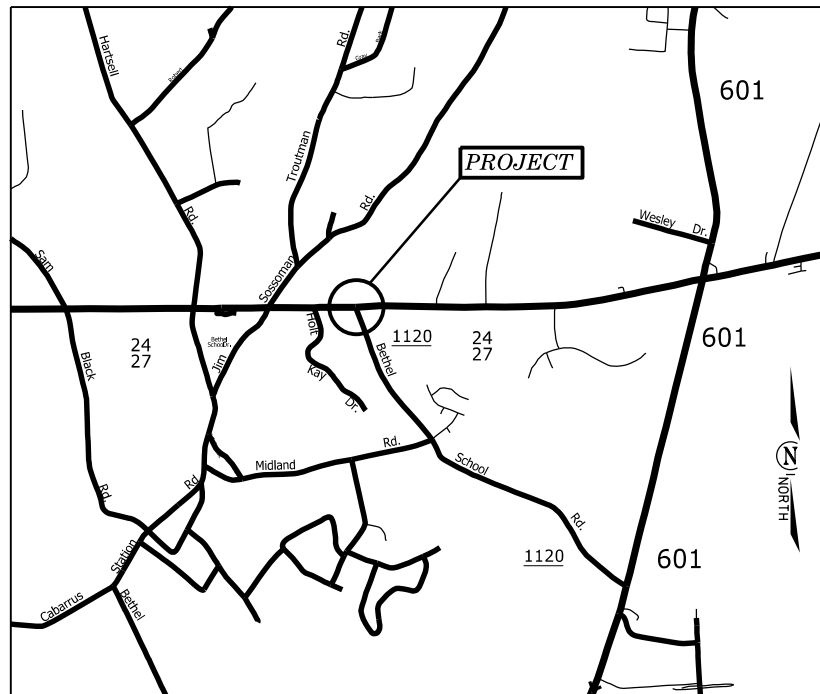


**PROJECT: 49291.3.4 TIP: HS-2010D**



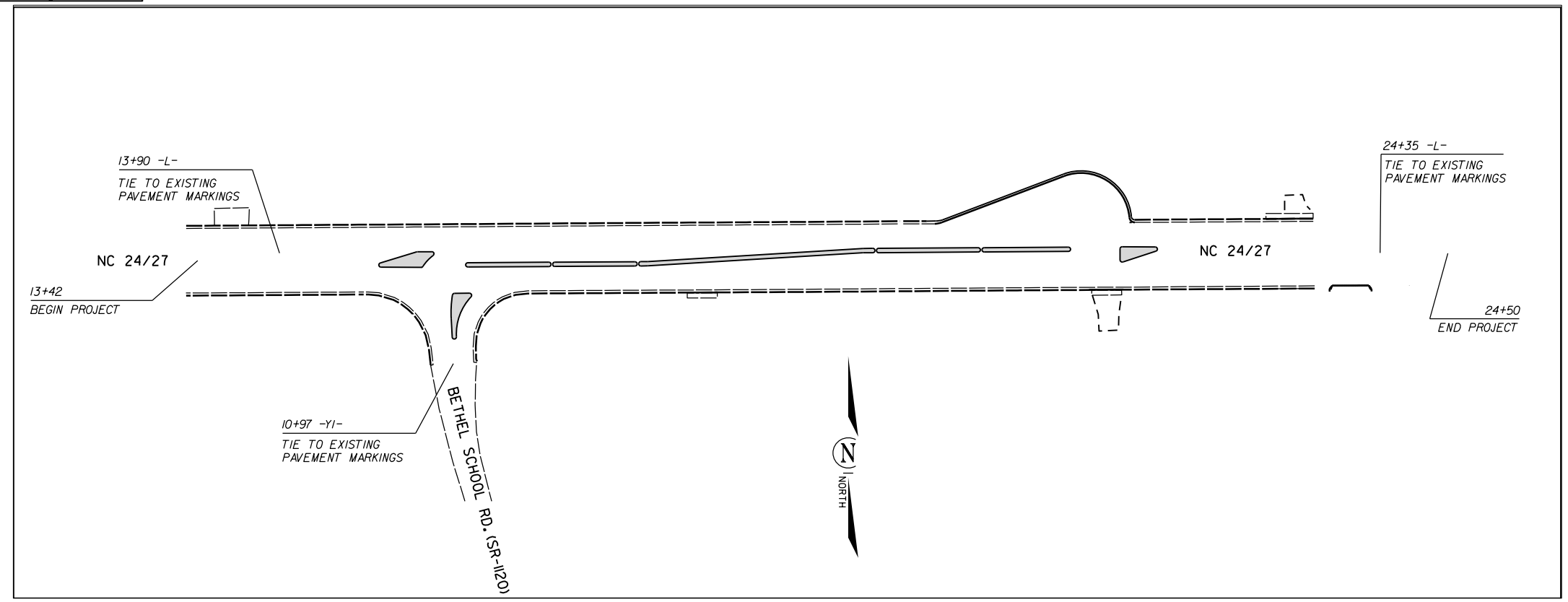
VICINITY MAP NOT TO SCALE

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**CABARRUS COUNTY**

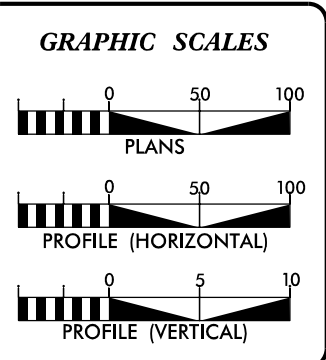
**LOCATION:** INTERSECTION OF NC 24 /27 AND  
BETHEL SCHOOL RD. (SR-1120)

**TYPE OF WORK:** GRADING, PAVING, MILLING, GRINDING, DRAINAGE, MONOLITHIC CONCRETE ISLANDS,  
SIGNAL, AND THERMOPLASTIC PAVEMENT MARKINGS & MARKERS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	49291.3.4	1	
STATE PROJ. NO.	P.L. PROJ. NO.	DESCRIPTION	
49291.1.4	0024092	P.E.	
49291.2.4	0024092	RW	
49291.3.4	0024092	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**

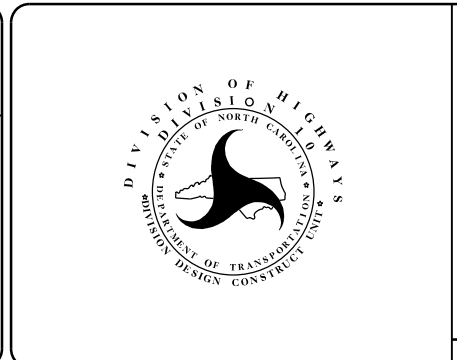
LENGTH OF ROADWAY PROJECT	0.23	=	0.23	MILES
TOTAL LENGTH OF STATE PROJECT	0.23	=	0.23	MILES

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

---

2024 STANDARD SPECIFICATIONS

<b>RIGHT OF WAY DATE:</b> APRIL 27 2023	<b>DONALD HARWARD</b> PROJECT ENGINEER
<b>LETTING DATE:</b> February 21, 2024	<b>CHAD BURRIS</b> PROJECT DESIGN ENGINEER



**ROADWAY DESIGN ENGINEER**

01/08/2024

DocuSigned by:  
*Travis Preslar*

A53C1AC7A1EE47B  
SIGNATURE

# STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale

### BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin (EIP)	⊙
Computed Property Corner	X
Existing Concrete Monument (ECM)	⊠
Parcel/Sequence Number	123
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	---W.B---
Proposed Wetland Boundary	W.B
Existing Endangered Animal Boundary	E.A.B
Existing Endangered Plant Boundary	E.P.B
Existing Historic Property Boundary	H.P.B
Known Contamination Area: Soil	---S---
Potential Contamination Area: Soil	---S---
Known Contamination Area: Water	---W---
Potential Contamination Area: Water	---W---
Contaminated Site: Known or Potential	☠ ?

### BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	⊙
Well	⊙
Small Mine	⊗
Foundation	⊠
Area Outline	⊠
Cemetery	⊠
Building	⊠
School	⊠
Church	⊠
Dam	⊠

### HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	-----
Jurisdictional Stream	---JS---
Buffer Zone 1	---BZ 1---
Buffer Zone 2	---BZ 2---
Flow Arrow	←
Disappearing Stream	→
Spring	⊙
Wetland	⊙
Proposed Lateral, Tail, Head Ditch	-----
False Sump	-----

### RAILROADS:

Standard Gauge	-----
RR Signal Milepost	⊙
Switch	⊠
RR Abandoned	-----
RR Dismantled	-----

### RIGHT OF WAY & PROJECT CONTROL:

Primary Horiz Control Point	⊙
Primary Horiz and Vert Control Point	⊙
Secondary Horiz and Vert Control Point	⊙
Vertical Benchmark	⊙
Existing Right of Way Monument	⊙
Proposed Right of Way Monument (Rebar and Cap)	⊙
Proposed Right of Way Monument (Concrete)	⊙
Existing Permanent Easement Monument	⊙
Proposed Permanent Easement Monument (Rebar and Cap)	⊙
Existing C/A Monument	⊙
Proposed C/A Monument (Rebar and Cap)	⊙
Proposed C/A Monument (Concrete)	⊙
Existing Right of Way Line	-----
Proposed Right of Way Line	-----
Existing Control of Access Line	-----
Proposed Control of Access Line	-----
Proposed ROW and CA Line	-----
Existing Easement Line	-----
Proposed Temporary Construction Easement	-----
Proposed Temporary Drainage Easement	-----
Proposed Permanent Drainage Easement	-----
Proposed Permanent Drainage/Utility Easement	-----
Proposed Permanent Utility Easement	-----
Proposed Temporary Utility Easement	-----
Proposed Aerial Utility Easement	-----

### ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	-----
Proposed Slope Stakes Fill	-----
Proposed Curb Ramp	-----
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊙
Pavement Removal	-----
VEGETATION:	
Single Tree	⊙
Single Shrub	⊙
Hedge	-----

Woods Line	-----
Orchard	-----
Vineyard	-----

### EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	-----
Bridge Wing Wall, Head Wall and End Wall	-----
MINOR:	
Head and End Wall	-----
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	-----
Paved Ditch Gutter	-----
Storm Sewer Manhole	-----
Storm Sewer	-----

### UTILITIES:

\* SUE - Subsurface Utility Engineering  
LOS - Level of Service - A,B,C or D (Accuracy)

POWER:	
Existing Power Pole	⊙
Proposed Power Pole	⊙
Existing Joint Use Pole	⊙
Proposed Joint Use Pole	⊙
Power Manhole	⊙
Power Line Tower	⊙
Power Transformer	⊙
U/G Power Cable Hand Hole	⊙
H-Frame Pole	⊙
U/G Power Line Test Hole (SUE - LOS A)*	⊙
U/G Power Line (SUE - LOS B)*	-----
U/G Power Line (SUE - LOS C)*	-----
U/G Power Line (SUE - LOS D)*	-----
TELEPHONE:	
Existing Telephone Pole	⊙
Proposed Telephone Pole	⊙
Telephone Manhole	⊙
Telephone Pedestal	⊙
Telephone Cell Tower	⊙
U/G Telephone Cable Hand Hole	⊙
U/G Telephone Test Hole (SUE - LOS A)*	⊙
U/G Telephone Cable (SUE - LOS B)*	-----
U/G Telephone Cable (SUE - LOS C)*	-----
U/G Telephone Cable (SUE - LOS D)*	-----
U/G Telephone Conduit (SUE - LOS B)*	-----
U/G Telephone Conduit (SUE - LOS C)*	-----
U/G Telephone Conduit (SUE - LOS D)*	-----
U/G Fiber Optics Cable (SUE - LOS B)*	-----
U/G Fiber Optics Cable (SUE - LOS C)*	-----
U/G Fiber Optics Cable (SUE - LOS D)*	-----

### WATER:

Water Manhole	⊙
Water Meter	⊙
Water Valve	⊙
Water Hydrant	⊙
U/G Water Line Test Hole (SUE - LOS A)*	⊙
U/G Water Line (SUE - LOS B)*	-----
U/G Water Line (SUE - LOS C)*	-----
U/G Water Line (SUE - LOS D)*	-----
Above Ground Water Line	-----

### TV:

TV Pedestal	⊙
TV Tower	⊙
U/G TV Cable Hand Hole	⊙
U/G TV Test Hole (SUE - LOS A)*	⊙
U/G TV Cable (SUE - LOS B)*	-----
U/G TV Cable (SUE - LOS C)*	-----
U/G TV Cable (SUE - LOS D)*	-----
U/G Fiber Optic Cable (SUE - LOS B)*	-----
U/G Fiber Optic Cable (SUE - LOS C)*	-----
U/G Fiber Optic Cable (SUE - LOS D)*	-----

### GAS:

Gas Valve	⊙
Gas Meter	⊙
U/G Gas Line Test Hole (SUE - LOS A)*	⊙
U/G Gas Line (SUE - LOS B)*	-----
U/G Gas Line (SUE - LOS C)*	-----
U/G Gas Line (SUE - LOS D)*	-----
Above Ground Gas Line	-----

### SANITARY SEWER:

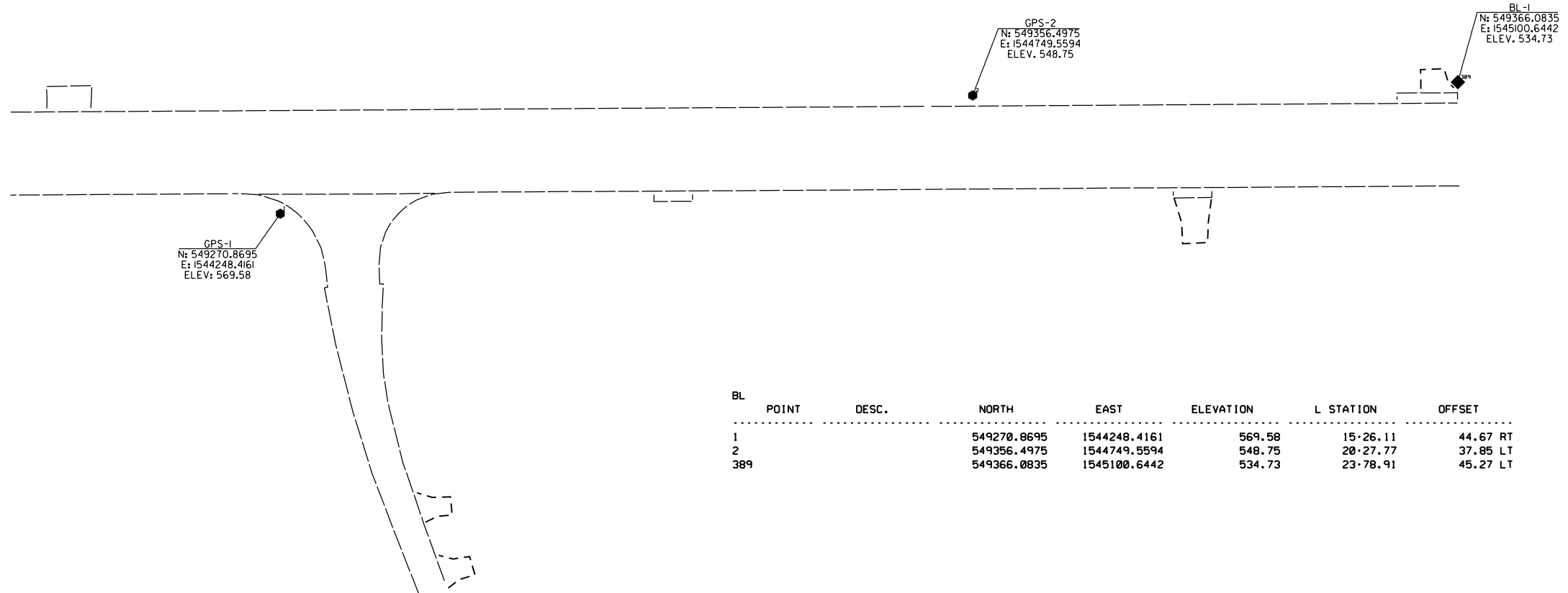
Sanitary Sewer Manhole	⊙
Sanitary Sewer Cleanout	⊙
U/G Sanitary Sewer Line	-----
Above Ground Sanitary Sewer	-----
SS Force Main Line Test Hole (SUE - LOS A)*	⊙
SS Force Main Line (SUE - LOS B)*	-----
SS Force Main Line (SUE - LOS C)*	-----
SS Force Main Line (SUE - LOS D)*	-----

### MISCELLANEOUS:

Utility Pole	⊙
Utility Pole with Base	⊙
Utility Located Object	⊙
Utility Traffic Signal Box	⊙
Utility Unknown U/G Line (SUE - LOS B)*	-----
U/G Tank; Water, Gas, Oil	⊙
Underground Storage Tank, Approx. Loc.	⊙
A/G Tank; Water, Gas, Oil	⊙
Geoenvironmental Boring	⊙
Abandoned According to Utility Records	⊙
End of Information	⊙

PROJECT NO.	SHEET NO.
49291.3.4	1B
F.A. PROJECT NO.	0024092

# SURVEY CONTROL SHEET



GPS-1  
N: 549270.8695  
E: 1544248.4161  
ELEV: 569.58

GPS-2  
N: 549356.4975  
E: 1544749.5594  
ELEV: 548.75

BL-1  
N: 549366.0835  
E: 1545100.6442  
ELEV: 534.73

BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
1		549270.8695	1544248.4161	569.58	15+26.11	44.67 RT
2		549356.4975	1544749.5594	548.75	20+27.77	37.85 LT
389		549366.0835	1545100.6442	534.73	23+78.91	45.27 LT



**DATUM DESCRIPTION**

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS-1"

WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF  
NORTHING: 549270.870(ft) EASTING: 1544248.416(ft)  
ELEVATION: 569.58(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987259

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS-1" TO -L- STATION 10+00 IS  
N 85 30' 04" E 580.00.

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES  
VERTICAL DATUM USED IS NAVD 88

**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 10 DDC UNIT. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE DIVISION 10 DDC UNIT.

*RCI AT INTERSECTION OF NC 24-27 AND BETHEL SCHOOL RD.(SR-1120)*

SCALE	1"=50'		REVISIONS
DATE	07-2022		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		

PROJECT NO.	SHEET NO.
49291.3.4	IC
F.A. PROJECT NO.	0024092

# RIGHT OF WAY, EASEMENT AND PROPOSED ALIGNMENT SHEET

L

TYPE	STATION	NORTH	EAST
POT	10+00.00	549312.2860	1543722.0439
POT	24+79.39	549321.4381	1545201.4019

ROW MARKER IRON PIN A & CAP

ALIGN	STATION	OFFSET	NORTH	EAST
L	20+65.00	-65.21	549384.0863	1544786.6169
L	21+50.00	-95.00	549414.3986	1544871.4342
L	21+75.00	-95.00	549414.5532	1544896.4337
L	22+09.00	-66.82	549386.5889	1544930.6120
L	22+35.00	-50.00	549369.9253	1544956.7109

Y1

TYPE	STATION	NORTH	EAST
POT	10+00.00	549315.8281	1544294.6029
PC	10+50.64	549265.1891	1544294.9162
PT	12+61.33	549059.4539	1544334.4938
POT	13+36.33	548989.6360	1544361.8883

ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	22+22.00	-73.00	549392.8444	1544943.5689
L	22+29.00	-60.00	549379.8880	1544950.6492

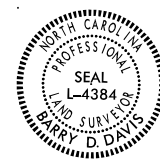
I, Barry D. Davis, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item, R/W and Easement Staking, was performed under my responsible charge meeting NCDOT Survey Standards as directed in the NCDOT Location & Surveys 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 8th day of AUG 2023

Barry D. Davis, \_\_\_\_\_ DocuSigned by: \_\_\_\_\_ PLS# L-4384  
Professional Land Surveyor

*Barry Davis*  
0E2AAE4F48174DC...



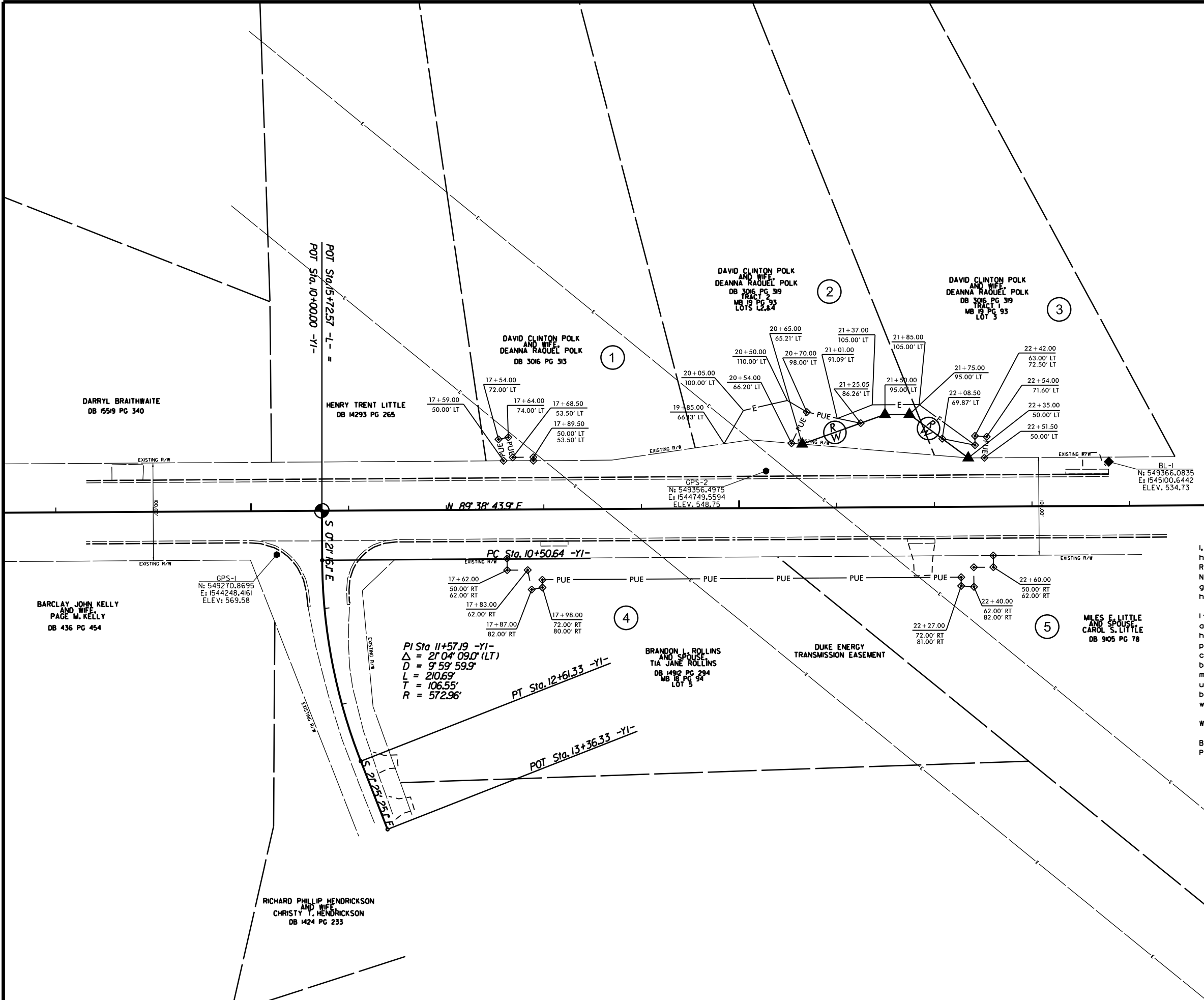
### NOTES:

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RCI AT INTERSECTION OF NC 24-27  
AND BETHEL SCHOOL RD. (SR-1120)

SCALE	1"=50'		REVISIONS
DATE	08-2023		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		

PROJECT NO.	SHEET NO.
49291.3.4	ID
F.A. PROJECT NO.	0024092



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/>.

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Witness my signature, registration number and seal this 8th day of AUG 2023

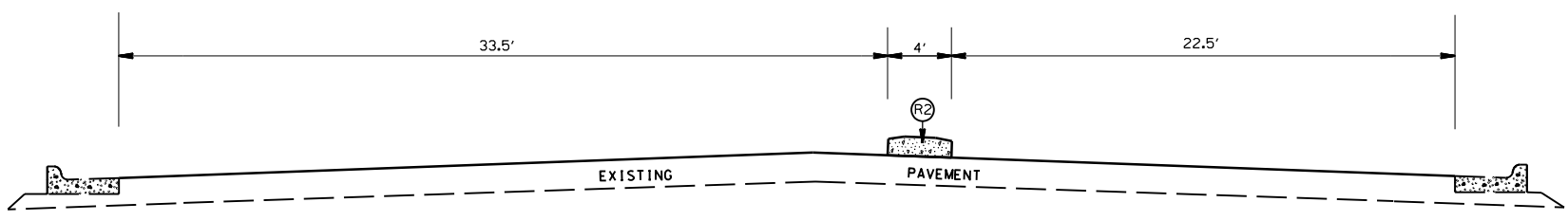
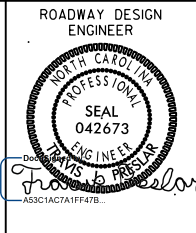
Barry D. Davis, Professional Land Surveyor DocuSigned by: Barry D. Davis PLS# L-4384

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RCI AT INTERSECTION OF NC 24-27 AND BETHEL SCHOOL RD. (SR-1120)

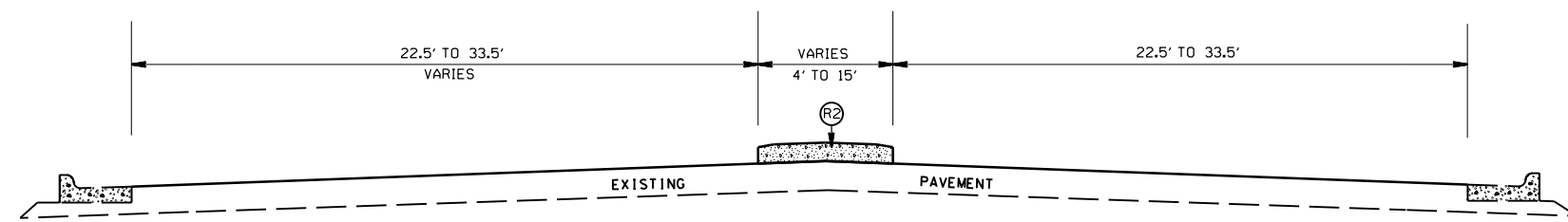
SCALE	1"=50'		REVISIONS
DATE	08-2023		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		



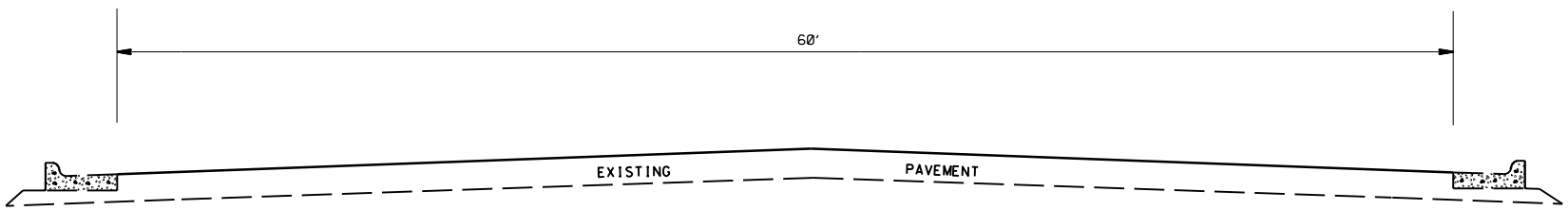
TYPICAL SECTION NO. 3  
 STA. 15+91.00 TO 16+46.00 -L-  
 STA. 16+47.50 TO 17+02.50 -L-  
 STA. 17+04.00 TO 17+58.62 -L-

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 3.0" 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. 4.0" ASPHALT CONC. BINDER COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 228 LBS. PER SQ. YD. IN ONE LAYER
(E1)	PROP. APPROX. 5.0" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD. IN ONE LAYER.
(R1)	PROP. 2'-6" CURB & GUTTER
(R2)	PROP. 5" MONOLITHIC CONCRETE ISLAND SURFACE MOUNTED
(T)	EARTH MATERIAL
(V1)	MILLING ASPHALT PAVEMENT, 1.5" IN DEPTH



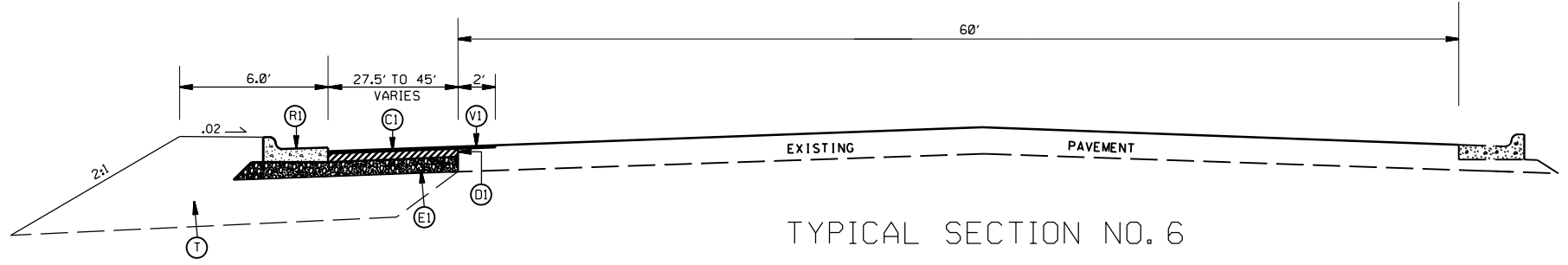
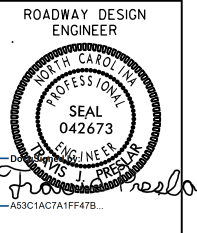
TYPICAL SECTION NO. 2  
 STA. 15+10.32 TO 15+61.44 -L-  
 STA. 17+60.12 TO 19+60.12 -L-  
 STA. 22+12.87 TO 22+33.71 -L-



TYPICAL SECTION NO. 1  
 STA. 13+42.00 TO 15+10.32 -L-  
 STA. 15+61.44 TO 15+91.00 -L-  
 STA. 16+46.00 TO 16+47.50 -L-  
 STA. 17+02.50 TO 17+04.00 -L-  
 STA. 17+58.62 TO 17+60.12 -L-  
 STA. 19+60.12 TO 19+61.64 -L-  
 STA. 20+24.00 TO 20+25.50 -L-  
 STA. 22+33.71 TO 23+96.00 -L-  
 STA. 24+30.00 TO 24+50.00 -L-

RCI AT INTERSECTION OF NC 24-27  
 AND BETHEL SCHOOL RD. (SR-1120)

SCALE	1"=50'		REVISIONS
DATE	11-2023		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		

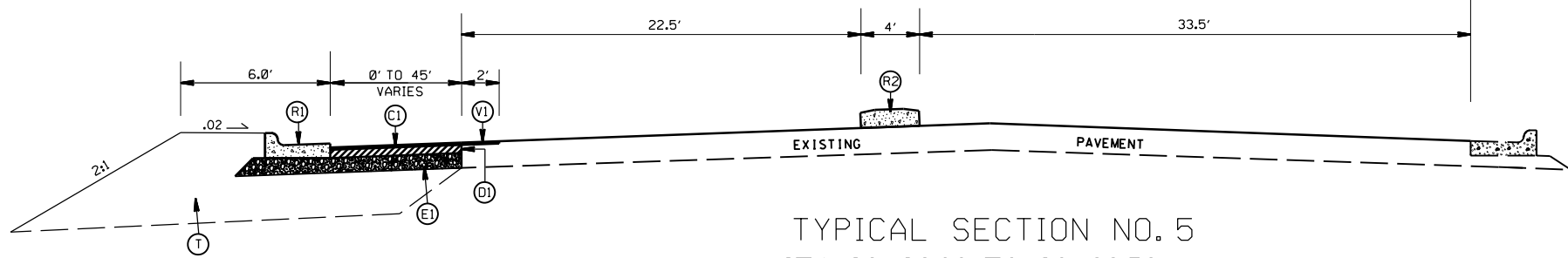


TYPICAL SECTION NO. 6

STA. 20+88.50 TO 20+90.00 -L-  
 STA. 21+53.00 TO 21+70.00 -L-

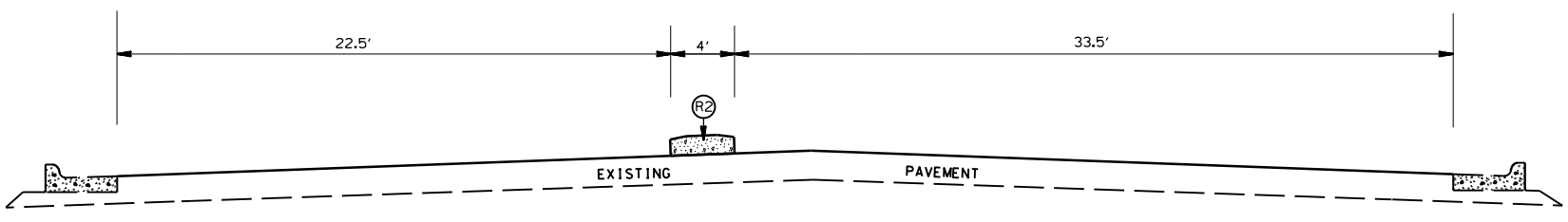
PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 3.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
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(R1)	PROP. 2'-6" CURB & GUTTER
(R2)	PROP. 5" MONOLITHIC CONCRETE ISLAND SURFACE MOUNTED
(T)	EARTH MATERIAL
(V1)	MILLING ASPHALT PAVEMENT, 1.5" IN DEPTH



TYPICAL SECTION NO. 5

STA. 20+26.00 TO 20+88.50 -L-  
 STA. 20+90.00 TO 21+53.00 -L-

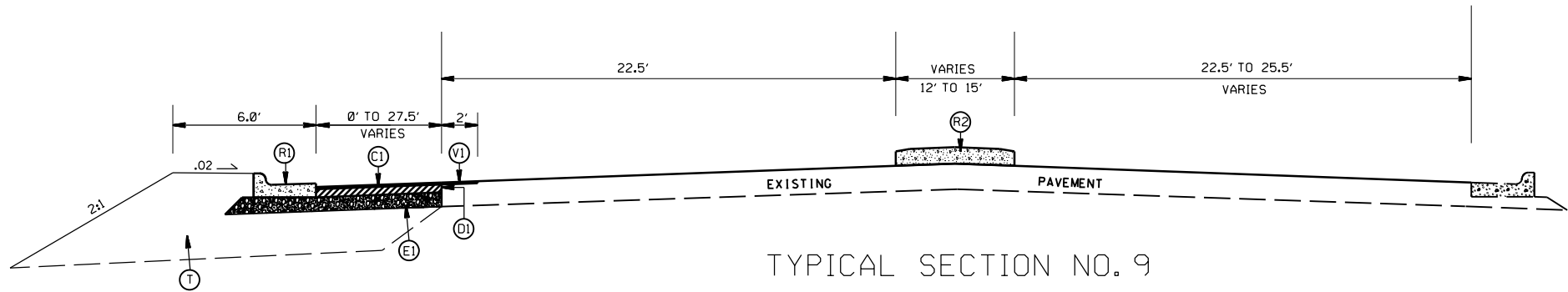
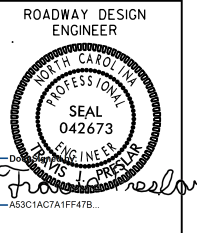


TYPICAL SECTION NO. 4

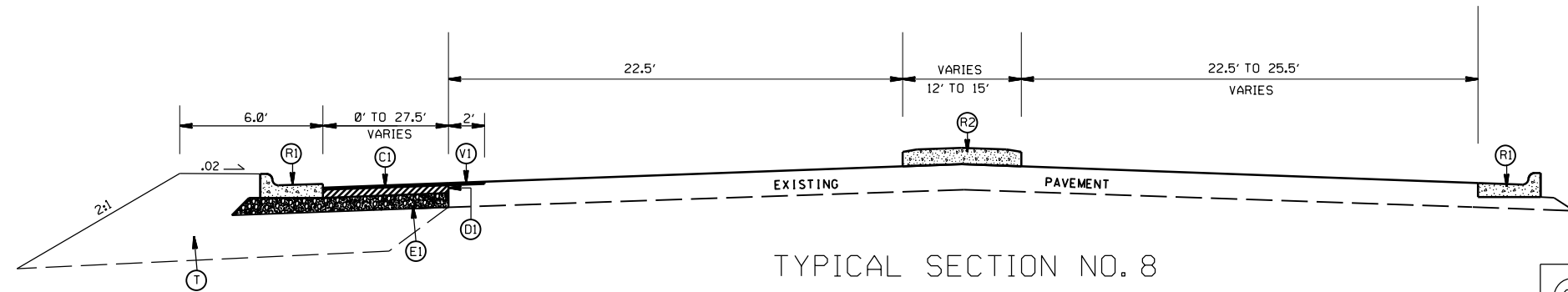
STA. 19+61.64 TO 20+24.00 -L-  
 STA. 20+25.50 TO 26+00.00 -L-

RCI AT INTERSECTION OF NC 24-27  
 AND BETHEL SCHOOL RD. (SR-1120)

SCALE	1"=50'		REVISIONS
DATE	11-2023		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		



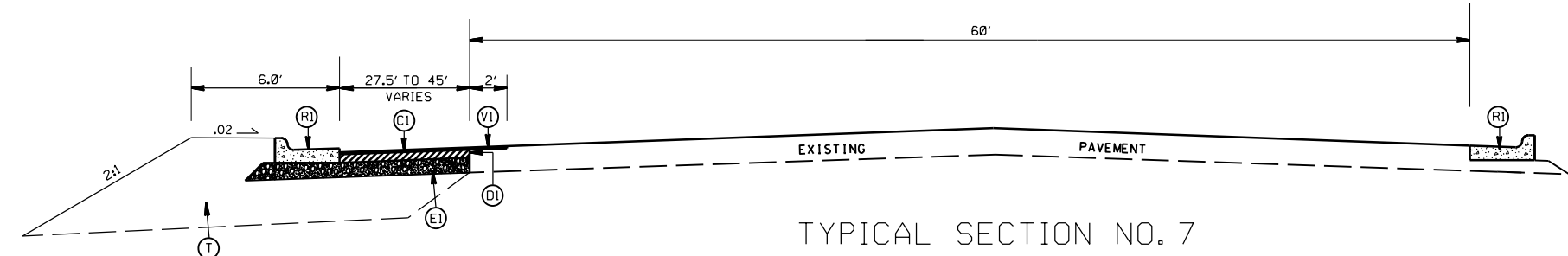
TYPICAL SECTION NO. 9  
STA. 22+02.00 TO 22+12.87 -L-



TYPICAL SECTION NO. 8  
STA. 21+89.16 TO 22+02.00 -L-

PAVEMENT SCHEDULE

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(T)	EARTH MATERIAL
(V1)	MILLING ASPHALT PAVEMENT, 1.5" IN DEPTH

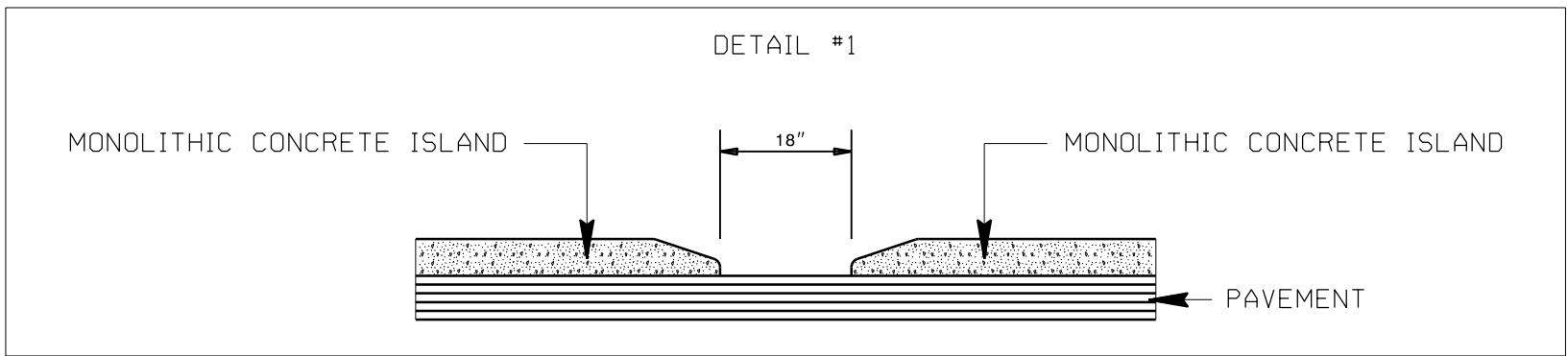
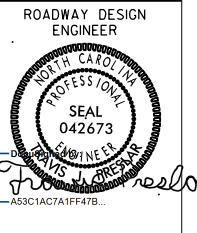


TYPICAL SECTION NO. 7  
STA. 21+70.00 TO 21+89.16 -L-

RCI AT INTERSECTION OF NC 24-27  
AND BETHEL SCHOOL RD. (SR-1120)

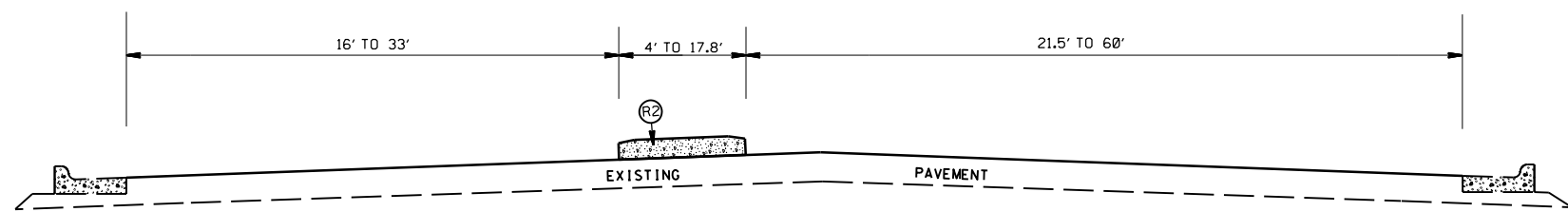
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DATE	11-2023		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		



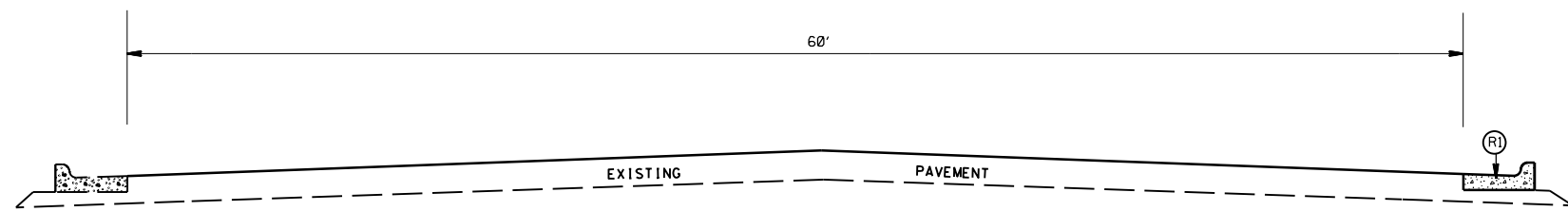


PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 3.0" 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. 4.0" ASPHALT CONC. BINDER COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 228 LBS. PER SQ. YD. IN ONE LAYER.
(E1)	PROP. APPROX. 5.0" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD. IN ONE LAYER.
(R1)	PROP. 2'-6" CURB & GUTTER
(R2)	PROP. 5" MONOLITHIC CONCRETE ISLAND SURFACE MOUNTED
(T)	EARTH MATERIAL
(V1)	MILLING ASPHALT PAVEMENT, 1.5" IN DEPTH



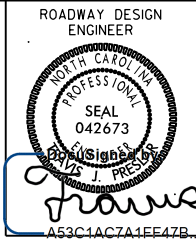
TYPICAL SECTION NO. 11  
STA. 10+31.82 TO 10+74.56 -YI-



TYPICAL SECTION NO. 10  
STA. 23+96.00 TO 24+30.00 -L-

RCI AT INTERSECTION OF NC 24-27  
AND BETHEL SCHOOL RD. (SR-1120)

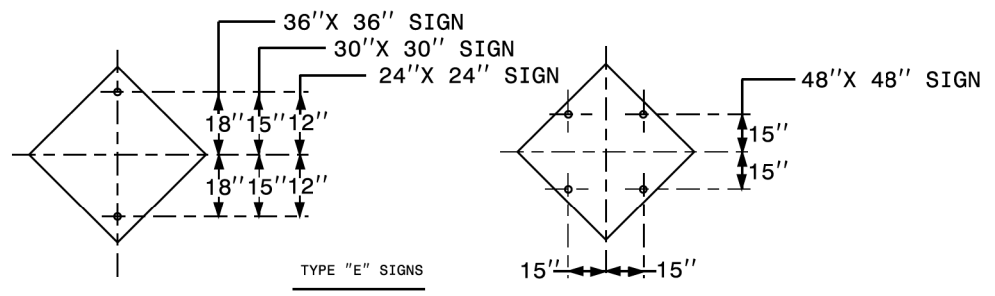
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DESIGN BY	CEB		
APPROVED	JDH		



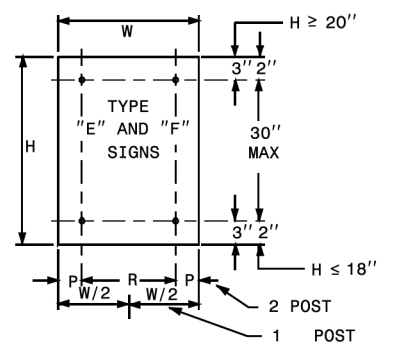
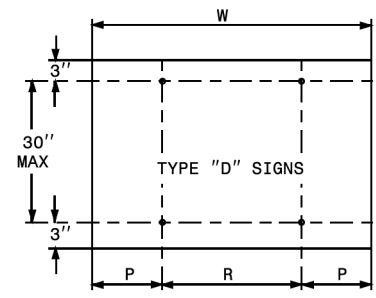
STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

1-12

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



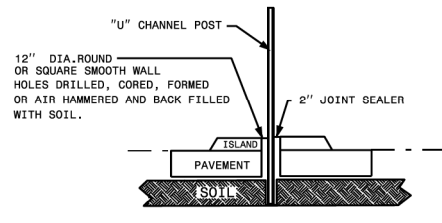
TYPE "E" SIGNS



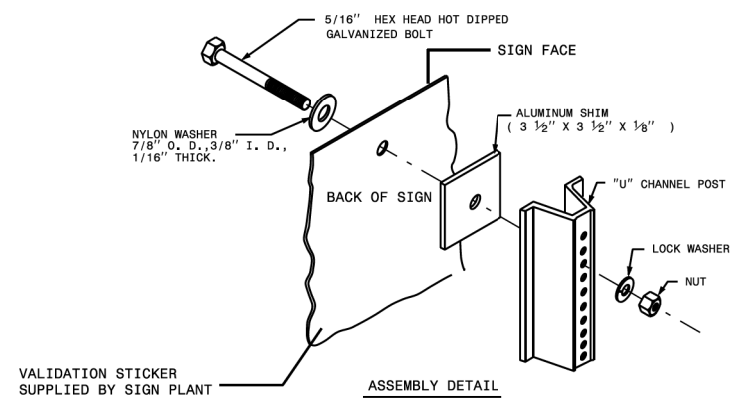
	NO. SUPPORTS		
	2	3 *	4
P	.207W	.145W	.107W
R	.586W	.355W	.262W

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

HOLE PUNCHING DETAIL



DETAIL FOR INSTALLATION OF CHANNEL POST IN CONCRETE



VALIDATION STICKER SUPPLIED BY SIGN PLANT

ASSEMBLY DETAIL

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

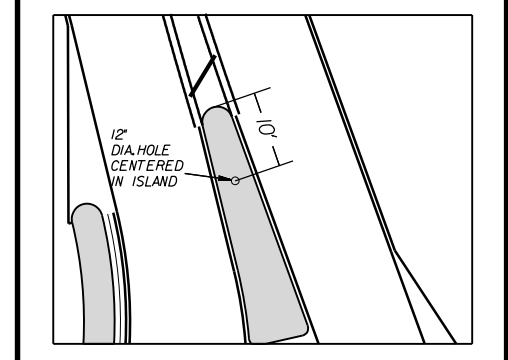
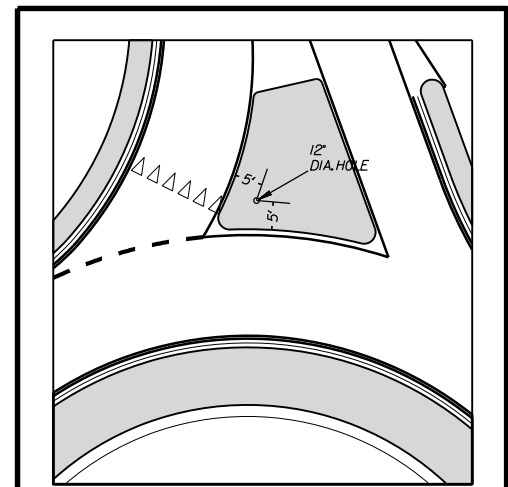
1-12

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



RCI AT INTERSECTION OF NC 24-27 AND BETHEL SCHOOL RD. (SR-1120)

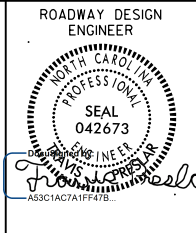
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SCALE	N/A		REVISIONS
DATE	11-2023		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		

SHEET 2 OF 2

904.50



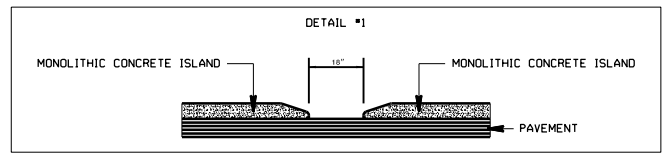
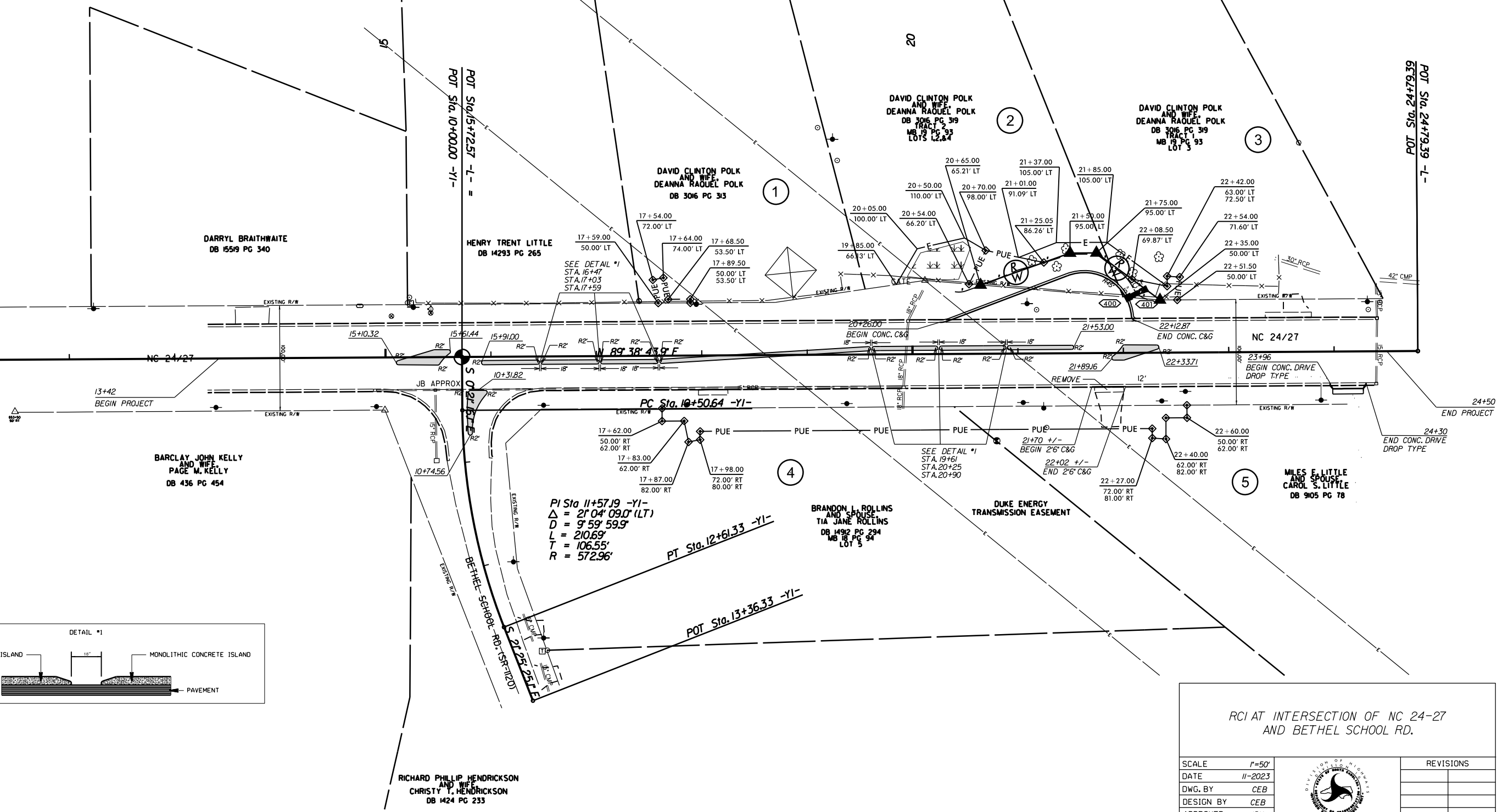


RESIDENT ENGINEER'S OFFICE SHOULD CONTACT METROLINA REGIONAL TRAFFIC ENGINEER AT BEGINNING OF CONSTRUCTION CONCERNING THE ORDINANCE FOR 'NO TRUCKS' SIGN



POT Sta. 10+00.00 -L-  
01 POT Sta. 10+00.00 -L-

POT Sta. 24+79.39 -L-  
656142 01S 10A

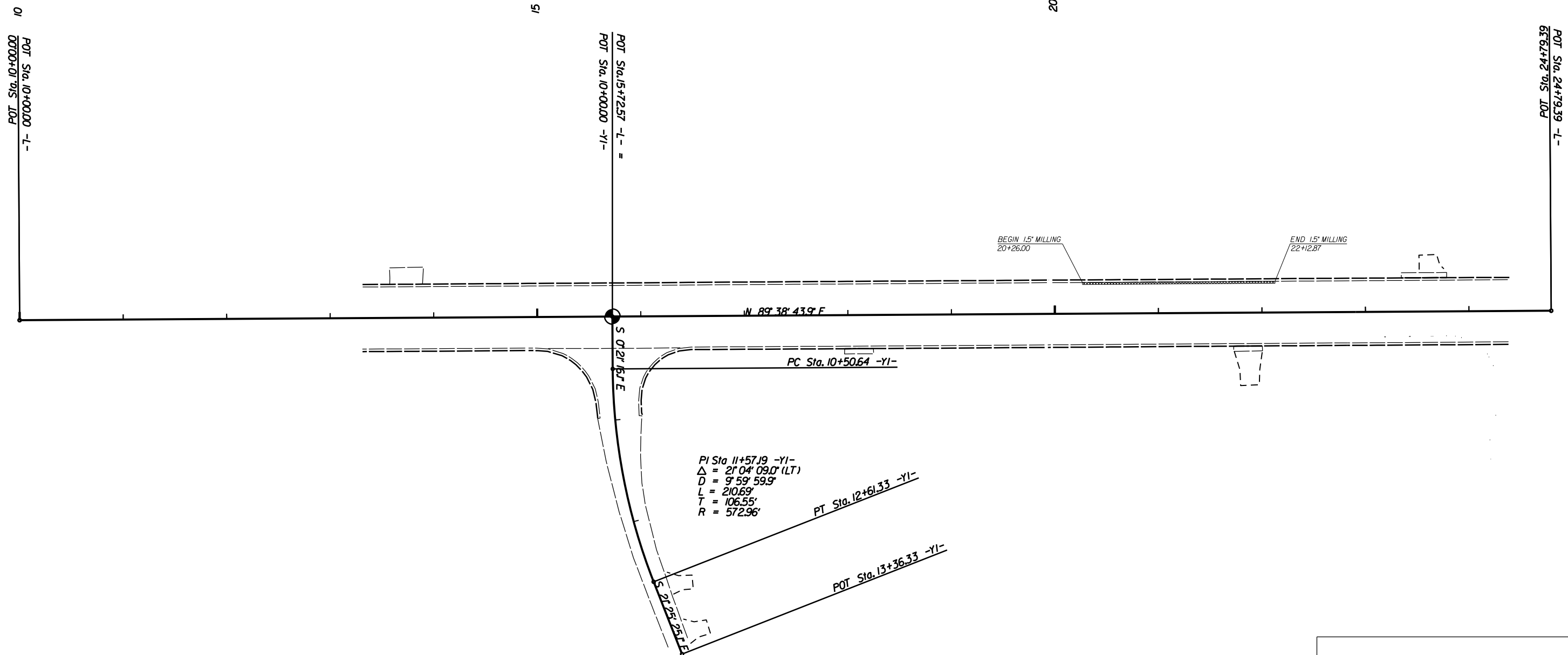
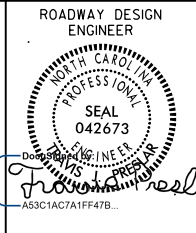


RICHARD PHILLIP HENDRICKSON AND WIFE CHRISTY T. HENDRICKSON DB 1424 PG 233

RCI AT INTERSECTION OF NC 24-27 AND BETHEL SCHOOL RD.

SCALE	1"=50'		REVISIONS
DATE	11-2023		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		

PROJECT NO.	SHEET NO.
49291.3.4	5
F.A. PROJECT NO.	0024092

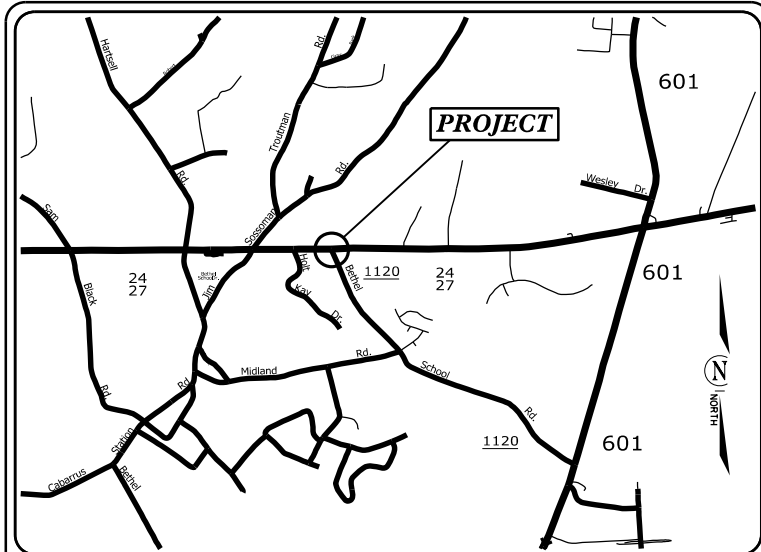


PI Sta. 11+57.19 -Y1-  
 $\Delta = 21^{\circ} 04' 09.0''$  (LT)  
 $D = 9^{\circ} 59' 59.9''$   
 $L = 210.69'$   
 $T = 106.55'$   
 $R = 572.96'$

RCI AT INTERSECTION OF NC 24-27  
AND BETHEL SCHOOL RD.

SCALE	1"=50'		REVISIONS
DATE	12-2023		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		

**TIP PROJECT: HS-2010D**



**VICINITY MAP**  
NOT TO SCALE

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  

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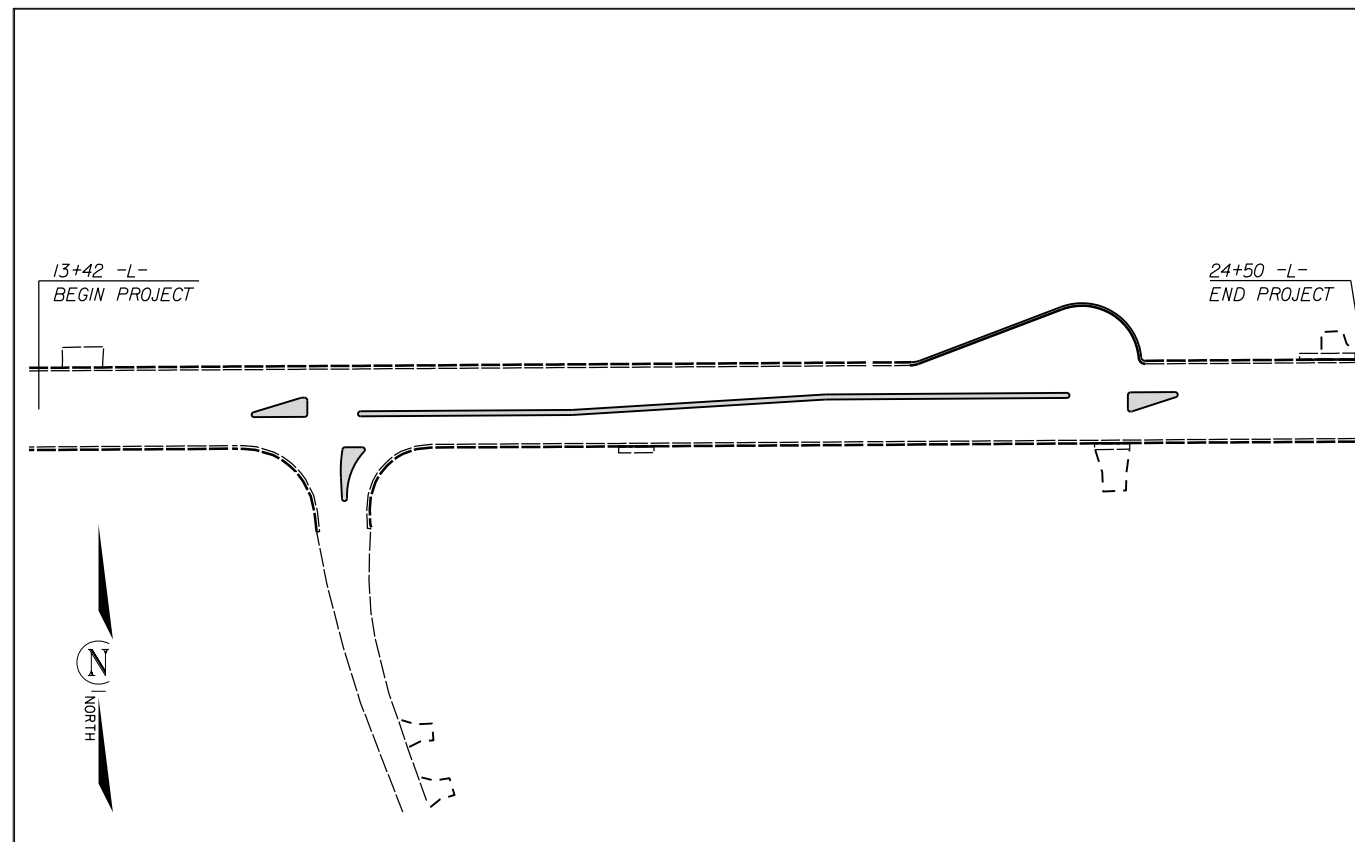
**PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL**  

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**CABARRUS COUNTY**

**LOCATION: INTERSECTION OF NC 24 /27 AND  
BETHEL SCHOOL RD. (SR-1120)**



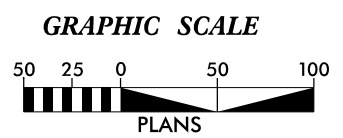
INSTALL PERIMETER EROSION CONTROL MEASURES DURING INITIAL CLEARING PHASE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HS-2010D	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
49291.1.4	0024092	P.E.	
49291.2.4	0024092	R/W	
49291.3.4	0024092	CONST.	

**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
1630.05	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	△△△△△△△△
1622.01	Temporary Berms and Slope Drains	— T —
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.



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

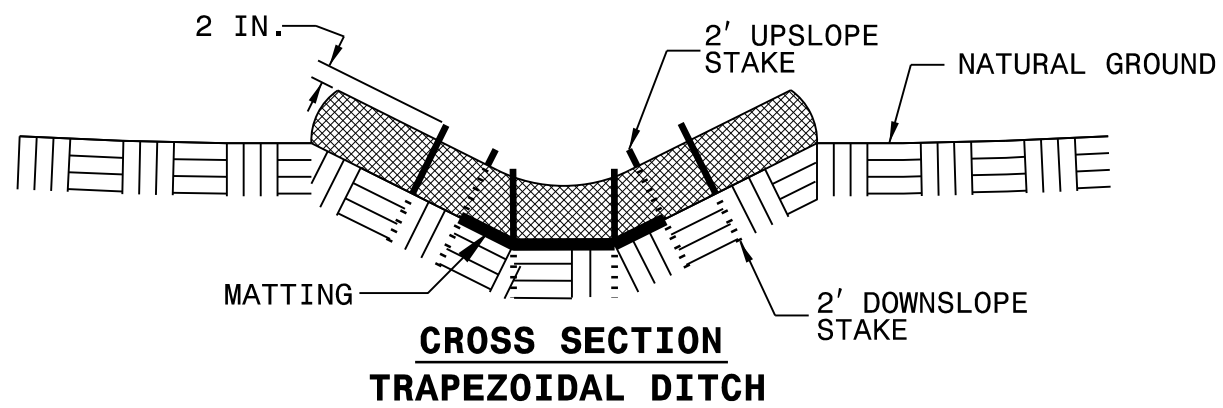
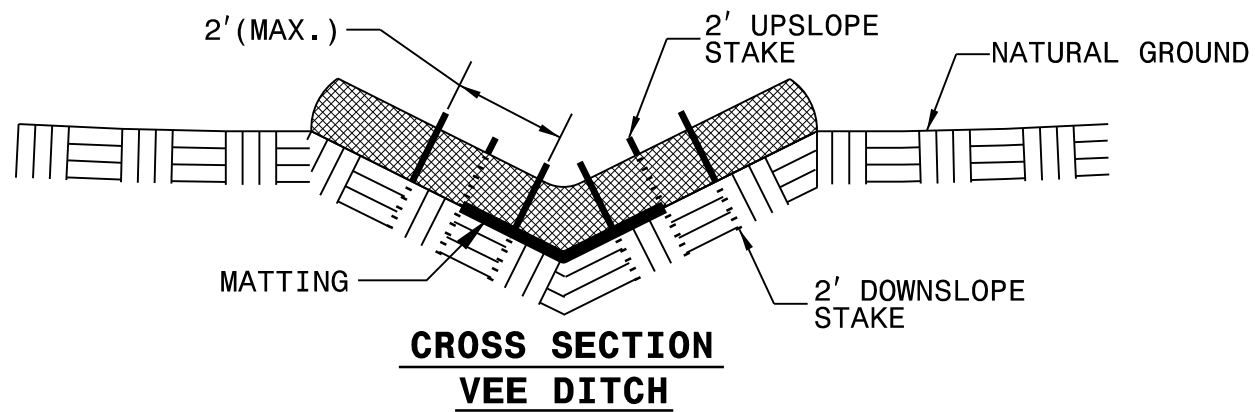
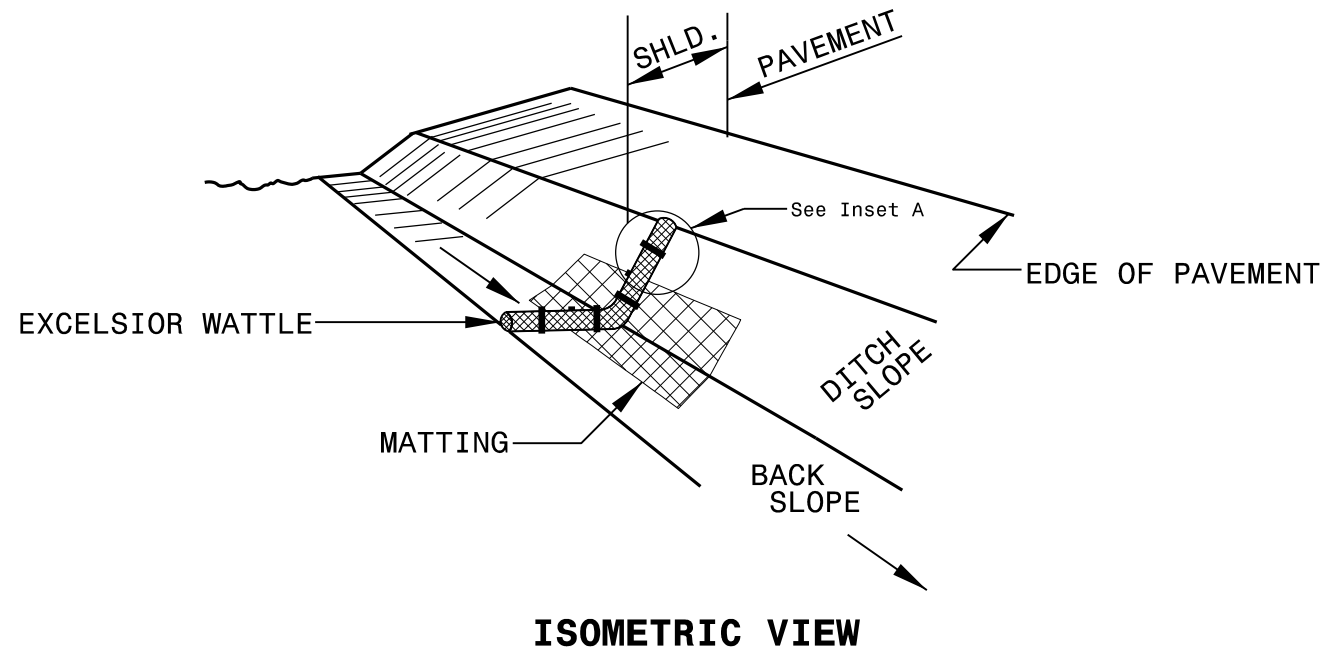
The following roadway english standards as appear in "Roadway Standard Drawings"— Roadway Design Unit – N. C. Department of Transportation – Raleigh, N. C., dated January 2018 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

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	

28 DEC 2023 11:30 AM Version:HS-2010D.NC 24-27 Bethel School\_RCI.stb.EC.TSH.dgn 7: Bethel School\_RCI.stb.EC.TSH.dgn

# WATTLE DETAIL

PROJECT NO.	SHEET NO.
49291.3.4	EC-2
F.A. PROJECT NO.	0024092



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

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

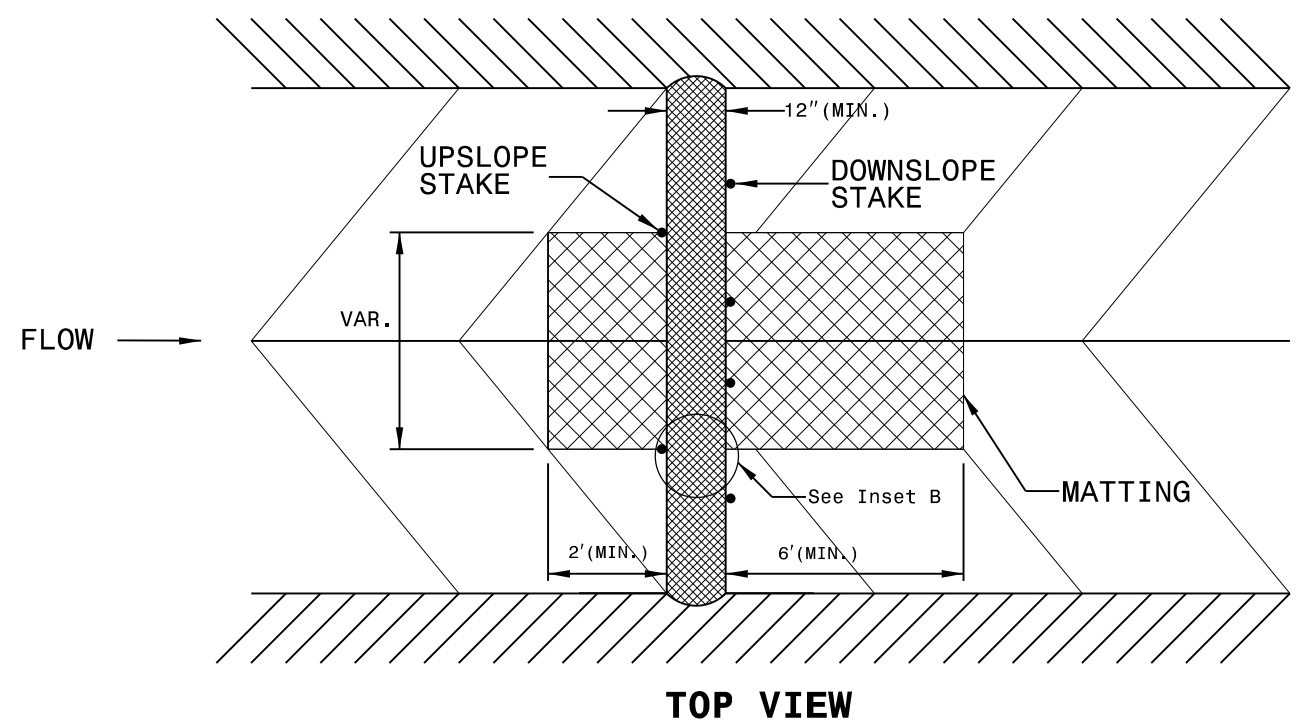
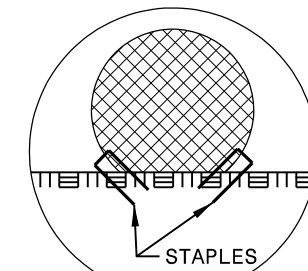
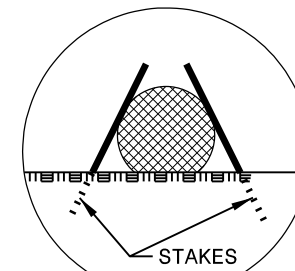
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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.

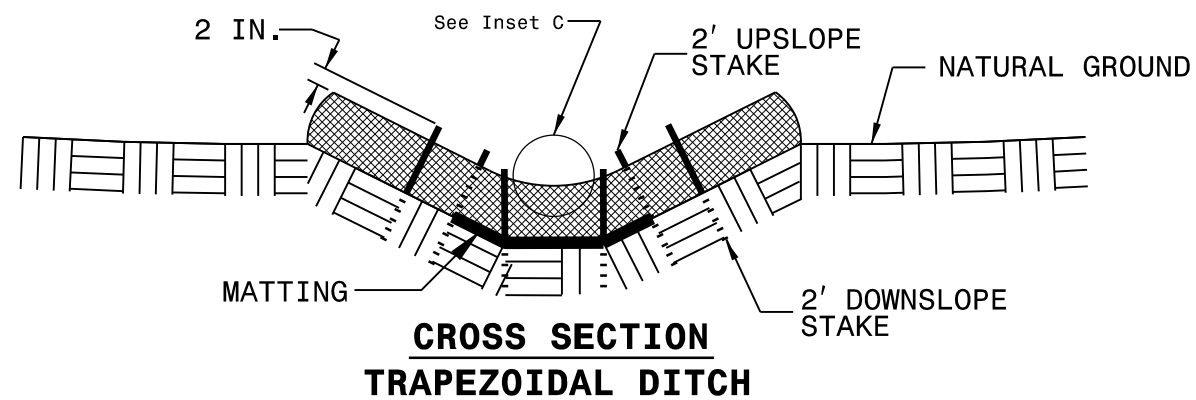
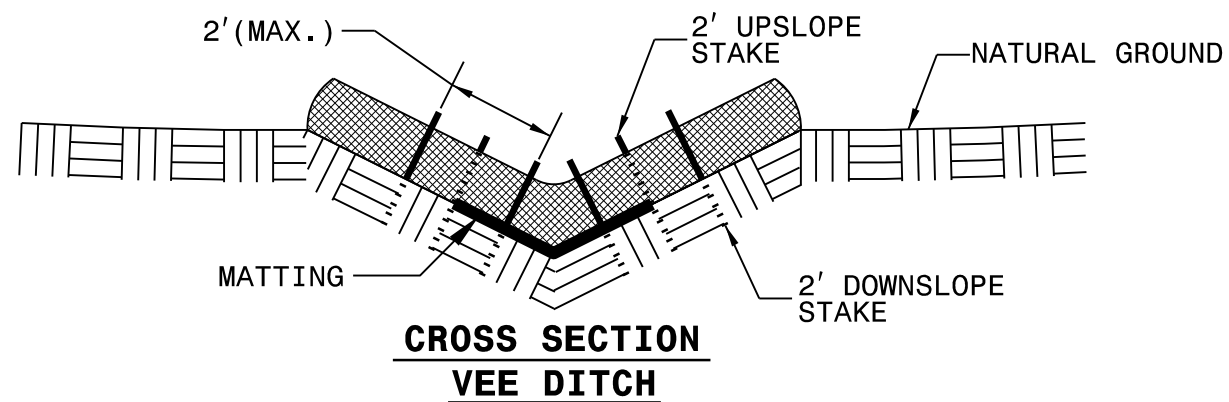
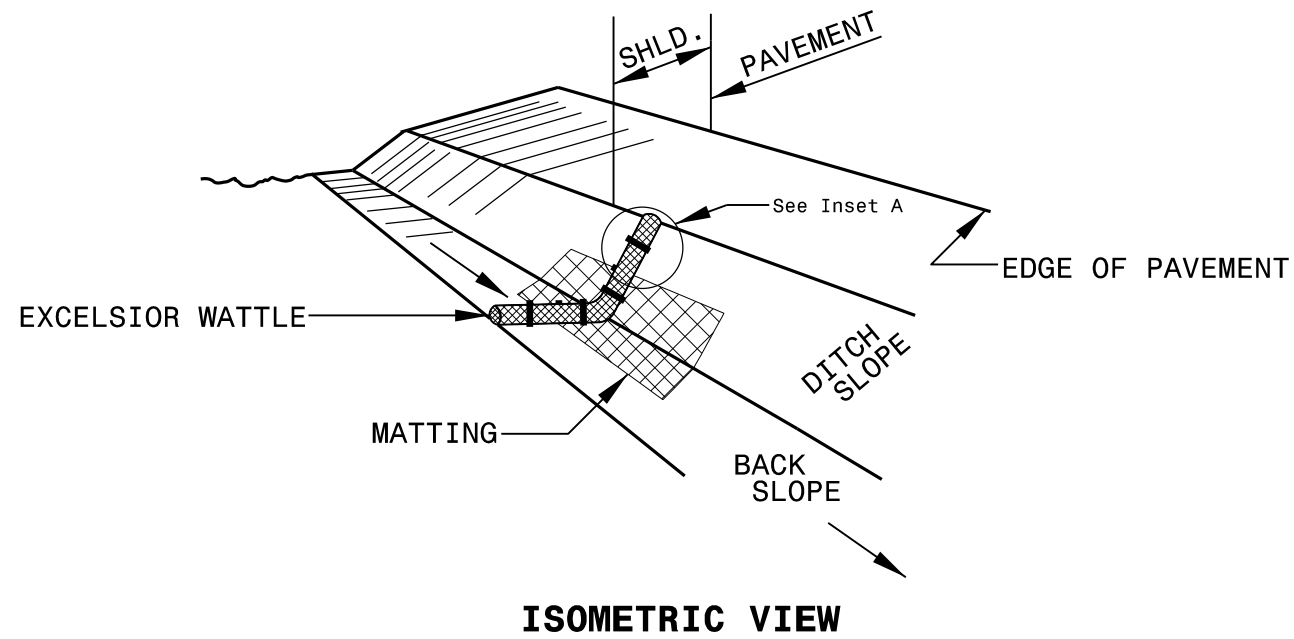
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

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



# WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

PROJECT NO.	SHEET NO.
49291.3.4	EC-2A
F.A. PROJECT NO. 0024092	



**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.

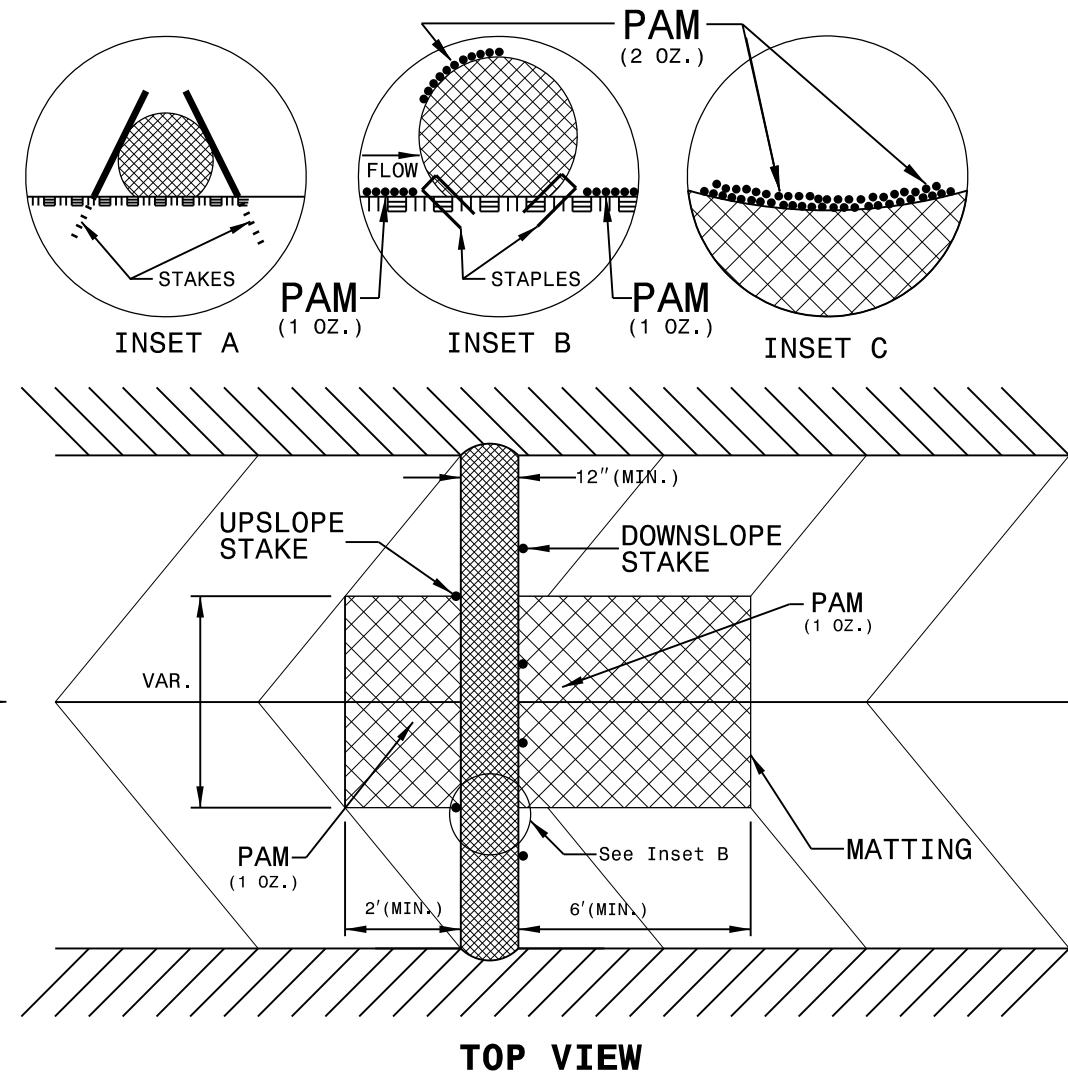
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

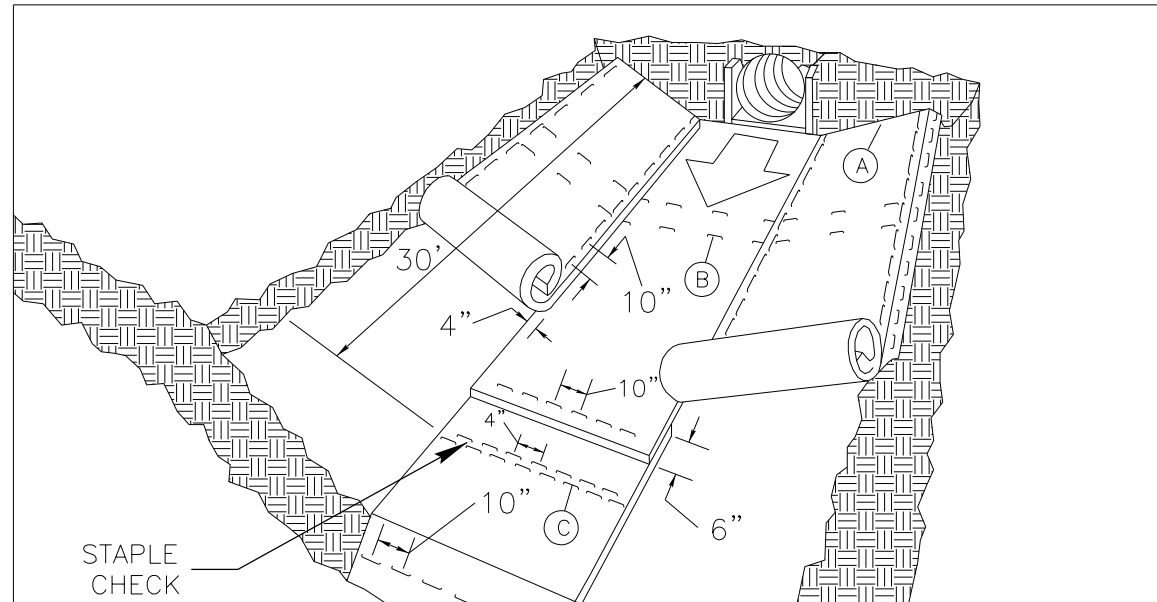
INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.





# MATTING INSTALLATION DETAIL

PROJECT NO.	SHEET NO.
49291.3.4	EC-2B
F.A. PROJECT NO. 0024092	



**MATTING IN DITCHES**

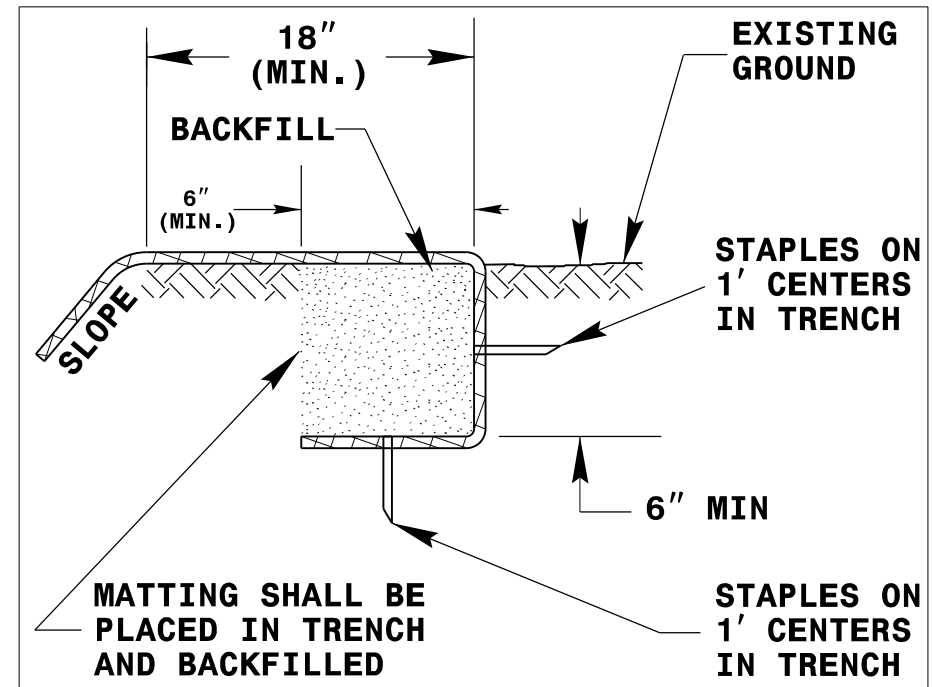
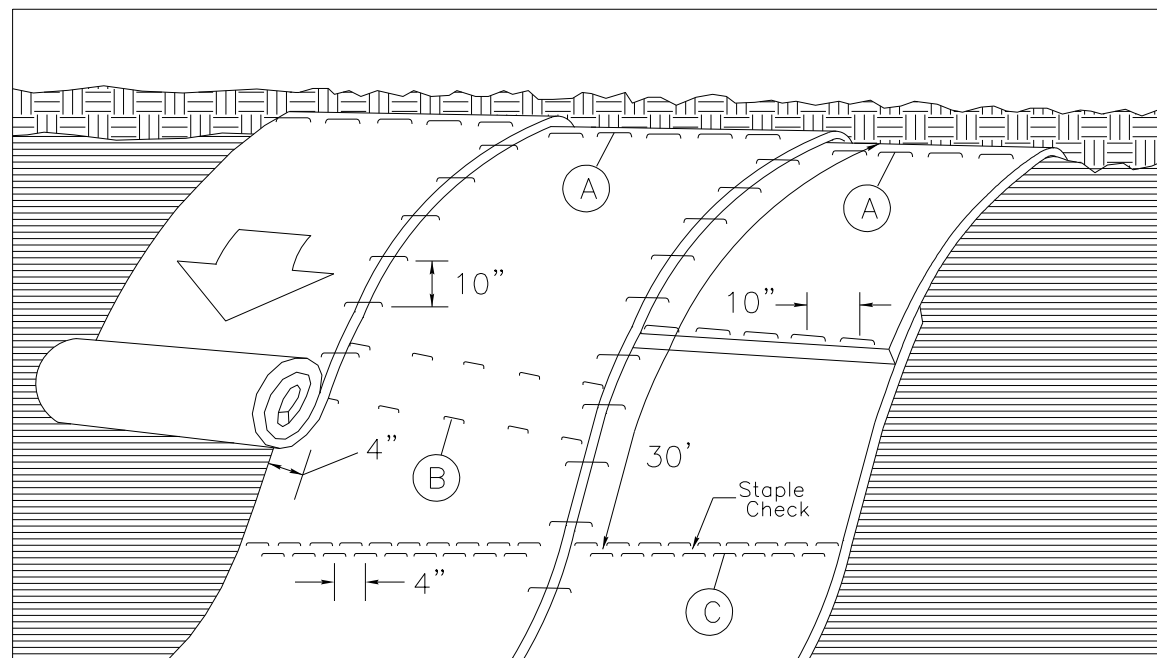


DIAGRAM (A)



**MATTING ON SLOPES**

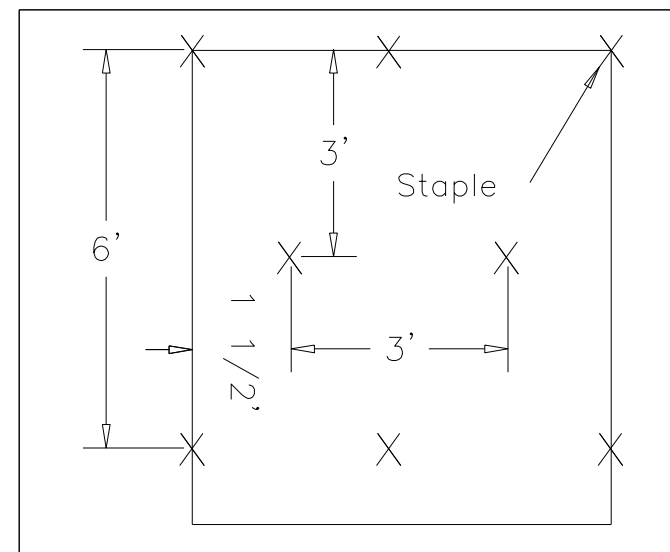


DIAGRAM (B)

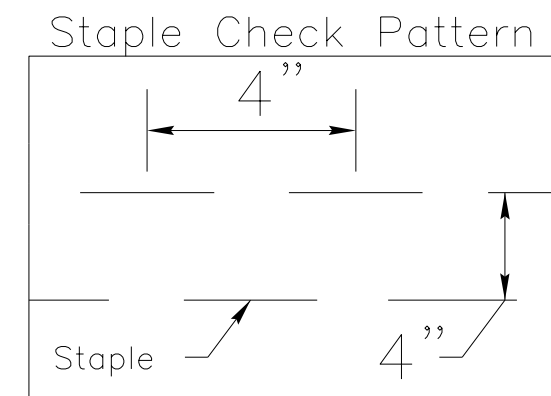


DIAGRAM (C)

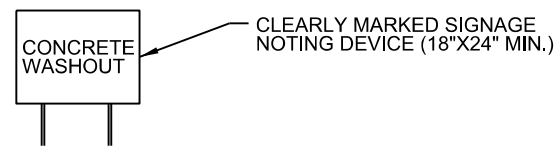
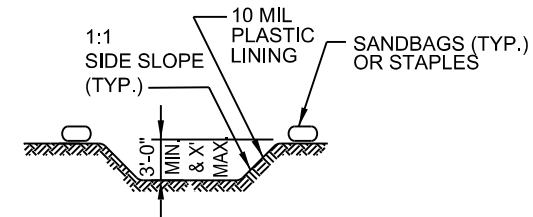
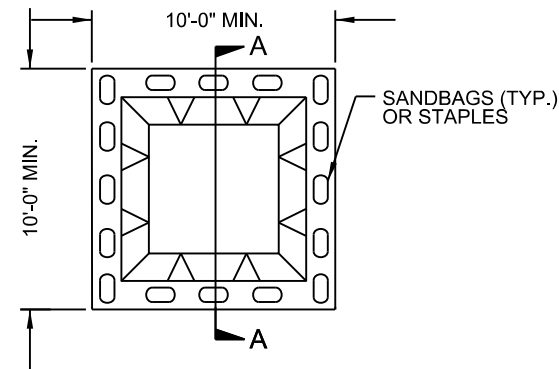
**NOTES:**

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

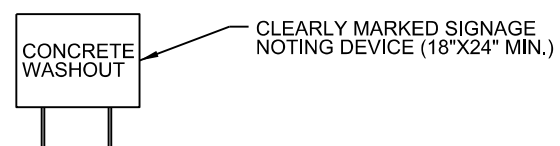
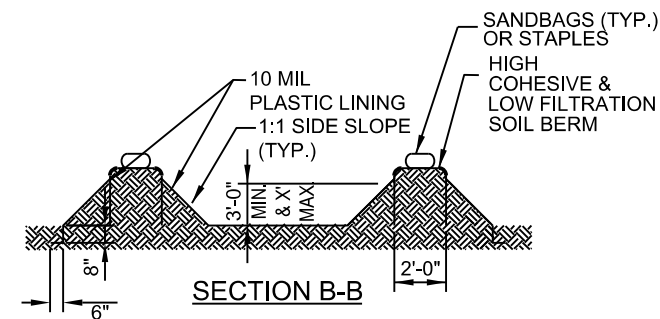
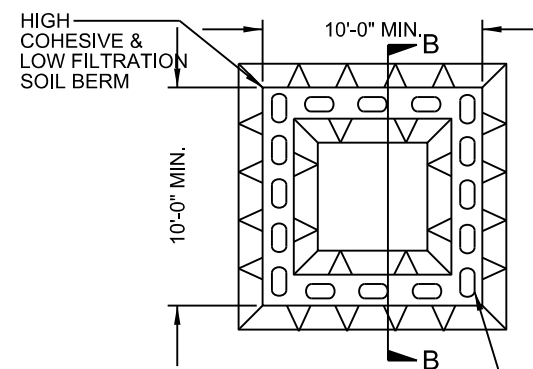
**NOTES:**

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



**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

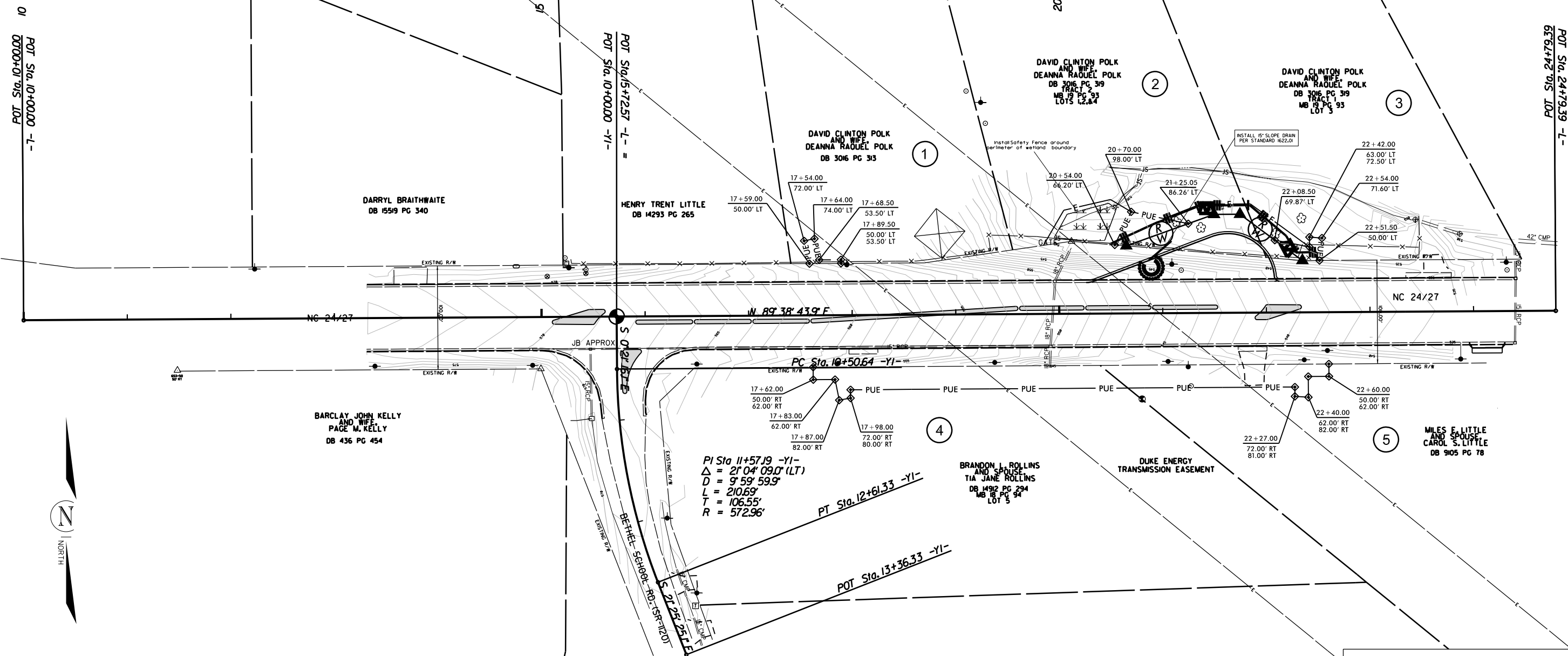
PROJECT NO.	SHEET NO.
4929I.3.4	EC-3
F.A. PROJECT NO.	0024092

***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.

# CLEARING PHASE


PROJECT NO.	SHEET NO.
49291.3.4	EC-4
F.A. PROJECT NO.	0024092



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

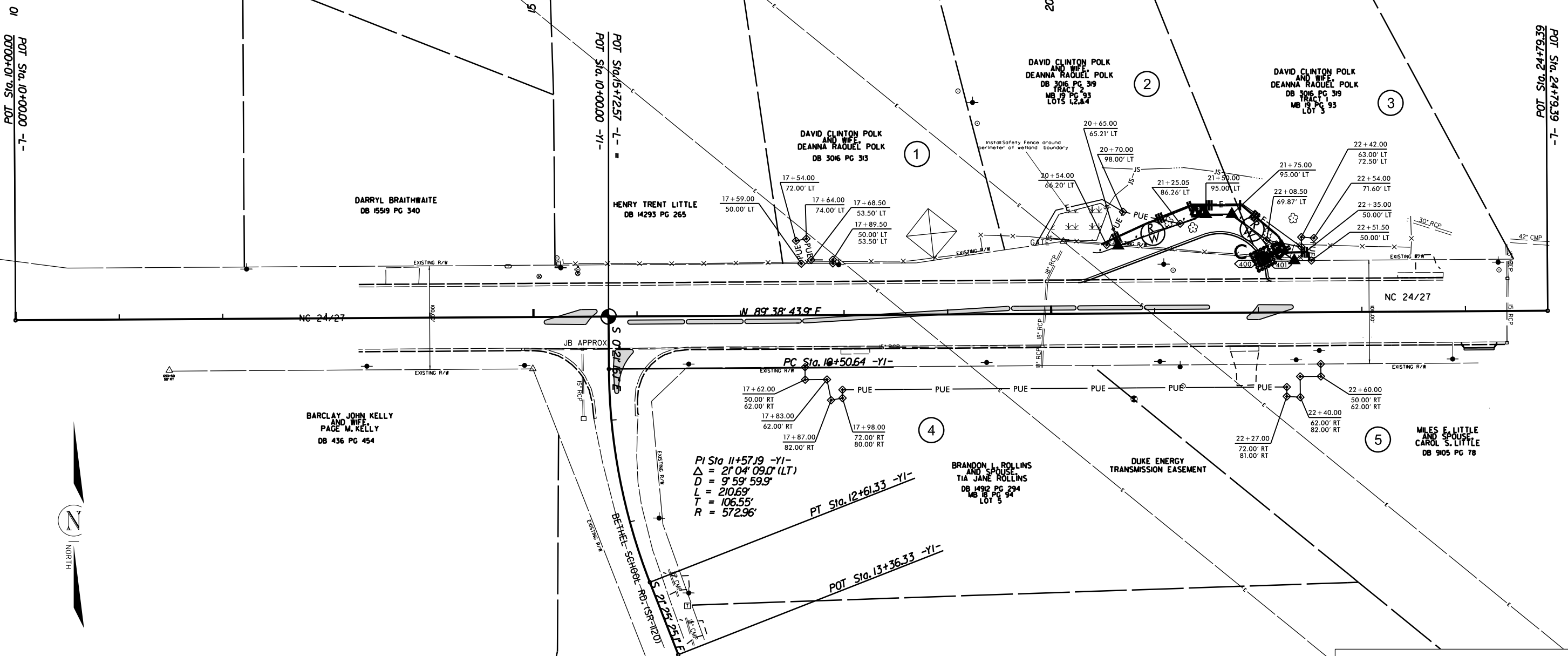
RICHARD PHILLIP HENDRICKSON  
AND WIFE  
CHRISTY L. HENDRICKSON  
DB 1424 PG 233

RCI AT INTERSECTION OF NC 24-27  
AND BETHEL SCHOOL RD

SCALE	1"=50'		REVISIONS
DATE	3-2022		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		

# CONSTRUCTION PHASE


PROJECT NO.	SHEET NO.
49291.3.4	EC-4A
F.A. PROJECT NO.	0024092

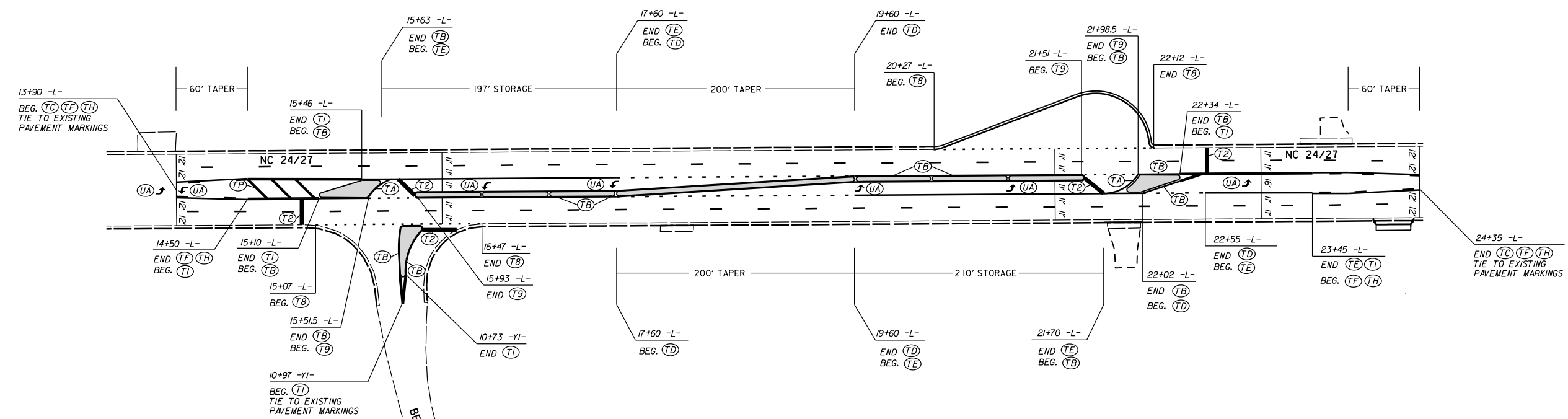
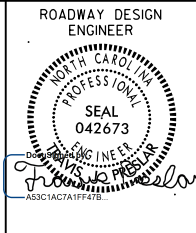


EROSION CONTROL MEASURES MAY BE CHANGED, IN FIELD AS DIRECTED BY THE ENGINEER.

RICHARD PHILLIP HENDRICKSON  
CHRISTY L. HENDRICKSON  
DB 1424 PG 233

RCI AT INTERSECTION OF NC 24-27 AND BETHEL SCHOOL RD

SCALE	1"=50'		REVISIONS
DATE	3-2022		
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)            | T1 - 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 (6',.90 MIL)                             |
| TJ - 10FT. WHITE SKIP (6',.90 MIL)            | T7 - YELLOW EDGELINE (6',.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 (6',.90 MIL)       | T9 - 2FT.-6FT./SP YELLOW MINISKIP (4',.90 MIL)               |
| TM - 10FT. YELLOW SKIP (6',.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 (6',.90 MIL)              |
| TP - YELLOW DIAGONAL (8',.90 MIL)             | T13 - 3FT.-9FT./SP WHITE MINISKIP (8',.90 MIL)               |
| TQ - WHITE CROSSWALK LINE (8',.90 MIL)        | T14 - 3FT.-9FT./SP WHITE MINISKIP (12',.90 MIL)              |
| TR - WHITE SOLID LANE LINE (8',.90 MIL)       | T15 - YELLOW SINGLE CENTER (6',.90 MIL)                      |
| TS - WHITE GORELINE (12',.90 MIL)             | T16 - YELLOW DOUBLE CENTER (6',.90 MIL)                      |
| TT - WHITE SOLID LANE LINE (12',.90 MIL)      | T17 - 3FT.-3FT./SP WHITE MINISKIP ENTRANCE LINE (8',.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)                   | UW - 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)                |
| UO - BICYCLE LEFT ARROW (90 MIL)               | MD - PERMANENT RAISED MARKER (YELLOW)                      |
| UP - MERGE ARROW (90 MIL)                      | ME - SNOWPLOWABLE MARKER (YELLOW & YELLOW)                 |
| UQ - RAMP ARROW SYMBOL (90 MIL)                | MF - SNOWPLOWABLE MARKER (CRYSTAL & YELLOW)                |
| UR - SHARROW (90 MIL)                          | MG - SNOWPLOWABLE MARKER (YELLOW & RED)                    |
| US - BICYCLE LOOP DETECTOR (90 MIL)            | ML - PERMANENT RAISED MARKER (CRYSTAL & CRYSTAL)           |
| UT - U-TURN ARROW (90 MIL)                     | MO - SNOWPLOWABLE MARKER (CRYSTAL & CRYSTAL)               |

NOTE:  
SEE PMPI-A FOR PAVEMENT MARKING REMOVAL

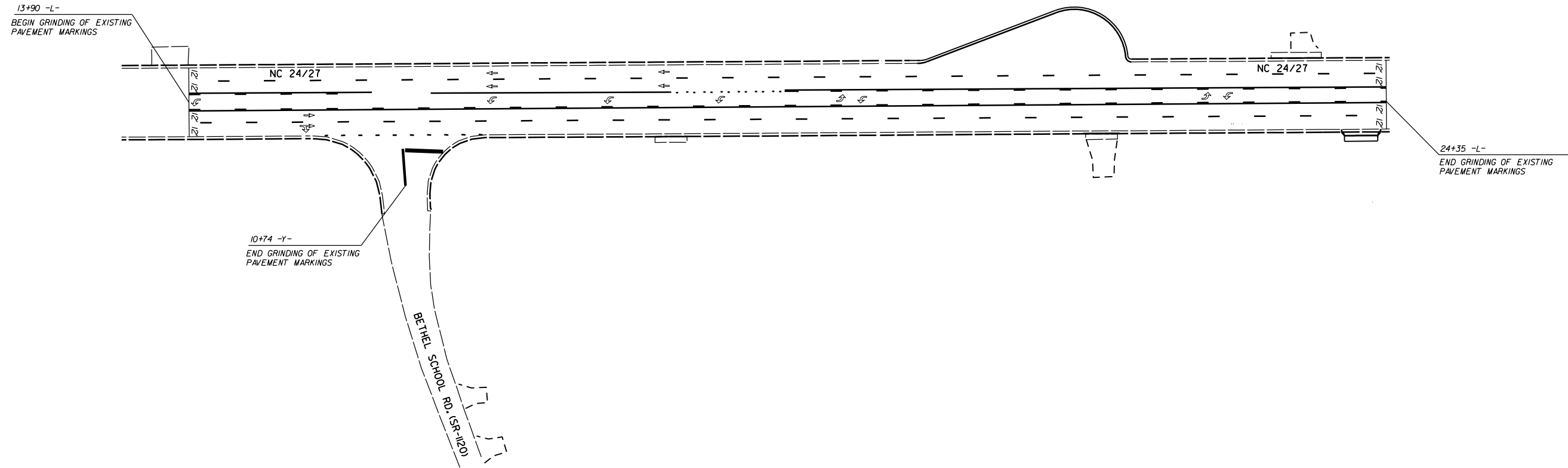
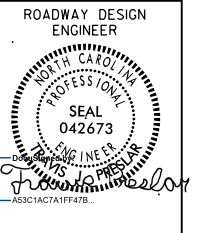
RCI AT INTERSECTION OF NC 24-27 AND BETHEL SCHOOL RD.(SR-1120)

SCALE	1"=50'		REVISIONS
DATE	11-2023		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		



# PAVEMENT MARKING REMOVAL

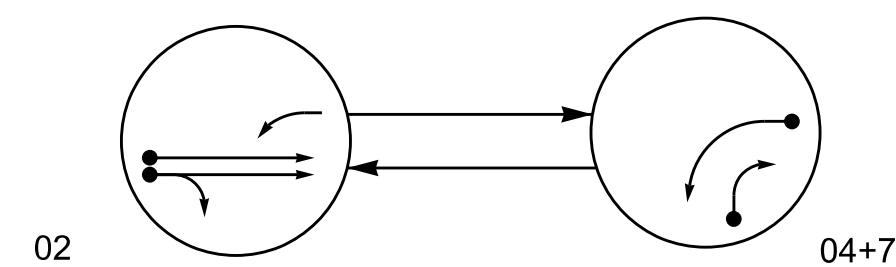
PROJECT NO.	SHEET NO.
49291.L4	PMP-2
F.A. PROJECT NO.	0024092



RCI AT INTERSECTION OF NC 24-27 AND BETHEL SCHOOL RD.(SR-1120)

SCALE	1"=50'		REVISIONS
DATE	11-2023		
DWG. BY	CEB		
DESIGN BY	CEB		
APPROVED	JDH		

PHASING DIAGRAM



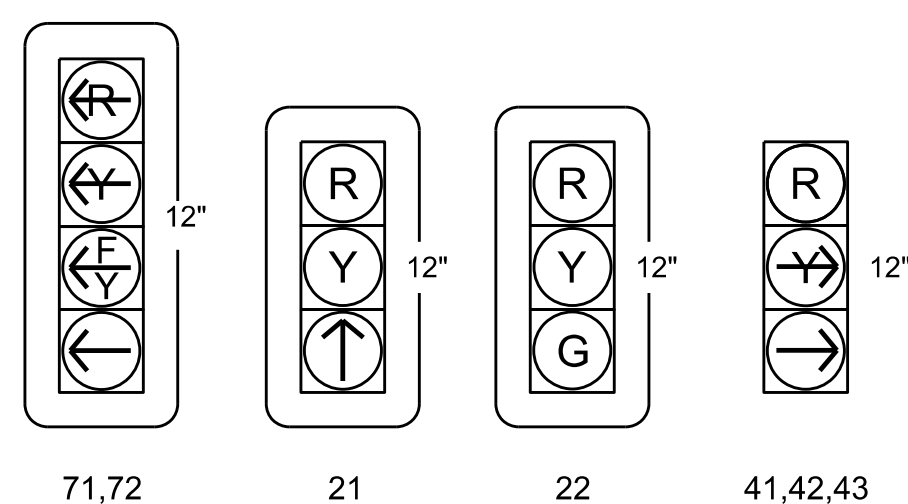
PHASING DIAGRAM DETECTION LEGEND

- ←●→ DETECTED MOVEMENT
- ←○→ UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ←- - -> PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE		
	0 2+ 6	0 4+ 7	F HEADS
21	↑	R	Y
22	G	R	Y
41,42,43	R	→	R
71,72	←	↓	→

SIGNAL FACE I.D.

All Heads L.E.D.

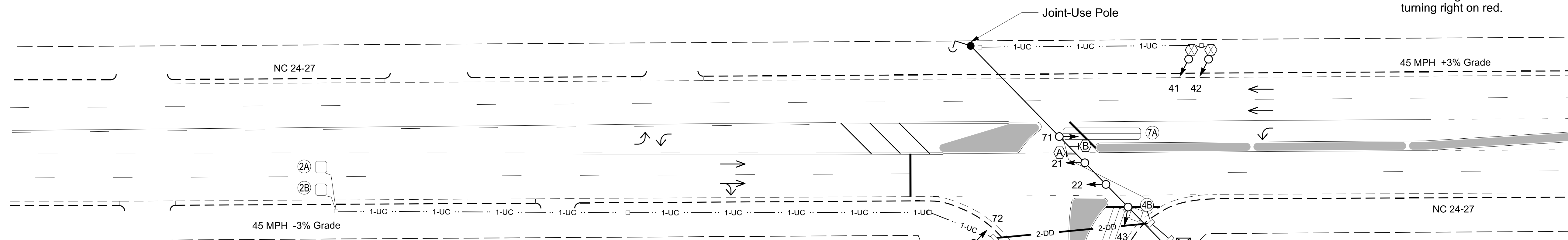


MAXTIME DETECTOR INSTALLATION CHART											
DETECTOR					PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOP LINE (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL DELAY DURING GREEN	NEW CARD
2A	6X6	300	5	X	2	-	-	X	X	X	-
2B	6X6	300	5	X	2	-	-	X	X	X	-
4A	6X40	0	2-4-2	X	4	15.0	-	X	-	X	-
4B	6X6	0	3	X	4	15.0	-	X	-	X	-
7A	6X40	+10	2-4-2	X	7	15.0	-	X	-	X	-

2 Phase Fully Actuated Isolated

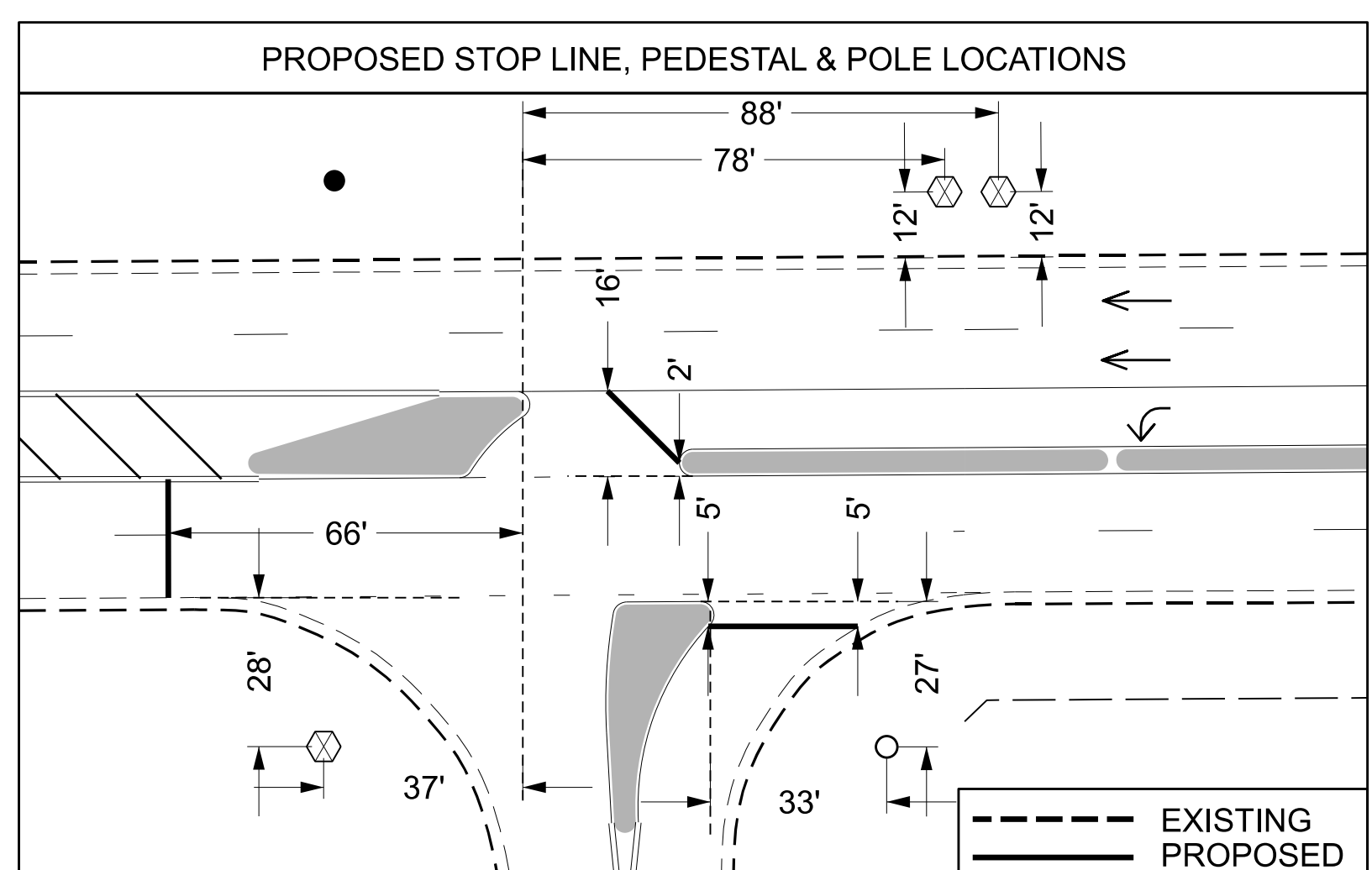
NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Install backplates with Retro-Reflective Sheeting for signal heads numbered 21, 22, 71 and 72.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.



FEATURE	PHASE		
	2	4	7
Walk *	-	-	-
Ped Clear *	-	-	-
Min Green *	12	7	7
Passage *	6.0	2.0	2.0
Max 1 *	90	25	25
Yellow Change	4.8	3.0	3.0
Red Clear	2.1	3.3	3.3
Added Initial *	1.5	-	-
Maximum Initial *	34	-	-
Time Before Reduction *	15	-	-
Time To Reduce *	30	-	-
Minimum Gap	3.0	-	-
Advance Walk	-	-	-
Non Lock Detector	-	X	X
Vehicle Recall	MIN RECALL	-	-
Dual Entry	-	X	X

\* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.



This plan supersedes the plan signed and sealed 10/23/23.

PROPOSED	LEGEND	EXISTING
○	Traffic Signal Head	●
○	Modified Signal Head	N/A
⊥	Sign	⊥
○	Pedestrian Signal Head	⊥
○	Signal Pole with Guy	⊥
○	Signal Pole with Sidewalk Guy	⊥
⊗	Inductive Loop Detector	⊗
⊗	Controller & Cabinet	⊗
⊗	Junction Box	⊗
⊗	2-in Underground Conduit	⊗
---	Right of Way	---
→	Directional Arrow	→
⊗	Type III Signal Pedestal	⊗
⊗	No Left Turn Sign (R3-2)	⊗
⊗	"U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	⊗

New Installation

Prepared in the Offices of:  
  
 750 N. Greenfield Pkwy, Garner, NC 27529

NC 24-27 at SR 1120 (Bethel School Rd)

Division 10 Cabarrus County Midland

PLAN DATE: November 2023 REVIEWED BY: R.N. Zinser

PREPARED BY: T.A. Kenion REVIEWED BY:

REVISIONS: INIT. DATE

Scale: 1"=30'

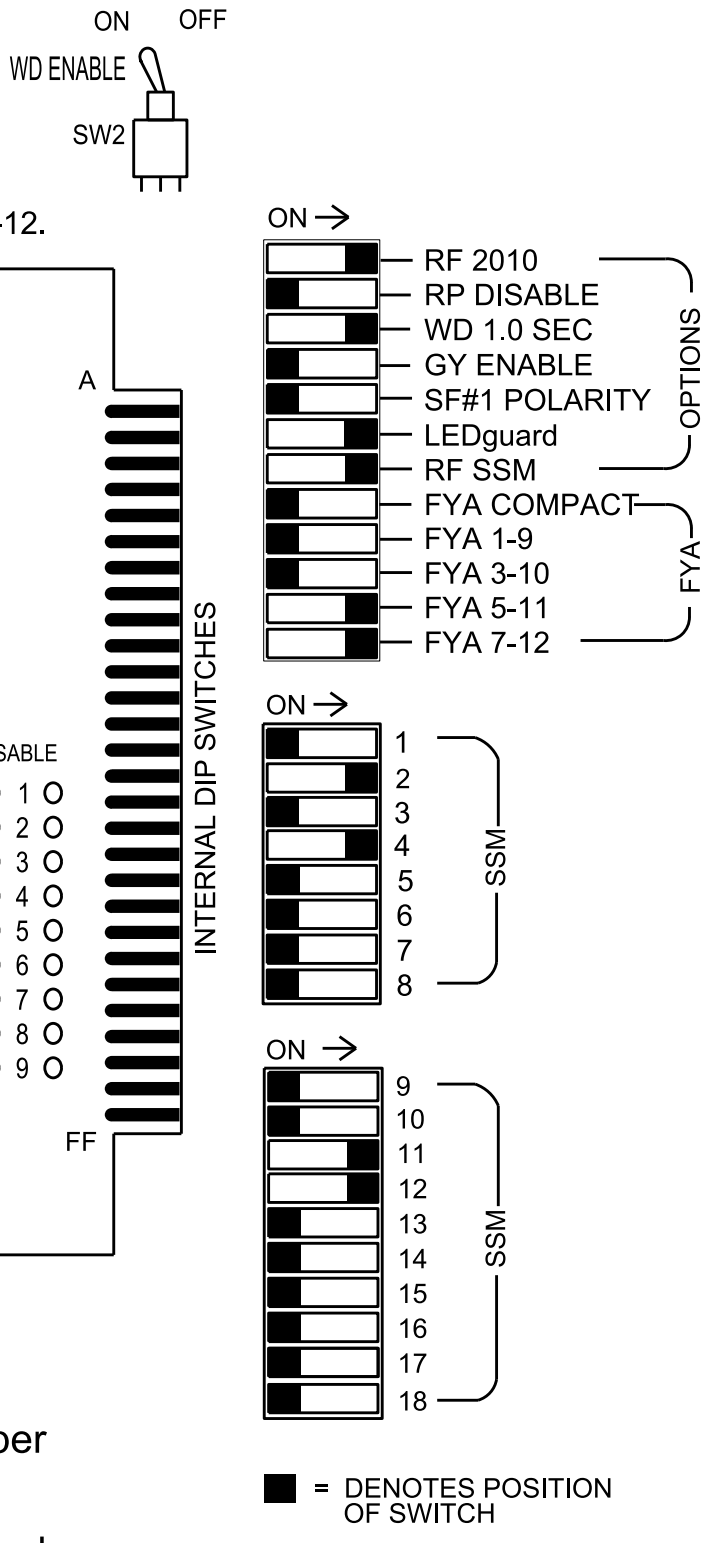
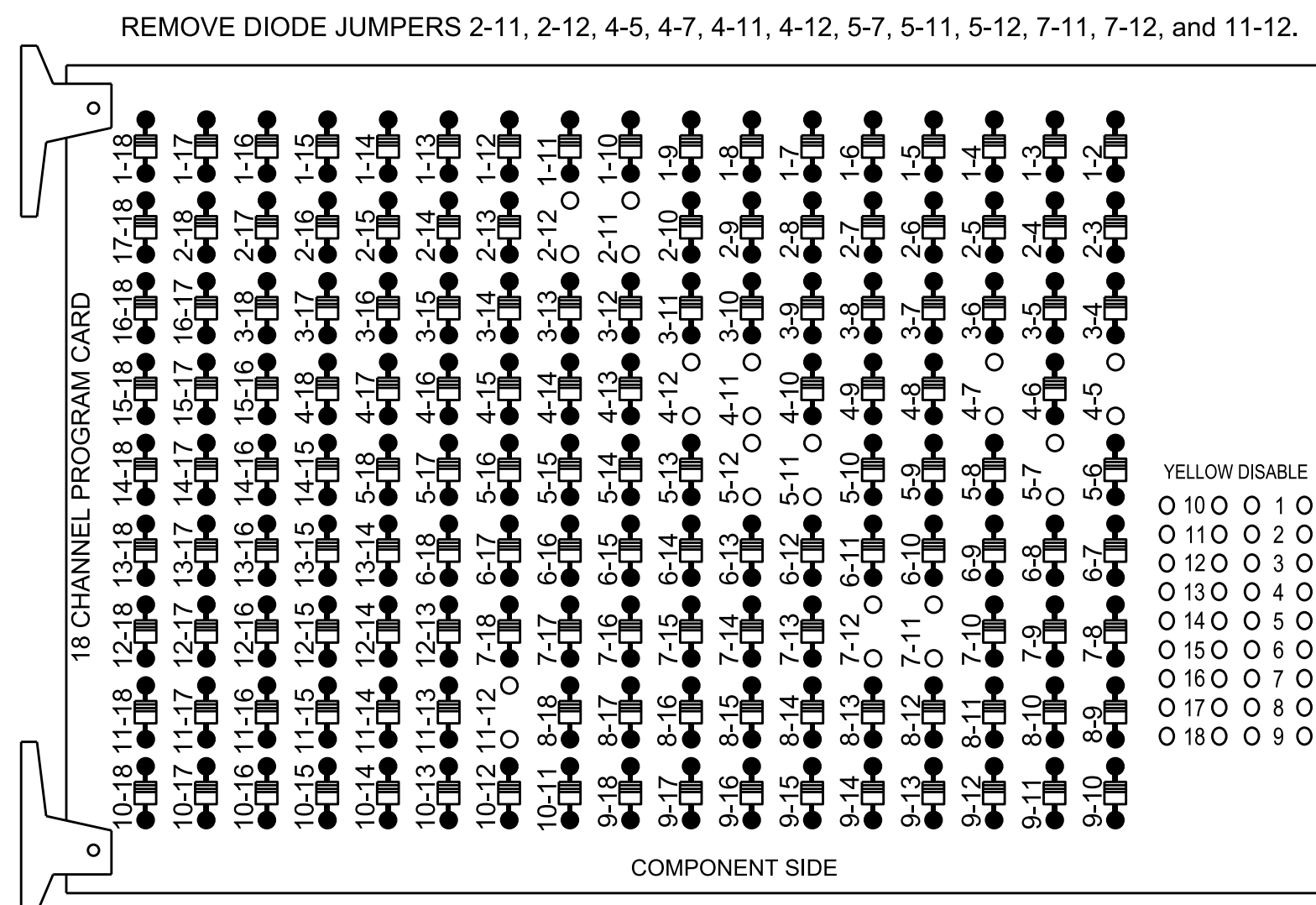
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 RICHARD N. ZINSER  
 SEAL 043914  
 ENGINEER  
 R. Nicholas Zinser 12/07/2023  
 DATE  
 SIG. INVENTORY NO. 10-2495



### 18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



### NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
- Program phases 4 and 7 for Dual Entry.
- Program controller to start up in phase 2 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.

### EQUIPMENT INFORMATION

Controller.....2070LX  
Cabinet.....332 w/ Aux  
Software.....Q-Free MAXTIME  
Cabinet Mount.....18 With Aux. Output File  
Load Switches Used.....S2, S5, S7, S10, AUX S4, AUX S5  
Phases Used.....2, 4, 7  
Overlap "1".....NOT USED  
Overlap "2".....NOT USED  
Overlap "3".....\*  
Overlap "4".....\*  
Overlap "7".....\*  
\*See overlap programming detail on this sheet.

### OVERLAP PROGRAMMING

Front Panel  
Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface  
Home >Controller >Overlap Configuration >Overlaps

Overlap Plan 1

Overlap	1	2	3	4	7
Type	Off	Off	FYA 4 - Section	FYA 4 - Section	Normal
Included Phases	-	-	2	2	7
Modifier Phases	-	-	-	7	-
Modifier Overlaps	-	-	7	-	-
Trail Green	0	0	0	0	0
Trail Yellow	0.0	0.0	0.0	0.0	0.0
Trail Red	0.0	0.0	0.0	0.0	0.0

### OUTPUT CHANNEL CONFIGURATION

Front Panel  
Main Menu >Controller >More>Channels>Channels Config

Web Interface  
Home >Controller >Advanced IO>Channels>Channel Configuration

Channel Configuration

Channel	Control Type	Control Source	Flash Yellow	Flash Red	Flash Alt	MMU Channel
1	Phase Vehicle	1		X	X	1
2	Phase Vehicle	2	X			2
3	Phase Vehicle	3		X	X	3
4	Phase Vehicle	4		X		4
5	Overlap	7		X		5
6	Phase Vehicle	6	X		X	6
7	Phase Vehicle	7		X		7
8	Phase Vehicle	8		X	X	8
9	Overlap	1	X		X	9
10	Overlap	2		X	X	10
11	Overlap	3	X			11
12	Overlap	4	X			12
13	Phase Ped	2				13
14	Phase Ped	4				14
15	Phase Ped	6				15
16	Phase Ped	8				16
17	Overlap	5		X	X	17
18	Overlap	6		X		18

NOTICE CHANNEL 5 CONTROL TYPE & SOURCE →

NOTICE OVERLAP 4 FLASH YELLOW →

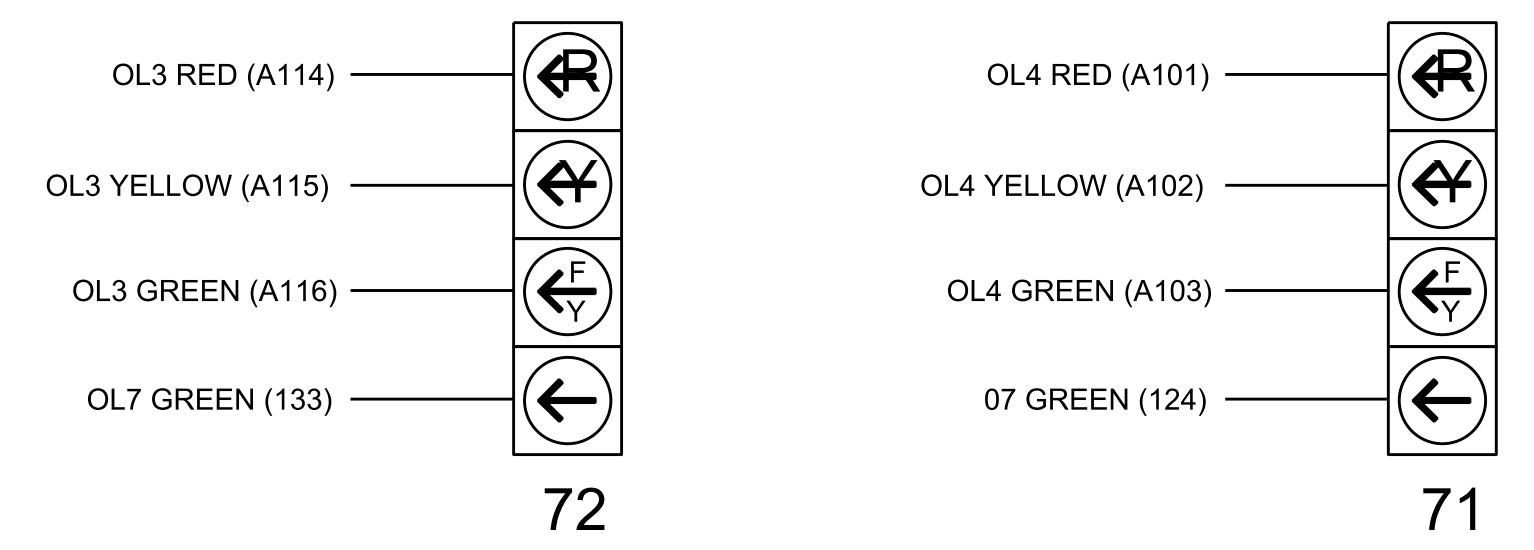
### SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
GMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	1	2	2 PED	3	4	4 PED	OL7	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	NU	21	22	NU	41,42,43	NU	72*	NU	NU	71*	NU	NU	NU	NU	NU	72*	71*	NU
RED		128	128		101													
YELLOW		129	129				*			*								
GREEN			130															
RED ARROW																		A114 A101
YELLOW ARROW						102												A115 A102
FLASHING YELLOW ARROW																		A116 A103
GREEN ARROW		130			103		133			124								
Hand																		
Person																		

\* Denotes install load resistor. See load resistor installation detail this sheet.  
\* See pictorial of head wiring in detail this sheet.  
NU = Not Used

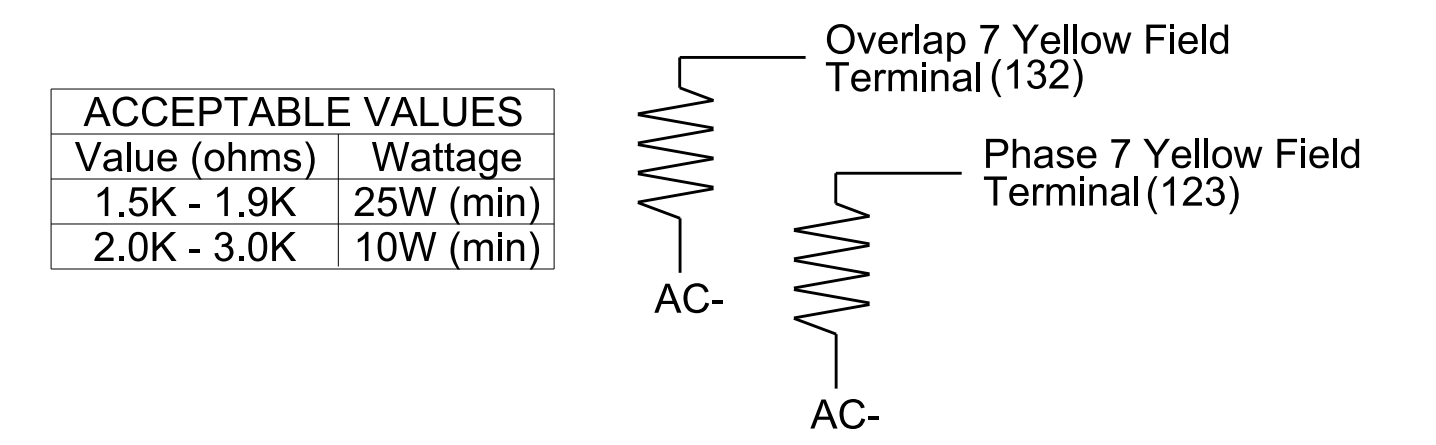
### FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



### LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)

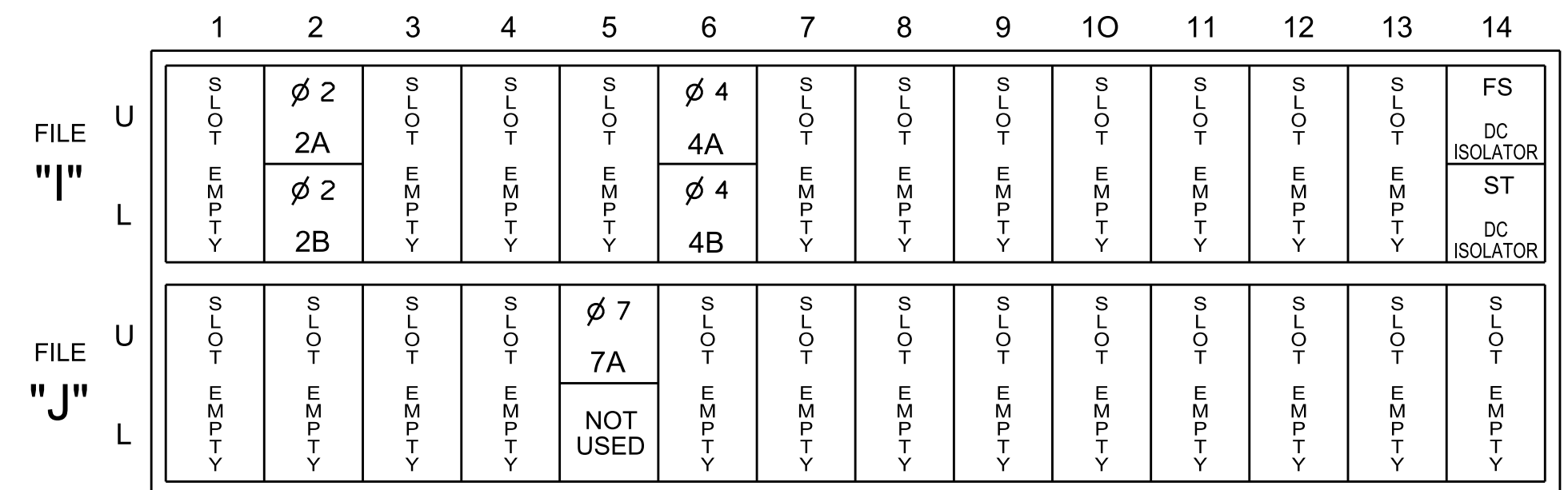


**THIS PLAN SUPERSEDES THE PLAN SIGNED AND SEALED ON 10/24/2023**

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 10-2495  
DESIGNED: November 2023  
SEALED: 12/7/2023  
REVISED:

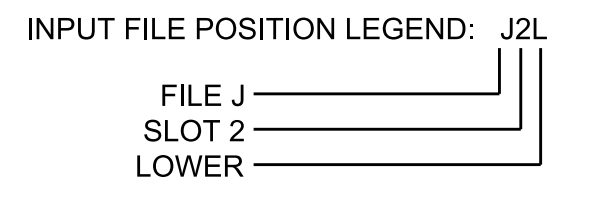
### INPUT FILE POSITION LAYOUT

(front view)



### INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
2A	TB2-5,6	I2U	39	1	2	2			X	X	X	
2B	TB2-7,8	I2L	43	5	3	2			X	X	X	
4A	TB4-9,10	I6U	41	3	8	4	15		X		X	
4B	TB4-11,12	I6L	45	7	9	4	15		X		X	
7A	TB5-5,6	J5U	57	19	21	7	15		X		X	



### Electrical Detail

Prepared in the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

NC 24-27 at SR 1120 (Bethel School Rd)

Division 10 Cabarrus County Midland

PLAN DATE: December 2023 REVIEWED BY: D.T.J.

PREPARED BY: D.J. Craddock REVIEWED BY:

REVISIONS

NO.	DESCRIPTION	INIT.	DATE

Seal of D. Todd Joyce, Professional Engineer, License No. 031001

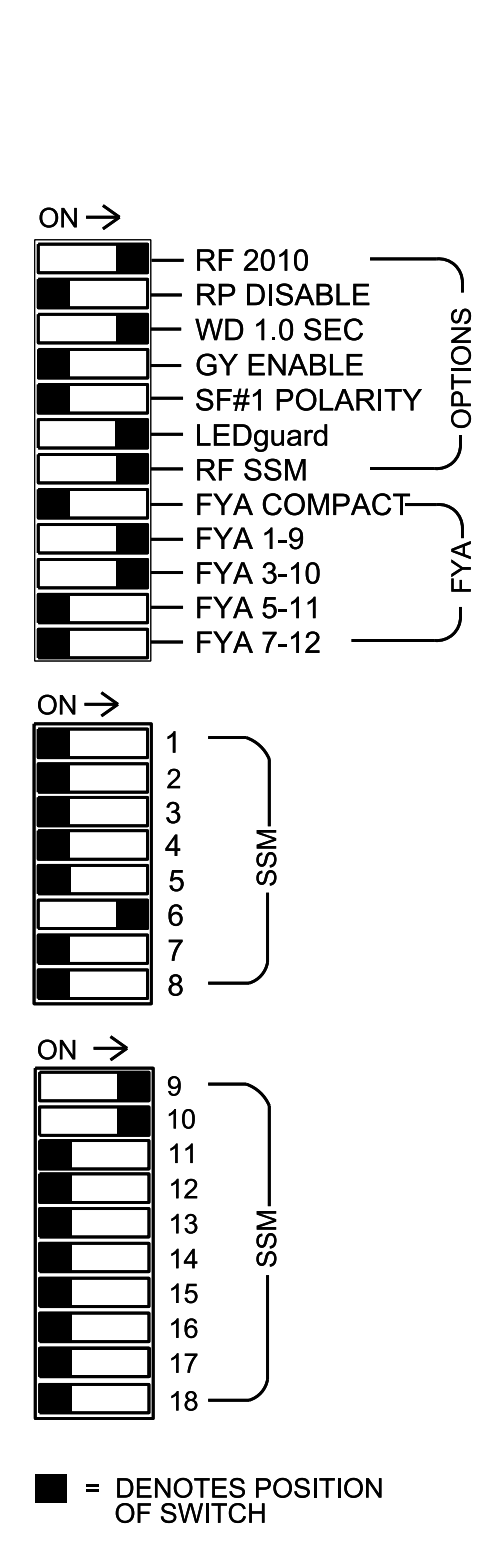
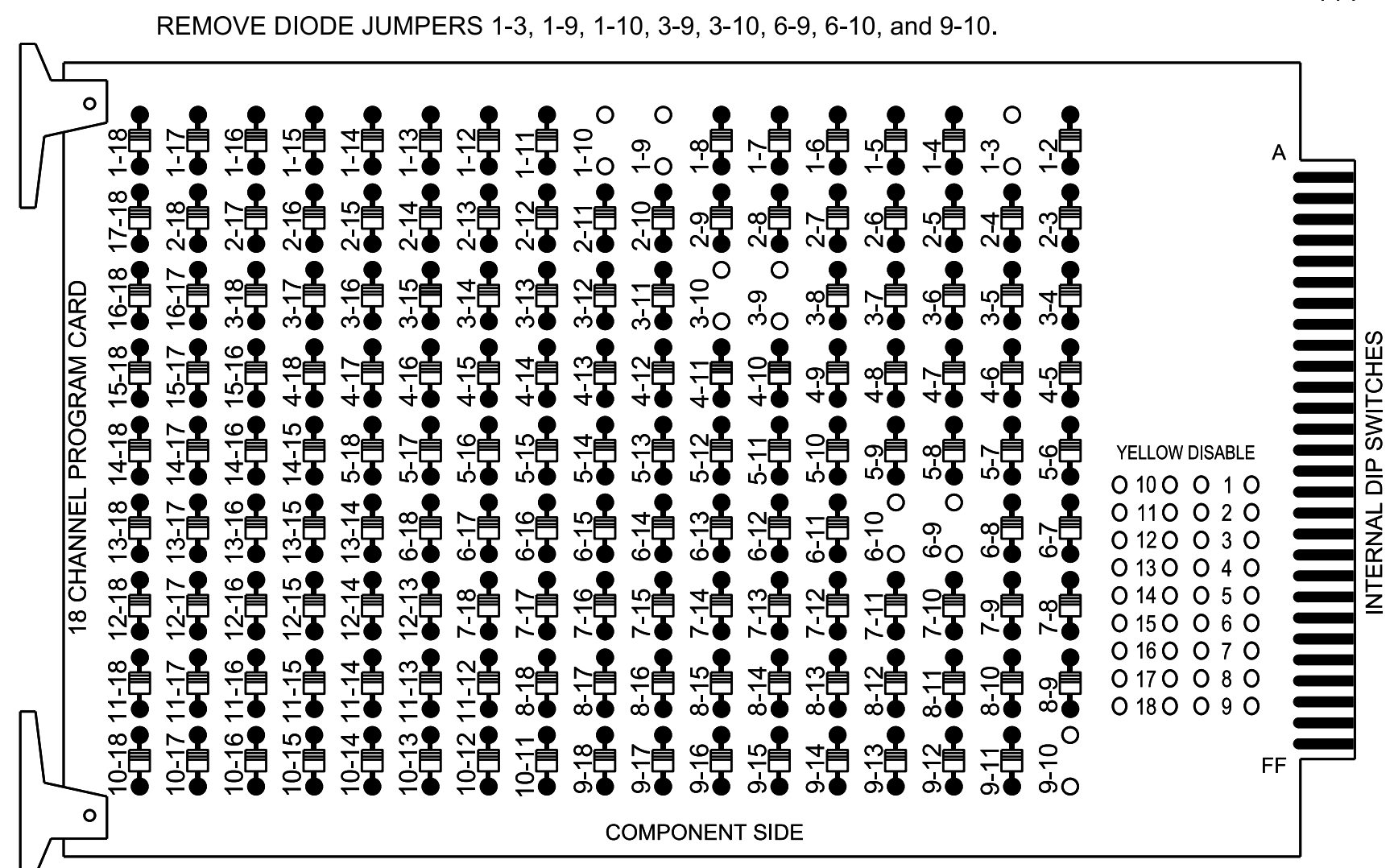
12/07/2023

SIG. INVENTORY NO. 10-2495



### 18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



### NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
- Program controller to start up in phase 6 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.

### EQUIPMENT INFORMATION

Controller.....2070LX  
 Cabinet.....332 w/ Aux  
 Software.....Q-Free MAXTIME  
 Cabinet Mount.....18 With Aux. Output File  
 Load Switches Used.....S1, S4, S8, AUX S1, AUX S2,  
 Phases Used.....3, 6  
 Overlap "1".....\*  
 Overlap "2".....\*  
 Overlap "3".....NOT USED  
 Overlap "4".....NOT USED  
 Overlap "7".....\*

\*See overlap programming detail on this sheet.

### OVERLAP PROGRAMMING

Front Panel  
 Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface  
 Home >Controller >Overlap Configuration >Overlaps

#### Overlap Plan 1

Overlap	1	2	3	4	7
Type	FYA 4 - Section	FYA 4 - Section	Off	Off	Normal
Included Phases	6	6	-	-	3
Modifier Phases	-	3	-	-	-
Modifier Overlaps	7	-	-	-	-
Trail Green	0	0	0	0	0
Trail Yellow	0.0	0.0	0.0	0.0	0.0
Trail Red	0.0	0.0	0.0	0.0	0.0

### OUTPUT CHANNEL CONFIGURATION

Front Panel  
 Main Menu >Controller >More>Channels>Channels Config

Web Interface  
 Home >Controller >Advanced IO>Channels>Channel Configuration

#### Channel Configuration

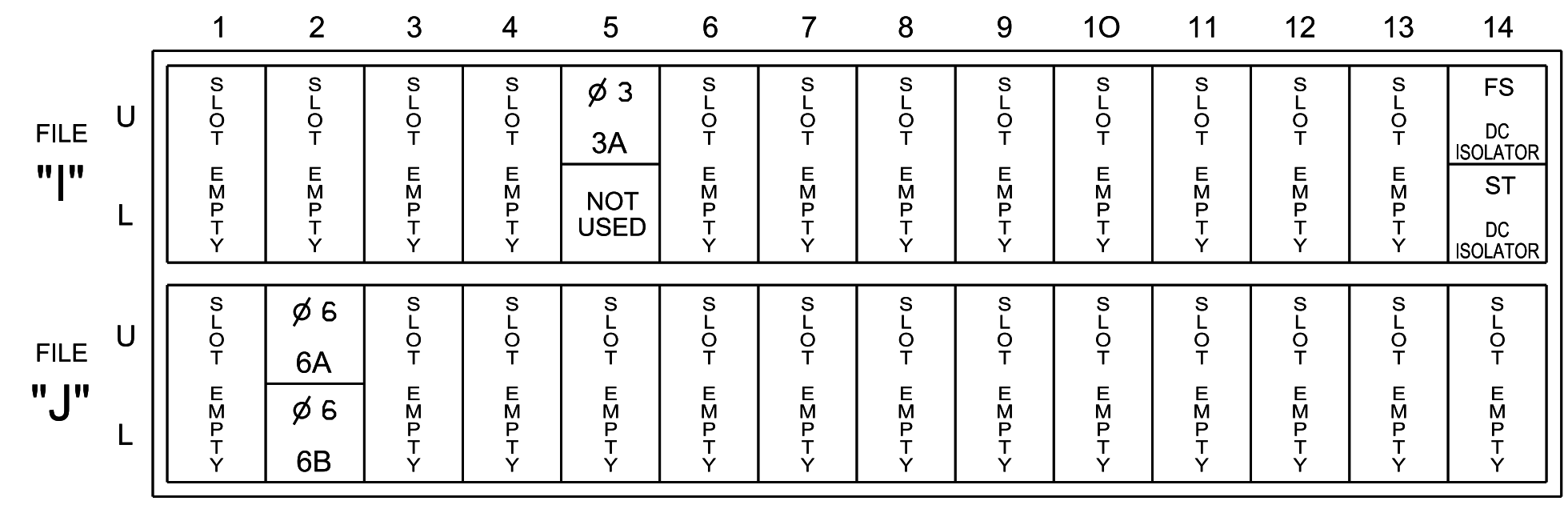
Channel	Control Type	Control Source	Flash Yellow	Flash Red	Flash Alt	MMU Channel
1	Overlap	7		X	X	1
2	Phase Vehicle	2	X			2
3	Phase Vehicle	3		X	X	3
4	Phase Vehicle	4		X		4
5	Phase Vehicle	5		X		5
6	Phase Vehicle	6	X		X	6
7	Phase Vehicle	7		X		7
8	Phase Vehicle	8		X	X	8
9	Overlap	1	X		X	9
10	Overlap	2	X		X	10
11	Overlap	3	X			11
12	Overlap	4		X		12
13	Phase Ped	2				13
14	Phase Ped	4				14
15	Phase Ped	6				15
16	Phase Ped	8				16
17	Overlap	5		X	X	17
18	Overlap	6		X		18

NOTICE CHANNEL 1 CONTROL TYPE & SOURCE →

NOTICE: FLASH YELLOW →

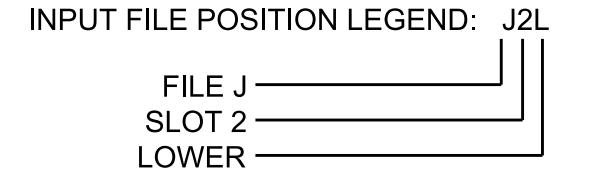
### INPUT FILE POSITION LAYOUT

(front view)



### INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
3A	TB4-5.6	I5U	58	20	7	3	15		X		X	
6A	TB3-5.6	J2U	40	2	16	6			X	X	X	
6B	TB3-7.8	J2L	44	6	17	6			X	X	X	



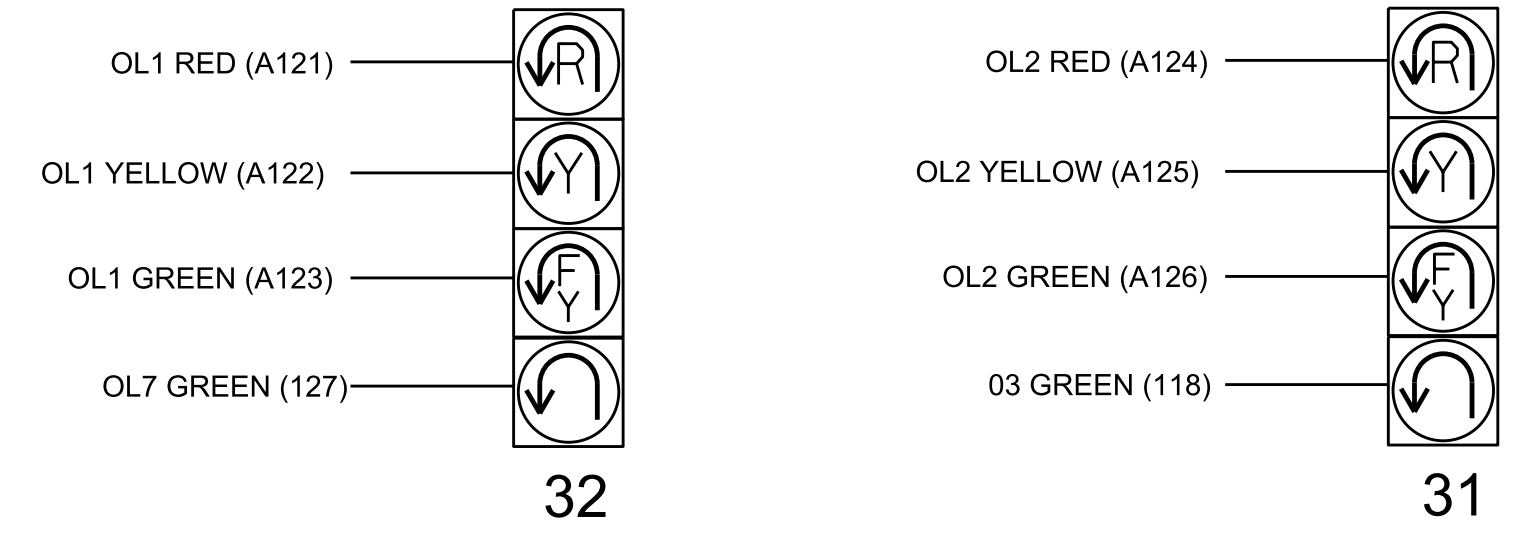
### SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	OL7	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	32	NU	NU	31	NU	NU	NU	61,62	NU	NU	NU	NU	32	31	NU	NU	NU	NU
RED								134										
YELLOW	*			*				135										
GREEN																		
RED ARROW													A121	A124				
YELLOW ARROW													A122	A125				
FLASHING YELLOW ARROW													A123	A126				
GREEN ARROW	127			118				136										
Hand																		
Walking																		

\* Denotes install load resistor. See load resistor installation detail this sheet.  
 \* See pictorial of head wiring in detail this sheet. NU = Not Used

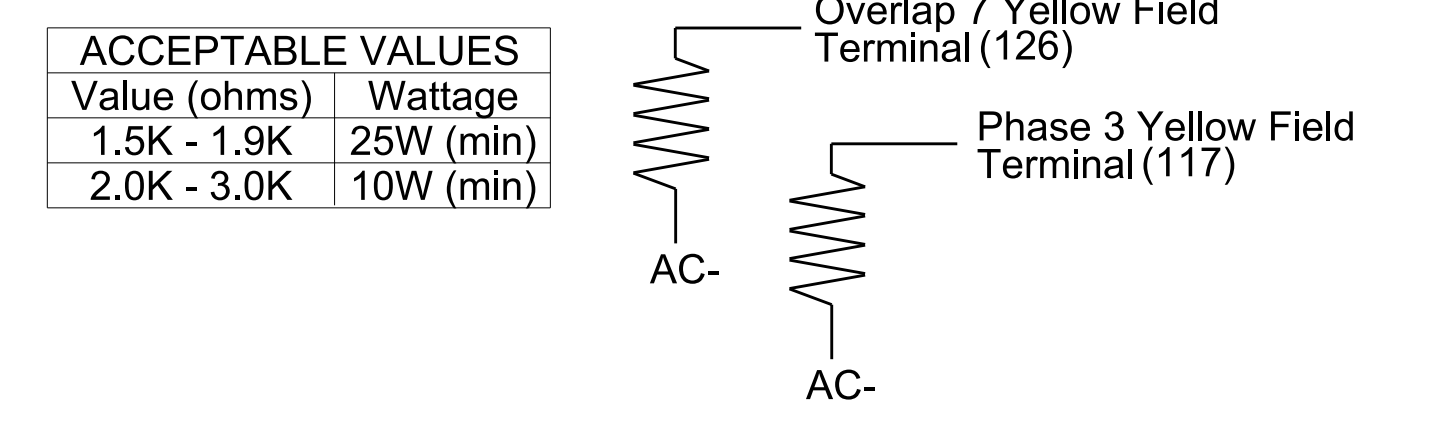
### FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



### LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)



THIS PLAN SUPERSEDES THE PLAN SIGNED AND SEALED ON 10/24/2023

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 10-2496  
 DESIGNED: November 2023  
 SEALED: 12/7/2023  
 REVISED:

Electrical Detail

Prepared in the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

NC 24-27 U-turn  
 East of  
 SR 1120 (Bethel School Rd)

Division 10 Cabarrus County Midland

PLAN DATE: December 2023 REVIEWED BY: D.T.J.

PREPARED BY: D.J. Craddock REVIEWED BY:

REVISIONS

INIT. DATE

DocuSigned by: D. Todd Joyce 12/07/2023

SEAL

STATE OF NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 031001

ENGINEER D. TODD JOYCE

SIG. INVENTORY NO. 10-2496

T.I.P.: HS-2010D

**STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN  
CABARRUS COUNTY**

LOCATION: NC 2427 AND SR 1120 (BETHEL SCHOOL RD)

PROJECT REFERENCE NO.	SHEET NO.
HS-2010D	SIGN-1
APPROVED:  Ashley Matthews 4017441808340	
DATE: 1/3/2024   10:56 AM EST	
SEAL	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

**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 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS
910.30	SIGNING SIGNALIZED AND UNSIGNALIZED SUPERSTREET

**GENERAL NOTES**

- . SIGNS FURNISHED BY CONTRACTOR
- . CONFIRM IN WRITING AT LEAST 4 MONTHS IN ADVANCE, THE ACTUAL DATE THE DEPARTMENT FURNISHED SIGNS WILL BE REQUIRED.
- . ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.
- . 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.
- . SEE ROADWAY PLANS FOR GUARD/ GUIDE RAIL DETAILS.

**SUMMARY OF QUANTITIES**

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4025000000	901	CONTRACTOR FURNISHED, TYPE E	50	S.F.
4025000000	901	CONTRACTOR FURNISHED, TYPE F	35	S.F.
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	215	L.F.
4102000000	904	SIGN ERECTION, TYPE E	12	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	2	EA.
4108000000	904	SIGN ERECTION, TYPE F	3	EA.
4192000000	907	DISPOSAL OF SUPPORT, U-CHANNEL	1	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE D (GROUND MOUNTED)	1	EA.

**PROJECT NOTES**

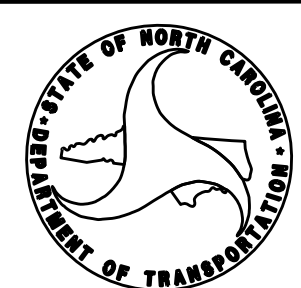
- |   |                                    |
|---|------------------------------------|
| 1 | DISPOSAL OF SIGN SYSTEM, U-CHANNEL |
| 2 | DISPOSAL OF SUPPORT, U-CHANNEL     |
| 3 | RELOCATE SIGN, TYPE D              |

**INDEX**

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2-3	E AND F SHEETS
SIGN-4-5	SIGNING PLAN SHEETS

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

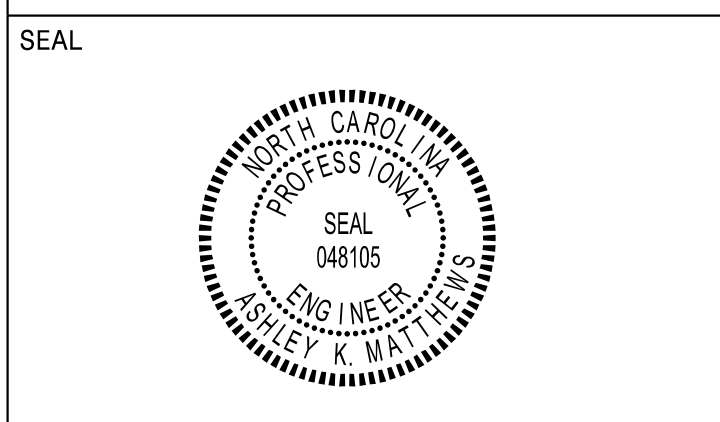
Kelvin Jordan SIGNING & DELINEATION REGIONAL ENGINEER  
Ashley K. Matthews, PE SIGNING & DELINEATION PROJECT DESIGN ENGINEER



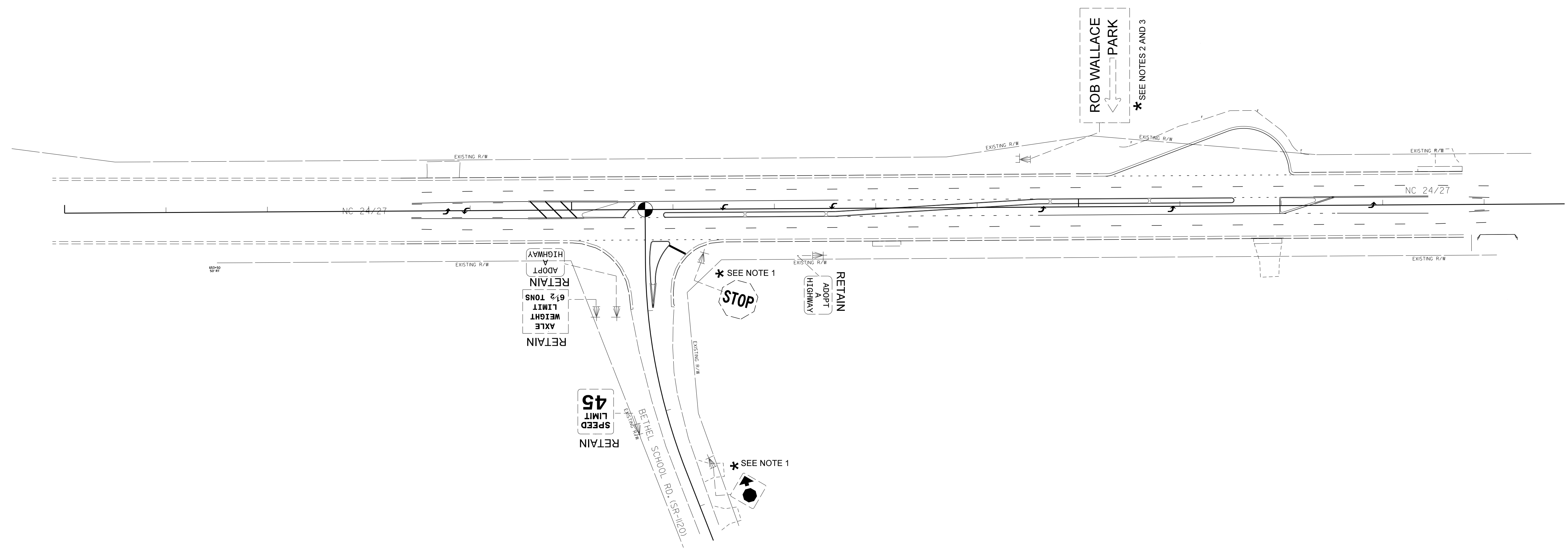
SYSTEMS CONDITIONING SERVICES







**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**

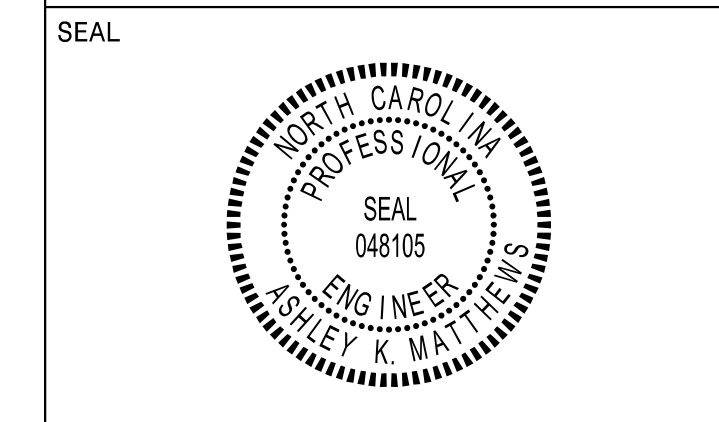


**PROJECT NOTES**

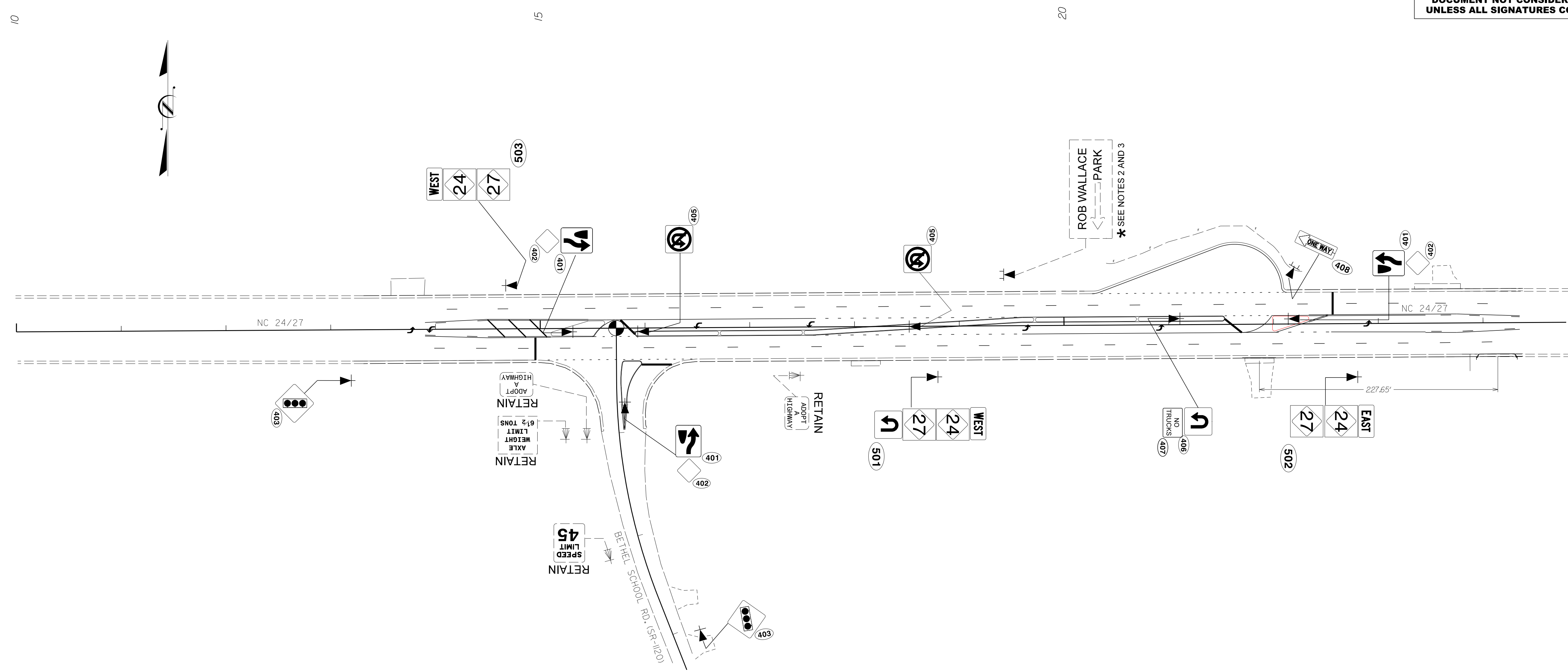
- 1 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 RELOCATE SIGN, TYPE D
- 3 DISPOSAL OF SUPPORT, U-CHANNEL

**EXISTING SIGNS**

APPROVED: *Ashley Matthews*  
40171AA18C834CD...  
 DATE: 1/3/2024 | 10:56 AM EST



**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**



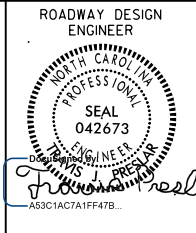
**PROJECT NOTES**

- 1 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 RELOCATE SIGN, TYPE D
- 3 DISPOSAL OF SUPPORT, U-CHANNEL


**PROPOSED SIGNS**



PROJECT NO.	SHEET NO.
49291.3.4	TCP-1
F.A. PROJECT NO.	0024096



INSTALL ALL SIGNS PERTAINING TO  
HATCHED AREA DURING THIS PHASE  
SEE SHEETS SIGN-1 - SIGN-5

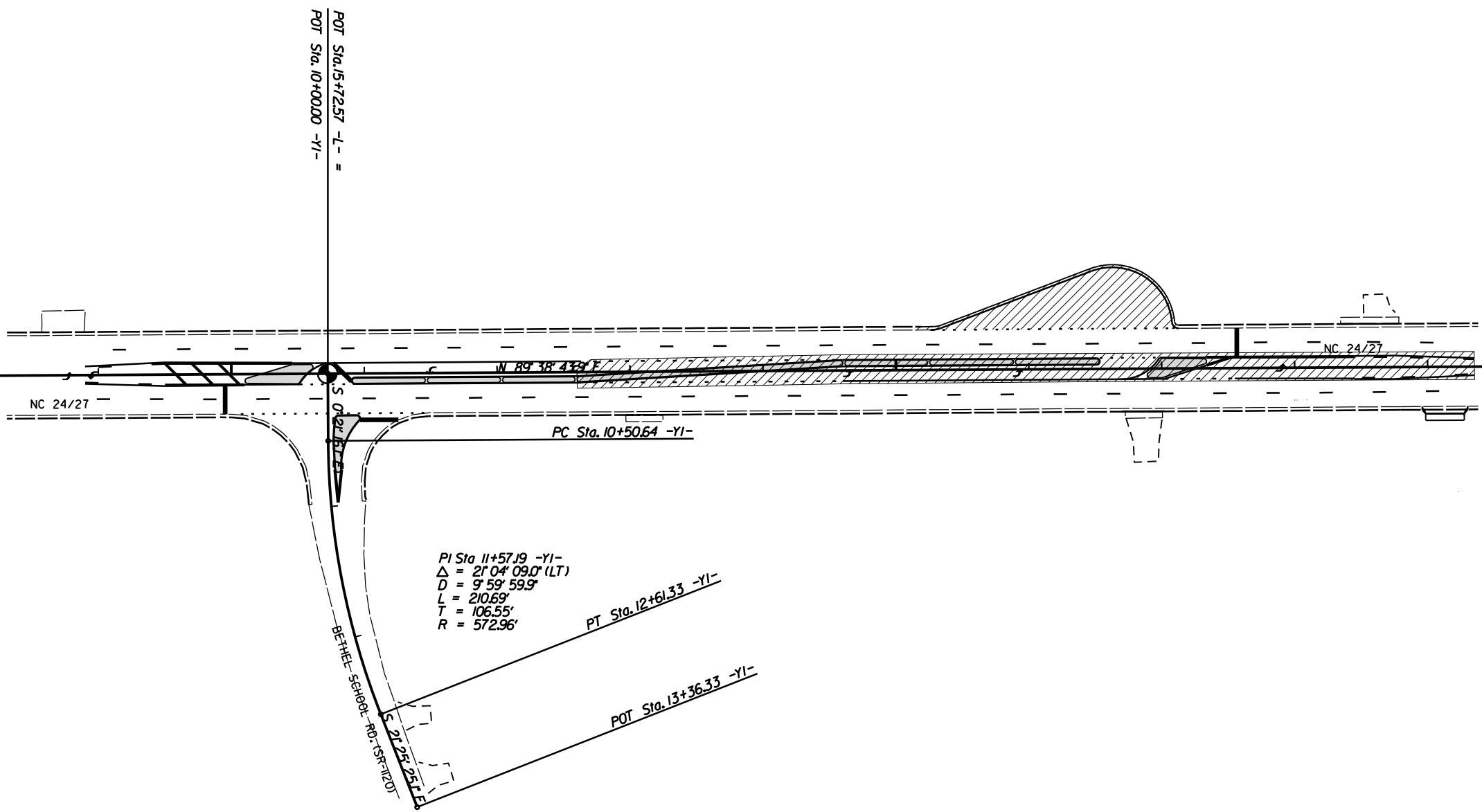
 Phase I of Construction

POT Sta. 10+00.00 -L-  
00700+01.71S 10P

51

20

POT Sta. 24+79.39 -L-  
67674+72.91S 10P



RESIDENT ENGINEER'S OFFICE SHOULD  
CONTACT METROLINA REGIONAL  
TRAFFIC ENGINEER AT BEGINING  
OF CONSTRUCTION CONCERNING THE  
ORDINANCE FOR "NO TRUCKS" SIGN

# PHASE I

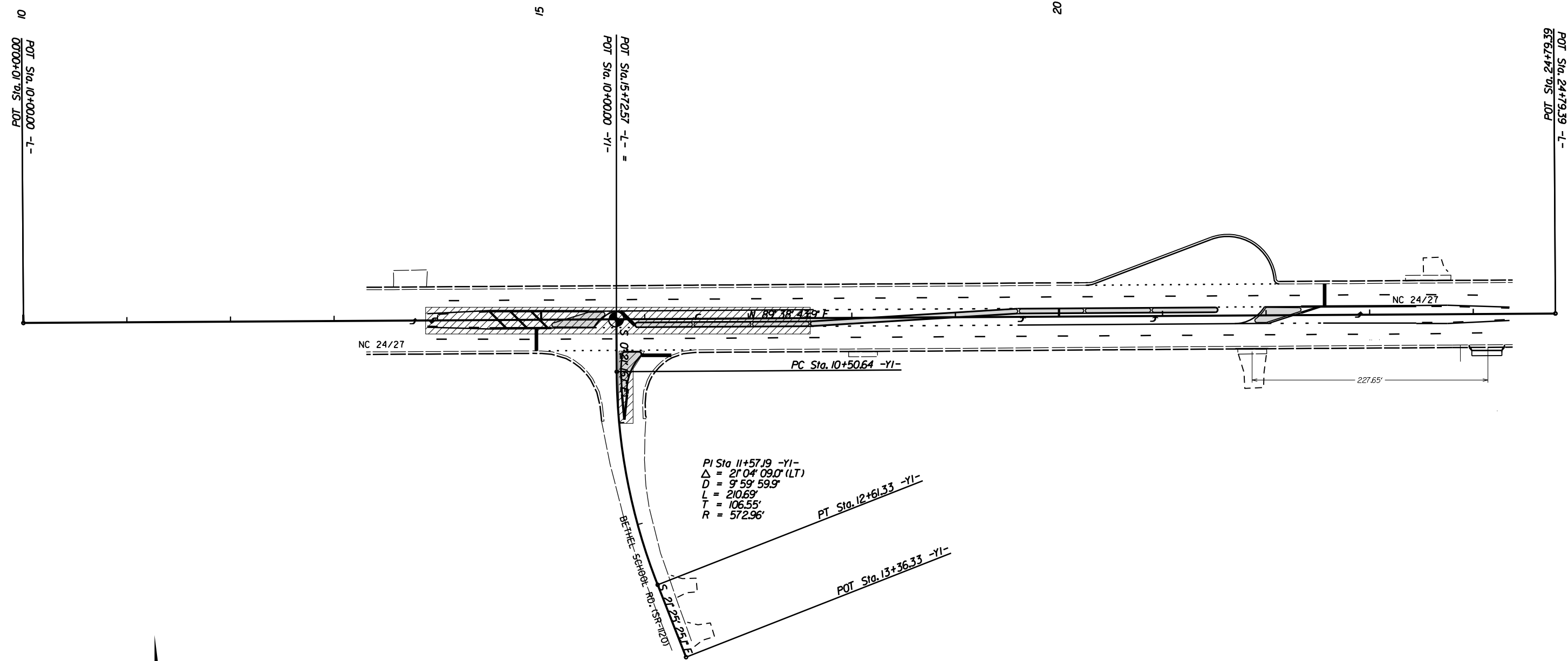
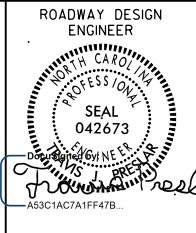
RCI AT INTERSECTION OF NC 24-27  
AND BETHEL SCHOOL RD.

SCALE	1"=50'		REVISIONS
DATE	6-2023		
DWG. BY	VSC		
DESIGN BY	CEB		
APPROVED	JDH		

INSTALL ALL SIGNS PERTAINING TO  
HATCHED AREA DURING THIS PHASE  
SEE SHEETS SIGN-1 - SIGN-5

 Phase II of Construction

PROJECT NO.	SHEET NO.
49291.3.4	TCP-2
F.A. PROJECT NO. 0024096	



# PHASE II

RCI AT INTERSECTION OF NC 24-27  
AND BETHEL SCHOOL RD.

SCALE	1"=50'
DATE	6-2023
DWG. BY	VSC
DESIGN BY	CEB
APPROVED	JDH



REVISIONS	

T.I.P. NO.	SHEET NO.
49291.3.4	UO-1

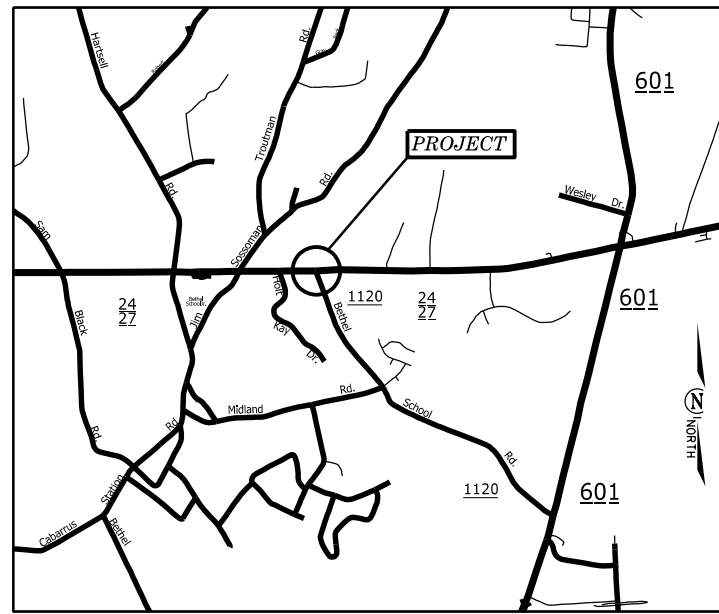
NOTE:  
 ALL UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS.  
 NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.

STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS

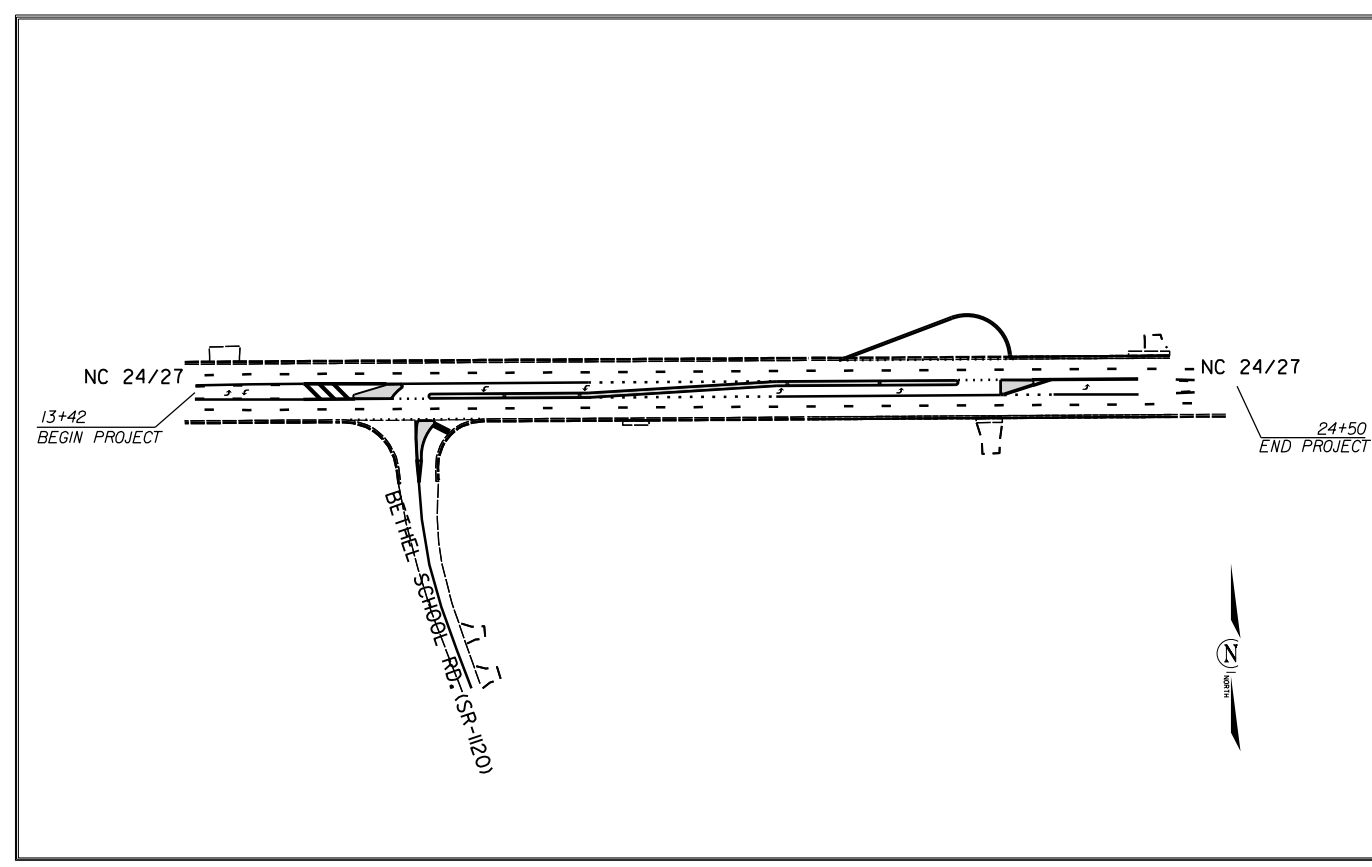
**UTILITIES BY OTHERS PLANS  
 CABARRUS COUNTY**

**LOCATION: INTERSECTION OF NC 24 /27 AND  
 BETHEL SCHOOL RD (SR-1120)**

**TYPE OF WORK: UTILITIES BY OTHERS**

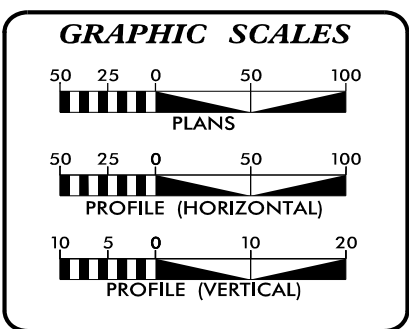


VICINITY MAP NOT TO SCALE



**TIP PROJECT: HS-2010D**

08-NOV-2023 11:28 S:\DDC\ROY\Cabarrus\HS-2010D\_NC 24-27\_BethelSchool\_RCI\Utility\HS-2010D\_NC 24-27\_BethelSchool\_RCI\_UBO\_tsh.dgn



**INDEX OF SHEETS**


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

**UTILITY OWNERS WITH CONFLICTS**

(A) TELECOMMUNICATIONS - AT&T  
 (B) TELECOMMUNICATIONS - SPECTRUM - CHARTER  
 (C) POWER - DUKE 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 PRESLAR** UTILITIES COORDINATOR

PROJECT NO.	SHEET NO.
49291.3.4	U0-2
F.A. PROJECT NO.	0024092

POT Sta. 10+00.00 -1-

POT Sta. 24+79.39 -1-

DARRYL BRAITHWAITE  
DB 15519 PG 340

HENRY TRENT LITTLE  
DB 14293 PG 265

DAVID CLINTON POLK  
AND WIFE  
DEANNA RAQUEL POLK  
DB 3016 PG 313

DAVID CLINTON POLK  
AND WIFE  
DEANNA RAQUEL POLK  
DB 3016 PG 319  
TRACT 2  
MB 19 PG 93  
LOTS 1,2,4

DAVID CLINTON POLK  
AND WIFE  
DEANNA RAQUEL POLK  
DB 3016 PG 319  
TRACT 1  
MB 19 PG 93  
LOT 3

BARCLAY JOHN KELLY  
AND WIFE  
PAGE M. KELLY  
DB 436 PG 454

RICHARD PHILLIP HENDRICKSON  
AND WIFE  
CHRISTY T. HENDRICKSON  
DB 1424 PG 233

BRANDON L. ROLLINS  
AND SPOUSE  
TIA JANE ROLLINS  
DB 14912 PG 294  
MB 18 PG 94  
LOT 5

MILES E. LITTLE  
AND SPOUSE  
CAROL S. LITTLE  
DB 9105 PG 78

PI Sta 11+57.19 -YI-  
Δ = 21°04'09.0" (LT)  
D = 9'59'59.9"  
L = 210.69'  
T = 106.55'  
R = 572.96'

PC Sta. 10+50.64 -YI-

PT Sta. 12+61.33 -YI-

POT Sta. 13+36.33 -YI-

N 89°38'43.9" E

POT Sta. 10+00.00 -YI-  
POT Sta. 15+72.57 -1- =

13+42  
BEGIN PROJECT

24+50  
END PROJECT



CHARTER / AT&T

DUKE OH POWER  
CHARTER AND AT&T TO REMAIN

DUKE ENERGY  
TRANSMISSION EASEMENT

2

1

3

4

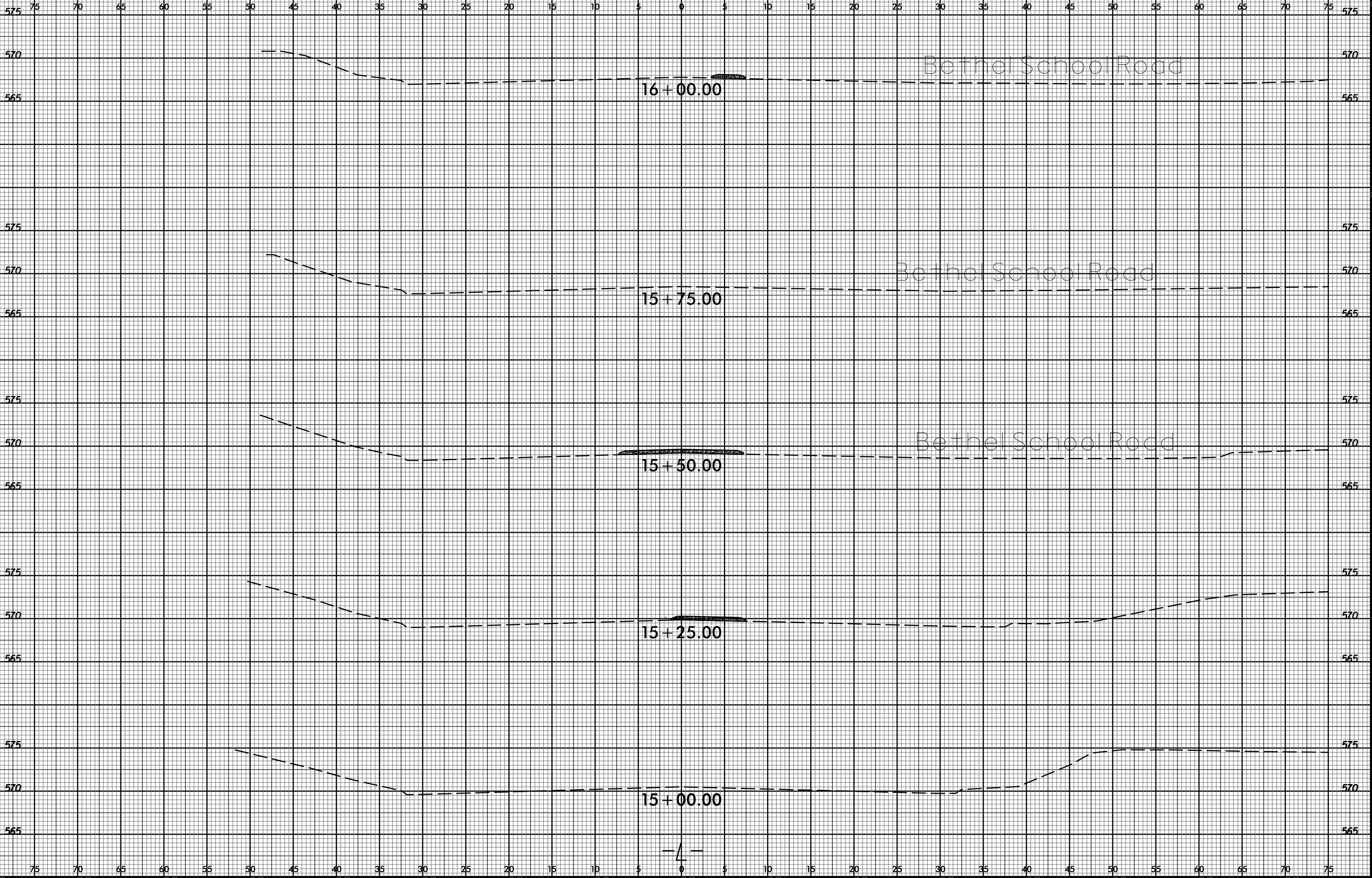
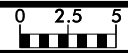
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RCI AT INTERSECTION OF NC 24-27  
AND BETHEL SCHOOL RD.(SR-1120)

SCALE	1"=50'
DATE	8-2023
DWG. BY	CEB
DESIGN BY	CEB
APPROVED	JDH

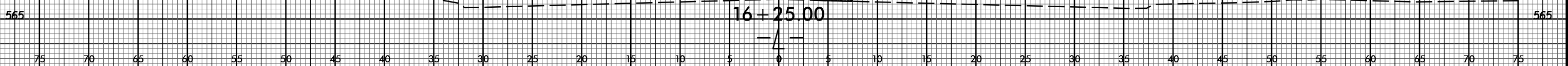
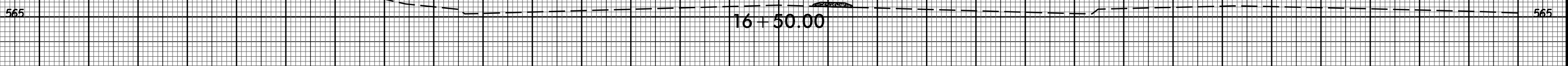
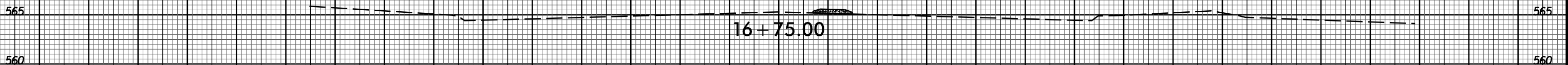
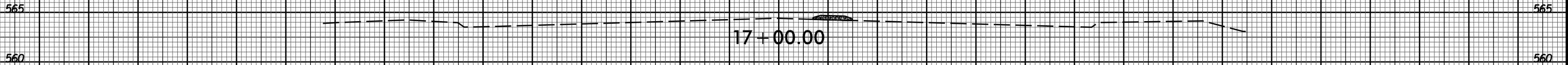
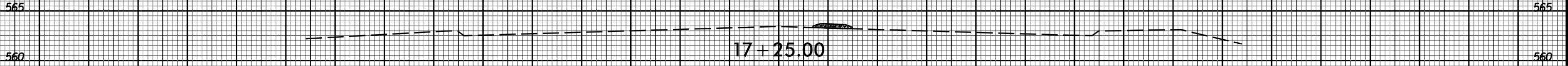


REVISIONS





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28-DEC-2023 14:49  
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\$\$\$\$\$SERNAME\$\$\$\$\$

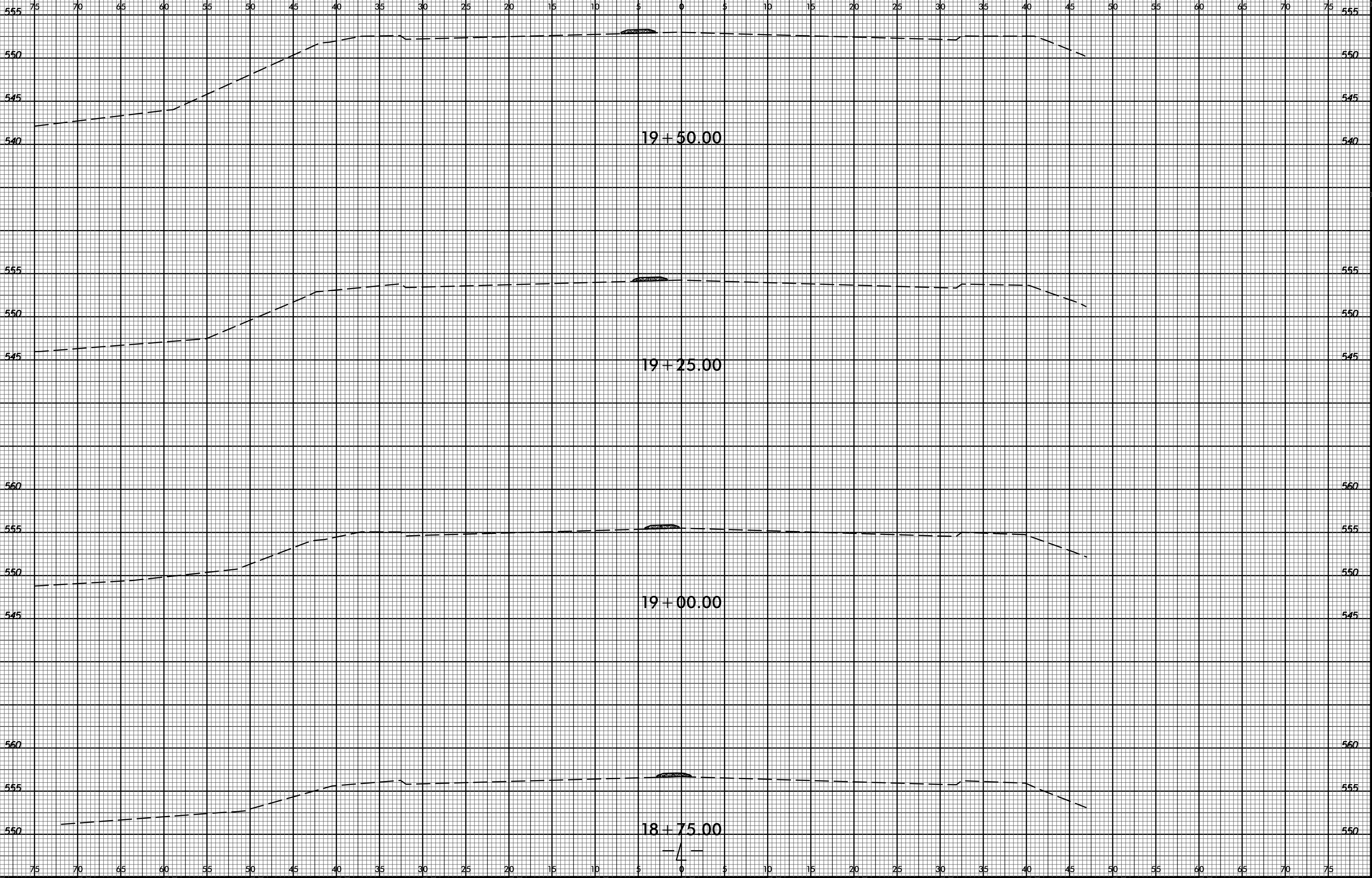
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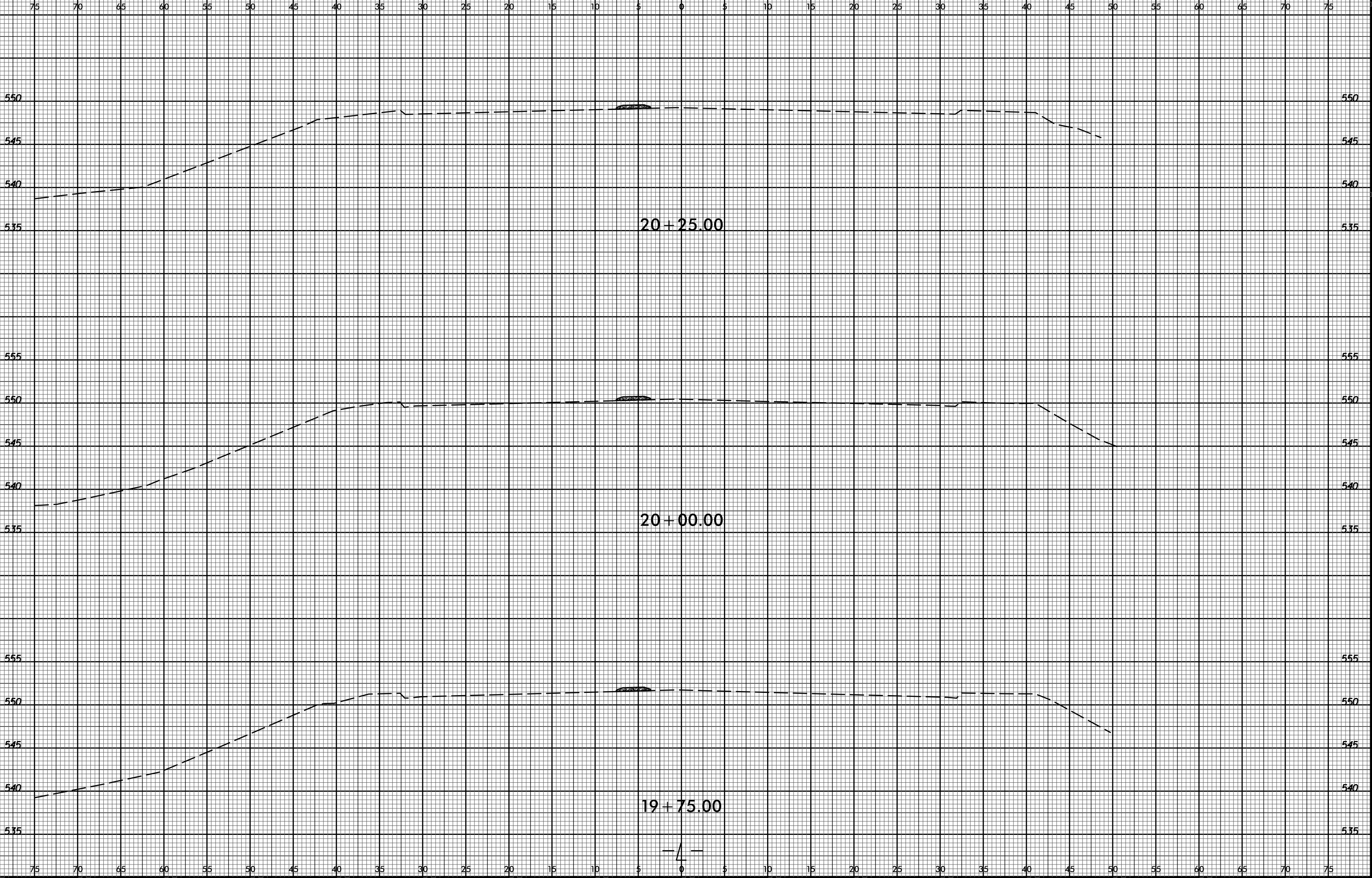
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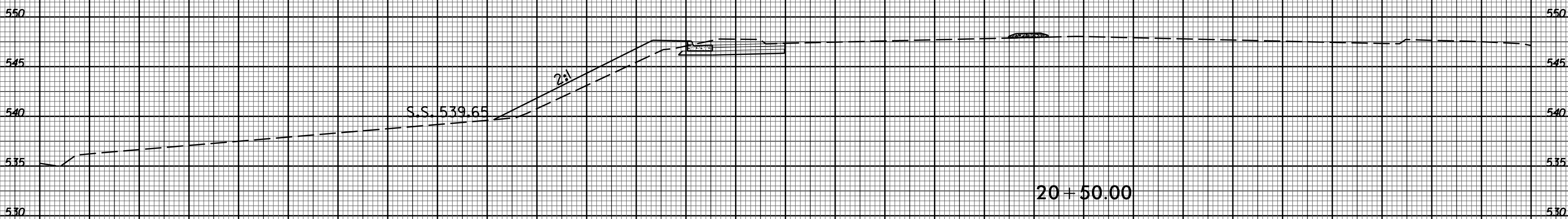
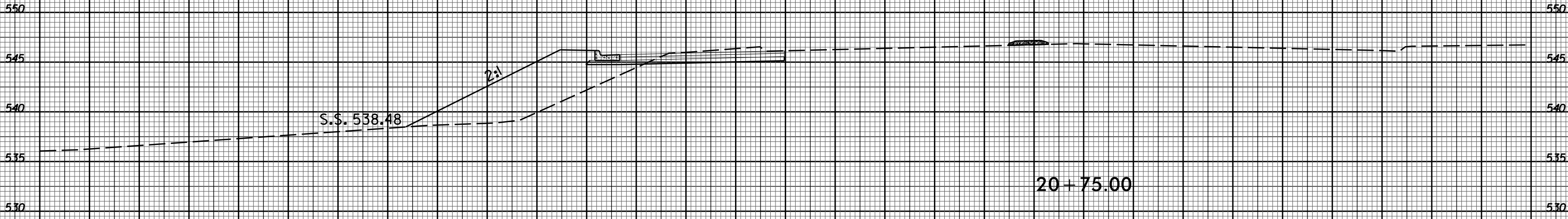








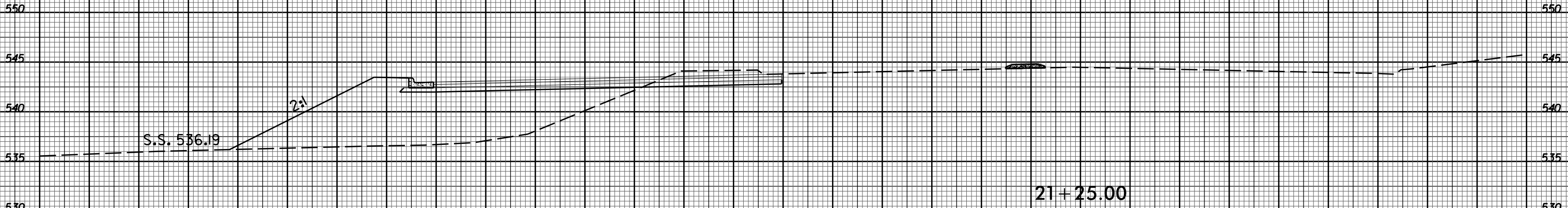
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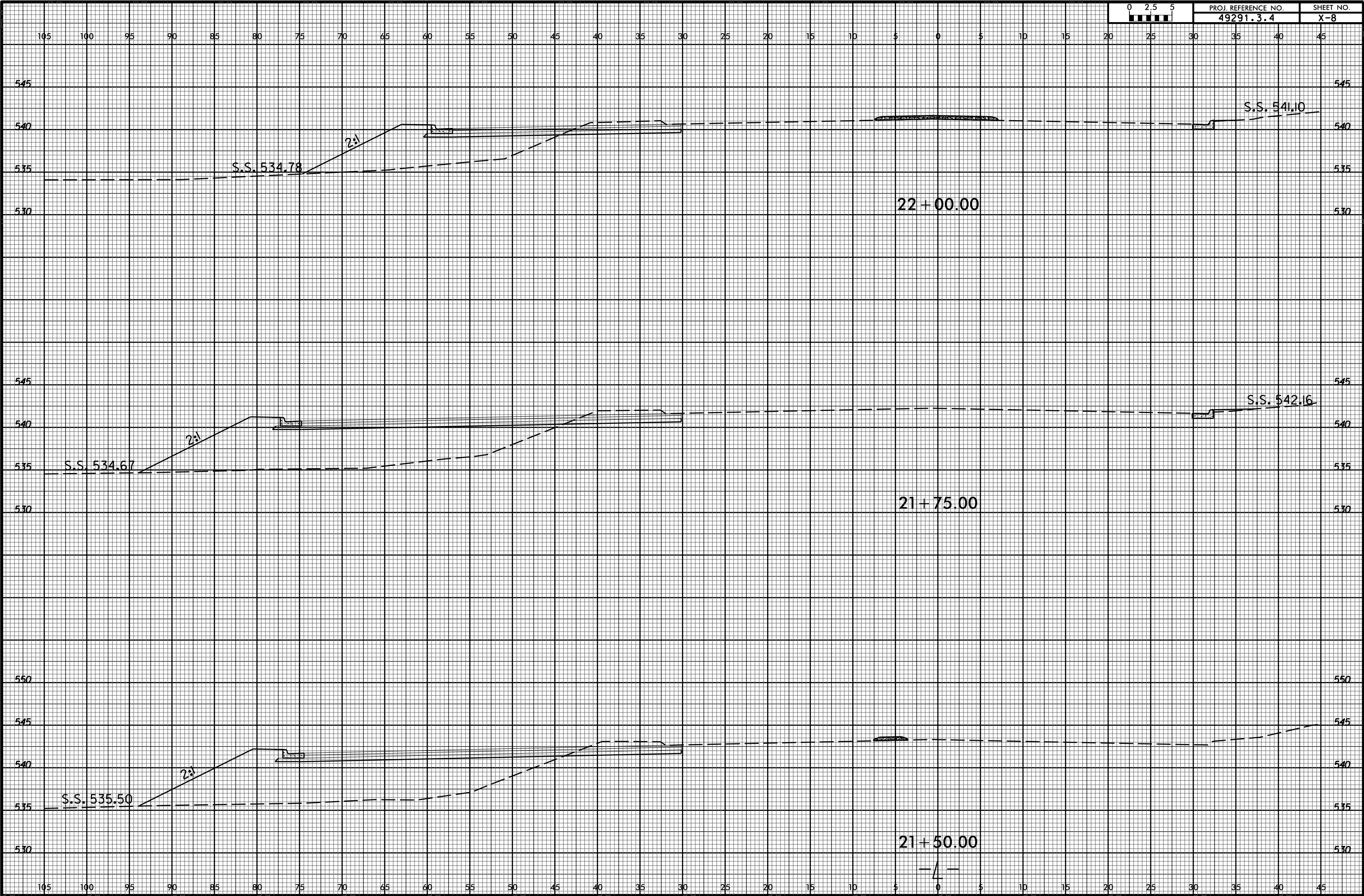


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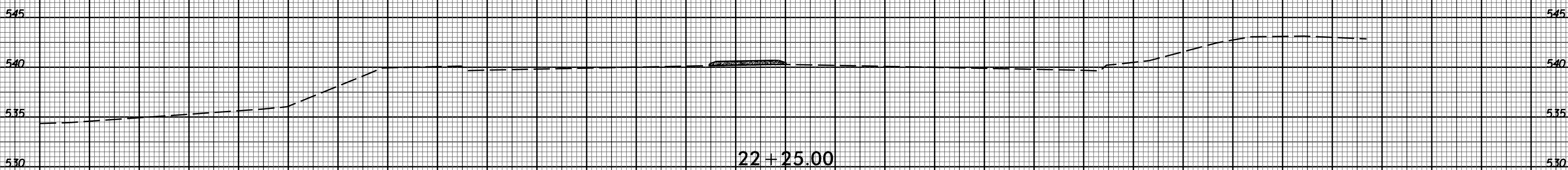
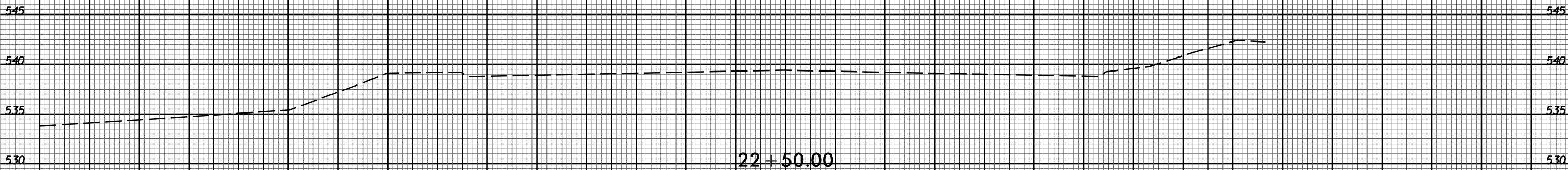
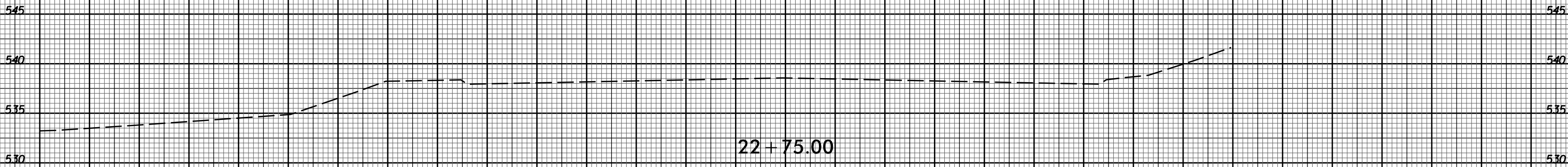
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23 + 25.00

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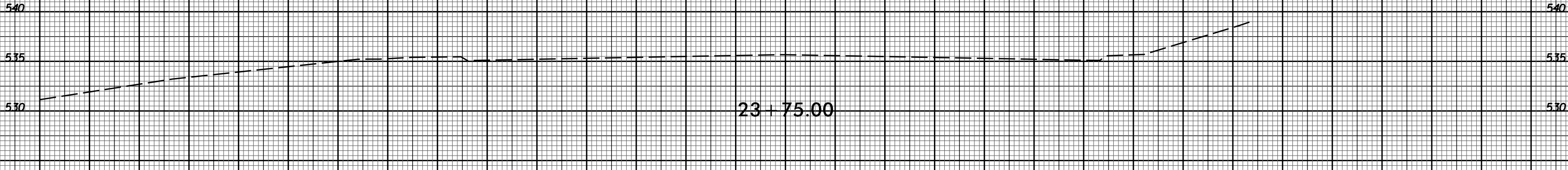
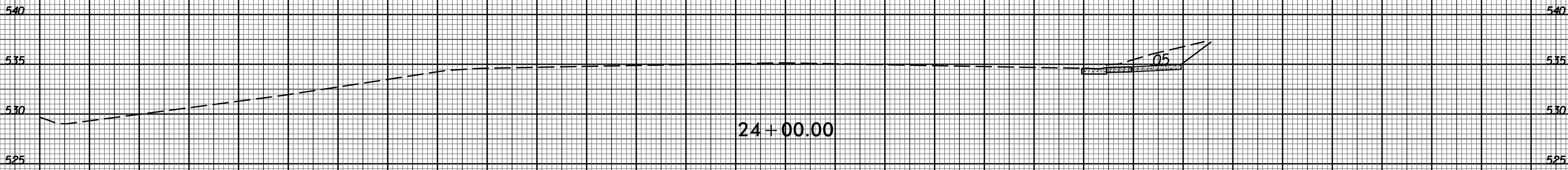
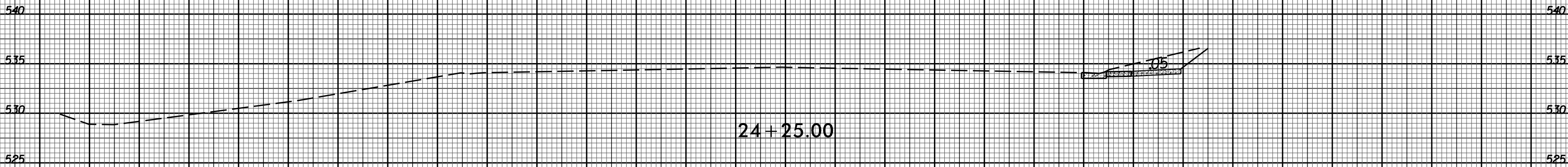
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575 575

570 570

565 565

11 + 00.00

575 575

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575 575

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10 + 50.00

570 570

565 565

10 + 25.00

-Y/-