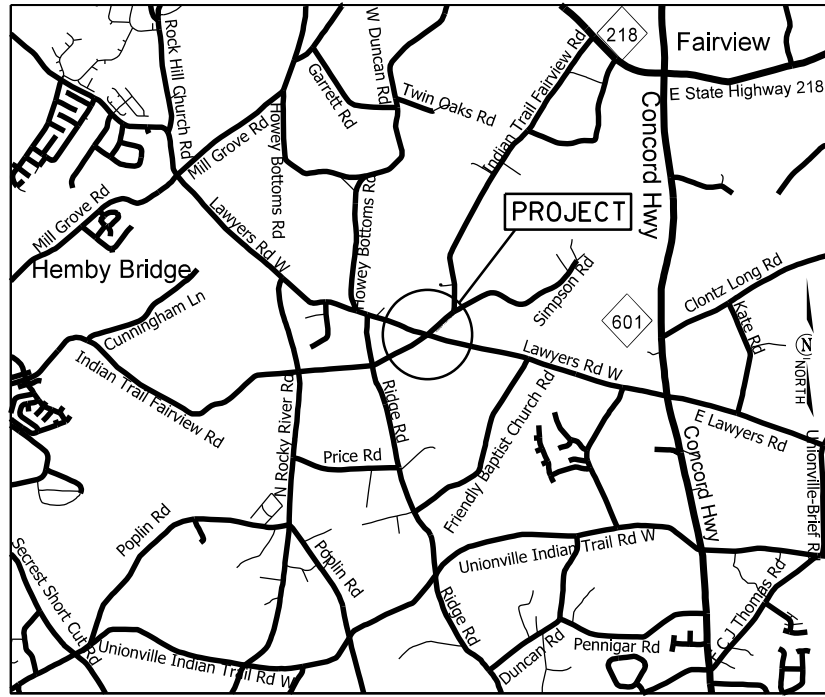


PROJECT: 44856.3.46 TIP: W-5710AR



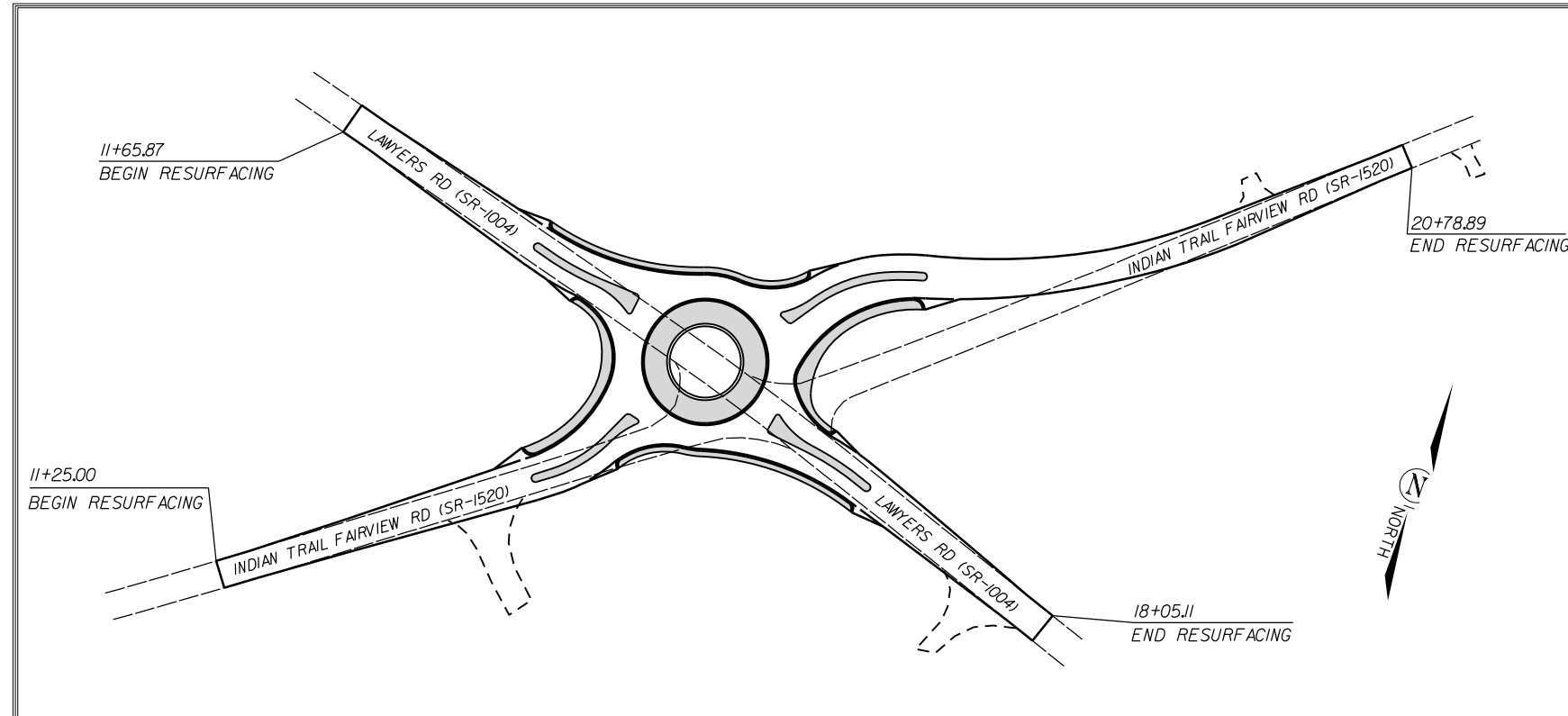
VICINITY MAP NOT TO SCALE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
UNION COUNTY

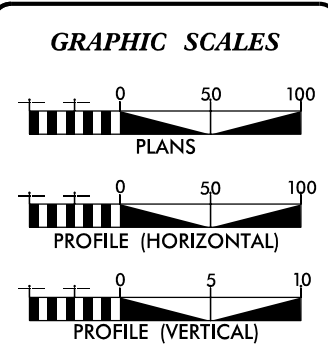
LOCATION: LAWYERS RD (SR-1004) AND INDIAN TRAIL-FAIRVIEW RD (SR-1532) NEAR FAIRVIEW

TYPE OF WORK: GRADING, DRAINAGE, CONCRETE CURB AND GUTTER, CONCRETE MONOLITHIC ISLANDS, MILLING, PAVING, AND THERMOPLASTIC PAVEMENT MARKING

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5710AR	1	
STATE PROJ. NO.	P.L. PROJ. NO.	DESCRIPTION	
44856.1.46	1004072	P.E.	
44856.2.46	1004072	R/W	
44856.3.46	1004072	CONST.	



CLEARING ON THIS PROJECT SHALL BE TO THE LIMITS ESTABLISHED BY METHOD III AS DESCRIBED IN THE NCDOT STANDARD DRAWINGS



DESIGN DATA

ADT	=	
ADT	=	
DHV	=	%
D	=	%
T	=	%
V	=	MPH

PROJECT LENGTH

LENGTH OF ROADWAY PROJECT	1593.13 FT	=	0.30	MILES
TOTAL LENGTH OF STATE PROJECT	1593.13 FT	=	0.30	MILES

Prepared In the Office of:
DIVISION OF HIGHWAYS
DIVISION TEN
DIVISION DESIGN / CONSTRUCT UNIT

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: SEPTEMBER 21, 2022	DONALD HARWARD PROJECT ENGINEER
LETTING DATE: NOVEMBER 15, 2023	CHAD BURRIS PROJECT DESIGN ENGINEER



ROADWAY DESIGN ENGINEER
08/11/2023

DocuSigned by:
Travis Preslar
A53C1AC7A1FF47B...

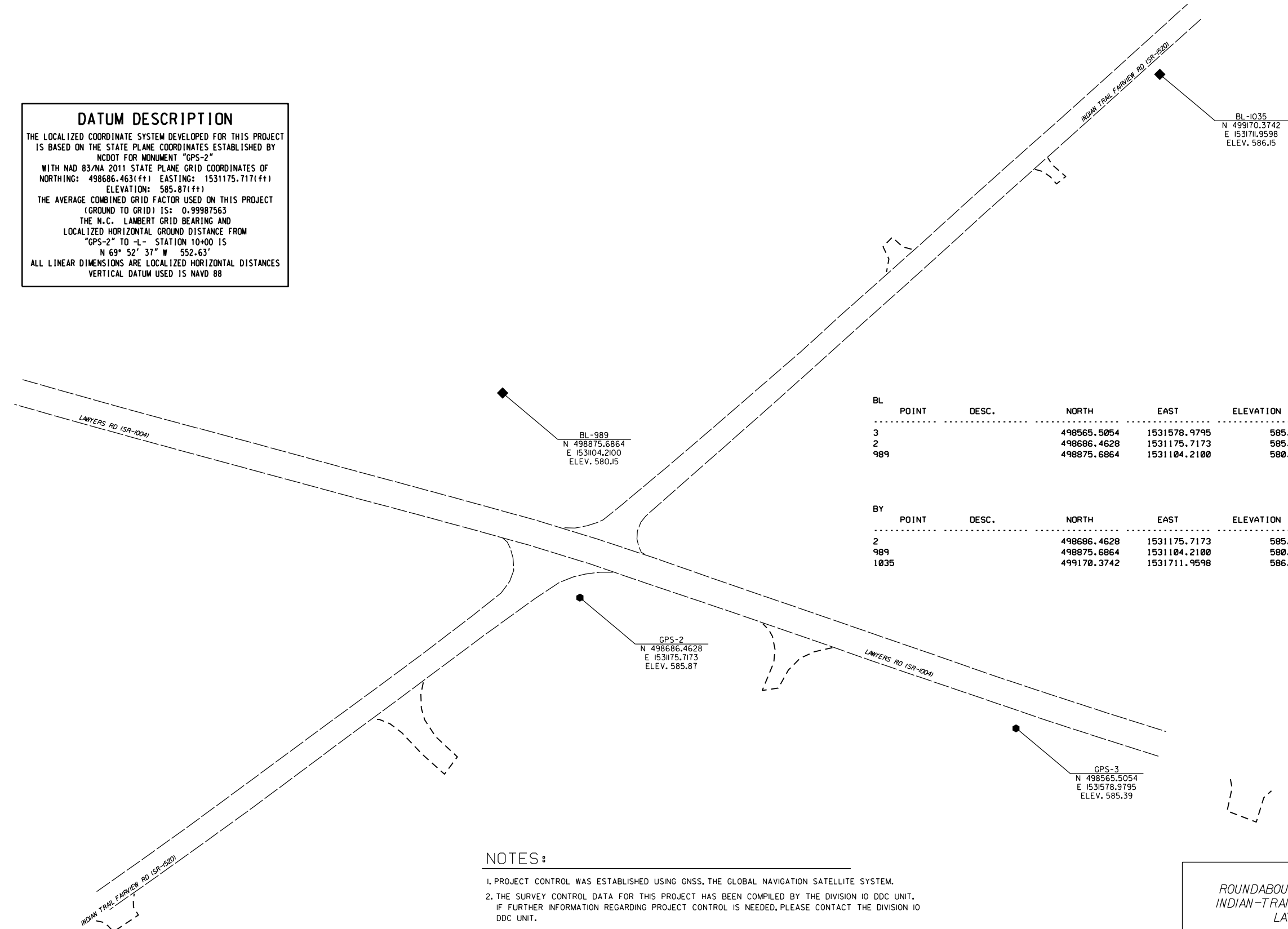
SIGNATURE

SURVEY CONTROL SHEET



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS-2" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 498686.463(±) EASTING: 1531175.717(±) ELEVATION: 585.87(±) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987563 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS-2" TO -L- STATION 10+00 IS N 69° 52' 37" W 552.63' ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88



BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
3		498565.5054	1531578.9795	585.39	19+73.99	28.11 RT
2		498686.4628	1531175.7173	585.87	15+53.04	44.26 RT
989		498875.6864	1531104.2100	580.15	14+32.84	116.69 LT

BY POINT	DESC.	NORTH	EAST	ELEVATION	Y STATION	OFFSET
2		498686.4628	1531175.7173	585.87	14+98.03	76.43 RT
989		498875.6864	1531104.2100	580.15	16+06.22	98.64 LT
1035		499170.3742	1531711.9598	586.15	22+55.11	21.87 RT

NOTES:

- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED BY THE DIVISION IO DDC UNIT. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE DIVISION IO DDC UNIT.

ROUNDABOUT AT THE INTERSECTION OF
INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND
LAYWERS RD (SR-1004)

SCALE	1"=50'		REVISIONS
DATE	5-2022		
DWG. BY	CEB		
DESIGN BY	JDH		
APPROVED	JDH		

RIGHT OF WAY, EASEMENT AND PROPOSED ALIGNMENT SHEET

L

TYPE	STATION	NORTH	EAST
PC	10+00.00	498976.5890	1530656.8197
PRC	14+85.00	498749.5941	1531124.8917
PRC	17+82.42	498654.3285	1531406.6324
PT	21+06.81	498551.1632	1531714.1662

PERMANENT DRAINAGE EASEMENT

ALIGN	STATION	OFFSET	NORTH	EAST
Y	16+37.00	-34.94	498958.6328	1531174.5071
Y	16+24.00	-38.67	498849.5436	1531161.0345
Y	16+50.00	-100.00	498921.8092	1531148.3678
Y	16+40.00	-104.00	498912.1708	1531130.6166

I, Barry D. Davis, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item, R/W and Easement Staking, was performed under my responsible charge meeting NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures as of 2017. Those standards can be found at <https://connect.ncdot.gov/resources/Location/Pages/>.

Y

TYPE	STATION	NORTH	EAST
PC	10+00.00	498406.8871	1530735.8071
PT	11+67.04	498504.2977	1530871.4894
PC	13+81.83	498632.4615	1531043.8560
PT	14+21.11	498661.2291	1531070.2599
POT	15+25.00	498749.5941	1531124.8917
PC	16+28.89	498827.7435	1531193.3436
PCC	16+76.19	498855.1456	1531231.4013
PRC	17+03.26	498863.8839	1531257.0017
PT	19+38.89	498975.1653	1531462.2200
POT	23+17.58	499228.4118	1531743.7820

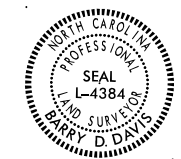
ROW MARKER, IRON PIN AND CAP

ALIGN	STATION	OFFSET	NORTH	EAST
Y	13+75.00	-30.00	498652.4606	1531020.4748
Y	14+40.00	-40.00	498698.3303	1531046.1704
Y	16+00.00	-45.00	498835.6620	1531140.4579
Y	16+70.00	-34.00	498883.1085	1531210.7872
Y	18+60.00	-24.09	498947.4644	1531386.5608
Y	14+65.00	57.57	498668.2836	1531142.3107

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from survey control established under my supervision; that the depicted property data shown herein were surveyed under my supervision; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (see deeds for final determination).

Witness my signature, registration number and seal this 4th day of Oct 2022

Barry D. Davis, _____ DocuSigned by: _____ PLS# L-4384
Professional Land Surveyor
Barry Davis
0E2AAE4F48174DC...



ROW MARKER, IRON PIN AND CAP

ALIGN	STATION	OFFSET	NORTH	EAST
L	14+10.00	42.00	498728.0871	1531041.6144
L	13+45.00	30.00	498756.4154	1530981.8009
L	17+60.00	-30.00	498690.0883	1531395.4359
L	16+25.00	-37.00	498740.7981	1531269.6669
L	16+11.31	-50.00	498757.5038	1531260.7858
L	13+00.00	-30.00	498826.0235	1530953.8776
L	13+88.00	-40.00	498812.9869	1531041.3658
L	16+00.00	40.00	498675.7653	1531221.4534
L	16+65.00	30.00	498664.4941	1531286.0293

NOTES:

- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED BY THE DIVISION IO DDC UNIT. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE DIVISION IO DDC UNIT.

ROUNDABOUT AT THE INTERSECTION OF
INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND
LAWYERS RD (SR-1004)

SCALE	N/A		REVISIONS
DATE	5-2022		
DWG. BY	CEB		
DESIGN BY	JDH		
APPROVED	JDH		

I, Barry D. Davis, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item, R/W and Easement Staking, was performed under my responsible charge meeting NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures as of 2017. Those standards can be found at <https://connect.ncdot.gov/resources/Location/Pages/>.

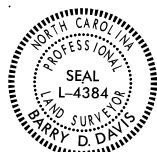
I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from survey control established under my supervision; that the depicted property data shown herein were surveyed under my supervision; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (see deeds for final determination).

Witness my signature, registration number and seal this 4th day of Oct 2022

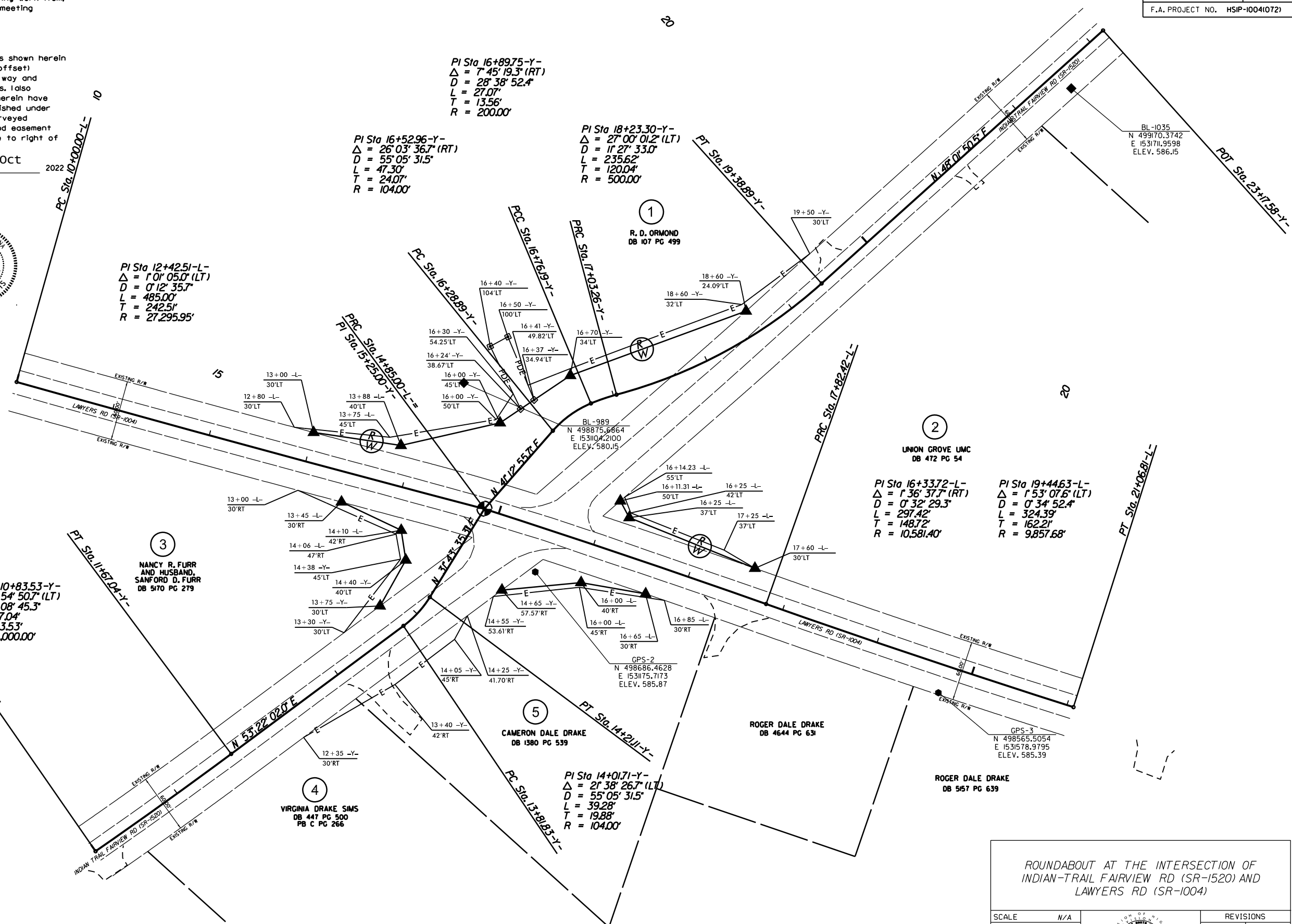
Barry D. Davis, Professional Land Surveyor PLS# L-4384

DocuSigned by:
Barry Davis

0E2AAE4F48174DC...



PROJECT NO.	SHEET NO.
44856.3.46	IC
F.A. PROJECT NO. HSP-10041072)	



PI Sta 16+89.75-Y-
 $\Delta = 7' 45'' 19.3''$ (RT)
 $D = 28' 38'' 52.4''$
 $L = 27.07'$
 $T = 13.56'$
 $R = 200.00'$

PI Sta 16+52.96-Y-
 $\Delta = 26' 03'' 36.7''$ (RT)
 $D = 55' 05'' 31.5''$
 $L = 47.30'$
 $T = 24.07'$
 $R = 104.00'$

PI Sta 18+23.30-Y-
 $\Delta = 27' 00'' 01.2''$ (LT)
 $D = 11' 27'' 33.0''$
 $L = 235.62'$
 $T = 120.04'$
 $R = 500.00'$

PI Sta 12+42.51-L-
 $\Delta = 1' 01'' 05.0''$ (LT)
 $D = 0' 12'' 35.7''$
 $L = 485.00'$
 $T = 242.51'$
 $R = 27,295.95'$

PI Sta 10+83.53-Y-
 $\Delta = 1' 54'' 50.7''$ (LT)
 $D = 1' 08'' 45.3''$
 $L = 167.04'$
 $T = 83.53'$
 $R = 5,000.00'$

PI Sta 16+33.72-L-
 $\Delta = 1' 36'' 37.7''$ (RT)
 $D = 0' 32'' 29.3''$
 $L = 297.42'$
 $T = 148.72'$
 $R = 10,581.40'$

PI Sta 19+44.63-L-
 $\Delta = 1' 53'' 07.6''$ (LT)
 $D = 0' 34'' 52.4''$
 $L = 324.39'$
 $T = 162.21'$
 $R = 9,857.68'$

PI Sta 14+01.71-Y-
 $\Delta = 21' 38'' 26.7''$ (LT)
 $D = 55' 05'' 31.5''$
 $L = 39.28'$
 $T = 19.88'$
 $R = 104.00'$

ROUNDABOUT AT THE INTERSECTION OF INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND LAWYERS RD (SR-1004)	
SCALE	N/A
DATE	5-2022
DWG. BY	CEB
DESIGN BY	JDH
APPROVED	JDH
REVISIONS	



EMMA ROSE FARMS, LLC
DB 6713 PG 768

VIRGINIA DRAKE SIMS
DB 447 PG 500
PB C PG 266

CAMERON DALE DRAKE
DB 1380 PG 539

ROGER DALE DRAKE
DB 4644 PG 631

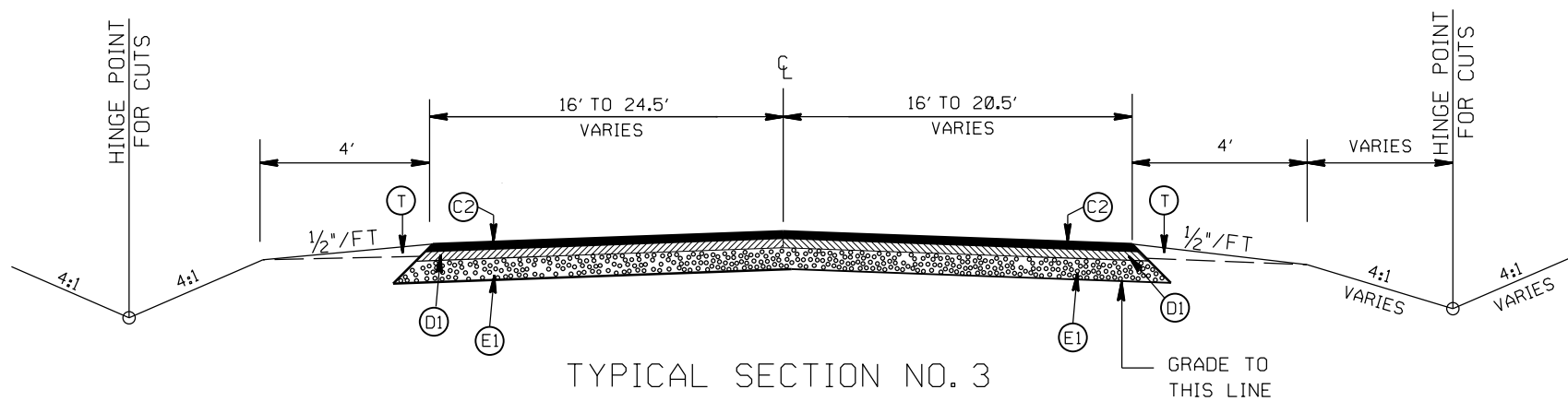
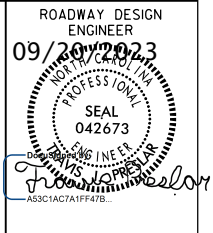
ROGER DALE DRAKE
DB 5157 PG 639

GPS-3
N 498565.5054
E 1531578.9795
ELEV. 585.39

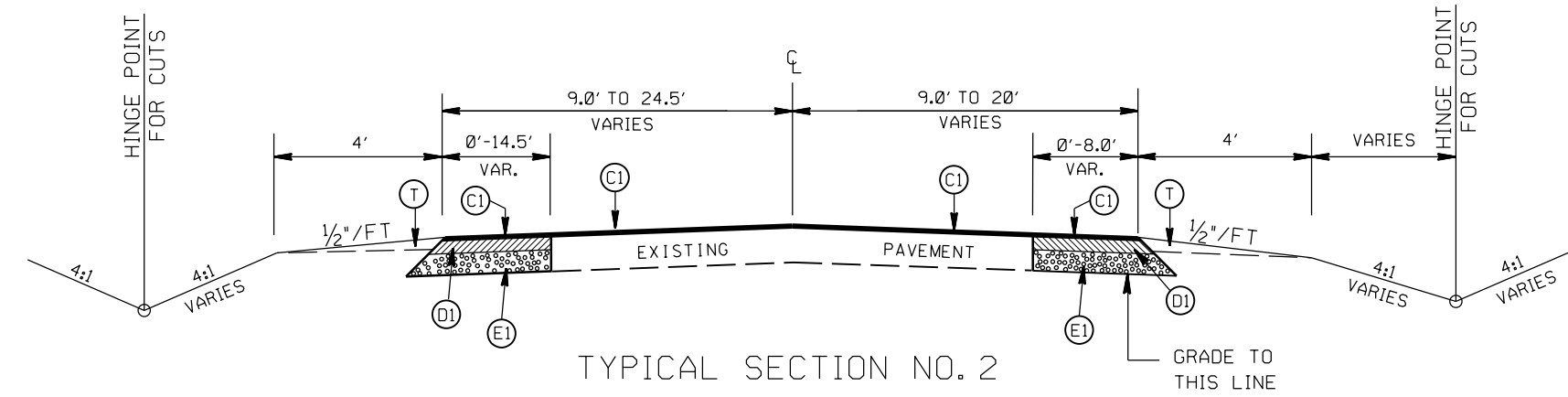
GPS-2
N 498686.4628
E 153175.7173
ELEV. 585.87

BL-989
N 498875.8864
E 1531104.2100
ELEV. 580.15

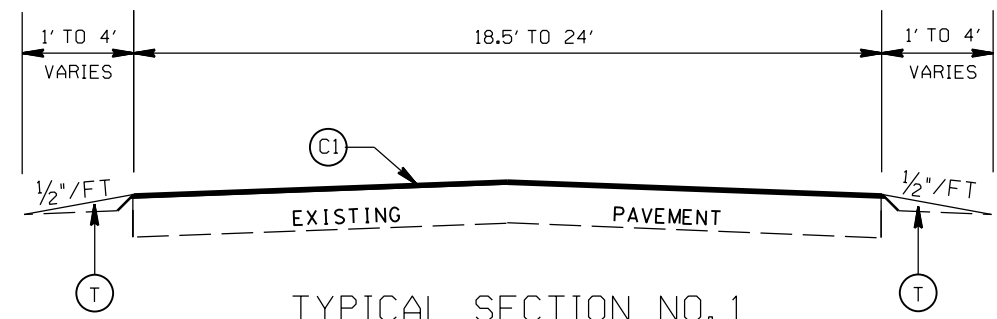
BL-1035
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E 153171.9598
ELEV. 586.15



TYPICAL SECTION NO. 3
 STA. 13+30.00 TO 13+30.87 -L-
 STA. 16+40.11 TO 16+45.00 -L-



TYPICAL SECTION NO. 2
 STA. 11+90.87 TO 13+30.00 -L-
 STA. 16+45.00 TO 17+80.11 -L-
 STA. 11+50.00 TO 13+67.50 -Y-
 STA. 19+05.00 TO 20+53.89 -Y-



TYPICAL SECTION NO. 1
 STA. 11+65.87 TO 11+90.87 -L-
 STA. 17+80.11 TO 18+05.11 -L-
 STA. 11+25.00 TO 11+50 -Y-
 STA. 20+53.89 TO 20+78.89 -Y-

-UTILIZE WELDED WIRE MESH (EITHER 4X4 W3.5XW3.5 OR 6X6 W5XW5) IN ALL PROP. 12" INSIDE AND OUTSIDE TRUCK MOUNTABLE CONCRETE APRONS.(R3,R5)
 -OVERLAP WELDED WIRE MESH PANELS 4"

PAVEMENT SCHEDULE

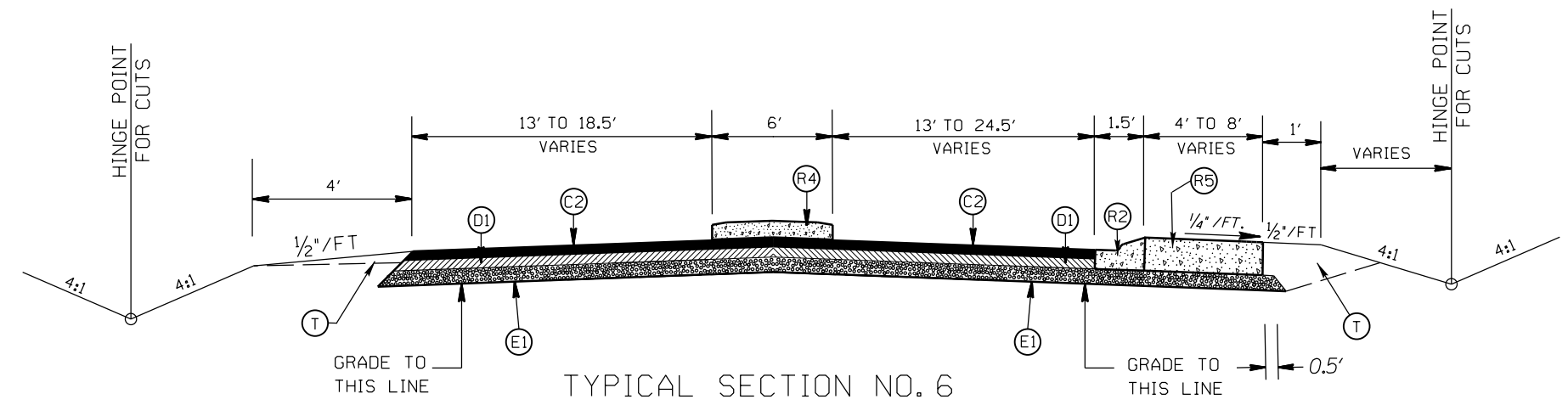
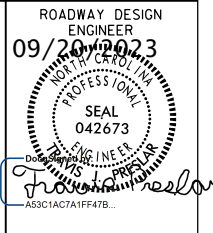
(C1)	PROP. APPROX. 1 1/2" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 3" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
(D1)	PROP. APPROX. 4" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
(D2)	PROP. VARIABLE DEPTH ASPHALT CONC. INTERMEDIATE COURSE.
(E1)	PROP. APPROX. 5" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
(R1)	PROP. 8" X 18" CONC. CURB
(R2)	PROP. 1'-6" CONC. CURB & GUTTER, CLASS AA CONCRETE
(R3)	PROP. 12" TRUCK MOUNTABLE CONC. ISLAND, CLASS AA CONCRETE
(R4)	PROP. 5" MONOLITHIC CONC. ISLAND (SURFACE MOUNTED)
(R5)	PROP. 12" TRUCK MOUNTABLE CONC. ISLAND W/ BLACK TINT, CLASS AA CONCRETE
(T)	EARTH MATERIAL

ROUNDABOUT AT THE INTERSECTION OF
 INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND
 LAWYERS RD (SR-1004)

SCALE	N/A
DATE	5-2022
DWG. BY	CEB
DESIGN BY	JDH
APPROVED	JDH

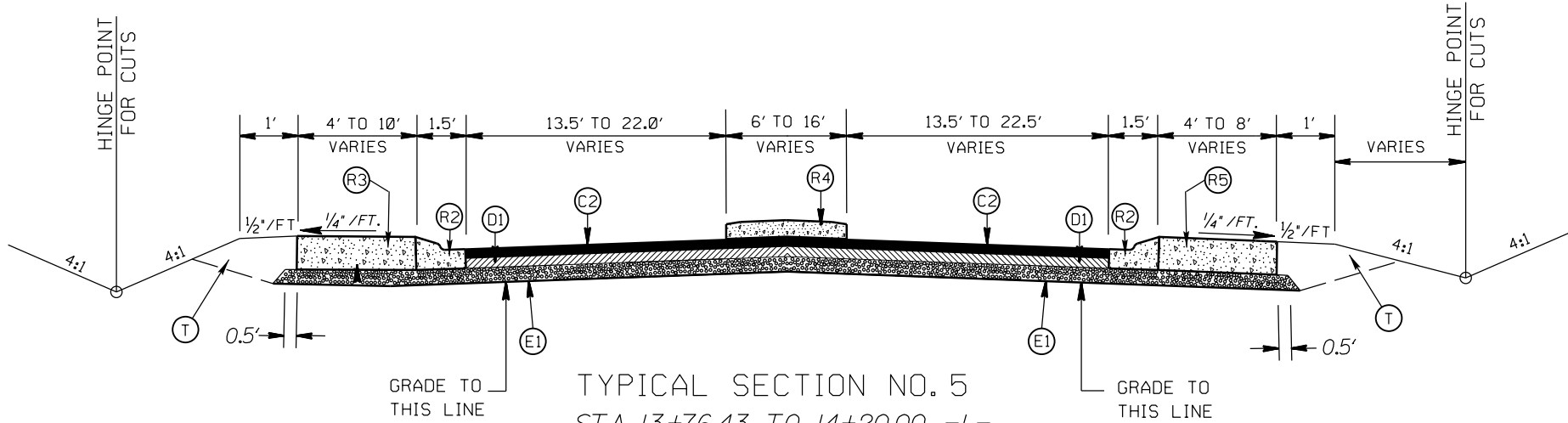


REVISIONS	



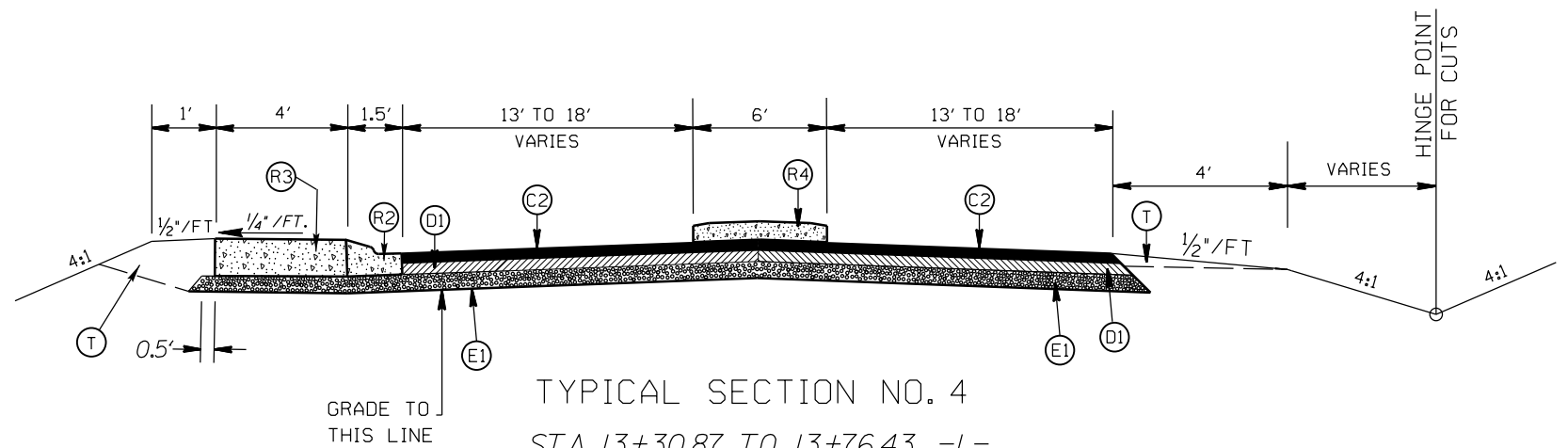
TYPICAL SECTION NO. 6
 STA. 15+93.52 TO 16+40.11 -L-
 STA. 16+25.68 TO 17+05.70 -Y-

-UTILIZE WELDED WIRE MESH (EITHER 4X4 W3.5XW3.5 OR 6X6 W5XW5) IN ALL PROP. 12" INSIDE AND OUTSIDE TRUCK MOUNTABLE CONCRETE APRONS. (R3, R5)
 -OVERLAP WELDED WIRE MESH PANELS 4"



TYPICAL SECTION NO. 5
 STA. 13+76.43 TO 14+20.00 -L-
 STA. 15+50.00 TO 15+93.52 -L-
 STA. 14+24.42 TO 14+60.00 -Y-
 STA. 15+90.00 TO 16+25.68 -Y-

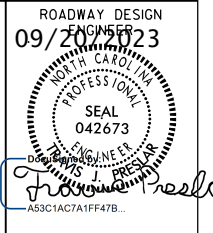
PAVEMENT SCHEDULE	
(C1)	PROP. APPROX. 1 1/2" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 3" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
(D1)	PROP. APPROX. 4" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
(D2)	PROP. VARIABLE DEPTH ASPHALT CONC. INTERMEDIATE COURSE.
(E1)	PROP. APPROX. 5" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
(R1)	PROP. 8" X 18" CONC. CURB
(R2)	PROP. 1'-6" CONC. CURB & GUTTER, CLASS AA CONCRETE
(R3)	PROP. 12" TRUCK MOUNTABLE CONC. ISLAND, CLASS AA CONCRETE
(R4)	PROP. 5" MONOLITHIC CONC. ISLAND (SURFACE MOUNTED)
(R5)	PROP. 12" TRUCK MOUNTABLE CONC. ISLAND W/ BLACK TINT, CLASS AA CONCRETE
(T)	EARTH MATERIAL



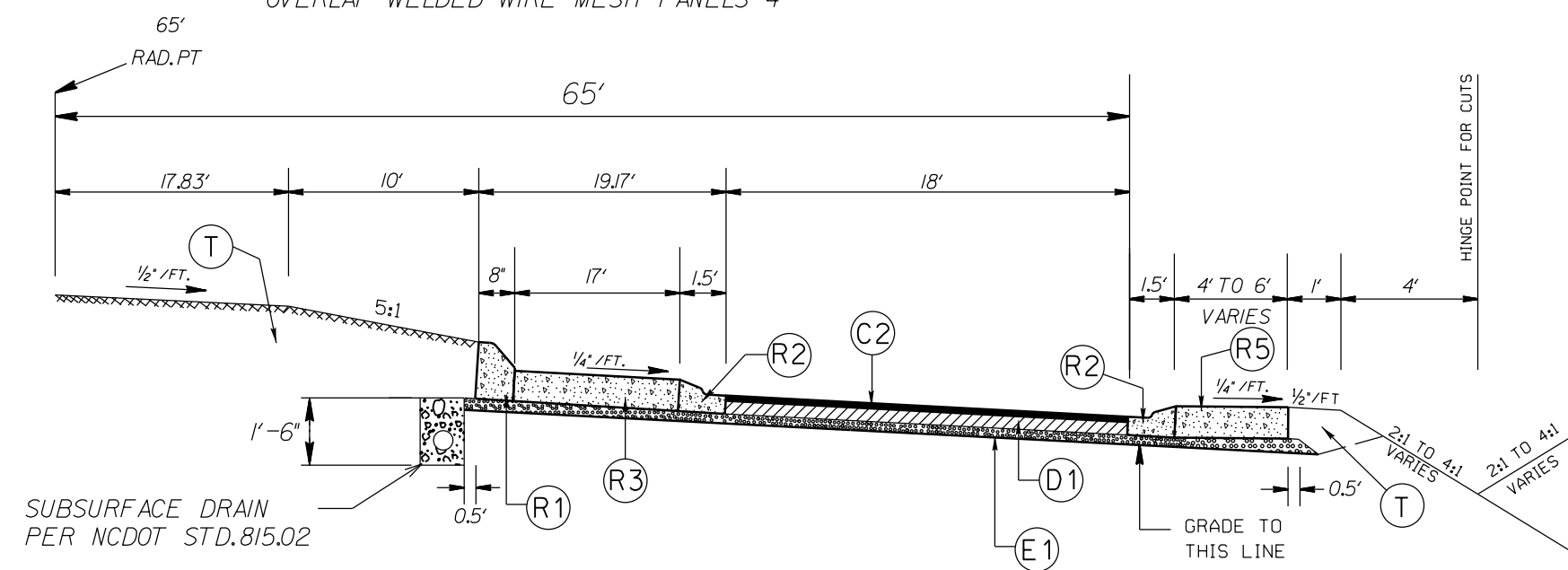
TYPICAL SECTION NO. 4
 STA. 13+30.87 TO 13+76.43 -L-
 STA. 13+67.50 TO 14+24.42 -Y-

ROUNDABOUT AT THE INTERSECTION OF INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND LAWYERS RD (SR-1004)

SCALE	N/A		REVISIONS
DATE	5-2022		
DWG. BY	CEB		
DESIGN BY	JDH		
APPROVED	JDH		



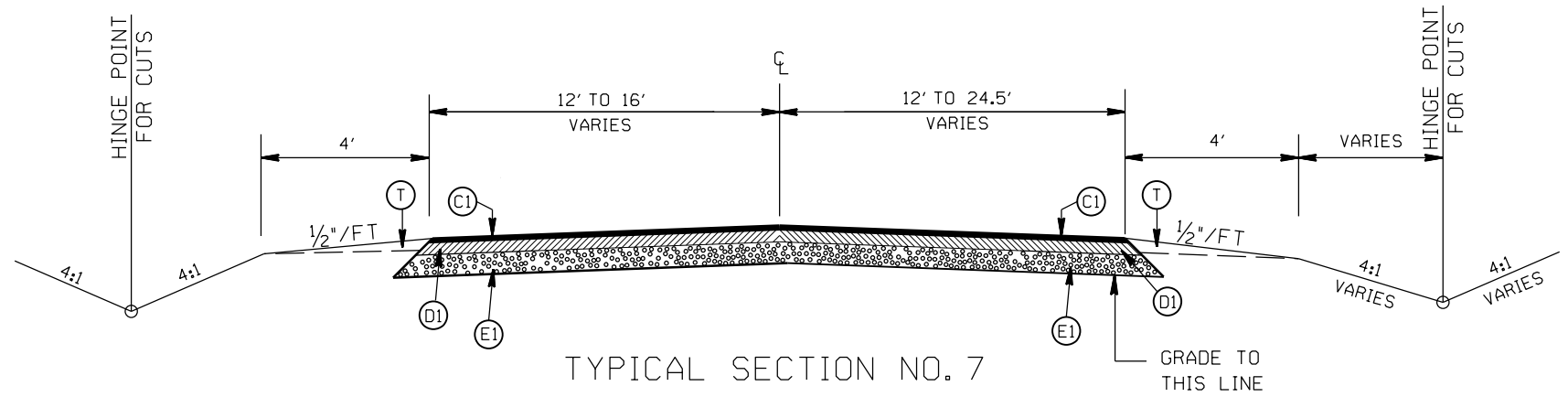
-UTILIZE WELDED WIRE MESH (EITHER 4X4 W3.5XW3.5 OR 6X6 W5XW5) IN ALL PROP. 12" INSIDE AND OUTSIDE TRUCK MOUNTABLE CONCRETE APRONS.(R3,R5)
 -OVERLAP WELDED WIRE MESH PANELS 4"



TYPICAL SECTION NO. 8
 ROUNDABOUT

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 1½" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 3" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
(D1)	PROP. APPROX. 4" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
(D2)	PROP. VARIABLE DEPTH ASPHALT CONC. INTERMEDIATE COURSE.
(E1)	PROP. APPROX. 5" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
(R1)	PROP. 8" X 18" CONC. CURB
(R2)	PROP. 1'-6" CONC. CURB & GUTTER, CLASS AA CONCRETE
(R3)	PROP. 12" TRUCK MOUNTABLE CONC. ISLAND, CLASS AA CONCRETE
(R4)	PROP. 5" MONOLITHIC CONC. ISLAND (SURFACE MOUNTED)
(R5)	PROP. 12" TRUCK MOUNTABLE CONC. ISLAND W/ BLACK TINT, CLASS AA CONCRETE
(T)	EARTH MATERIAL



TYPICAL SECTION NO. 7
 STA. 17+05.70 TO 19+05.00 -Y-

ROUNDABOUT AT THE INTERSECTION OF
 INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND
 LAWYERS RD (SR-1004)

SCALE	N/A
DATE	5-2022
DWG. BY	CEB
DESIGN BY	JDH
APPROVED	JDH



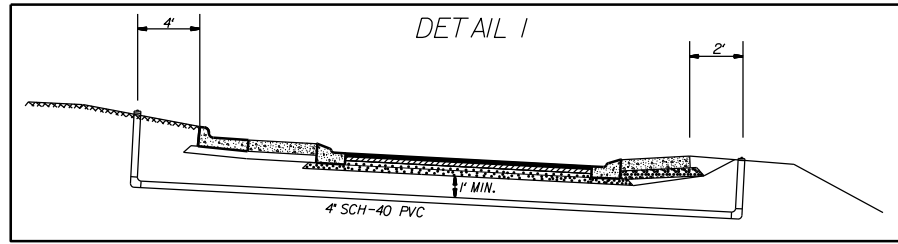
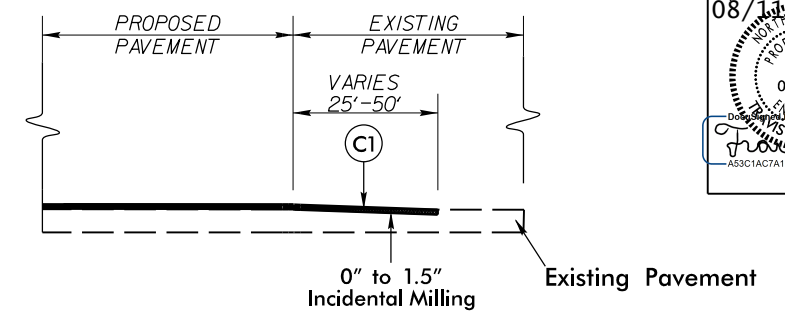
REVISIONS	

**INCIDENTAL MILLING DETAIL
EXISTING ROAD TIE-IN**

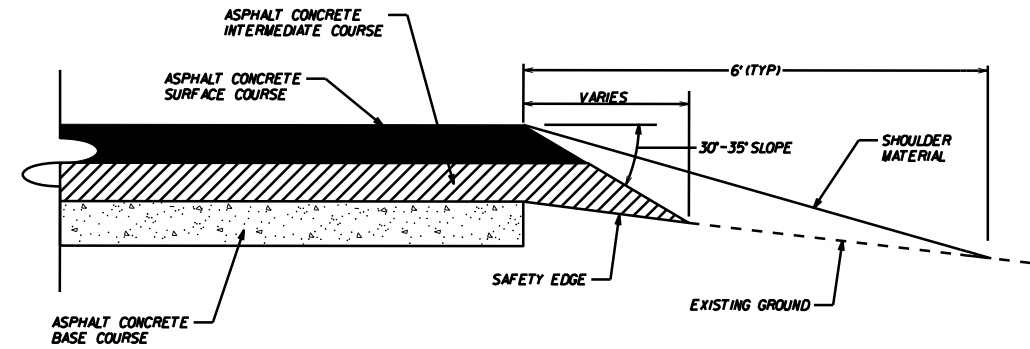
PROJECT NO.	SHEET NO.
44856.3.46	2C
F.A. PROJECT NO. HSIP-100410721	

ROADWAY DESIGN ENGINEER
 08/11/2023
 SEAL 042673
 PROFESSIONAL ENGINEER
 STATE OF TEXAS
 ASSOCIATION 114747B

PROJECT TIE-INS

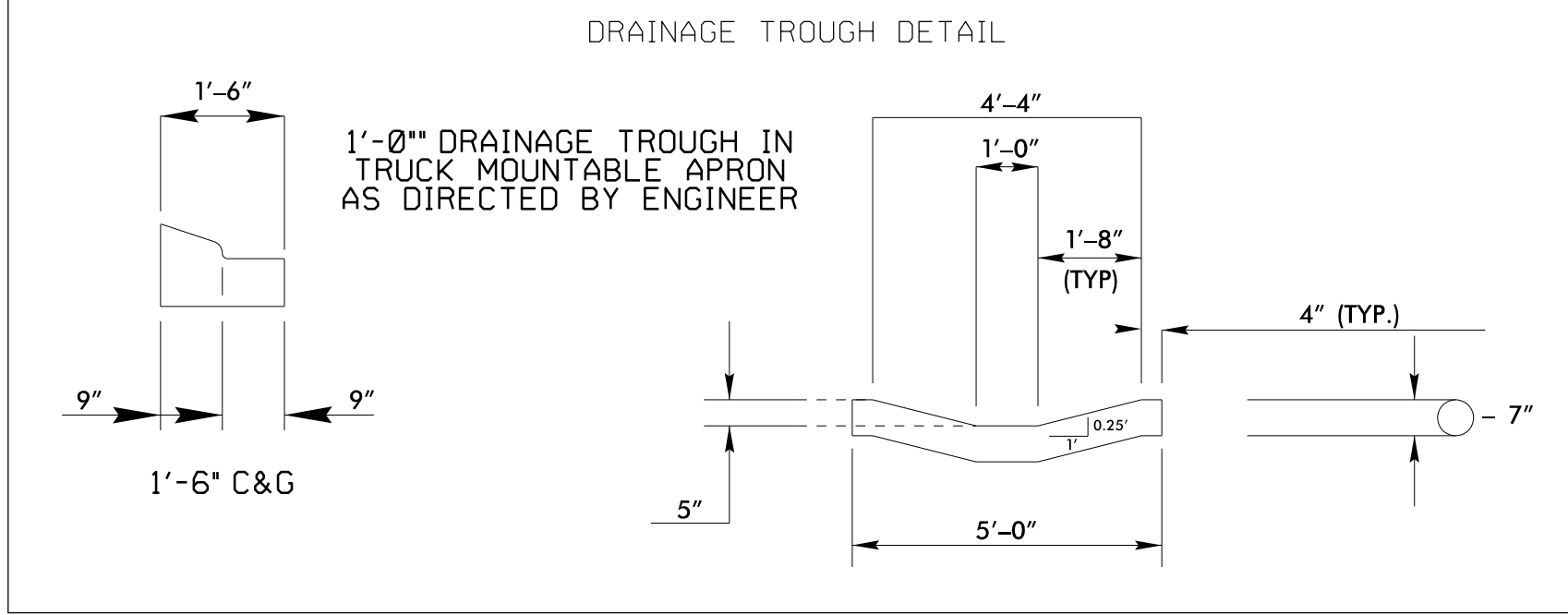


PVC PIPE DETAIL



SAFETY EDGE DETAIL

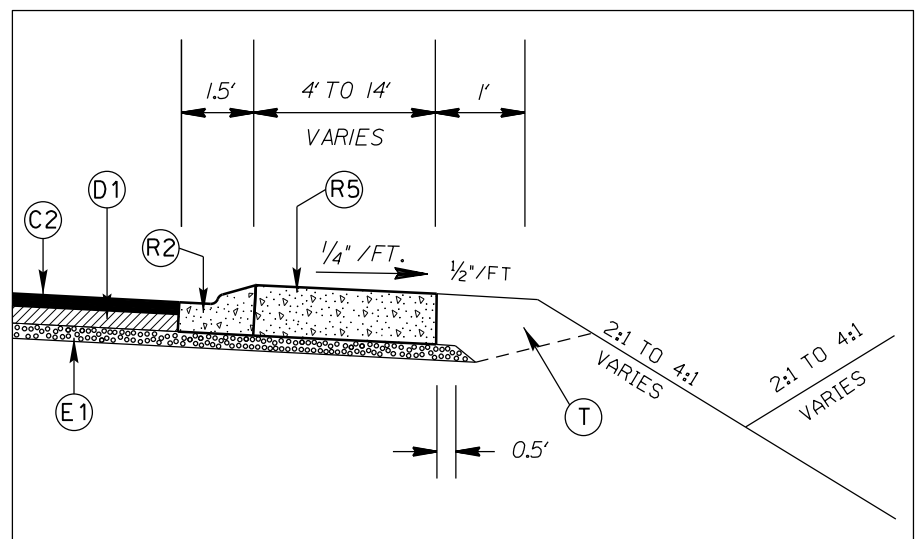
DRAINAGE TROUGH DETAIL



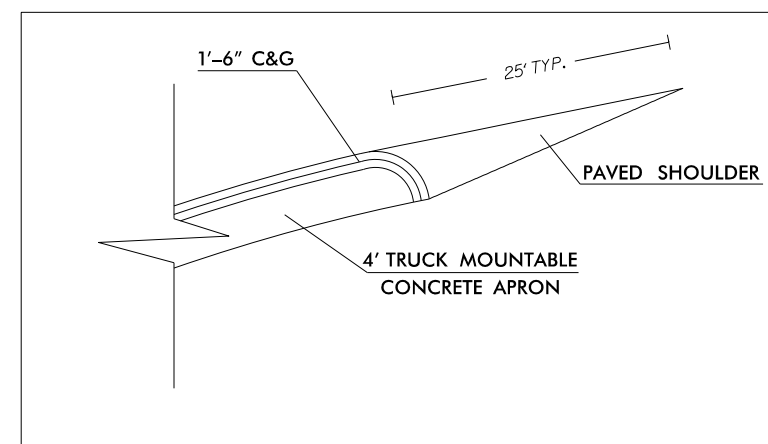
PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 1½" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 3" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
(D1)	PROP. APPROX. 4" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
(D2)	PROP. VARIABLE DEPTH ASPHALT CONC. INTERMEDIATE COURSE.
(E1)	PROP. APPROX. 5" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
(R1)	PROP. 8" X 18" CONC. CURB
(R2)	PROP. 1'-6" CONC. CURB & GUTTER, CLASS AA CONCRETE
(R3)	PROP. 12" TRUCK MOUNTABLE CONC. ISLAND, CLASS AA CONCRETE
(R4)	PROP. 5" MONOLITHIC CONC. ISLAND (SURFACE MOUNTED)
(R5)	PROP. 12" TRUCK MOUNTABLE CONC. ISLAND W/ BLACK TINT, CLASS AA CONCRETE
(T)	EARTH MATERIAL

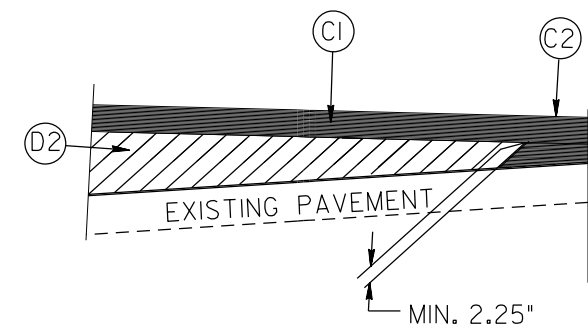
*UTILIZE WELDED WIRE MESH (EITHER 4X4 W3.5XW3.5 OR 6X6 W5XW5) IN PROP. 12" TRUCK MOUNTABLE CONC. ISLAND



APRON DETAIL



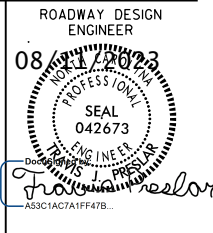
CURB DETAIL



WEDGING DETAIL

ROUNDABOUT AT THE INTERSECTION OF INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND LAWYERS RD (SR-1004)

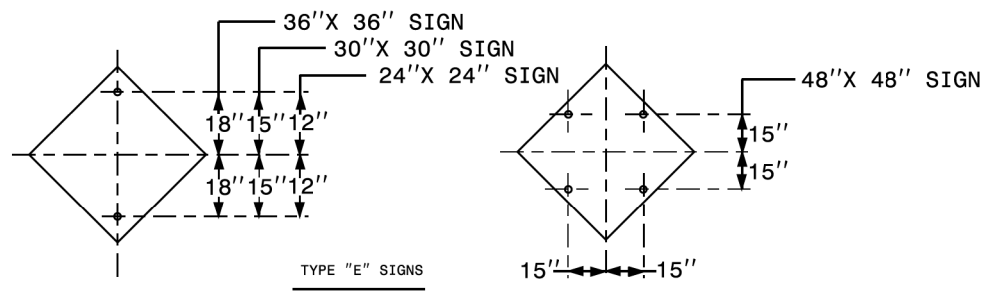
SCALE	N/A		REVISIONS
DATE	5-2022		
DWG. BY	CEB		
DESIGN BY	JDH		
APPROVED	JDH		



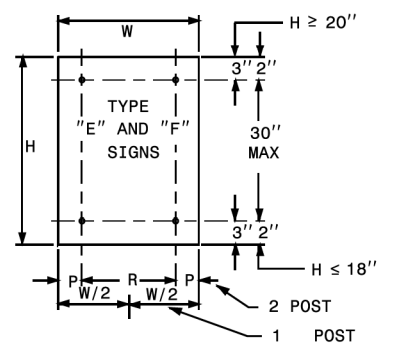
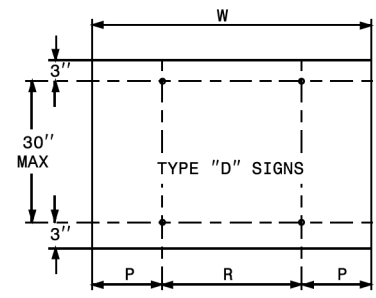
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR
MOUNTING OF
TYPE 'D', 'E' AND 'F' SIGNS
ON 'U' CHANNEL POSTS



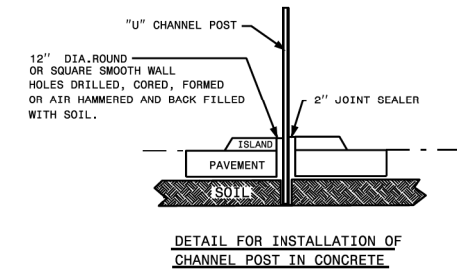
TYPE "E" SIGNS



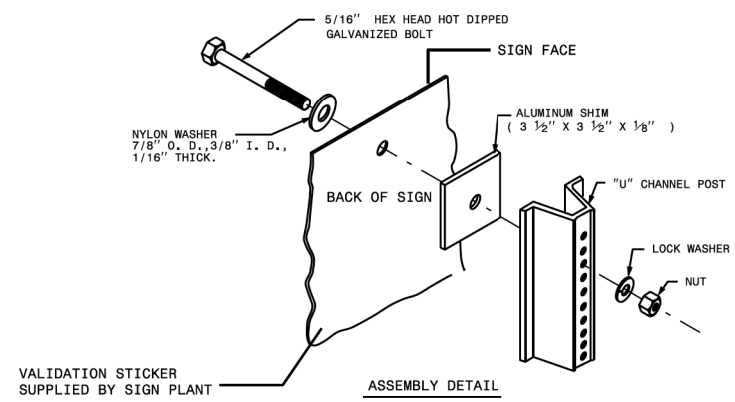
	NO. SUPPORTS		
	2	3 *	4
P	.207W	.145W	.107W
R	.586W	.355W	.262W

UNITS ON ATTACHED SHEET
* MINIMUM 4 FT. BETWEEN CHANNEL POSTS

HOLE PUNCHING DETAIL



DETAIL FOR INSTALLATION OF CHANNEL POST IN CONCRETE



ASSEMBLY DETAIL

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

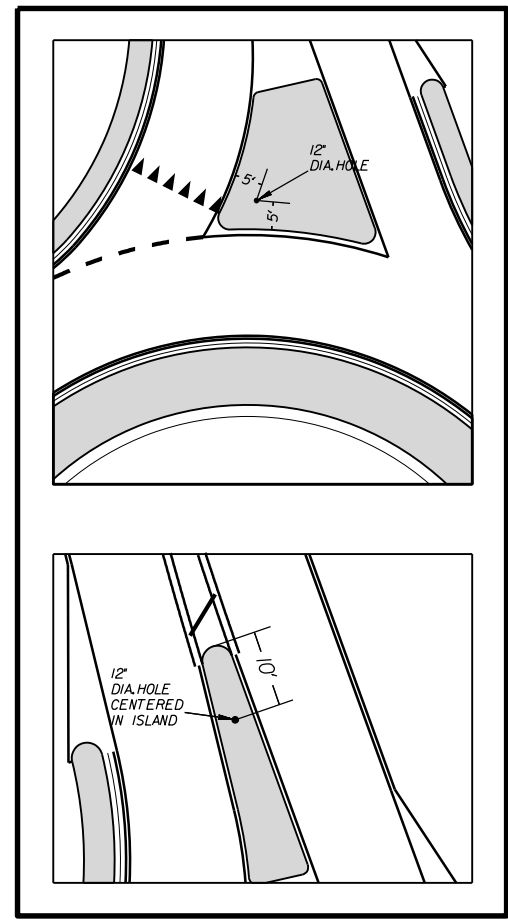
1-12

ENGLISH STANDARD DRAWING FOR
MOUNTING OF
TYPE 'D', 'E' AND 'F' SIGNS
ON 'U' CHANNEL POSTS

SHEET 2 OF 2

904.50

12" DIA. HOLE LOCATION FOR SIGN U-CHANNEL POST IN SPLITTER ISLANDS



SHEET 2 OF 2

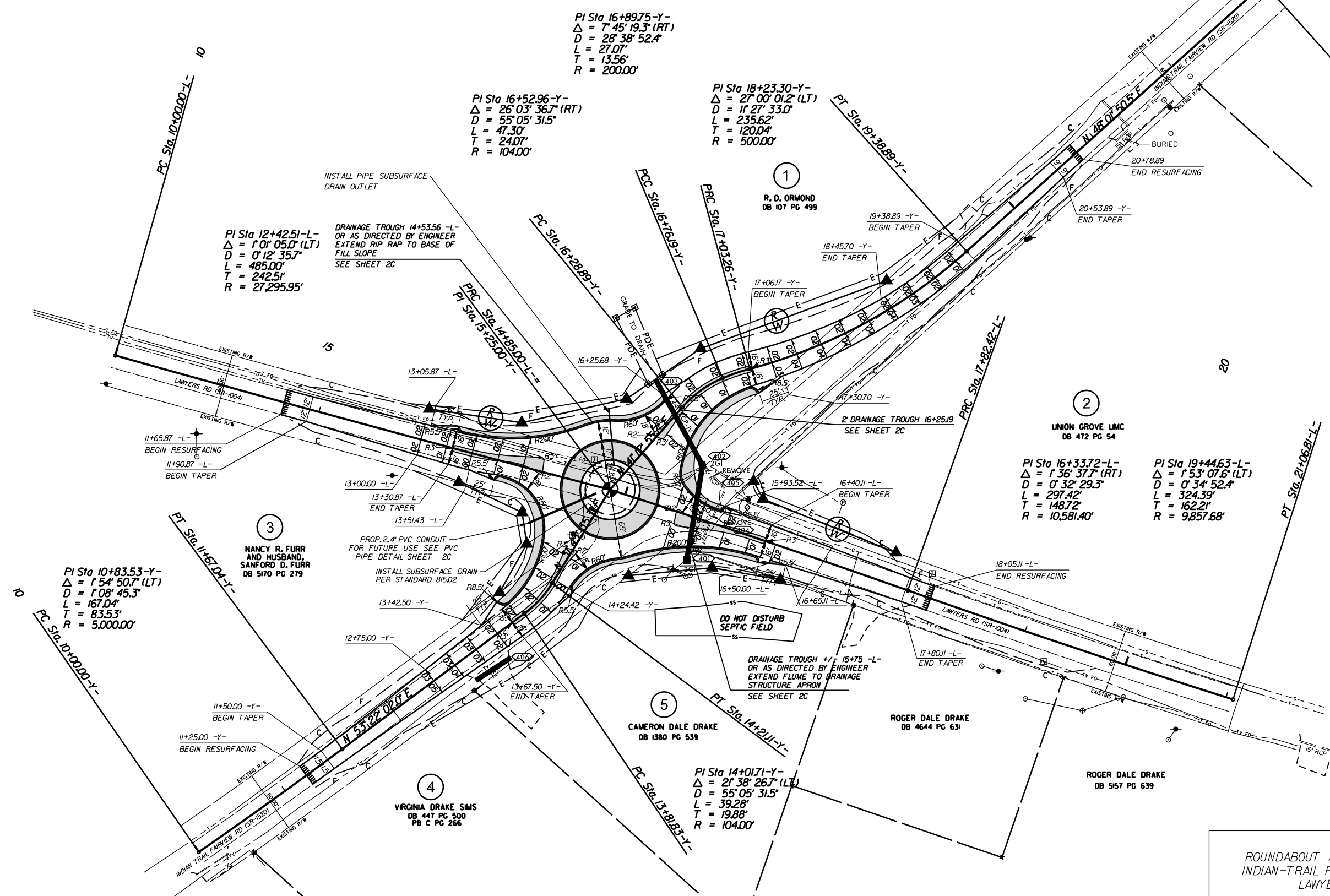
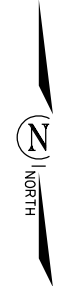
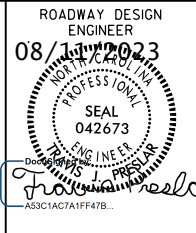
904.50

ROUNDABOUT AT THE INTERSECTION OF INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND LAWYERS RD (SR-1004)

SCALE	N/A
DATE	5-2022
DWG. BY	CEB
DESIGN BY	JDH
APPROVED	JDH



REVISIONS	



PI Sta 10+83.53-Y-
 $\Delta = 1^{\circ}54'50.7"$ (LT)
 $D = 1^{\circ}08'45.3"$
 $L = 167.04'$
 $T = 83.53'$
 $R = 5,000.00'$

PI Sta 12+42.51-L-
 $\Delta = 1^{\circ}01'05.0"$ (LT)
 $D = 0^{\circ}12'35.7"$
 $L = 485.00'$
 $T = 242.51'$
 $R = 27,295.95'$

PI Sta 16+52.96-Y-
 $\Delta = 26^{\circ}03'36.7"$ (RT)
 $D = 55^{\circ}05'31.5"$
 $L = 47.30'$
 $T = 24.07'$
 $R = 104.00'$

PI Sta 16+89.75-Y-
 $\Delta = 7^{\circ}45'19.3"$ (RT)
 $D = 28^{\circ}38'52.4"$
 $L = 27.07'$
 $T = 13.56'$
 $R = 200.00'$

PI Sta 18+23.30-Y-
 $\Delta = 27^{\circ}00'01.2"$ (LT)
 $D = 11^{\circ}27'33.0"$
 $L = 235.62'$
 $T = 120.04'$
 $R = 500.00'$

PI Sta 16+33.72-L-
 $\Delta = 1^{\circ}36'37.7"$ (RT)
 $D = 0^{\circ}32'29.3"$
 $L = 297.42'$
 $T = 148.72'$
 $R = 10,581.40'$


PI Sta 19+44.63-L-
 $\Delta = 1^{\circ}53'07.6"$ (LT)
 $D = 0^{\circ}34'52.4"$
 $L = 324.39'$
 $T = 162.21'$
 $R = 9,857.68'$

PI Sta 14+01.71-Y-
 $\Delta = 21^{\circ}38'26.7"$ (LT)
 $D = 55^{\circ}05'31.5"$
 $L = 39.28'$
 $T = 19.88'$
 $R = 104.00'$

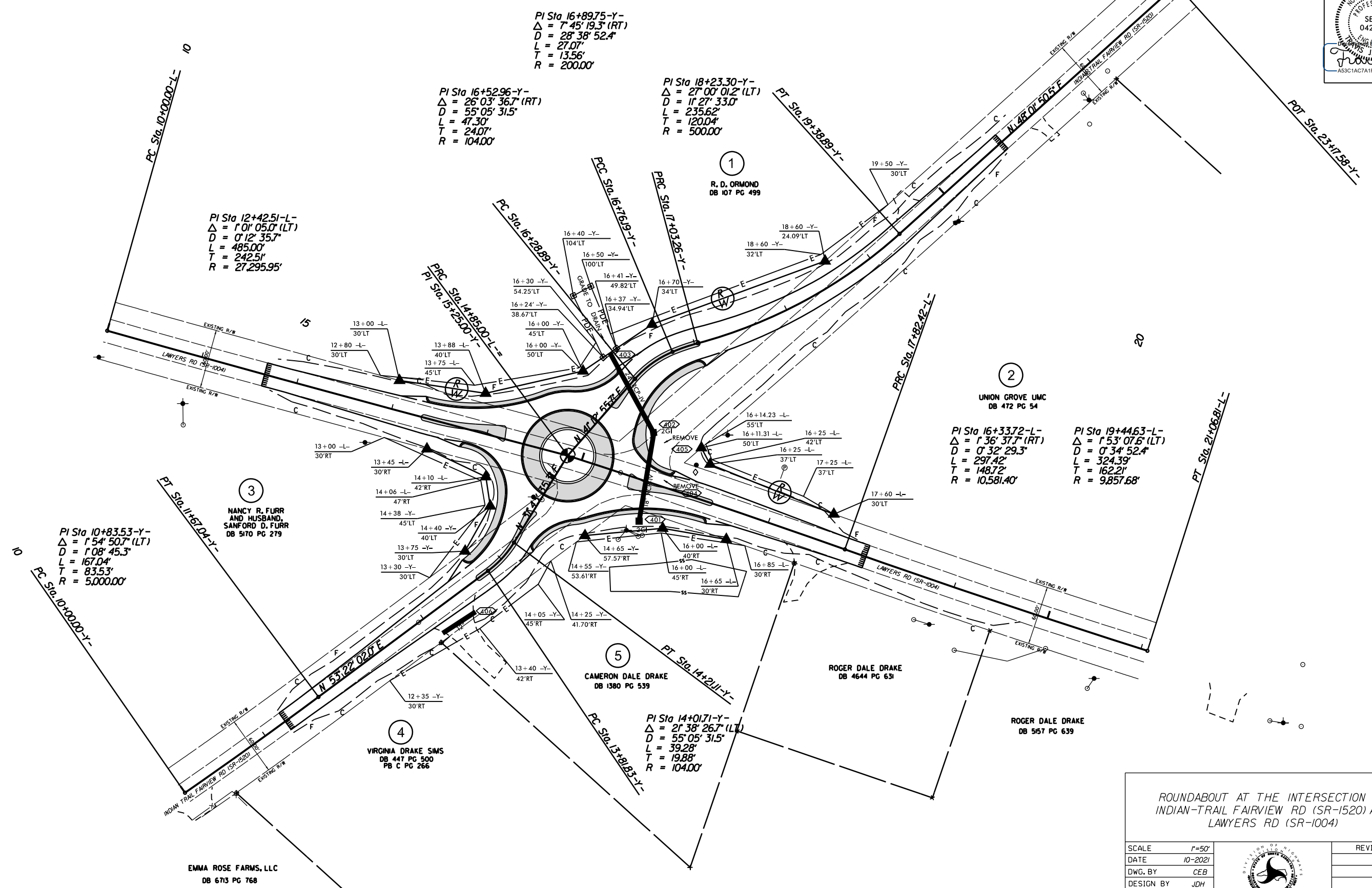
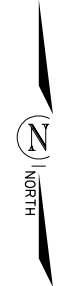
EMMA ROSE FARMS, LLC
 DB 6713 PG 768

NOTE: INCIDENTAL MILL APPROXIMATELY 25' AT EACH TIE IN TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING ASPHALT PAVEMENT.

ROUNDABOUT AT THE INTERSECTION OF INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND LAWYERS RD (SR-1004)

SCALE	1"=50'		REVISIONS
DATE	12-2021		
DWG. BY	CEB		
DESIGN BY	JDH		
APPROVED	JDH		

ROADWAY DESIGN
ENGINEER
08/11/2023
PROFESSIONAL
SEAL
042673
THOMAS J. PRESLER
AS3C1AC7A1FF47B...



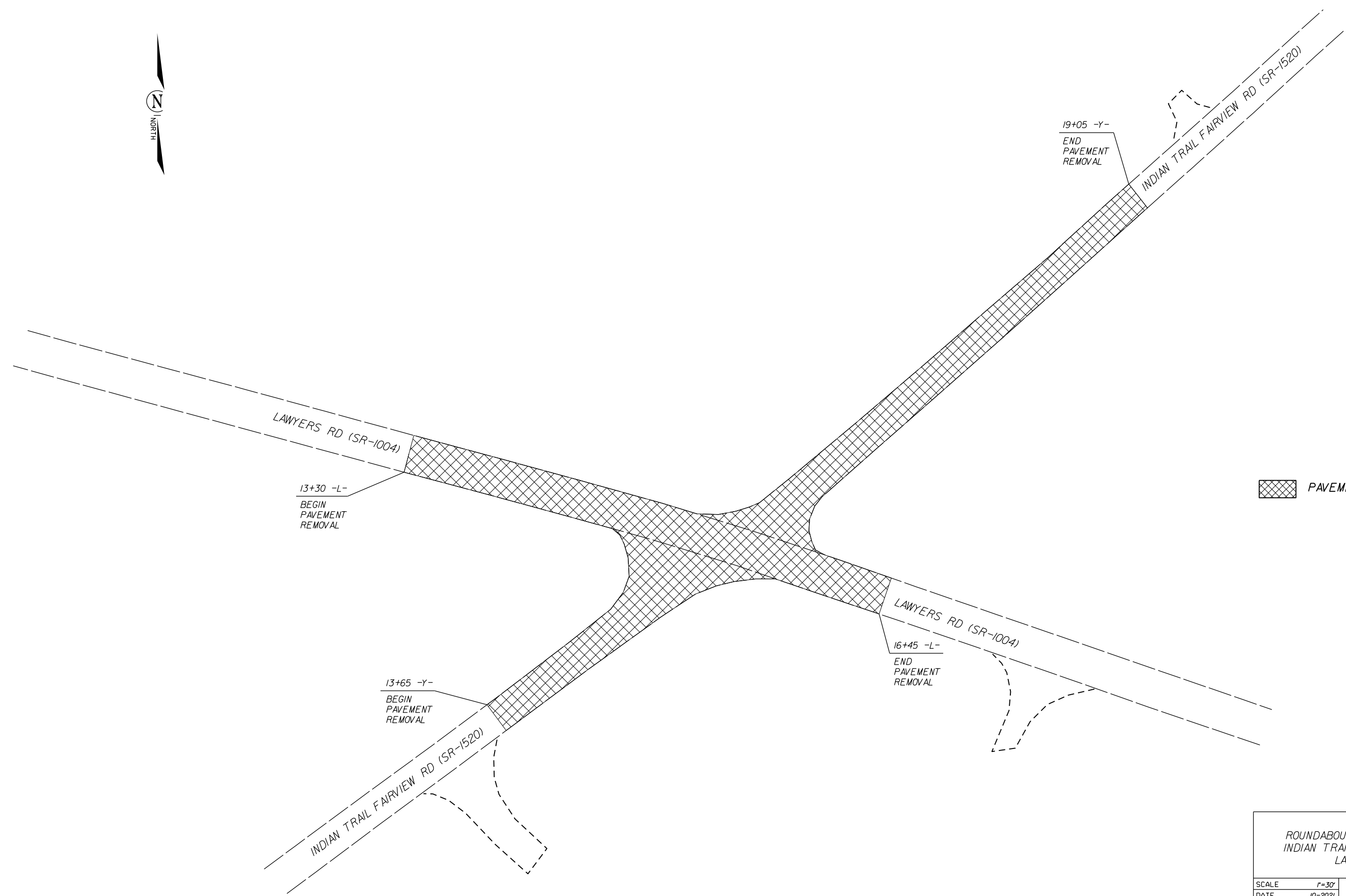
ROUNDABOUT AT THE INTERSECTION OF
INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND
LAWYERS RD (SR-1004)

SCALE	1"=50'		REVISIONS
DATE	10-2021		
DWG. BY	CEB		
DESIGN BY	JDH		
APPROVED	JDH		

EMMA ROSE FARMS, LLC
DB 6713 PG 768

PROJECT NO.	SHEET NO.
44856.3.46	6
F.A. PROJECT NO. HSIP-10041072)	

ROADWAY DESIGN
ENGINEER
08/11/2023
PROFESSIONAL
SEAL
042673
J. D. HARRIS, P.E.
AS3C1AG7A1FF47B...



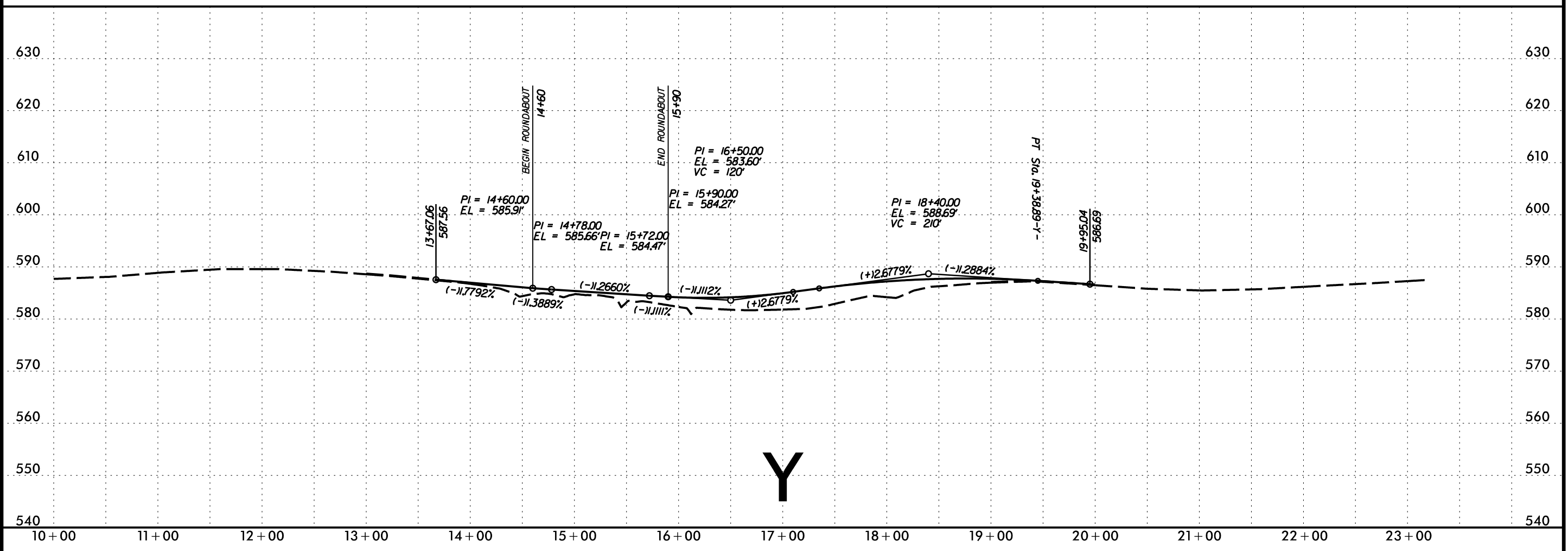
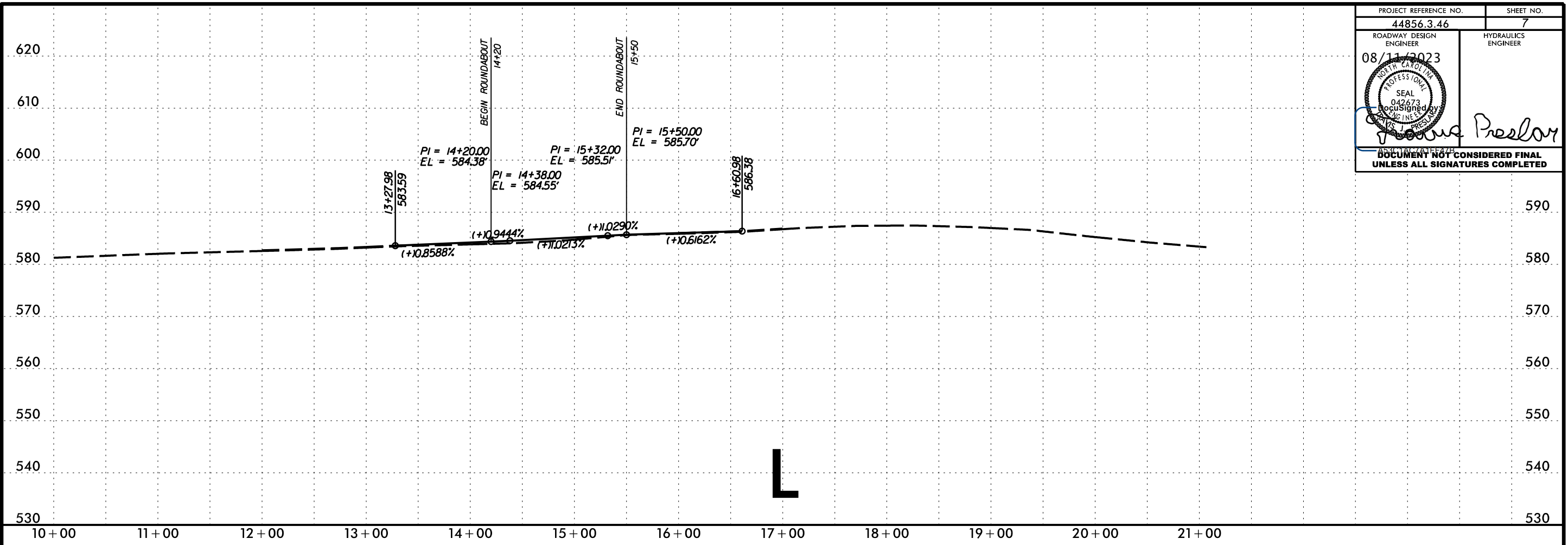
PAVEMENT REMOVAL

ROUNDBOUT AT THE INTERSECTION OF
INDIAN TRAIL-FAIRVIEW RD.(SR-1520) AND
LAWYERS RD.(SR-1004)

SCALE	r=30'		REVISIONS
DATE	10-2021		
DWG. BY	CEB		
DESIGN BY	JDH		
APPROVED	JDH		

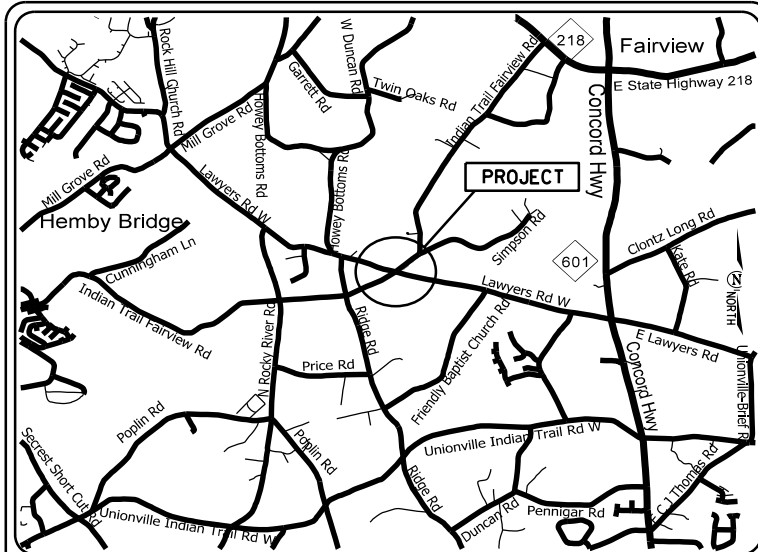
5/28/99

PROJECT REFERENCE NO. 44856.3.46	SHEET NO. 7
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
08/11/2023	
<p>THOMAS PRESLAR</p> <p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	



23-JAN-2023 14:22 S:\DD\CDK\Union\W-5710AR-Lowways_Indion Trail_Fairview-RAB.pfl\W-5710AR1.dgn

W-5710AR



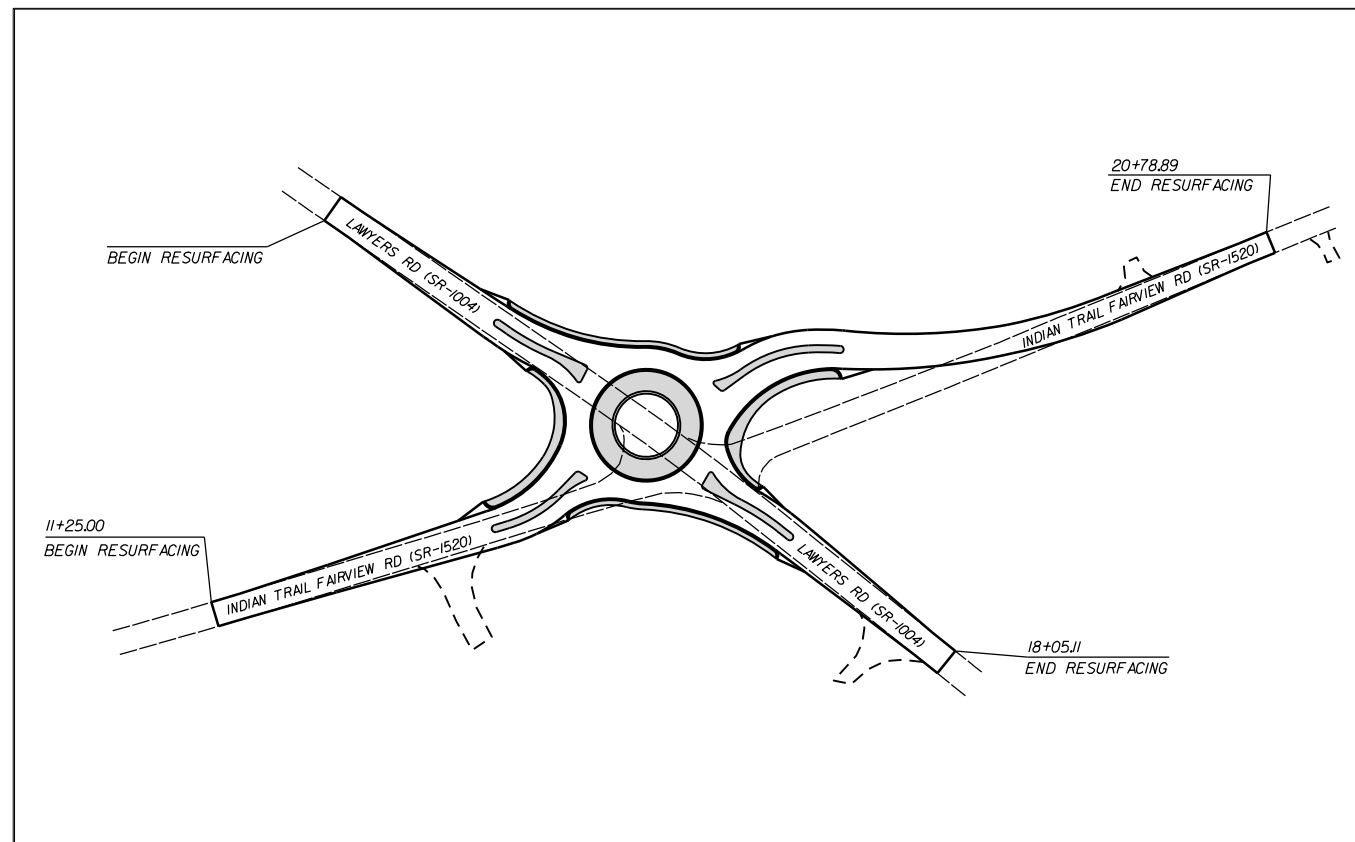
VICINITY MAP
NOT TO SCALE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

UNION COUNTY

LOCATION: SR 1004 (LAWYERS RD) AND SR 1532
(INDIAN-TRAIL FAIRVIEW RD) NEAR FAIRVIEW



INSTALL PERIMETER EROSION CONTROL MEASURES DURING INITIAL CLEARING PHASE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5710AR	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
44856.1.46	HSIP-1004(072)	P.E.	
44856.2.46	HSIP-1004(072)	RW	
44856.3.46	HSIP-1004(072)	CONST.	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.05	Temporary Silt Ditch	---
1630.05	Temporary Diversion	--->
1605.01	Temporary Silt Fence	--- --- ---
1606.01	Special Sediment Control Fence	--- --- ---
1622.01	Temporary Berms and Slope Drains	--- ---
1630.02	Silt Basin Type B	--- ---
1633.01	Temporary Rock Silt Check Type-A	--- ---
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	--- ---
1633.02	Temporary Rock Silt Check Type-B	--- ---
	Wattle/Coir Fiber Wattle	--- ---
	Wattle/Coir Fiber Wattle with Polyacrylamide (PAM)	--- ---
1634.01	Temporary Rock Sediment Dam Type-A	--- ---
1634.02	Temporary Rock Sediment Dam Type-B	--- ---
1635.01	Rock Pipe Inlet Sediment Trap Type-A	--- ---
1635.02	Rock Pipe Inlet Sediment Trap Type-B	--- ---
1630.04	Stilling Basin	--- ---
1630.06	Special Stilling Basin	--- ---
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	--- ---
	Tiered Skimmer Basin	--- ---
	Infiltration Basin	--- ---

THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.

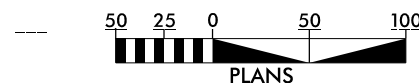
HIGH QUALITY WATER(S) EXIST
ON THIS PROJECT

High Quality Water Zone(s) Exist
From Sta. _____ Begin Project
to Sta. _____ End Project
Refer To E. C. Special Provisions
for Special Considerations.

ENVIRONMENTALLY
SENSITIVE AREA(S) EXIST
ON THIS PROJECT

Refer To E. C. Special Provisions
for Special Considerations.

GRAPHIC SCALE



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE APRIL 1, 2019 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES.



Prepared In the Office of:
DDC UNIT DIVISION 10
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Designed by:
CHAD BURRIS 4159
NAME LEVEL III CERTIFICATION NO.

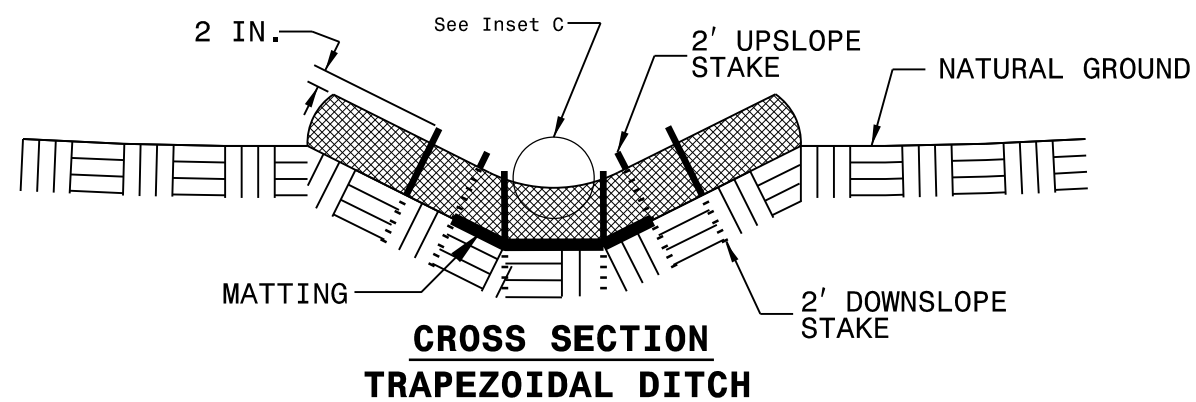
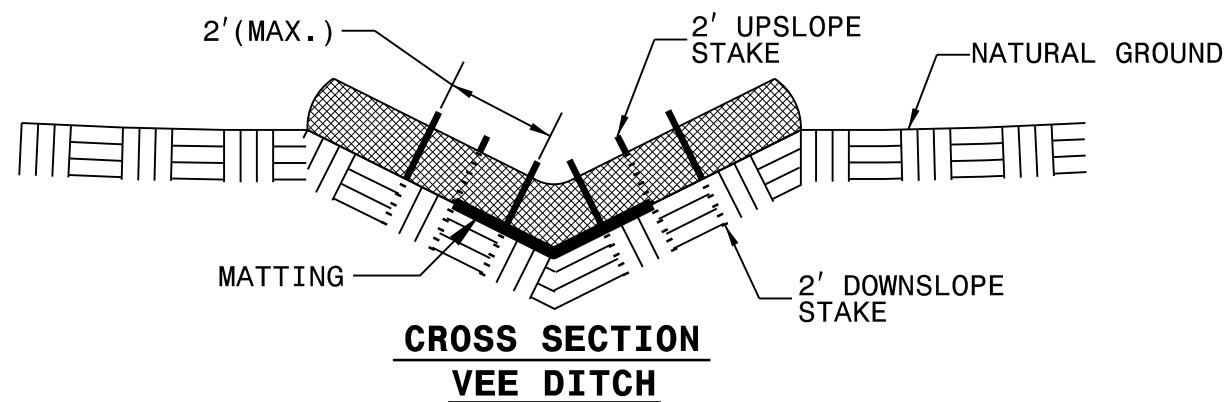
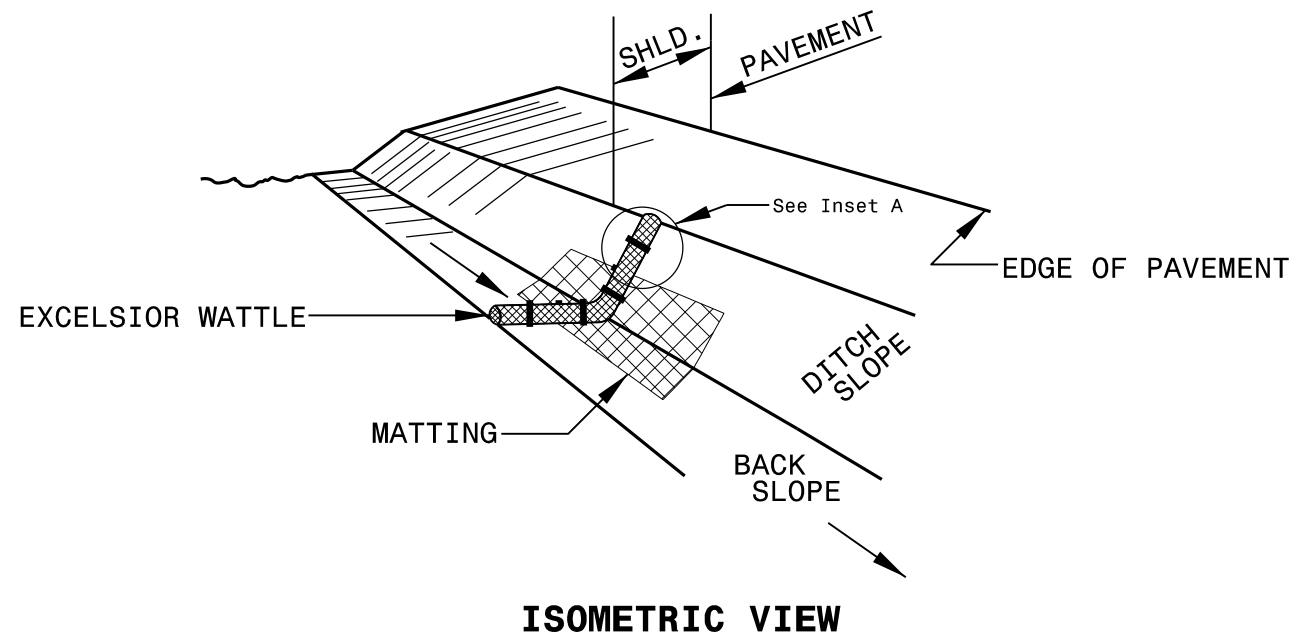
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2018 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type J
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type J
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type J	1634.02 Temporary Rock Sediment Dam Type J
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.04 Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type J
1630.05 Temporary Diversion	1640.01 Coir Fiber Jaffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

PROJECT NO.	SHEET NO.
44856.3.46	EC-2
F.A. PROJECT NO. HSP-1004(072)	



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

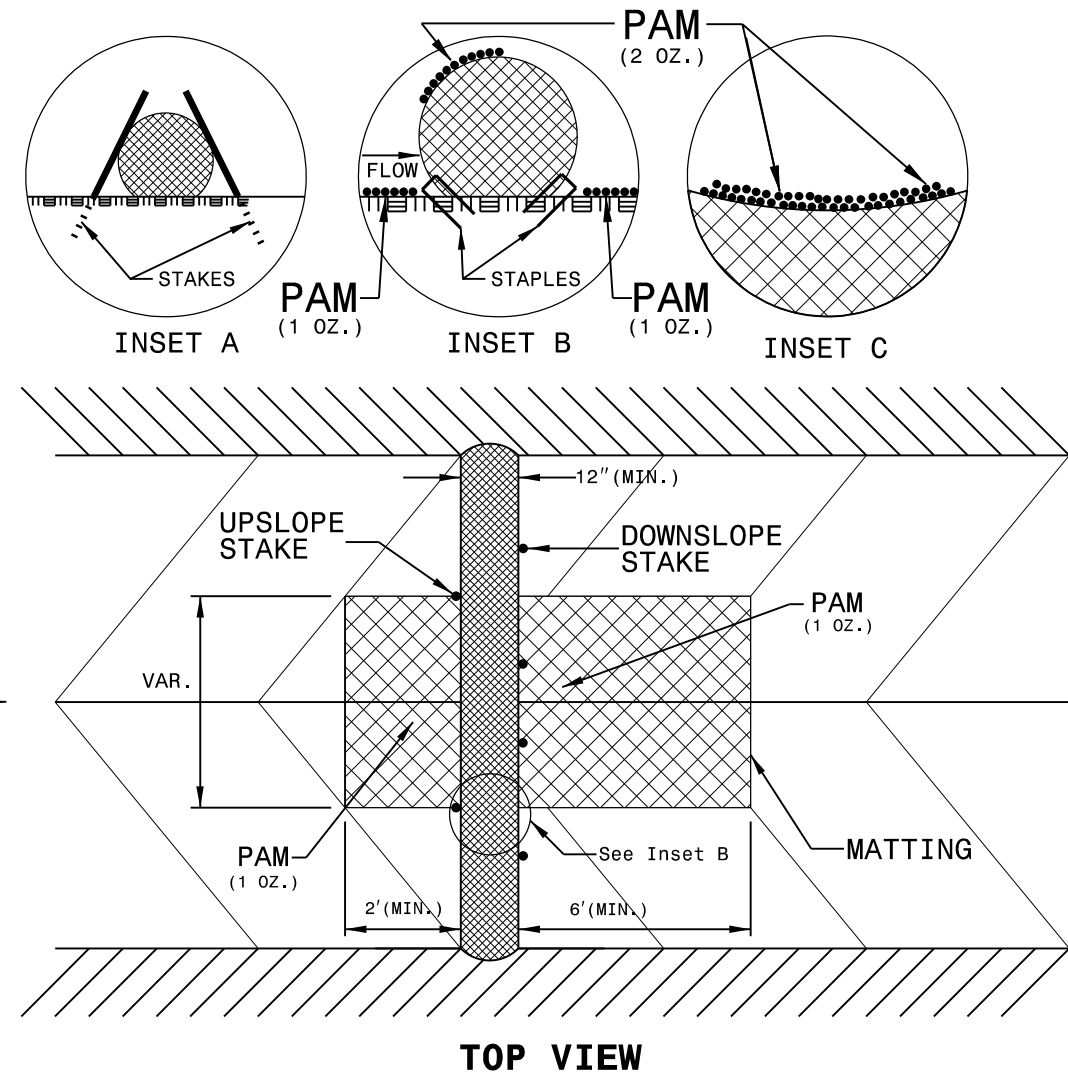
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

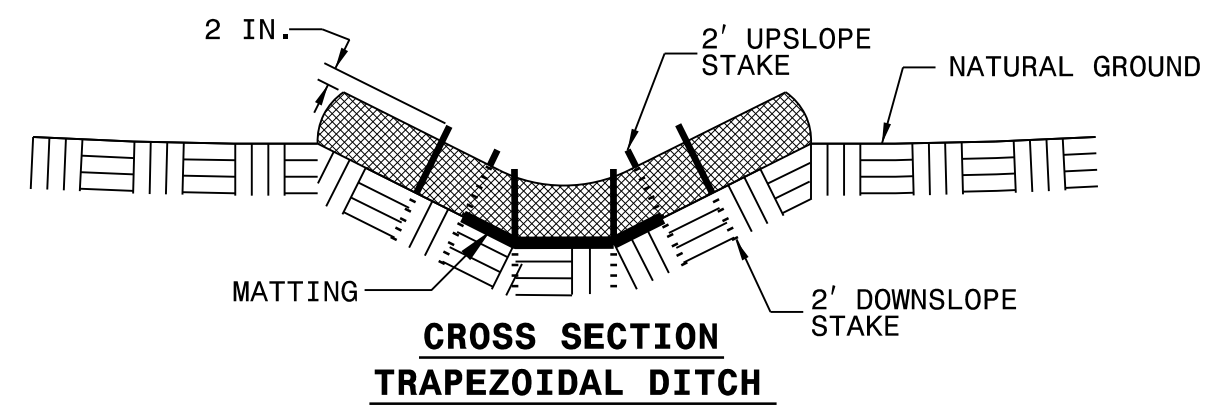
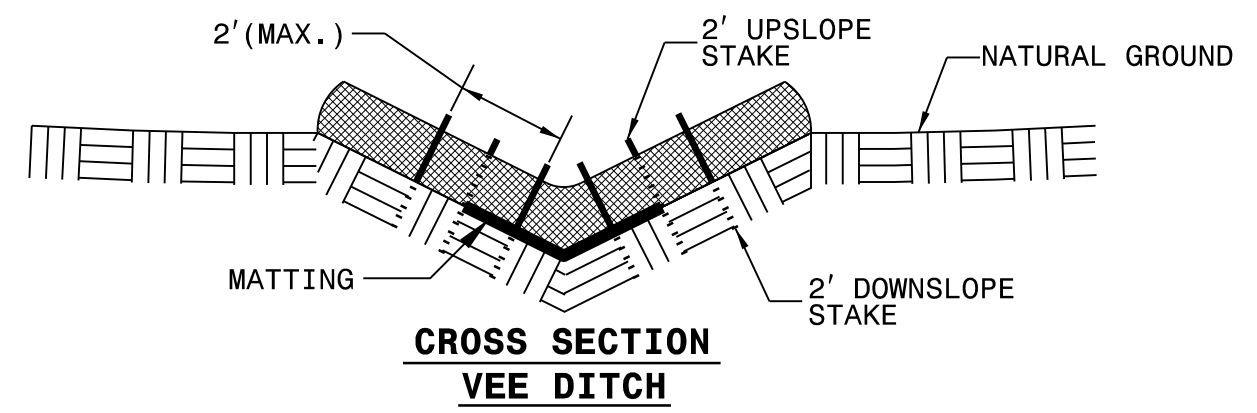
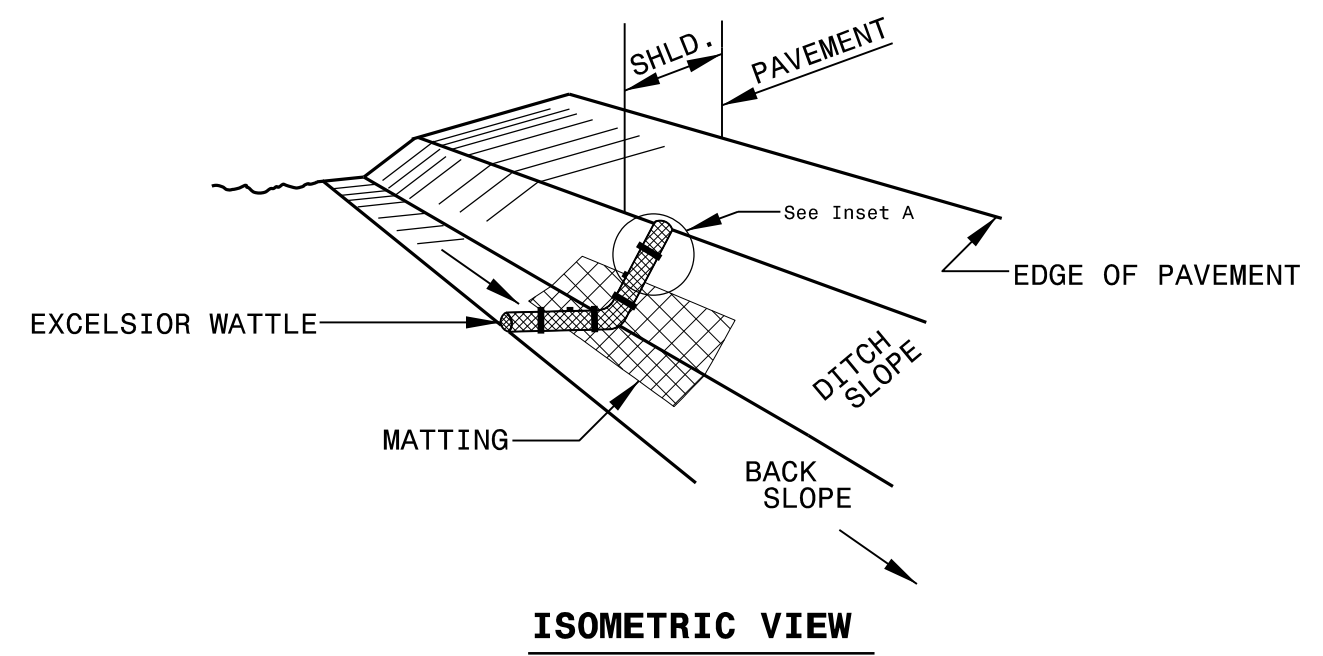
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



WATTLE DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

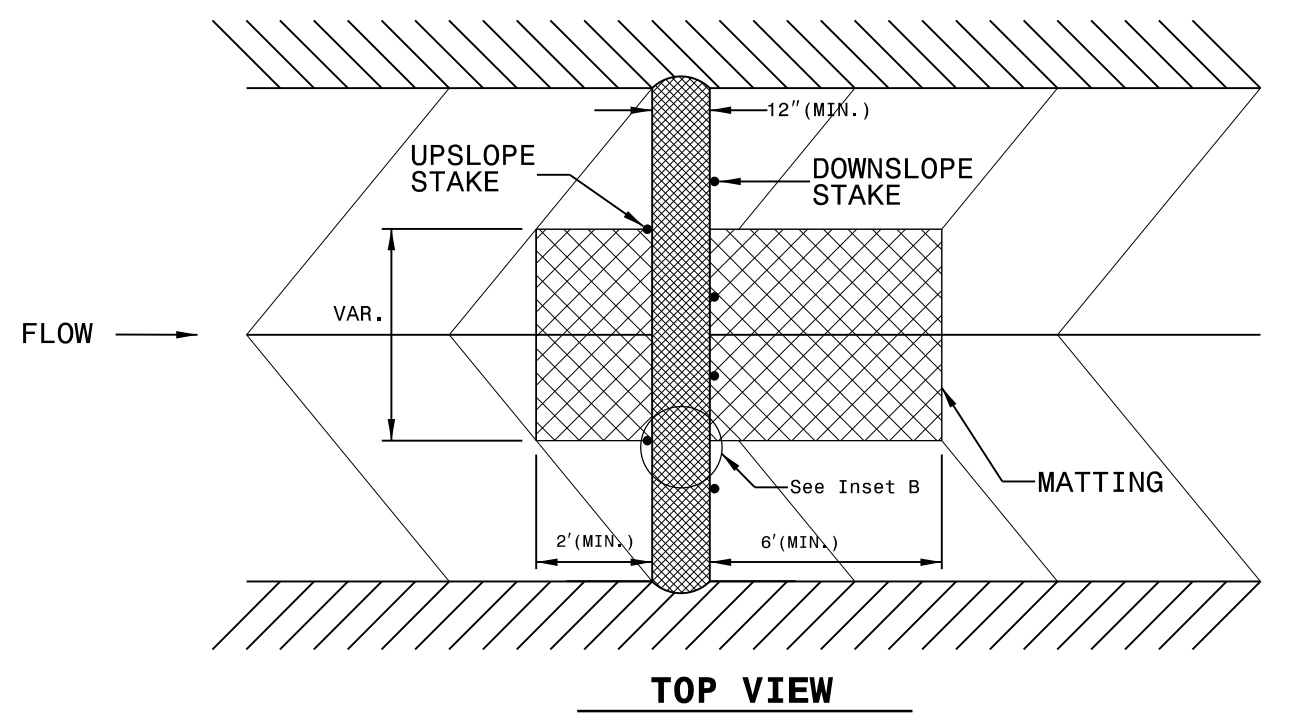
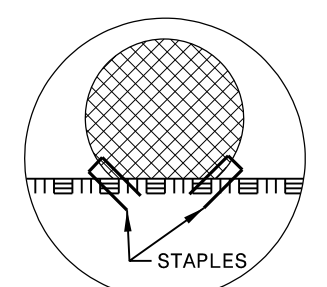
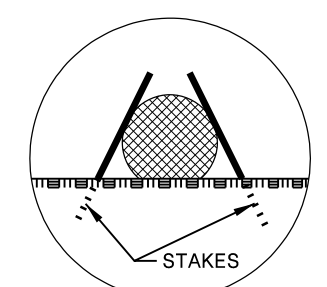
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

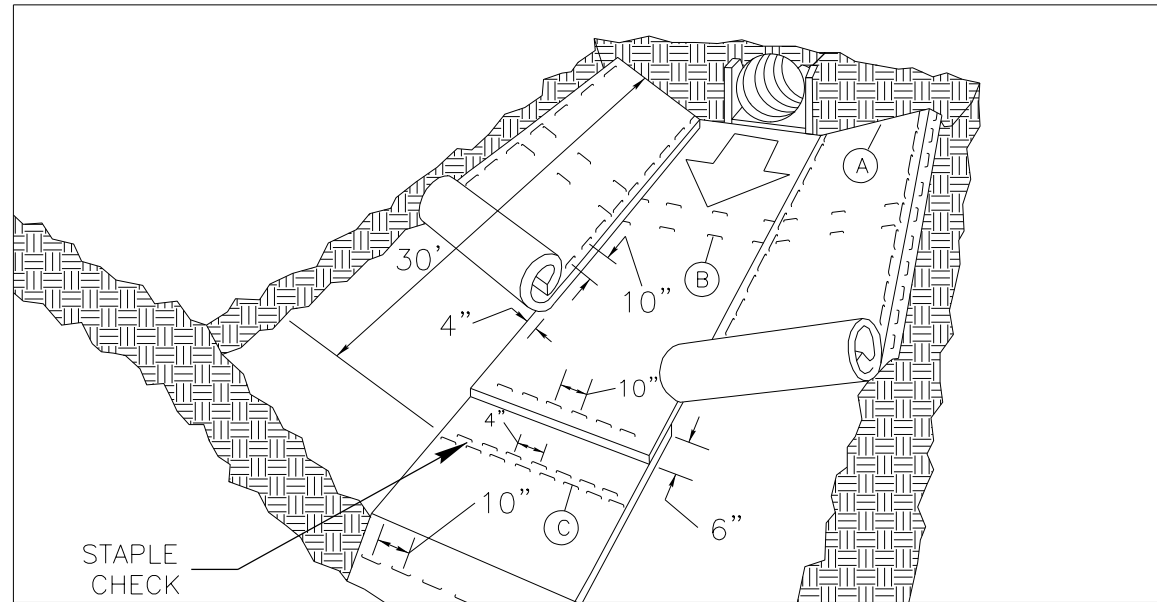
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



MATTING INSTALLATION DETAIL

PROJECT NO.	SHEET NO.
44856.3.46	EC-2B
F.A. PROJECT NO. HSP-1004(072)	



MATTING IN DITCHES

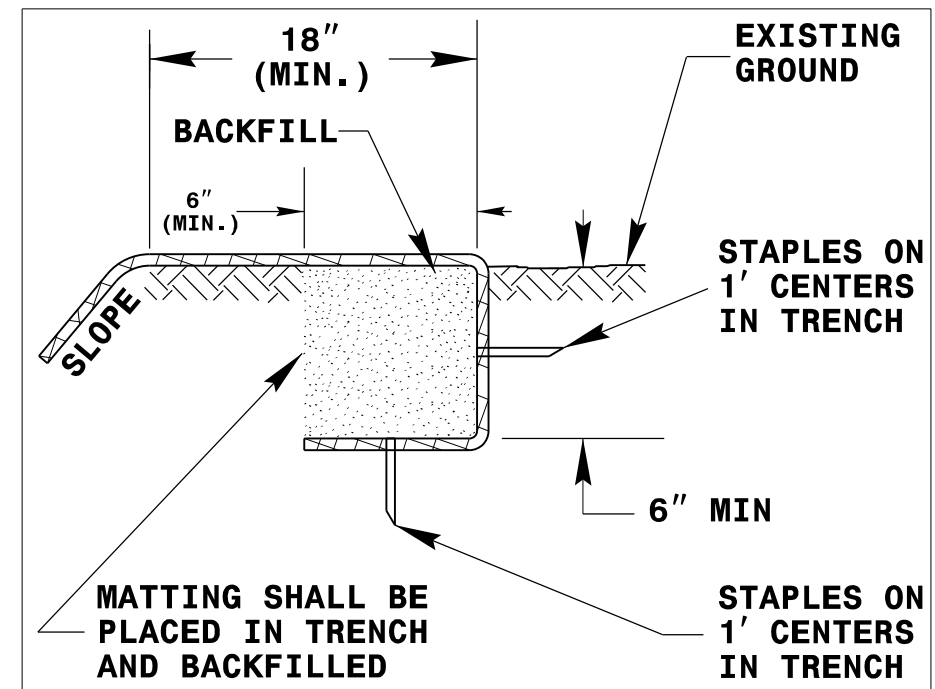
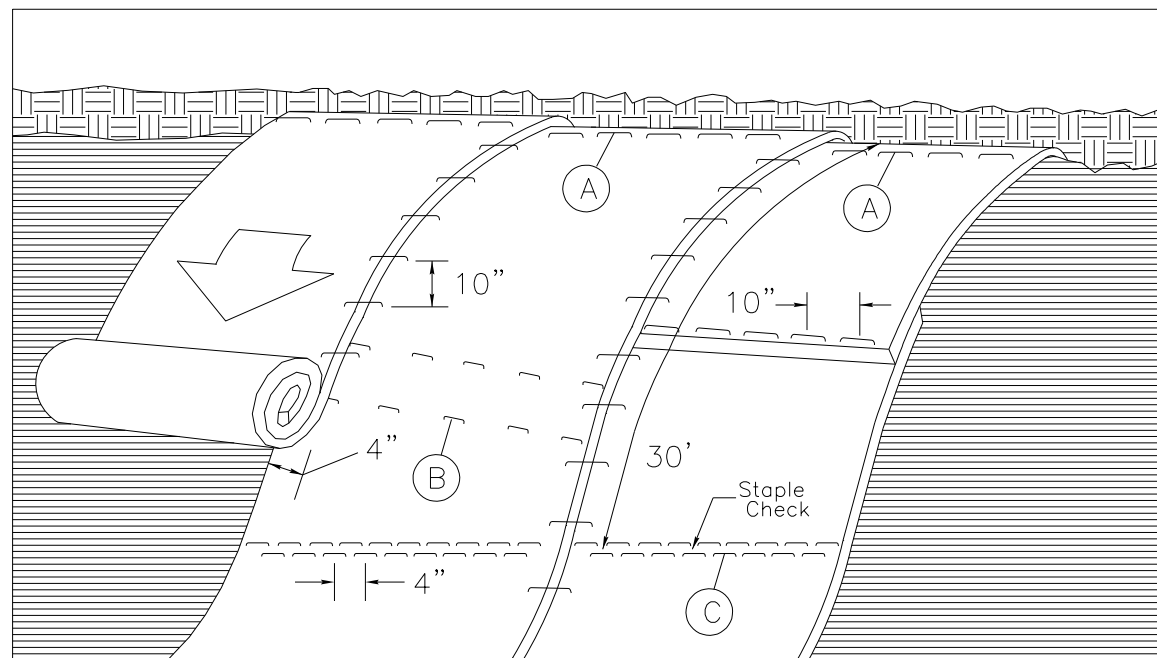


DIAGRAM (A)



MATTING ON SLOPES

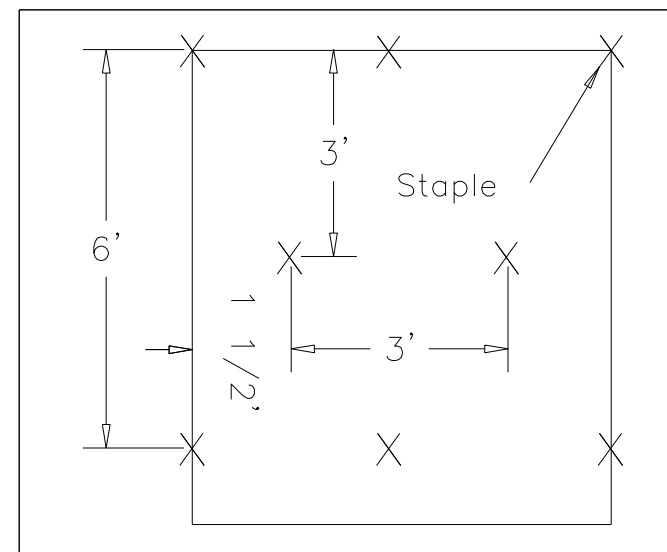


DIAGRAM (B)

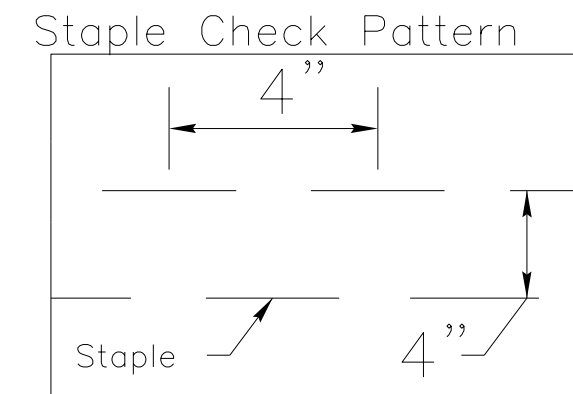


DIAGRAM (C)

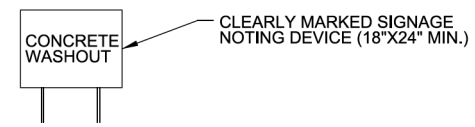
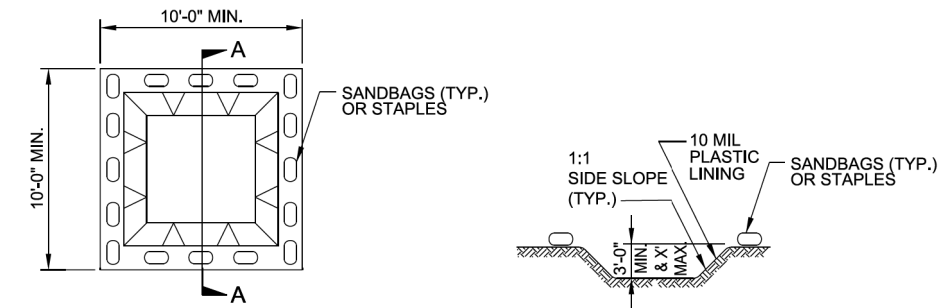
NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



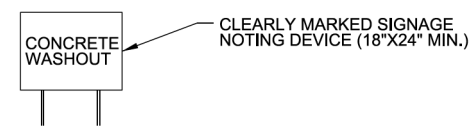
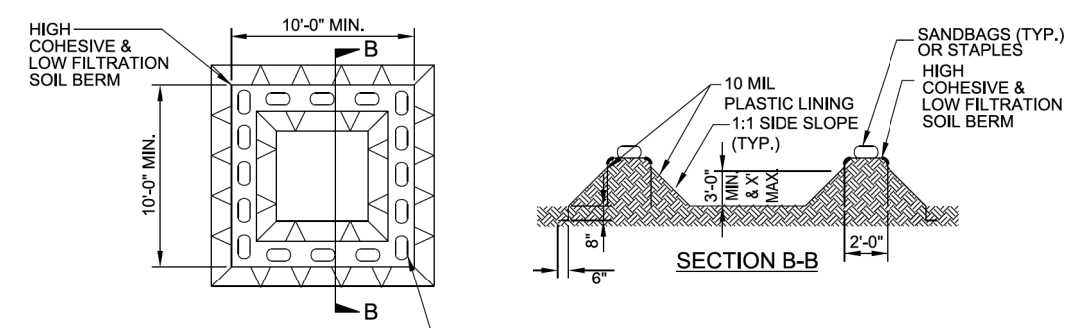
SECTION A-A

- NOTES:**
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

PLAN

BELOW GRADE WASHOUT STRUCTURE

NOT TO SCALE



SECTION B-B

- NOTES:**
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

PLAN

ABOVE GRADE WASHOUT STRUCTURE

NOT TO SCALE

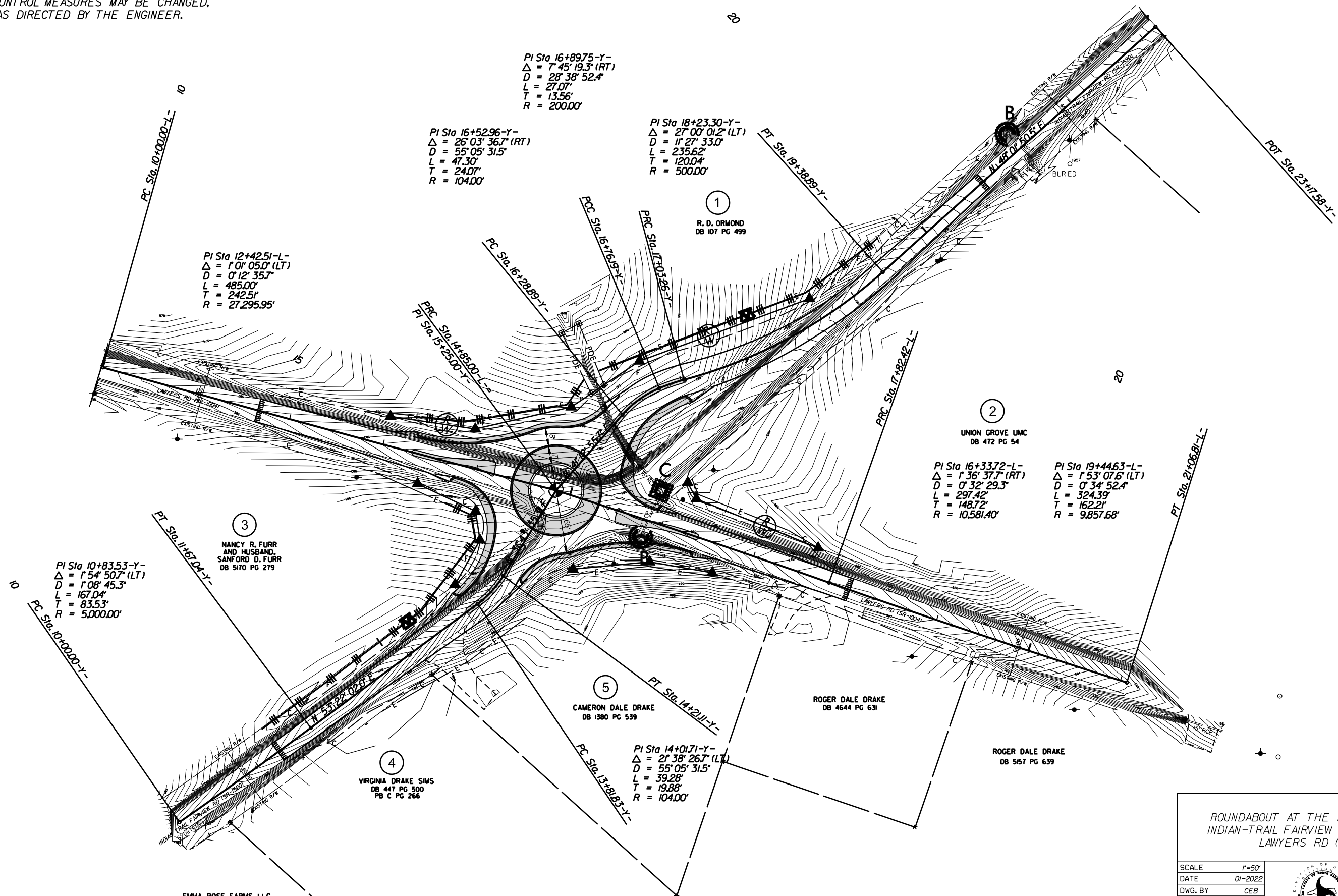
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT NO.	SHEET NO.
44856.3.46	EC-3
F.A. PROJECT NO. HSIP-1004(072)	

SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

EROSION CONTROL MEASURES MAY BE CHANGED,
IN FIELD AS DIRECTED BY THE ENGINEER.



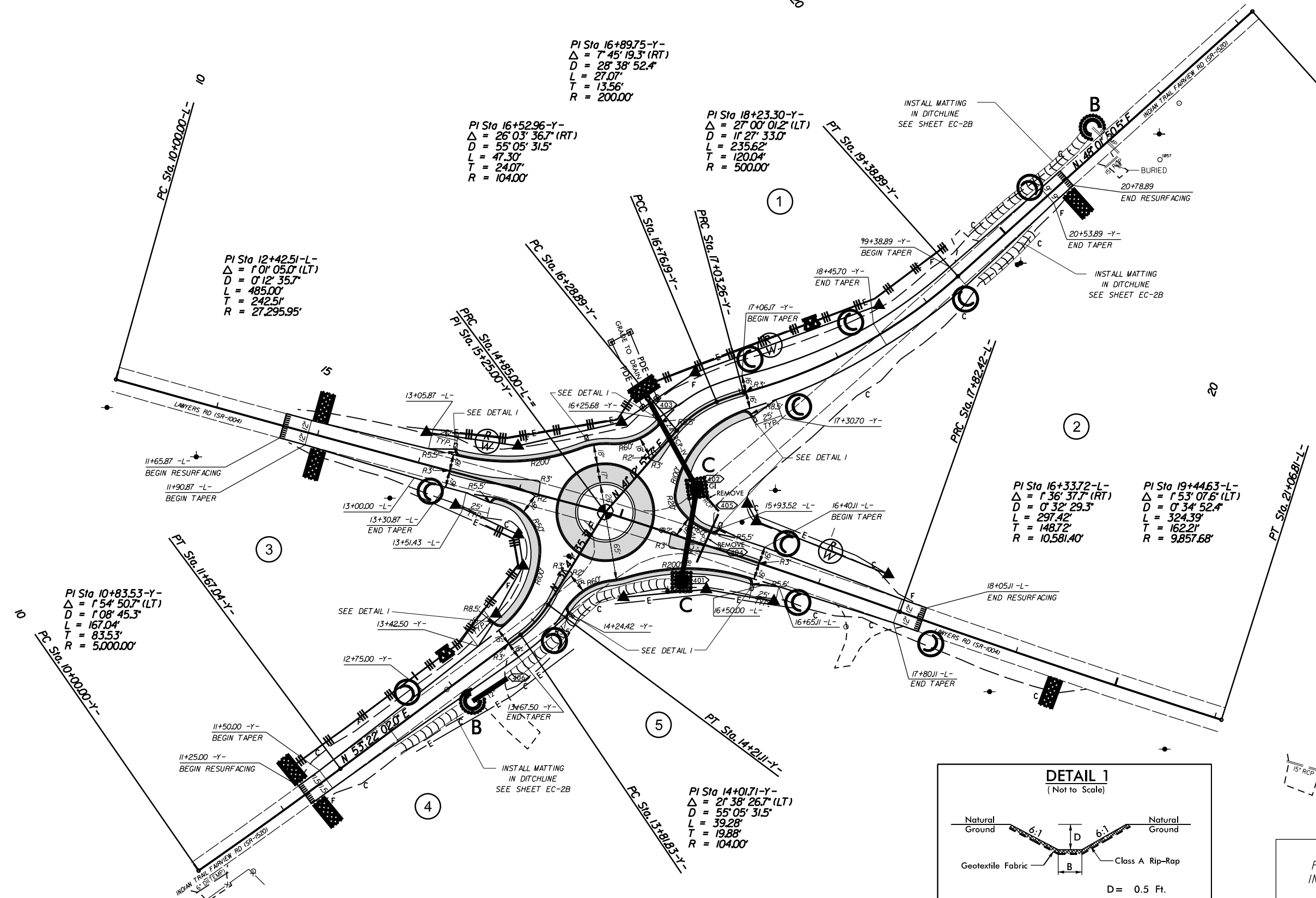
ROUNDBOUT AT THE INTERSECTION OF
INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND
LAWYERS RD (SR-1004)

SCALE	1"=50'		REVISIONS
DATE	01-2022		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		

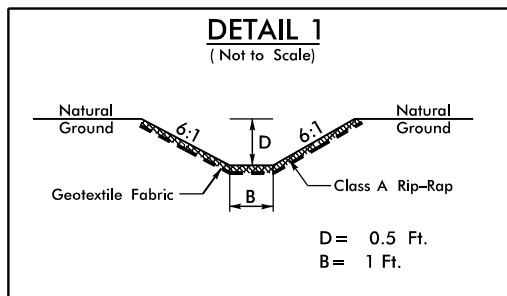
EMMA ROSE FARMS, LLC
DB 6713 PG 768

EROSION CONTROL MEASURES MAY BE CHANGED,
IN FIELD AS DIRECTED BY THE ENGINEER.

PROJECT NO.	SHEET NO.
44856.3.46	EC-4A
F.A. PROJECT NO. HSP-10041072)	



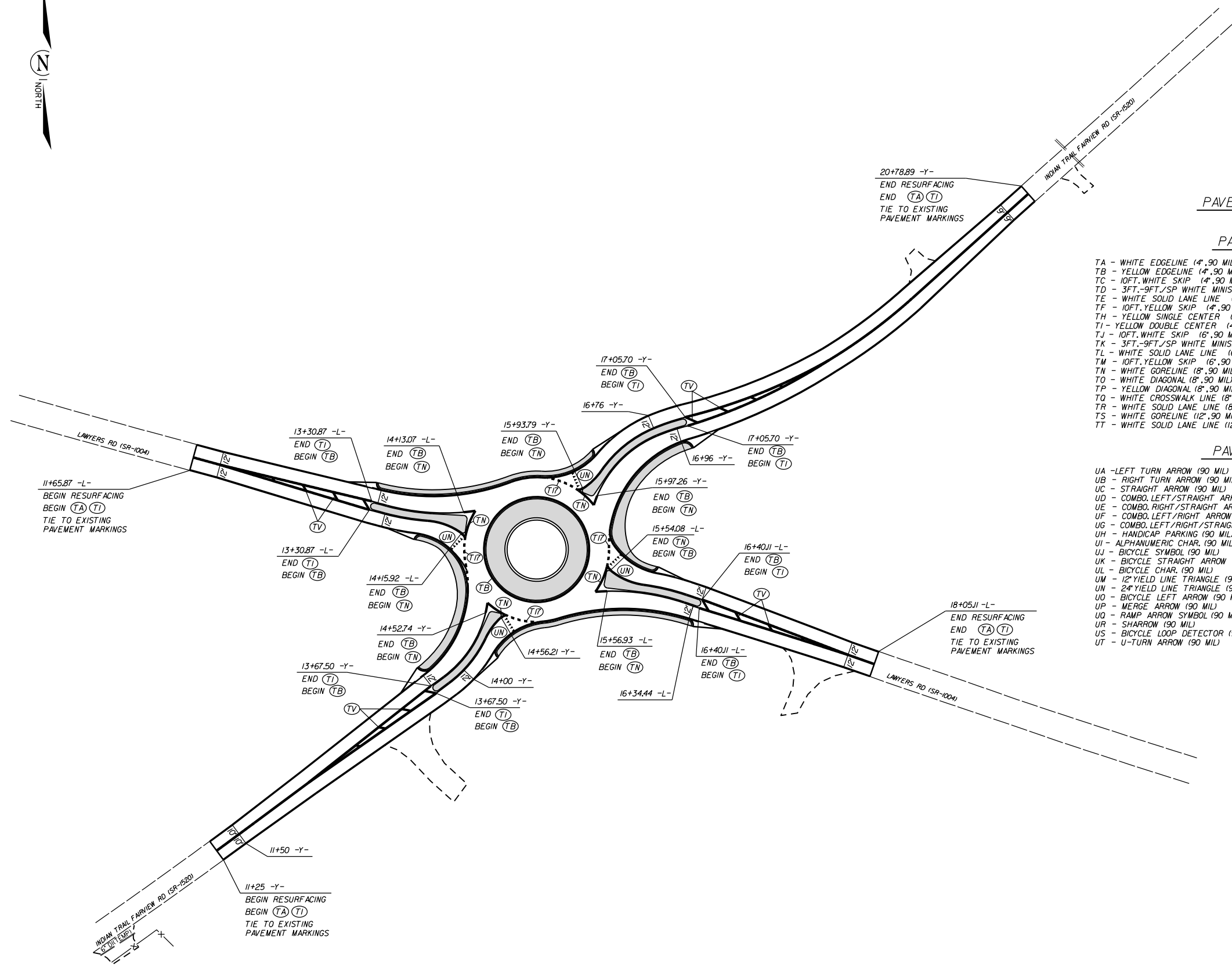
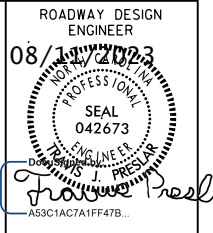
INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.
SEE SHEET EC-2B
STA. 12+25 -Y- RT TO 12+95 -Y- RT
STA. 13+45 -Y- RT TO 15+00 -Y- RT
STA. 19+75 -Y- LT TO 21+25 -Y- LT
STA. 19+50 -Y- RT TO 20+25 -Y- RT



To be placed at the
end of Curb Turnouts
as directed by the Engineer.

ROUNDABOUT AT THE INTERSECTION OF
INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND
LAWYERS RD (SR-1004)

SCALE	1"=50'		REVISIONS
DATE	01-2022		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		



PAVEMENT MARKING SCHEDULE

PAVEMENT MARKING LINES

- | | |
|---|---|
| TA - WHITE EDGELINE (4',.90 MIL) | TU - WHITE DIAGONAL (12',.90 MIL) |
| TB - YELLOW EDGELINE (4',.90 MIL) | TV - YELLOW DIAGONAL (12',.90 MIL) |
| TC - 10FT. WHITE SKIP (4',.90 MIL) | TI - WHITE LINE, RR X (16',.90 MIL) |
| TD - 3FT.-9FT./SP WHITE MINISKIP (4',.90 MIL) | T2 - WHITE STOPBAR (24',.90 MIL) |
| TE - WHITE SOLID LANE LINE (4',.90 MIL) | T3 - WHITE CROSSWALK LINE (24',.90 MIL) |
| TF - 10FT. YELLOW SKIP (4',.90 MIL) | T4 - WHITE RUMBLE STRIP (4",.240 MIL) |
| TH - YELLOW SINGLE CENTER (4',.90 MIL) | T5 - YELLOW RUMBLE STRIP (4",.240 MIL) |
| TI - YELLOW DOUBLE CENTER (4',.90 MIL) | T6 - WHITE EDGELINE (16',.90 MIL) |
| TJ - 10FT. WHITE SKIP (16',.90 MIL) | T7 - YELLOW EDGELINE (16',.90 MIL) |
| TK - 3FT.-9FT./SP WHITE MINISKIP (6',.90 MIL) | T8 - 2FT.-6FT./SP WHITE MINISKIP (4',.90 MIL) |
| TL - WHITE SOLID LANE LINE (16',.90 MIL) | T9 - 2FT.-6FT./SP YELLOW MINISKIP (4',.90 MIL) |
| TM - 10FT. YELLOW SKIP (16',.90 MIL) | T10 - 3FT.-3FT./SP WHITE MINISKIP (12',.90 MIL) |
| TN - WHITE GORELINE (8',.90 MIL) | T11 - 2FT.-6FT./SP WHITE MINISKIP (6',.90 MIL) |
| TO - WHITE DIAGONAL (8',.90 MIL) | T12 - 2FT.-6FT./SP YELLOW MINISKIP (12',.90 MIL) |
| TP - YELLOW DIAGONAL (8',.90 MIL) | T13 - 3FT.-9FT./SP WHITE MINISKIP (18',.90 MIL) |
| TQ - WHITE CROSSWALK LINE (8',.90 MIL) | T14 - 3FT.-9FT./SP WHITE MINISKIP (12',.90 MIL) |
| TR - WHITE SOLID LANE LINE (18',.90 MIL) | T15 - YELLOW SINGLE CENTER (16',.90 MIL) |
| TS - WHITE GORELINE (12',.90 MIL) | T16 - YELLOW DOUBLE CENTER (16',.90 MIL) |
| TT - WHITE SOLID LANE LINE (12',.90 MIL) | T17 - 3FT.-3FT./SP WHITE MINISKIP ENTRANCE LINE (18',.90 MIL) |

PAVEMENT MARKING SYMBOLS

- | | |
|--|--|
| UA - LEFT TURN ARROW (90 MIL) | UU - FISH-HOOK STRAIGHT ARROW (90 MIL) |
| UB - RIGHT TURN ARROW (90 MIL) | UV - FISH-HOOK LEFT/STRAIGHT ARROW (90 MIL) |
| UC - STRAIGHT ARROW (90 MIL) | UN - FISH-HOOK RIGHT/STRAIGHT ARROW (90 MIL) |
| UD - COMBO. LEFT/STRAIGHT ARROW (90 MIL) | UX - FISH-HOOK LEFT/RIGHT ARROW (90 MIL) |
| UE - COMBO. RIGHT/STRAIGHT ARROW (90 MIL) | UY - FISH-HOOK LEFT/RIGHT/STRAIGHT ARROW (90 MIL) |
| UF - COMBO. LEFT/RIGHT ARROW (90 MIL) | UZ - FISH-HOOK W/CIRCLE STRAIGHT ARROW (90 MIL) |
| UG - COMBO. LEFT/RIGHT/STRAIGHT ARROW (90 MIL) | |
| UH - HANDICAP PARKING (90 MIL) | WA - FISH-HOOK W/CIRCLE LEFT ARROW (90 MIL) |
| UI - ALPHANUMERIC CHAR. (90 MIL) | WB - FISH-HOOK W/CIRCLE LEFT/STRAIGHT ARROW (90 MIL) |
| UJ - BICYCLE SYMBOL (90 MIL) | WC - FISH-HOOK W/CIRCLE LEFT/RIGHT/STRAIGHT ARROW (90 MIL) |
| UK - BICYCLE STRAIGHT ARROW (90 MIL) | |
| UL - BICYCLE CHAR. (90 MIL) | MA - PERMANENT RAISED MARKER (YELLOW & YELLOW) |
| UM - 12" YIELD LINE TRIANGLE (90 MIL) | MB - PERMANENT RAISED MARKER (CRYSTAL & RED) |
| UN - 24" YIELD LINE TRIANGLE (90 MIL) | MC - PERMANENT RAISED MARKER (YELLOW & RED) |
| UP - BICYCLE LEFT ARROW (90 MIL) | MD - PERMANENT RAISED MARKER (YELLOW) |
| UQ - MERGE ARROW (90 MIL) | ME - SNOWPLOWABLE MARKER (YELLOW & YELLOW) |
| UR - RAMP ARROW SYMBOL (90 MIL) | MF - SNOWPLOWABLE MARKER (CRYSTAL & RED) |
| US - SHARROW (90 MIL) | MG - SNOWPLOWABLE MARKER (YELLOW & RED) |
| UT - BICYCLE LOOP DETECTOR (90 MIL) | ML - PERMANENT RAISED MARKER (CRYSTAL & CRYSTAL) |
| | MO - SNOWPLOWABLE MARKER (CRYSTAL & CRYSTAL) |


**ROUNDABOUT AT THE INTERSECTION OF
INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND
LAWYERS RD (SR-1004)**

SCALE	1"=50'		REVISIONS
DATE	12-2021		
DWG. BY	CEB		
DESIGN BY	JDH		
APPROVED	JDH		

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN
UNION COUNTY**

**LOCATION: INTERSECTION OF NEW TOWN RD.(SR-1315), ENNIS RD (SR-1319),
AND BROOMES OLD MILL RD.(SR-1320)**

PROJECT REFERENCE NO. W-5710AR	SHEET NO. SIGN-1
APPROVED: <u>Renee B. Roach</u> <small>Professional Engineer License No. 35849000104431</small>	
DATE: 03/16/2023	
SEAL 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

T.I.P.: W-5710AR

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS
910.40	SINGLE LANE ROUNDABOUT SIGNING, WITH PEDESTRIANS

SUMMARY OF QUANTITIES

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	346	L.F.
4096000000	904	SIGN ERECTION, TYPE D	1	EA.
4102000000	904	SIGN ERECTION, TYPE E	30	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE E (GROUND MOUNTED)	2	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	13	EA.
4192000000	907	DISPOSAL OF SUPPORT, U-CHANNEL	1	EA.

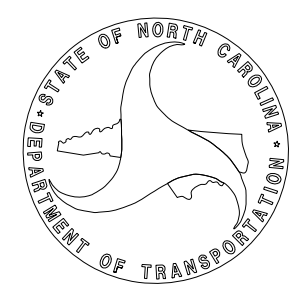
GENERAL NOTES

- SIGNS FURNISHED BY STATE
- CONFIRM IN WRITING AT LEAST 4 MONTHS IN ADVANCE, THE ACTUAL DATE THE DEPARTMENT FURNISHED SIGNS WILL BE REQUIRED.
- IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER
- ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.
- WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.
- THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.

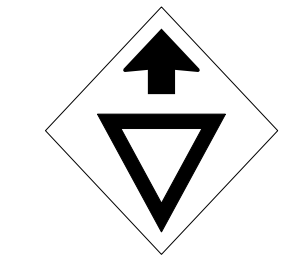

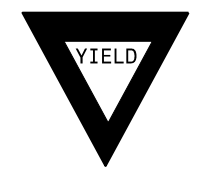

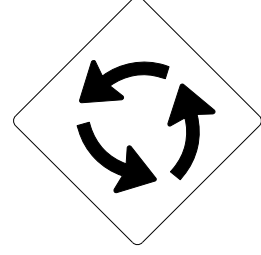

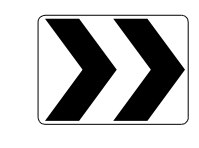
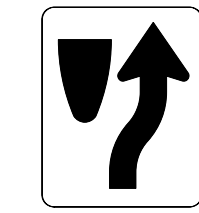
PLAN PREPARED BY: N.C.D.O.T. SIGNING AND DELINEATION UNIT

Kelvin Jordan SIGNING & DELINEATION REGIONAL ENGINEER

J.Navarrete SIGNING & DELINEATION PROJECT DESIGN ENGINEER



TYPE E SIGNS

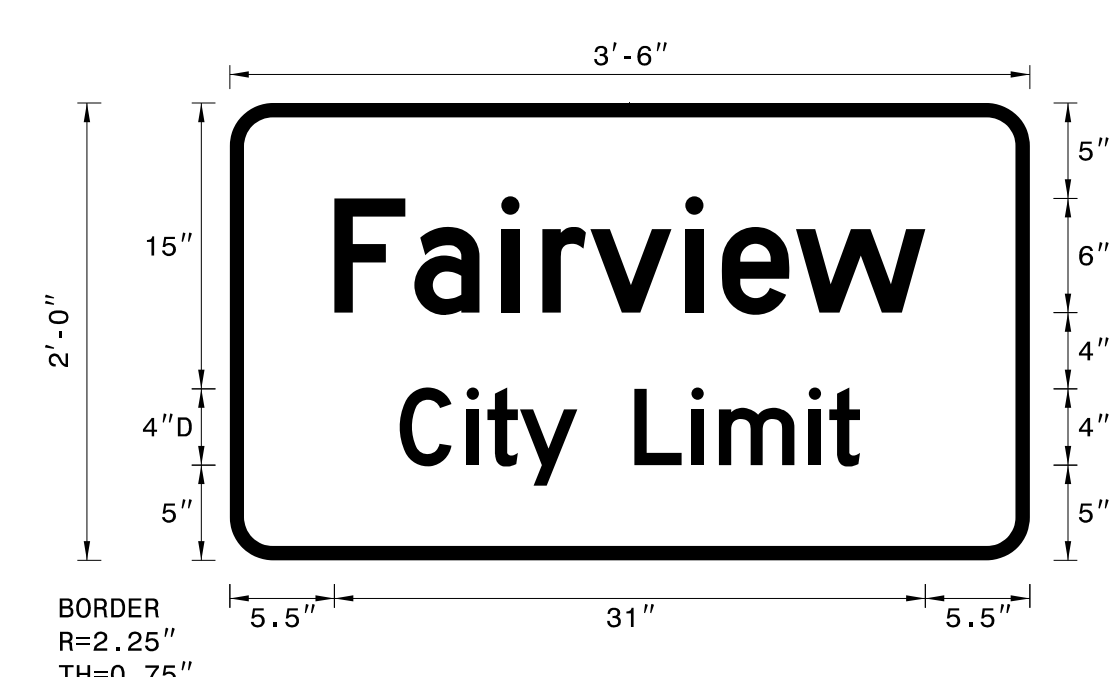
<p style="text-align: center;">(401) QUANTITY REQ'D <u>4</u></p> <div style="text-align: center;">  <p>30" X 30" W3-2</p> <p>ONE "U" POST PER SIGN</p> </div>	<p style="text-align: center;">(404) QUANTITY REQ'D <u>2</u></p> <div style="text-align: center;">  <p>Indian Trail Fairview Rd</p> <p>SEE SIGN DESIGN SHEET</p> <p>MOUNT BELOW SIGN 403</p> </div>
<p style="text-align: center;">(402) QUANTITY REQ'D <u>8</u></p> <div style="text-align: center;">  <p>36 X 36 X 36 R1-2</p> <p>ONE "U" POST PER SIGN</p> </div>	<p style="text-align: center;">(405) QUANTITY REQ'D <u>2</u></p> <div style="text-align: center;">  <p>Lawyers Rd</p> <p>SEE SIGN DESIGN SHEET</p> <p>MOUNT BELOW SIGN 403</p> </div>
<p style="text-align: center;">(403) QUANTITY REQ'D <u>4</u></p> <div style="text-align: center;">  <p>30" X 30" W2-6</p> <p>ONE "U" POST PER SIGN</p> </div>	<p style="text-align: center;">(406) QUANTITY REQ'D <u>2</u></p> <div style="text-align: center;">  <p>SPEED LIMIT 45</p> <p>24" X 30" R2-1</p> <p>ONE "U" POST PER SIGN</p> </div>
<p style="text-align: center;">(407) QUANTITY REQ'D <u>4</u></p> <div style="text-align: center;">  <p>30" X 24" R6-4</p> <p>ONE "U" POST PER SIGN</p> </div>	<p style="text-align: center;">(408) QUANTITY REQ'D <u>4</u></p> <div style="text-align: center;">  <p>30" X 24" R4-7</p> <p>ONE "U" POST PER SIGN</p> </div>

INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2	SIGN DESIGNS
SIGN-3	EXISTING SIGN SHEET
SIGN-4	PROPOSED SIGN SHEET

CONTRACT:

SIGN NUMBER: 301 TYPE: D QUANTITY: 1
 SIGN WIDTH: 3'-6" HEIGHT: 2'-0" TOTAL AREA: 7.0 Sq.Ft.
 BORDER TYPE: FLUSH RECESS: 0" WIDTH: 0.75" RADII: 2.25"
 NO. Z BARS: LENGTH:
 BACKG COLOR: Green COPY COLOR: White
 SYMBOL X Y WID HT
 MAT'L: 0.125" (3.2 mm) ALUMINUM
 DESIGN BY: J.Navarrete PROJECT ID: W-5710AR
 CHECKED BY: LOCATION: Jan 24, 2022 DIV: 10




USE NOTES: 1,2
 1. Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.
 2. Background shall be Grade C reflective sheeting.

LETTER POSITIONS
 Letter spacings are to start of next letter

Series/Size	Text Length
D 2000	31
D 2000	24.2

FILENAME: W-5710AR Sign Designs NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 404 TYPE: E QUANTITY: 2
 SIGN WIDTH: 4'-0" HEIGHT: 1'-0" TOTAL AREA: 4.0 Sq.Ft.
 BORDER TYPE: FLUSH RECESS: 0.38" WIDTH: 0.38" RADII: 1.5"
 NO. Z BARS: LENGTH:
 BACKG COLOR: Yellow COPY COLOR: Black
 SYMBOL X Y WID HT
 MAT'L: 0.125" (3.2 mm) ALUMINUM
 DESIGN BY: J.Navarrete PROJECT ID: W-5710AR
 CHECKED BY: LOCATION: Jan 24, 2022 DIV: 10



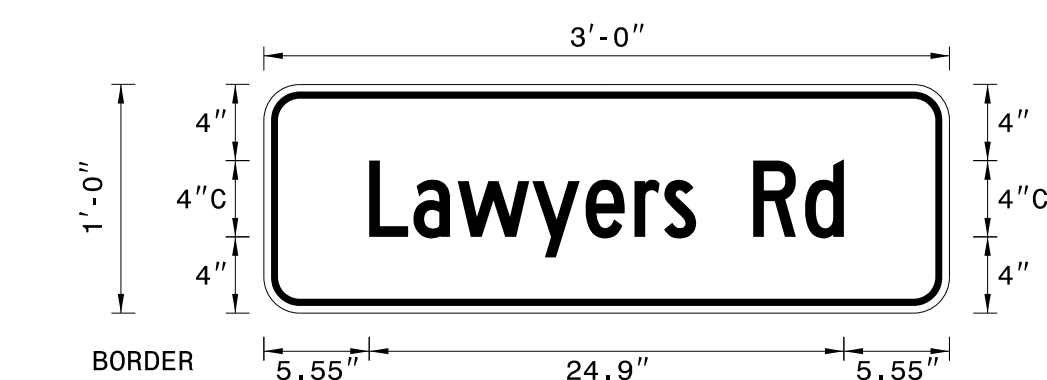
USE NOTES: 1,2
 1. Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.
 2. Background shall be Grade C reflective sheeting.

LETTER POSITIONS
 Letter spacings are to start of next letter

Series/Size	Text Length
B 2000	39.6

FILENAME: W-5710AR Sign Designs NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 405 TYPE: E QUANTITY: 2
 SIGN WIDTH: 3'-0" HEIGHT: 1'-0" TOTAL AREA: 3.0 Sq.Ft.
 BORDER TYPE: FLUSH RECESS: 0.38" WIDTH: 0.38" RADII: 1.5"
 NO. Z BARS: LENGTH:
 BACKG COLOR: Yellow COPY COLOR: Black
 SYMBOL X Y WID HT
 MAT'L: 0.125" (3.2 mm) ALUMINUM
 DESIGN BY: J.Navarrete PROJECT ID: W-5710AR
 CHECKED BY: LOCATION: Feb 01, 2022 DIV: 10

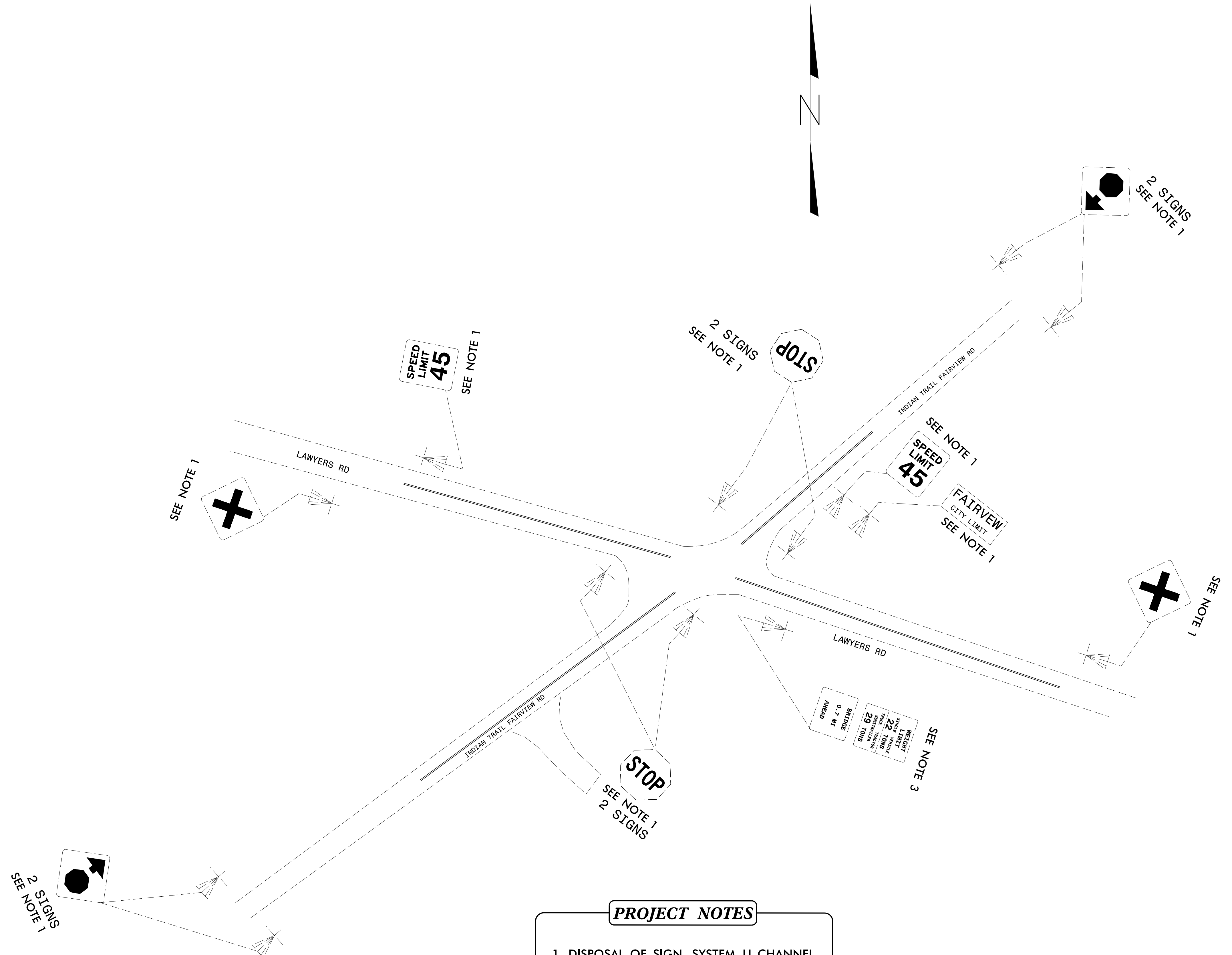


USE NOTES: 1,2
 1. Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.
 2. Background shall be Grade C reflective sheeting.

LETTER POSITIONS
 Letter spacings are to start of next letter

Series/Size	Text Length
C 2000	24.9

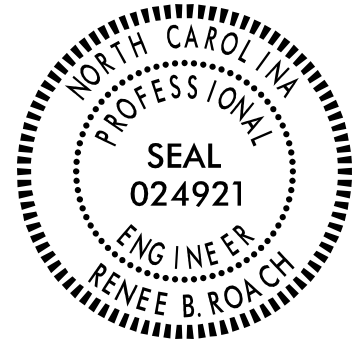
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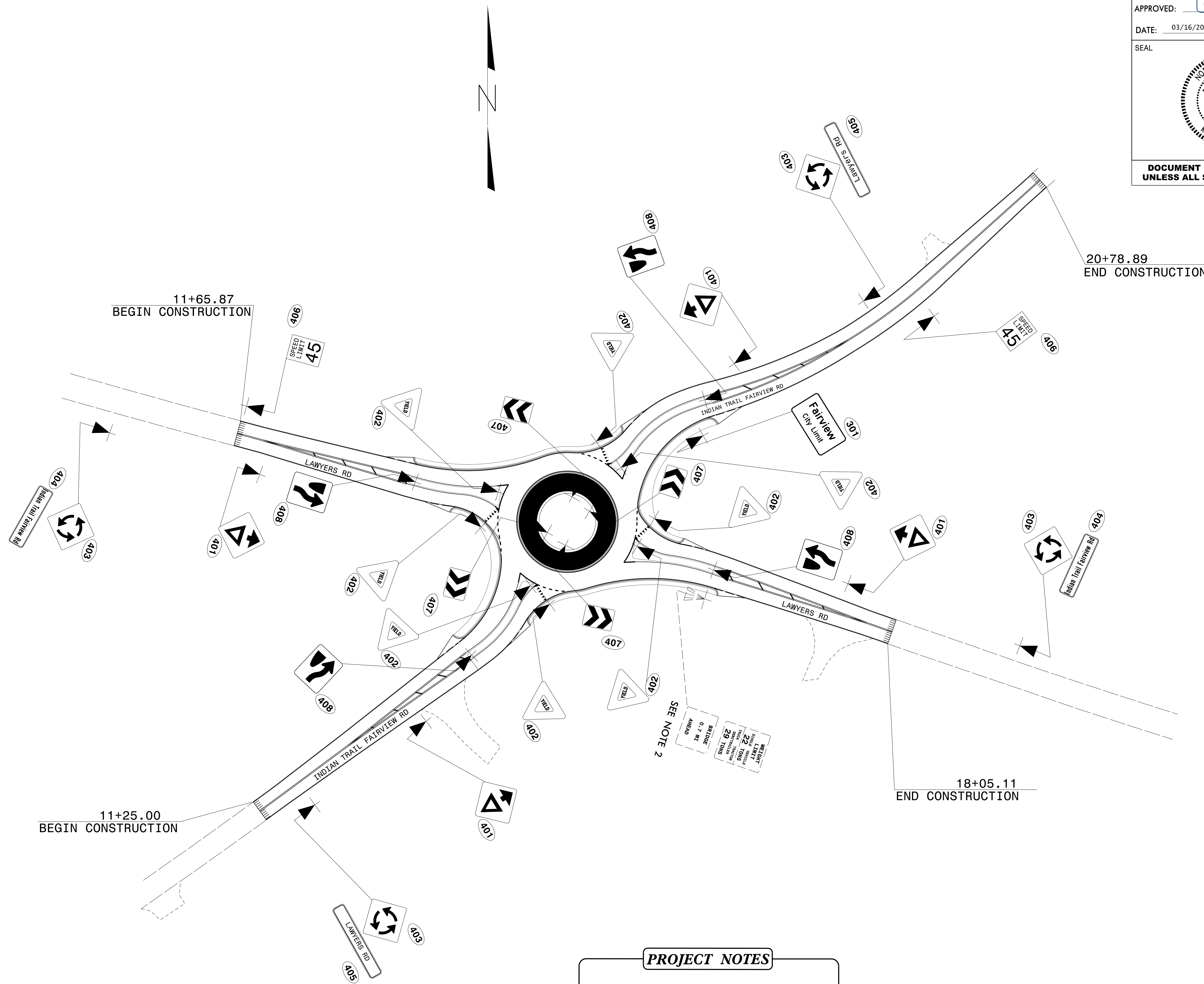


PROJECT NOTES

- 1 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 SIGN ERECTION, RELOCATE SIGN TYPE E
- 3 DISPOSAL OF U-CHANNEL POST

EXISTING

PROJECT REFERENCE NO. W-5710AR	SHEET NO. SIGN-4
APPROVED: <i>Renee B. Roach</i> <small>RENEE B. ROACH</small>	
DATE: 03/16/2023	
SEAL	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



PROJECT NOTES

- 1 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 SIGN ERECTION, RELOCATE SIGN TYPE E
- 3 DISPOSAL OF U-CHANNEL POST

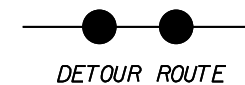
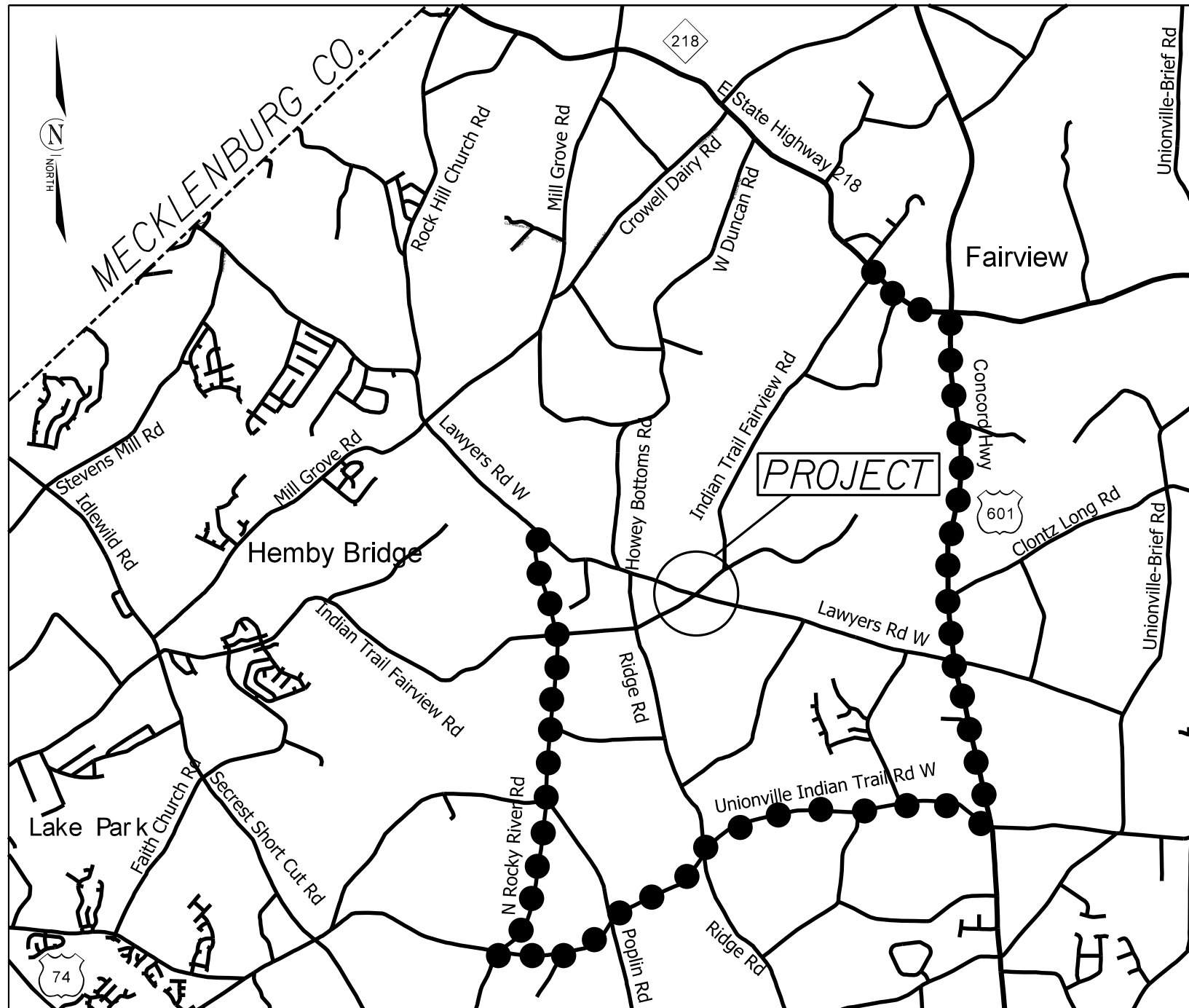
PROPOSED

PROJECT NO.	SHEET NO.
44856.3.46	TCP-1
F.A. PROJECT NO. HSP-100410721	

ROADWAY DESIGN
ENGINEER
08/31/2023
PROFESSIONAL
SEAL
042673
JAMES J. PRESLER
REGISTERED PROFESSIONAL ENGINEER
ASSOCIATION 11F47B...


OFFSITE DETOUR

OFFSITE DETOUR TO BE INSTALLED AND MAINTAINED BY NCDOT.



ROUNDAABOUT AT THE INTERSECTION OF
INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND
LAWYERS RD (SR-1004)

SCALE	N/A	REVISIONS
DATE	5-2022	
DWG. BY	CEB	
DESIGN BY	JDH	
APPROVED	JDH	



T.I.P. NO.	SHEET NO.
44856.3.46	UO-1

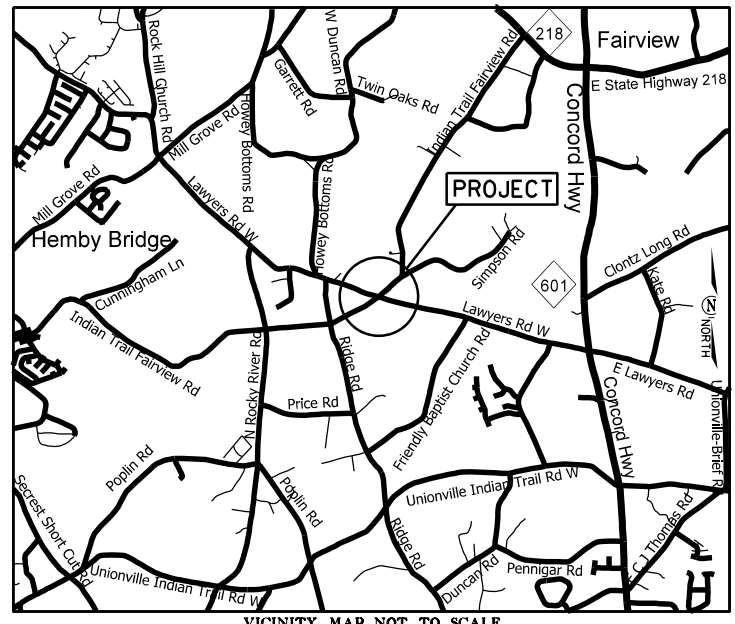
NOTE:
 ALL UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS.
 NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

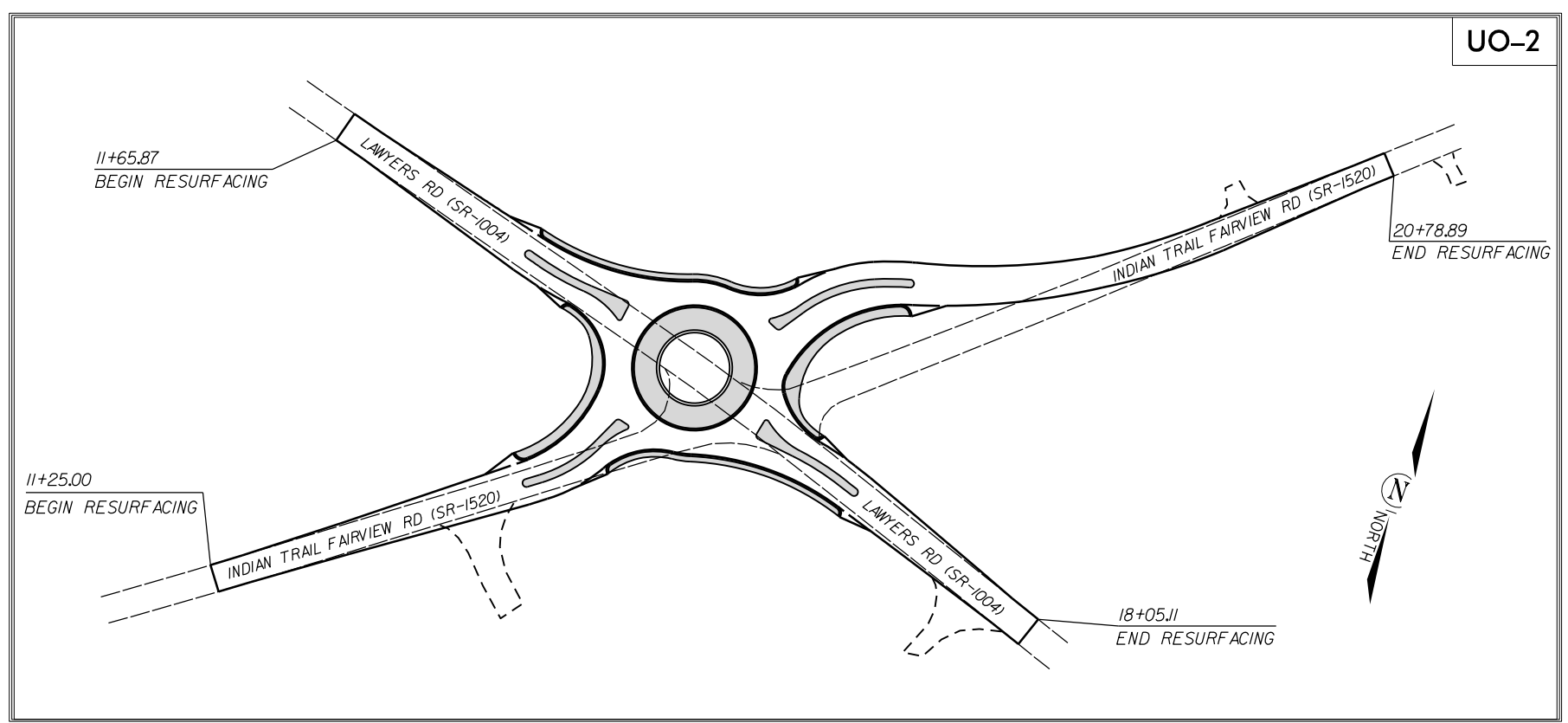
UTILITIES BY OTHERS PLANS
UNION COUNTY

LOCATION: LAWYERS RD (SR-1004) AND INDIAN-TRAIL FAIRVIEW RD (SR-1532) NEAR FAIRVIEW

TYPE OF WORK: UTILITIES BY OTHERS



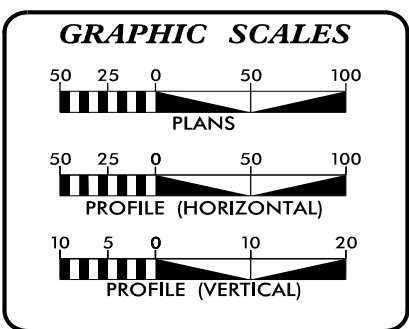
VICINITY MAP NOT TO SCALE



UO-2

TIP PROJECT: W-5710AR

29-MAR-2023 12:39 S:\DDC\ROY\Union\W-5710AR_Lawyers.s.Indian Trail\Fairview_RAB_UBO_tsh.dgn



INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UO-1	TITLE SHEET
UO-2	UBO PLAN SHEETS

UTILITY OWNERS WITH CONFLICTS

(A) TELECOMMUNICATIONS - FRONTIER
 (B) TELECOMMUNICATIONS - SPECTRUM-CHARTER
 (C) TELECOMMUNICATIONS - AT+T
 (D) GAS - PROGRESS ENERGY

PREPARED IN THE OFFICE OF:

DDC UNIT DIVISION 10
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

DIVISION 10 UTILITIES UNIT
 716 W. MAIN ST.
 ALBEMARLE, NC 28001
 PHONE (704) 983-4400

T LYNN BASINGER UTILITIES ENGINEER
ADAM PRESSLAR UTILITIES COORDINATOR



AT+T CABLE REPLACEMENT CONTINUES APPROX. 730', 3' DEPTH, 4' FROM EOP TO PROPOSED HANDHOLE, ROAD BORE USED TO CROSS UNDER LAWYERS RD

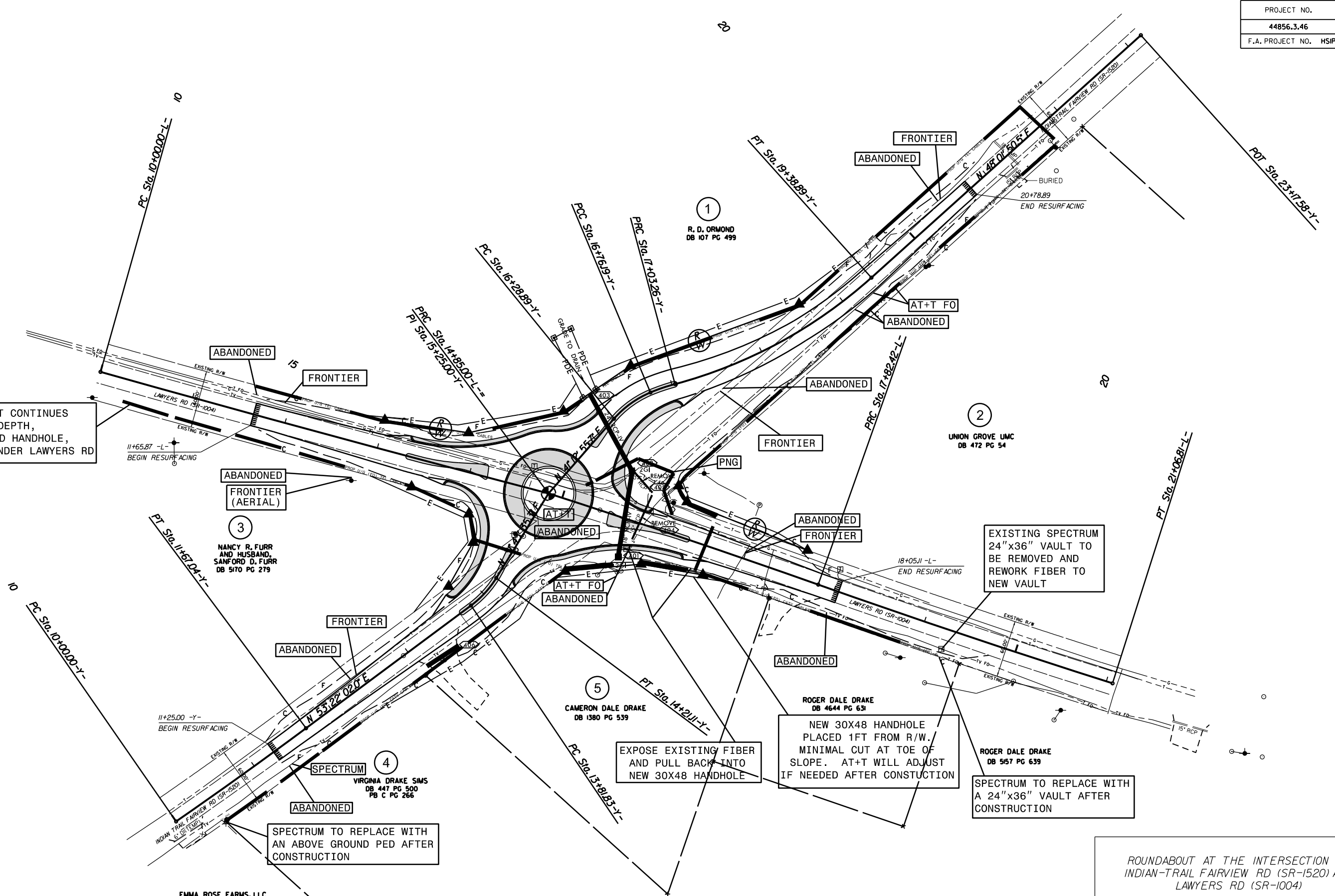
EXISTING SPECTRUM 24"x36" VAULT TO BE REMOVED AND REWORK FIBER TO NEW VAULT

NEW 30X48 HANDHOLE PLACED 1FT FROM R/W. MINIMAL CUT AT TOE OF SLOPE. AT+T WILL ADJUST IF NEEDED AFTER CONSTRUCTION

SPECTRUM TO REPLACE WITH A 24"x36" VAULT AFTER CONSTRUCTION

SPECTRUM TO REPLACE WITH AN ABOVE GROUND PED AFTER CONSTRUCTION

EXPOSE EXISTING FIBER AND PULL BACK INTO NEW 30X48 HANDHOLE



ROUNDABOUT AT THE INTERSECTION OF INDIAN-TRAIL FAIRVIEW RD (SR-1520) AND LAWYERS RD (SR-1004)

SCALE	1"=50'		REVISIONS
DATE	10-2022		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		

EMMA ROSE FARMS, LLC
DB 6713 PG 768

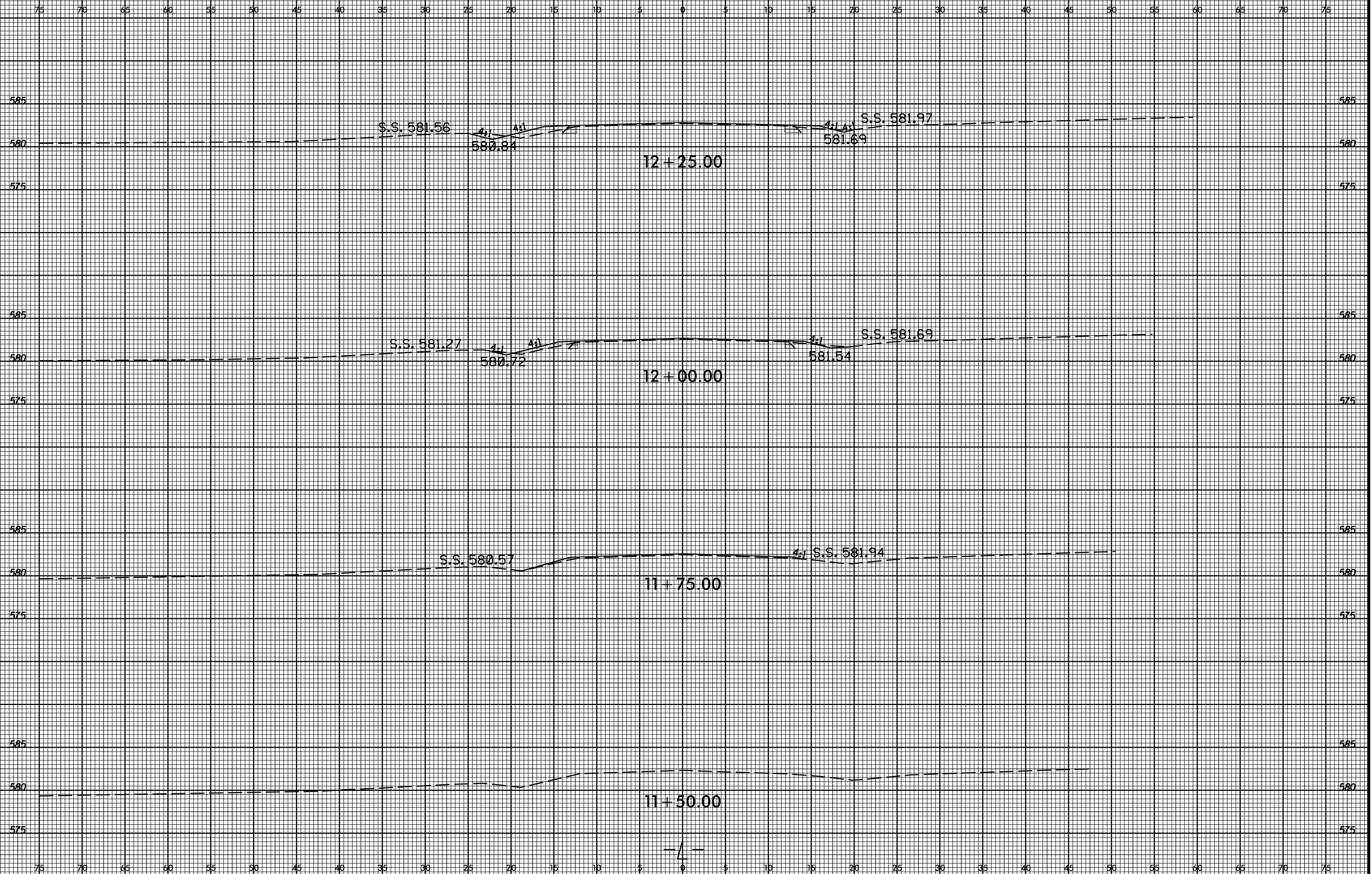
NANCY R. FURR AND HUSBAND, SANFORD D. FURR
DB 5170 PG 279

CAMERON DALE DRAKE
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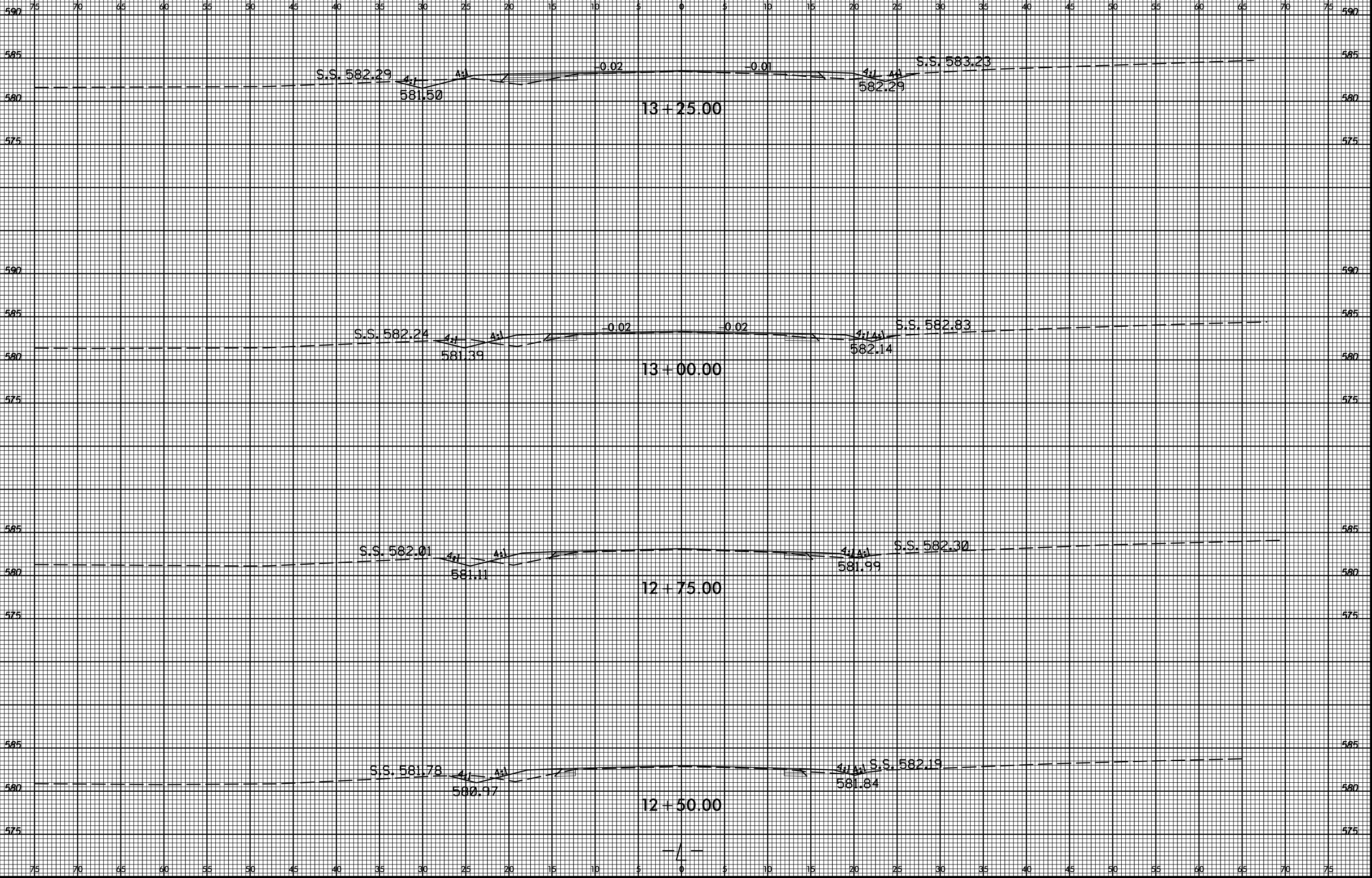
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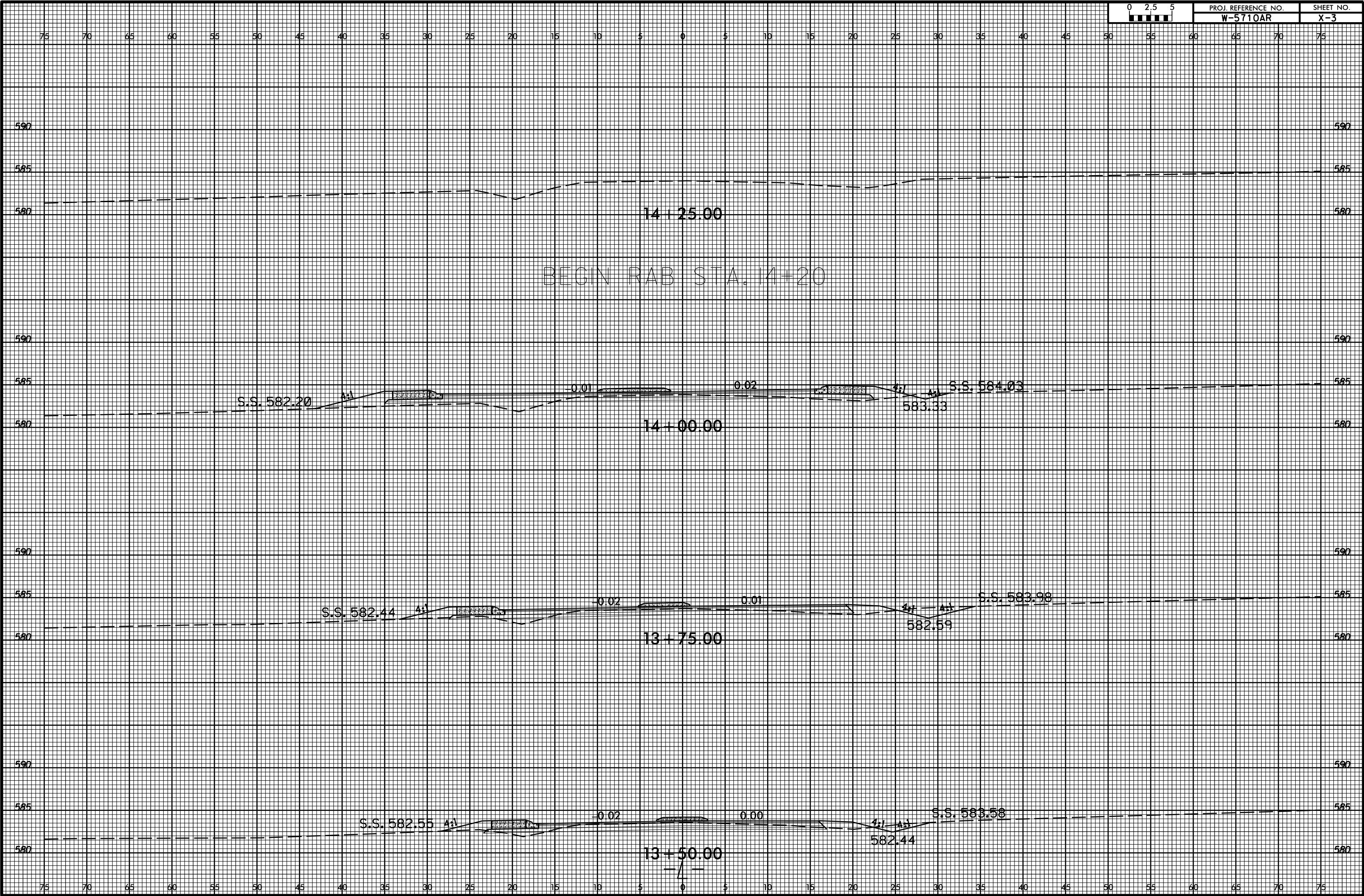
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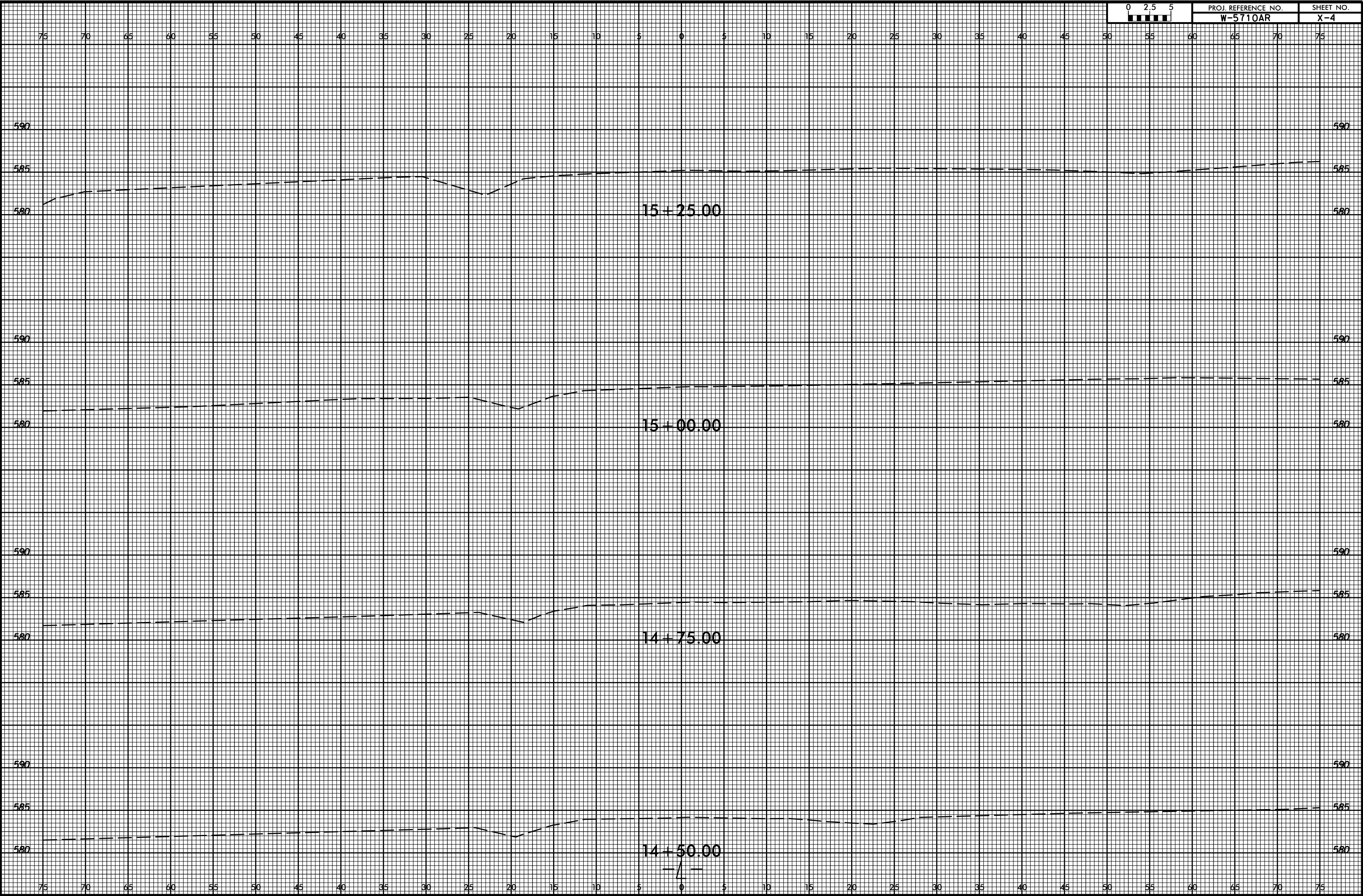
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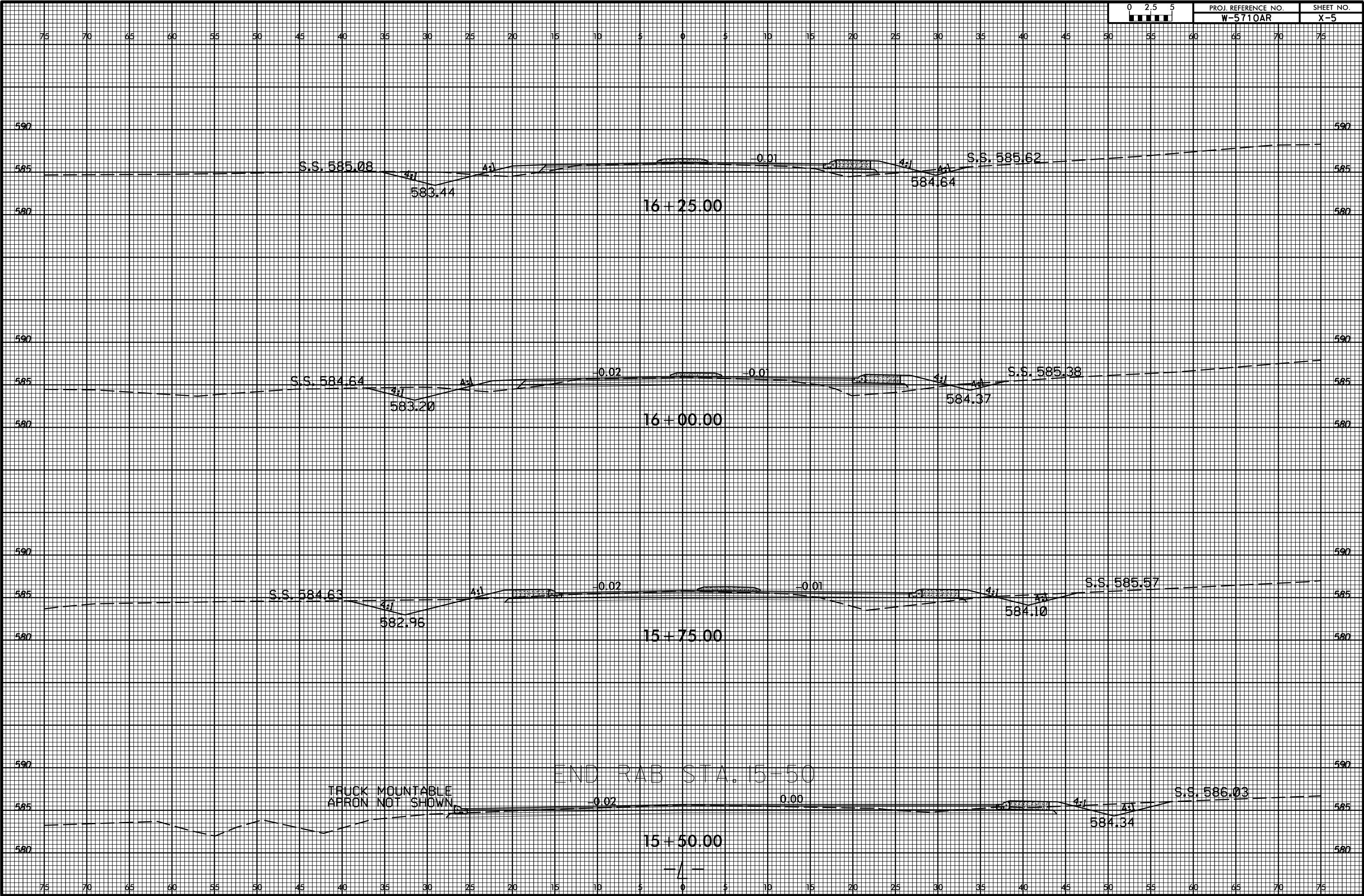


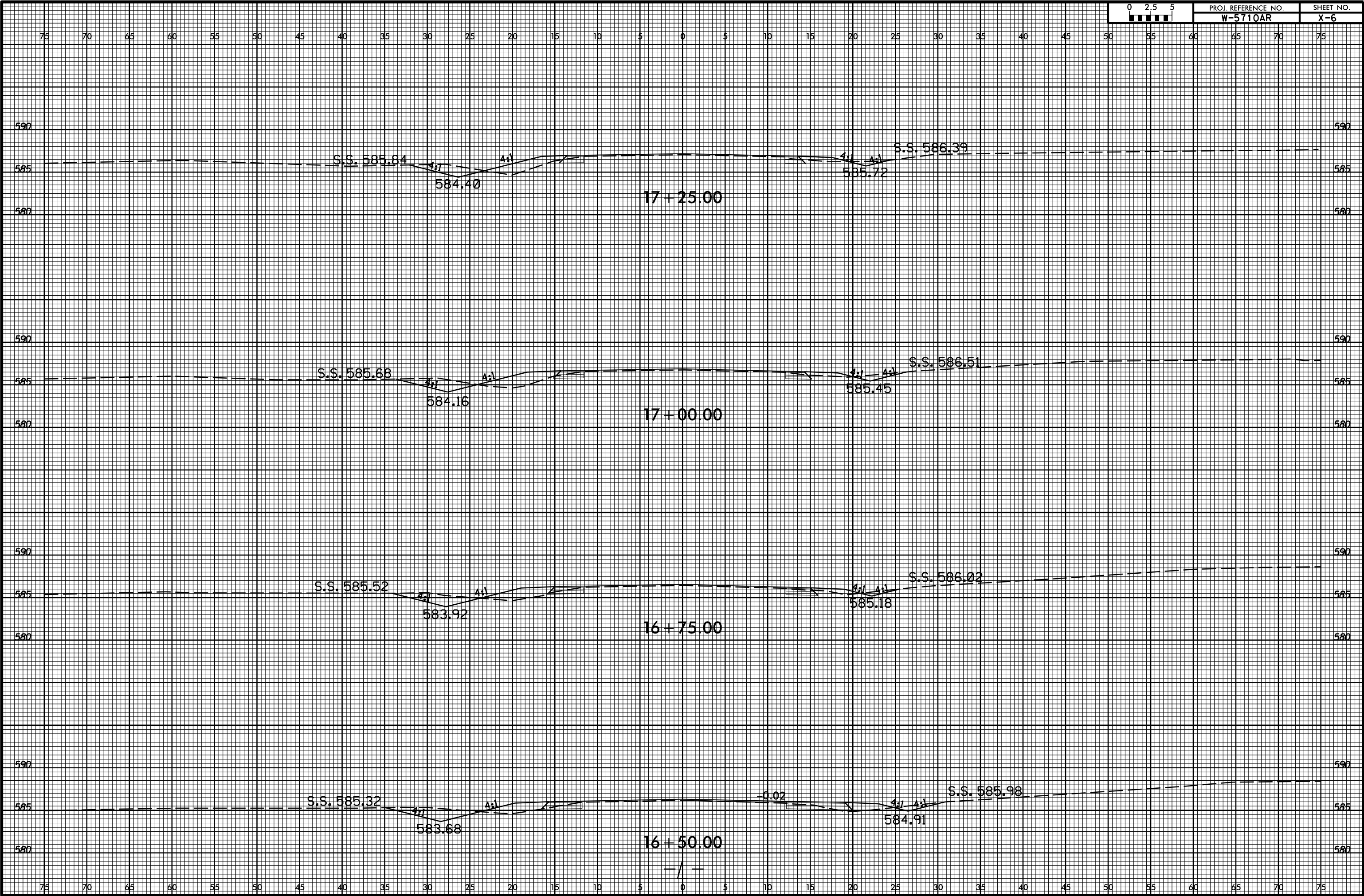
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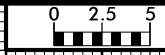




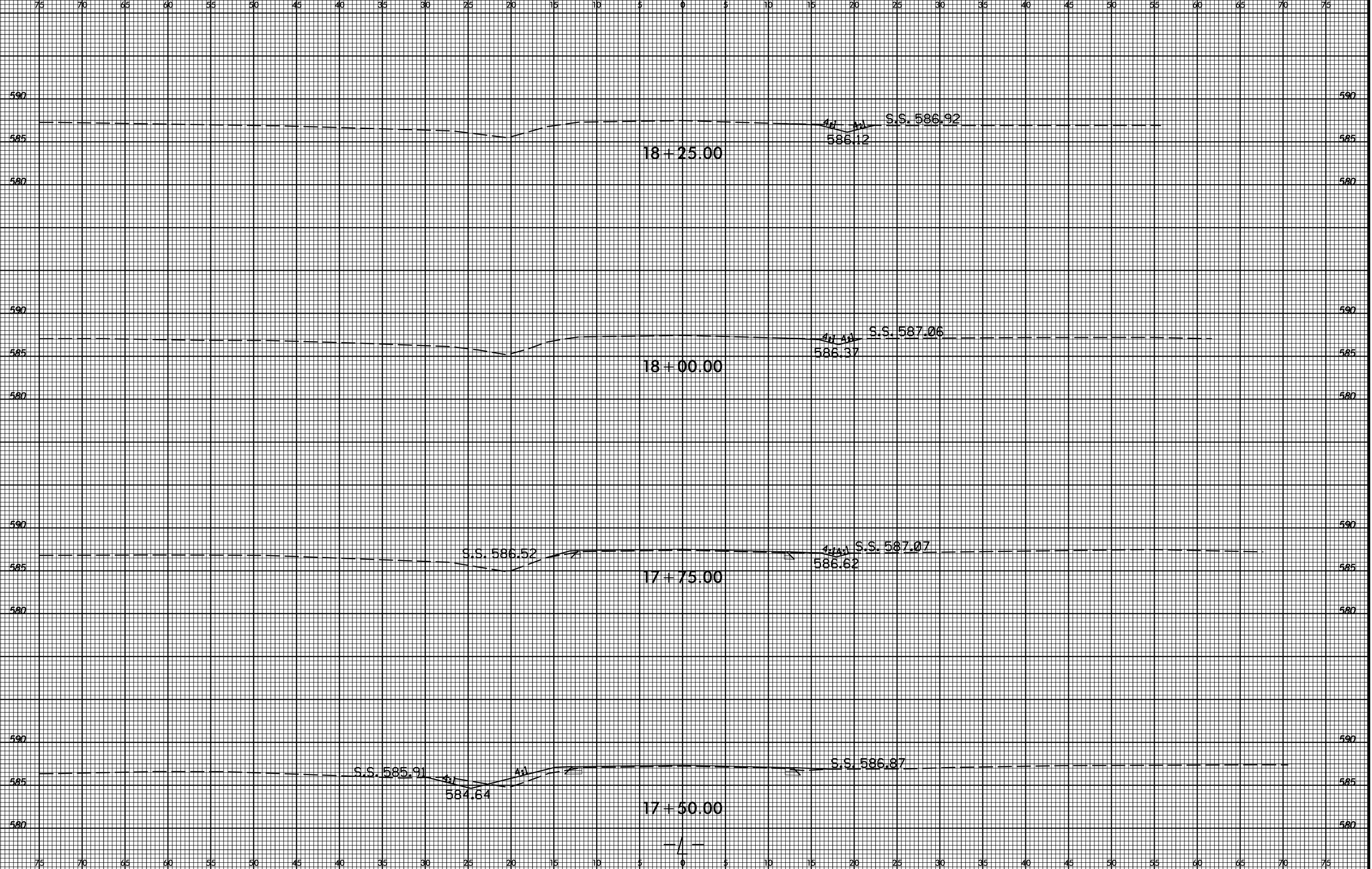




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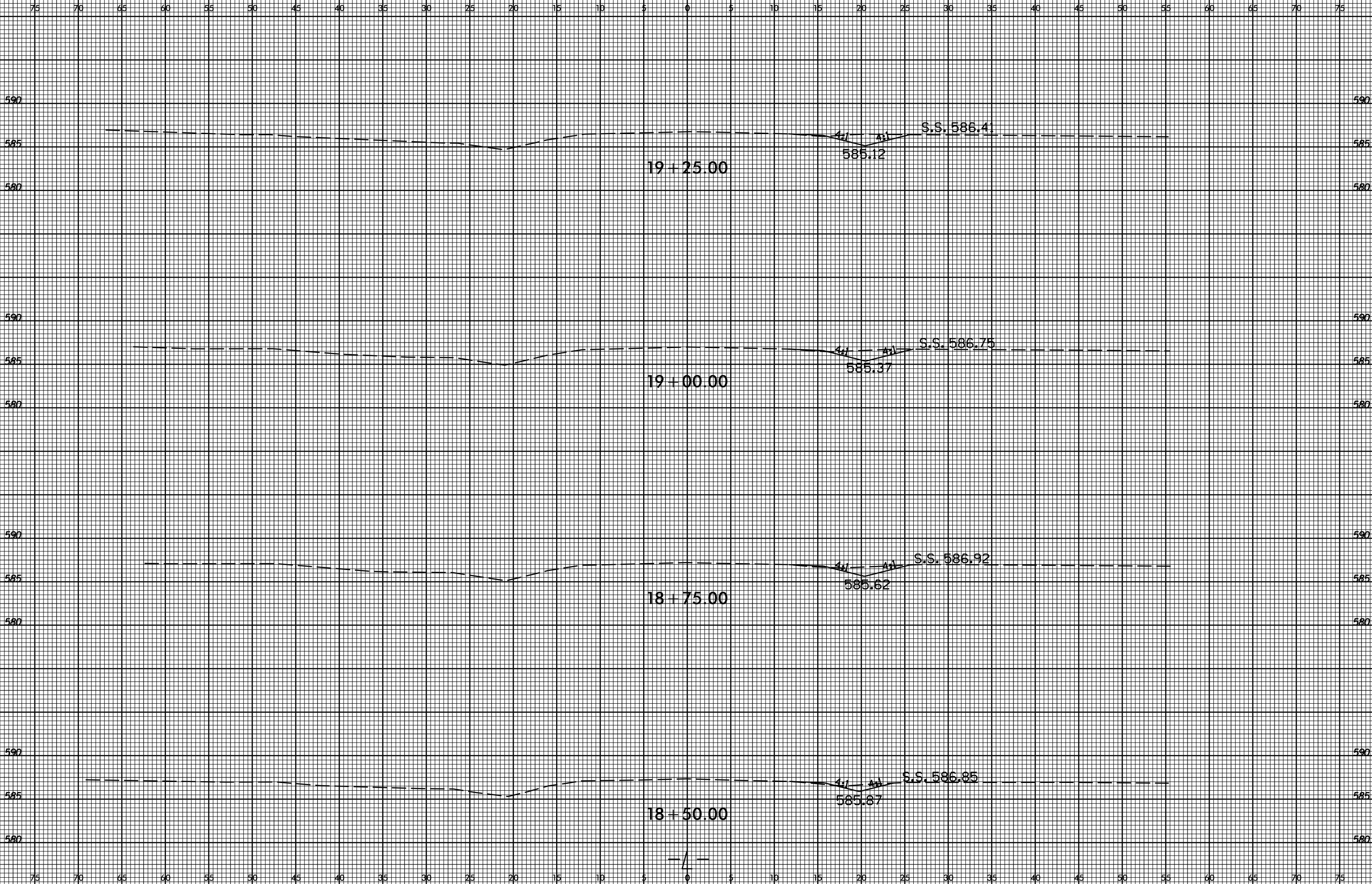
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6/23/16



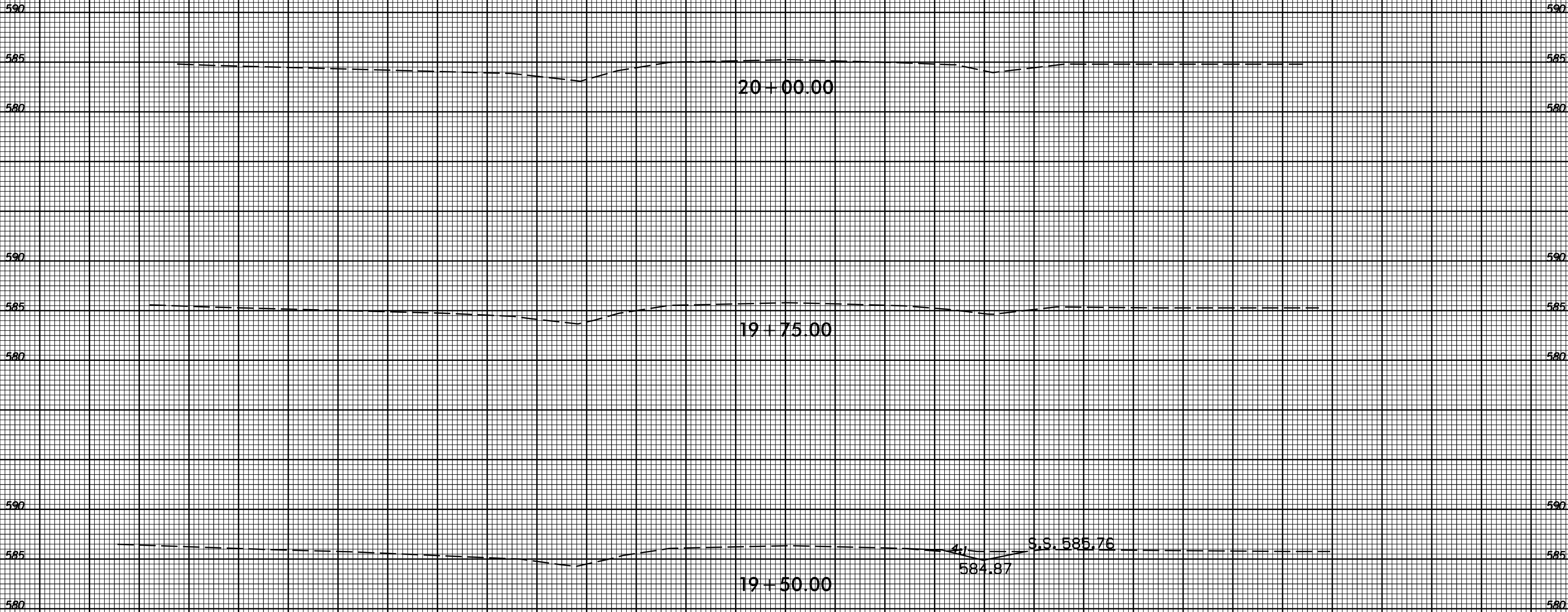
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595 595

590 590

585 585

S.S. 587.99 4% 4% S.S. 589.00

587.49 587.82

11 + 75.00

590 590

585 585

S.S. 587.92 4% 4% S.S. 587.61

587.42

11 + 50.00

595 595

590 590

585 585

S.S. 588.23 S.S. 587.92

11 + 25.00

590 590

585 585

11 + 00.00

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587.58

12+50.00

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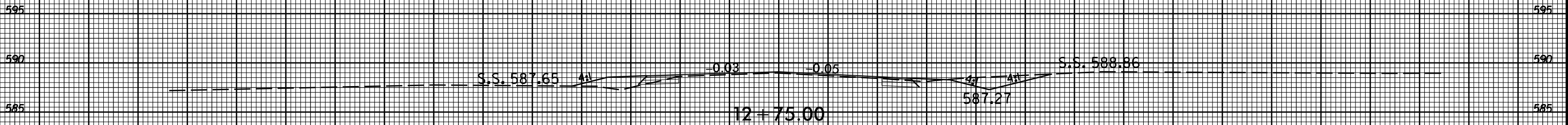
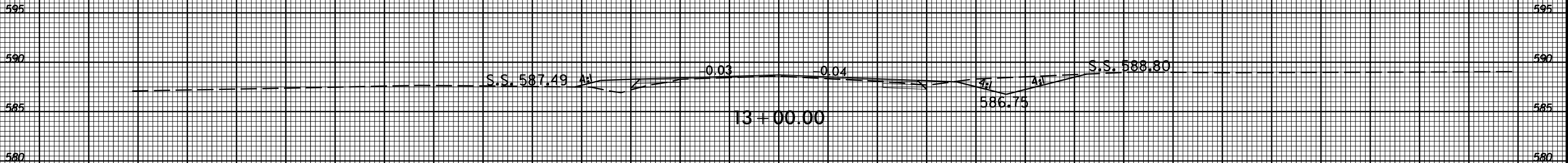
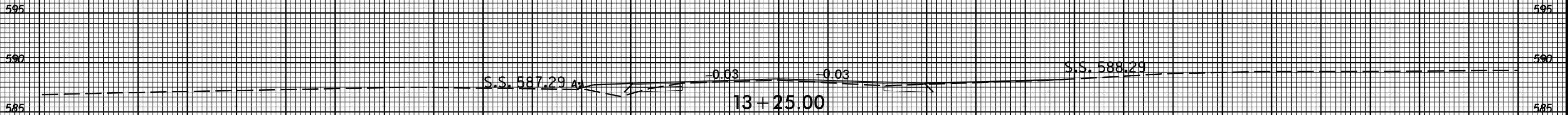
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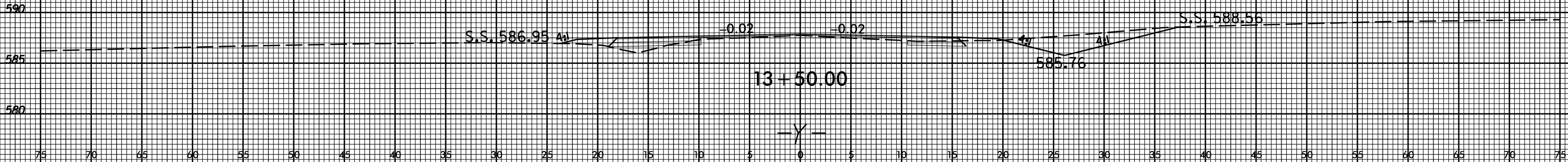
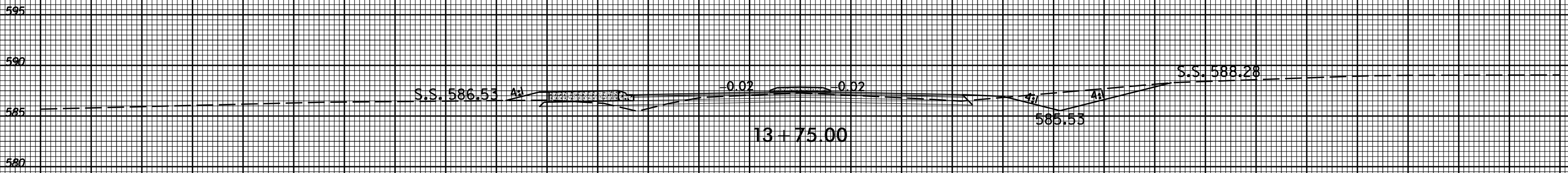
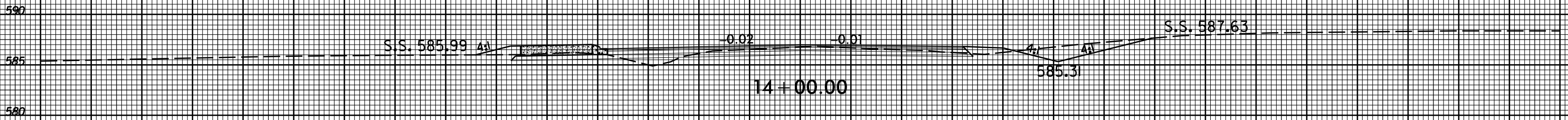


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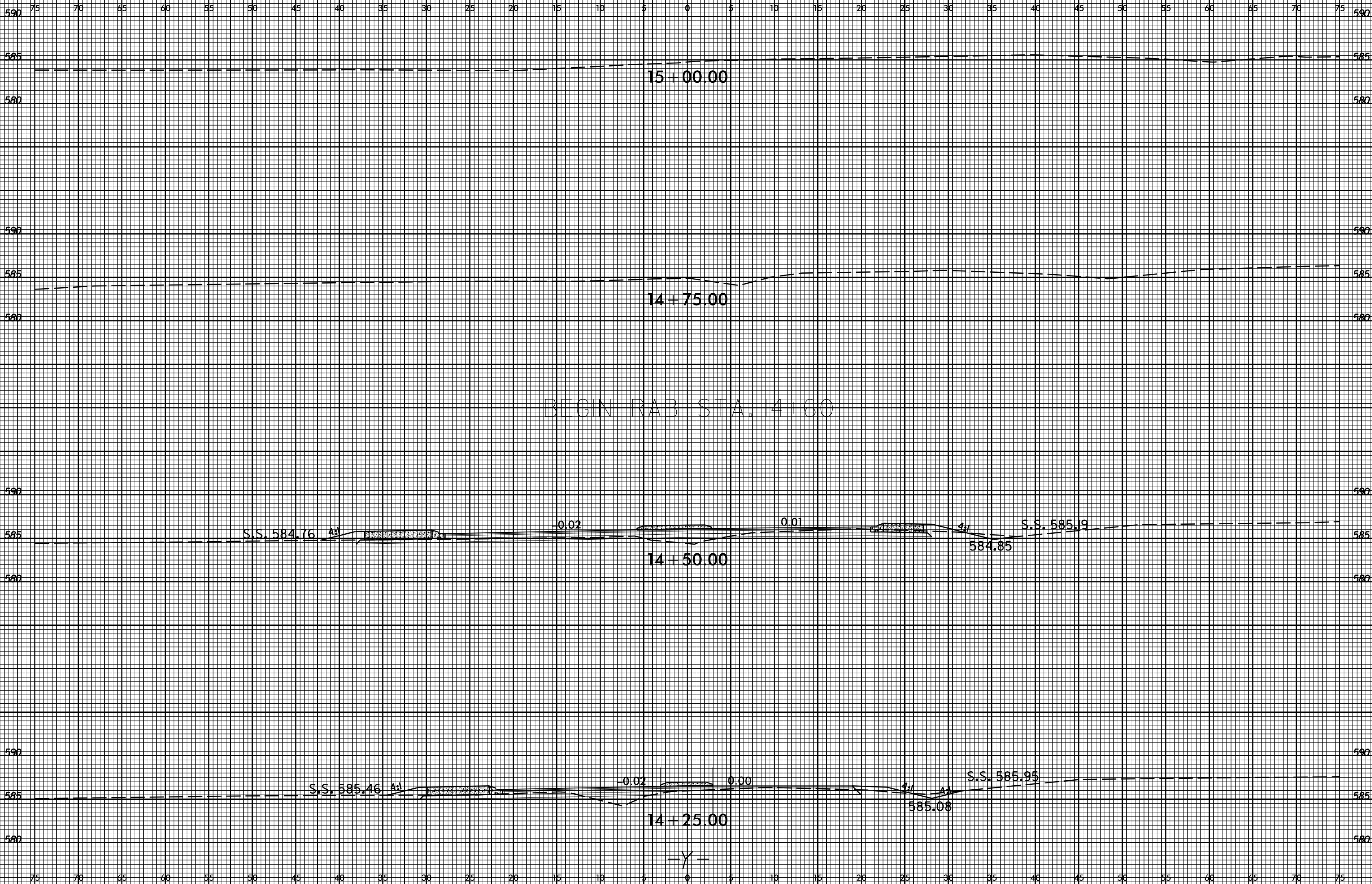
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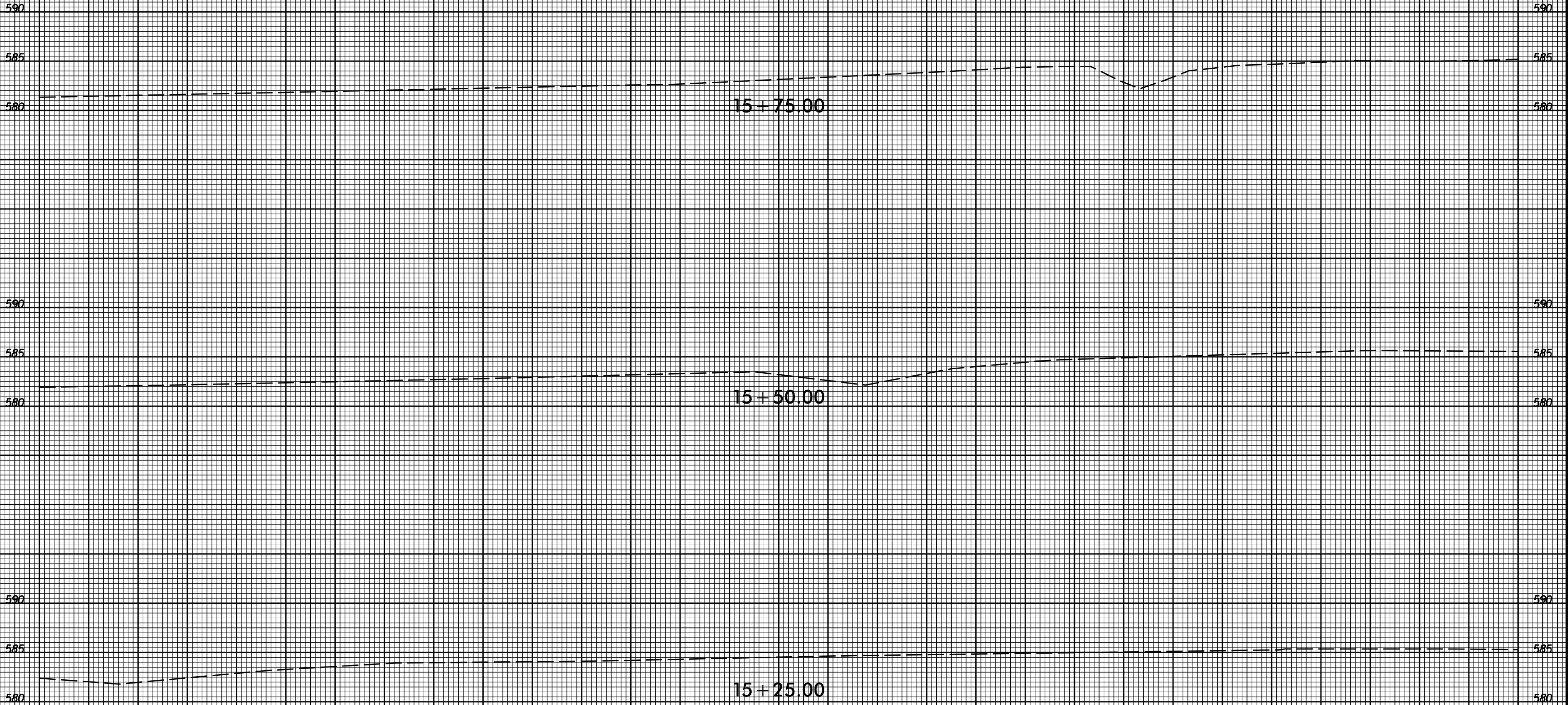
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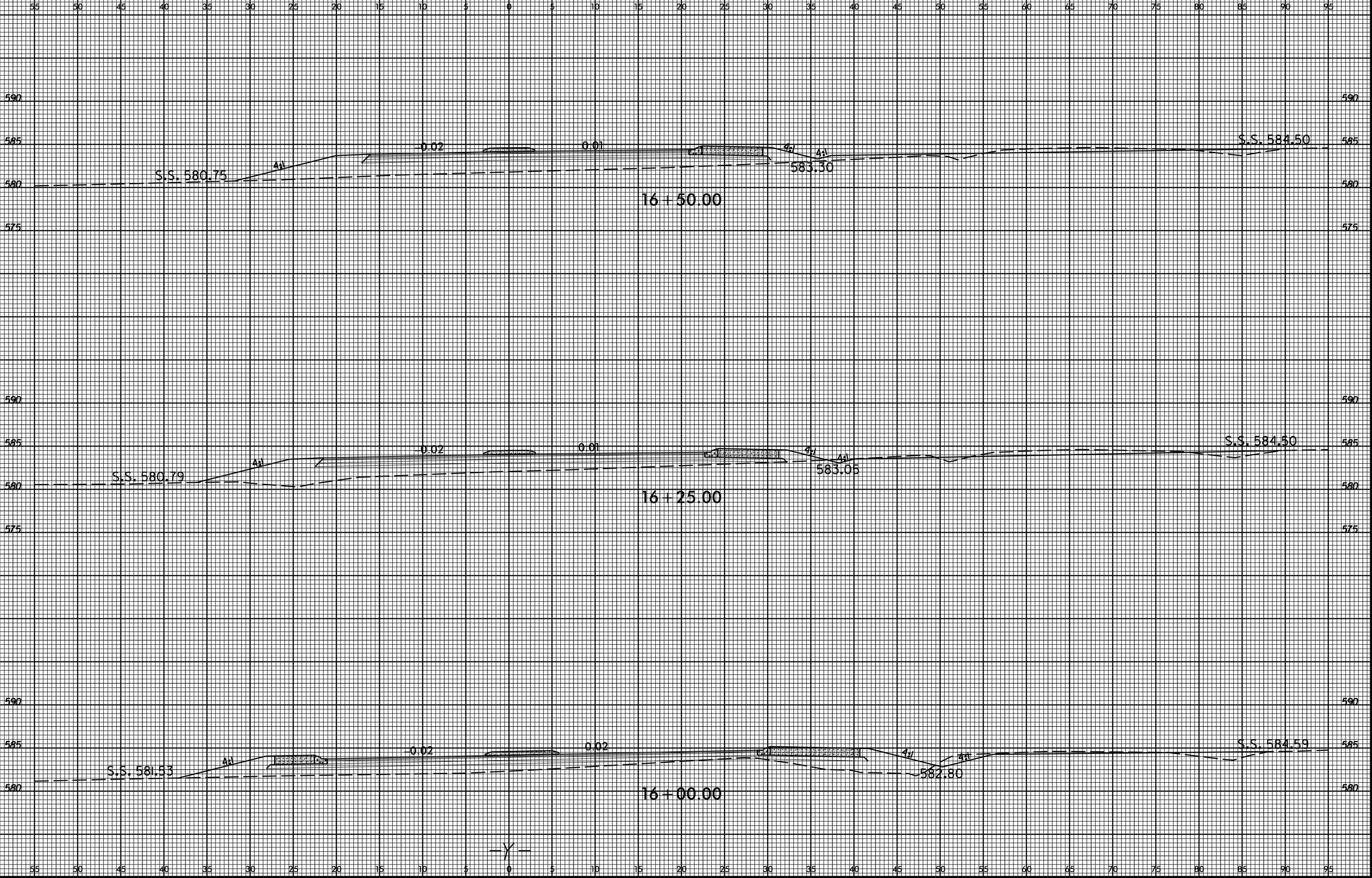


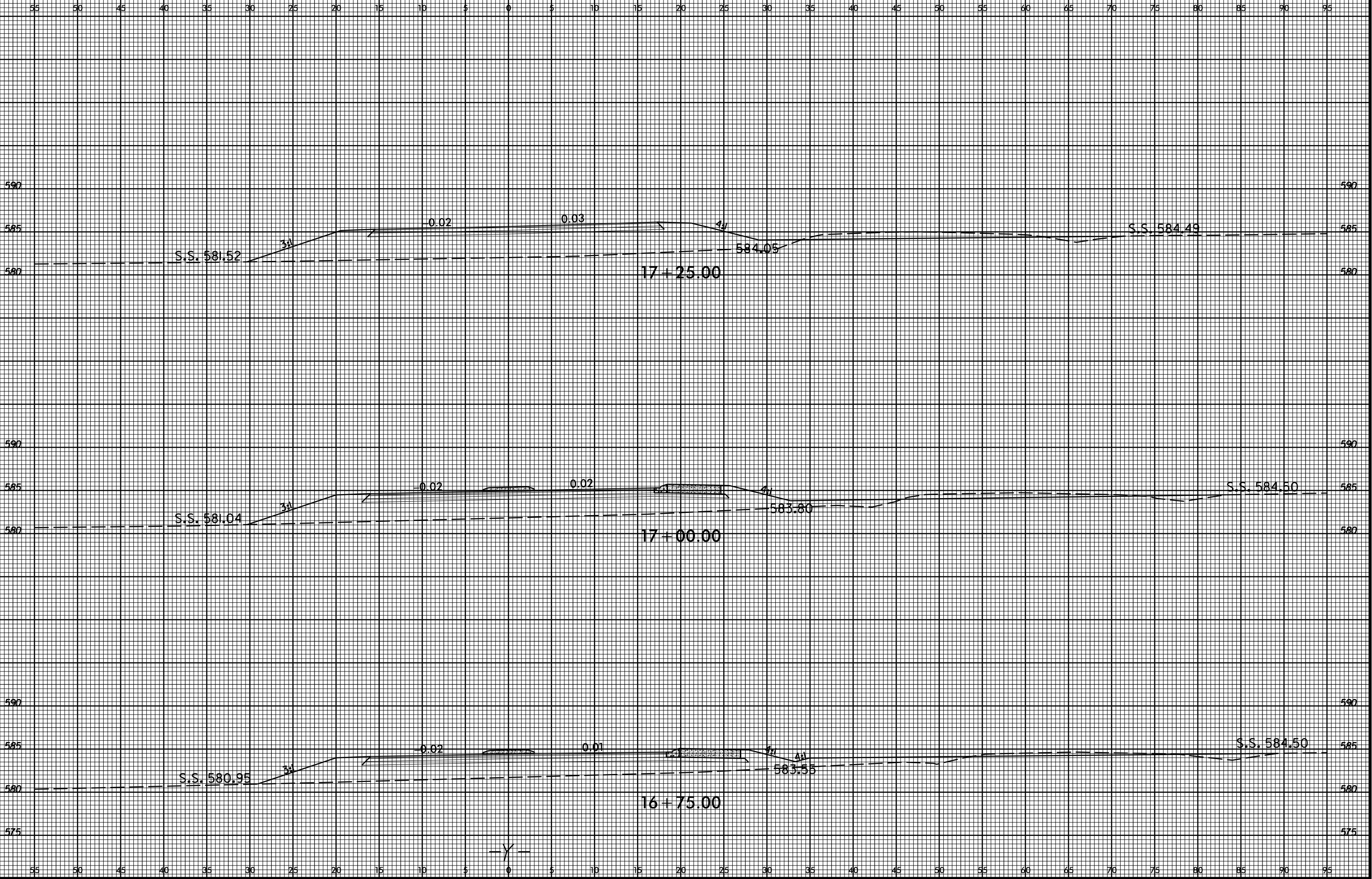
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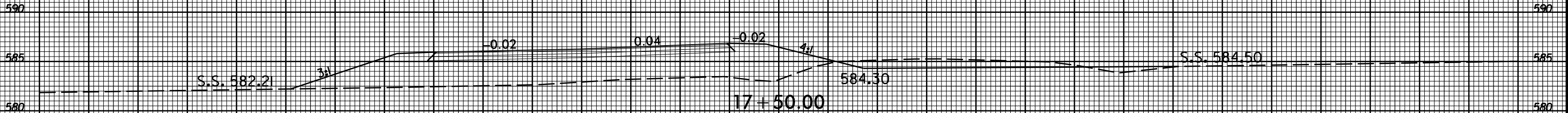
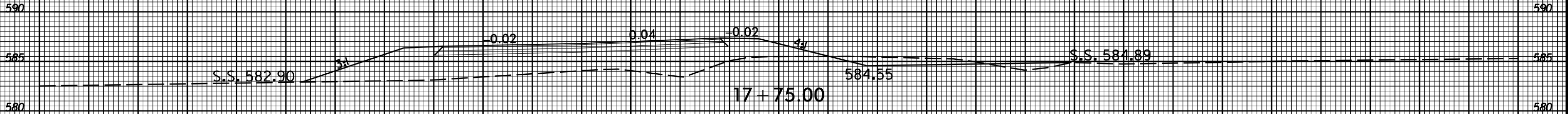
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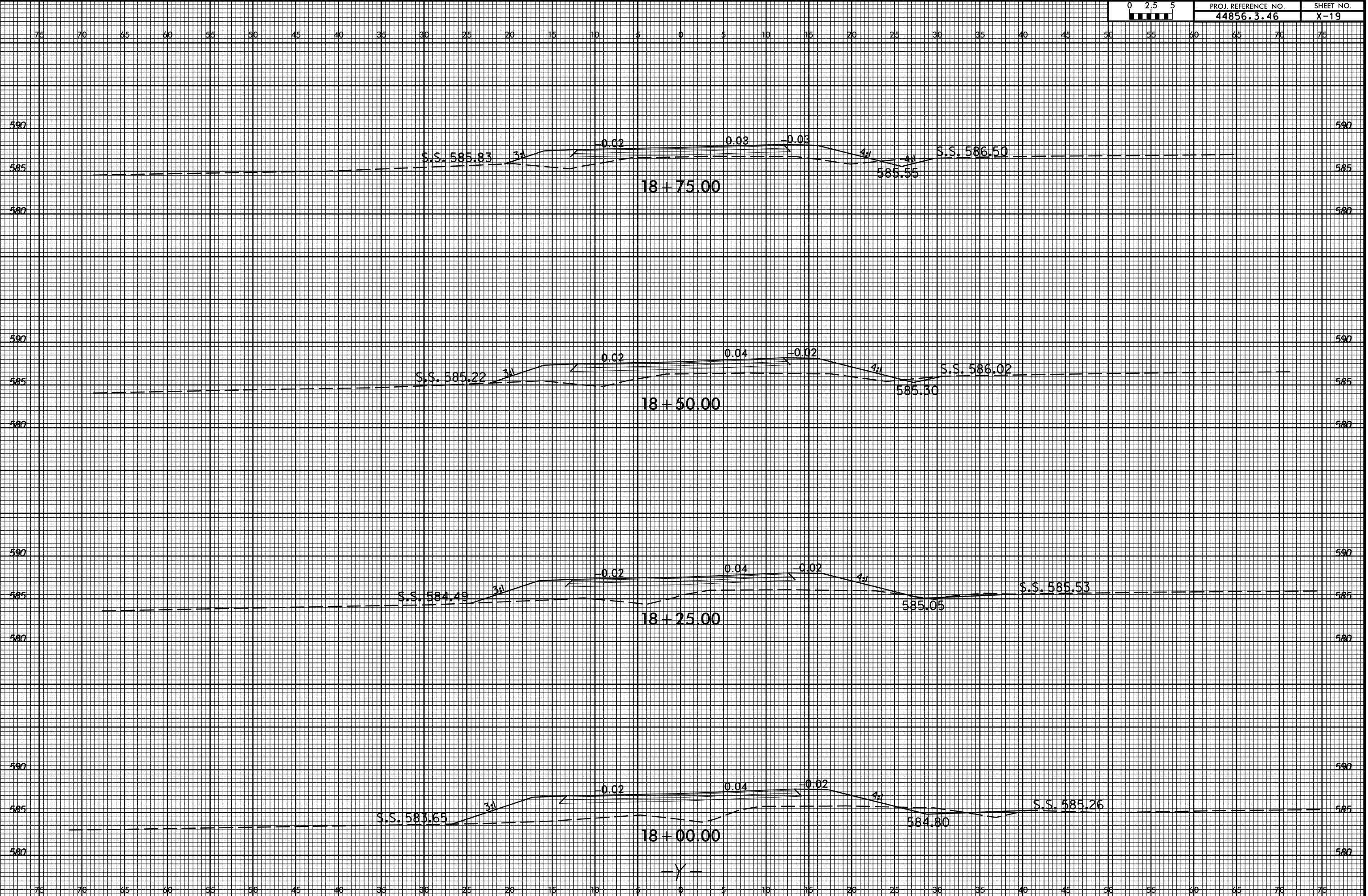






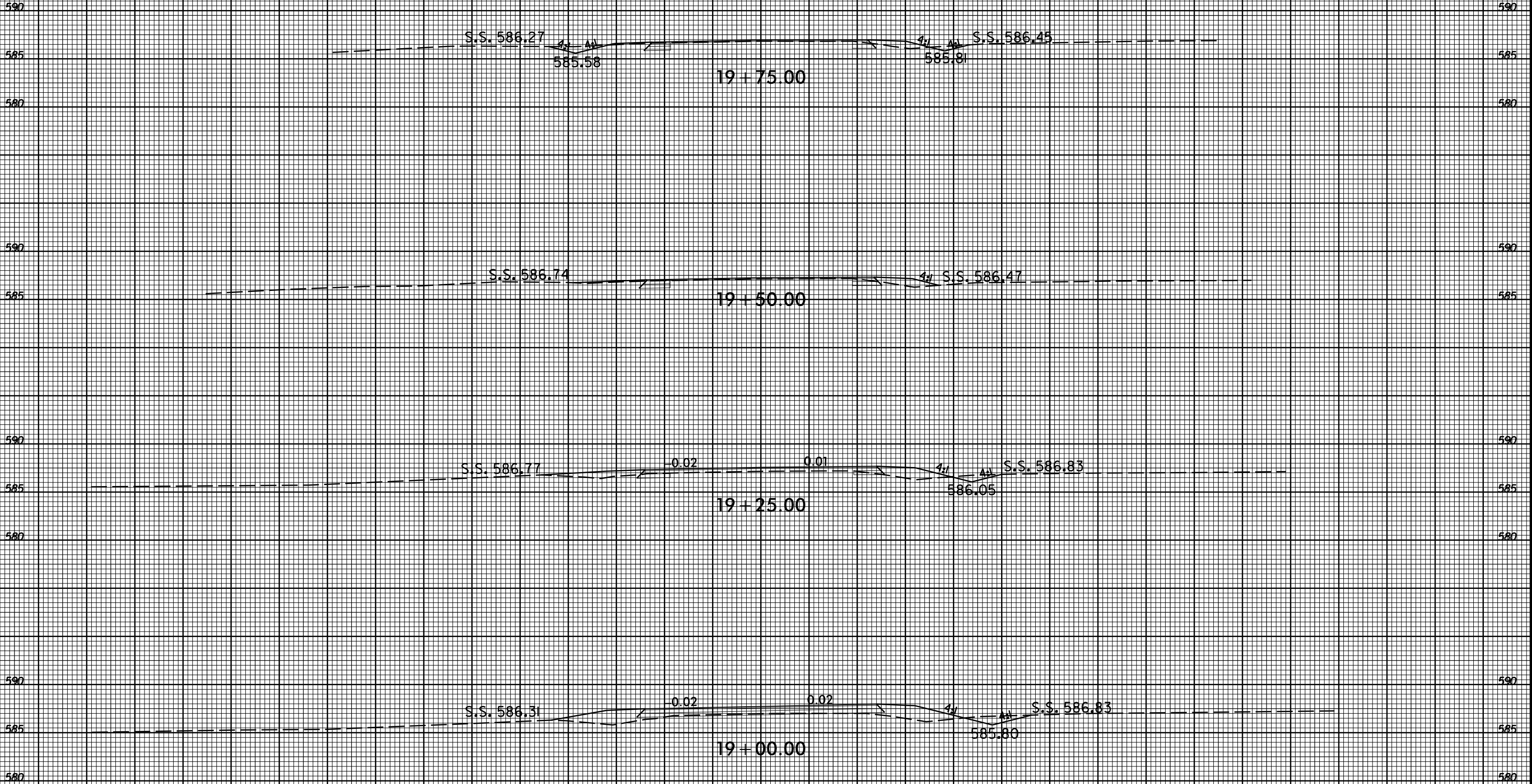
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75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

590 590

585 S.S. 584.30 584.08 S.S. 585.22 585

580 20+75.00 580

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585 S.S. 584.64 584.33 S.S. 584.82 585

580 20+50.00 580

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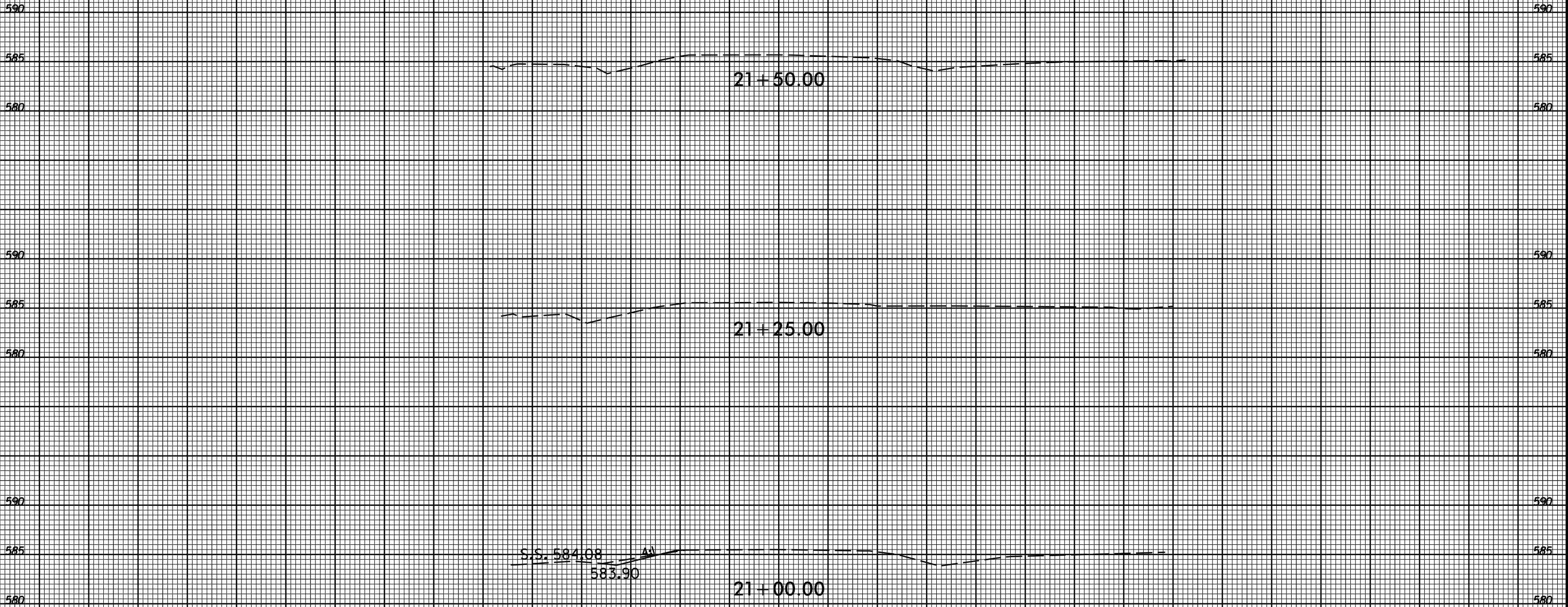
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