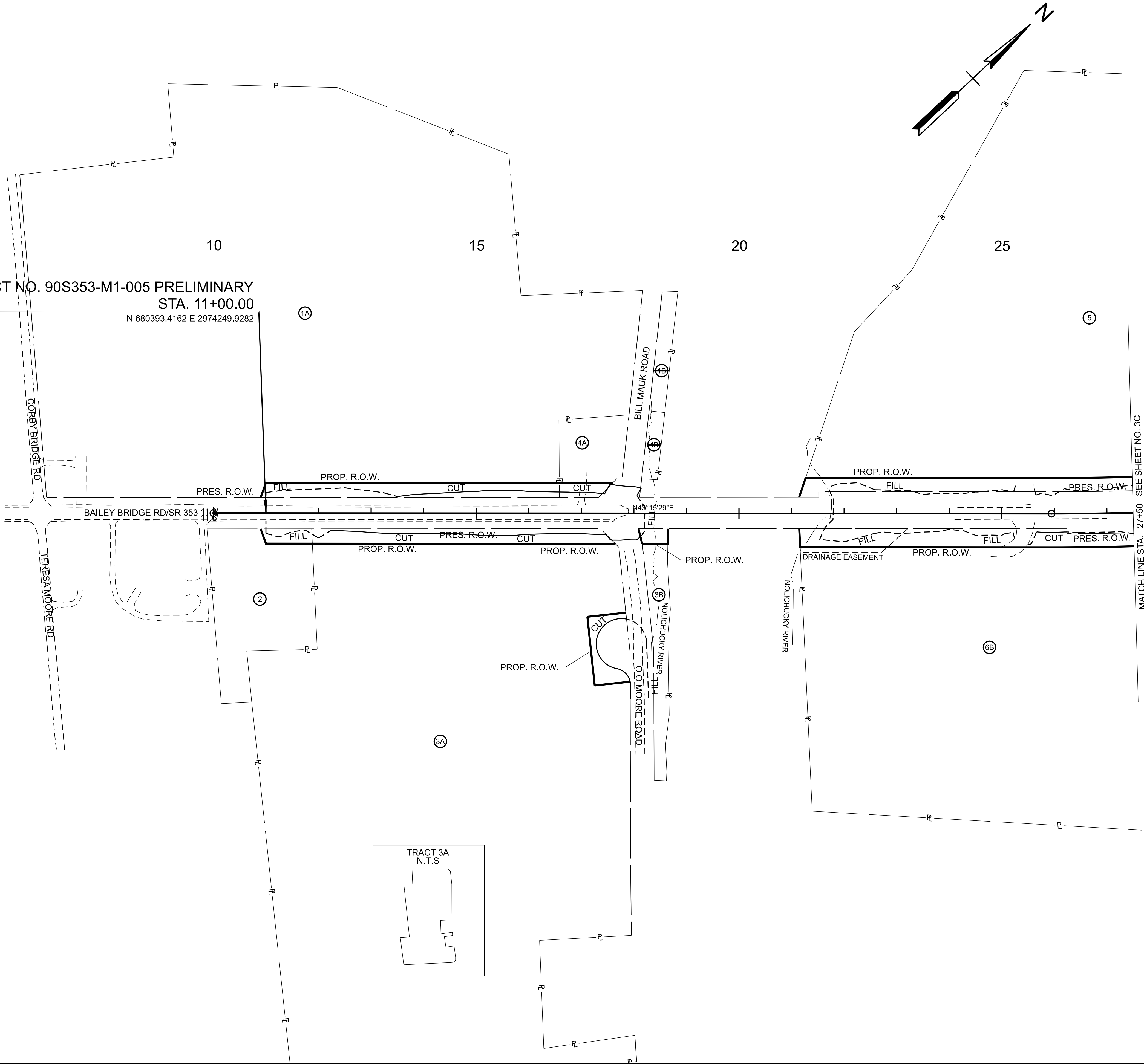
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STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
RIGHT-OF-WAY ACQUISITION TABLE

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	3B

REVISION 11/21/2024:
REVISED SLOPE LINES FOR FIELD ENTRANCE
ON TRACT 6B

BEGIN PROJECT NO. 90S353-M1-005 PRELIMINARY
STA. 11+00.00
N 68°03'39.4162" E 2974249.9282



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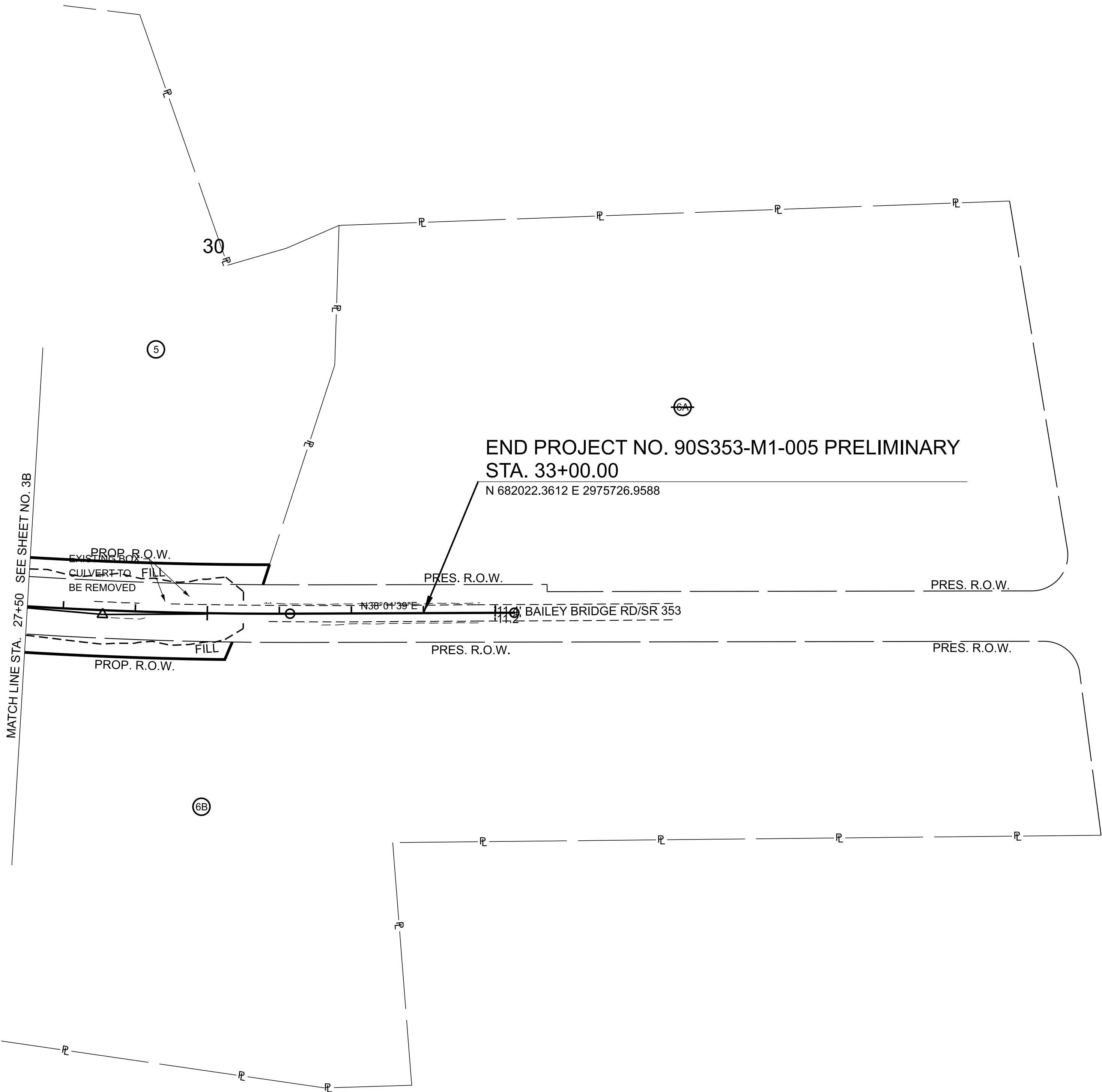
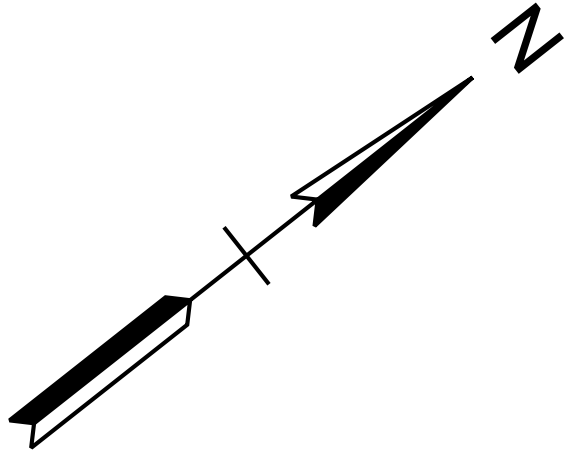
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY
MAP

B.O.P. TO STA. 27+50.00
SCALE: 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	3C



SEALED BY

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**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

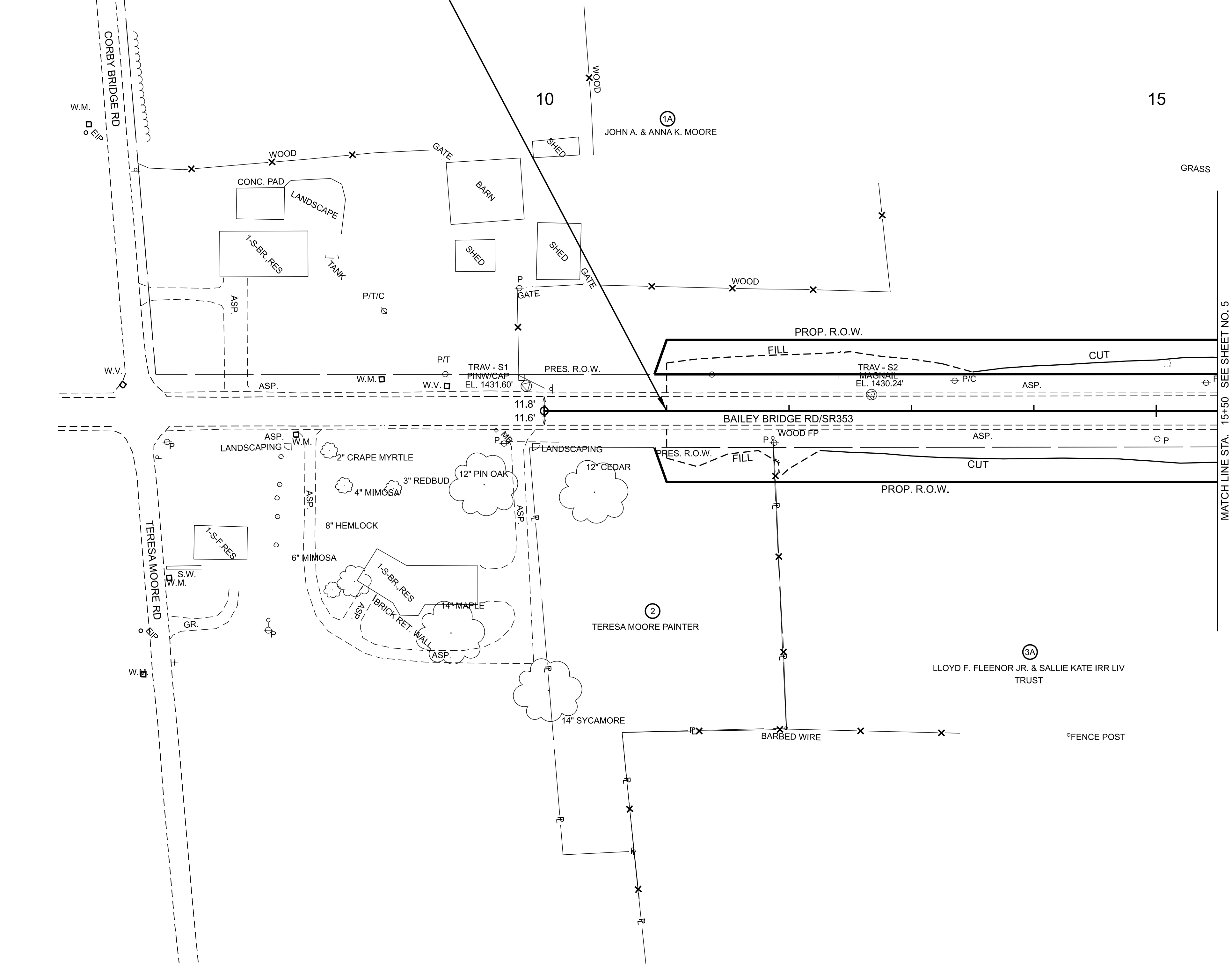
**PROPERTY
MAP**

STA. 27+50.00 TO E.O.P.
SCALE: 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	4

BEGIN PROJECT NO. 90S353-M1-005 PRELIMINARY
STA. 11+00.00

N 680393.4160 E 2974249.9285



POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	FEATURE
S1	9+84.34	20.34' LT	680323.8491	2974156.5354	1431.60	XCP
S2	12+67.40	13.33' LT	680524.4684	2974354.9386	1430.24	XCP

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

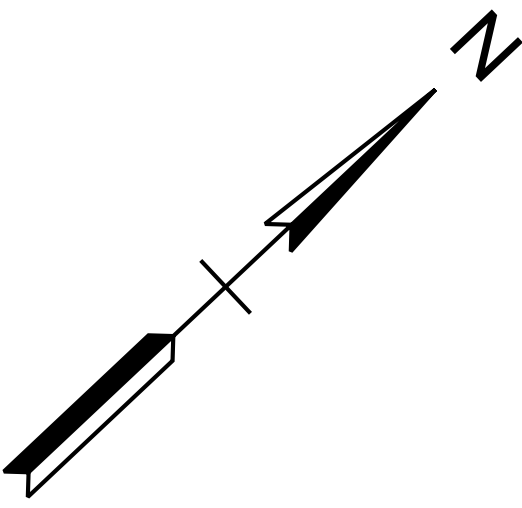
PRESENT
LAYOUT

B.O.P. TO STA. 15+50.00
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	4A

BEGIN PROJECT NO. 90S353-M1-005 PRELIMINARY
STA. 11+00.00

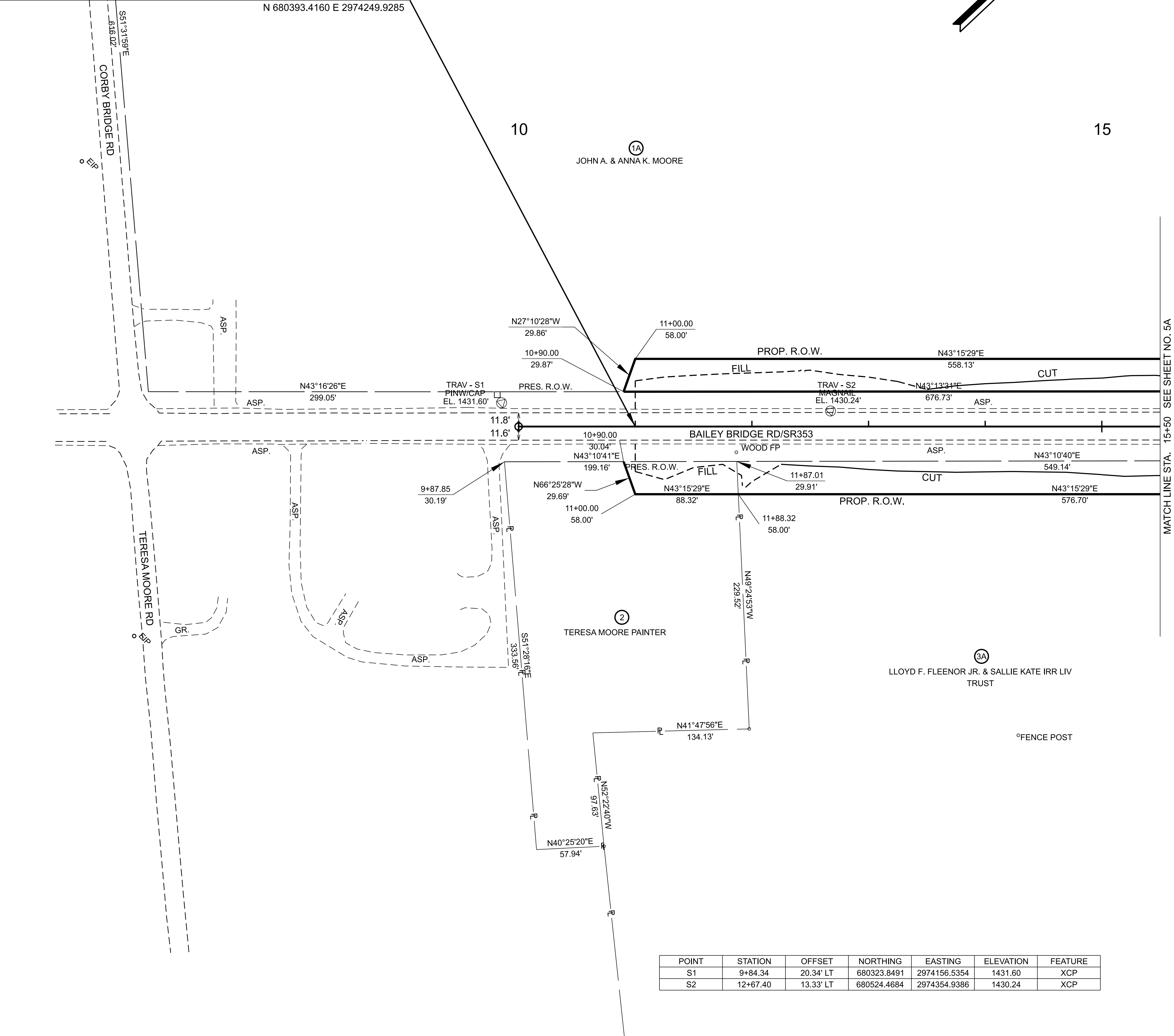
N 680393.4160 E 2974249.9285



10

15

1A
JOHN A. & ANNA K. MOORE



SEE SHEET NO. 5A
MATCH LINE STA. 15+50

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	FEATURE
S1	9+84.34	20.34' LT	680323.8491	2974156.5354	1431.60	XCP
S2	12+67.40	13.33' LT	680524.4684	2974354.9386	1430.24	XCP

SEALED BY

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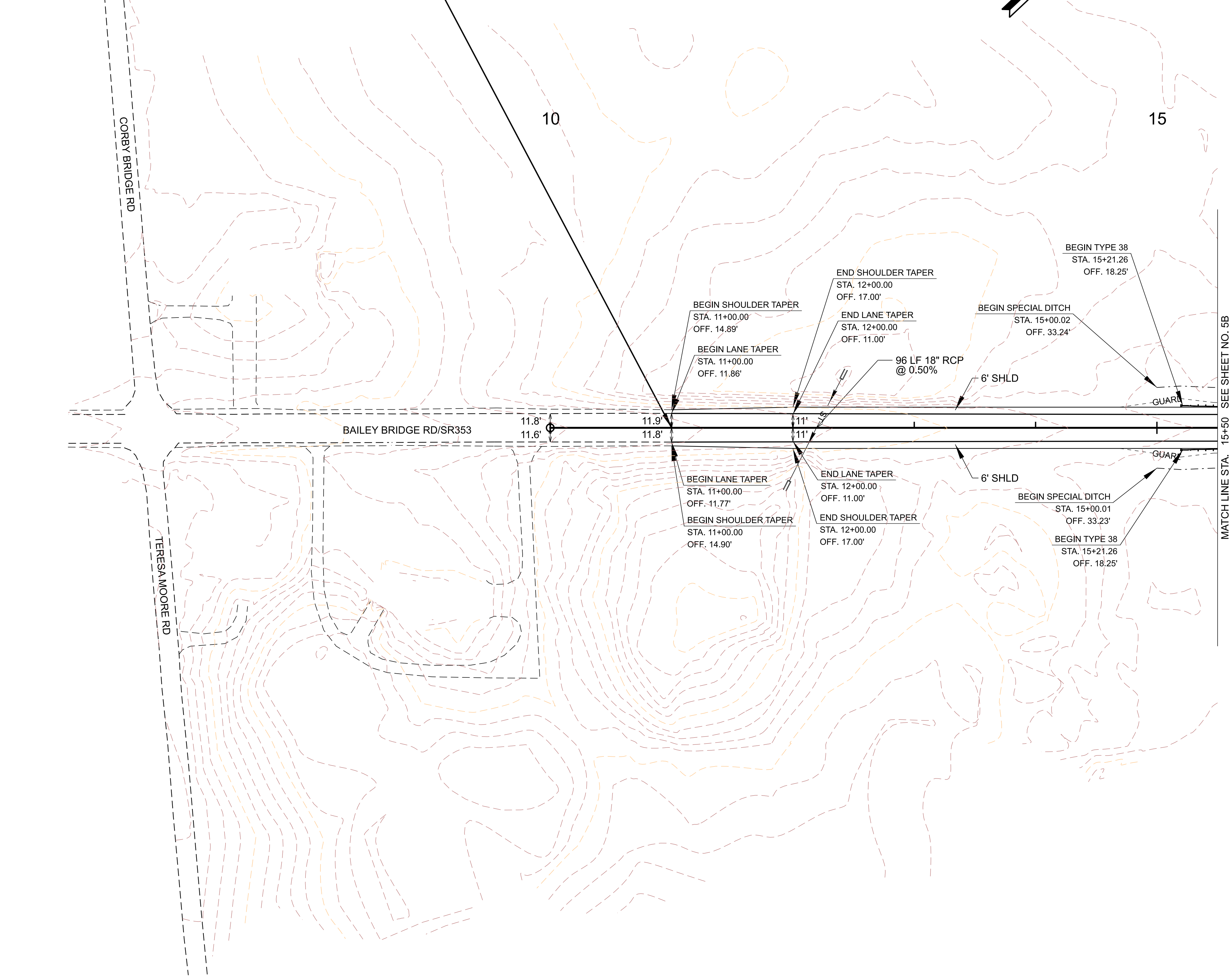
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

R.O.W.
DETAILS

B.O.P. TO STA. 15+50.00
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	4B

BEGIN PROJECT NO. 90S353-M1-005 PRELIMINARY
STA. 11+00.00
N 680393.4160 E 2974249.9285



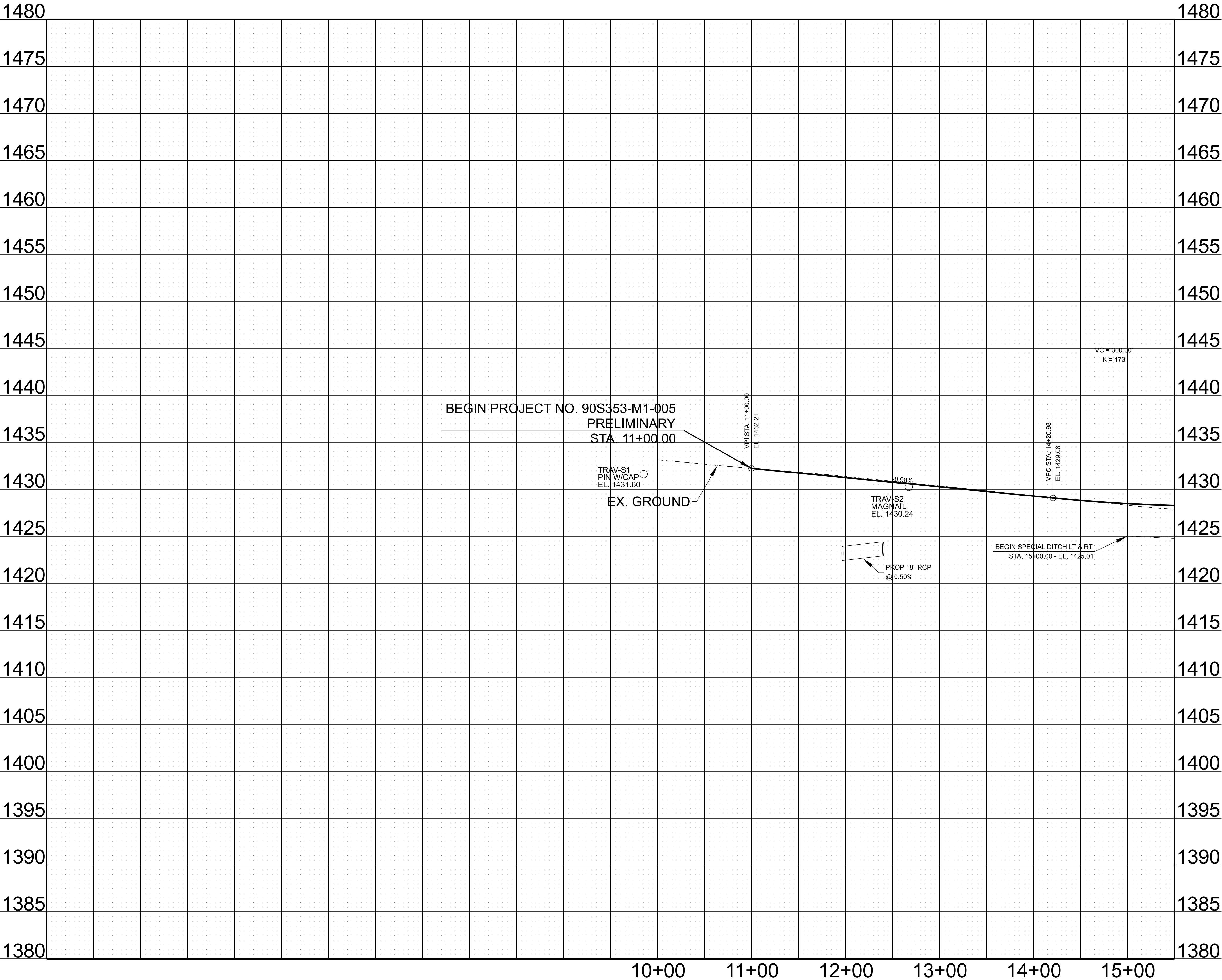
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**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

**PROPOSED
LAYOUT**

B.O.P. TO STA. 15+50.00
SCALE: 1" = 50'



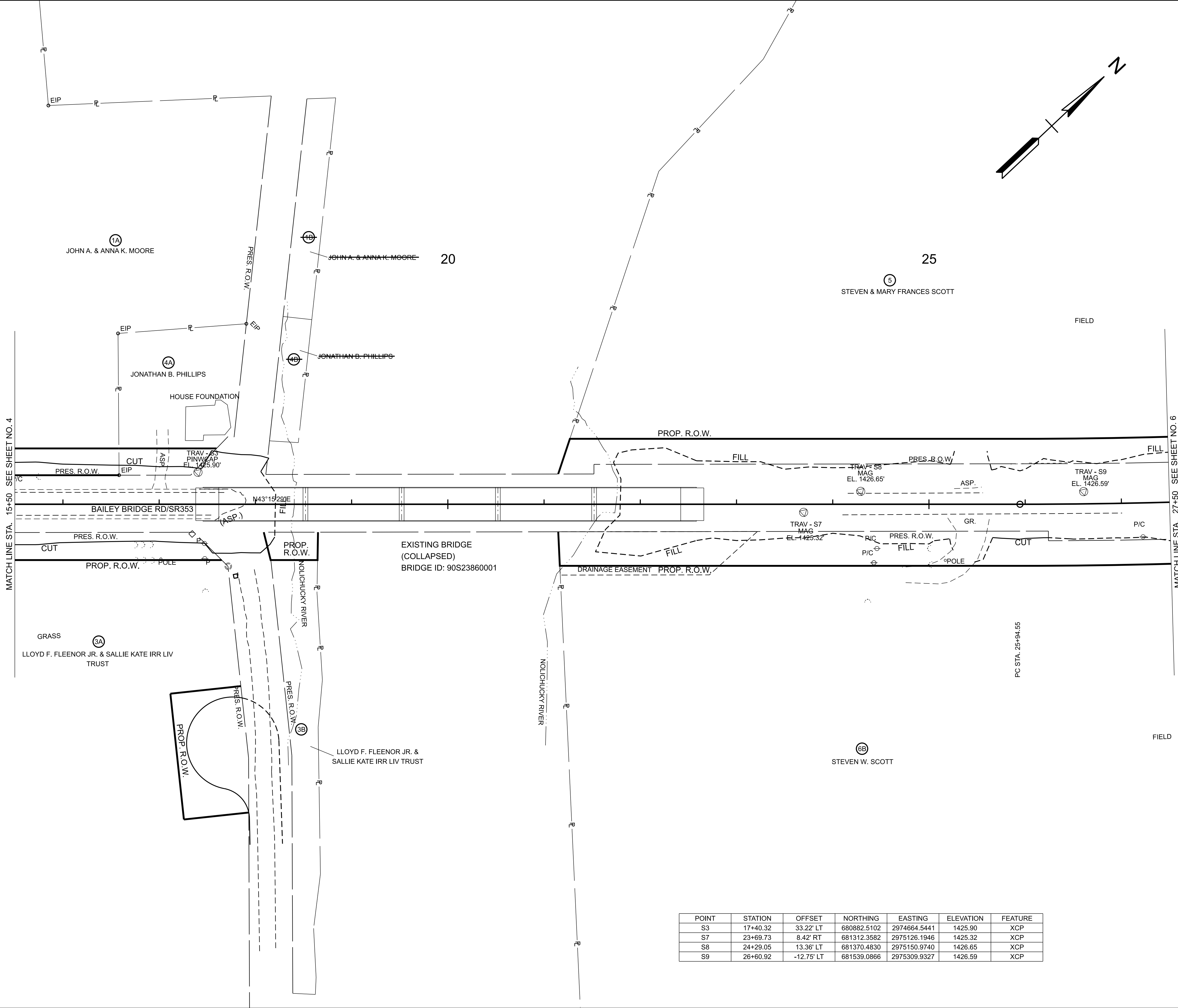
TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	4C

SEALED BY

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
PROPOSED PROFILE
B.O.P. TO STA. 15+50.00
SCALE: 1" = 50' HORIZ. 1" = 5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	5

REVISION 11/21/2024:
REVISED SLOPE LINES FOR FIELD ENTRANCE
ON TRACT 6B



POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	FEATURE
S3	17+40.32	33.22' LT	680882.5102	2974664.5441	1425.90	XCP
S7	23+69.73	8.42' RT	681312.3582	2975126.1946	1425.32	XCP
S8	24+29.05	13.36' LT	681370.4830	2975150.9740	1426.65	XCP
S9	26+60.92	-12.75' LT	681539.0866	2975309.9327	1426.59	XCP

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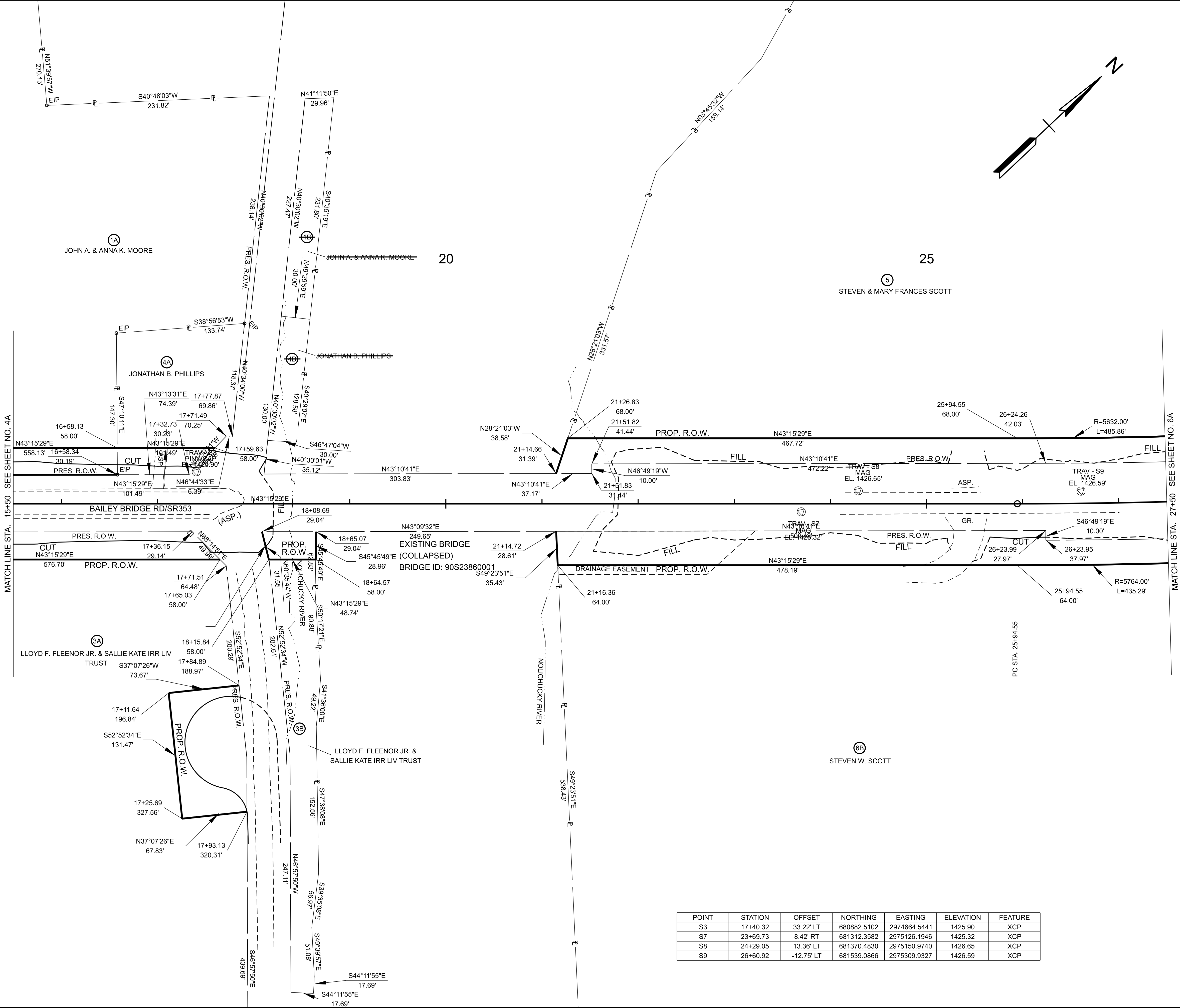
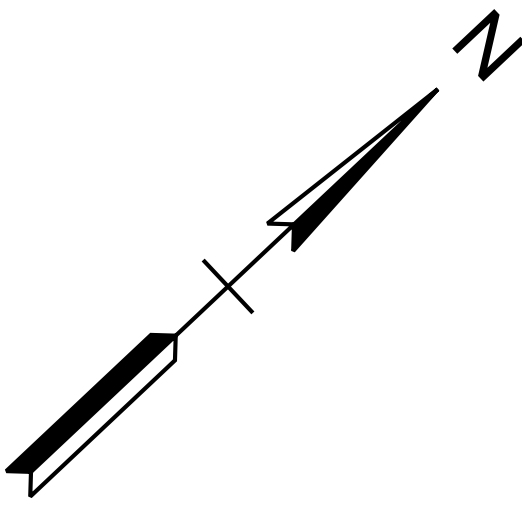
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT
LAYOUT

STA. 15+50.00 TO STA. 27+50.00
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	5A

REVISION 11/21/2024:
REVISED SLOPE LINES FOR FIELD ENTRANCE
ON TRACT 6B



POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	FEATURE
S3	17+40.32	33.22' LT	680882.5102	2974664.5441	1425.90	XCP
S7	23+69.73	8.42' RT	681312.3582	2975126.1946	1425.32	XCP
S8	24+29.05	13.36' LT	681370.4830	2975150.9740	1426.65	XCP
S9	26+60.92	-12.75' LT	681539.0866	2975309.9327	1426.59	XCP

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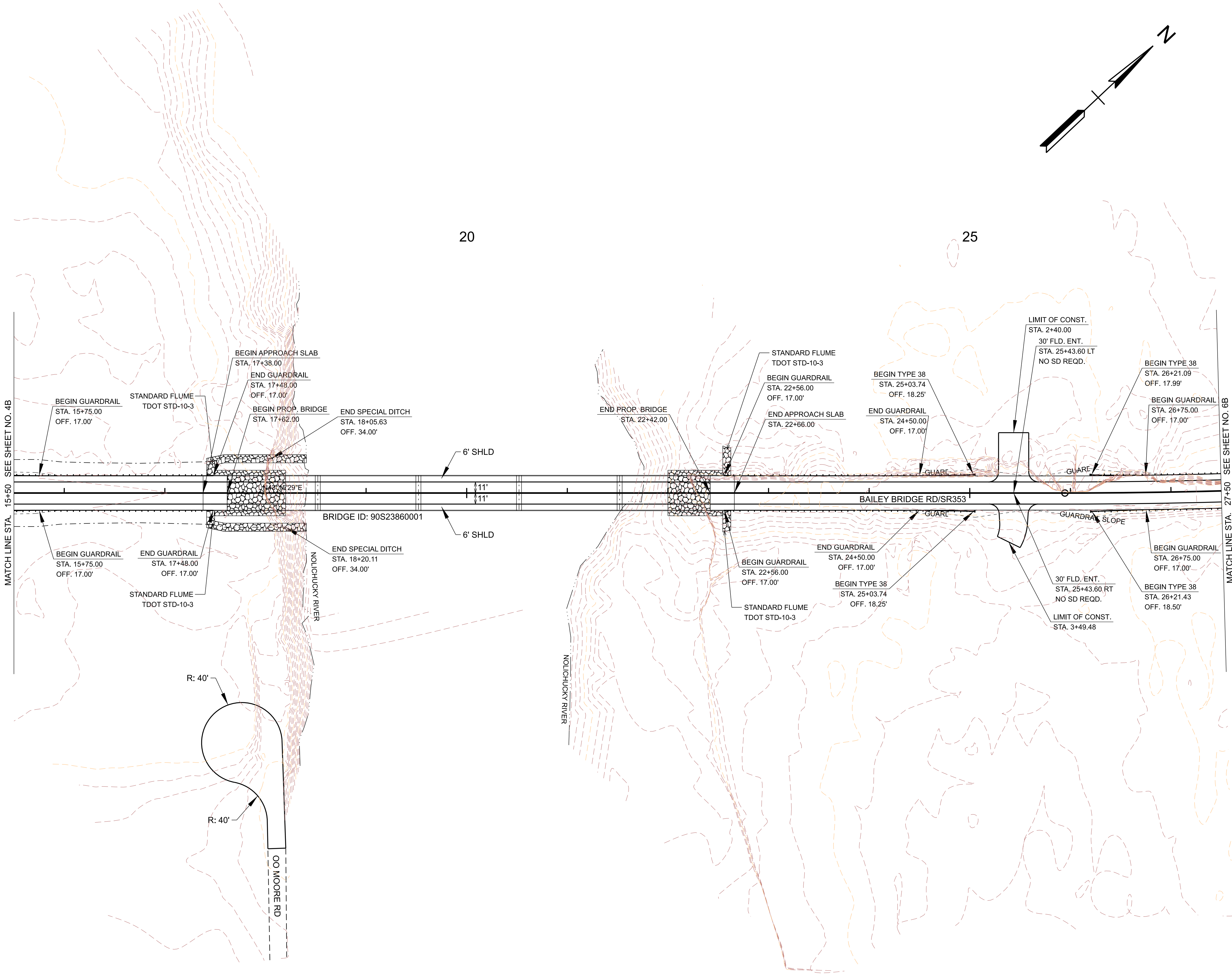
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

R.O.W.
DETAILS

STA. 15+50.00 TO STA. 27+50.00
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	5B

REVISION 11/21/2024:
REVISED LIMITS FOR FIELD ENTRANCE AT
STATION 25+43.60 RT



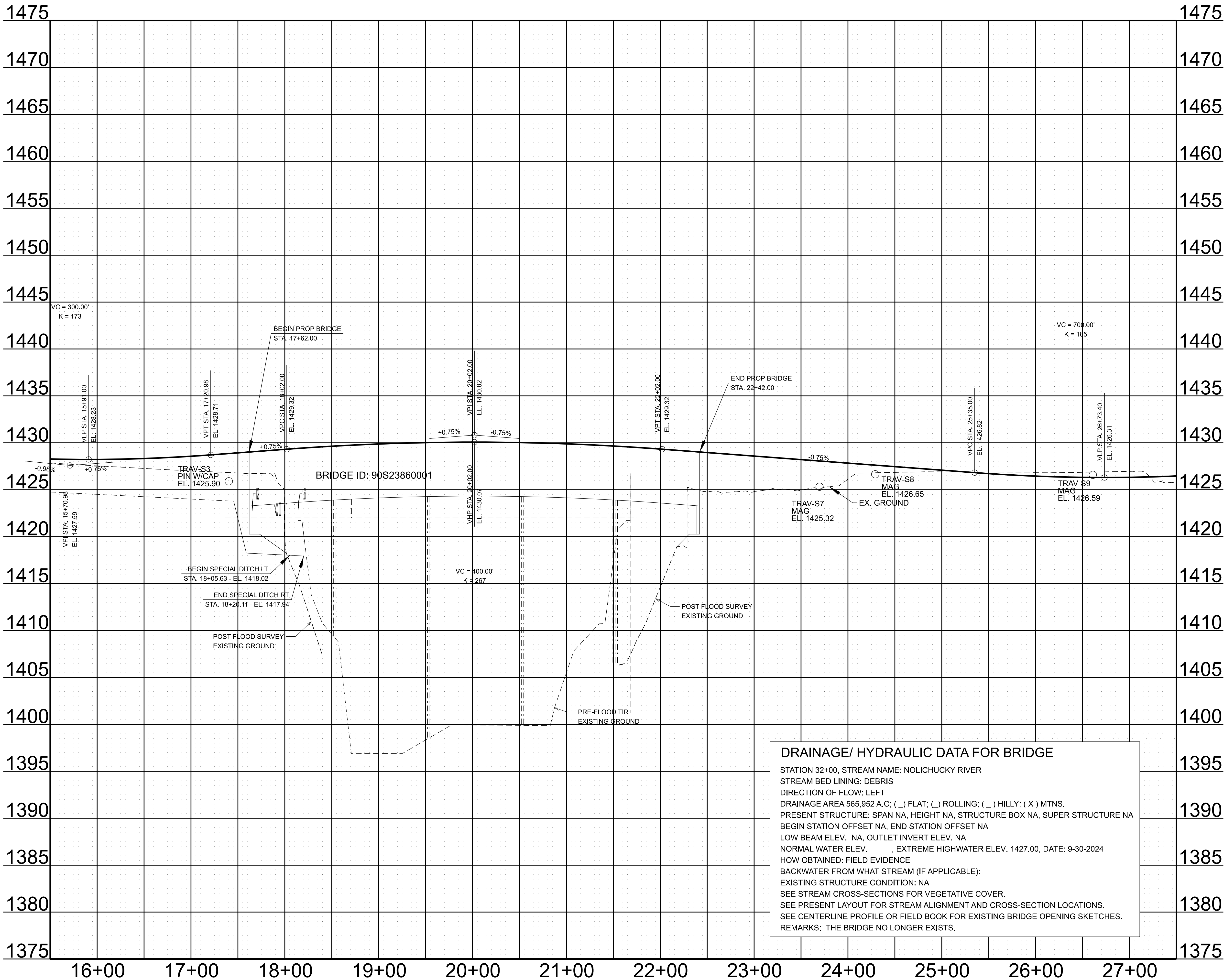
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**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

**PROPOSED
LAYOUT**

STA. 15+50.00 TO STA. 27+50.00
SCALE: 1" = 50'



DRAINAGE/ HYDRAULIC DATA FOR BRIDGE

STATION 32+00, STREAM NAME: NOLICHUCKY RIVER
STREAM BED LINING: DEBRIS
DIRECTION OF FLOW: LEFT
DRAINAGE AREA 565,952 A.C.; (_) FLAT; (_) ROLLING; (_) HILLY; (X) MTNS.
PRESENT STRUCTURE: SPAN NA, HEIGHT NA, STRUCTURE BOX NA, SUPER STRUCTURE NA
BEGIN STATION OFFSET NA, END STATION OFFSET NA
LOW BEAM ELEV. NA, OUTLET INVERT ELEV. NA
NORMAL WATER ELEV. , EXTREME HIGHWATER ELEV. 1427.00, DATE: 9-30-2024
HOW OBTAINED: FIELD EVIDENCE
BACKWATER FROM WHAT STREAM (IF APPLICABLE):
EXISTING STRUCTURE CONDITION: NA
SEE STREAM CROSS-SECTIONS FOR VEGETATIVE COVER.
SEE PRESENT LAYOUT FOR STREAM ALIGNMENT AND CROSS-SECTION LOCATIONS.
SEE CENTERLINE PROFILE OR FIELD BOOK FOR EXISTING BRIDGE OPENING SKETCHES.
REMARKS: THE BRIDGE NO LONGER EXISTS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	5C

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED
PROFILE

STA. 15+50.00 TO STA. 27+50.00

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

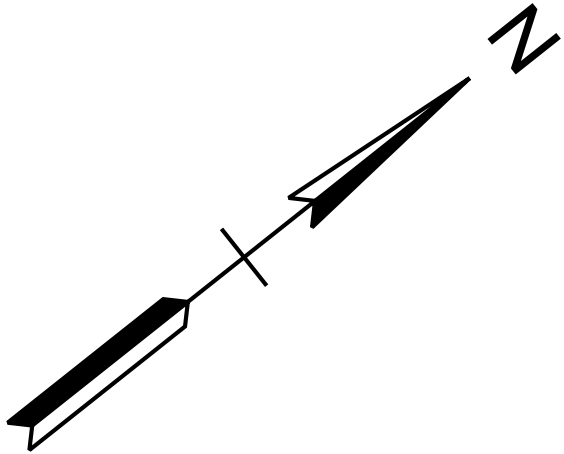
SR 353
CURVE SR353-1
PI 28+54.90
N 681671.4675
E 2975452.5386
Δ 05°13'50" LT.
D 01°00'19"
R 5700.00'
L 520.35'
T 260.36'
LC 520.17'
BC N40°38'34.1"E
SE NC
TRANS. LENGTH N/A
DESIGN SPEED 50 MPH

STEVEN & MARY FRANCES SCOTT

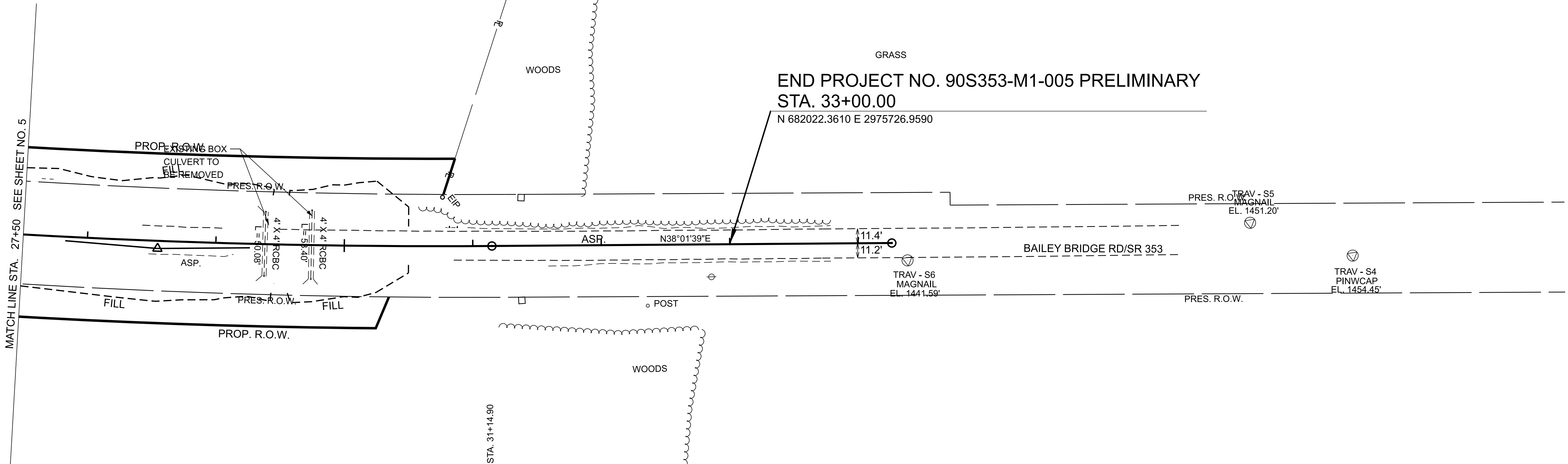
STEVEN W. SCOTT

END PROJECT NO. 90S353-M1-005 PRELIMINARY
STA. 33+00.00

N 682022.3610 E 2975726.9590



TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	6



STEVEN W. SCOTT

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	FEATURE
S6	34+38.36	13.60' RT	682122.9704	2975822.9071	1441.59	XCP
S5	37+05.21	13.67' LT	682349.9726	2975965.8109	1451.20	XCP
S4	37+84.84	12.45' RT	682396.6058	2976035.4504	1454.45	XCP

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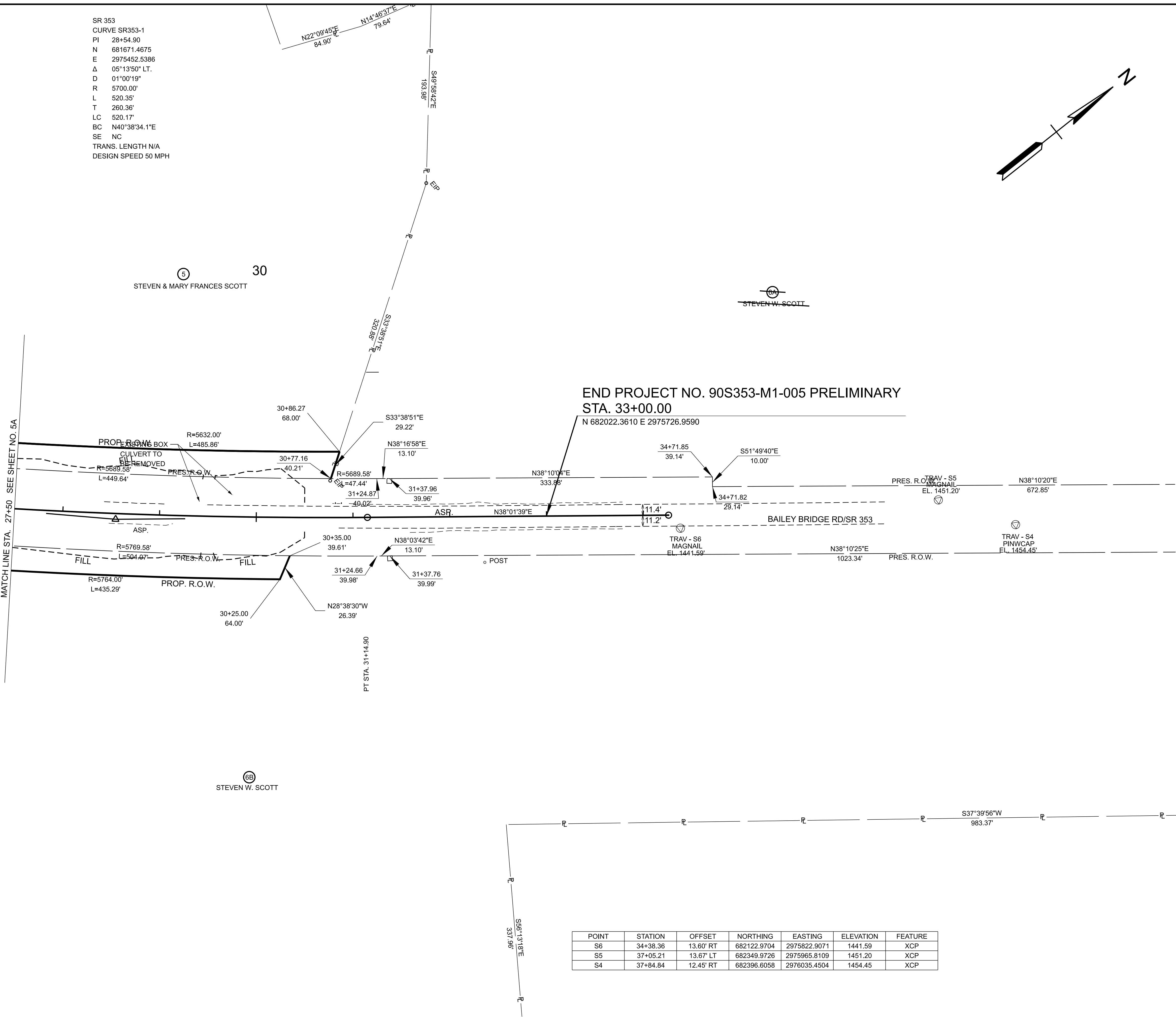
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DATUM ADJUSTED BY THE FACTOR
OF 1.00000 AND TIED TO THE TGRN.
ALL ELEVATIONS ARE REFERENCED
TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT
LAYOUT

STA. 27+50.00 TO E.O.P.
SCALE: 1" = 50'

SR 353
CURVE SR353-1
PI 28+54.90
N 681671.4675
E 2975452.5386
Δ 05°13'50" LT.
D 01°00'19"
R 5700.00'
L 520.35'
T 260.36'
LC 520.17'
BC N40°38'34.1"E
SE NC
TRANS. LENGTH N/A
DESIGN SPEED 50 MPH



END PROJECT NO. 90S353-M1-005 PRELIMINARY
STA. 33+00.00
N 682022.3610 E 2975726.9590

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	FEATURE
S6	34+38.36	13.60' RT	682122.9704	2975822.9071	1441.59	XCP
S5	37+05.21	13.67' LT	682349.9726	2975965.8109	1451.20	XCP
S4	37+84.84	12.45' RT	682396.6058	2976035.4504	1454.45	XCP

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	6A

SEALED BY

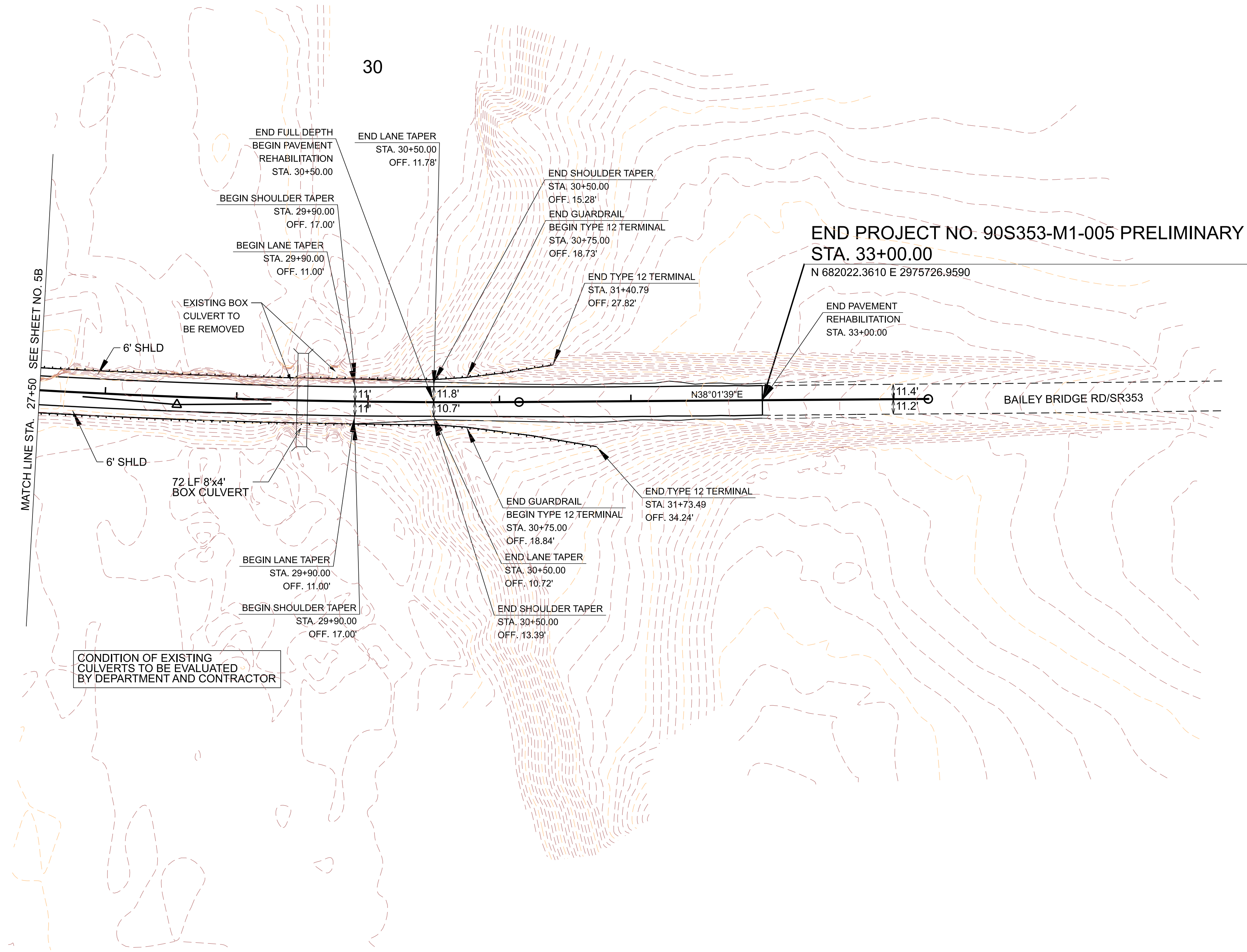
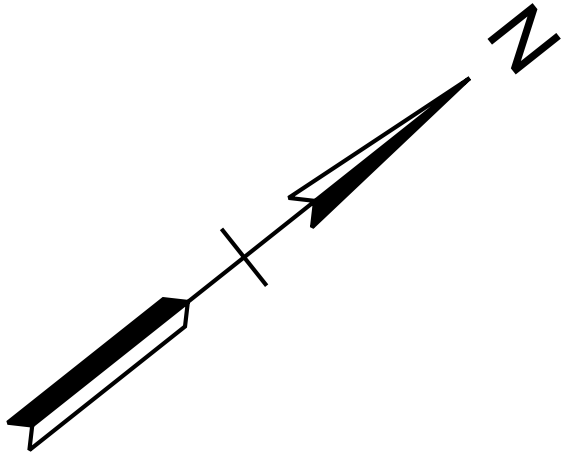
COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

R.O.W.
DETAILS

STA. 27+50.00 TO E.O.P.
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	6B



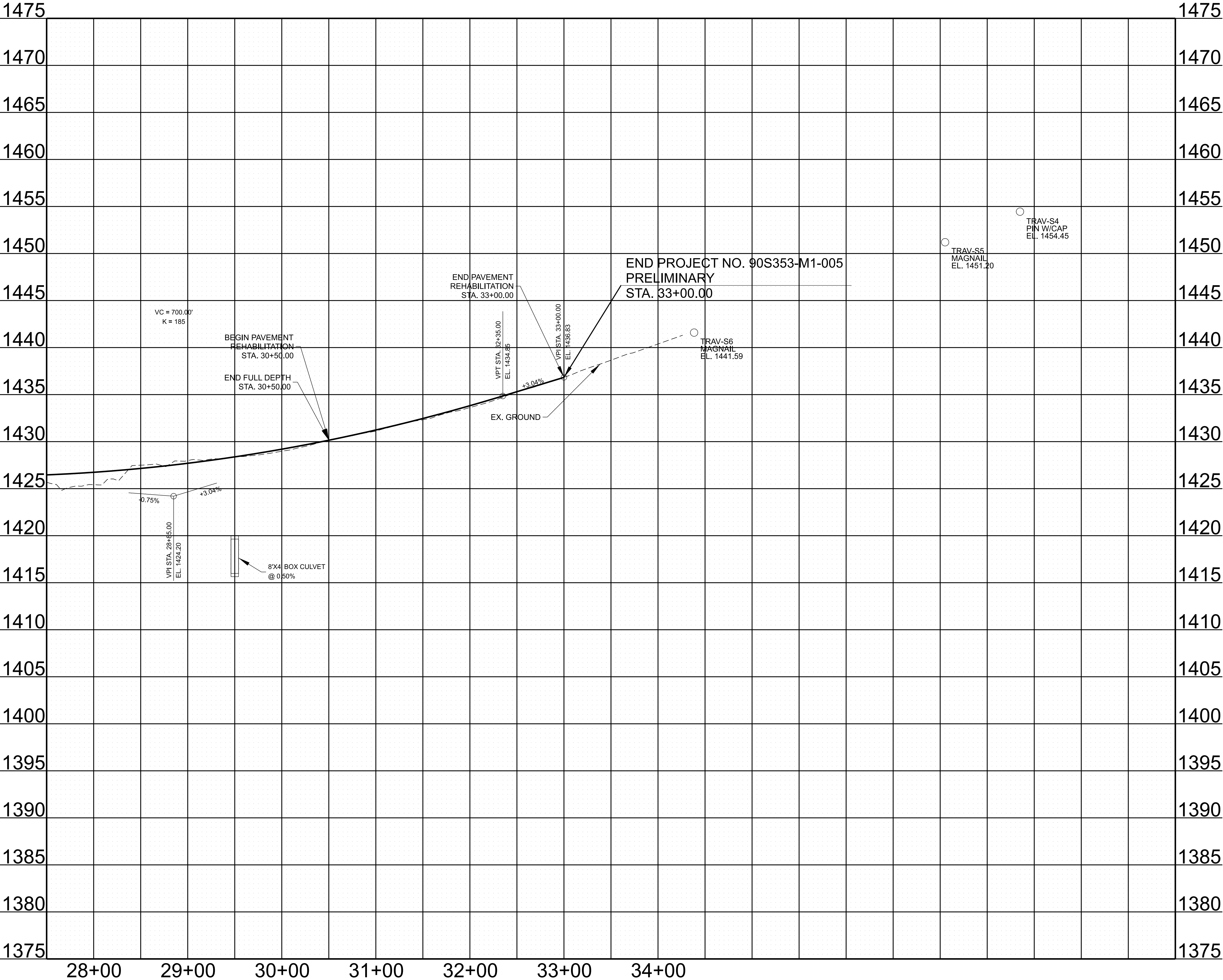
SEALED BY

COORDINATES ARE NAD 83(2011), ARE
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED
LAYOUT

STA. 27+50.00 TO E.O.P.
SCALE: 1" = 50'



TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	6C

SEALED BY

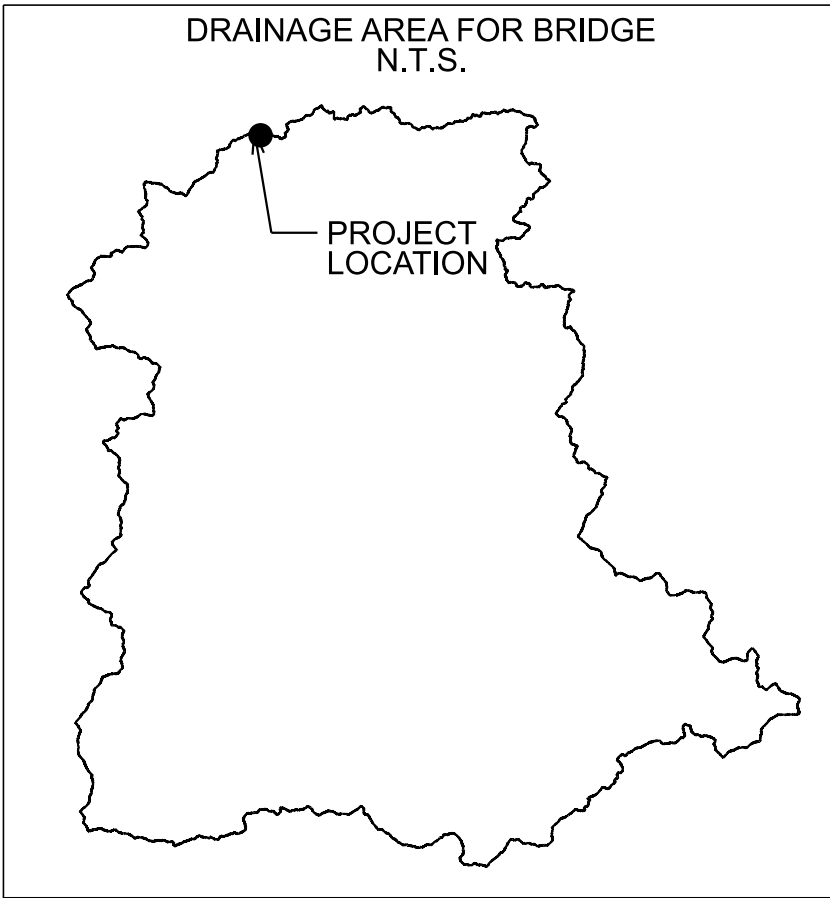
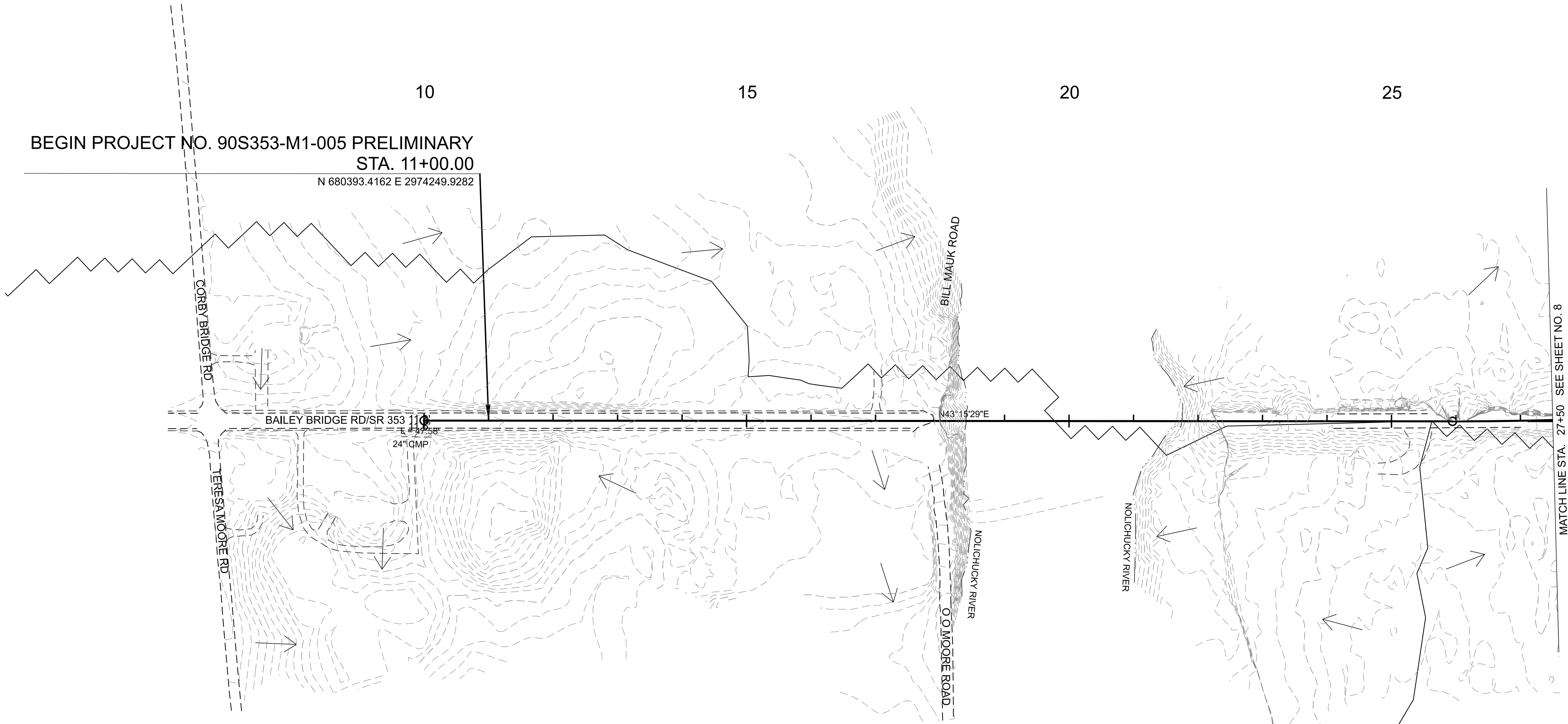
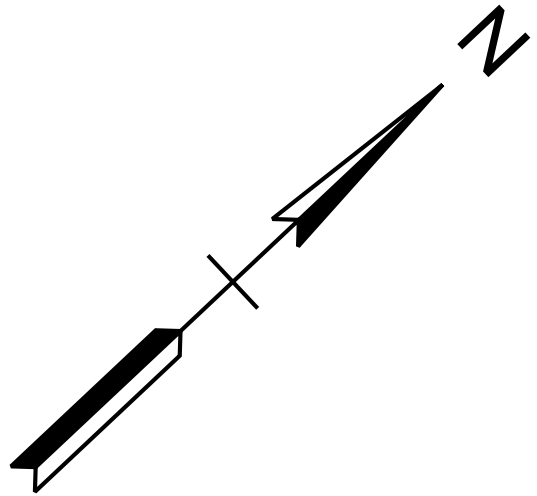
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED
PROFILE

STA. 27+50.00 TO STA. E.O.P.

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	7



DRAINAGE/ HYDRAULIC DATA FOR BRIDGE

STATION 20+02, STREAM NAME: NOLICHUCKY RIVER
STREAM BED LINING: DEBRIS
DIRECTION OF FLOW: LEFT
DRAINAGE AREA 565,952 A.C; (_) FLAT; (_) ROLLING; (_) HILLY; (X) MTNS.
PRESENT STRUCTURE: SPAN NA, HEIGHT NA, STRUCTURE BOX NA,
SUPER STRUCTURE NA
BEGIN STATION OFFSET NA, END STATION OFFSET NA
LOW BEAM ELEV. NA, OUTLET INVERT ELEV. NA
NORMAL WATER ELEV. , EXTREME HIGHWATER ELEV. 1427.00,
DATE: 9-30-2024
HOW OBTAINED: FIELD EVIDENCE
BACKWATER FROM WHAT STREAM (IF APPLICABLE):
EXISTING STRUCTURE CONDITION: NA
SEE STREAM CROSS-SECTIONS FOR VEGETATIVE COVER.
SEE PRESENT LAYOUT FOR STREAM ALIGNMENT AND CROSS-SECTION LOCATIONS.
SEE CENTERLINE PROFILE OR FIELD BOOK FOR EXISTING BRIDGE OPENING SKETCHES.
REMARKS: THE BRIDGE NO LONGER EXISTS.

SEALED BY

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

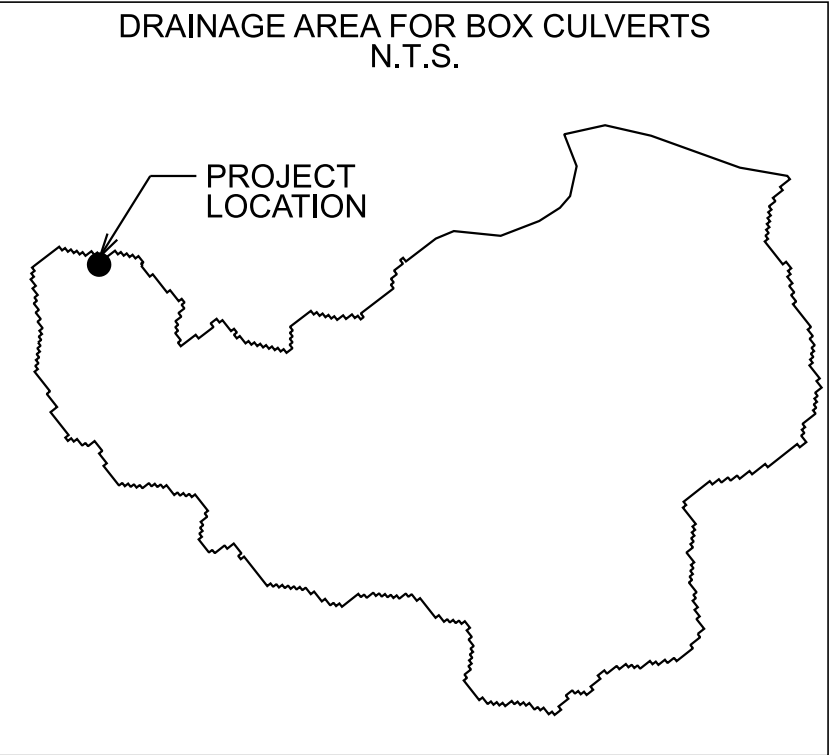
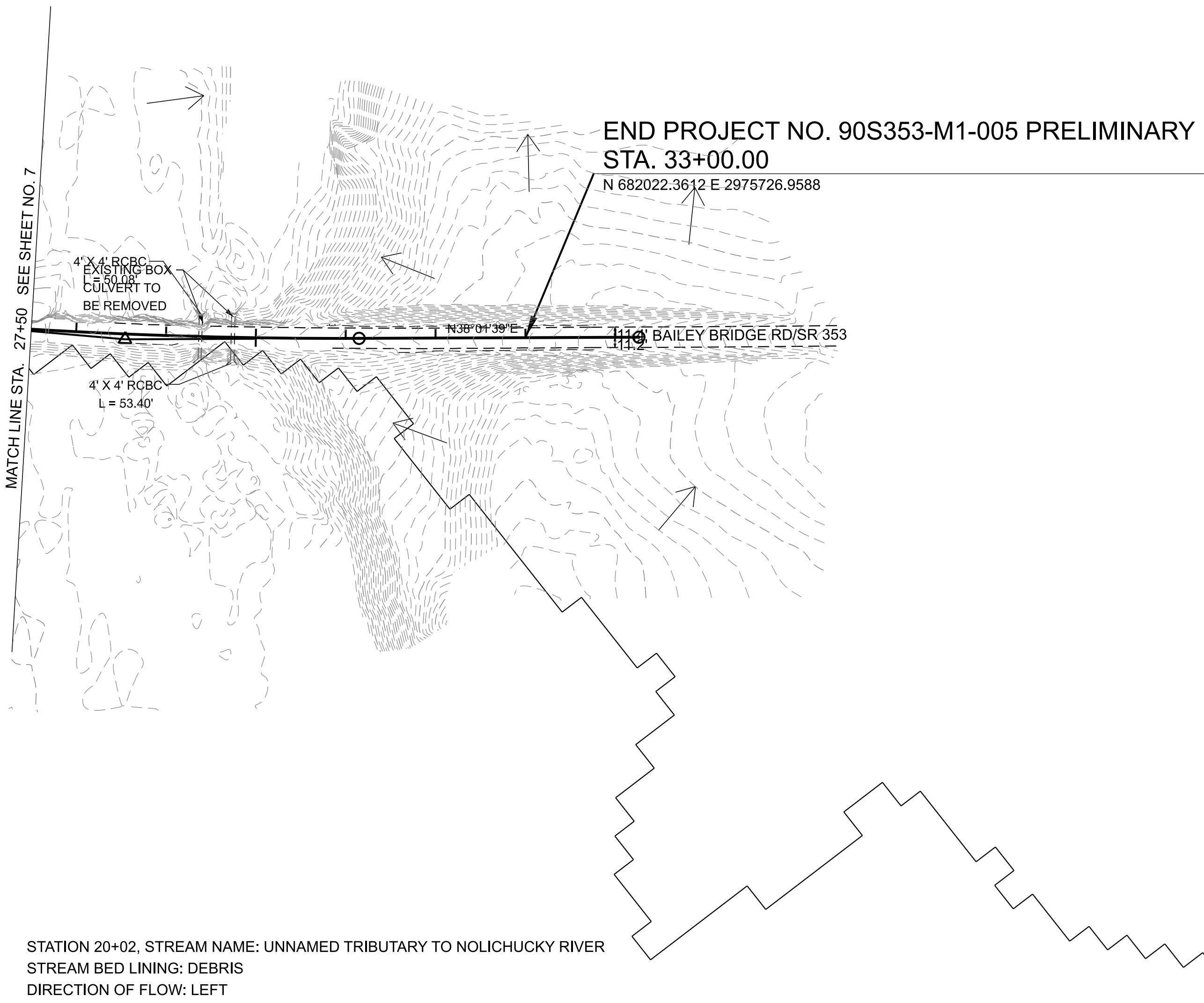
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DRAINAGE
MAP

B.O.P. TO STA. 27+50.00
SCALE: 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	8

30



STATION 20+02, STREAM NAME: UNNAMED TRIBUTARY TO NOLICHUCKY RIVER
STREAM BED LINING: DEBRIS
DIRECTION OF FLOW: LEFT
DRAINAGE AREA 313.6 A.C.; () FLAT; () ROLLING; () HILLY; (X) MTNS.
PRESENT STRUCTURE: (2) 4'x4' REINFORCED CONCRETE BOX CULVERTS
BEGIN STATION OFFSET NA, END STATION OFFSET NA
LOW BEAM ELEV. NA, OUTLET INVERT ELEV. NA
NORMAL WATER ELEV. , EXTREME HIGHWATER ELEV.
DATE: 9-30-2024
HOW OBTAINED: FIELD EVIDENCE
BACKWATER FROM WHAT STREAM (IF APPLICABLE):
EXISTING STRUCTURE CONDITION: N/A .
SEE PRESENT LAYOUT FOR STREAM ALIGNMENT AND CROSS-SECTION LOCATIONS.
REMARKS: BOTH CULVERTS WERE DAMAGED DURING FLOOD EVENT.
CONTRACTOR AND TDOT TO EVALUATE EXISITNG CONDITION OF REMAINING CULVERT.

SEALED BY

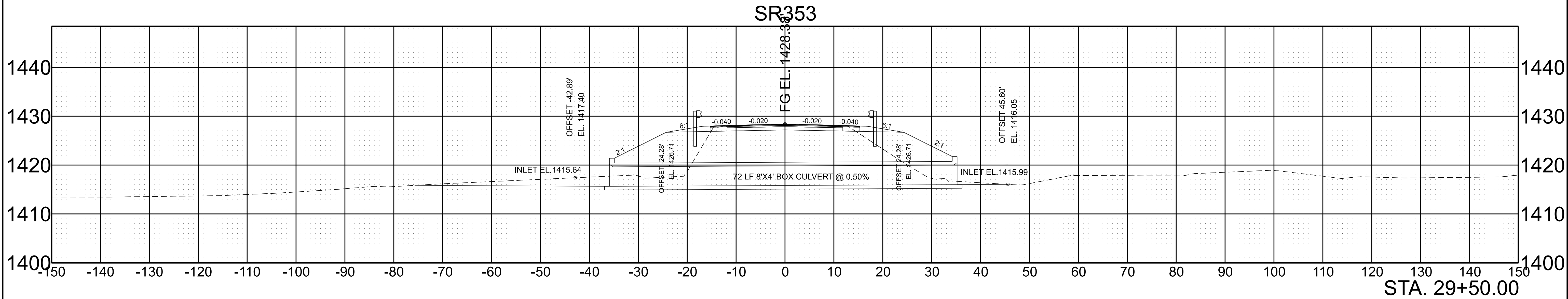
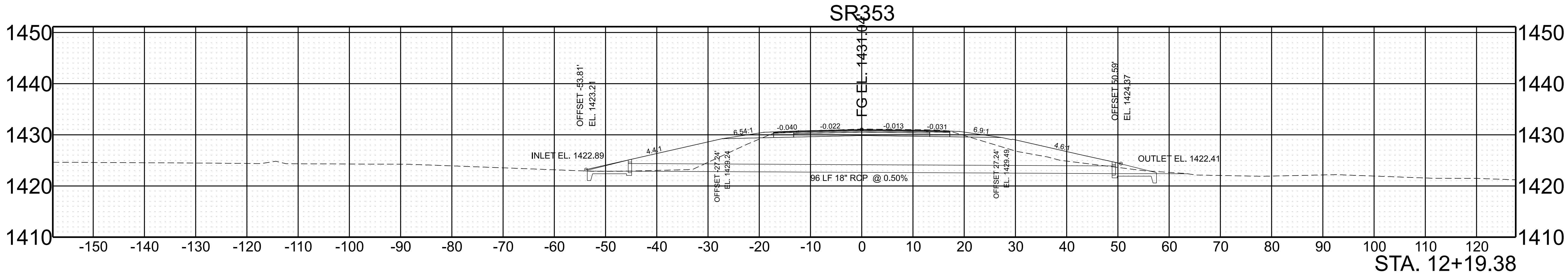
COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00000 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DRAINAGE
MAP

STA. 27+50.00 TO E.O.P.
SCALE: 1" = 100'

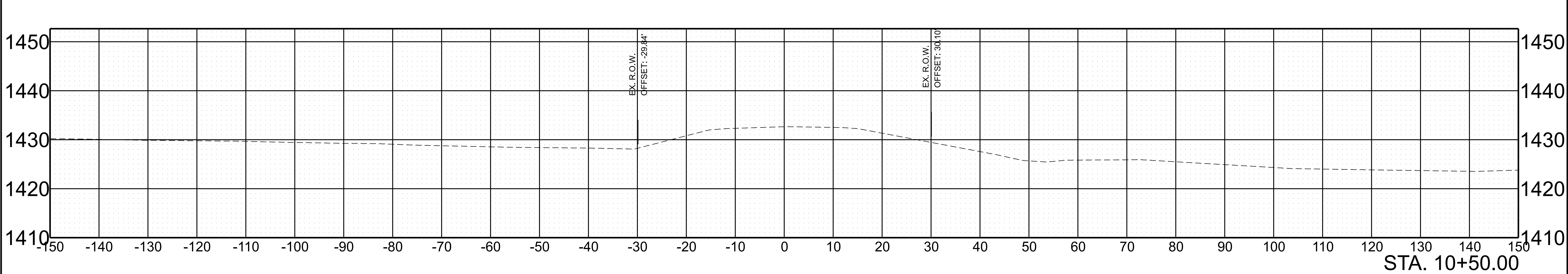
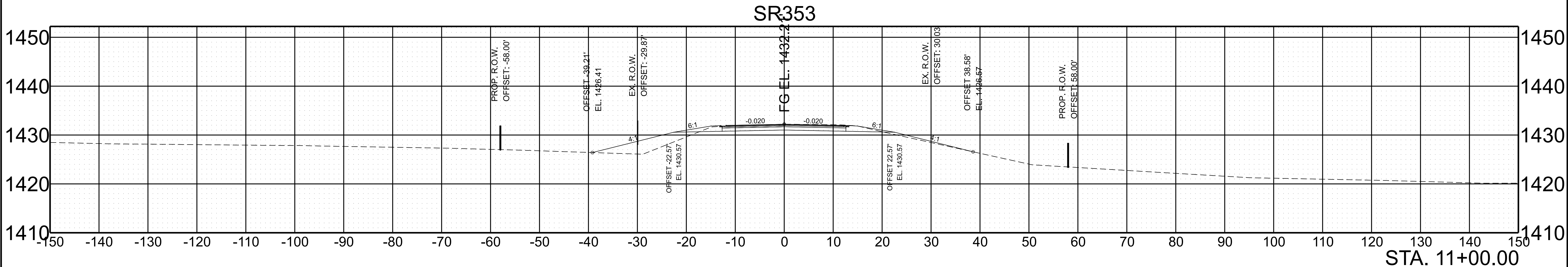
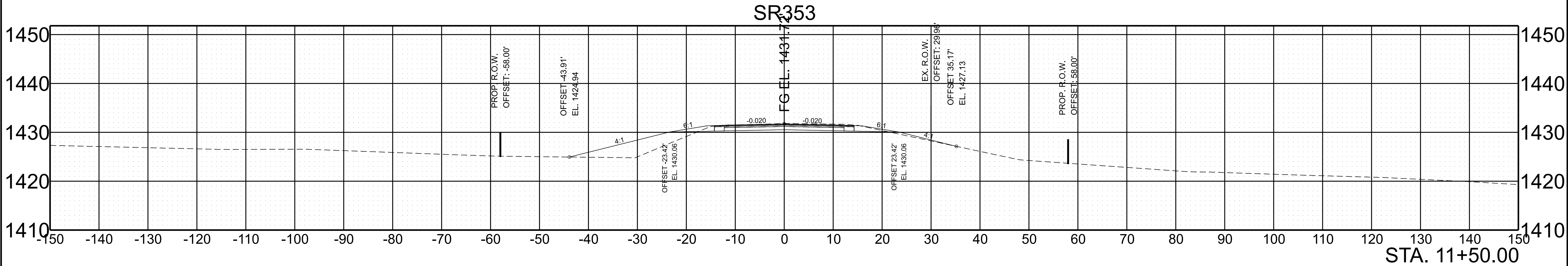
TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	9



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

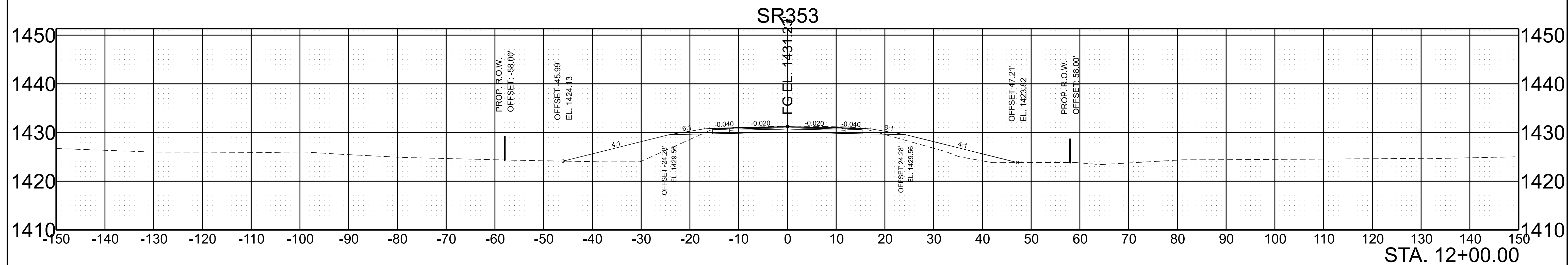
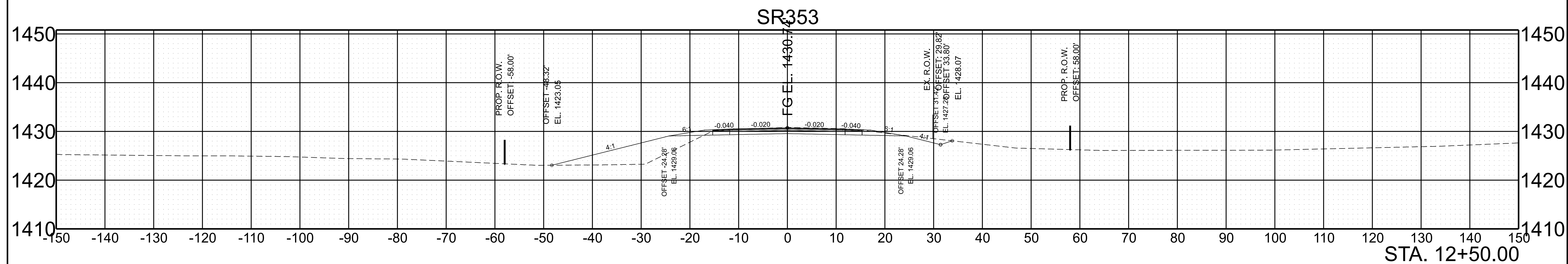
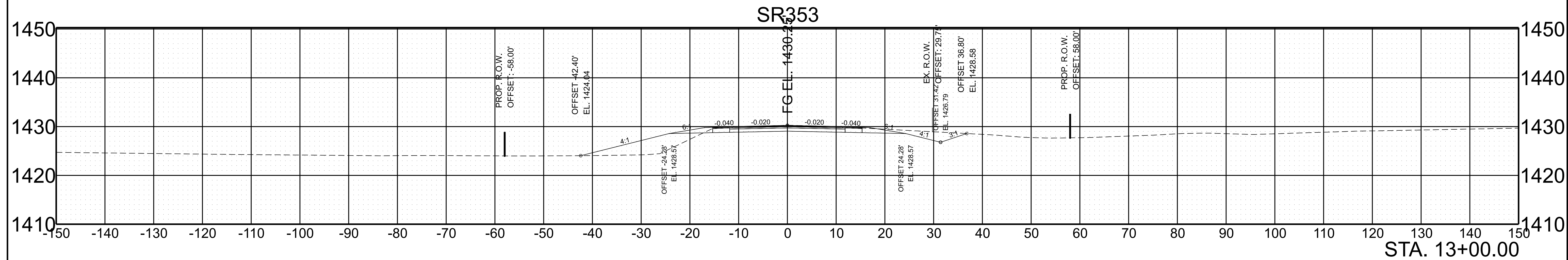
BEGIN STA. 29+50.00
END STA. 29+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	10



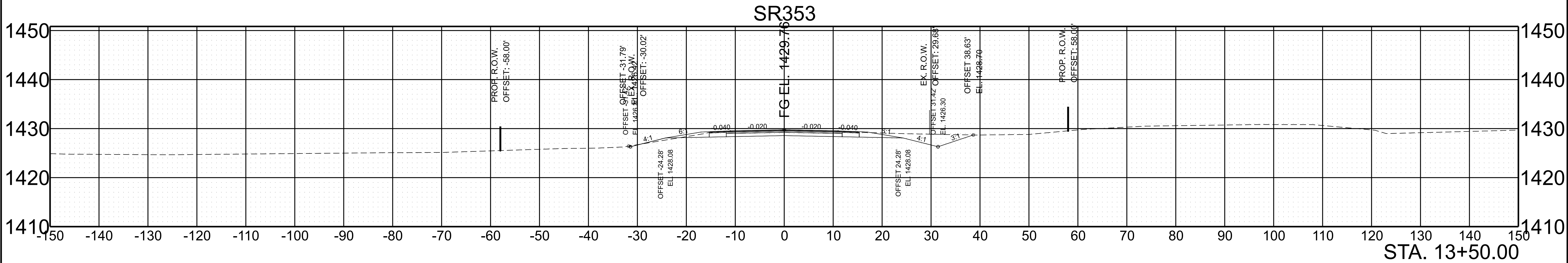
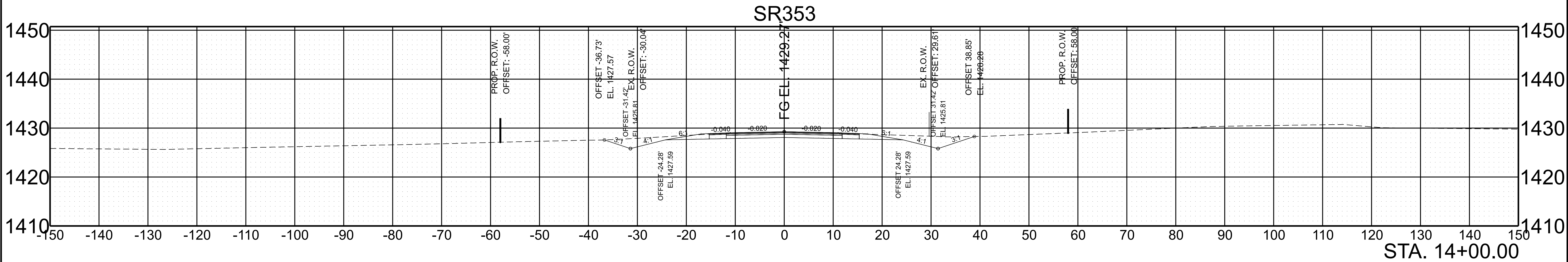
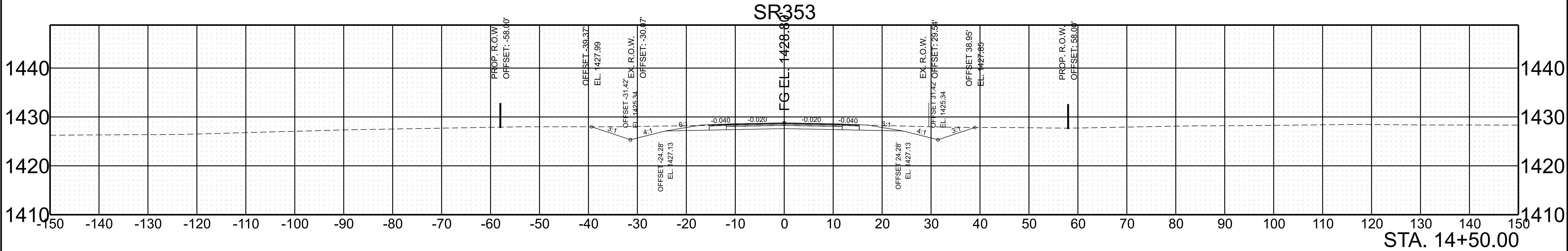
SCALE: 1"=10' HORIZ.	BEGIN STA. 10+50.00
1"=10' VERT.	END STA. 11+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	11



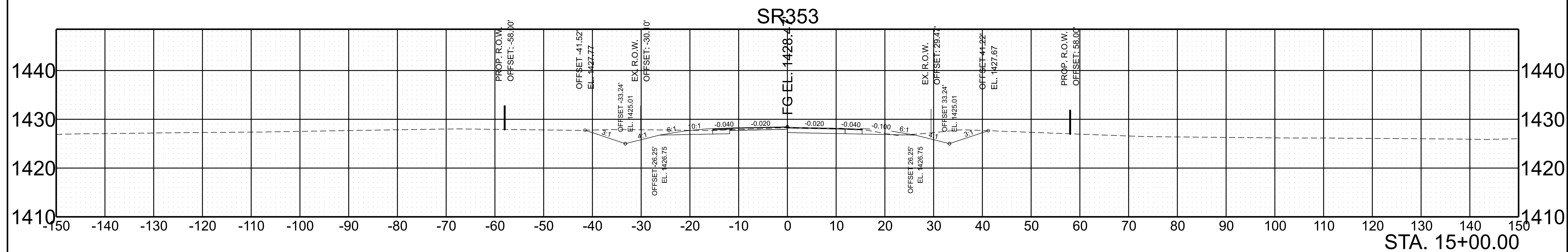
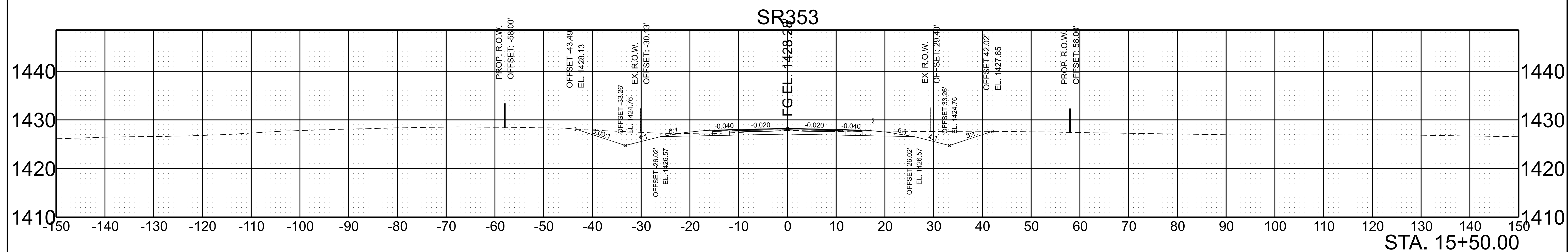
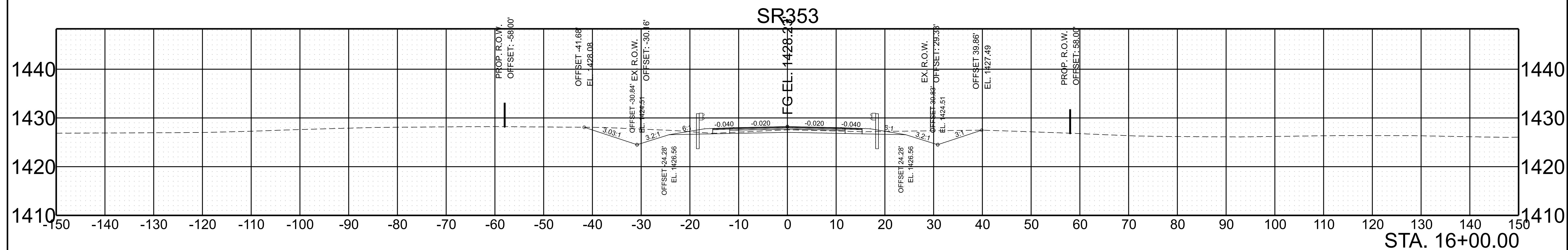
SCALE: 1"=10' HORIZ.	BEGIN STA. 12+00.00
1"=10' VERT.	END STA. 13+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	12



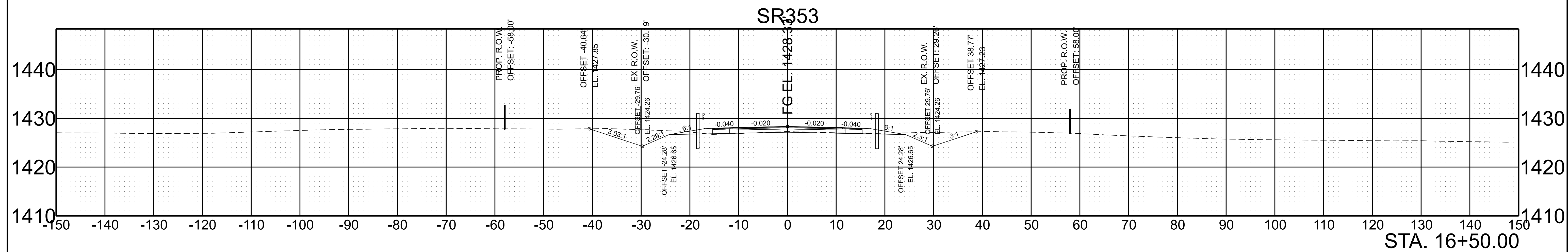
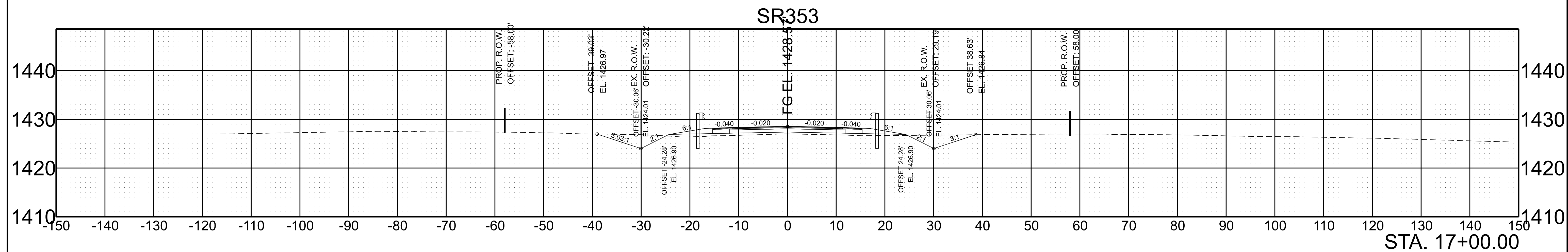
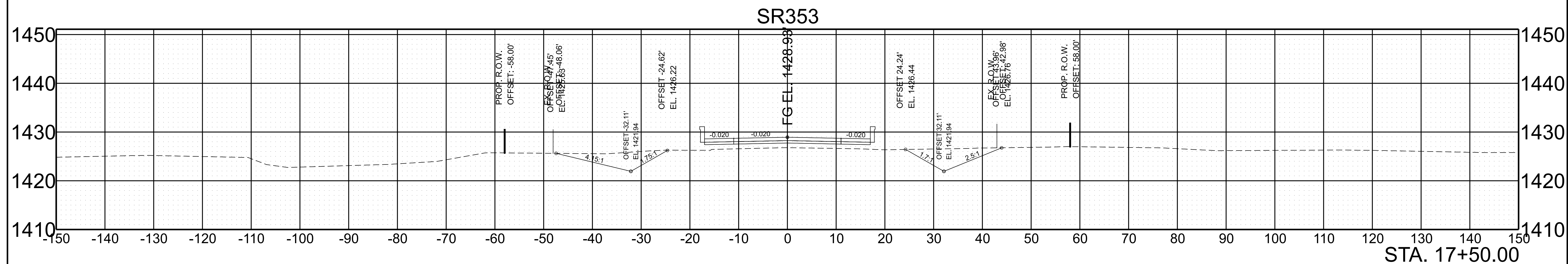
SCALE:	1"=10' HORIZ.	BEGIN STA. 13+50.00
	1"=10' VERT.	END STA. 14+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	13



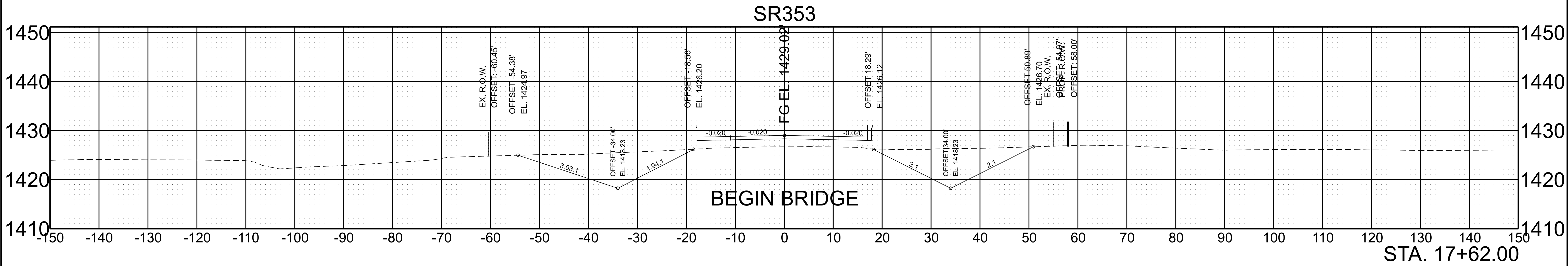
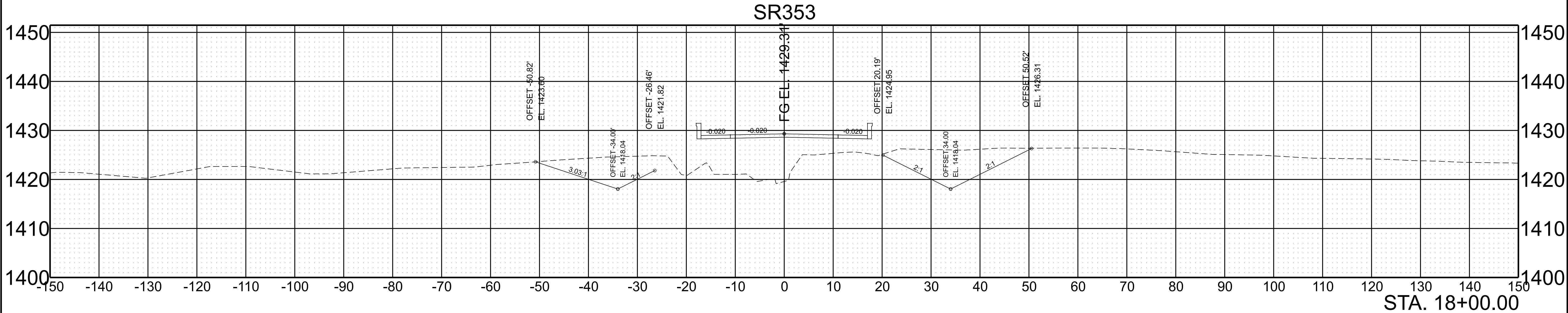
SCALE: 1"=10' HORIZ.	BEGIN STA. 15+00.00
1"=10' VERT.	END STA. 16+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	14



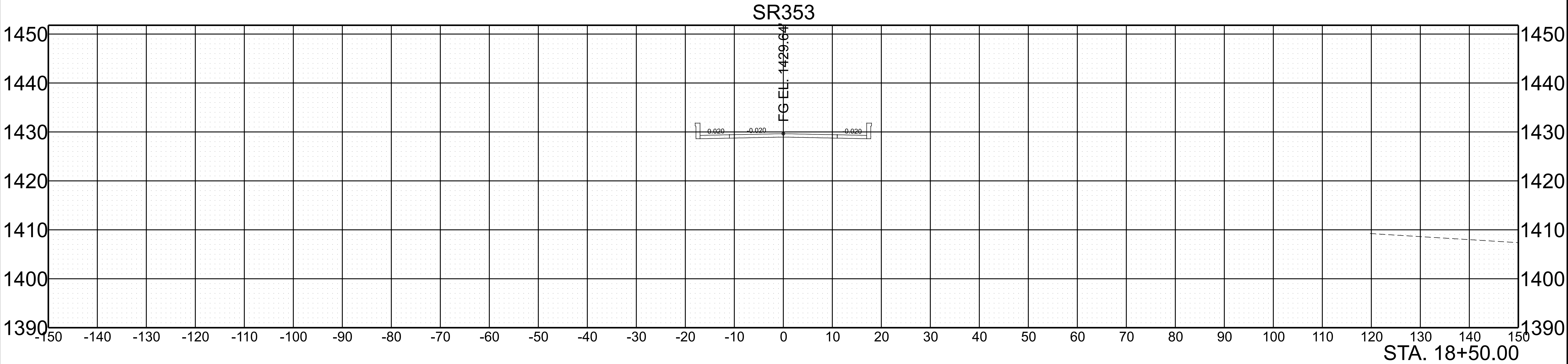
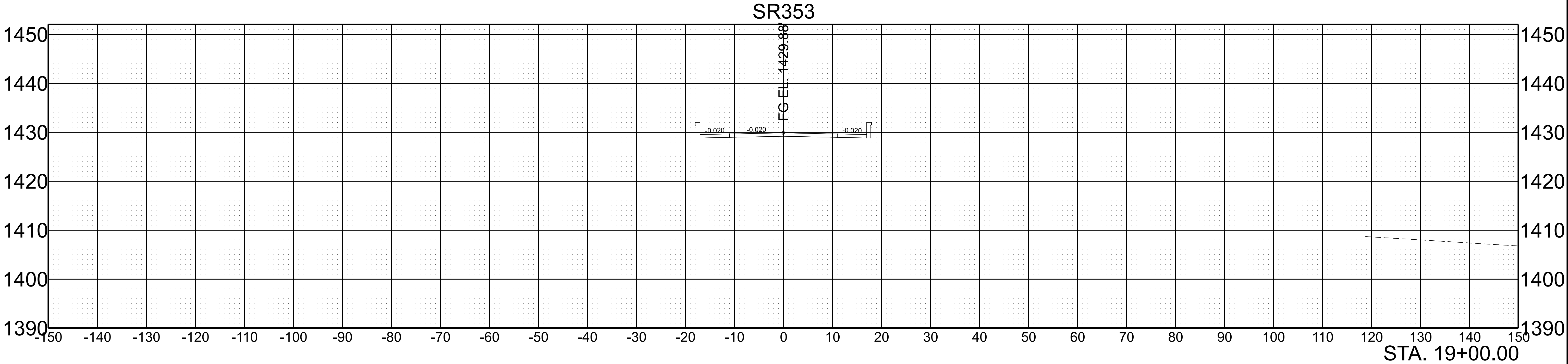
SCALE: 1"=10' HORIZ.	BEGIN STA. 16+50.00
1"=10' VERT.	END STA. 17+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	15



SCALE:	1"=10' HORIZ.	BEGIN STA. 17+62.00
	1"=10' VERT.	END STA. 18+00.00

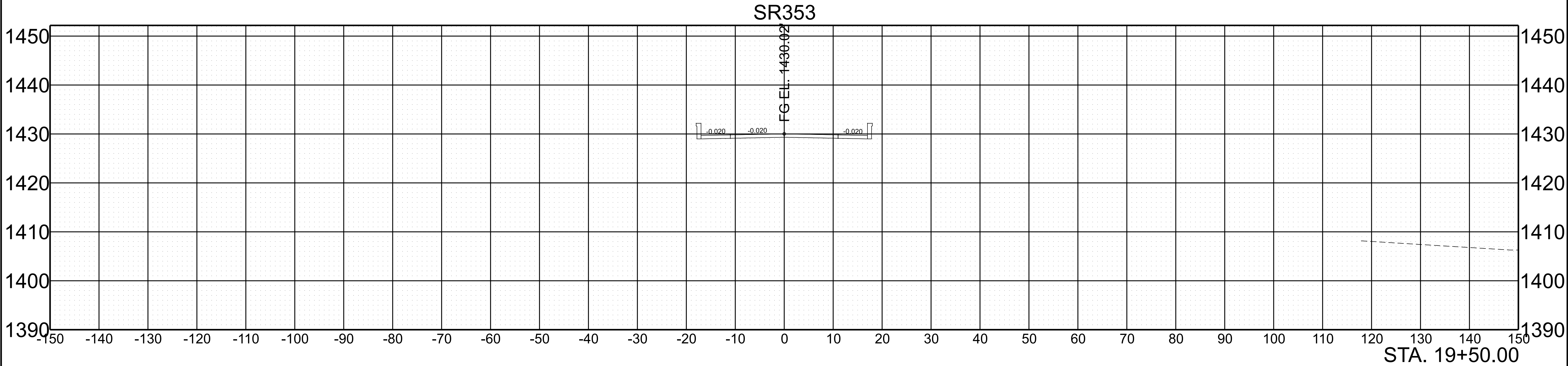
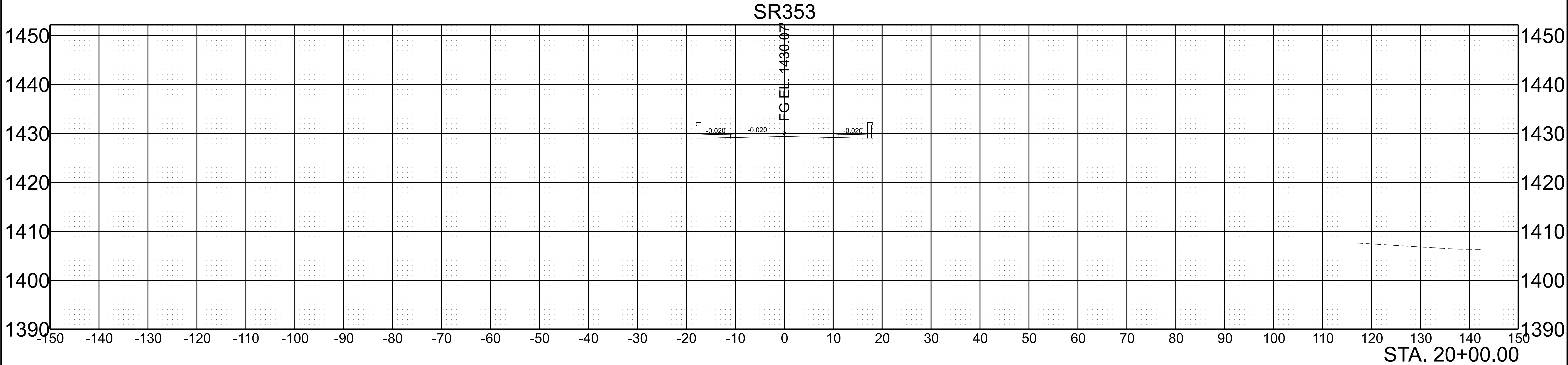
TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	16



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

BEGIN STA. 18+50.00
END STA. 19+00.00

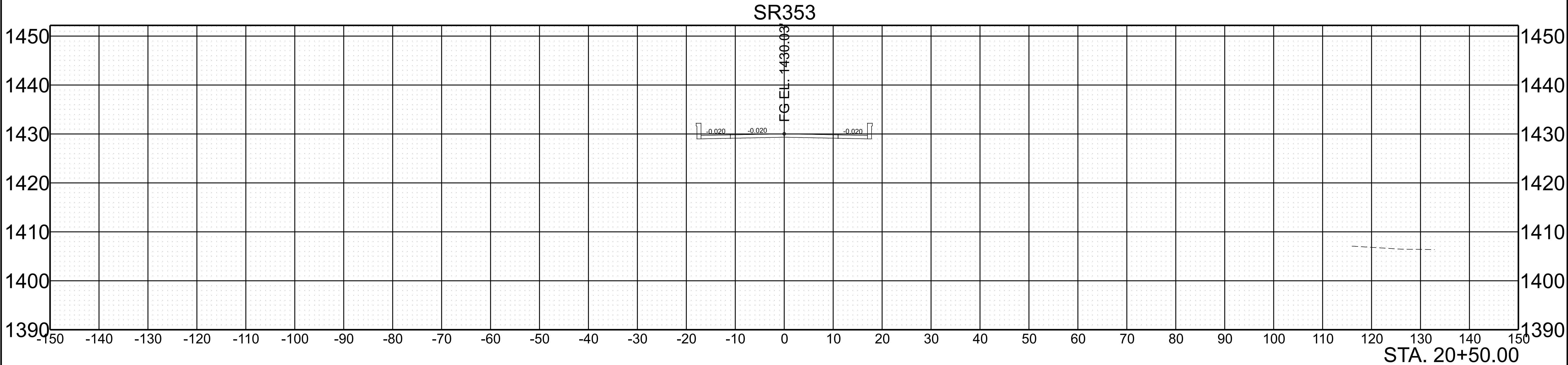
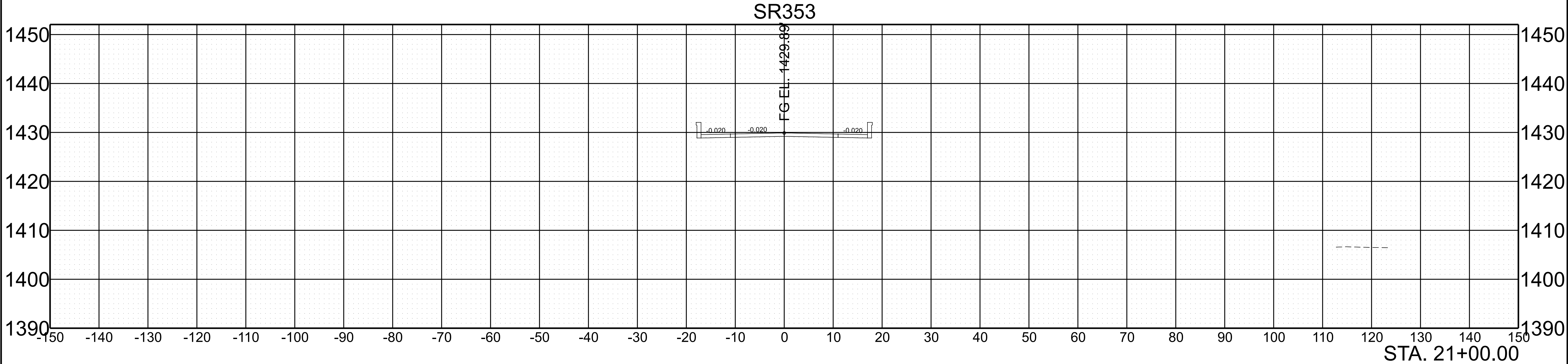
TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	17



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

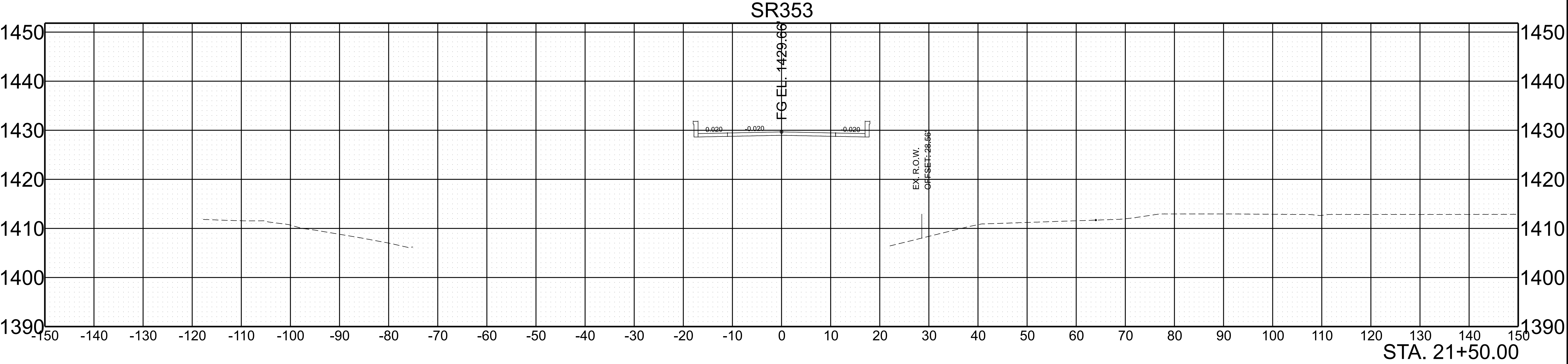
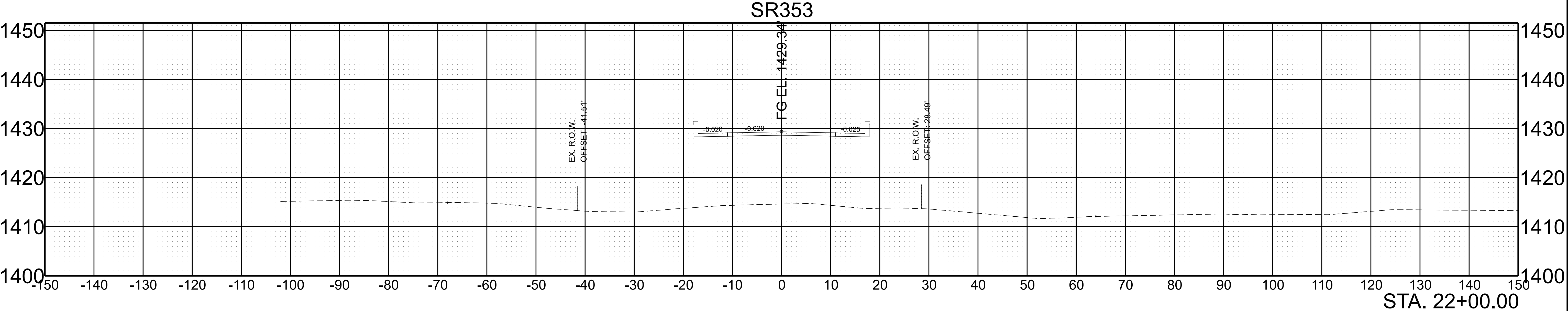
BEGIN STA. 19+50.00
END STA. 20+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	18



SCALE: 1"=10' HORIZ.	BEGIN STA. 20+50.00
1"=10' VERT.	END STA. 21+00.00

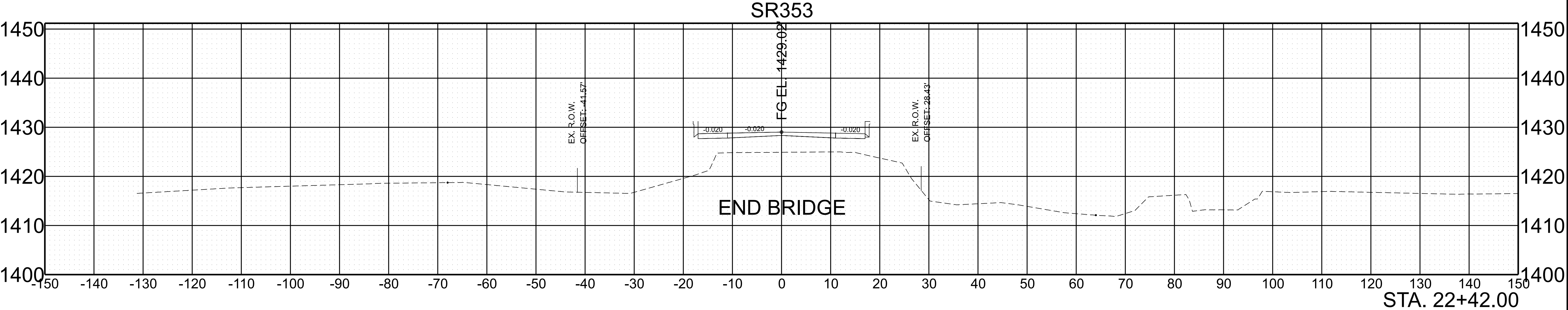
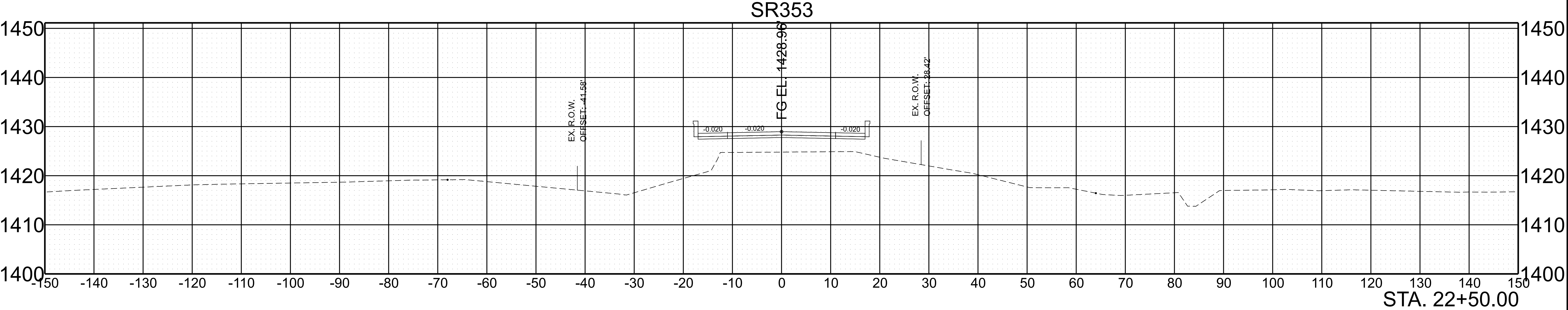
TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	19



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

BEGIN STA. 21+50.00
END STA. 22+00.00

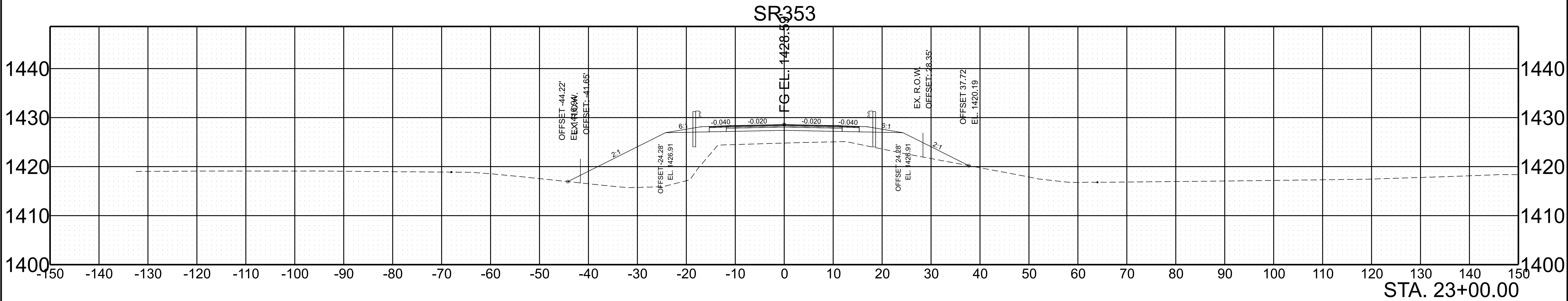
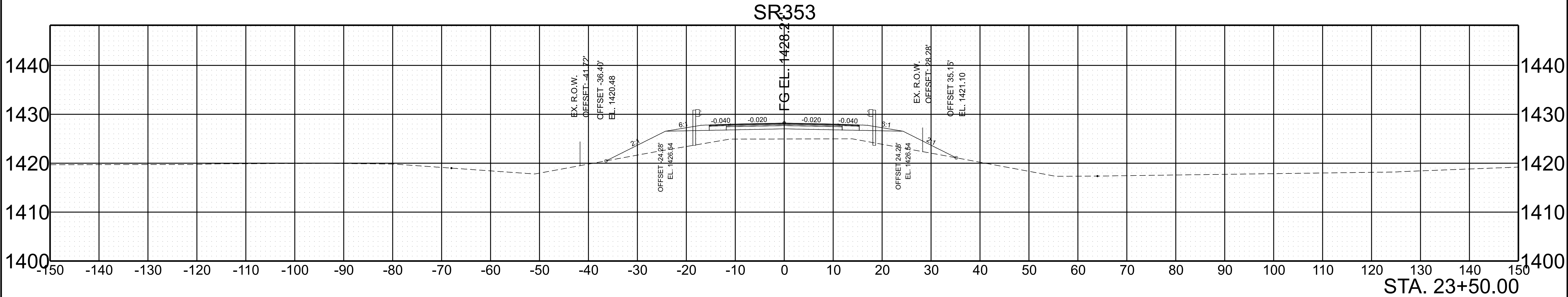
TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	20



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

BEGIN STA. 22+42.00
END STA. 22+50.00

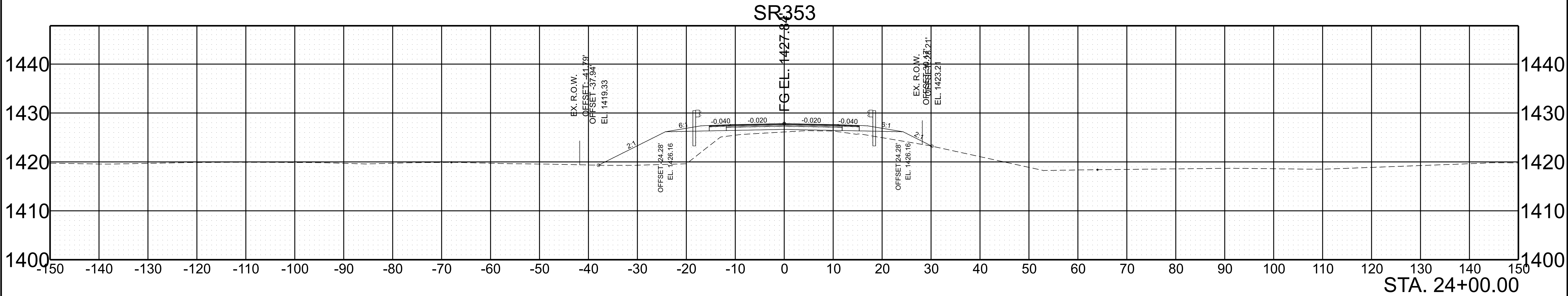
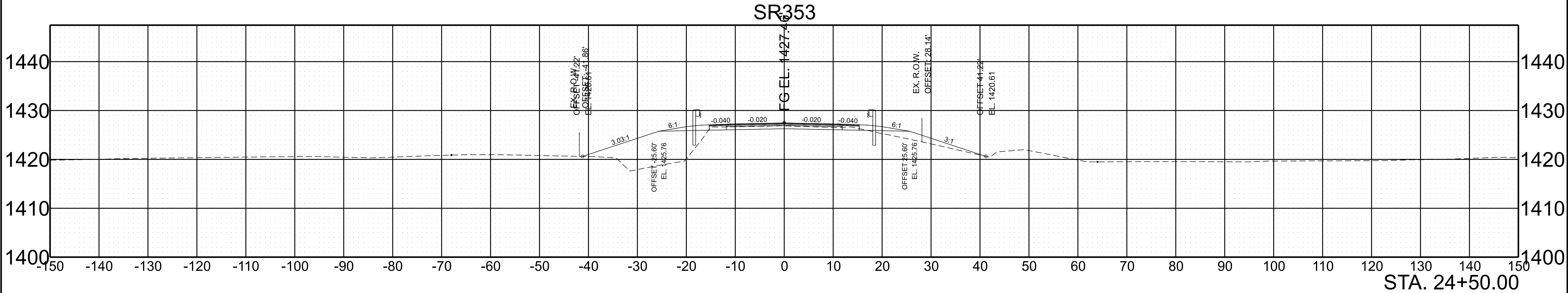
TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	21



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

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

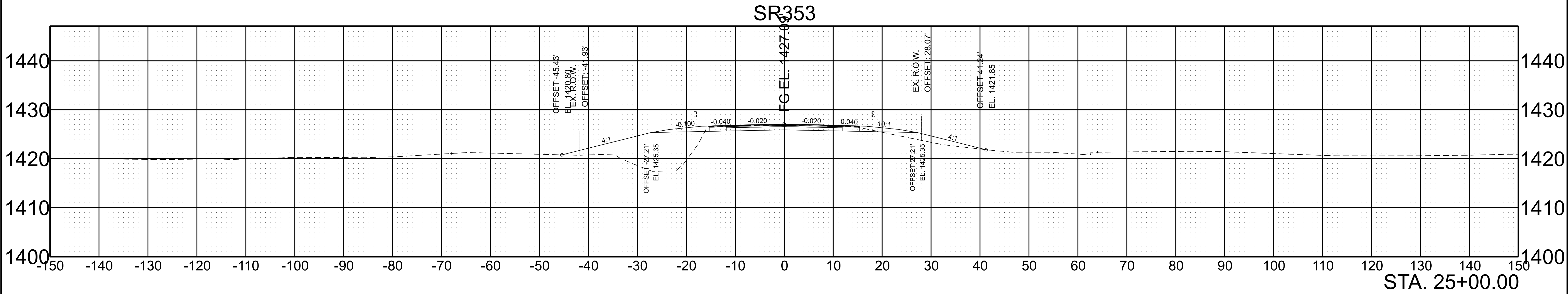
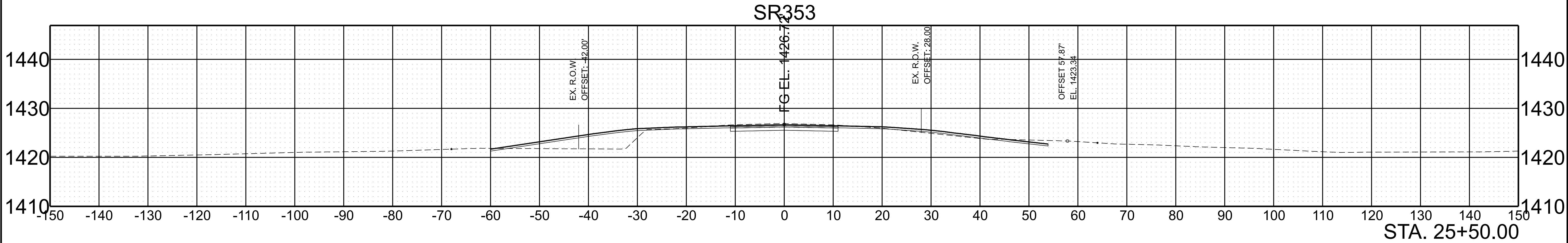
TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	22



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

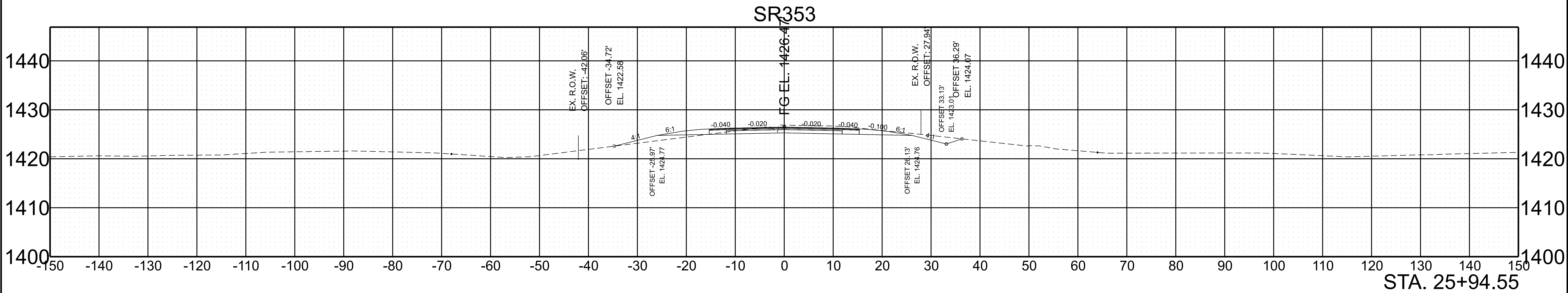
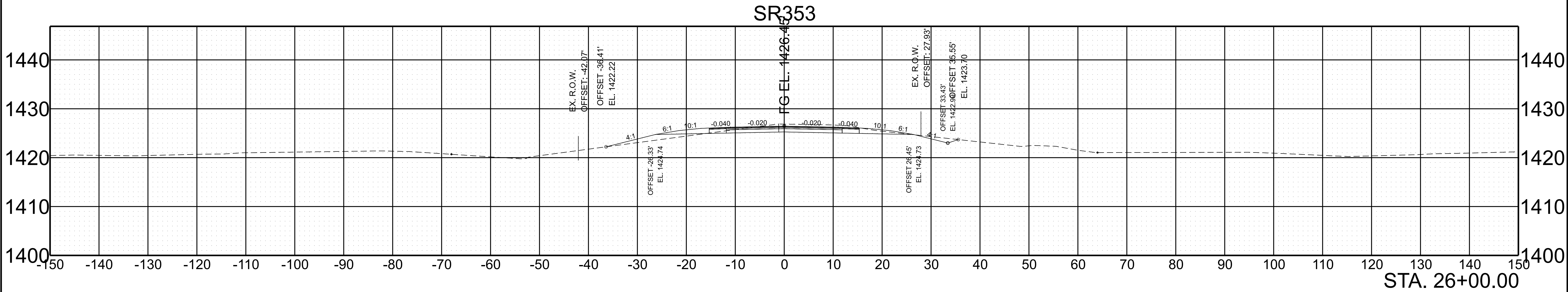
BEGIN STA. 24+00.00
END STA. 24+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	23



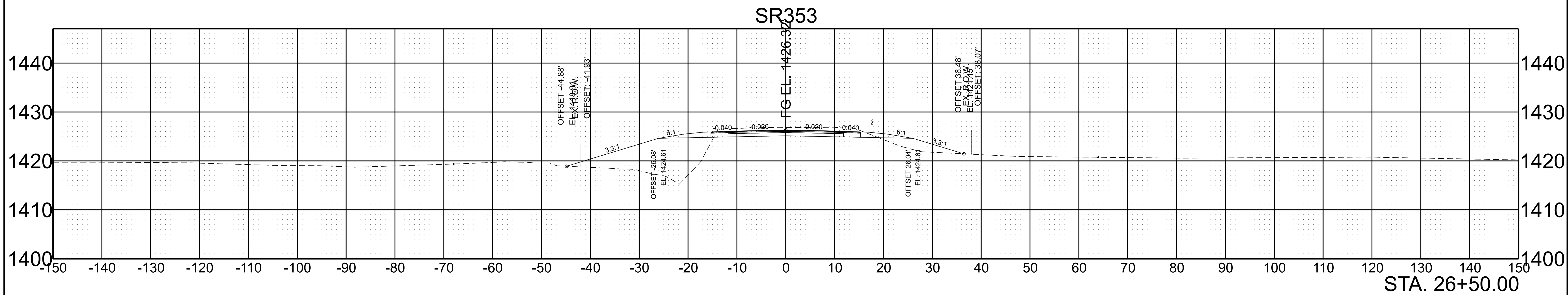
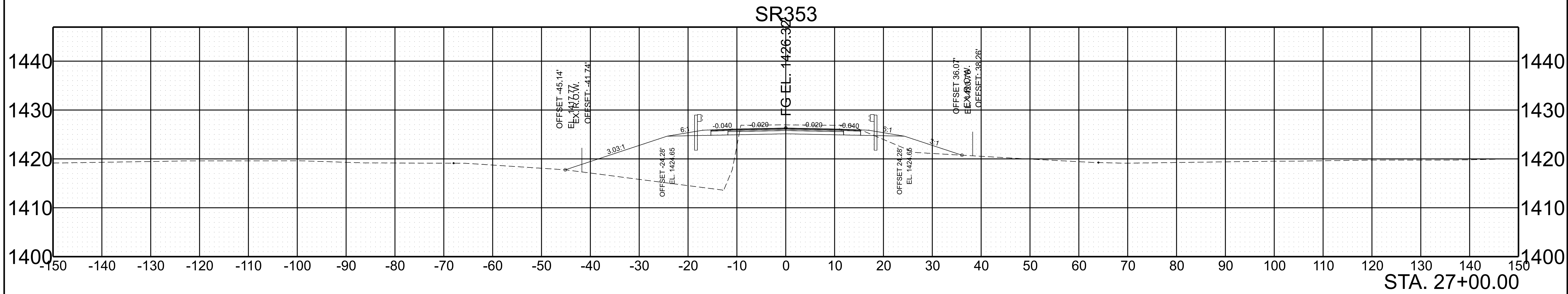
SCALE: 1"=10' HORIZ. 1"=10' VERT.	BEGIN STA. 25+00.00 END STA. 25+94.55
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TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	24



SCALE: 1"=10' HORIZ.	BEGIN STA. 25+94.55
1"=10' VERT.	END STA. 26+00.00

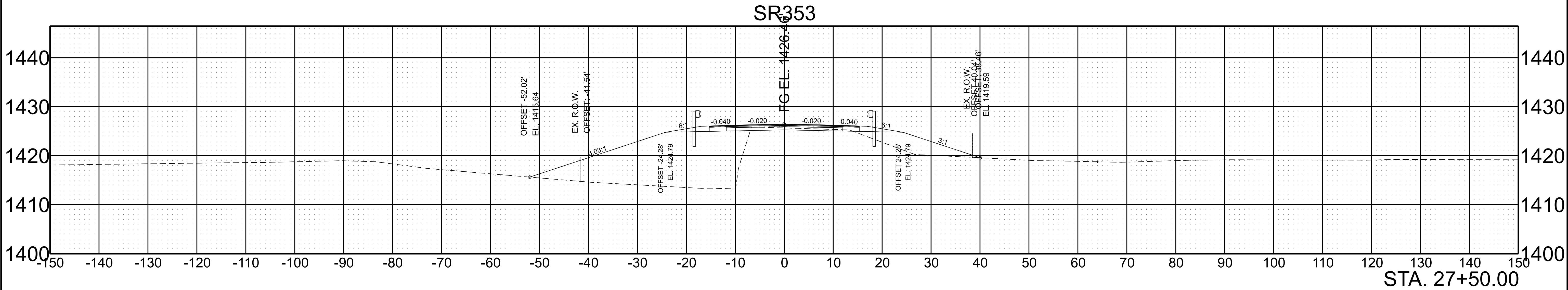
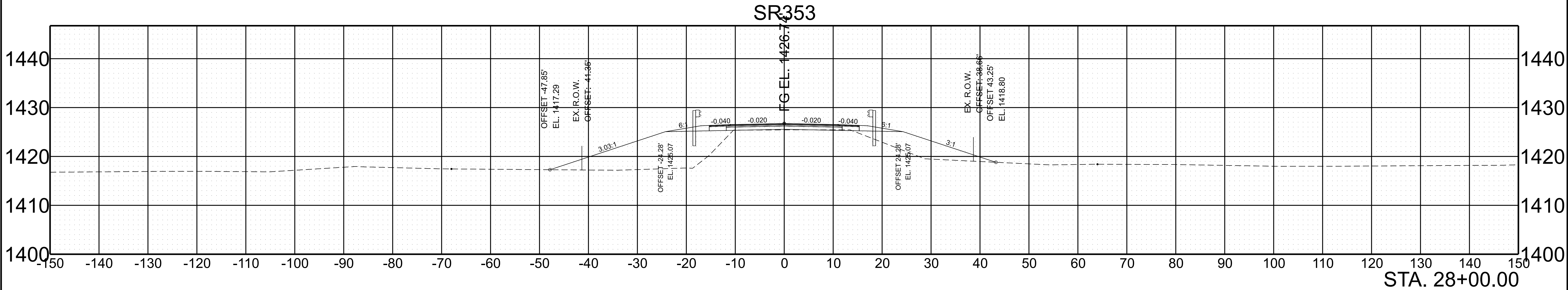
TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	25



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

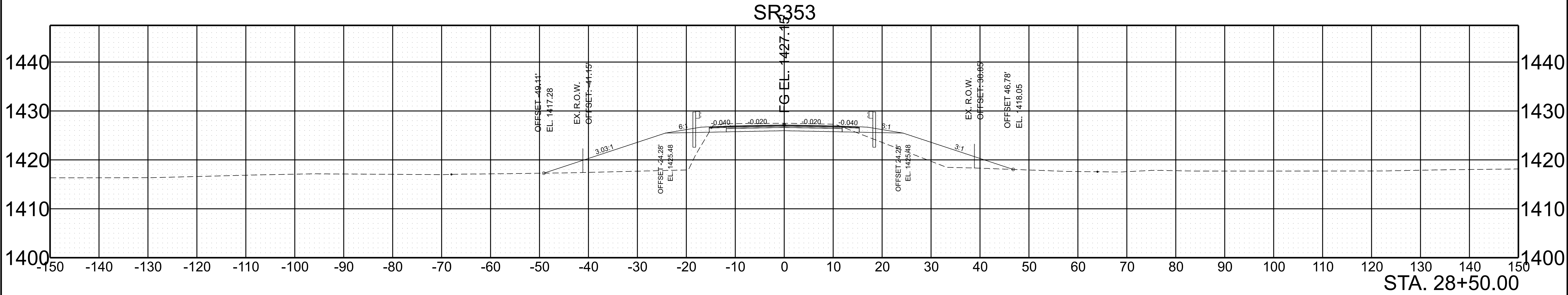
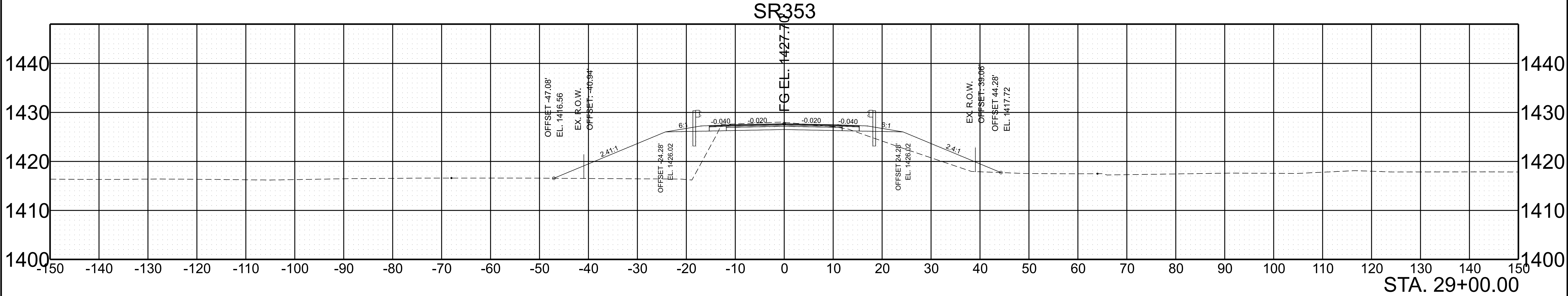
BEGIN STA. 26+50.00
END STA. 27+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	26



SCALE:	1"=10' HORIZ.	BEGIN STA. 27+50.00
	1"=10' VERT.	END STA. 28+00.00

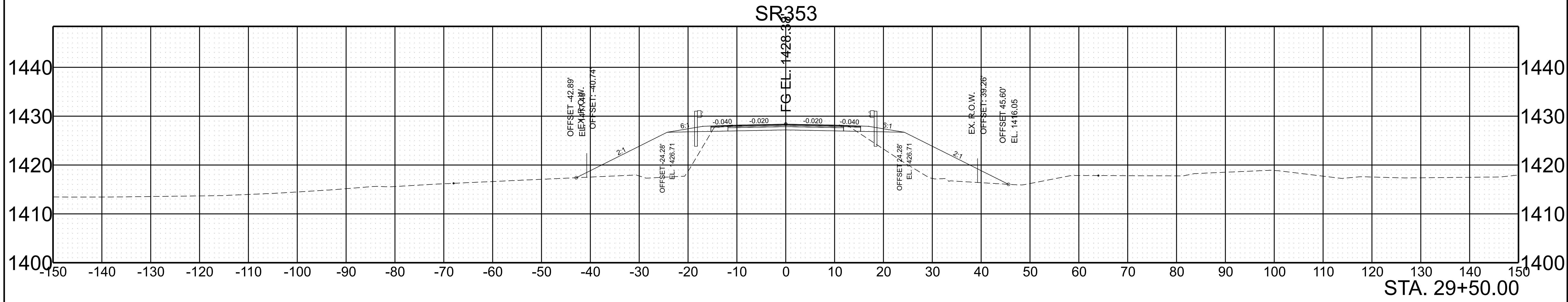
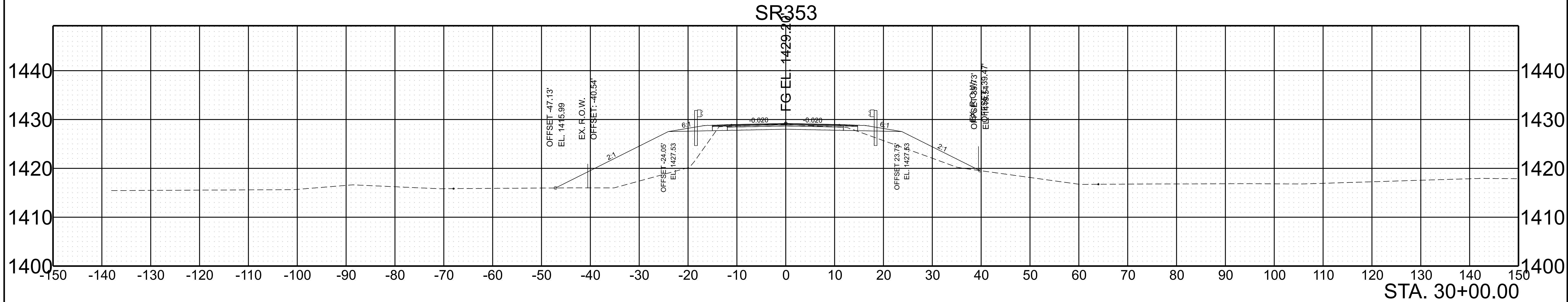
TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	27



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

BEGIN STA. 28+50.00
END STA. 29+00.00

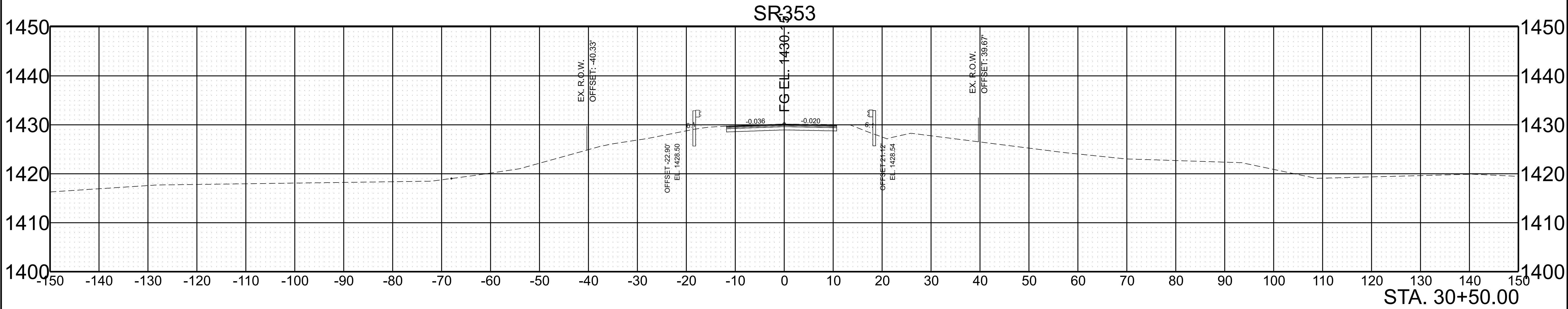
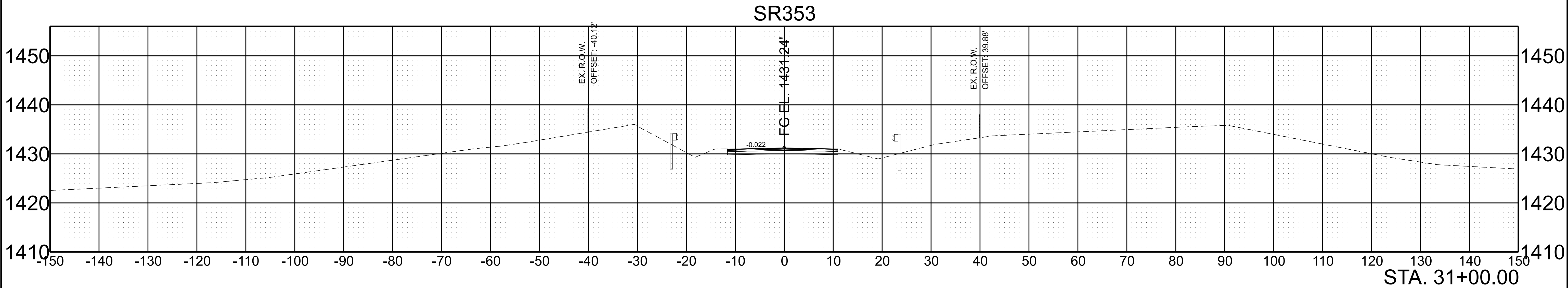
TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	28



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

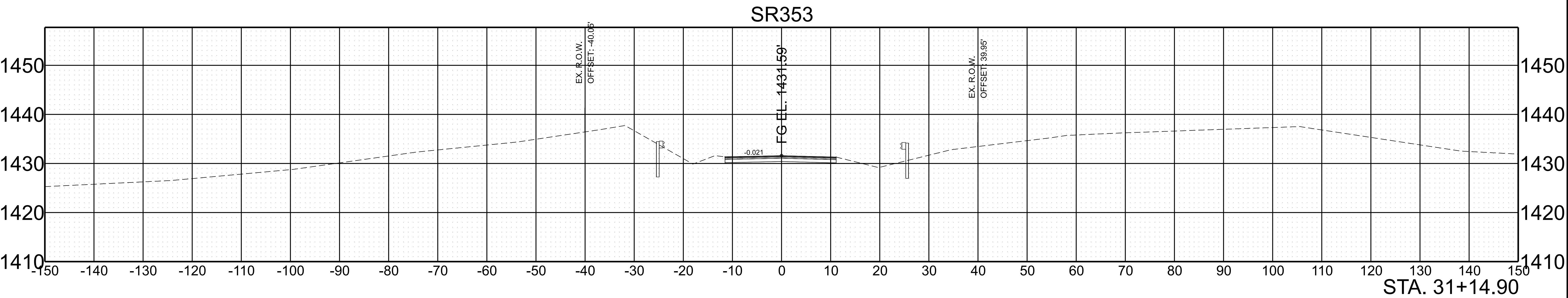
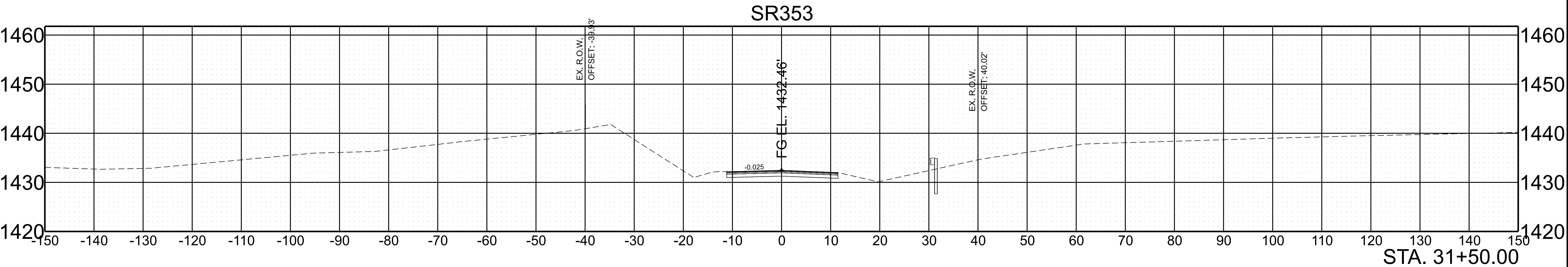
BEGIN STA. 29+50.00
END STA. 30+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	29



SCALE: 1"=10' HORIZ. 1"=10' VERT.	BEGIN STA. 30+50.00 END STA. 31+00.00
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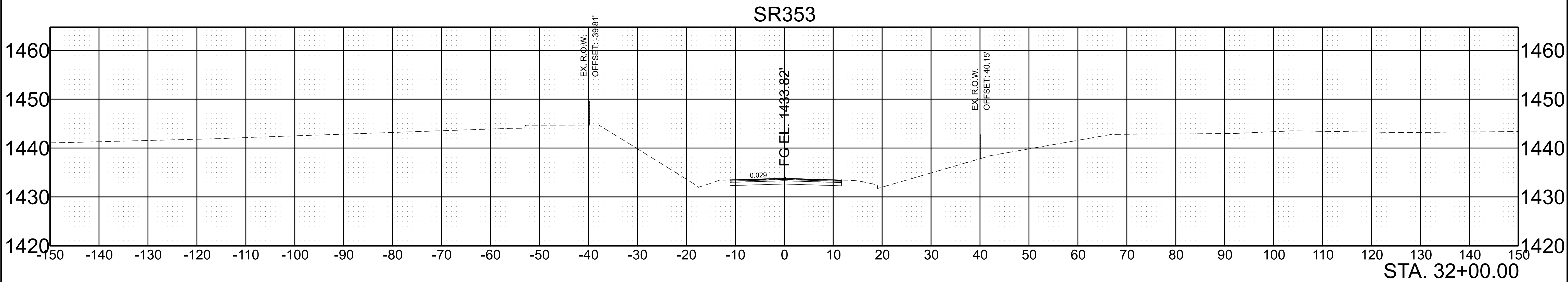
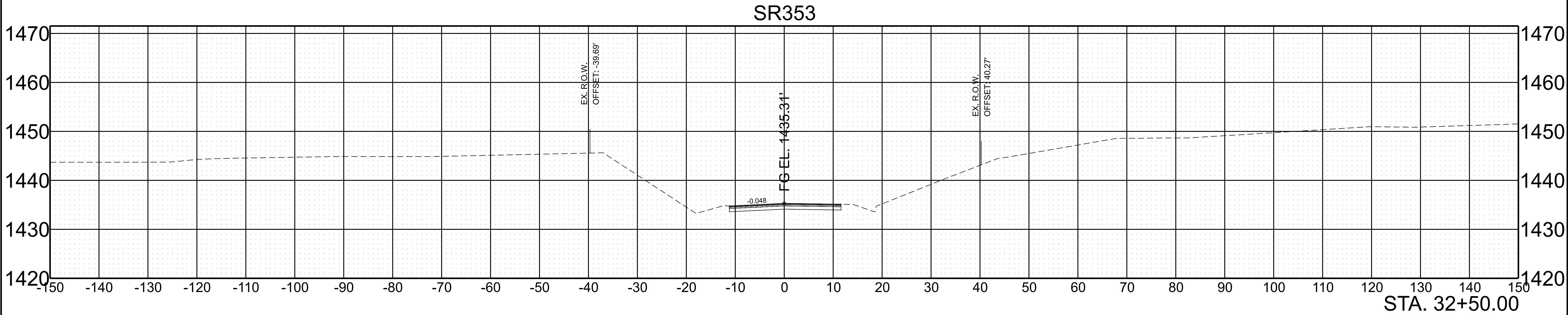
TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	30



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

BEGIN STA. 31+14.90
END STA. 31+50.00

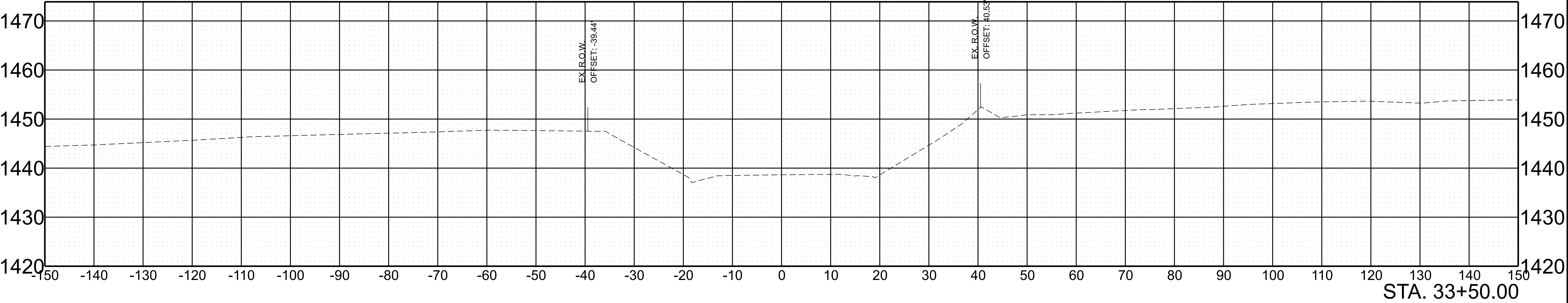
TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	31



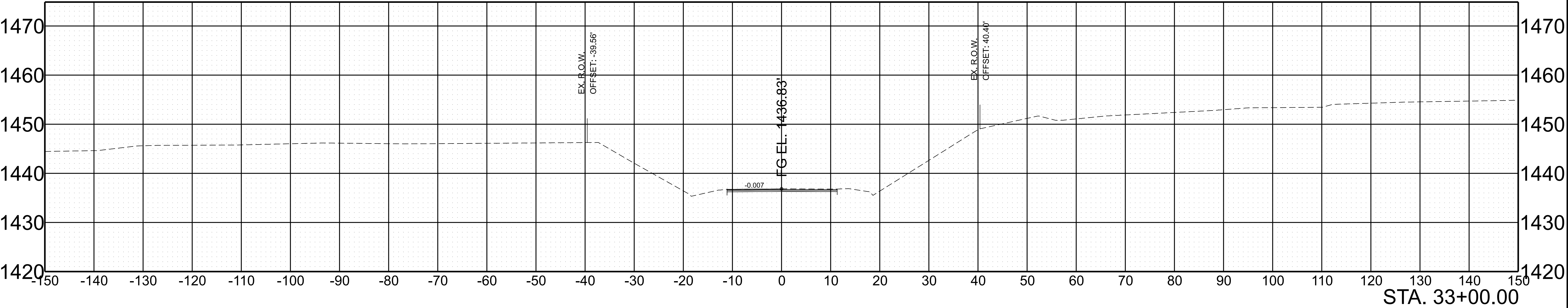
SCALE: 1"=10' HORIZ.
1"=10' VERT.

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
LINE & GRADE	2024	90S353-M1-005	32



SR353



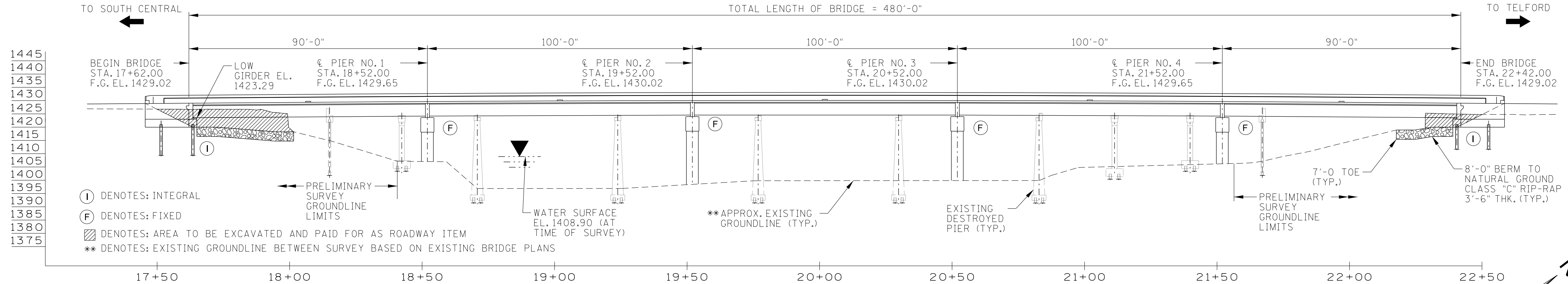
SCALE:	1"=10' HORIZ.	BEGIN STA. 33+00.00
	1"=10' VERT.	END STA. 33+50.00

(TO BE DETERMINED BY DESIGN BUILD TEAM)
DRAINAGE AREA = _____ SQ. MI.
DESIGN DISCHARGE (50 YR) = _____ CFS
WATER AREA PROVIDED
 BELOW EL. _____ = _____ FT²
50 YR BACKWATER = _____ FT @ EL. _____
50 YR VELOCITY = _____ FPS
ROADWAY OVERTOPPING EL. = _____
50 YR DISCHARGE = _____ CFS @ EL. _____
100 YR DISCHARGE = _____ CFS @ EL. _____

(LEFT & RIGHT SIDE)

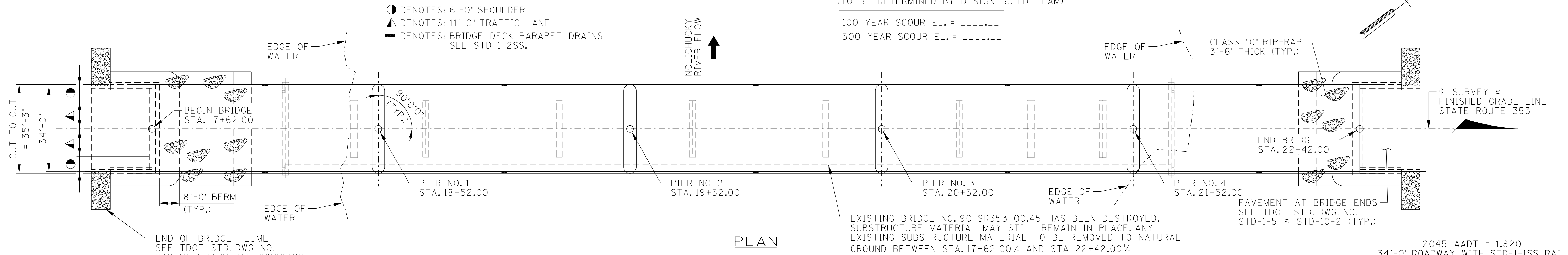
STA. 18+07
STA. 19+02
STA. 20+02
STA. 21+22
STA. 21+97

PROJECT NO.		YEAR		SHEET NO.	
90S353-M1-005		2024		B1	
REVISIONS					
NO.	DATE	BY	BRIEF DESCRIPTION		
1	11-21-2024	BGW	REVISED LOW GIRDER ELEVATION		
	- -				
	- -				
	- -				
	- -				



(TO BE DETERMINED BY DESIGN BUILD TEAM)

100 YEAR SCOUR EL. = _____
500 YEAR SCOUR EL. = _____

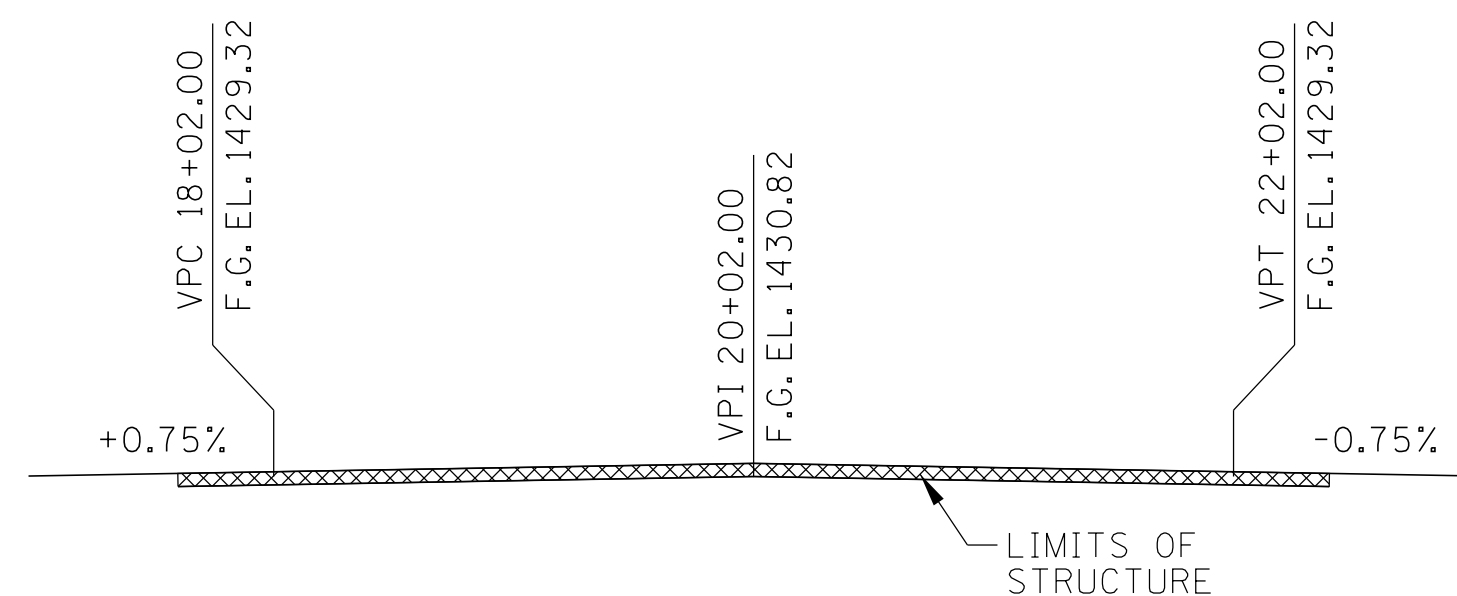


2045 AADT = 1,820
34'-0" ROADWAY WITH STD-1-1SS RAIL
DESIGN SPEED = 50 MPH

1. CONSTRUCTION SPECIFICATIONS; TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (JANUARY 1, 2021 EDITION.)
2. DESIGN SPECIFICATIONS; 9TH EDITION (2020) AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND THE 2ND EDITION (2011) AASHTO GUIDE SPECIFICATIONS FOR LRFD SEISMIC BRIDGE DESIGN WITH INTERIMS.
3. LOADING; HL-93 LIVE LOADING; SEISMIC CATEGORY "B" WITH $A_s = 0.186$, $S_{ds} = 0.368$, $S_{d1} = 0.152$ (1000 YEAR RETURN PERIOD); DEAD LOADS TO INCLUDE 35 LB/SQ. FT. FOR FUTURE WEARING SURFACE.
4. SUPERSTRUCTURE: TO CONSIST OF 5 SPANS OF CONTINUOUS PRESTRESS PRECAST BT-54 WITH COMPOSITE CONCRETE SLAB.
5. CONCRETE; CLASS A $f'c=3000$ PSI, CLASS D $f'c=4000$ PSI FOR BRIDGE DECK.
6. REINFORCING STEEL: TO BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. EPOXY COAT ALL SLAB STEEL.
7. BRIDGE DECK SURFACE FINISH: TO BE IN ACCORDANCE WITH METHOD 1 IN ARTICLE 604.22 OF THE STANDARD SPECIFICATIONS.
8. USE TDOT STD. DWG. NO. STD-1-1SS FOR PARAPETS.

9. TEXTURE COATING: TO BE GRAY (36440) EXCEPT TRAFFIC FACE AND TOP OF PARAPET TO BE WHITE (37886).
10. EXCAVATION: TO BE BASED ON FINAL PROFILE AT ABUTMENTS AND EXISTING GROUND AT PIERS.
11. RIP-RAP: MACHINED RIP-RAP SHALL BE CLASS "C" IN ACCORDANCE WITH SECTION 709 OF THE STANDARD SPECIFICATIONS AND SHALL BE MEASURED AND PAID FOR UNDER ROADWAY ITEM NO. 709-05.09.
12. FLUMES AT BRIDGE ENDS ARE REQUIRED.
13. BRIDGE DECK DRAINS ARE REQUIRED.
14. EXISTING BRIDGE DESCRIPTION (DESTROYED): BRIDGE NO. 90-SR353-00.45, TOTAL LENGTH = 354'-6", 5 SPANS AT 28'-6" AND 4 SPANS AT 53'-0", CONTINUOUS CONCRETE DECK GIRDER BRIDGE WITH CONCRETE SUBSTRUCTURES.
15. STREAM CHANNEL: ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G. PIER/BENT FOOTING, RIP-RAP PLACEMENT, 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 TEMPORARY DIVERSION CHANNELS (EC-STR-31).

(STATE ROUTE 353)
N.T.S.



PIN NO.:	<u>135866.08</u>	
DESIGN BY:	<u>GRESHAM SMITH</u>	DATE: <u>10/2024</u>
DRAWN BY:	<u>B. WELLS</u>	DATE: <u>10/2024</u>
SUPERVISED BY:	<u>D. MCCRARY</u>	DATE: <u>10/2024</u>
CHECKED BY:	<u>A. ALLSBROOK</u>	DATE: <u>10/2024</u>



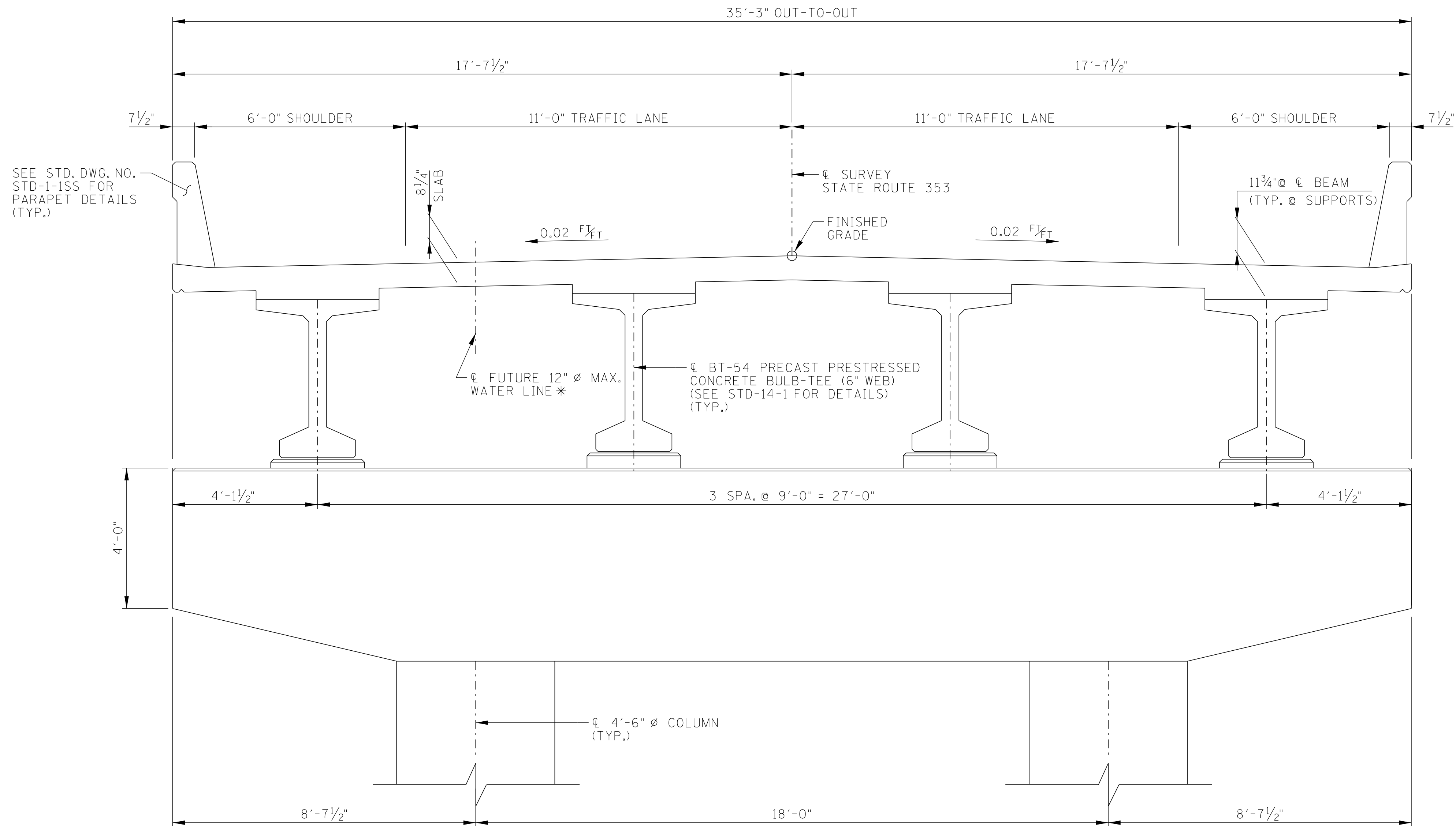
CONCEPTUAL PLANS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRELIMINARY LAYOUT
STATE ROUTE 353 OVER
NOLICHUCKY RIVER
BRIDGE ID. NO. 90S23860001
STA.20+02.00
LOG MILE 0.45
WASHINGTON COUNTY
2024

SHEET 1 OF 2

CLASS "C" MACHINED RIP-RAP = 695 TONS

CONST. NO.:			
PROJECT NO.		YEAR	SHEET NO.
90S353-M1-005		2024	B2
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
- -	- -	- -	- -
- -	- -	- -	- -
- -	- -	- -	- -
- -	- -	- -	- -
- -	- -	- -	- -



TYPICAL CROSS-SECTION
(LOOKING FORWARD ON SURVEY)

* DENOTES: THE DESIGN BUILD TEAM SHALL MAKE PROVISIONS FOR THE FUTURE WATER LINE WITH REGARD TO THE DIAPHRAGMS AND ABUTMENT BACKWALLS

CONCEPTUAL
PLANS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRELIMINARY LAYOUT
STATE ROUTE 353 OVER
NOLICHUCKY RIVER
BRIDGE ID. NO. 90S23860001
STA.20+02.00
LOG MILE 0.45
WASHINGTON COUNTY
2024

PIN NO.: 135866.08
DESIGN BY: GRESHAM SMITH DATE: 10/2024
DRAWN BY: B. WELLS DATE: 10/2024
SUPERVISED BY: D. MCCRARY DATE: 10/2024
CHECKED BY: A. ALLSBROOK DATE: 10/2024

