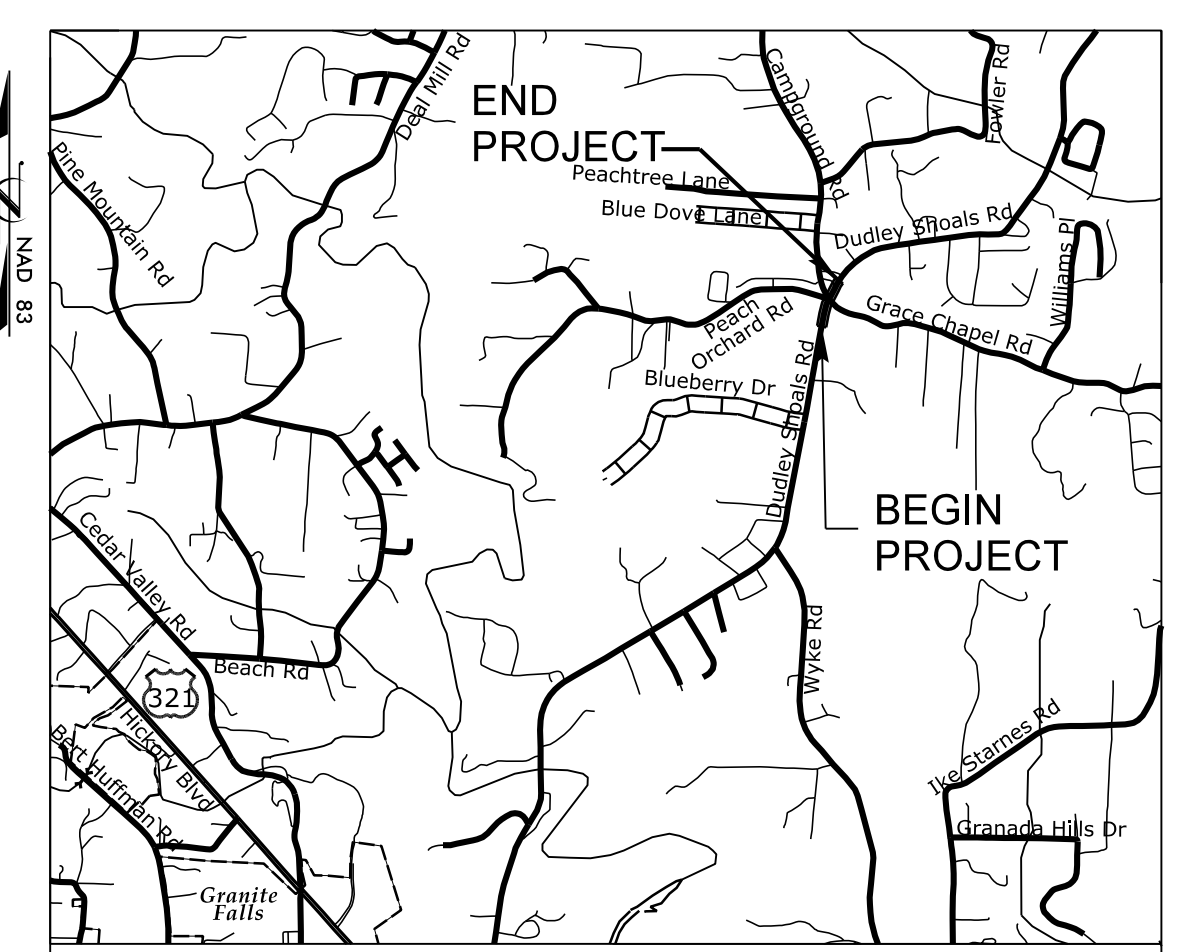
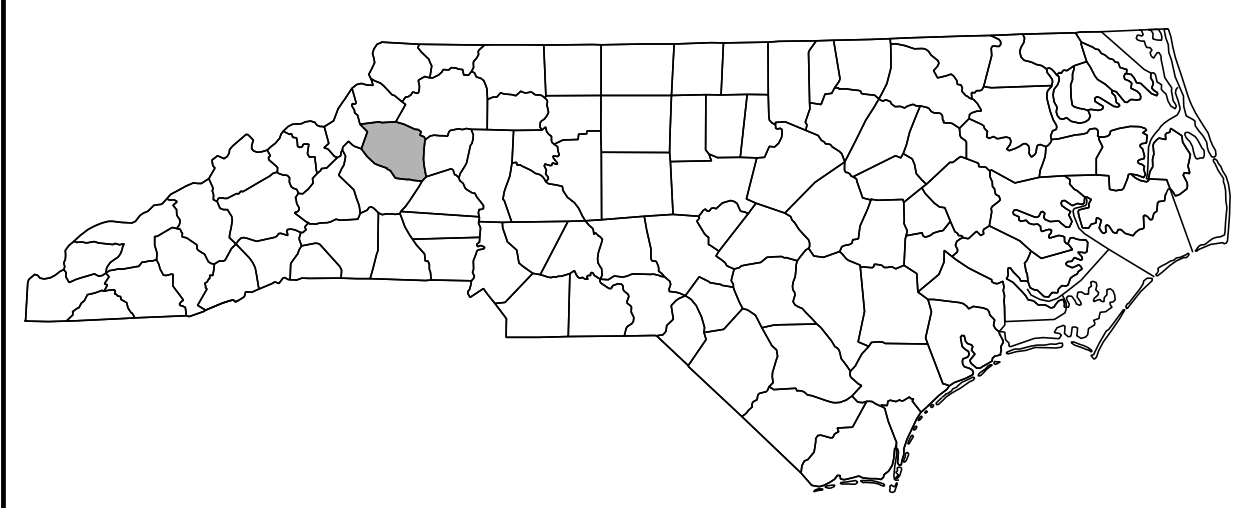


09/28/2019

See Sheet 1A For Index of Sheets  
See Sheet 1B For Conventional plan Sheet Symbols



VICINITY MAP (NTS)



# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS **CALDWELL COUNTY**

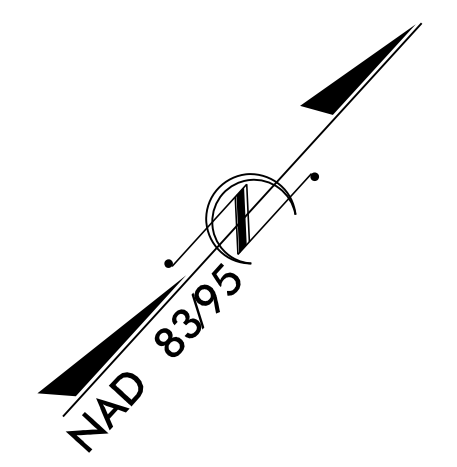
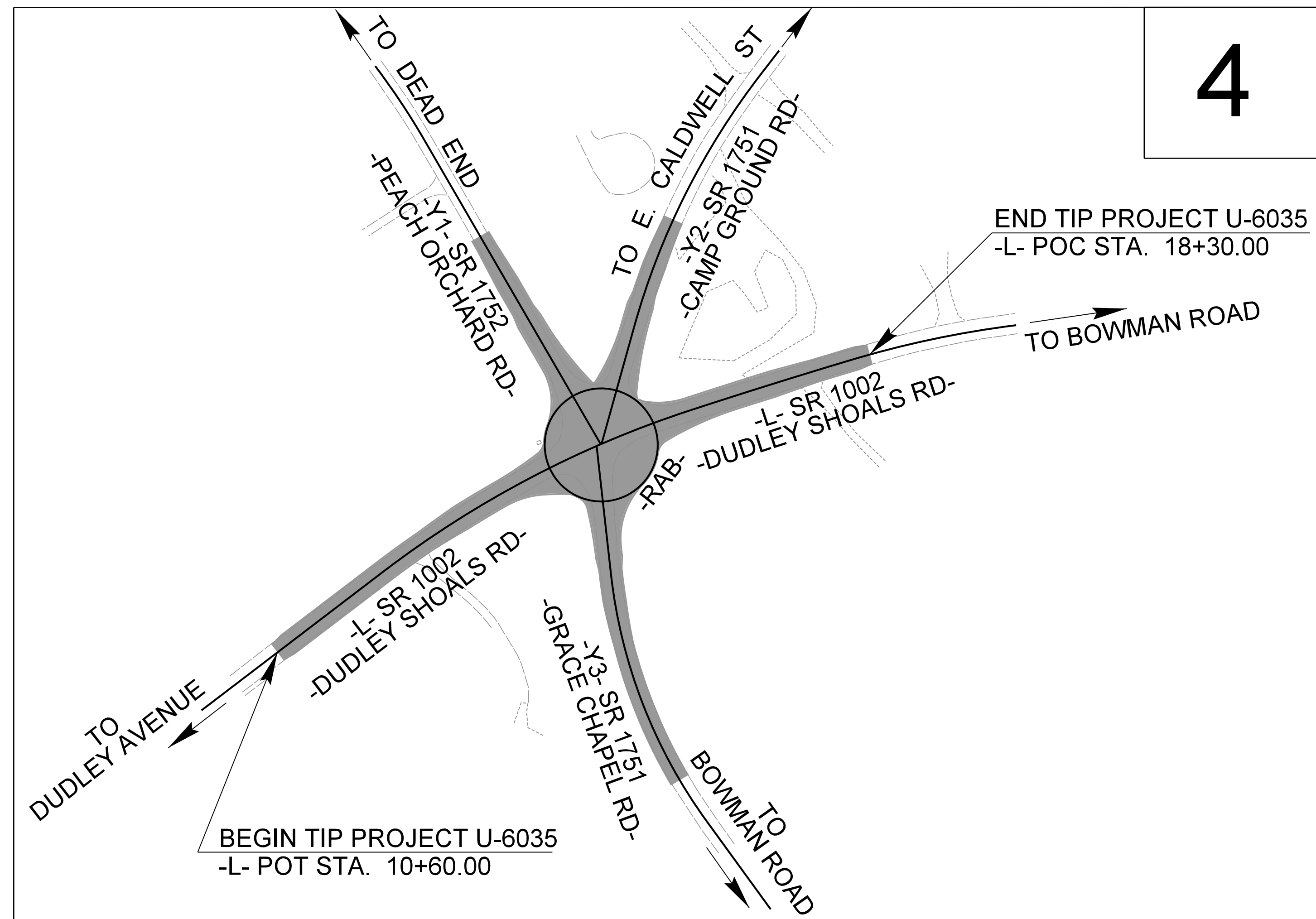
**LOCATION: DUDLEY SHOALS ROAD - SR 1002 (DUDLEY SHOALS RD),  
SR 1752 (PEACH ORCHARD RD), AND SR 1751 (CAMPGROUND RD/  
GRACE CHAPEL RD) INTERSECTION**

**TYPE OF WORK: GRADING, DRAINAGE, AND PAVING**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	<b>U-6035</b>	<b>1</b>	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
46970.1.1		P.E.	
46970.2.1		ROW	
46970.2.2		UTIL	
46970.3.1		CONST	

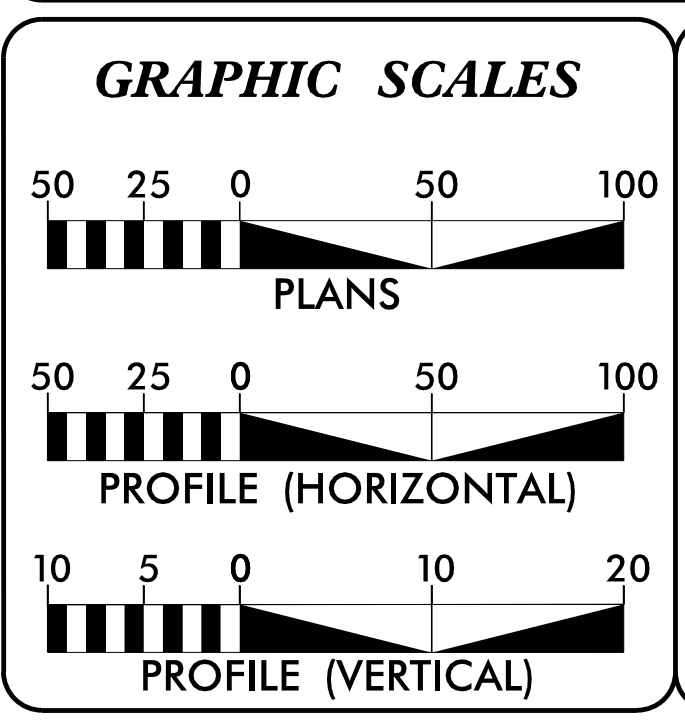
**TIP PROJECT: U-6035**

**CONTRACT: DK00390**



NOTES:  
1. THIS IS A NO CONTROL OF ACCESS PROJECT

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



**DESIGN DATA**

ADT 2018 =	5,600
ADT 2040 =	7,200
K =	10 %
D =	65 %
T =	3 % *
V =	50 MPH
* TTST =	1% DUAL 2%
FUNC CLASS =	
MAJOR COLLECTOR	
STATEWIDE TIER	

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT U-6035	0.146 Miles
LENGTH STRUCTURE TIP PROJECT U-6035	0.000 Miles
TOTAL LENGTH TIP PROJECT U-6035	0.146 Miles

Prepared In the Office of:

**NV5**  
NVS ENGINEERS & CONSULTANTS, INC. NC License # F-1333

FOR THE NORTH CAROLINA DEPT. OF TRANSPORTATION  
2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: **CHRIS D. ANDERSON, PE**  
APRIL 19, 2021  
PROJECT ENGINEER

LETTING DATE: **DYLAN McCANN**  
JANUARY 18, 2024  
PROJECT DESIGN ENGINEER

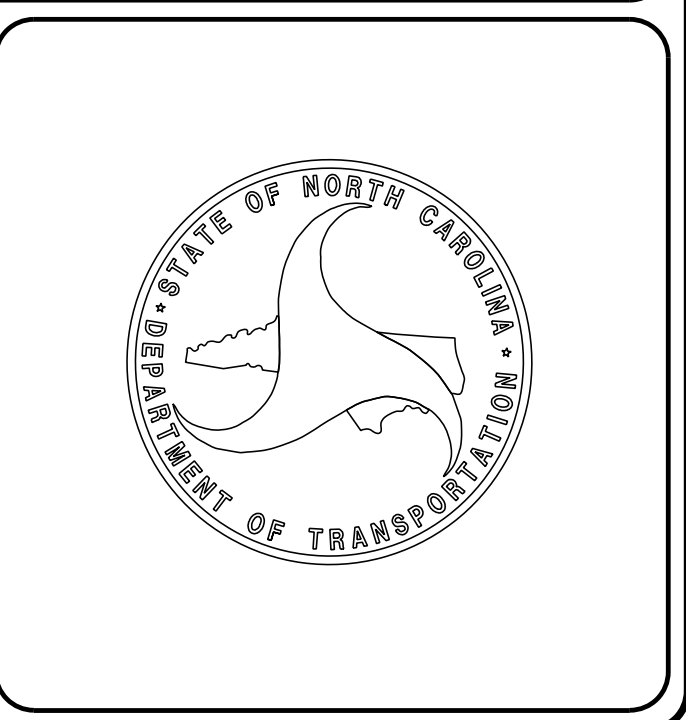
NCDOT CONTACT: **RAMIE SHAW**  
DIVISION PROJECT ENGINEER

**HYDRAULICS ENGINEER**

DocuSigned by: **Will Weatherston** P.E.  
SIGNATURE: *Will Weatherston* 10/30/2023

**ROADWAY DESIGN ENGINEER**

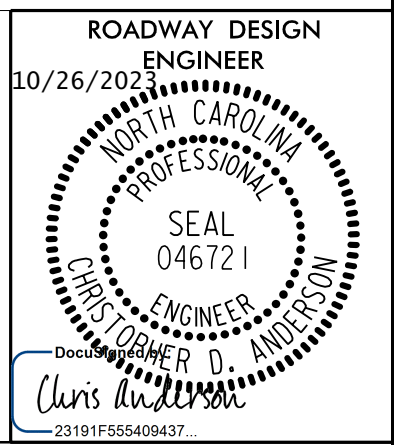
DocuSigned by: **Chris Anderson** P.E.  
SIGNATURE: *Chris Anderson* 10/30/2023



10/30/2023  
R:\Roadway\Proj\U6035-RDY-TSH.dgn  
Chris Anderson

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-6035	1A
RW SHEET NO.	



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

SHEET NUMBER	DESCRIPTION
1	Title Sheet
1-A	Index of Sheets, General Notes, and List of Standards
1-B	Conventional Symbols
RW-01 thru RW-04	Survey Control Sheets, Alignment Control, Right of Way Control and Properties
2A-1	Pavement Schedule, Wedging Details & Typical Sections
2B-1	Roundabout Detail Sheet
3B-1	Summary of Quantities
3D-1	Summary of Drainage
3G-1	Summary of Geotechnical Quantities
4	Plan Sheets
5 thru 6	Profile Sheets
TMP-1 thru TMP-6	Traffic Control Plans
PM-1 thru PM-2	Pavement Marking Plans
EC-1 thru EC-6	Erosion Control Plans
SIGN-1 thru SIGN-4	Signing Plans
UC-1 thru UC-6	Utility Construction Plans
UD-1 thru UD-2	Utilities by others Plans
X-1	Cross-Section Index
X-1A	Cross-Section Summary Sheet
X-2 thru X-15	Cross-Sections

EFF. 01-16-2024  
REV.

2024 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Contracts Standards and Development Unit - N. C. Department of Transportation - Raleigh, N. C., Dated January 16, 2024 are applicable to this project and by reference hereby are considered a part of these plans:

STD. NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superlevation - Two Lane Pavement
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
310.10	Driveway Pipe Construction
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
815.02	Subsurface Drain
846.01	Concrete Curb, Gutter and Curb & Gutter
848.02	Driveway Turnout - Radius Type
852.01	Concrete Islands

GENERAL NOTES: 2024 SPECIFICATIONS  
EFFECTIVE: 01-16-2024  
REVISED:

GRADE LINE:  
GRADING AND SURFACING:  
THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD 11.

SUPERELEVATION:  
ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:  
ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01

SIDE ROADS:  
THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

SUBSURFACE DRAINS:  
SUBSURFACE DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.02 AT LOCATIONS DIRECTED BY THE ENGINEER.

DRIVEWAYS:  
DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 3 FOOT RADIUS OR RADIUS AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

TEMPORARY SHORING:  
SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC NOT SHOWN ON THE PLANS WILL BE PAID FOR AT THE CONTRACT PRICE FOR "TEMPORARY SHORING".

UTILITIES:  
UTILITY OWNERS ON THIS PROJECT ARE BLUE RIDGE ENERGY, CENTURYLINK (TELECOMMUNICATION), AND CHARTER (TELECOMMUNICATION).  
ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

RIGHT-OF-WAY MARKERS:  
ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY CONTRACT.

10/26/2023  
R:\Projects\Proj\U6035\_RDY\_PSH\_1A.dgn  
Chris Anderson



12/2/2016

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

## BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ EIP
Computed Property Corner	-----
Property 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	----- WLB
Proposed Wetland Boundary	----- WLB
Existing Endangered Animal Boundary	----- EAB
Existing Endangered Plant Boundary	----- EPB
Existing Historic Property Boundary	----- HPB
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	○ S
Well	○ W
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	○ MILEPOST 35
Switch	□ SWITCH
RR Abandoned	-----
RR Dismantled	-----

## RIGHT OF WAY & PROJECT CONTROL:

Secondary Horiz and Vert Control Point	◆
Primary Horiz Control Point	○
Primary Horiz and Vert Control Point	◆
Exist Permanent Easement Pin and Cap	◇
New Permanent Easement Pin and Cap	◆
Vertical Benchmark	▲
Existing Right of Way Marker	△
Existing Right of Way Line	-----
New Right of Way Line	----- R/W
New Right of Way Line with Pin and Cap	----- R/W ▲
New Right of Way Line with Concrete or Granite R/W Marker	----- R/W ▲
New Control of Access Line with Concrete C/A Marker	----- C/A
Existing Control of Access	----- C/A
New Control of Access	----- C/A
Existing Easement Line	----- E
New Temporary Construction Easement	----- E
New Temporary Drainage Easement	----- TDE
New Permanent Drainage Easement	----- PDE
New Permanent Drainage / Utility Easement	----- DUE
New Permanent Utility Easement	----- PUE
New Temporary Utility Easement	----- TUE
New Aerial Utility Easement	----- AUE

## ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	----- C
Proposed Slope Stakes Fill	----- F
Proposed Curb Ramp	----- CR
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	-----

## VEGETATION:

Single Tree	○
Single Shrub	○

Note: Not to Scale

\*S.U.E. = Subsurface Utility Engineering

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

## EXISTING STRUCTURES:

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

## UTILITIES:

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	○ P
Power Line Tower	⊠
Power Transformer	⊠
U/G Power Cable Hand Hole	○
H-Frame Pole	●
U/G Power Line LOS B (S.U.E.*)	----- P
U/G Power Line LOS C (S.U.E.*)	----- P
U/G Power Line LOS D (S.U.E.*)	----- P

## TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	○ T
Telephone Pedestal	□
Telephone Cell Tower	⊕
U/G Telephone Cable Hand Hole	○
U/G Telephone Cable LOS B (S.U.E.*)	----- T
U/G Telephone Cable LOS C (S.U.E.*)	----- T
U/G Telephone Cable LOS D (S.U.E.*)	----- T
U/G Telephone Conduit LOS B (S.U.E.*)	----- TC
U/G Telephone Conduit LOS C (S.U.E.*)	----- TC
U/G Telephone Conduit LOS D (S.U.E.*)	----- TC
U/G Fiber Optics Cable LOS B (S.U.E.*)	----- T FO
U/G Fiber Optics Cable LOS C (S.U.E.*)	----- T FO
U/G Fiber Optics Cable LOS D (S.U.E.*)	----- T FO

## WATER:

Water Manhole	○ W
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
U/G Water Line LOS B (S.U.E.*)	----- W
U/G Water Line LOS C (S.U.E.*)	----- W
U/G Water Line LOS D (S.U.E.*)	----- W
Above Ground Water Line	----- A/G Water

## TV:

TV Pedestal	□
TV Tower	⊗
U/G TV Cable Hand Hole	○
U/G TV Cable LOS B (S.U.E.*)	----- TV
U/G TV Cable LOS C (S.U.E.*)	----- TV
U/G TV Cable LOS D (S.U.E.*)	----- TV
U/G Fiber Optic Cable LOS B (S.U.E.*)	----- TV FO
U/G Fiber Optic Cable LOS C (S.U.E.*)	----- TV FO
U/G Fiber Optic Cable LOS D (S.U.E.*)	----- TV FO

## GAS:

Gas Valve	◇
Gas Meter	⊕
U/G Gas Line LOS B (S.U.E.*)	----- G
U/G Gas Line LOS C (S.U.E.*)	----- G
U/G Gas Line LOS D (S.U.E.*)	----- G
Above Ground Gas Line	----- A/G Gas

## SANITARY SEWER:

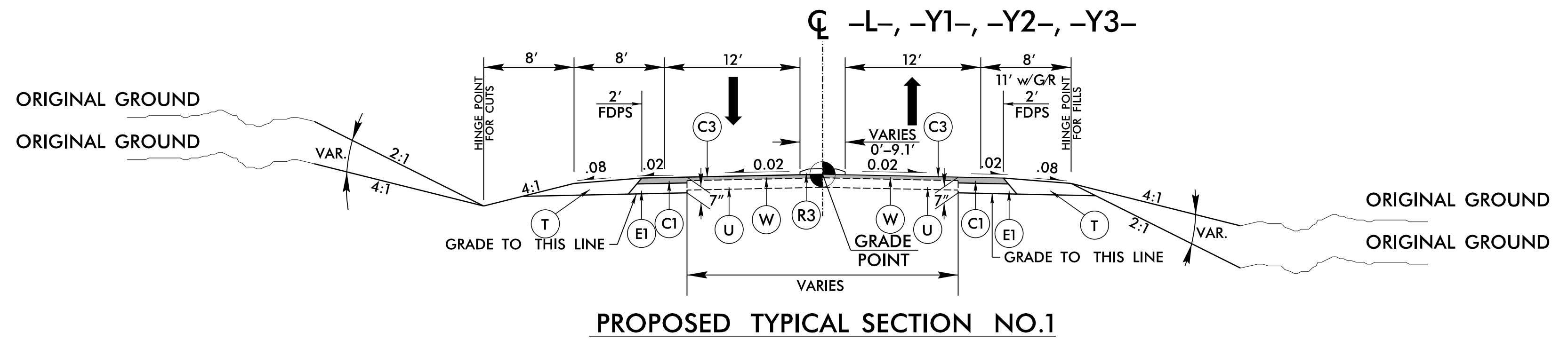
Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	----- SS
Above Ground Sanitary Sewer	----- A/G Sanitary Sewer
SS Forced Main Line LOS B (S.U.E.*)	----- FSS
SS Forced Main Line LOS C (S.U.E.*)	----- FSS
SS Forced Main Line LOS D (S.U.E.*)	----- FSS

## MISCELLANEOUS:

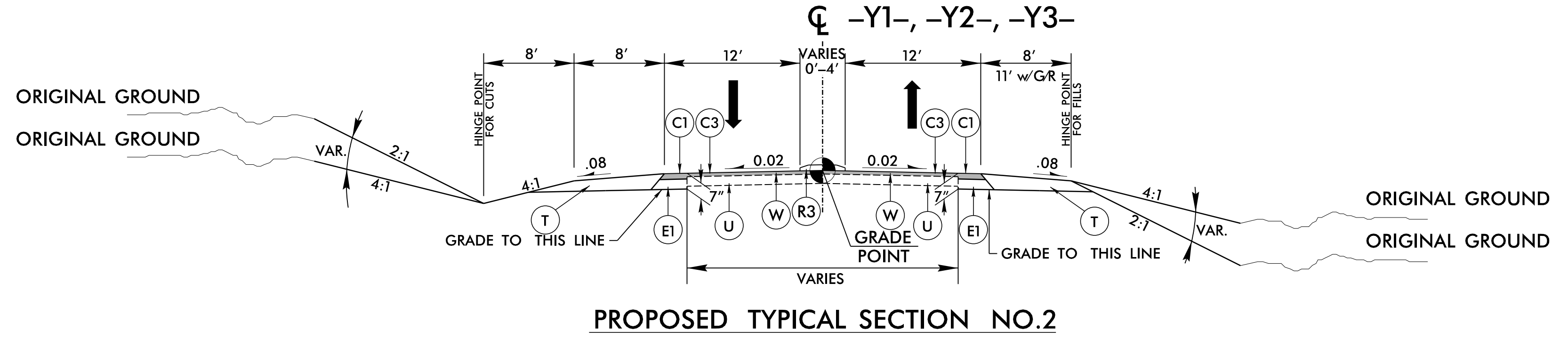
Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	⊕
Utility Unknown U/G Line LOS B (S.U.E.*)	----- 7U/L
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	⊕
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	⊕
U/G Test Hole LOS A (S.U.E.*)	○
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

5/14/23

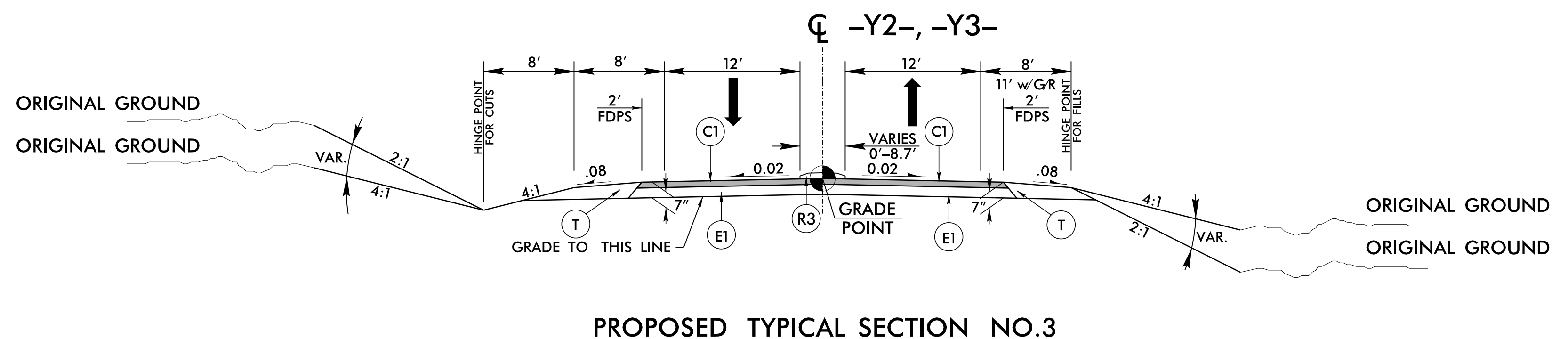
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 1" IN DEPTH OR GREATER THAN 1.5" IN DEPTH.
C3	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5.5" IN DEPTH.
R1	4' EXPRESSWAY GUTTER
R2	9" X 18" CONCRETE CURB
R3	5" MONOLITHIC CONCRETE ISLAND (KEYED IN)
R4	12" CONCRETE TRUCK APRON
T	EARTH MATERIAL
U	EXISTING PAVEMENT
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL 1)



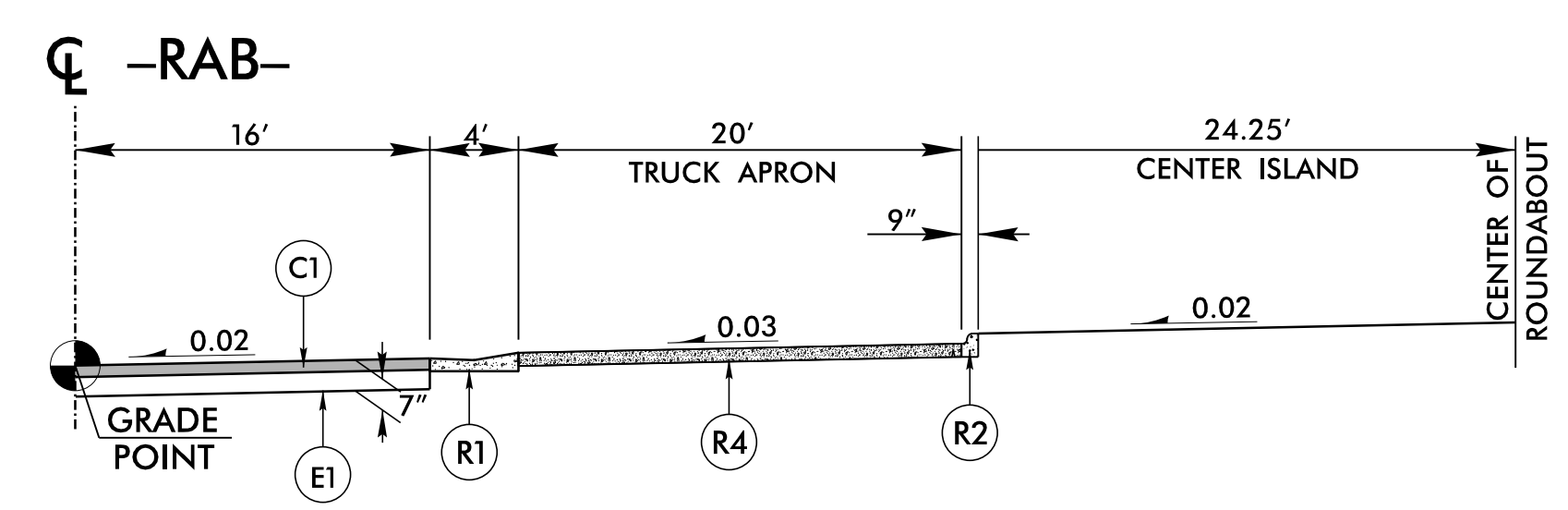
PROPOSED TYPICAL SECTION NO.1



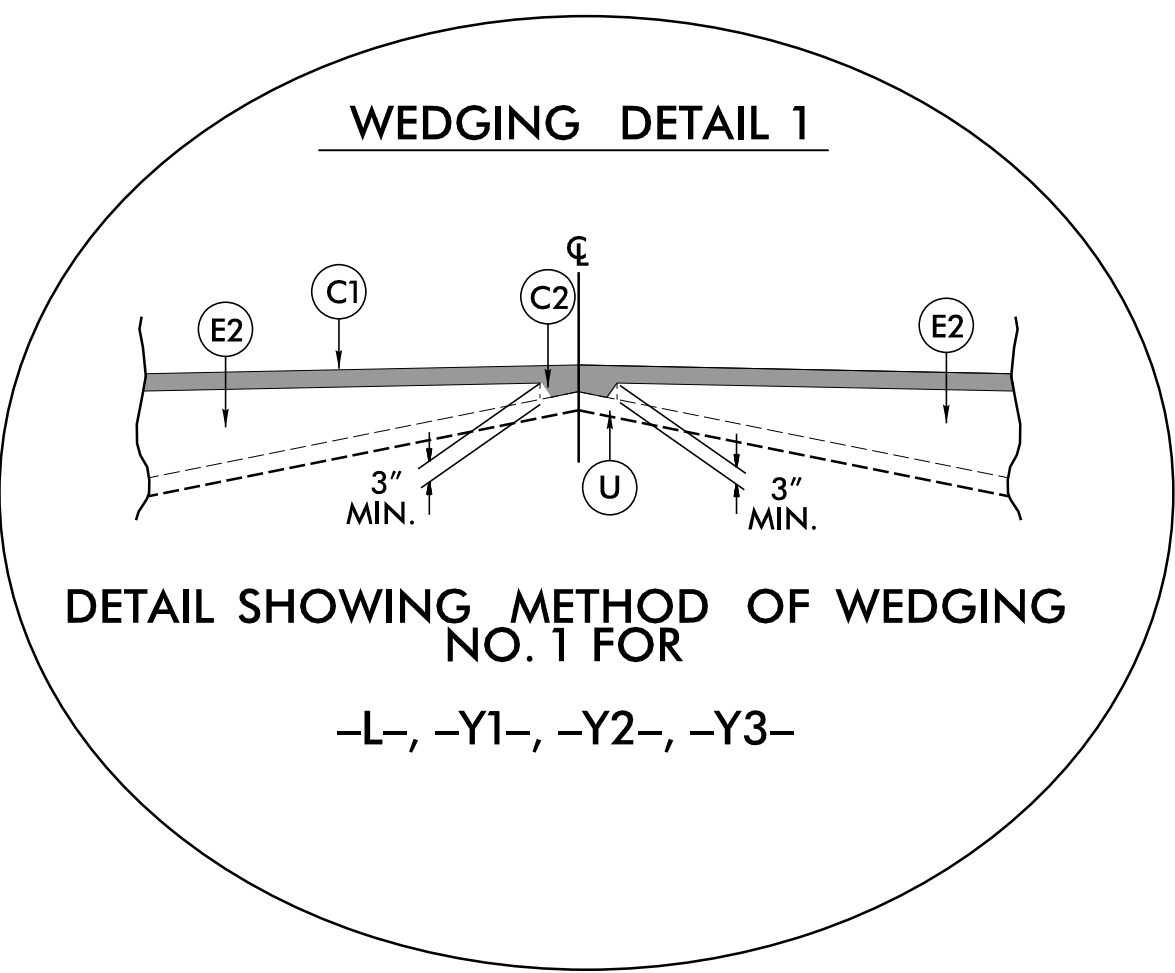
PROPOSED TYPICAL SECTION NO.2



PROPOSED TYPICAL SECTION NO.3



PROPOSED TYPICAL SECTION NO.4



PROJECT REFERENCE NO. U-6035	SHEET NO. 2A-1
RW SHEET NO.	
ROADWAY DESIGN ENGINEER 10/26/2023 Chris Anderson	PAVEMENT DESIGN ENGINEER 10/26/2023 Kamil Al-Sayid
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	
NV5 ENGINEERS & CONSULTANTS, INC. 7500 E. INDEPENDENCE BLVD, STE 100 CHARLOTTE, NC 28227 P: 704.537.7300 www.NV5.com NC License # F-1333	

**USE TYPICAL SECTION NO. 1**  
 -L- STA. 10+60.00 TO STA. 14+38.70  
 -L- STA. 15+68.75 TO STA. 18+30.00  
 -Y1- STA. 13+28.36 TO STA. 14+42.69  
 -Y2- STA. 13+21.83 TO STA. 14+00.00  
 -Y3- STA. 11+00.00 TO STA. 11+43.99

**USE TYPICAL SECTION NO. 2**  
 -Y1- STA. 12+30.00 TO STA. 13+28.36  
 -Y2- STA. 12+30.00 TO STA. 13+21.83  
 -Y3- STA. 11+43.99 TO STA. 14+00.00

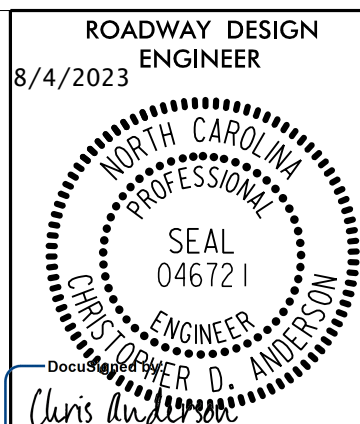
**USE TYPICAL SECTION NO. 3**  
 -Y2- STA. 14+00.00 TO STA. 14+37.54  
 -Y3- STA. 10+64.17 TO STA. 11+00.00

**USE TYPICAL SECTION NO. 4**  
 -RAB- STA. 10+00.00 TO STA. 14+08.41

**NOTES:**  
 SEE PLANS FOR TAPERS.  
 MILL AS NEEDED.

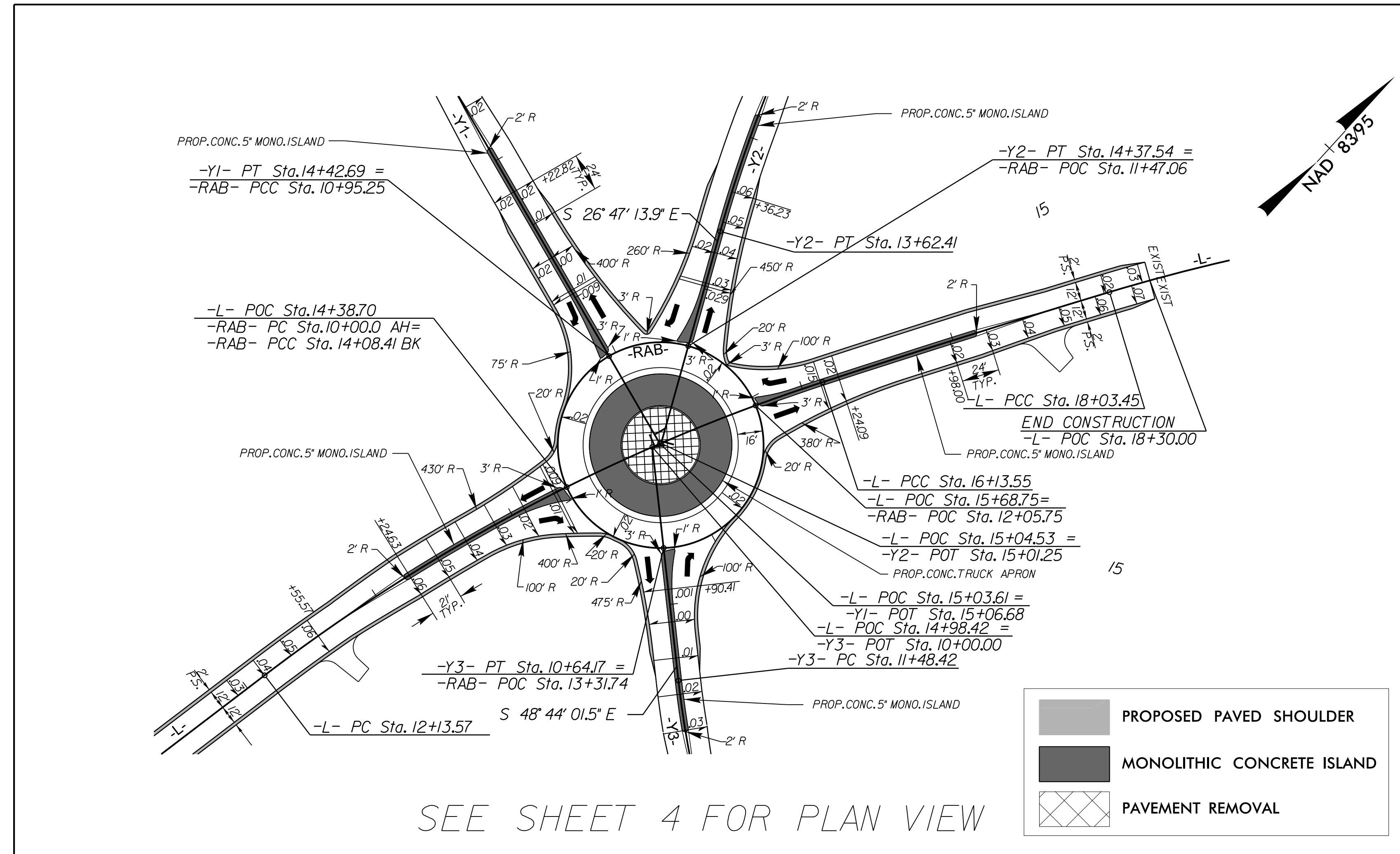
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 Chris Anderson






PROJECT REFERENCE NO. <i>U-6035</i>	SHEET NO. <i>2B-1</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER 8/4/2023	
	

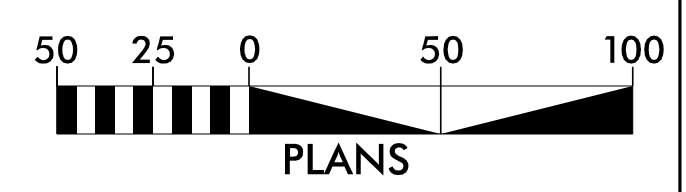
# ROUNDAABOUT DETAIL SHEET

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



SEE SHEET 4 FOR PLAN VIEW

-  PROPOSED PAVED SHOULDER
-  MONOLITHIC CONCRETE ISLAND
-  PAVEMENT REMOVAL



**N|V|5**  
 NV5 ENGINEERS & CONSULTANTS, INC.  
 7500 E. INDEPENDENCE BLVD, STE 100  
 CHARLOTTE, NC 28227  
 P: 704.537.7300 www.NV5.com  
 NC License # F-1333

COMPUTED BY: R. CAREATHERS DATE: 12-16-2019  
CHECKED BY: M. HOLT DATE: \_\_\_\_\_

PROJECT REFERENCE NO. SHEET NO.  
U-6035 3B-1

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

**SUMMARY OF EARTHWORK**  
IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT + 15%	BORROW	WASTE
-L- STA. 10+60.00 TO 14+38.71	663		462		201
-L- STA. 15+68.75 TO 18+30.00	656		120		536
<b>SUBTOTAL:</b>	<b>1,319</b>		<b>582</b>		<b>737</b>
-Y1- STA. 12+30.00 TO 14+42.69	331		131		200
<b>SUBTOTAL:</b>	<b>331</b>		<b>131</b>		<b>200</b>
-Y2- STA. 12+30.00 TO 14+37.45 *	289		121		168
<b>SUBTOTAL:</b>	<b>289</b>		<b>121</b>		<b>168</b>
-Y3- STA. 10+64.17 TO 14+00.00	178		662	484	
<b>SUBTOTAL:</b>	<b>178</b>		<b>662</b>	<b>484</b>	
-RAB- STA. 10+00.00 TO 14+08.41	68		2,937	2,869	
<b>SUBTOTAL:</b>	<b>68</b>		<b>2,937</b>	<b>2,869</b>	
<b>TOTAL:</b>	<b>2,185</b>		<b>4,433</b>	<b>3,354</b>	<b>1,105</b>
MATERIAL FOR SHOULDER CONSTRUCTION:			154		
EST. LOSS DUE TO CLEARING AND GRUBBING:	-450		450		
ADDITIONAL UNDERCUT:		250	288		250
WASTE IN LIEU OF BORROW:				-1,105	-1,105
<b>PROJECT TOTAL:</b>	<b>1,735</b>	<b>250</b>	<b>4,875</b>	<b>3,140</b>	<b>250</b>
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT:				157	
<b>GRAND TOTAL:</b>	<b>1,736</b>			<b>3,297</b>	
<b>SAY:</b>	<b>1,800</b>			<b>3,300</b>	

**PAVEMENT REMOVAL SUMMARY**  
IN SQUARE YARDS

SURVEY LINE	STATION	STATION	LOCATION LTR/CL	AREA (SF)
-RAB-	10+00	12+00	CL	1,847.45
			<b>TOTAL (SF):</b>	<b>1,847.45</b>
			<b>TOTAL (SY):</b>	<b>205.27</b>
			<b>SAY:</b>	<b>210</b>

\* A QUANTITY OF APPROXIMATELY 150 CUBIC YARDS OF ACCEPTABLE UNCLASSIFIED EXCAVATION HAS BEEN MEASURED FROM CROSS SECTIONS. THE SOILS ARE SHOWN ON CROSS SECTIONS. RECOMMEND THAT THESE SOILS BE WASTED; HOWEVER, THE MATERIAL MAY BE USED IN EMBANKMENTS, EXCEPT IN THE TOP 3 FEET, AT THE DISCRETION OF THE ENGINEER.

NOTE: Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

**NV5**  
 NV5 ENGINEERS & CONSULTANTS, INC.  
 7500 E. INDEPENDENCE BLVD, STE 100  
 CHARLOTTE, NC 28227  
 P: 704.537.7300 www.NV5.com  
 NC License # F-1333

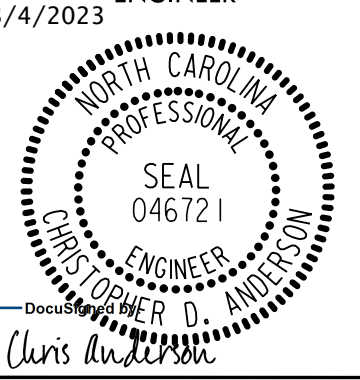
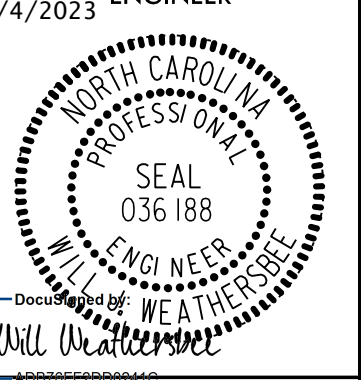
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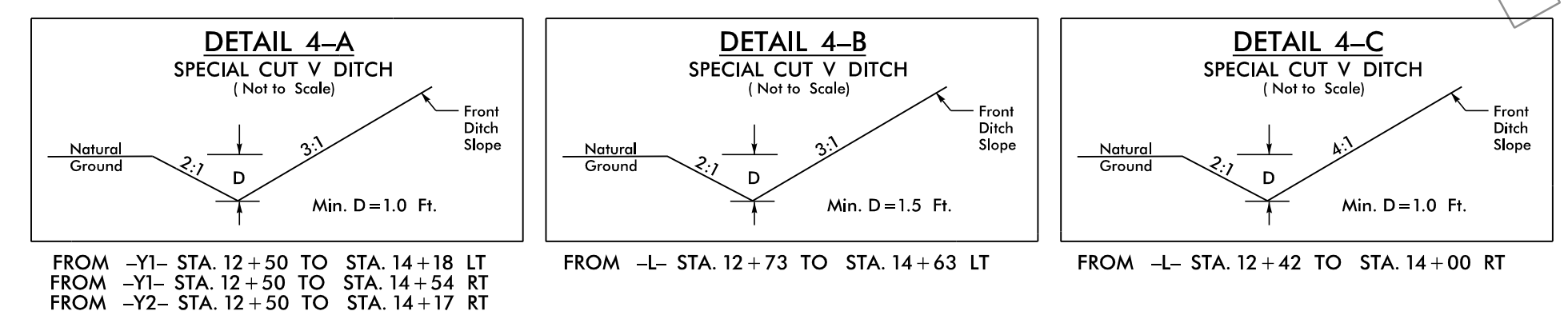
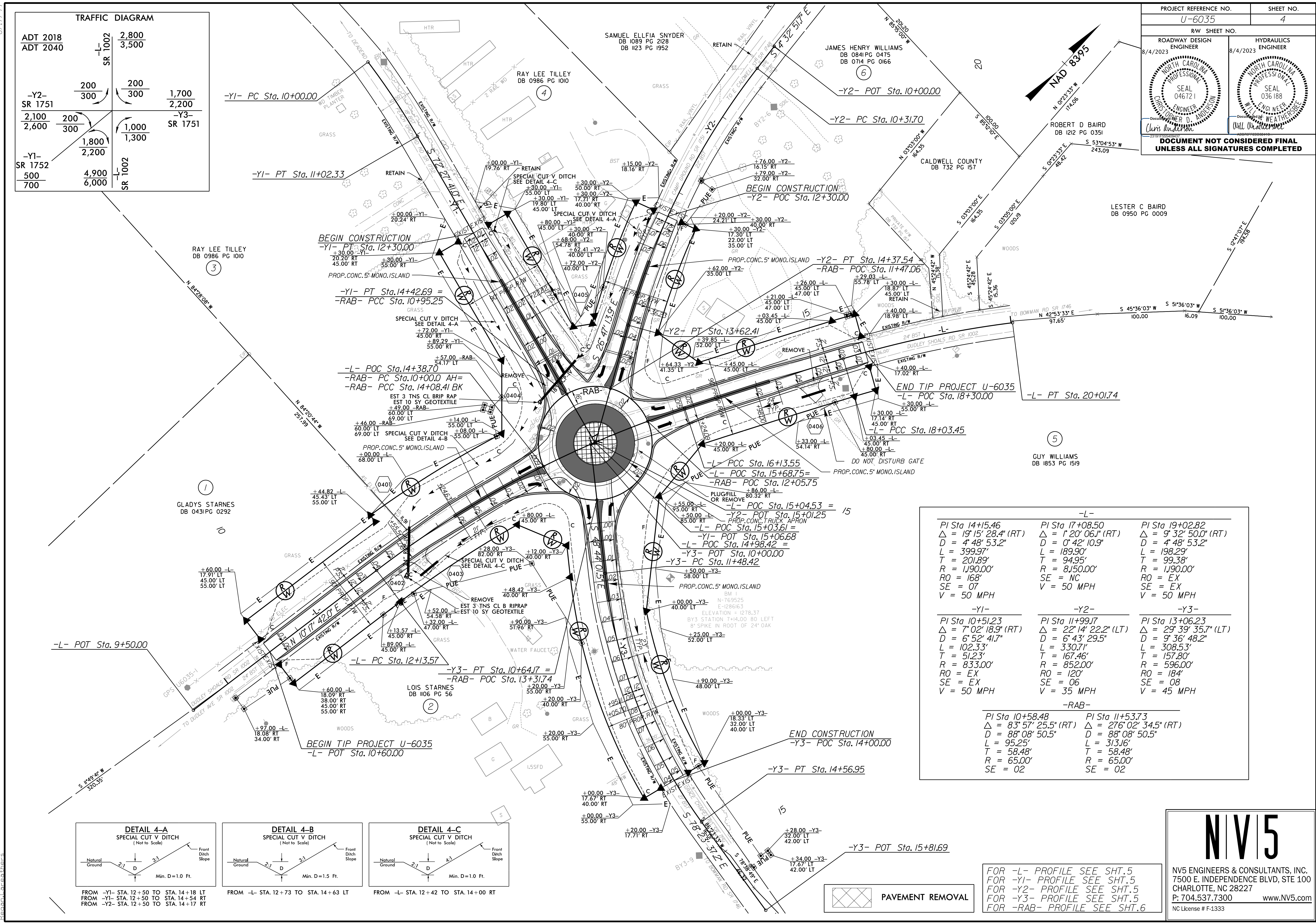
PROJECT REFERENCE NO. <b>U-6035</b>		SHEET NO. <b>4</b>	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER 8/4/2023		HYDRAULICS ENGINEER 8/4/2023	
			
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			

**TRAFFIC DIAGRAM**

ADT 2018	2,800
ADT 2040	3,500

-Y2- SR 1751	200/300	200/300	1,700/2,200
-Y3-	200/300	1,000/1,300	SR 1751
-Y1- SR 1752	500/700	4,900/6,000	SR 1002



FOR -L- PROFILE SEE SHT. 5  
 FOR -Y1- PROFILE SEE SHT. 5  
 FOR -Y2- PROFILE SEE SHT. 5  
 FOR -Y3- PROFILE SEE SHT. 5  
 FOR -RAB- PROFILE SEE SHT. 6

**NV5**

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4/14/2022 R:\Projects\ProJ\U6035\_RDY\_PSH\_04.dgn RyanCarroll



5/28/2022

**PIPE HYDRAULIC DATA**  
-L- Sta. 12+59

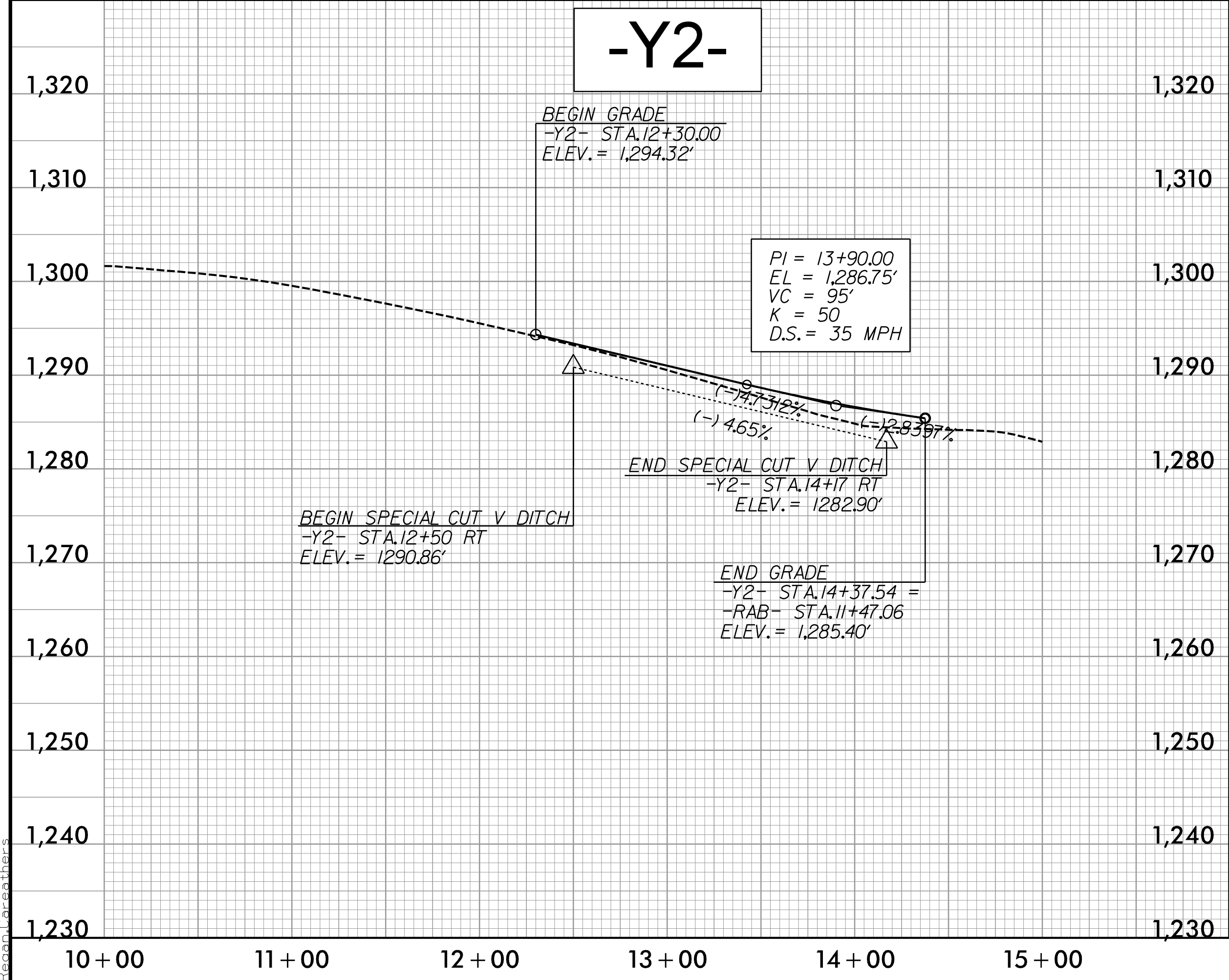
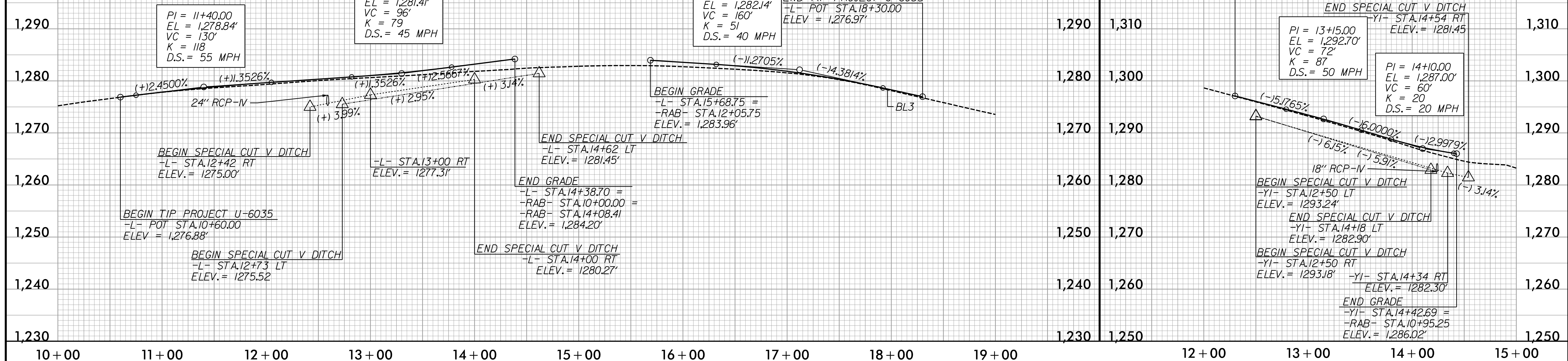
DRAINAGE AREA	= 4.8	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 13	CFS
DESIGN HW ELEVATION	= 1277.4	FT
100 YEAR DISCHARGE	= 15	CFS
100 YEAR HW ELEVATION	= 1277.6	FT
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 38	CFS
OVERTOPPING ELEVATION	= 1281.5	FT

**-L-**

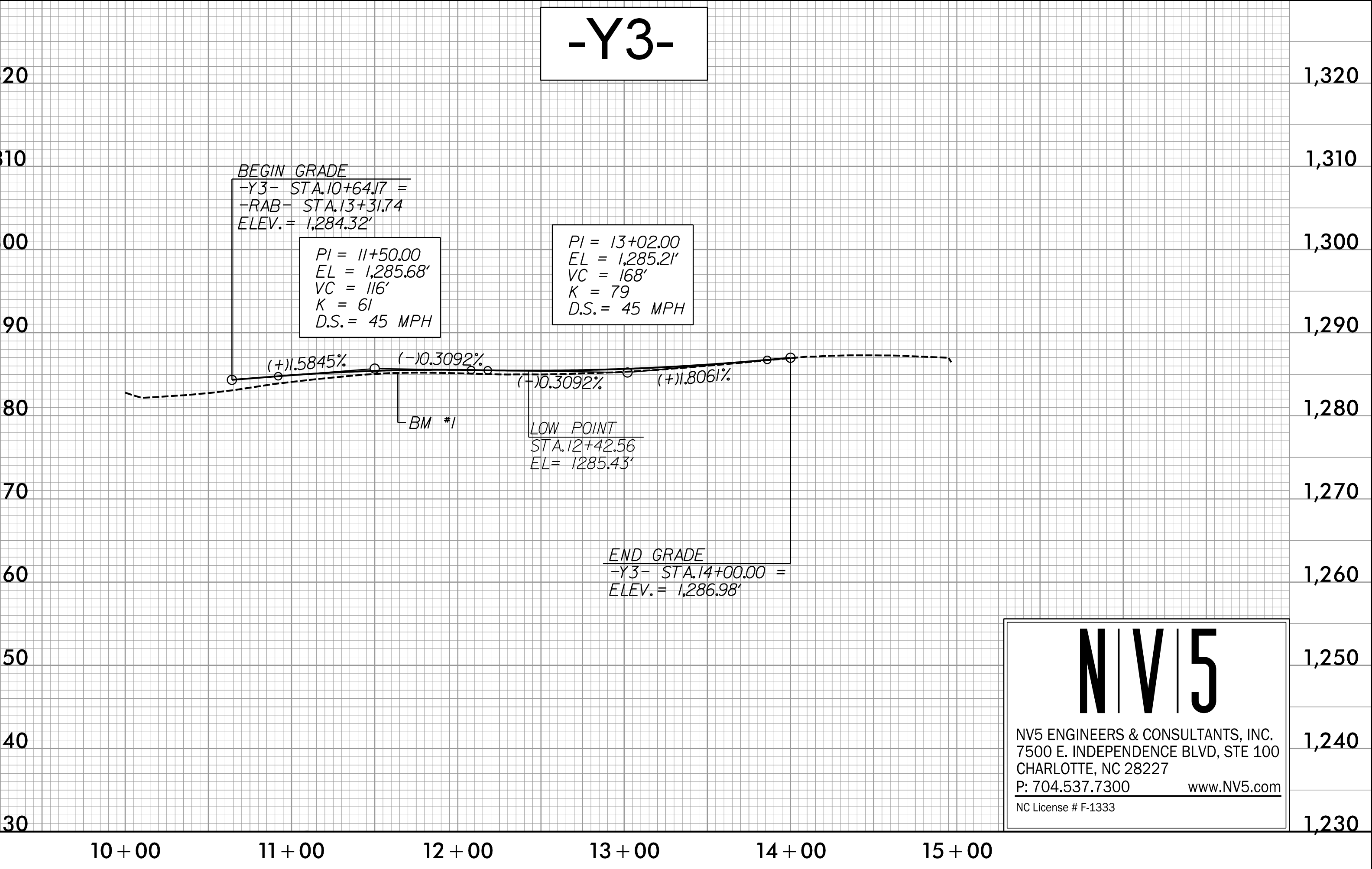
**-Y1-**

PROJECT REFERENCE NO.	U-6035	SHEET NO.	5
ROADWAY DESIGN ENGINEER	8/4/2023	HYDRAULICS ENGINEER	8/4/2023

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



**-Y2-**



**-Y3-**

**N|V|5**

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7500 E. INDEPENDENCE BLVD, STE 100  
CHARLOTTE, NC 28227  
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NC License # F-1333

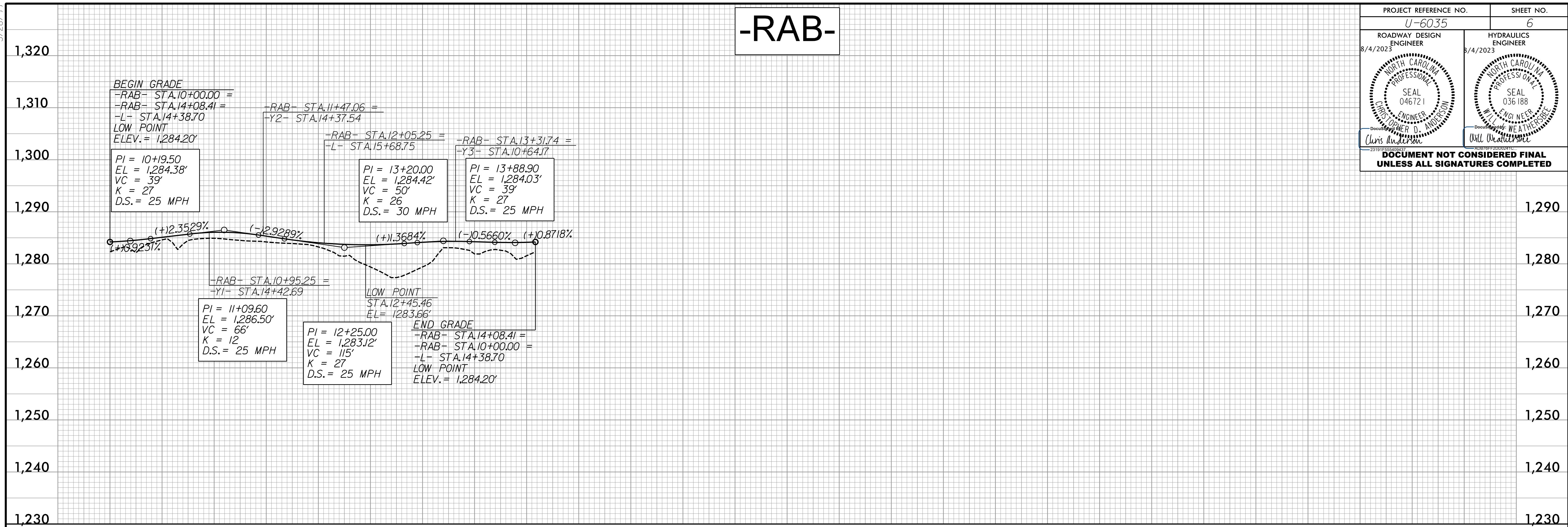
4/14/2022  
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Reagan, C



5/28/24

# -RAB-

PROJECT REFERENCE NO. <b>U-6035</b>	SHEET NO. <b>6</b>
ROADWAY DESIGN ENGINEER 8/4/2023	HYDRAULICS ENGINEER 8/4/2023
<i>Chris Anderson</i>	<i>Will Weatherbee</i>
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



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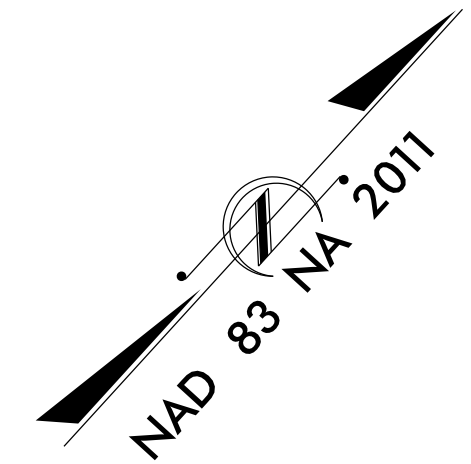
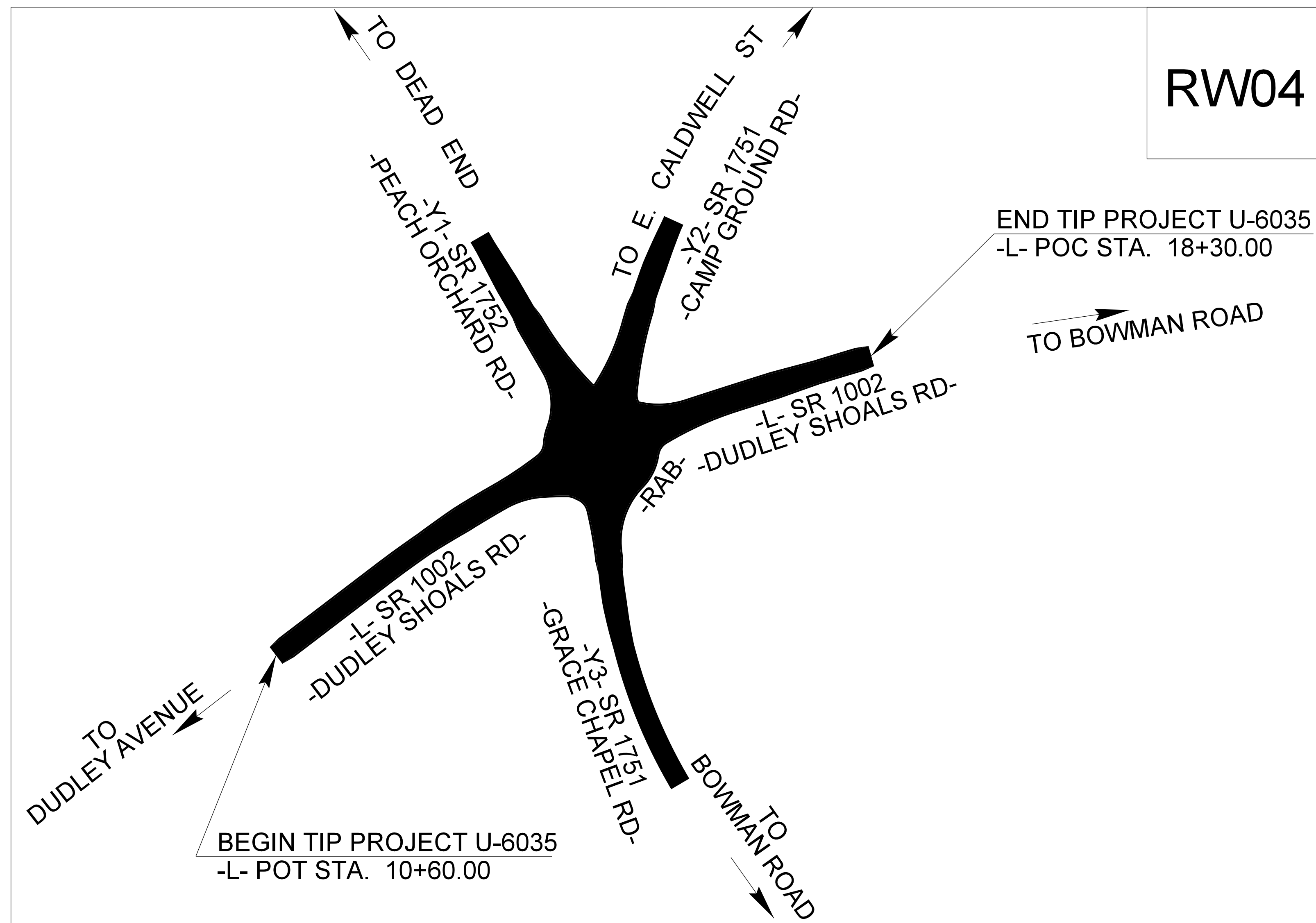
**N|V|5**  
 NV5 ENGINEERS & CONSULTANTS, INC.  
 7500 E. INDEPENDENCE BLVD, STE 100  
 CHARLOTTE, NC 28227  
 P: 704.537.7300 www.NV5.com  
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STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

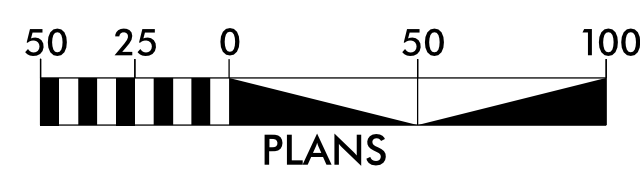
SURVEY CONTROL, EXISTING CENTERLINES,  
RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

**CALDWELL COUNTY**

**TIP PROJECT: U-6035**



**GRAPHIC SCALE**



**DATUM DESCRIPTION**

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "U6035 GPS1" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 769060.1883(ft) EASTING: 1285839.4742(ft) ELEVATION: 1275.317(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9998690334 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "U6035 GPS1" TO -L- STATION 10+60 IS N 24-11'46.84" E 102.8896(ft) ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

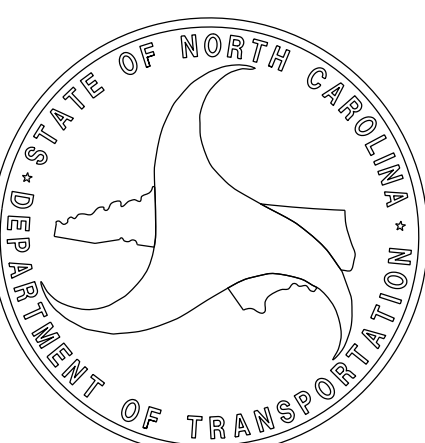
Prepared in the Office of:

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

PROFESSIONAL LAND SURVEYOR




DocuSigned by:  
K. Landon Wagner  
54068137F03042D...

9/6/2019  
Date:

\$\$\$SYTIME\$\$\$\$  
 \$\$\$DGN\$\$\$\$  
 \$\$\$USERNAME\$\$\$\$



# RIGHT OF WAY CONTROL SHEET

<small>PROJECT REFERENCE NO.</small> U-6035	<small>SHEET NO.</small> RW03E-1
<b>Location and Surveys</b>	
	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	10+60.00	45.00	769145.9091	1285925.9004
L	10+60.00	18.09	769150.7175	1285899.4284
L	10+60.00	-17.91	769157.1513	1285864.0079
L	10+60.00	-45.00	769161.9936	1285837.3493
L	12+13.57	45.00	769297.0096	1285953.3463
L	12+44.58	-55.00	769346.7197	1285861.1689
L	12+44.82	-45.43	769345.0081	1285870.5921
L	13+80.00	45.00	769452.0541	1285992.8711
L	14+14.00	-55.00	769517.0734	1285909.5878
L	16+20.00	45.00	769662.7044	1286087.0430
L	16+45.00	-45.00	769728.9954	1286021.2367
L	18+03.45	45.00	769820.3066	1286178.9284
L	18+03.45	-45.00	769866.5090	1286101.6928
L	18+30.00	-18.87	769876.0841	1286138.2228
L	18+30.00	17.14	769856.9171	1286168.6992
L	18+30.00	-45.00	769889.9966	1286116.1013
L	18+30.00	45.00	769842.0825	1286192.2868

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y1	12+30.00	-45.00	769707.5991	1285744.7411
Y1	12+30.00	-19.80	769683.5731	1285737.1479
Y1	12+30.00	20.20	769645.4325	1285725.0940
Y1	12+30.00	45.00	769621.7828	1285717.6198
Y1	13+72.00	45.00	769578.9914	1285853.0188
Y1	13+80.00	-45.00	769662.3968	1285887.7682

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y2	12+30.00	-35.00	769839.2045	1285915.8447
Y2	12+30.00	40.00	769816.1742	1285844.4682
Y2	12+30.00	-17.30	769833.7704	1285899.0030
Y2	12+30.00	17.71	769823.0191	1285865.6820
Y2	13+62.00	-35.00	769722.2286	1285963.8705
Y2	13+62.41	40.00	769688.0764	1285897.0963
Y2	13+72.00	40.00	769679.5159	1285901.4181

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y3	10+67.96	-71.25	769585.3106	1286090.9515
Y3	11+12.00	40.00	769472.6412	1286050.6772
Y3	11+48.42	40.00	769448.6185	1286078.0542
Y3	12+00.00	-40.00	769478.6189	1286168.3126
Y3	14+00.00	40.00	769318.7238	1286310.7244
Y3	14+00.00	17.67	769340.0650	1286317.2821
Y3	14+00.00	-40.00	769395.1950	1286334.2224
Y3	14+00.00	-18.33	769374.4771	1286327.8562

I, R. Landon Wagoner, 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(s) (Base map Compilation, R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

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 existing survey control provided by others; that the depicted property data shown herein were surveyed by others; 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 original signature, registration number and seal this 13th day of August, 2019.

DocuSigned by:  
*R. Landon Wagoner* 9/6/2019  
Professional Land Surveyor

L-4301  
PLS #

Seal

**NOTES:**

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.





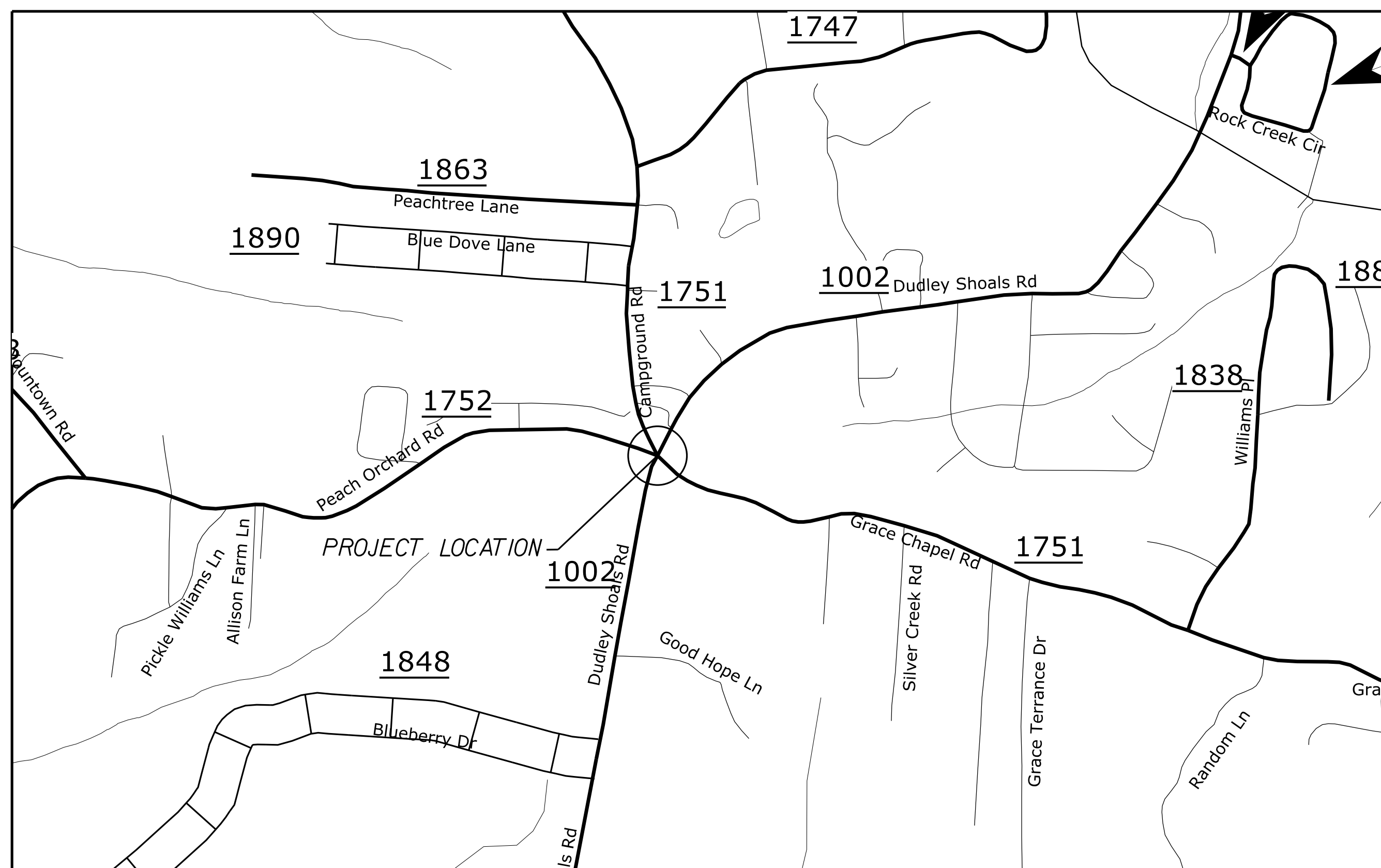
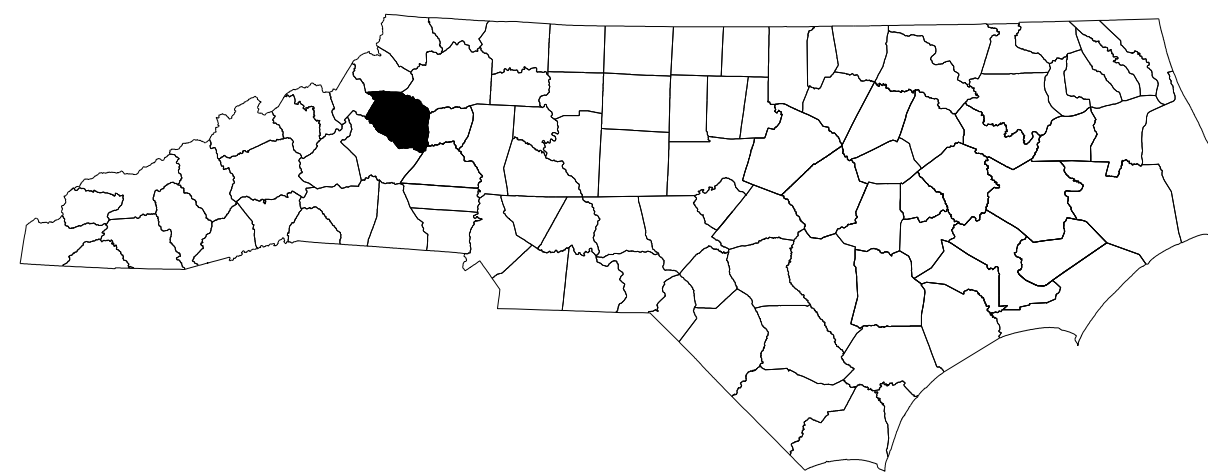


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**

**CALDWELL COUNTY**

**DUDLEY SHOALS ROAD - SR 1002 (DUDLEY SHOALS RD),  
SR 1752 (PEACH ORCHARD RD), AND SR 1751 (CAMPGROUND RD/  
GRACE CHAPEL RD) INTERSECTION**



**INDEX OF SHEETS**

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP AND INDEX OF SHEETS
TMP-2	ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-3	TRANSPORTATION OPERATIONS PLAN: GENERAL NOTES
TMP-4	PHASE 1 DETAIL
TMP-5	PHASE 2 DETAIL
TMP-6	PHASE 3 DETAIL

SHEET NO.  
TMP-1

**U-6035**

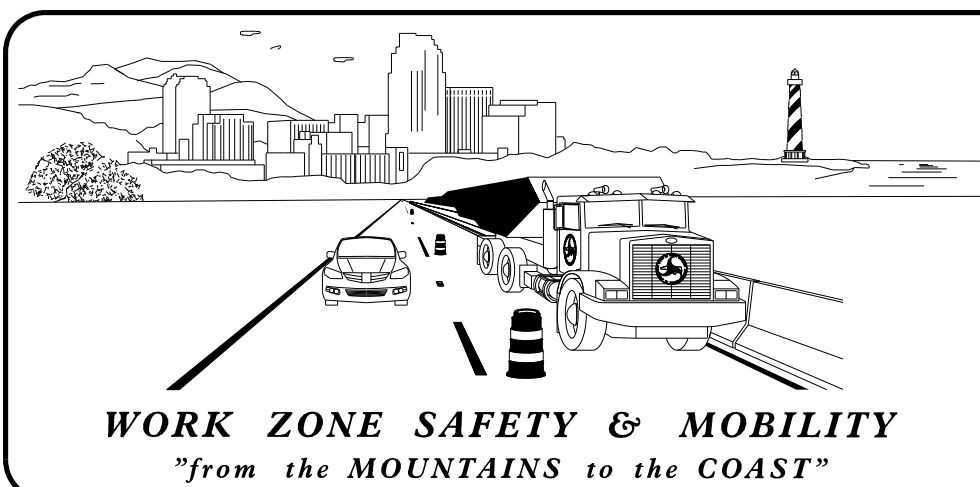
**TIP PROJECT:**

JASON HAMILTON, P.E., PTOE  
PROJECT ENGINEER  
ALICIA D. ANDREWS, E.I.  
PROJECT DESIGN ENGINEER

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

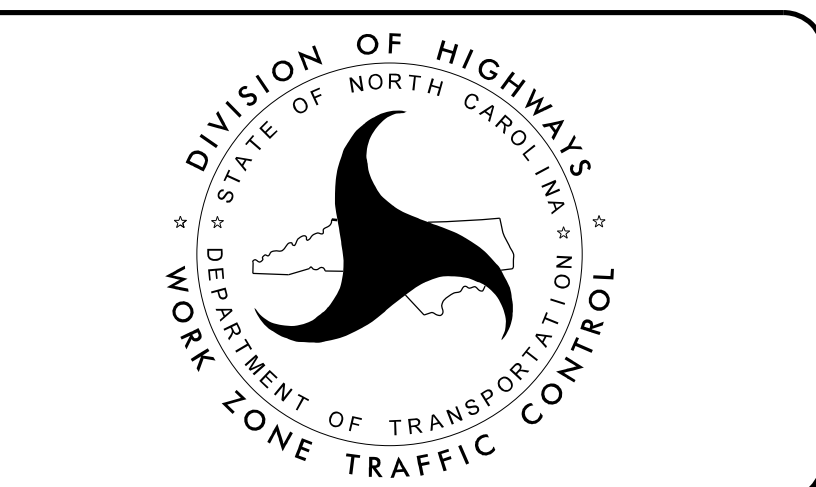
Prepared in the Office of:  
**RKA**  
**RAMEY KEMP ASSOCIATES**  
5808 Faringdon Place  
Raleigh, North Carolina 27609  
Phone: 919-872-5115

APPROVED: William J. Hamilton  
DATE: 3/16/2022  
SEAL  
NORTH CAROLINA PROFESSIONAL ENGINEER  
SEAL 32396  
WILLIAM J. HAMILTON



**DIVISION DESIGN CONSTRUCT (DDC)**  
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561  
801 STATESVILLE ROAD, NORTH WILKESBORO, NC 28659 (DELIVERY)  
PHONE: (910) 341-2000 FAX: (919) 771-2745

RAMIE SHAW, P.E. NCDOT PROJECT MANAGER  
DESIREE HAGWOOD NCDOT PROJECT ENGINEER



3/21/2022  
TMP\7332\_U6035\_TC\_TMP\_TSH.dgn  
User: tpobelg

# ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - 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
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGERS
1180.01	SKINNY DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.14	PAVEMENT MARKINGS - ROUNDABOUTS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

# LEGEND

## GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)

- WORK AREA
- REMOVAL
- TEMPORARY PAVEMENT
- WEDGE AND WIDEN

## SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

## PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

## TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM
- SKINNY DRUM
- TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

## TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

## PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

## PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

## TEMPORARY PAVEMENT MARKING

SYMBOL	PAVEMENT MARKING LINES PAINT (4")
P1	WHITE EDGELINE
P5	2FT. - 6FT. /SP WHITE MINISKIP
P10	YELLOW EDGELINE
P13	YELLOW DOUBLE CENTER
SYMBOL	PAVEMENT MARKING LINES PAINT (24")
P61	WHITE STOPBAR

3/21/2022  
 User: tpobelk  
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APPROVED: *William J. Hamilton*  
 A55600704648484  
 DATE: 03/16/2022

SEAL

ROADWAY STANDARD DRAWINGS AND LEGEND

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



# GENERAL NOTES

PROJ. REFERENCE NO.	SHEET NO.
U-6035	TMP-3
5808 Faringdon Place Raleigh, North Carolina 27609 Phone: 919-872-5115	
NC License No. C-0910 www.rameykemp.com	

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRE OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

**TIME RESTRICTIONS**

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
SR 1002 (DUDLEY SHOALS ROAD)	MONDAY THRU FRIDAY 7:00 A.M. - 9:00 A.M. 4:00 P.M. - 6:00 P.M.

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

- | ROAD NAME   | HOLIDAY  |
|---|--|
| SR 1002 (DUDLEY SHOALS ROAD)<br>SR 1751 (PEACH ORCHARD ROAD)<br>SR 1751 (CAMPGROUND ROAD/GRACE CHAPEL ROAD) |  |
|   | <ol style="list-style-type: none"> <li>1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.</li> <li>2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31st TO 6:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00 P.M. THE FOLLOWING TUESDAY.</li> <li>3. FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 6:00 P.M. MONDAY.</li> <li>4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.</li> <li>5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE DAY AFTER INDEPENDENCE DAY.<br/><br/>IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.</li> <li>6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 6:00 P.M. TUESDAY.</li> <li>7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 6:00 P.M. MONDAY.</li> <li>8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.</li> </ol> |

C) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

**LANE AND SHOULDER CLOSURE REQUIREMENTS**

- D) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

**LANE AND SHOULDER CLOSURE REQUIREMENTS (CONT...)**

F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

H) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

I) DO NOT INSTALL MORE THAN ONE LANE CLOSURE AT A TIME.

**PAVEMENT EDGE DROP OFF REQUIREMENTS**

J) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

K) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 1000 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

**TRAFFIC PATTERN ALTERATIONS**

L) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

**SIGNING**

M) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

N) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

O) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 1000 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

**TRAFFIC CONTROL DEVICES**

P) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

Q) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

**PAVEMENT MARKINGS AND MARKERS**

R) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

S) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

T) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

U) TRACE THE PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO INSTALLATION. PLACE DRUMS TO DELINEATE ANY PROPOSED MONOLITHIC ISLANDS BEFORE INSTALLATION.

**MISCELLANEOUS**

V) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

W) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 1000 FT AND 1500 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

3/21/2022  
 TMP\7332\_U6035\_TC\_TMP\_3.dgn  
 User: tbobekg

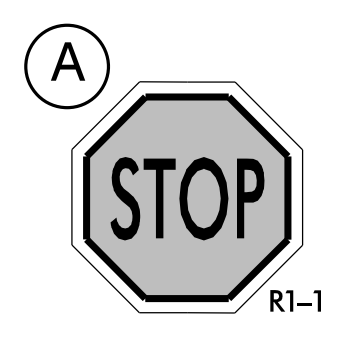
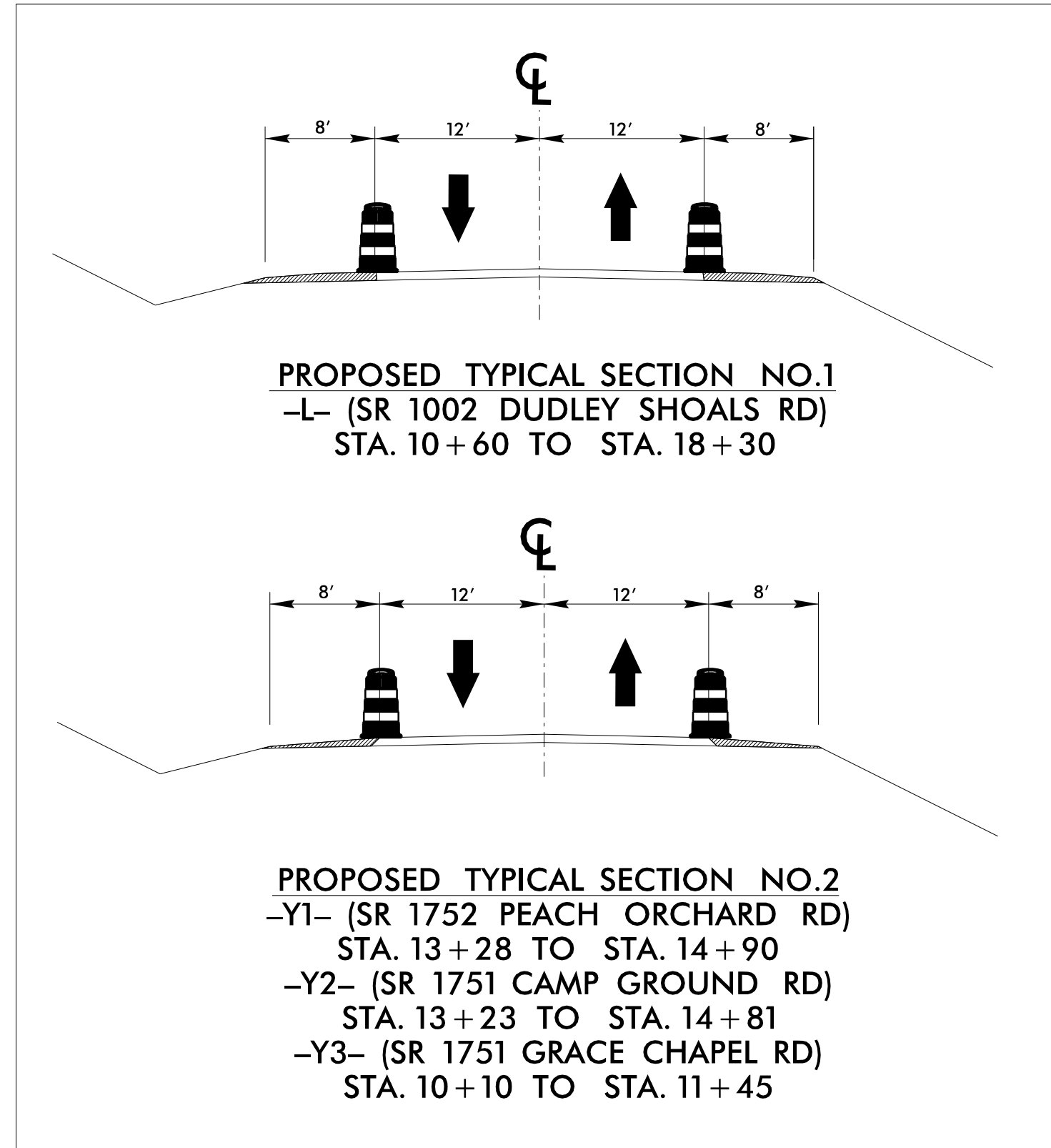
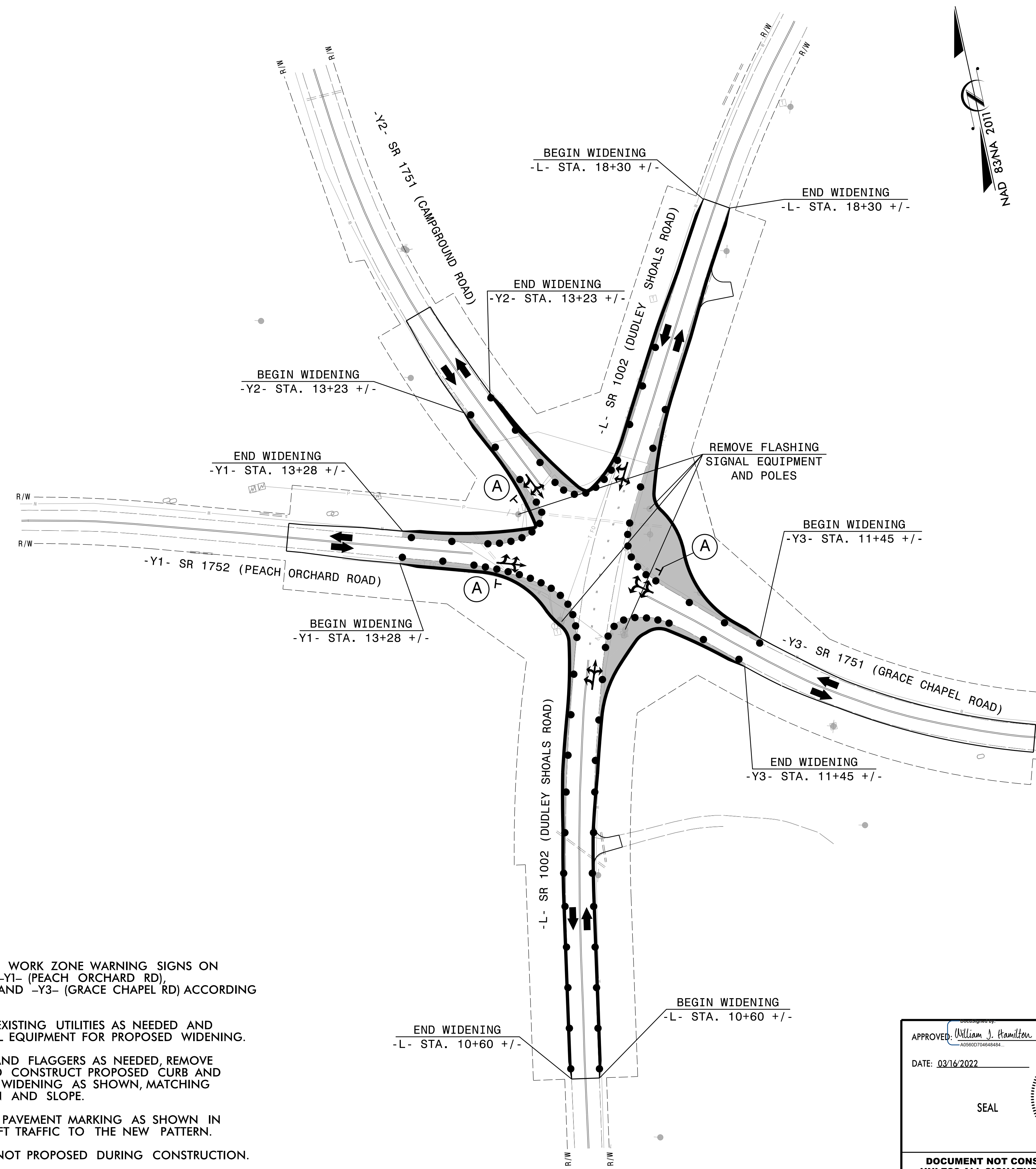
APPROVED: DATE: 3/16/2022  SEAL			<b>TRANSPORTATION OPERATIONS PLAN: GENERAL NOTES</b>
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			



PROJ. REFERENCE NO.	SHEET NO.
U-6035	TMP-4

**RKA**  
**RAMEY KEMP ASSOCIATES**  
 5808 Faringdon Place  
 Raleigh, North Carolina 27609  
 Phone: 919-872-5115  
 NC License No. C-0910  
 www.rameykemp.com

50' 0' 50' 100'  
 25'



**PHASE 1 NOTES:**

STEP 1: INSTALL ADVANCED WORK ZONE WARNING SIGNS ON -L- (DUDLEY SHOALS RD), -Y1- (PEACH ORCHARD RD), -Y2- (CAMPGROUND RD), AND -Y3- (GRACE CHAPEL RD) ACCORDING TO RSD 1101.01.

STEP 2: RELOCATE/ADJUST EXISTING UTILITIES AS NEEDED AND REMOVE FLASHING SIGNAL EQUIPMENT FOR PROPOSED WIDENING.

USING NARROW LANES AND FLAGGERS AS NEEDED, REMOVE EXISTING SHOULDERS AND CONSTRUCT PROPOSED CURB AND GUTTER, SHOULDERS, AND WIDENING AS SHOWN, MATCHING EXISTING EDGE, ELEVATION AND SLOPE.

STEP 3: PLACE TEMPORARY PAVEMENT MARKING AS SHOWN IN PHASE 2 (TMP-5) AND SHIFT TRAFFIC TO THE NEW PATTERN.

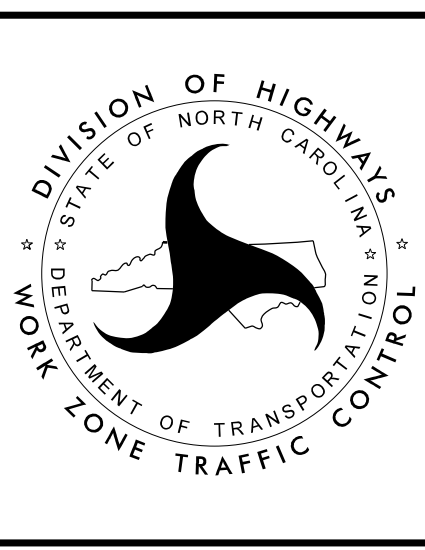
A TEMPORARY SIGNAL IS NOT PROPOSED DURING CONSTRUCTION.

3/21/2022  
 User: tpopskdg  
 T.C. TMP-4-Phase1.dgn

APPROVED: *William J. Hamilton*  
 DATE: 03/16/2022

SEAL

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED



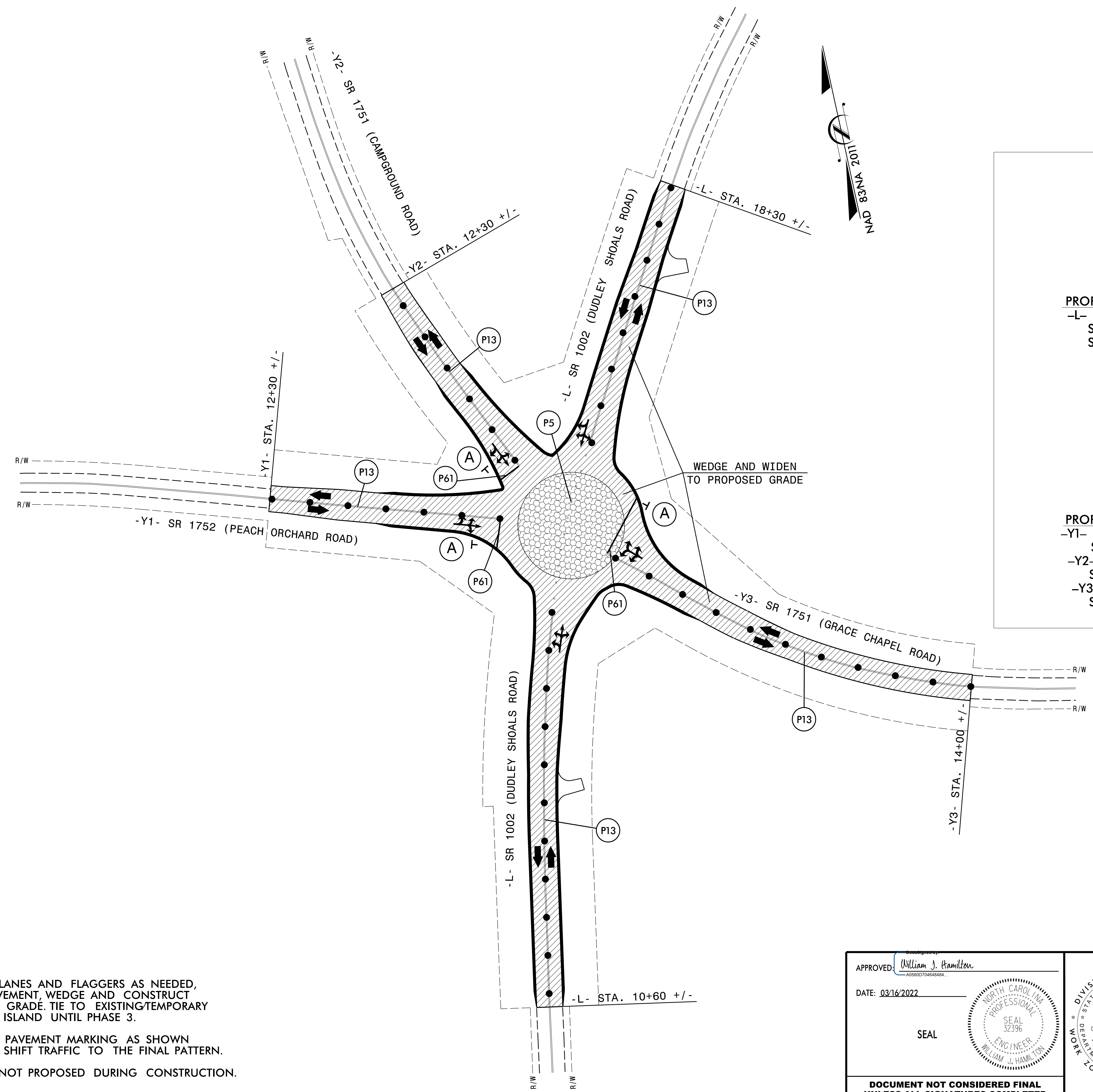
DIVISION OF HIGHWAYS  
 NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 WORK ZONE TRAFFIC CONTROL

**PHASE 1  
 DETAIL**



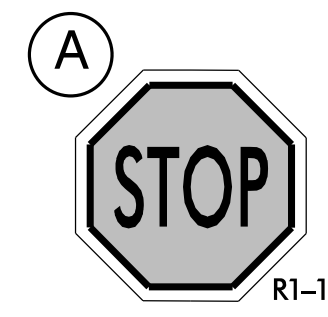
PROJ. REFERENCE NO. U-6035	SHEET NO. TMP-5
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**RKA**  
RAMEY KEMP ASSOCIATES  
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Raleigh, North Carolina 27609  
Phone: 919-872-5115  
NC License No. C-0910  
www.rameykemp.com



**PROPOSED TYPICAL SECTION NO.1**  
-L- (SR 1002 DUDLEY SHOALS RD)  
STA. 10+60 TO STA. 14+38  
STA. 15+70 TO STA. 18+30

**PROPOSED TYPICAL SECTION NO.2**  
-Y1- (SR 1752 PEACH ORCHARD RD)  
STA. 12+30 TO STA. 14+41  
-Y2- (SR 1751 CAMP GROUND RD)  
STA. 12+30 TO STA. 14+39  
-Y3- (SR 1751 GRACE CHAPEL RD)  
STA. 10+65 TO STA. 14+00



**PHASE 2 NOTES:**

STEP 1: USING NARROW LANES AND FLAGGERS AS NEEDED, REMOVE ABANDONED PAVEMENT, WEDGE AND CONSTRUCT ROADWAY TO PROPOSED GRADE. TIE TO EXISTING/TEMPORARY PAVEMENT INSIDE CENTER ISLAND UNTIL PHASE 3.

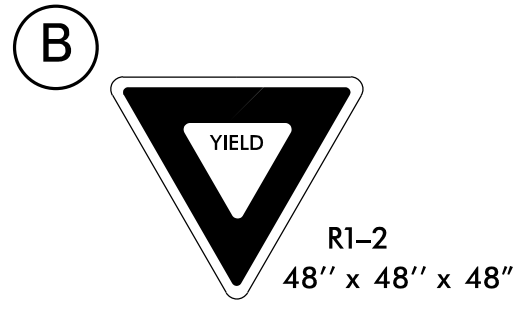
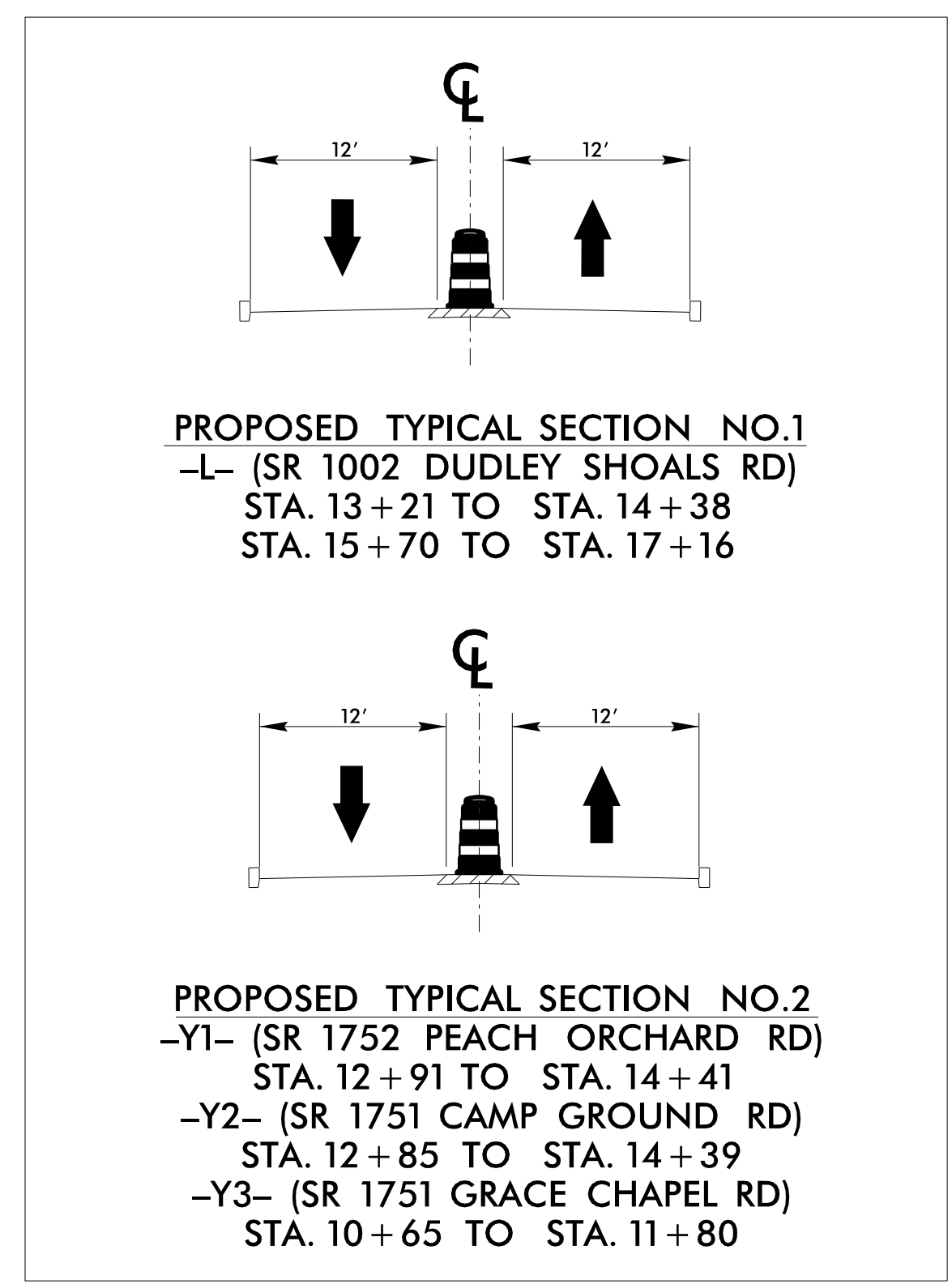
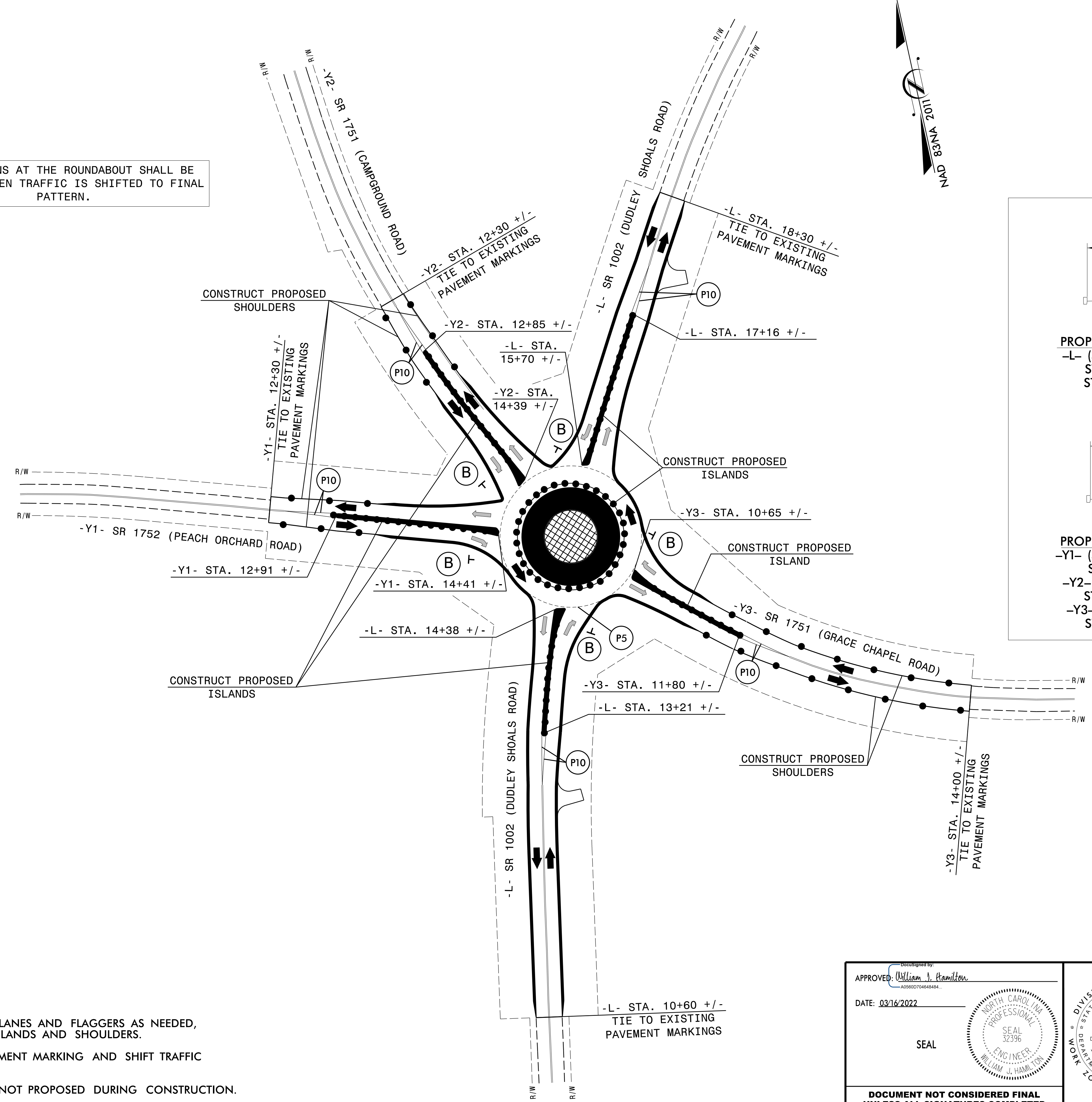
STEP 2: PLACE TEMPORARY PAVEMENT MARKING AS SHOWN IN PHASE 3 (TMP-6) AND SHIFT TRAFFIC TO THE FINAL PATTERN.

A TEMPORARY SIGNAL IS NOT PROPOSED DURING CONSTRUCTION.

3/21/2022  
3:53:02, U6035\_TC\_TMP\_5-Phase2.dgn  
User: rpk@rka.com

APPROVED: <i>William J. Hamilton</i> DATE: 03/16/2022 SEAL 		<p><b>PHASE 2 DETAIL</b></p>
<p><b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b></p>		

YIELD SIGNS AT THE ROUNDABOUT SHALL BE IN PLACE WHEN TRAFFIC IS SHIFTED TO FINAL PATTERN.

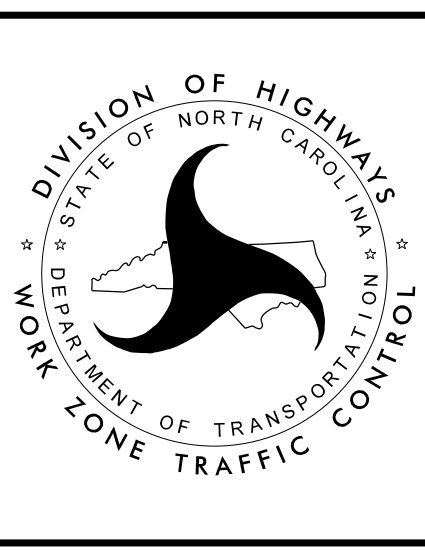


**PHASE 3 NOTES:**  
STEP 1: USING NARROW LANES AND FLAGGERS AS NEEDED, CONSTRUCT PROPOSED ISLANDS AND SHOULDERS.  
STEP 2: PLACE FINAL PAVEMENT MARKING AND SHIFT TRAFFIC TO THE FINAL PATTERN.  
A TEMPORARY SIGNAL IS NOT PROPOSED DURING CONSTRUCTION.

APPROVED: *William J. Hamilton*  
DATE: 03/16/2022

SEAL

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
WORK ZONE TRAFFIC CONTROL

**PHASE 3  
DETAIL**

3/21/2022  
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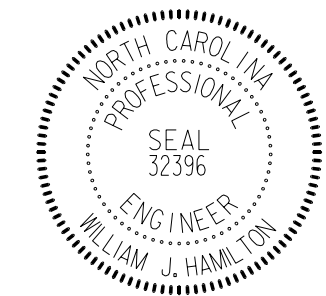
**T.I.P.: U-6035**

**CONTRACT NO.:**

**STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING PLAN  
CALDWELL COUNTY**

**LOCATION: DUDLEY SHOALS ROAD - SR 1002 (DUDLEY SHOALS RD),  
SR 1752 (PEACH ORCHARD RD), AND SR 1751 (CAMPGROUND RD/  
GRACE CHAPEL RD) INTERSECTION**

<small>TIP NO.</small> U-6035	<small>SHEET NO.</small> PMP-1
<small>APPROVED</small> <i>William J. Hamilton</i> <small>ASSET ID: 4356007846484</small>	
<small>DATE:</small> 03/16/2022	
	
<small>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</small>	

**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:

<u>STD. NO.</u>	<u>TITLE</u>
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTILANE ROADWAYS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.14	PAVEMENT MARKINGS - ROUNDABOUTS
1250.01	SNOW PLOWABLE PAVEMENT MARKERS - INSTALLATION SPACING
1253.01	SNOW PLOWABLE PAVEMENT MARKERS - PERMANENT AND TEMPORARY

**INDEX**

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
PMP-1	PAVEMENT MARKING PLAN COVER SHEET AND PAVEMENT MARKING SCHEDULE
PMP-2	PAVEMENT MARKING DETAIL

**GENERAL NOTES**

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

- A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

<u>ROAD NAME</u>	<u>MARKING</u>	<u>MARKER</u>
SR 1002 (DUDLEY SHOALS RD)	THERMOPLASTIC	SNOW PLOWABLE
SR 1752 (PEACH ORCHARD RD)	THERMOPLASTIC	SNOW PLOWABLE
SR 1751 (CAMPGROUND RD)	THERMOPLASTIC	SNOW PLOWABLE
SR 1751 (GRACE CHAPEL RD)	THERMOPLASTIC	SNOW PLOWABLE

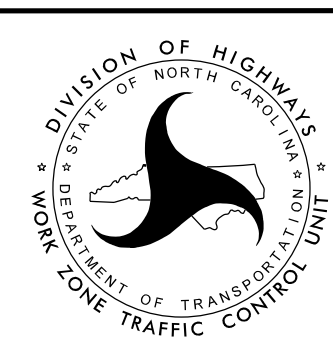
- B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.  
 C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.  
 D) STOP BAR LOCATION AT NON-SIGNALIZED INTERSECTIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.

**PAVEMENT MARKING SCHEDULE**

<u>SYMBOL</u>	<u>DESCRIPTION</u>
THERMOPLASTIC (4", 90 MILS)	
T1	WHITE EDGELINE
T10	YELLOW EDGELINE
T13	YELLOW DOUBLE CENTER
THERMOPLASTIC (8", 90 MILS)	
T40	WHITE GORELINE
THERMOPLASTIC (12", 90 MILS)	
T55	3 FT. - 3 FT./SP WHITE MINISKIP
THERMOPLASTIC PAVEMENT MARKING SYMBOLS (90 MILS)	
T103	24" YIELD LINE TRIANGLE

**PLAN SUBMITTED TO: N.C.D.O.T. HIGHWAY DIVISION II**


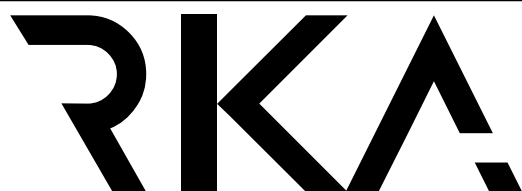
**RAMIE SHAW, P.E.** NCDOT PROJECT MANAGER  
**DESIREE HAGWOOD** NCDOT PROJECT ENGINEER

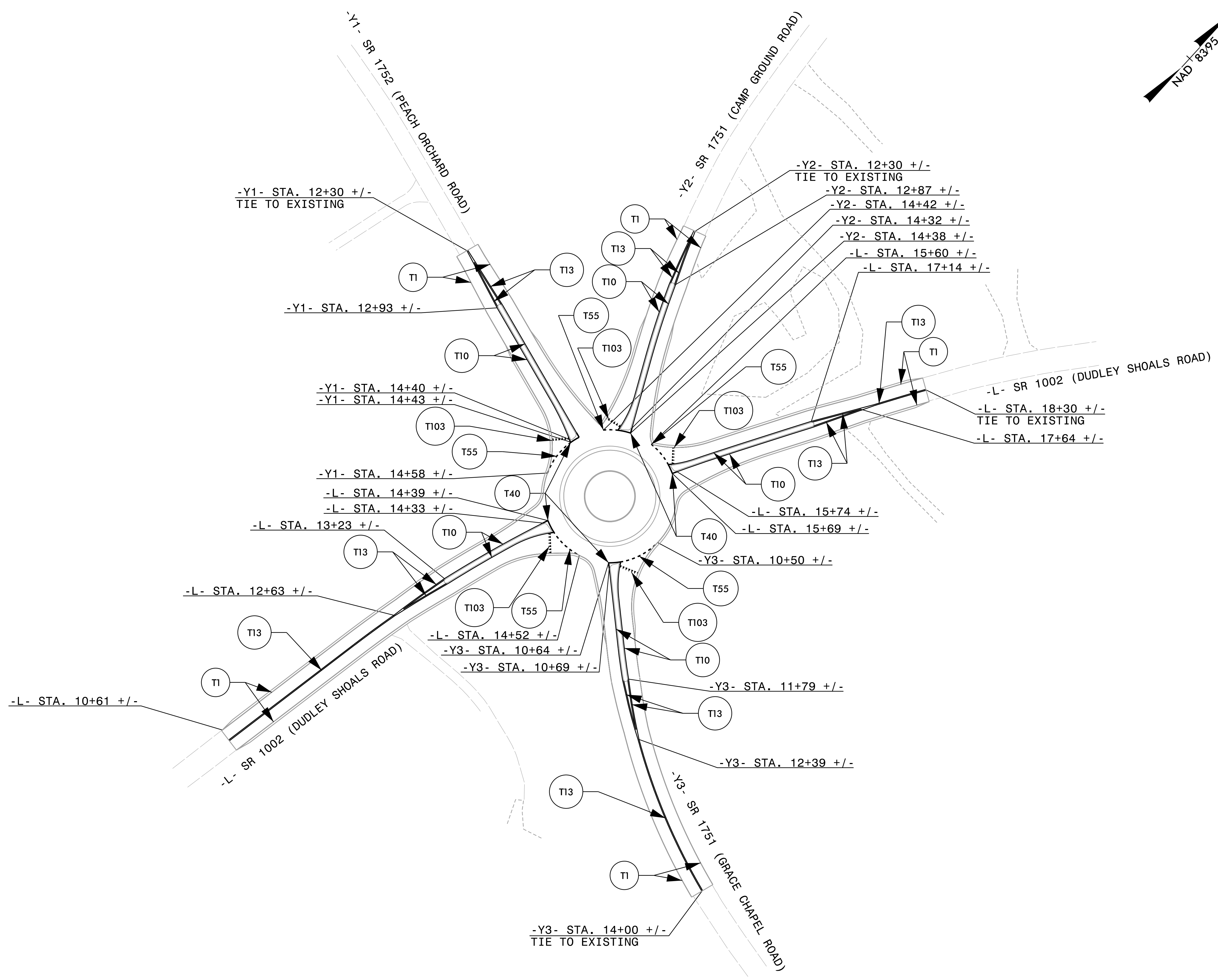
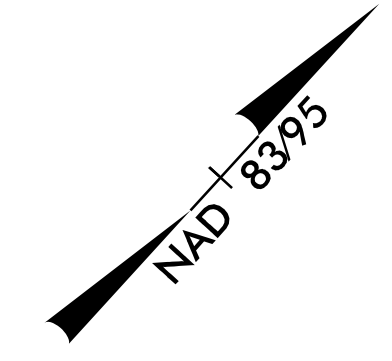


**PLANS PREPARED BY: Ramey Kemp Associates**

**W. JASON HAMILTON, P.E., PTOE** PROJECT MANAGER  
**TIMOTHY S. POPELKA, P.E.** PROJECT ENGINEER



TIP NO. U-6035	SHEET NO. PMP-2
APPROVED: <i>William J. Hamilton</i> <small>AS2600704848484...</small>	
DATE: 03/16/2022	
SEAL 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 <b>RAMEY KEMP ASSOCIATES</b> <small>5808 Faringdon Place Raleigh, North Carolina 27609 Phone: 919-872-5115</small> <small>NC License No. C-0910 www.rameykemp.com</small>	



3/2/2022 11:00:36 AM TC\_pmp02.dgn  
User: tpope@rka

# PAVEMENT MARKING DETAIL



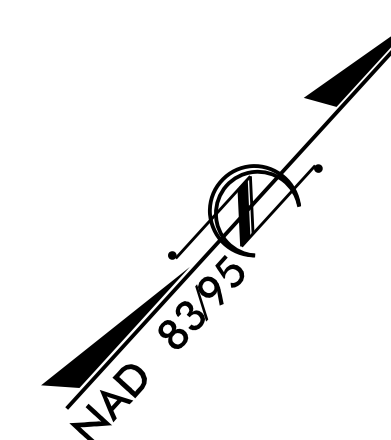
**TIP PROJECT: U-6035**

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

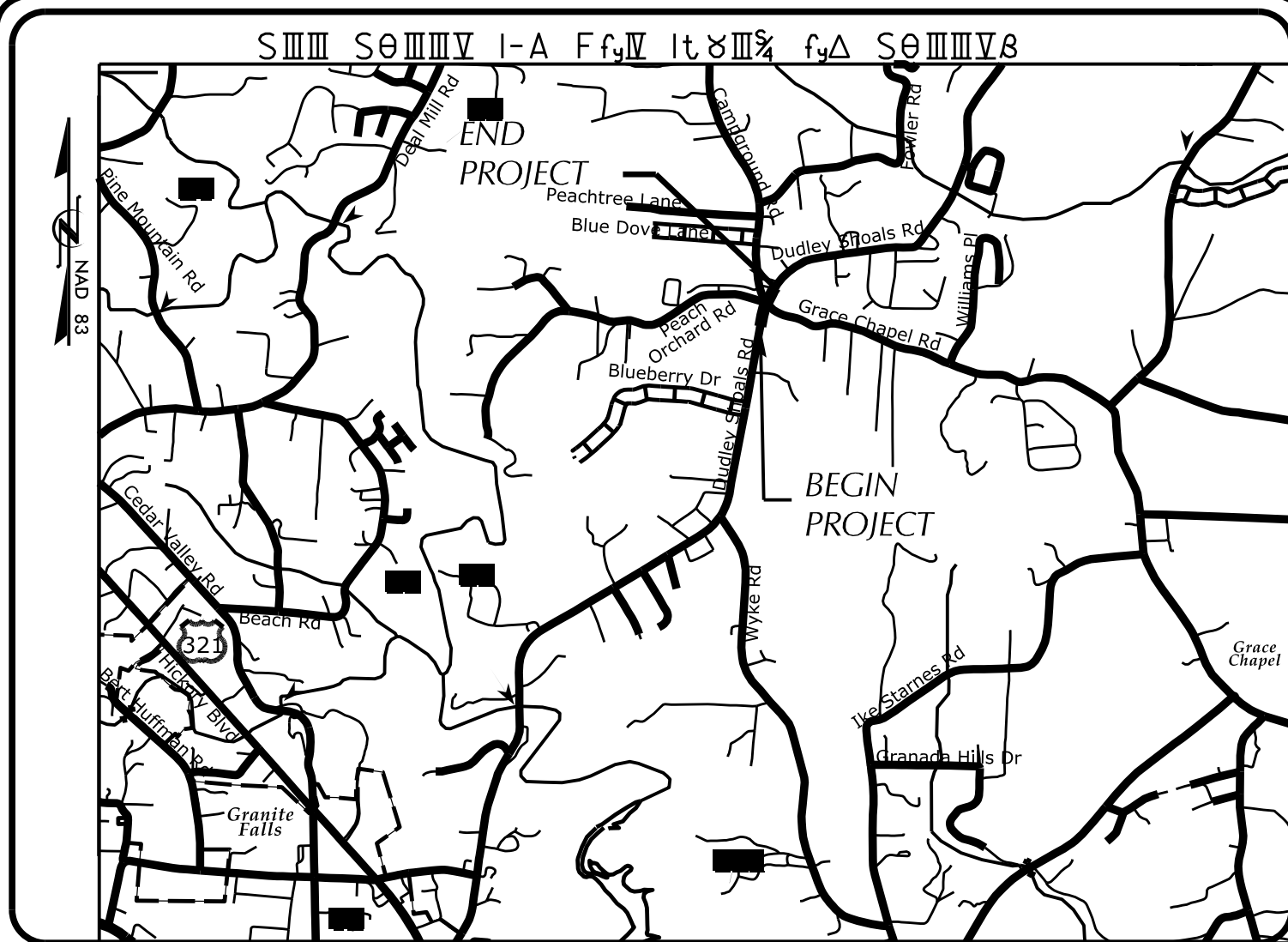
PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL  
**CALDWELL COUNTY**

**LOCATION: DUDLEY SHOALS ROAD - SR 1002 (DUDLEY SHOALS RD),  
SR 1752 (PEACH ORCHARD RD), AND SR 1751 (CAMPGROUND RD/  
GRACE CHAPEL RD) INTERSECTION**

**TYPE OF WORK: GRADING, DRAINAGE, AND PAVING**

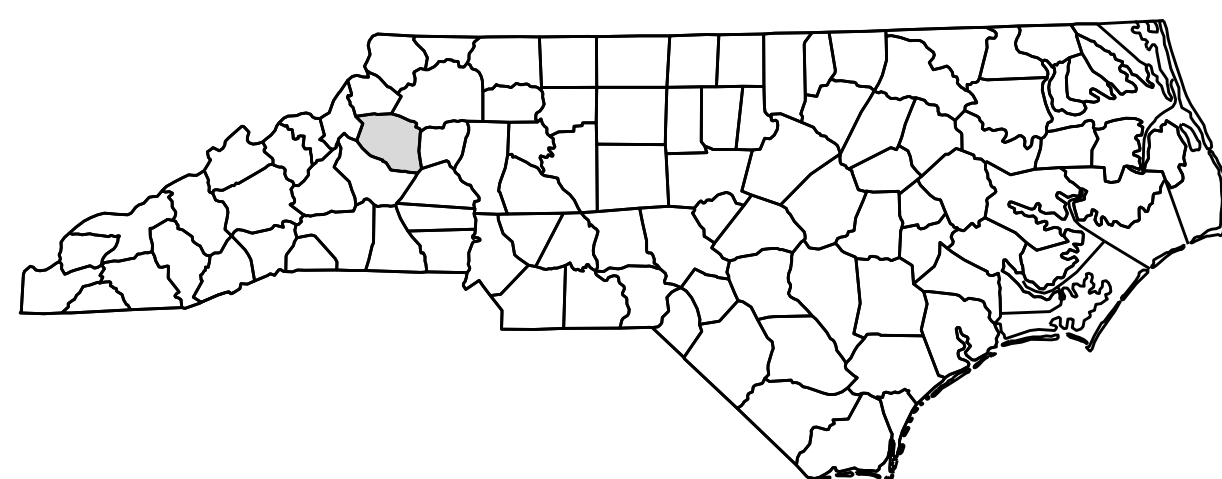


STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6035	EC-1	6
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	



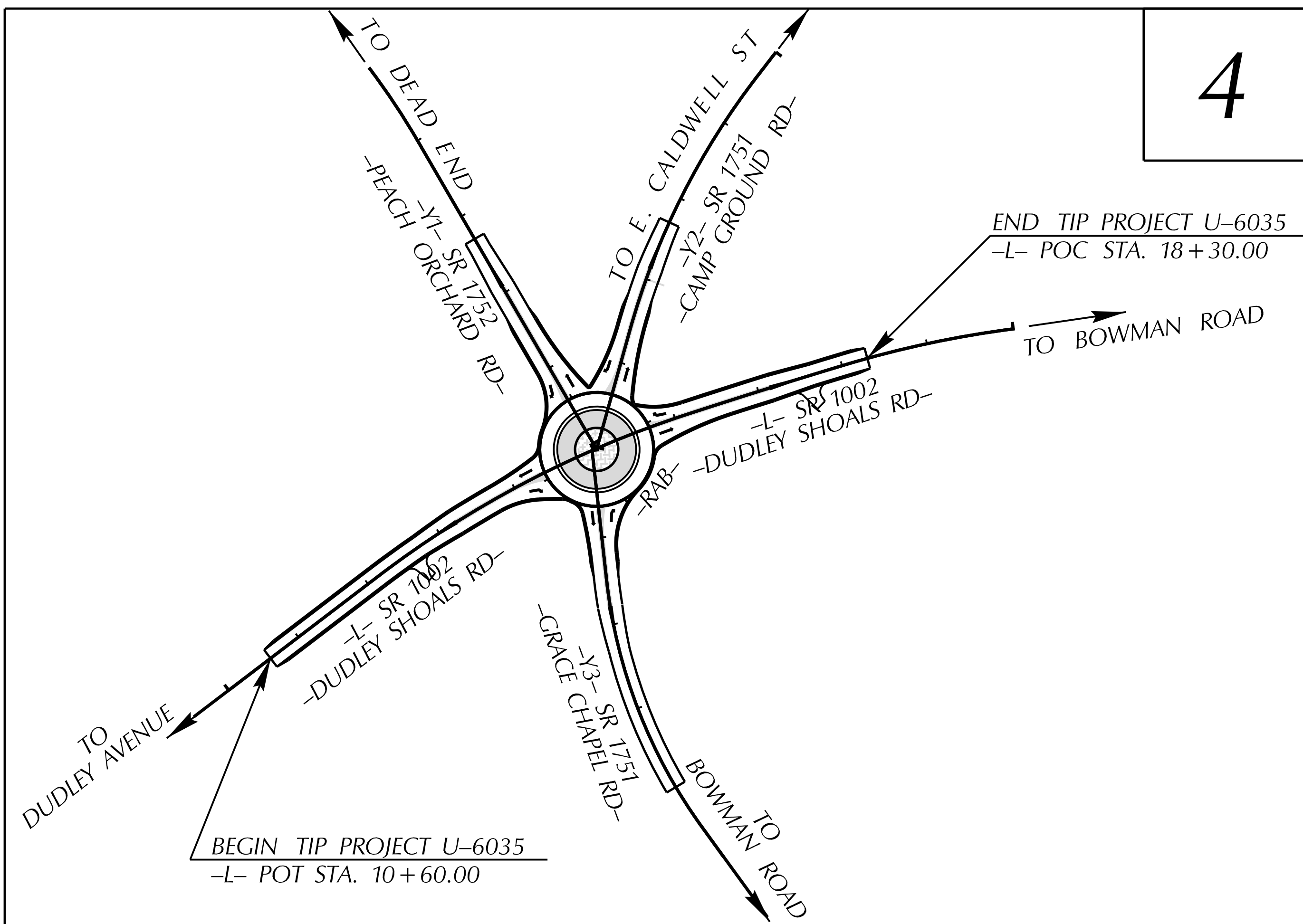
**VICINITY MAP**

NOT TO SCALE



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

CLEARING ON THIS PROJECT SHALL BE PERFORMED  
TO THE LIMITS ESTABLISHED BY METHOD II  
THIS PROJECT IS NOT LOCATED WITHIN ANY  
MUNICIPAL BOUNDARY



**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	TSF
1606.01	Special Sediment Control Fence	SSCF
1622.01	Temporary Berms and Slope Drains	TBSD
1630.02	Silt Basin Type B	SBS
1633.01	Temporary Rock Silt Check Type-A	TRSCA
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	TRSCA-PAM
1633.02	Temporary Rock Silt Check Type-B	TRSCB
	Wattle Coir Fiber Wattle	WCFW
	Wattle Coir Fiber Wattle with Polyacrylamide (PAM)	WCFW-PAM
1634.01	Temporary Rock Sediment Dam Type-A	TRSDA
1634.02	Temporary Rock Sediment Dam Type-B	TRSDB
1635.01	Rock Pipe Inlet Sediment Trap Type-A	RPISTRA
1635.02	Rock Pipe Inlet Sediment Trap Type-B	RPISTRB
1630.04	Stilling Basin	SB
1630.06	Special Stilling Basin	SSB
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	SB
	Tiered Skimmer Basin	TSB
	Infiltration Basin	IB

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

**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.

**N|V|5**

NV5 ENGINEERS & CONSULTANTS, INC.  
7500 E. INDEPENDENCE BLVD, STE 100  
CHARLOTTE, NC 28227  
P: 704.537.7300 www.NV5.com  
NC License # F-1333  
formerly CALYX Engineers & Consultants

Prepared in the Office of:

**NV5**

7500 E. INDEPENDENCE BLVD., STE 100  
CHARLOTTE, NC 28227

Designed by:

Will J. Weathersbee  
NAME

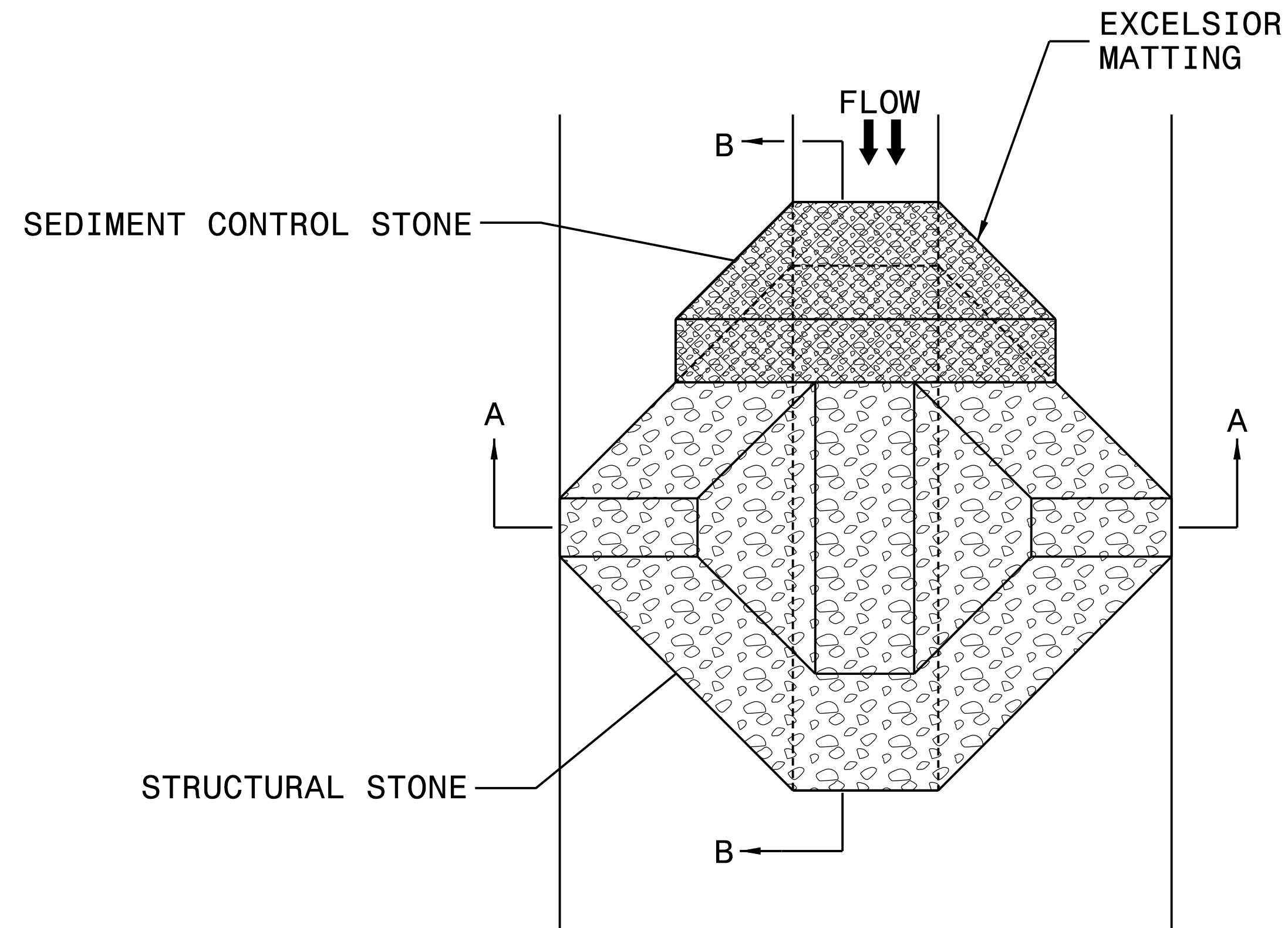
3161  
LEVEL III CERTIFICATION NO.

**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 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

- 1605.01 Temporary Silt Fence
- 1606.01 Special Sediment Control Fence
- 1607.01 Gravel Construction Entrance
- 1622.01 Temporary Berms and Slope Drains
- 1631.01 Matting Installation
- 1633.01 Temporary Rock Silt Check Type A
- 1635.02 Rock Pipe Inlet Sediment Trap Type B

# TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)



PLAN

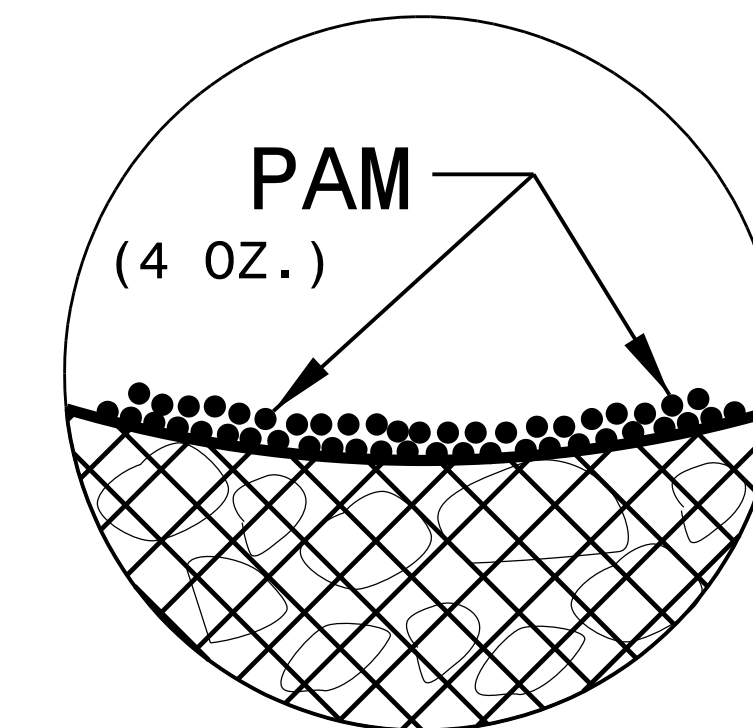
**NOTES:**

INSTALL TEMPORARY ROCK SILT CHECK TYPE A IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1633.01.

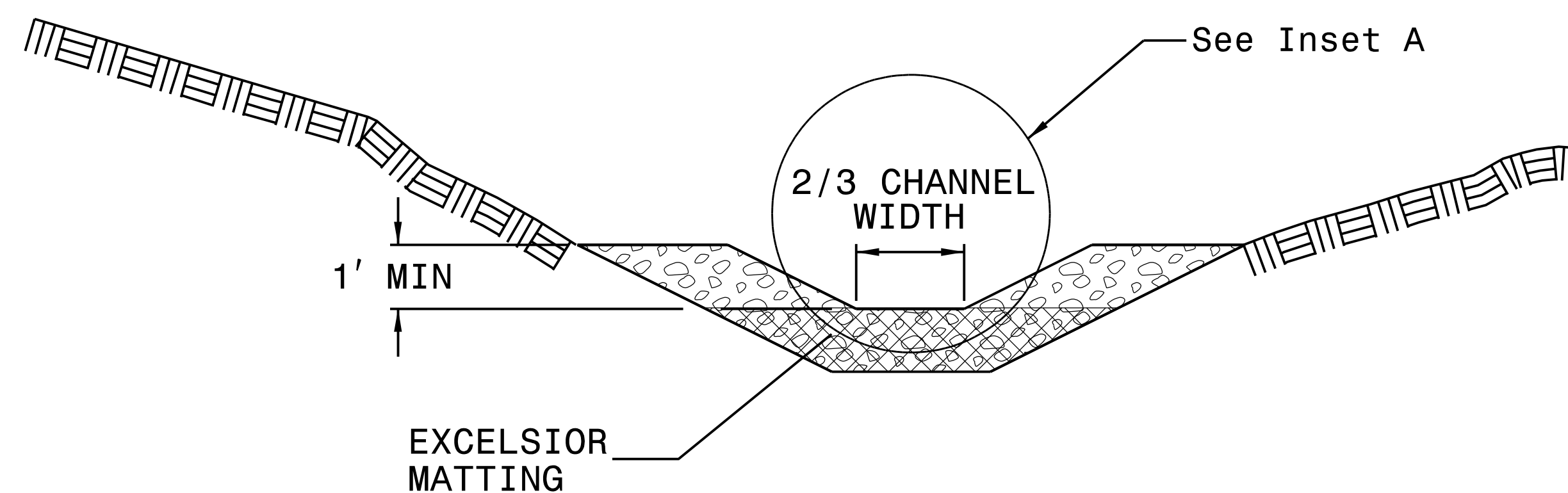
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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 ROCK SILT CHECK.

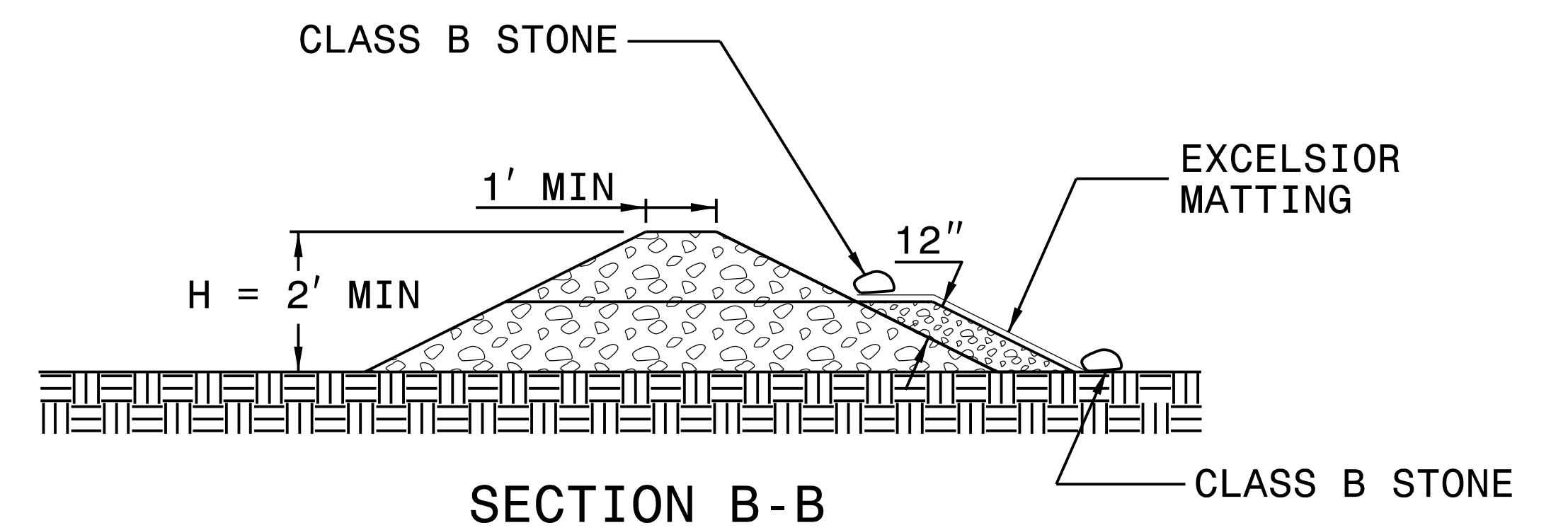
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION A-A

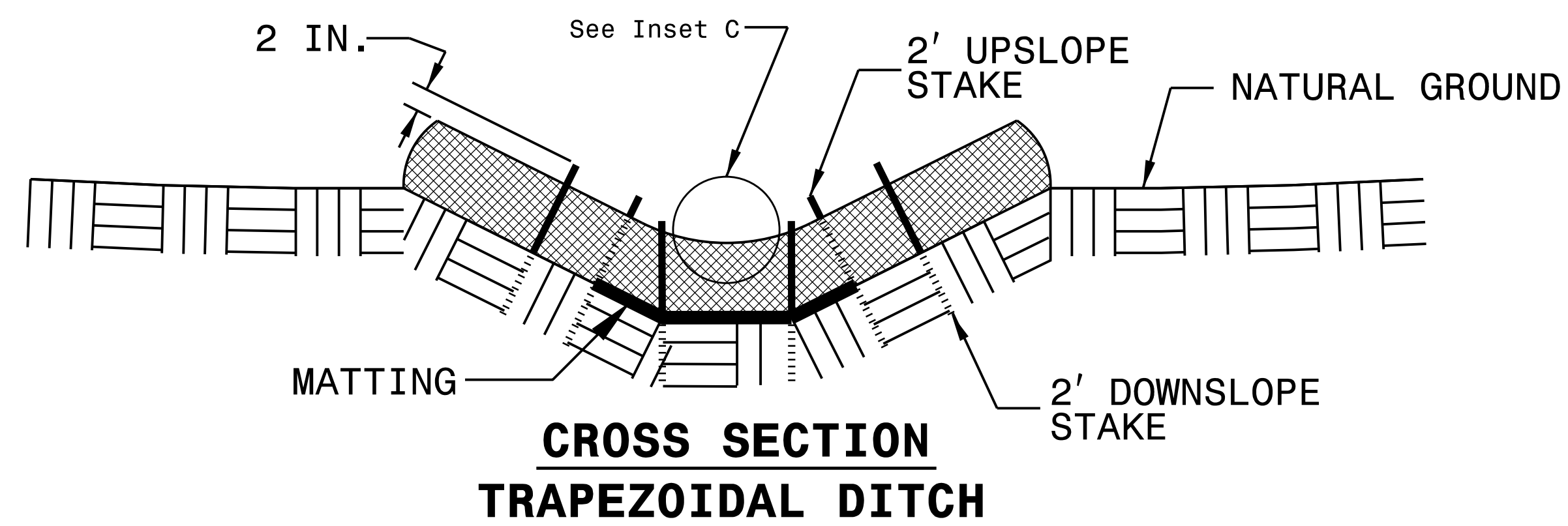
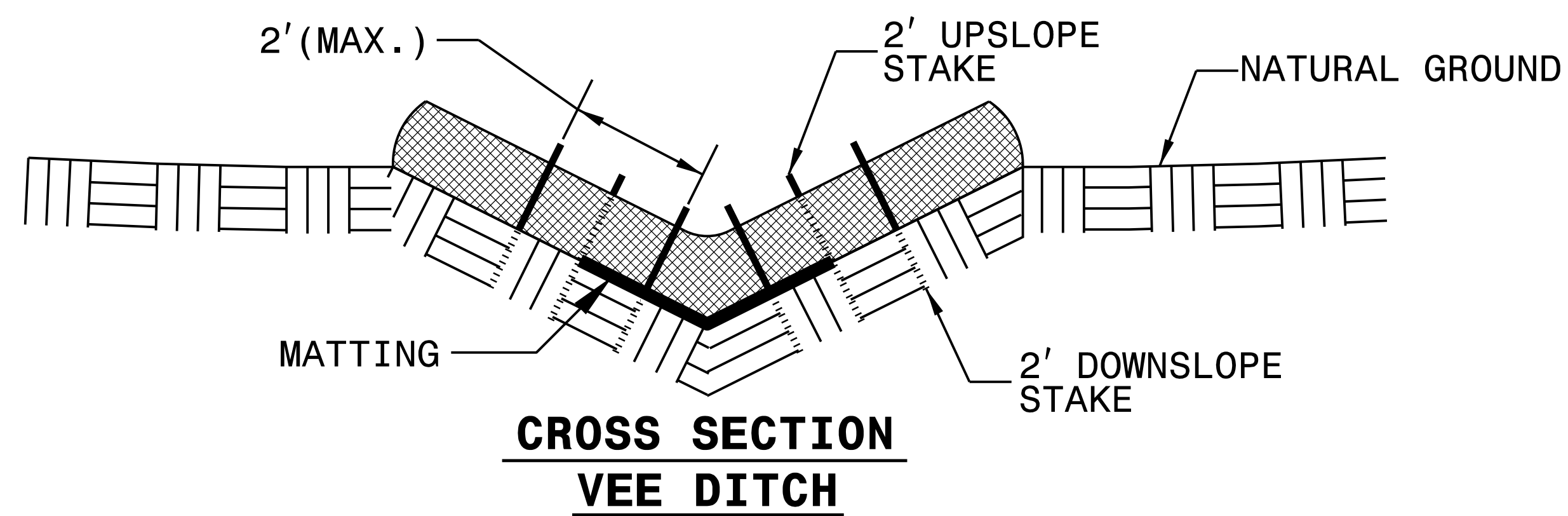
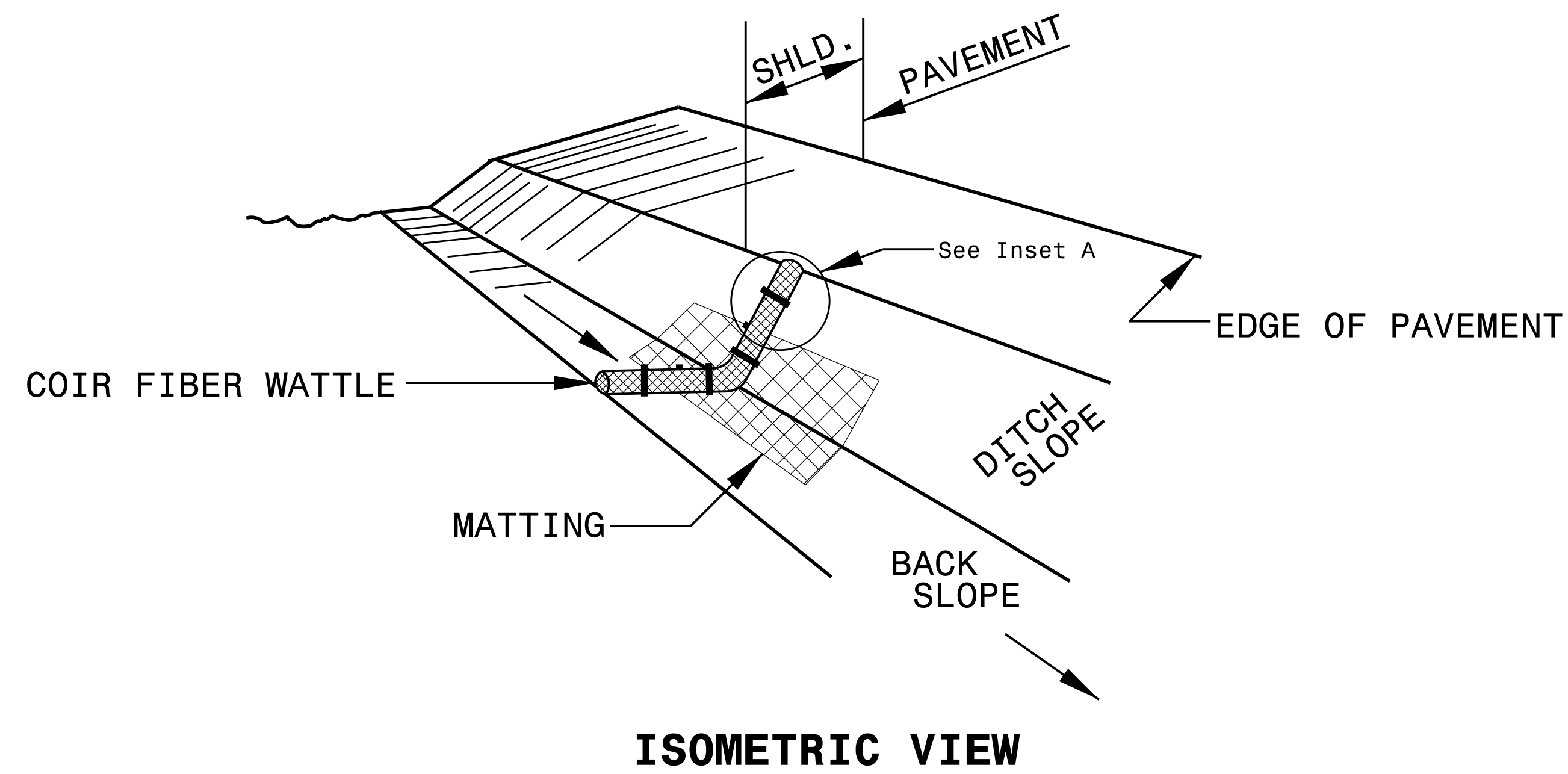


SECTION B-B

NOT TO SCALE



# COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



**NOTES:**

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) 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.

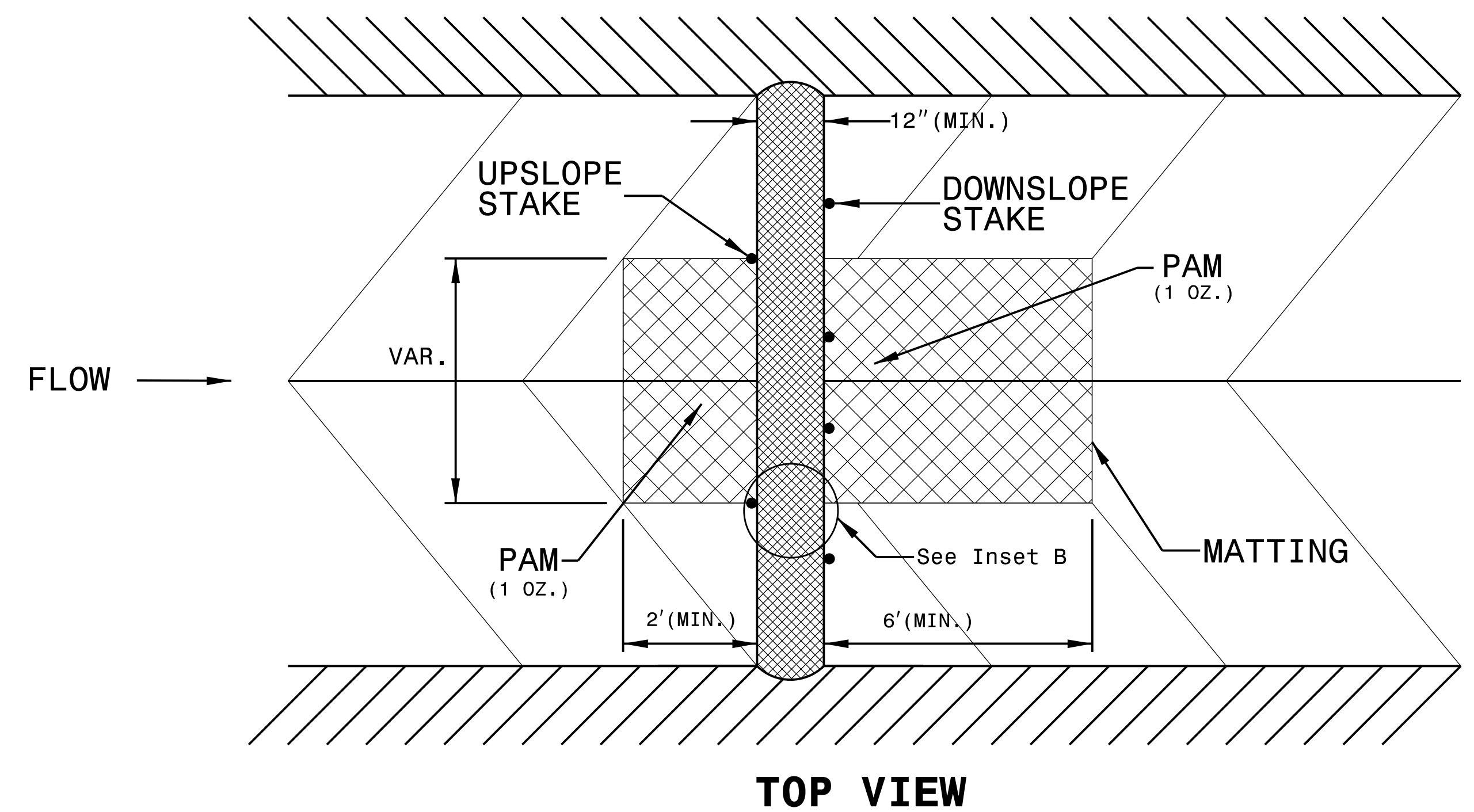
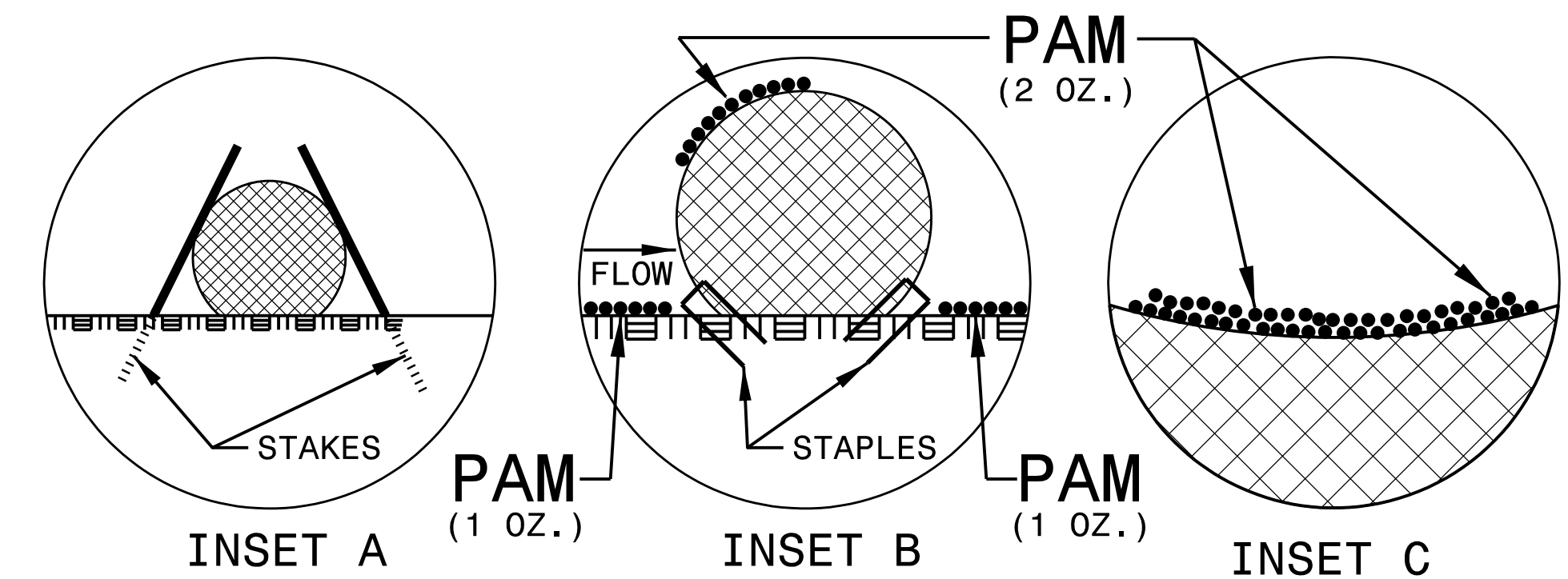
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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 EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

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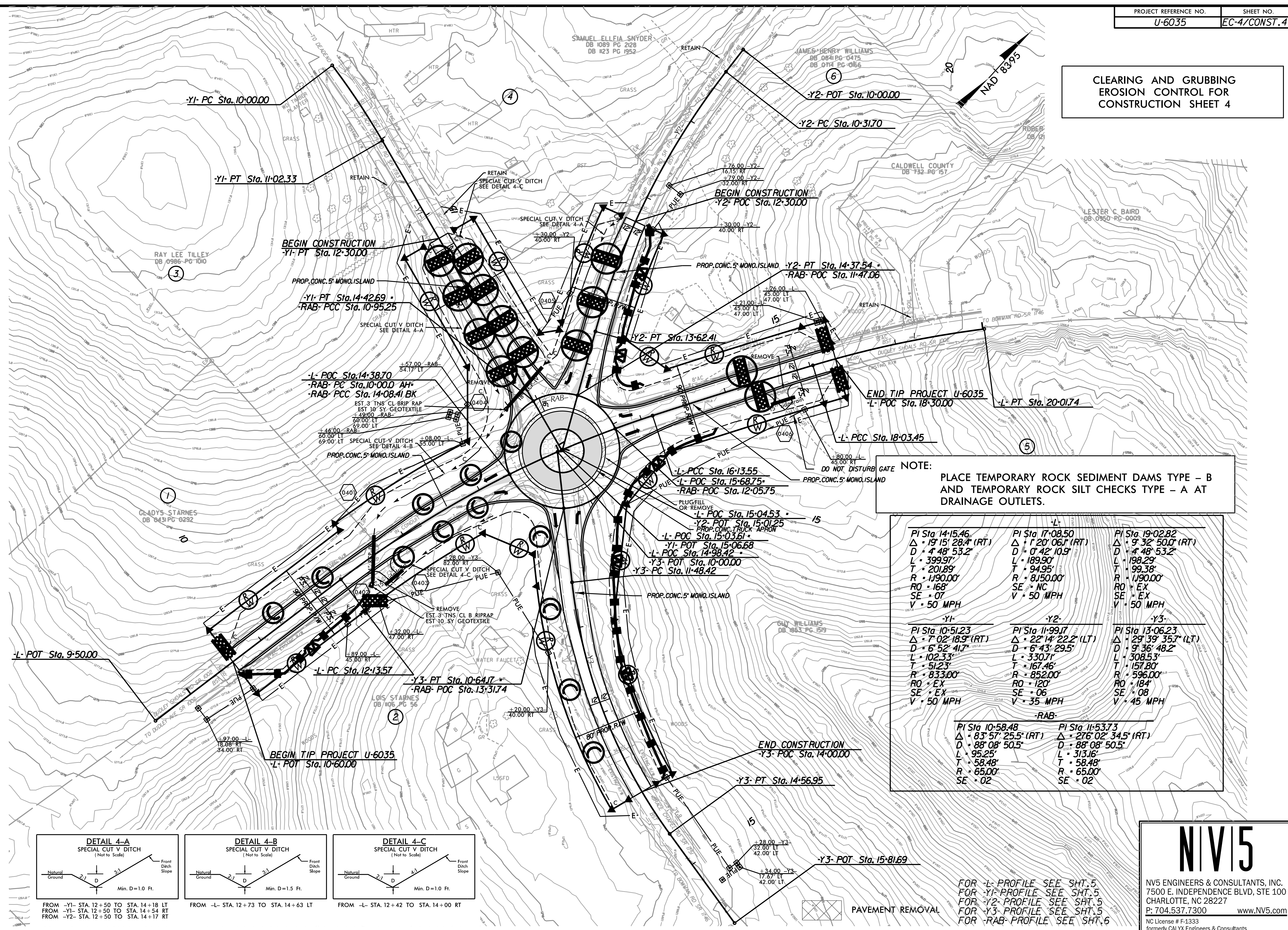
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## ***SOIL STABILIZATION TIMEFRAMES***

<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.

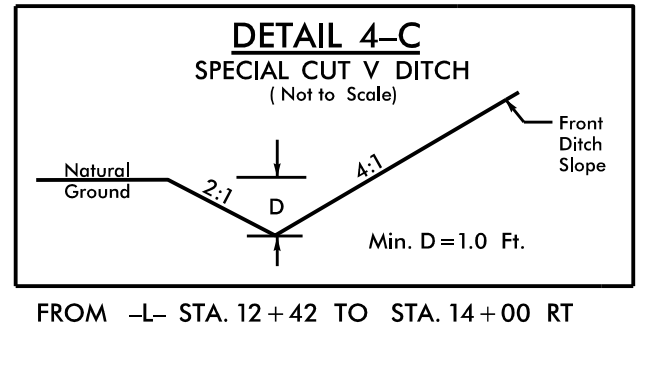
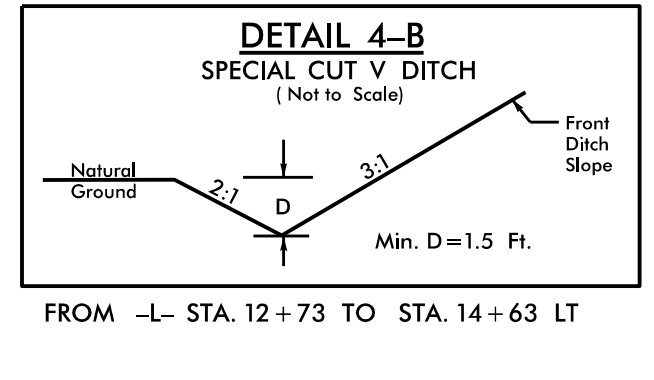
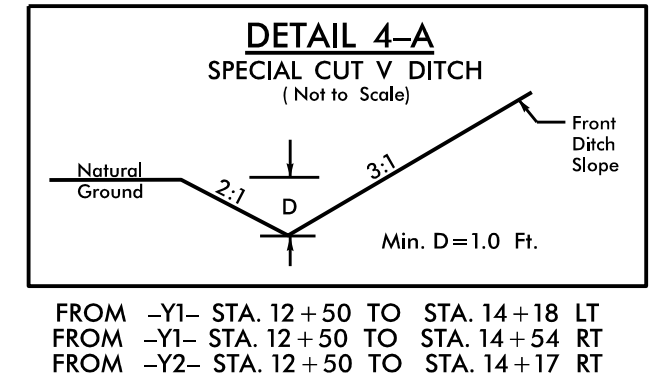


CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 4



NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

-L-		
PI Sta 14-15.46 Δ = 19' 15" 28.4" (RT) D = 4' 48" 53.2" L = 399.97' T = 201.89' R = 1190.00' RO = 168' SE = 07 V = 50 MPH	PI Sta 17-08.50 Δ = 1' 20" 06.1" (RT) D = 0' 42" 10.9" L = 189.90' T = 94.95' R = 8150.00' SE = NC V = 50 MPH	PI Sta 19-02.82 Δ = 9' 32" 50.0" (RT) D = 4' 48" 53.2" L = 198.29' T = 99.38' R = 1190.00' RO = EX SE = EX V = 50 MPH
-Y1-		
PI Sta 10-51.23 Δ = 7' 02" 18.9" (RT) D = 6' 52" 41.7" L = 102.33' T = 51.23' R = 833.00' RO = EX SE = EX V = 50 MPH	-Y2-	PI Sta 13-06.23 Δ = 29' 39" 35.7" (LT) D = 9' 36" 48.2" L = 308.53' T = 157.80' R = 852.00' RO = 184' SE = 06 V = 35 MPH
-Y2-		
PI Sta 11-99.17 Δ = 22' 14" 22.2" (LT) D = 6' 43" 29.5" L = 330.71' T = 167.46' R = 852.00' RO = 120' SE = 06 V = 35 MPH	-Y3-	PI Sta 11-53.73 Δ = 276' 02" 34.5" (RT) D = 88' 08" 50.5" L = 313.16' T = 58.48' R = 65.00' SE = 02
-RAB-		
PI Sta 10-58.48 Δ = 83' 57" 25.5" (RT) D = 88' 08" 50.5" L = 95.25' T = 58.48' R = 65.00' SE = 02	PI Sta 11-53.73 Δ = 276' 02" 34.5" (RT) D = 88' 08" 50.5" L = 313.16' T = 58.48' R = 65.00' SE = 02	



FOR -L- PROFILE SEE SHT. 5  
FOR -Y1- PROFILE SEE SHT. 5  
FOR -Y2- PROFILE SEE SHT. 5  
FOR -Y3- PROFILE SEE SHT. 5  
FOR -RAB- PROFILE SEE SHT. 6

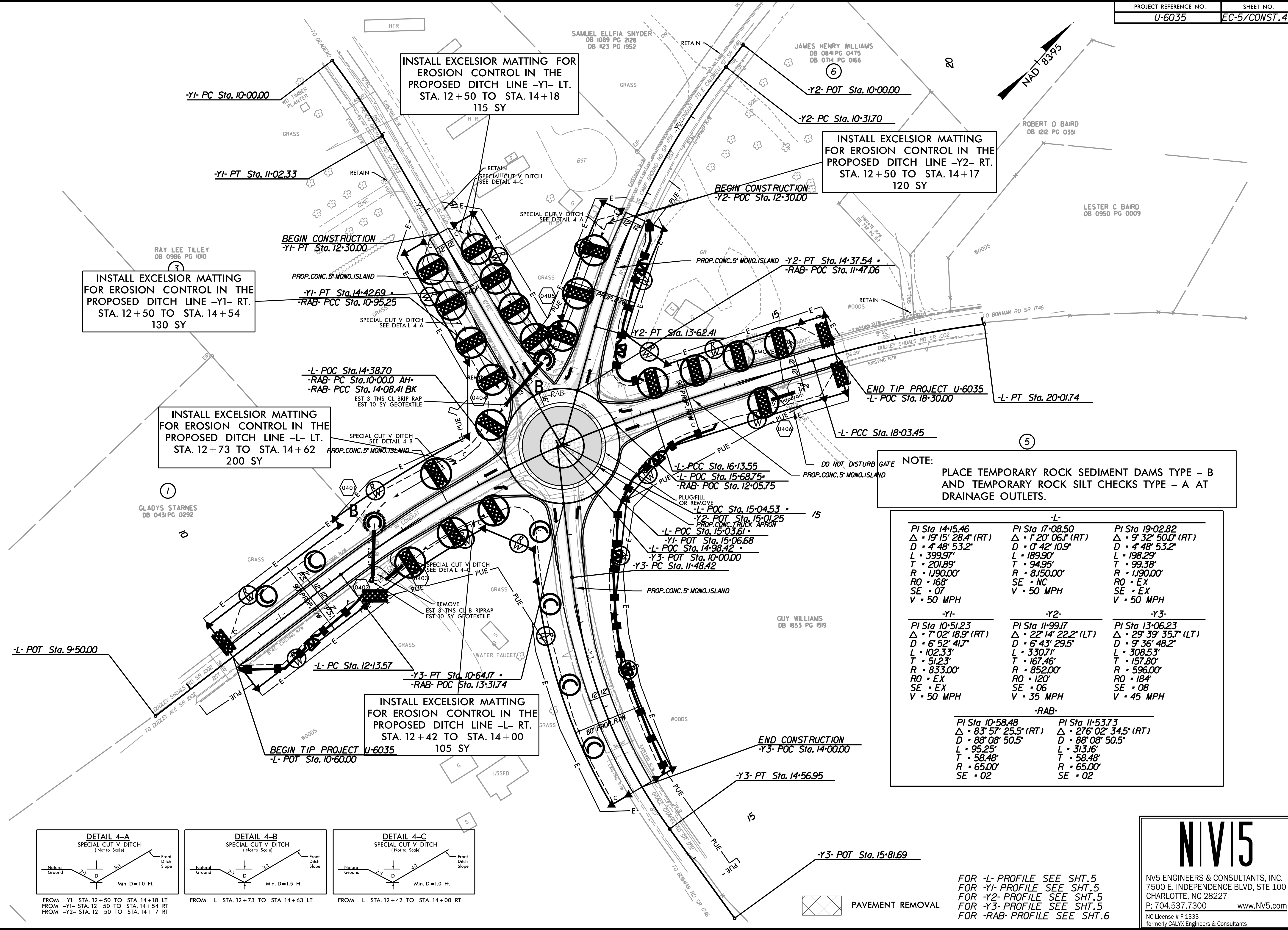
**NV5**

NV5 ENGINEERS & CONSULTANTS, INC.  
7500 E. INDEPENDENCE BLVD, STE 100  
CHARLOTTE, NC 28227  
P: 704.537.7300 www.NV5.com  
NC License # F-1333  
formerly CALYX Engineers & Consultants

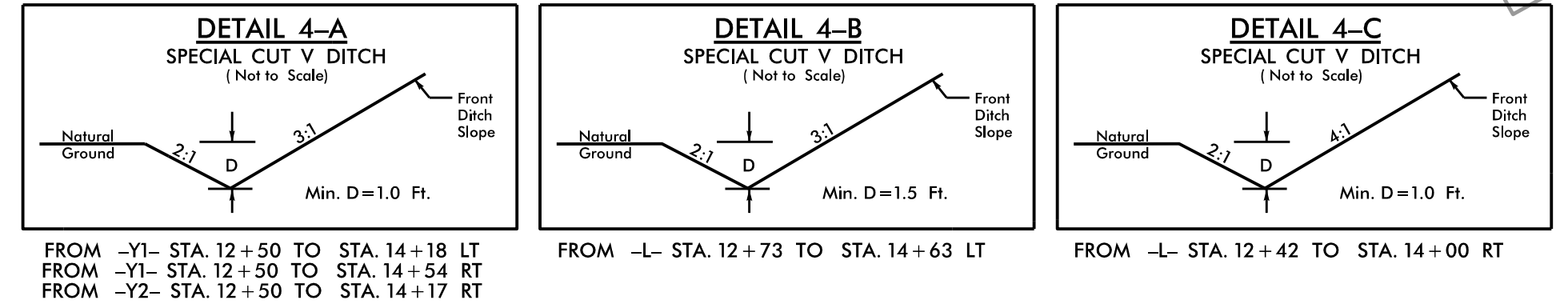
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8/17/99  
10/30/2023  
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J:\Projects\U6035\_EC\_05\_F.incl.dgn



-L-		
PI Sta 14+15.46 Δ • 19' 15" 28.4" (RT) D • 4' 48" 53.2" L • 399.97' T • 201.89' R • 1,190.00' RO • 168" SE • 07 V • 50 MPH	PI Sta 17-08.50 Δ • 1' 20" 06.1" (RT) D • 0' 42" 10.9" L • 189.90' T • 94.95' R • 8,150.00' SE • NC V • 50 MPH	PI Sta 19-02.82 Δ • 9' 32" 50.0" (RT) D • 4' 48" 53.2" L • 198.29' T • 99.38' R • 1,190.00' RO • EX SE • EX V • 50 MPH
-Y1-		
PI Sta 10-51.23 Δ • 7' 02" 18.9" (RT) D • 6' 52" 41.7" L • 102.33' T • 51.23' R • 833.00' RO • EX SE • EX V • 50 MPH	-Y2-	
	PI Sta 11-99.17 Δ • 22' 14" 22.2" (LT) D • 6' 43" 29.5" L • 330.71' T • 167.46' R • 852.00' RO • 120' SE • 06 V • 35 MPH	PI Sta 13-06.23 Δ • 29' 39" 35.7" (LT) D • 9' 36" 48.2" L • 308.53' T • 157.80' R • 596.00' RO • 184' SE • 08 V • 45 MPH
-RAB-		
PI Sta 10-58.48 Δ • 83' 57" 25.5" (RT) D • 88' 08" 50.5" L • 95.25' T • 58.48' R • 65.00' SE • 02	PI Sta 11-53.73 Δ • 276' 02" 34.5" (RT) D • 88' 08" 50.5" L • 313.16' T • 58.48' R • 65.00' SE • 02	



FOR -L- PROFILE SEE SHT. 5  
FOR -Y1- PROFILE SEE SHT. 5  
FOR -Y2- PROFILE SEE SHT. 5  
FOR -Y3- PROFILE SEE SHT. 5  
FOR -RAB- PROFILE SEE SHT. 6

**NIV5**

NV5 ENGINEERS & CONSULTANTS, INC.  
7500 E. INDEPENDENCE BLVD, STE 100  
CHARLOTTE, NC 28227  
P: 704.537.7300 www.NV5.com  
NC License # F-1333  
formerly CALYX Engineers & Consultants




**T.I.P.: U-6035**

**CONTRACT:**

**STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN  
CALDWELL COUNTY**

**LOCATION: DUDLEY SHOALS ROAD - SR 1002 (DUDLEY SHOALS RD),  
SR 1752 (PEACH ORCHARD RD), AND SR 1751 (CAMPGROUND RD/  
GRACE CHAPEL RD) INTERSECTION**

<b>TIP NO.</b> U-6035	<b>SHEET NO.</b> SIGN-1
Approved by: <u>William J. Hamilton</u> <small>AD560070468484</small> DATE: 03/16/2022	
	
<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 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

<u>STD. NO.</u>	<u>TITLE</u>
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS

**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 SIGNS SHALL BE GRADE C REFLECTIVE SHEETING.
- . SEE ROADWAY PLANS FOR GUARD/GUIDE RAIL DETAILS.


**SUMMARY OF QUANTITIES**

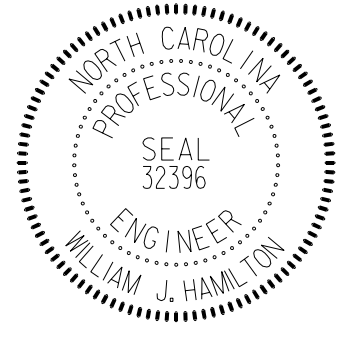
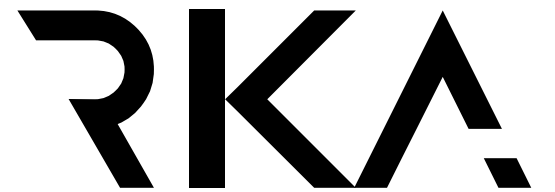
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DESC. NO.	SECT. NO.		
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4102000000	904	40	EA.
4155000000	907	9	EA.

**INDEX**

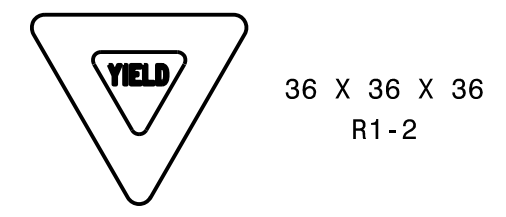
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SIGN-1	TITLE SHEET
SIGN-2	TYPE E SIGNS
SIGN-3	EXISTING SIGNS
SIGN-4	PROPOSED SIGNS

<b>PLAN SUBMITTED TO: N.C.D.O.T. HIGHWAY DIVISION II</b>		
<u>RAMIE SHAW, P.E.</u>	NCDOT PROJECT MANAGER	
<u>DESIREE HAGWOOD</u>	NCDOT PROJECT ENGINEER	

<b>PLAN PREPARED BY: Ramey Kemp Associates</b>		 <b>RAMEY KEMP ASSOCIATES</b> <small>5808 Faringdon Place Raleigh, North Carolina 27609 Phone: 919-872-5115</small>
<u>W. JASON HAMILTON, P.E., PTOE</u>	PROJECT MANAGER	
<u>TIMOTHY S. POPELKA, P.E.</u>	PROJECT ENGINEER	

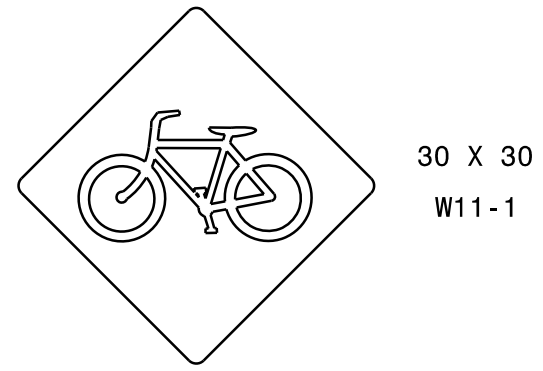
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DocuSigned by: APPROVED: <i>William J. Hamilton</i> <small>30562704848484</small>	
DATE: 03/16/2022	
SEAL	
	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	
	
<b>RAMEY KEMP ASSOCIATES</b> <small>5808 Faringdon Place Raleigh, North Carolina 27609 Phone: 919-872-5115</small> <small>NC License No. C-0910 www.rameykemp.com</small>	

401 QUANTITY REQ'D 10



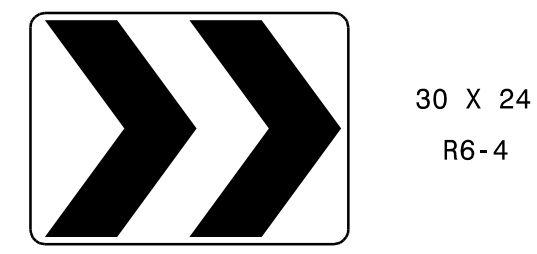
ONE "U" POST PER SIGN

406 QUANTITY REQ'D 1



ONE "U" POST PER SIGN

402 QUANTITY REQ'D 5



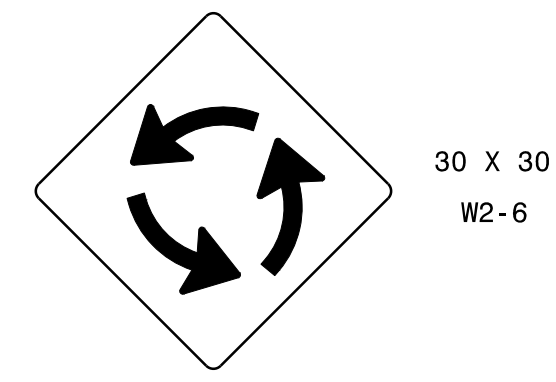
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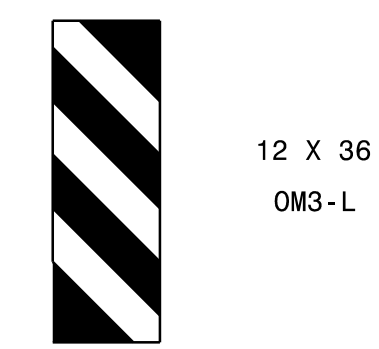
MOUNT BELOW SIGN 406  
IN 1 INSTALLATION

403 QUANTITY REQ'D 5



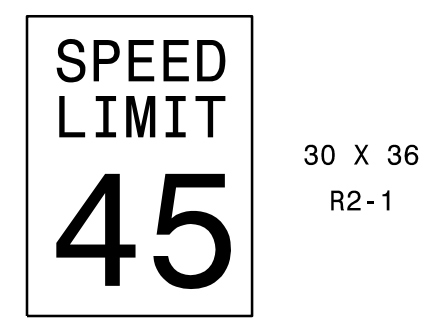
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408 QUANTITY REQ'D 5



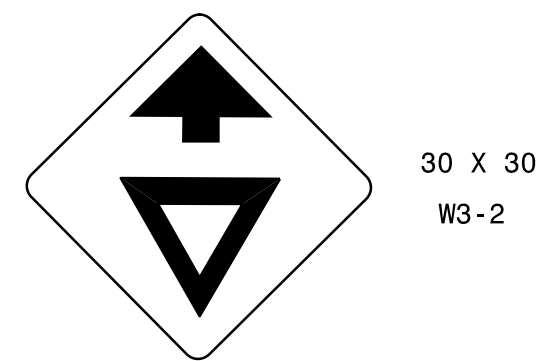
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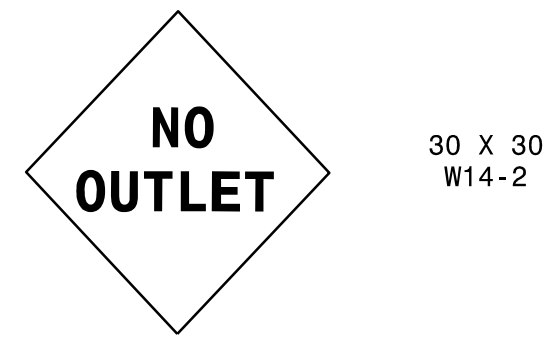
ONE "U" POST PER SIGN

409 QUANTITY REQ'D 5



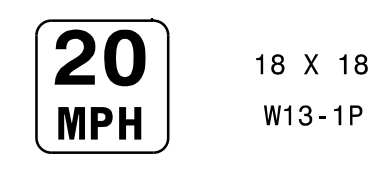
ONE "U" POST PER SIGN

405 QUANTITY REQ'D 1



ONE "U" POST PER SIGN

410 QUANTITY REQ'D 5


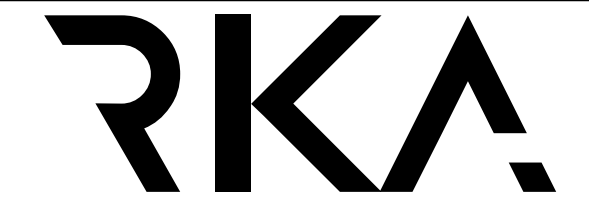


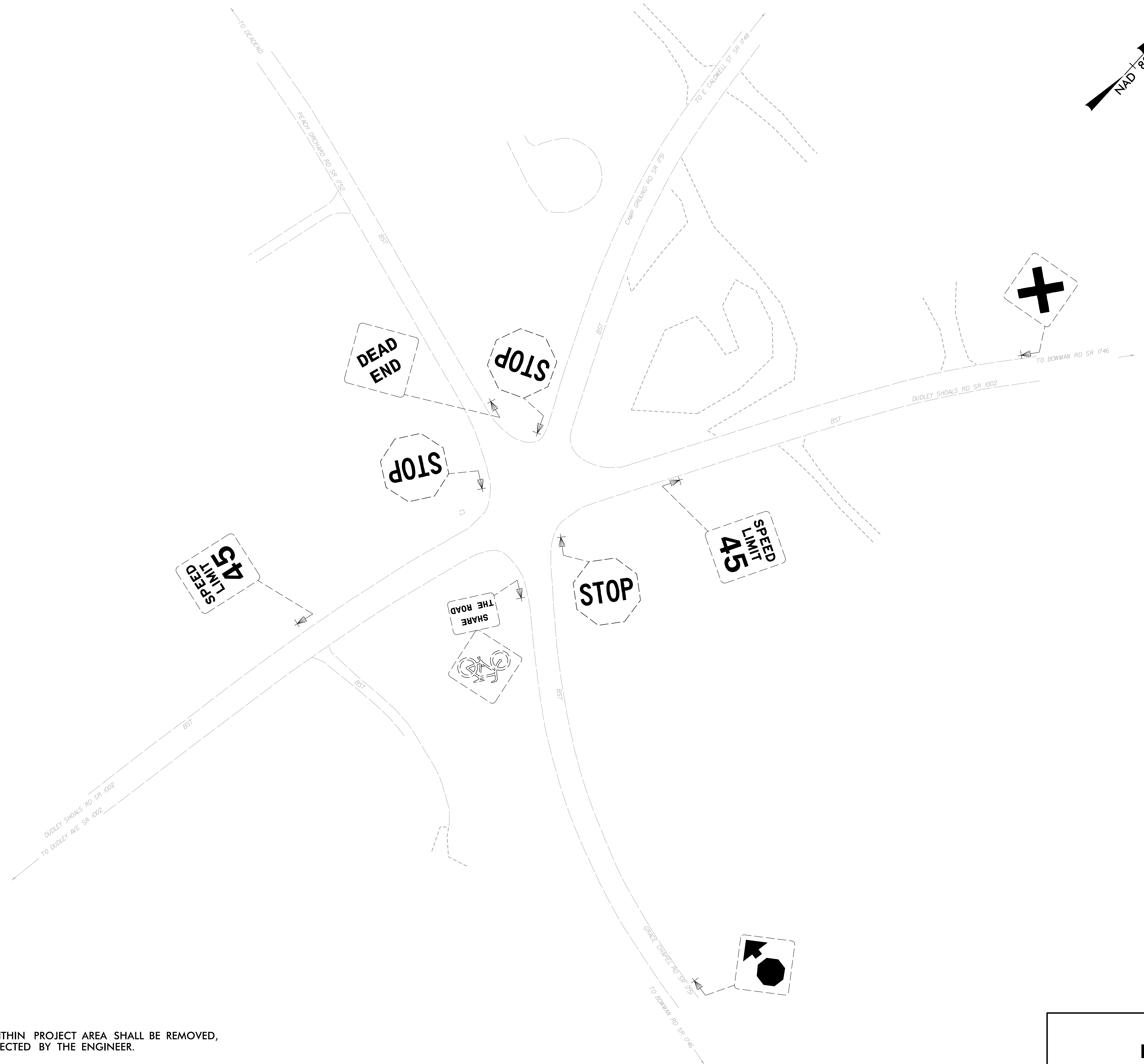
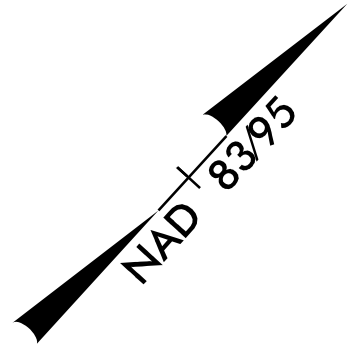
MOUNT BELOW SIGN 403  
IN 5 INSTALLATIONS

TYPE "E" SIGNS

3/21/2022 2:50:00 PM J:\6035\_Sgn\_Sign02.dgn  
User: fpopelka



TIP NO. U-6035	SHEET NO. SIGN-3
APPROVED: <i>William J. Hamilton</i> <small>AS25007468484...</small>	
DATE: 03/16/2022	
SEAL 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 <b>RAMEY KEMP ASSOCIATES</b> <small>5808 Faringdon Place Raleigh, North Carolina 27609 Phone: 919-872-5115</small> <small>NC License No. C-0910 www.rameykemp.com</small>	


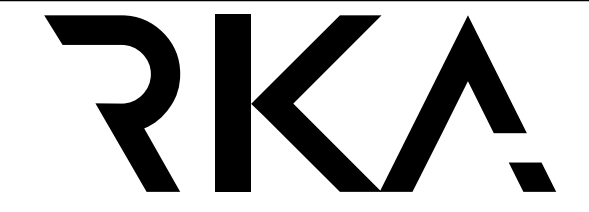


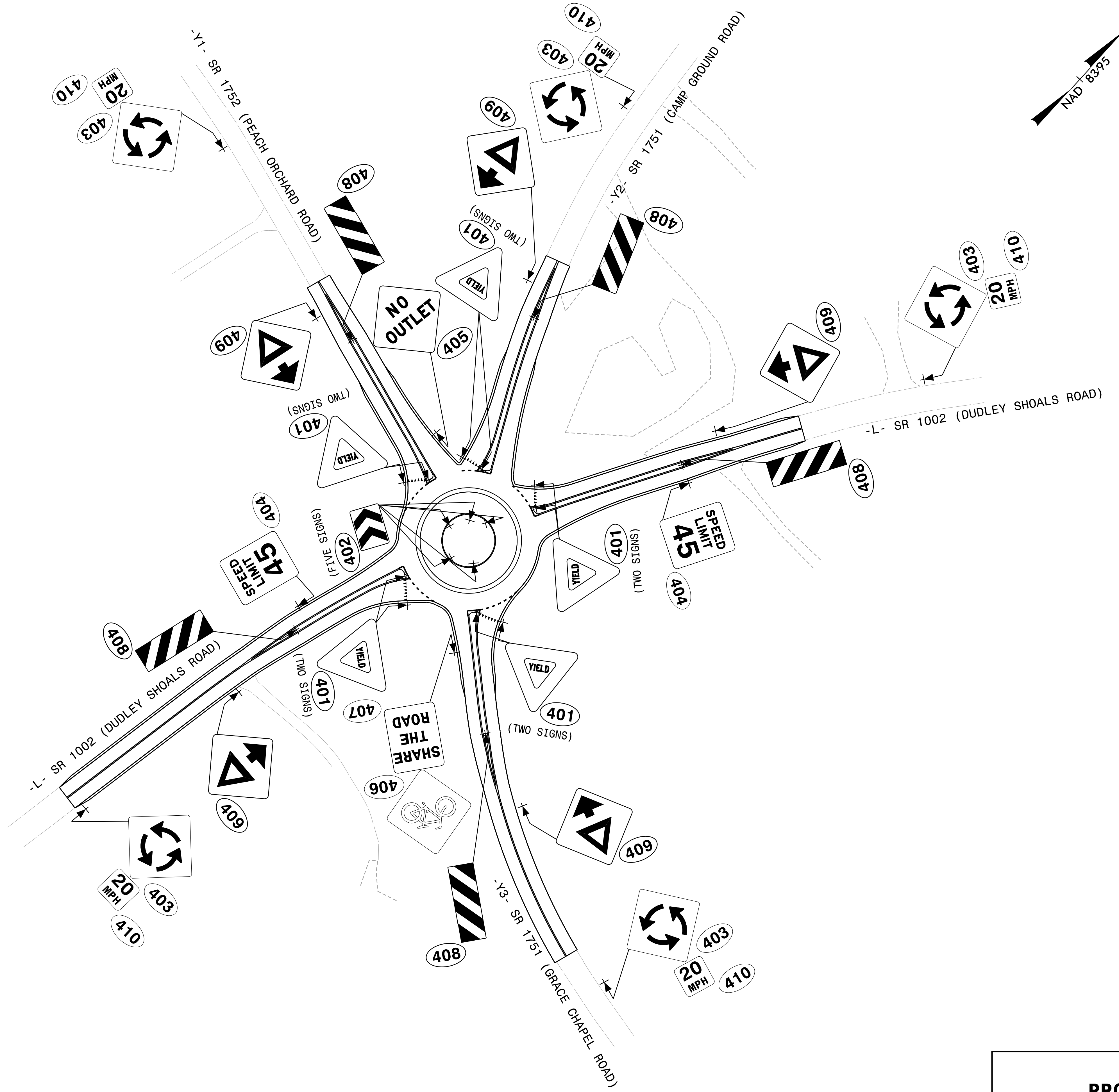
NOTE:

1. ALL EXISTING SIGNS WITHIN PROJECT AREA SHALL BE REMOVED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

**EXISTING SIGNS**

3/21/2022  
User: tpoep@kca

TIP NO.	SHEET NO.
U-6035	SIGN-4
APPROVED: <i>William J. Hamilton</i> <small>AS0007046484</small>	
DATE: 03/16/2022	
SEAL	
	
<p><b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b></p>	
 <p><b>RAMEY KEMP ASSOCIATES</b> 5808 Faringdon Place Raleigh, North Carolina 27609 Phone: 919-872-5115 NC License No. C-0910 www.rameykemp.com</p>	



**PROPOSED SIGNS**

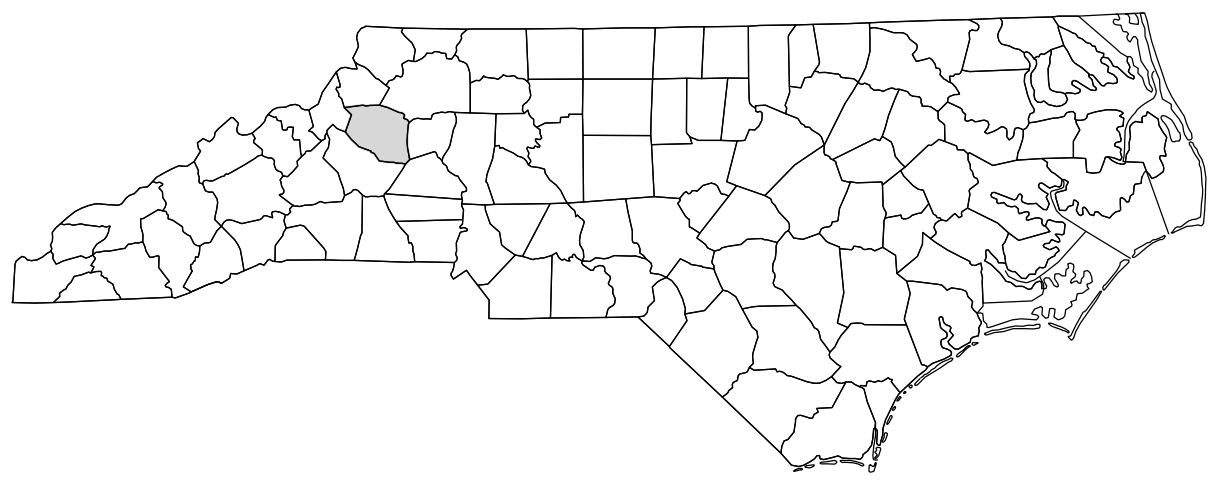
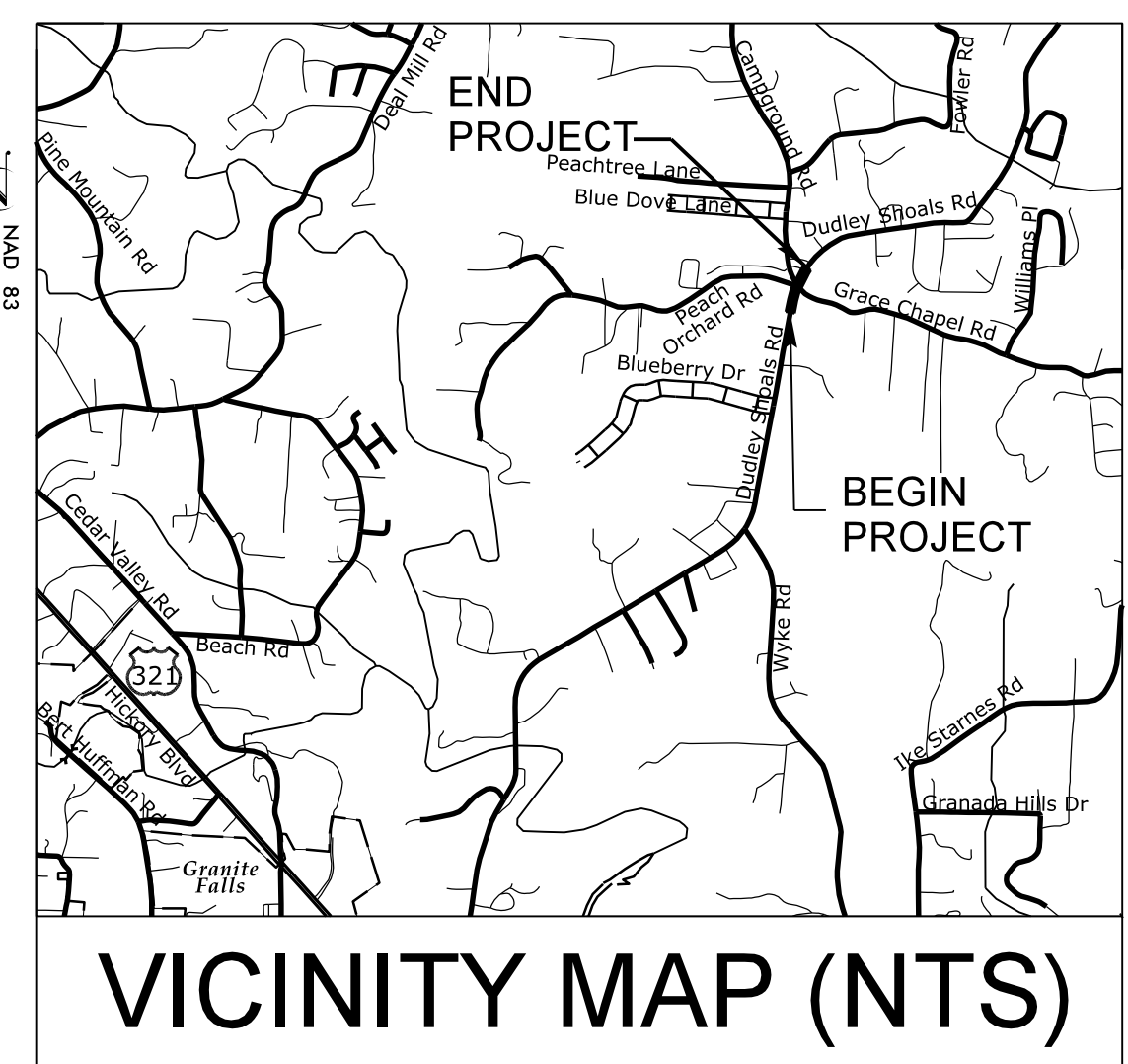
3/21/2022  
User: tpopelk  
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T.I.P. NO.	SHEET NO.
U-6035	UC-1

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**TIP PROJECT: U-6035**

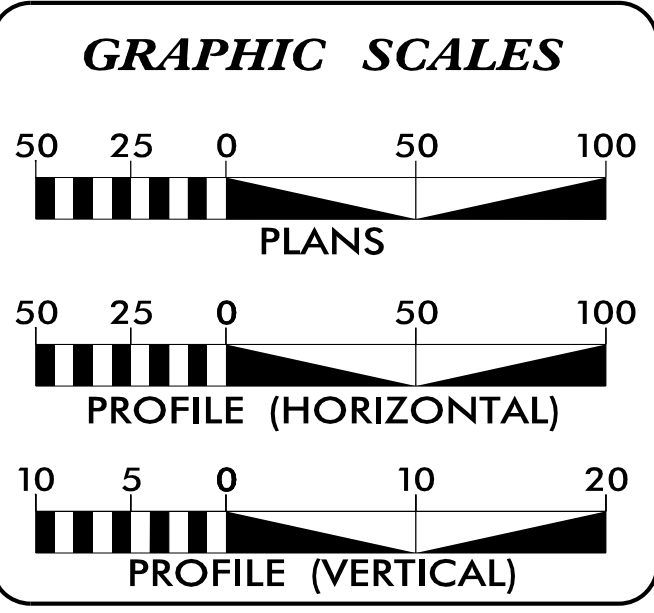
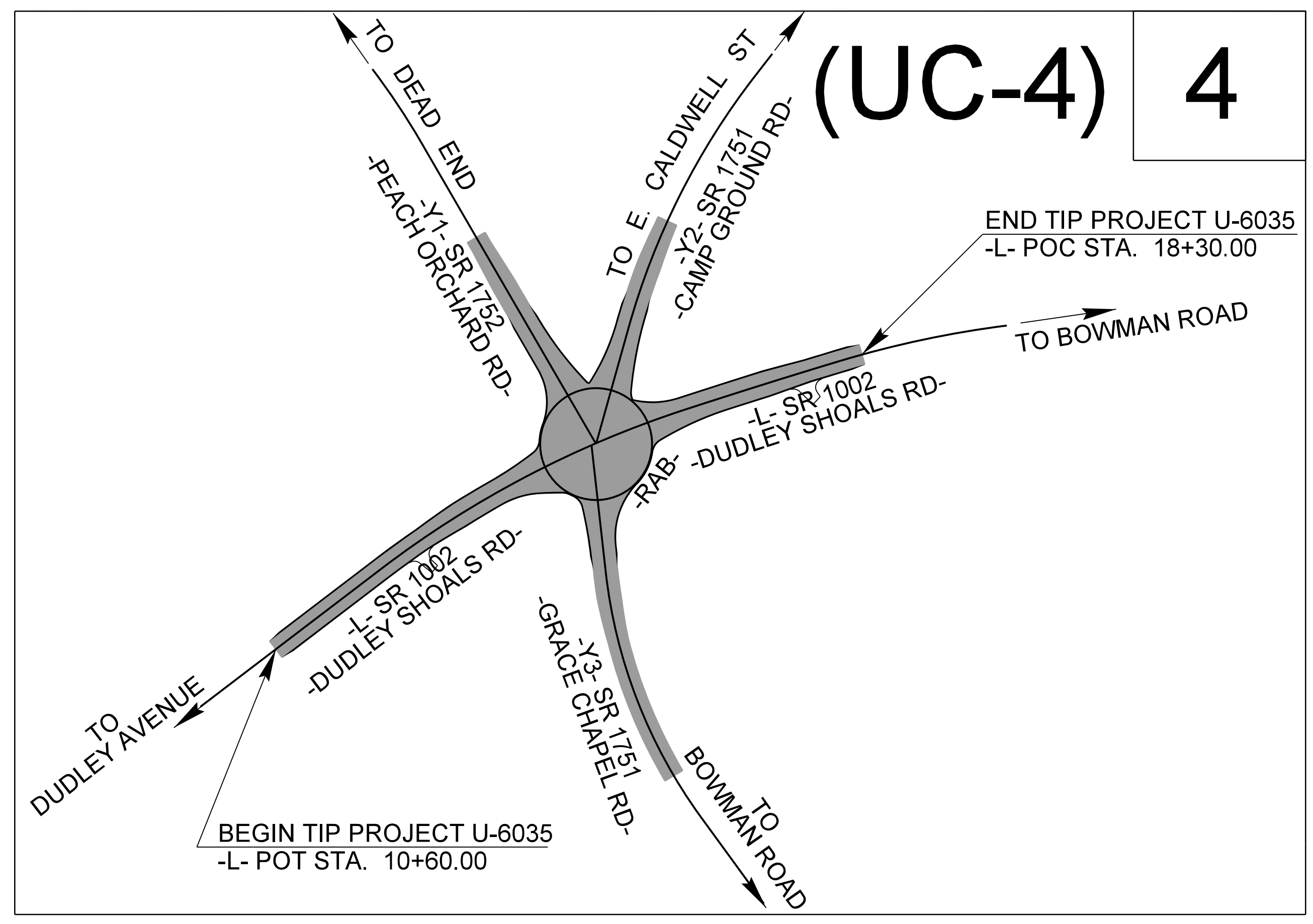


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**UTILITY CONSTRUCTION PLANS  
CALDWELL COUNTY**

**LOCATION: DUDLEY SHOALS ROAD - SR 1002 (DUDLEY SHOALS RD),  
SR 1752 (PEACH ORCHARD RD), AND SR 1751 (CAMPGROUND RD/  
GRACE CHAPEL RD) INTERSECTION**

**TYPE OF WORK: WATER LINE RELOCATION**



**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A	DETAILS
UC-4	UTILITY CONSTRUCTION SHEET
UC-5 THRU UC-6	PROFILE SHEETS

**WATER OWNER  
ON PROJECT**

(A) CALDWELL COUNTY

PREPARED IN THE OFFICE OF:

**HINDE ENGINEERING**  
License No. C-2639  
401 Harrison Oaks Blvd., Suite 220 Cary, NC 27513  
Ph. (919) 653-0001

Clint L. Stevens, P.E. UTILITIES PROJECT MANAGER  
Jordan K. Chapman UTILITIES PROJECT ENGINEER  
James N. Arnold UTILITIES PROJECT DESIGNER

SEAL

DocuSign  
Clint L. Stevens  
906F82D777EB42D  
040370  
7/12/2023

**DIVISION OF HIGHWAYS  
DIVISION II**  
801 STATESVILLE RD  
NORTH WILKESBORO NC 28659  
PHONE (336) 903-9101  
FAX (336) 667-4549

Michael L. Poe, P.E. DIVISION ENGINEER  
Daniel Adams, P.E. DIVISION PROJECT TEAM LEAD  
Susan O. Huffman DIVISION UTILITY COORDINATOR  
Brandon Greer DIVISION UTILITY ENGINEER

12-JUL-2023 10:17  
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 \$\$\$USERNAME\$\$\$

# UTILITIES PLAN SHEET SYMBOLS

## PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	
11 1/4 Degree Bend	
22 1/2 Degree Bend	
45 Degree Bend	
90 Degree Bend	
Plug	
Tee	
Cross	
Reducer	
Gate Valve	
Butterfly Valve	
Tapping Valve	
Line Stop	
Line Stop with Bypass	
Blow Off	
Fire Hydrant	
Relocate Fire Hydrant	
Remove Fire Hydrant	REM FH
Water Meter	
Relocate Water Meter	
Remove Water Meter	REM WM
Water Pump Station	
RPZ Backflow Preventer	
DCV Backflow Preventer	
Relocate RPZ Backflow Preventer	
Relocate DCV Backflow Preventer	

## PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	
Force Main Sewer Line (Sized as Shown)	
Manhole (Sized per Note)	
Sewer Pump Station	

## PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Telephone Pedestal	
Utility Line by Others (Type as Shown)	
Trenchless Installation	
Encasement by Open Cut	
Encasement	

Thrust Block	
Air Release Valve	
Utility Vault	
Concrete Pier	
Steel Pier	
Plan Note	
Pay Item Note	

## EXISTING UTILITIES SYMBOLS

Power Pole		*Underground Power Line	
Telephone Pole		*Underground Telephone Cable	
Joint Use Pole		*Underground Telephone Conduit	
Utility Pole		*Underground Fiber Optics Telephone Cable	
Utility Pole with Base		*Underground TV Cable	
H-Frame Pole		*Underground Fiber Optics TV Cable	
Power Transmission Line Tower		*Underground Gas Pipeline	
Water Manhole		Aboveground Gas Pipeline	
Power Manhole		*Underground Water Line	
Telephone Manhole		Aboveground Water Line	
Sanitary Sewer Manhole		*Underground Gravity Sanitary Sewer Line	
Hand Hole for Cable		Aboveground Gravity Sanitary Sewer Line	
Power Transformer		*Underground SS Forced Main Line	
Telephone Pedestal		Underground Unknown Utility Line	
CATV Pedestal		SUE Test Hole	
Gas Valve		Water Meter	
Gas Meter		Water Valve	
Located Miscellaneous Utility Object		Fire Hydrant	
Abandoned According to Utility Records	AATUR	Sanitary Sewer Cleanout	
End of Information	E.O.I.		

\*For Existing Utilities  
Utility Line Drawn from Record (Type as Shown)   
Designated Utility Line (Type as Shown)

2017\A2017\07\07\U-6035-UC-2.psh.dgn





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

PROJECT REFERENCE NO. <b>U-6035</b>	SHEET NO. <b>UC-3</b>
DESIGNED BY: <b>JKC</b>	
DRAWN BY: <b>JNA</b>	
CHECKED BY: <b>JKC</b>	
APPROVED BY: <b>CLS</b>	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

# UTILITY CONSTRUCTION

## GENERAL NOTES:

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2018.

2. THE EXISTING UTILITIES BELONG TO CALDWELL COUNTY. THE CONTACT PERSON IS:

BARRY CALLOWAY  
 WATER DIRECTOR  
 (828) 757-5757

IN THE EVENT OF A CONFLICT BETWEEN THE UTILITY OWNER'S TECHNICAL SPECIFICATIONS AND NCDOT STANDARD SPECIFICATIONS/PROJECT SPECIAL PROVISIONS, THE MOST STRINGENT SHALL GOVERN.

3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, PUBLIC WATER SUPPLY SECTION. ALL SEWER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT QUALITY, DIVISION OF WATER RESOURCES, WATER QUALITY SECTION. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.

4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.

5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.

6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.

7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.

8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.

9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, " SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

10. ALL WATER LINE INSTALLED ON THIS PROJECT SHALL MEET THE REQUIREMENTS OF THE RULES GOVERNING PUBLIC WATER SYSTEMS. VERTICAL SEPARATION BETWEEN PROPOSED WATER MAINS AND STORM DRAINAGE SHALL BE A MINIMUM OF 18-INCHES PER RECOMMENDED STANDARDS OF WATER WORKS. ALL PROPOSED WATER LINE SHALL HAVE A MINIMUM COVER OF 36-INCHES. PROPOSED WATER MAINS SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 10-FEET FROM SEWER MAINS (REF. RULE .0904, RULE.0906). UTILITIES BEING RELOCATED OR INSTALLED AS SHOWN ON THE UTILITY CONSTRUCTION PLANS MUST BE ADJUSTED ACCORDINGLY TO MEET THESE CRITERIA.

## UTILITY CONSTRUCTION

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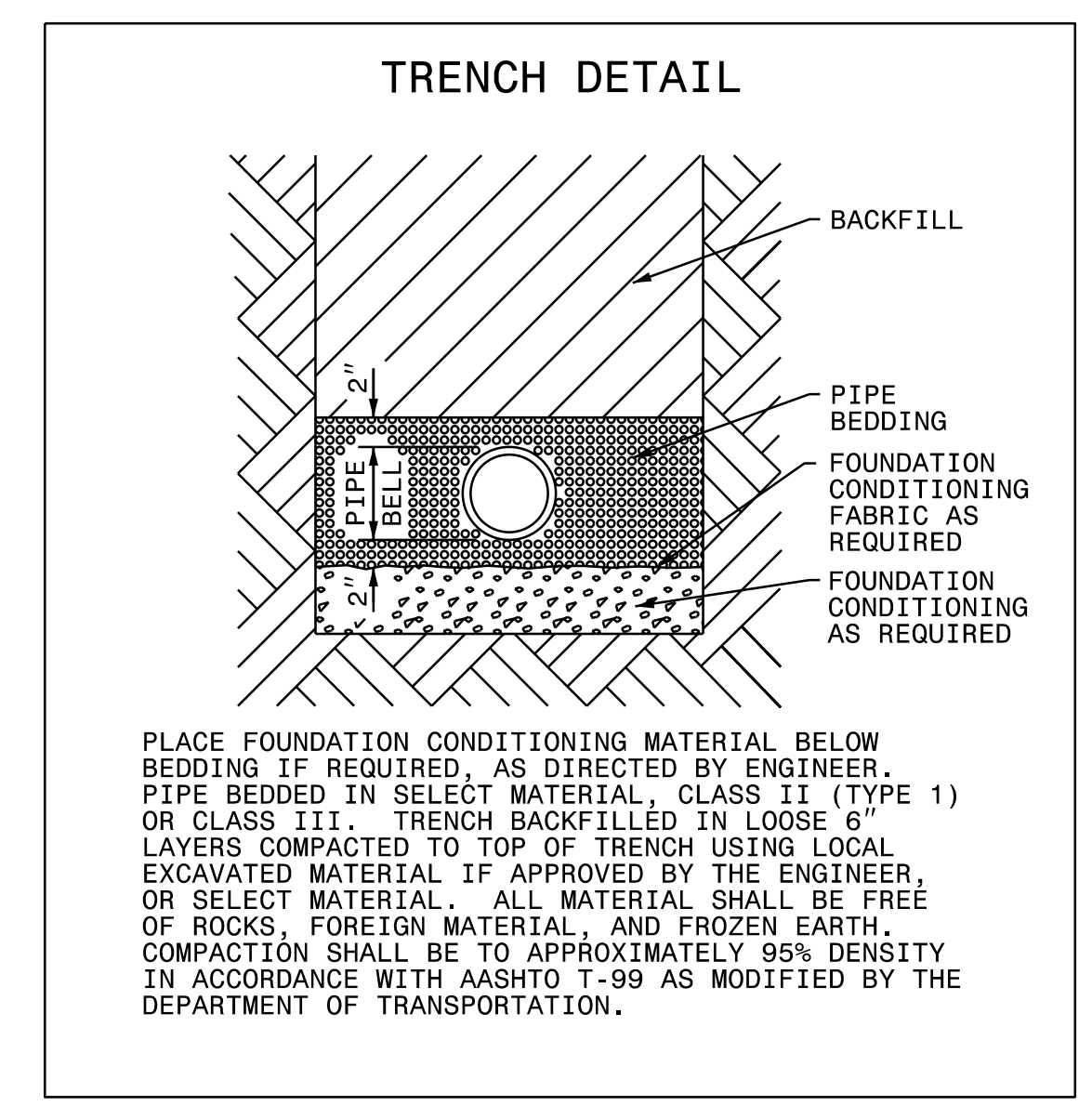
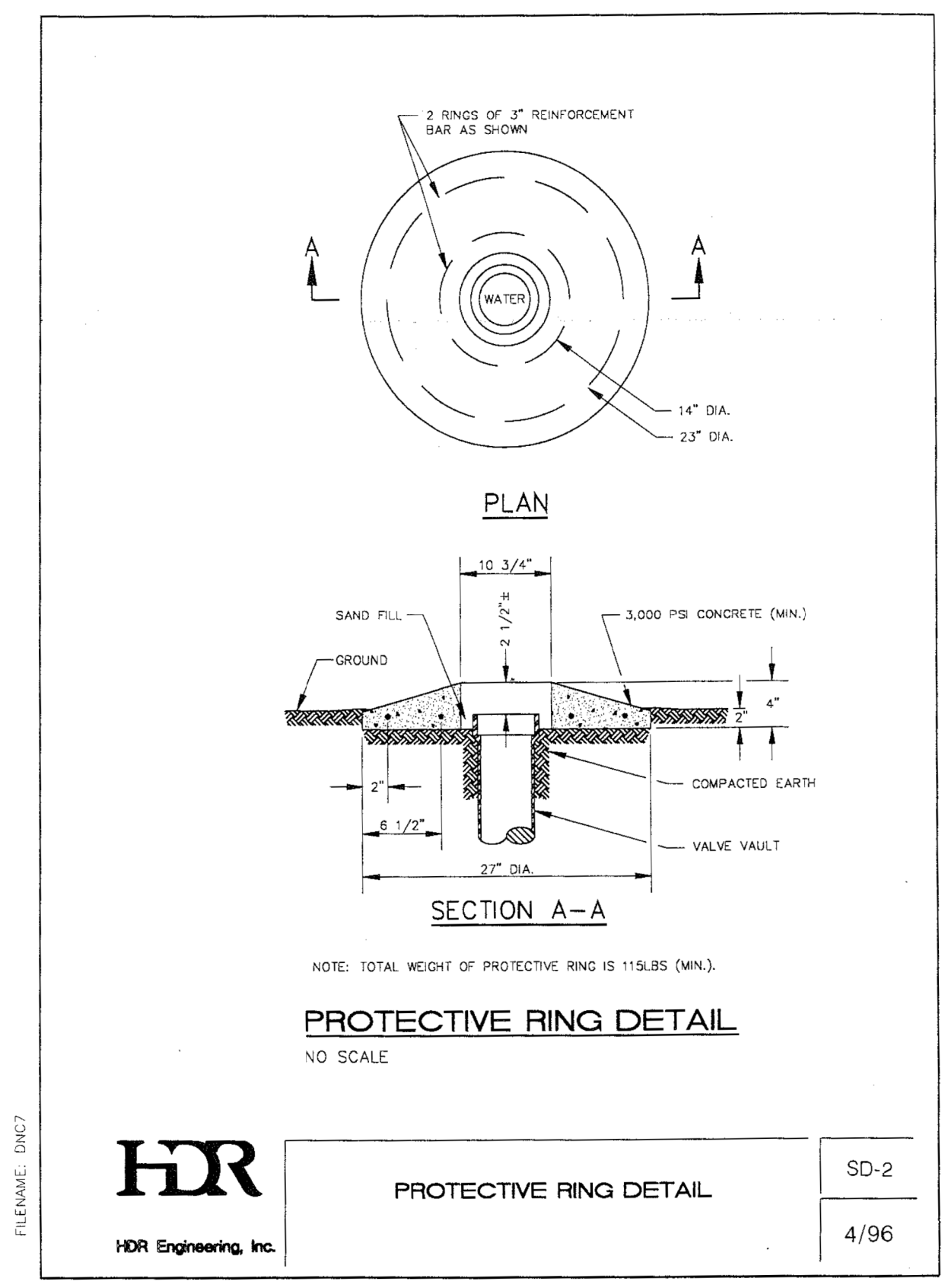
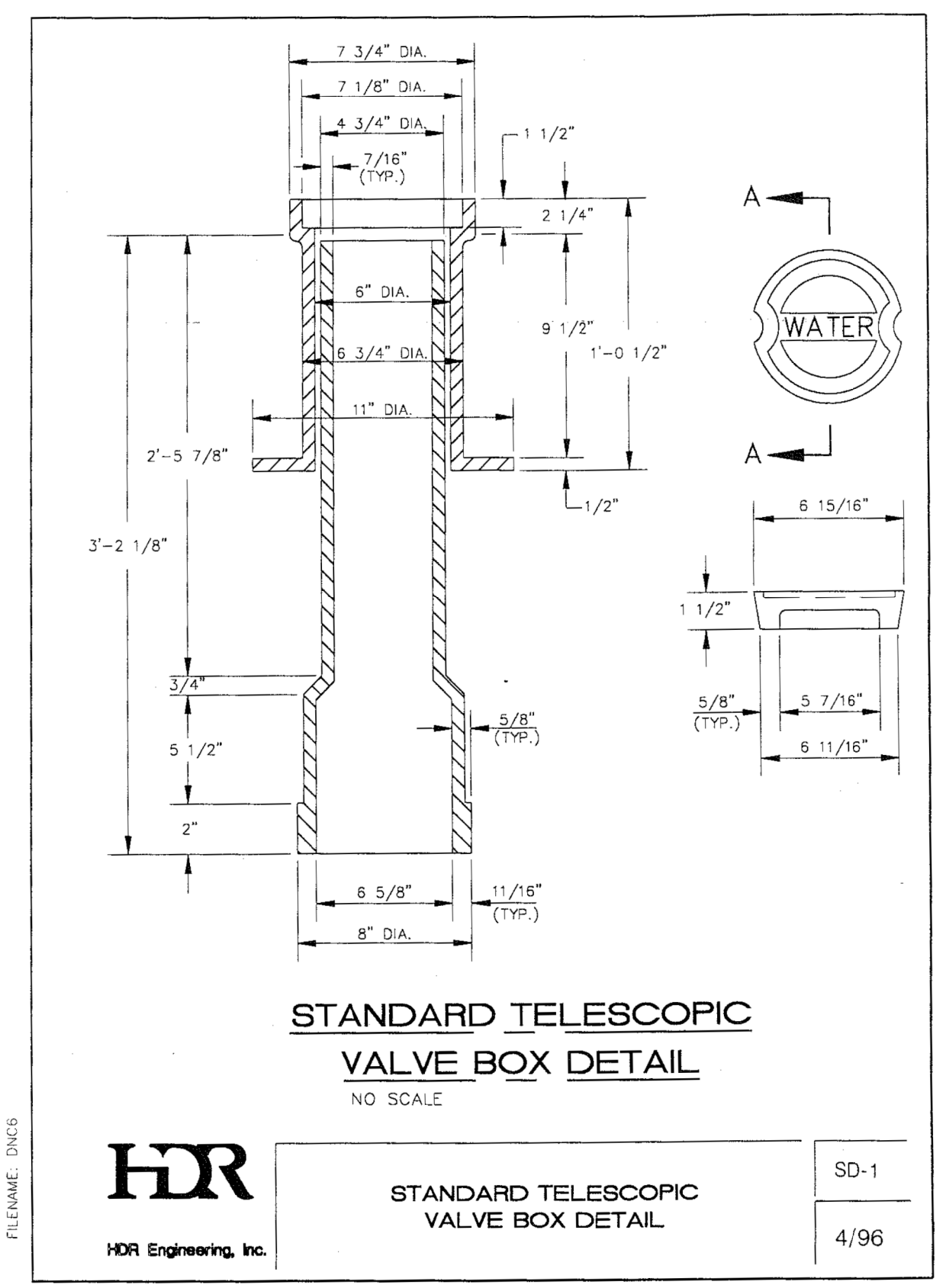
**HINDE ENGINEERING**  
 License No. C-2639  
 401 Harrison Oaks Blvd., Suite 220 Cary, NC 27513

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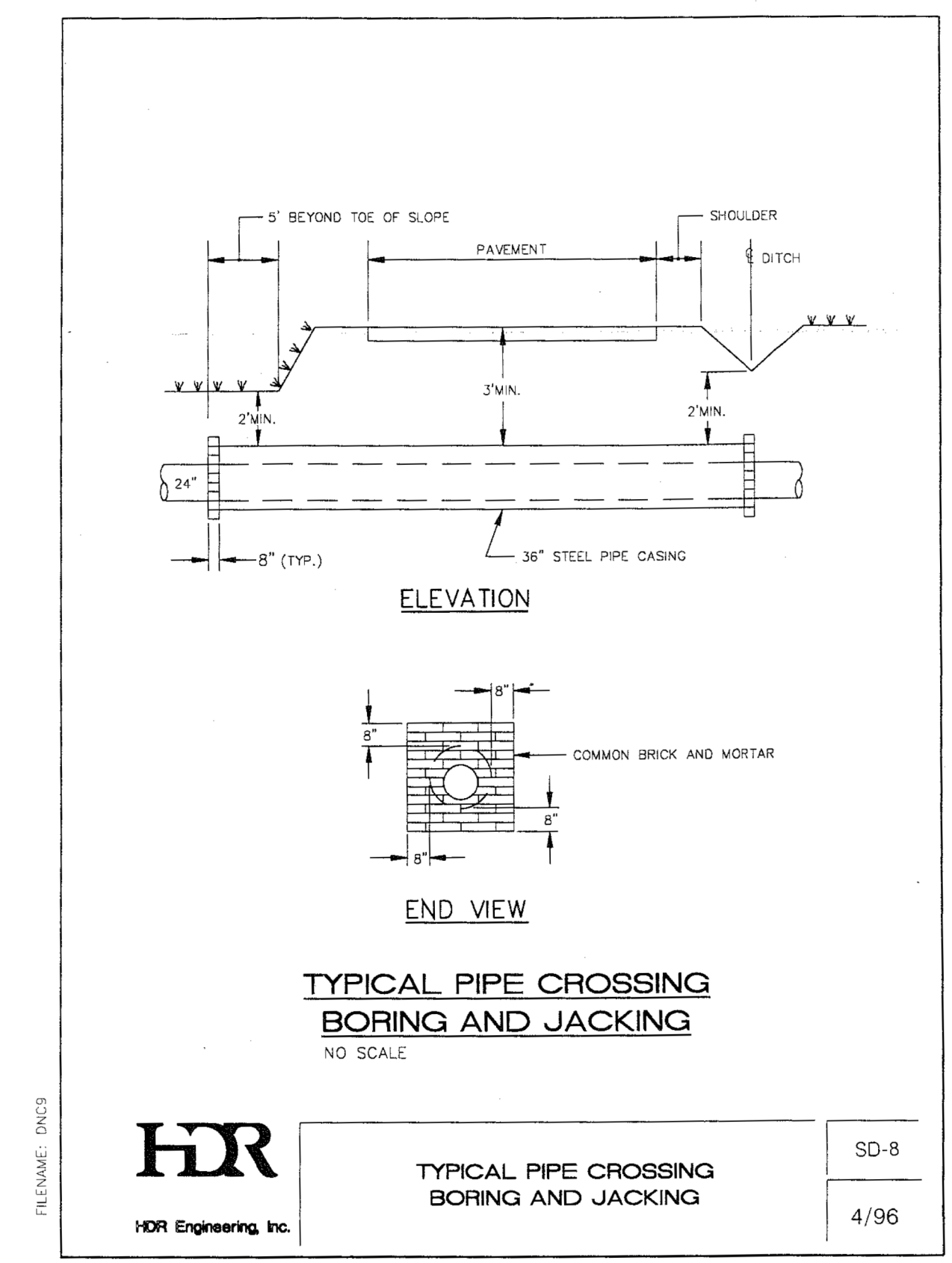
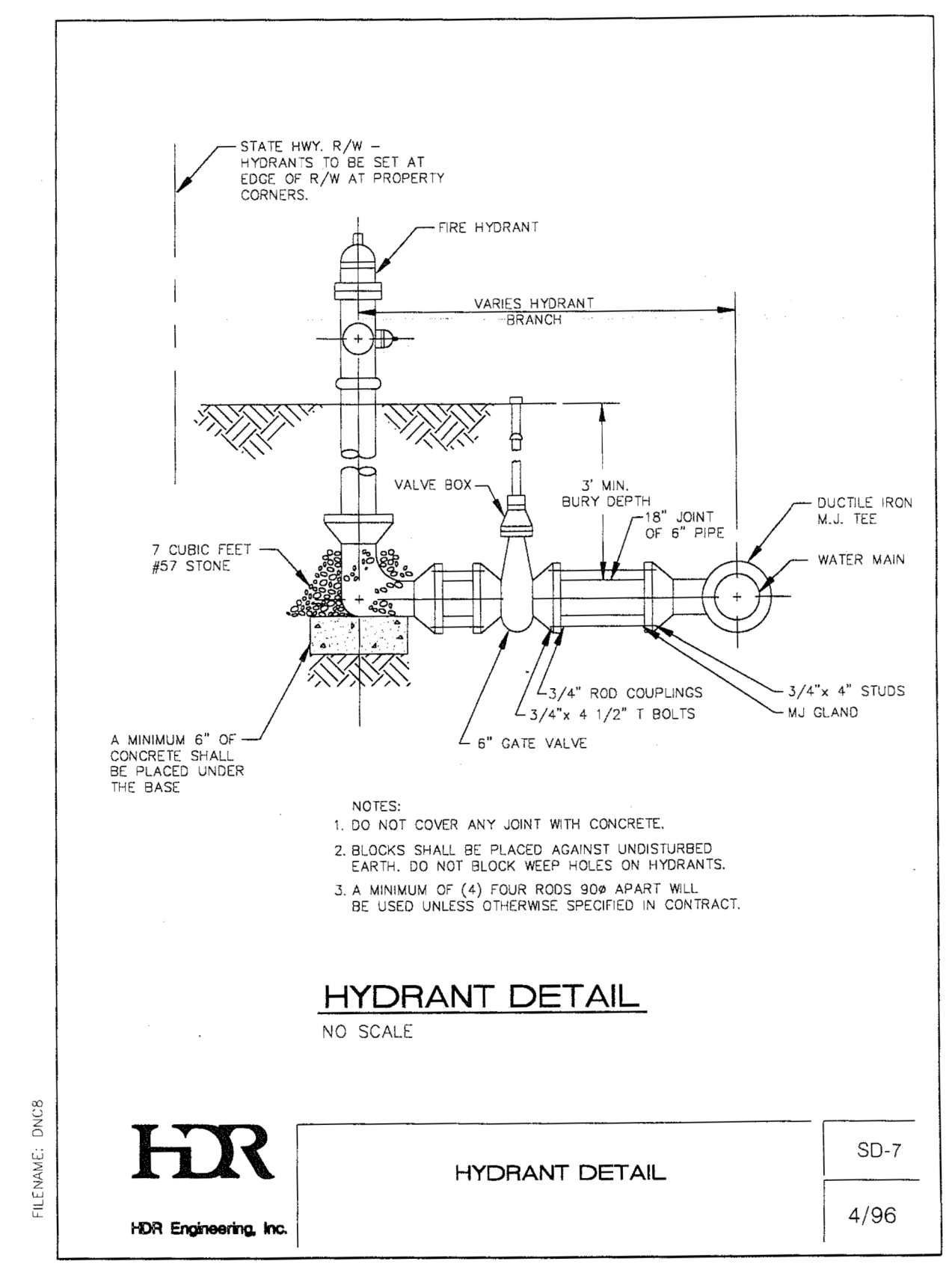
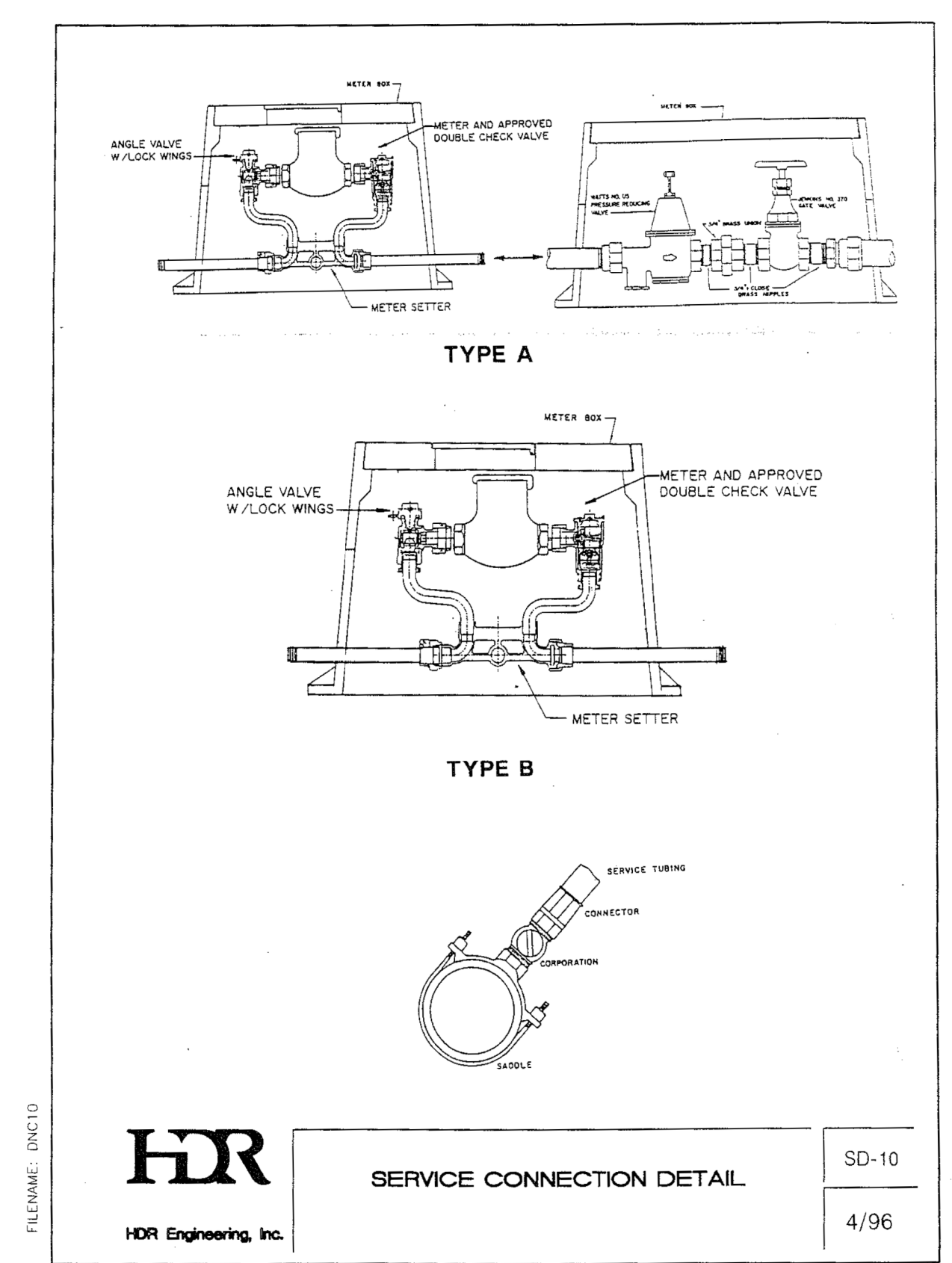
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U-6035	UC-3A
DESIGNED BY: JKC	
DRAWN BY: JNA	
CHECKED BY: JKC	
APPROVED BY: CLS	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
7/12/2023 UTILITY CONSTRUCTION PLANS ONLY	

# STANDARD WATER DETAILS

## UTILITY CONSTRUCTION



NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)	NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)
4	28	20	44
6	30	24	48
8	32	30	54
10	34	36	60
12	36	42	66
14	38	48	72
16	40	54	78
18	42		



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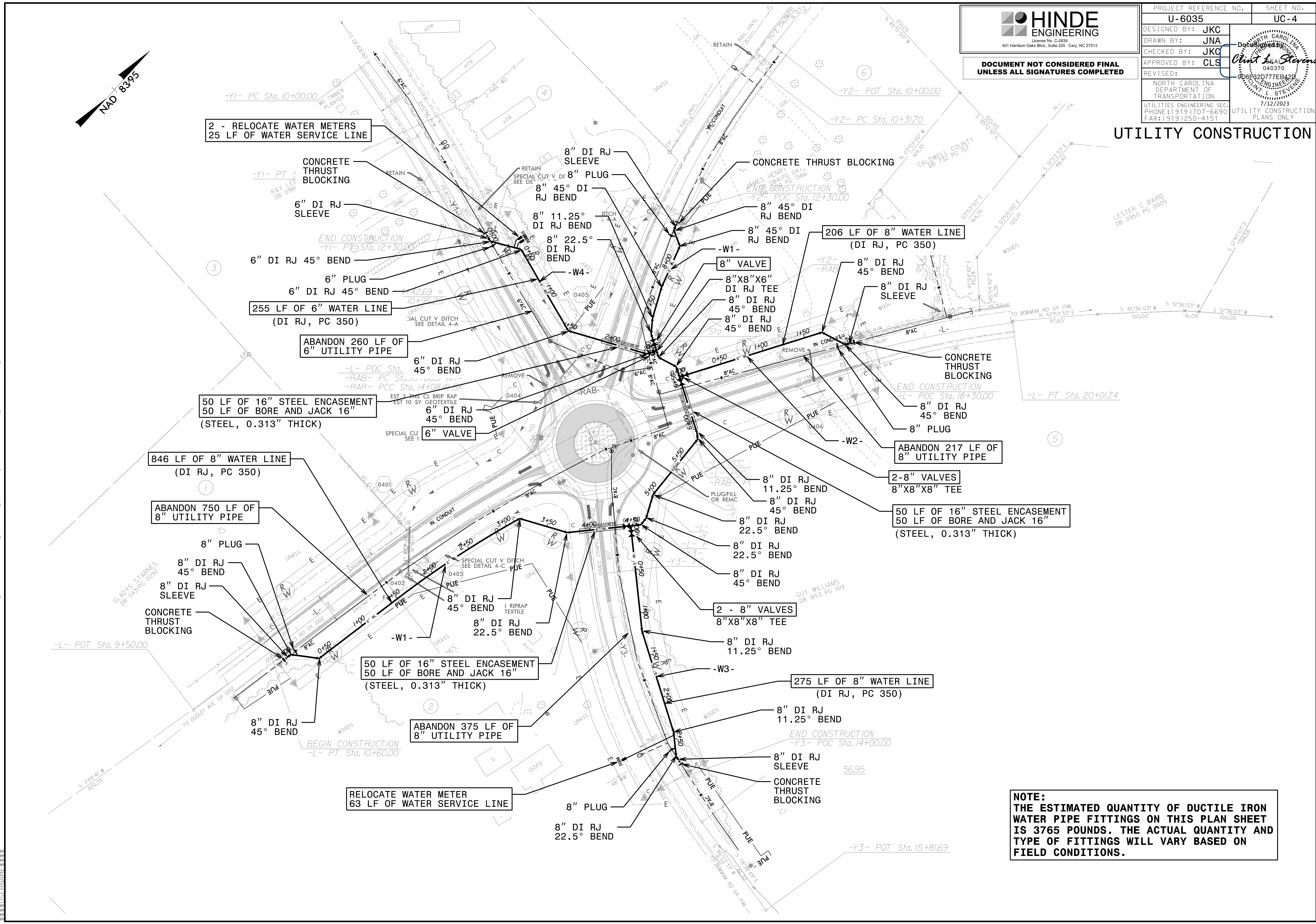


**HINDE ENGINEERING**  
 License No. C-2639  
 401 Harrison Oaks Blvd., Suite 220 Cary, NC 27513

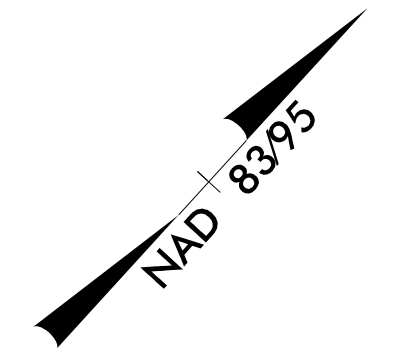
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DRAWN BY: <b>JNA</b>	
CHECKED BY: <b>JKC</b>	
APPROVED BY: <b>CLS</b>	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SECTION PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY 7/12/2023	

### UTILITY CONSTRUCTION



**NOTE:**  
 THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 3765 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.



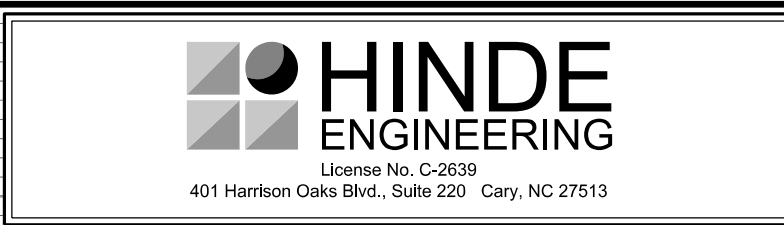
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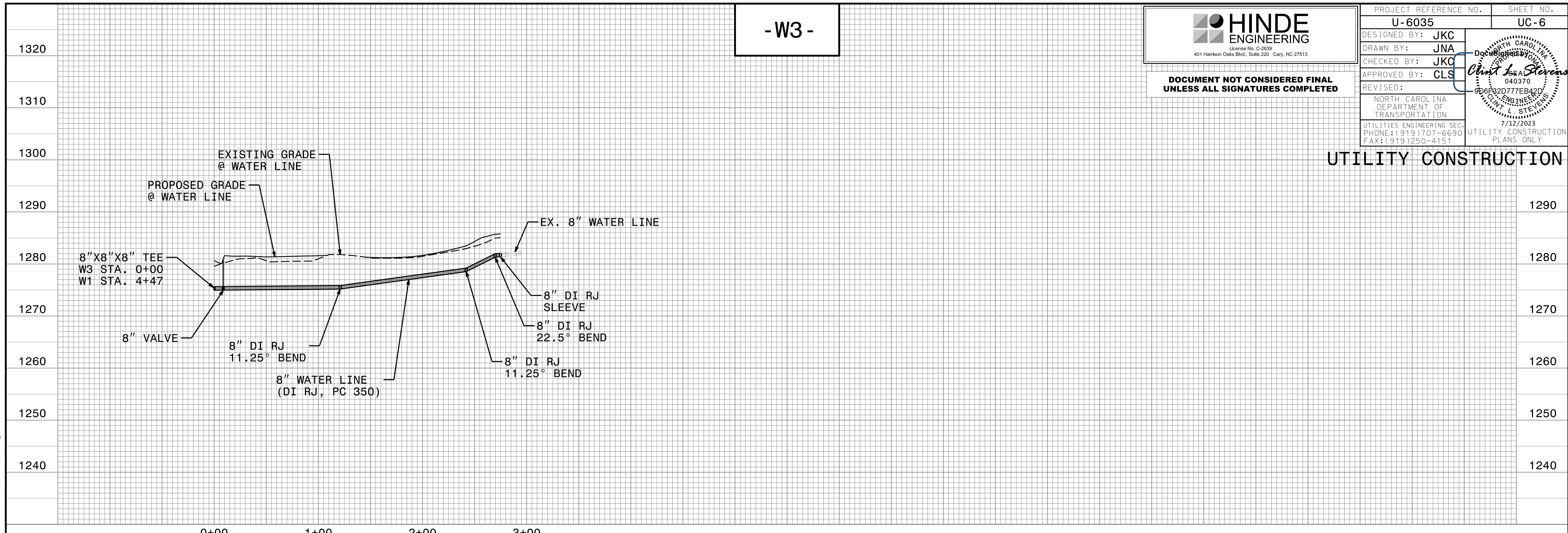
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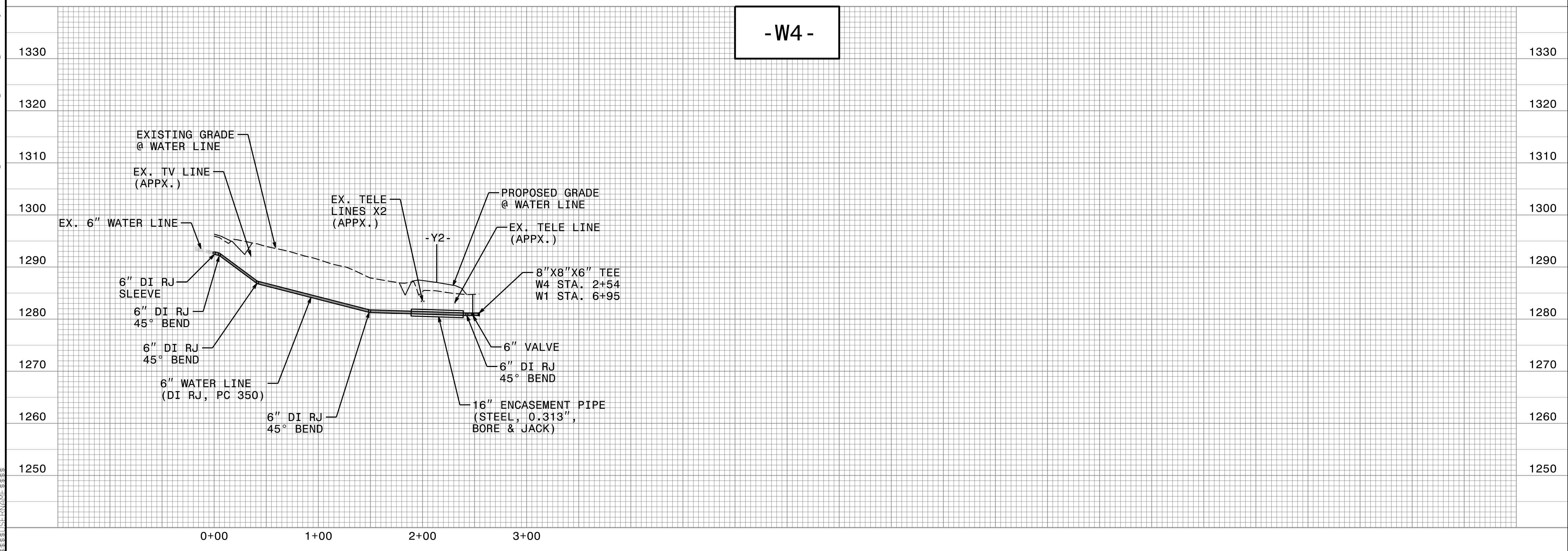
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UNLESS ALL SIGNATURES COMPLETED

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DRAWN BY: JNA	
CHECKED BY: JKC	
APPROVED BY: CLS	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	7/12/2023 UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

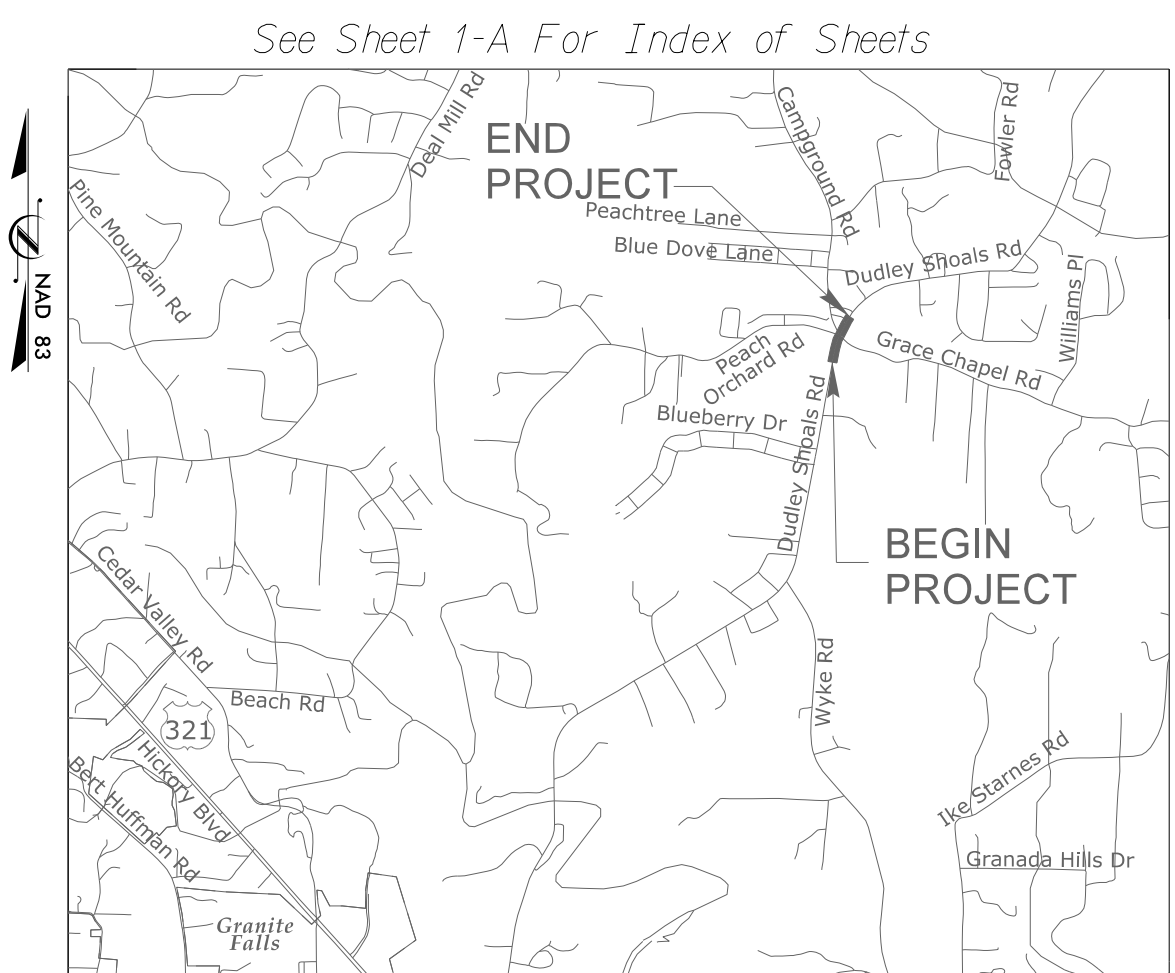


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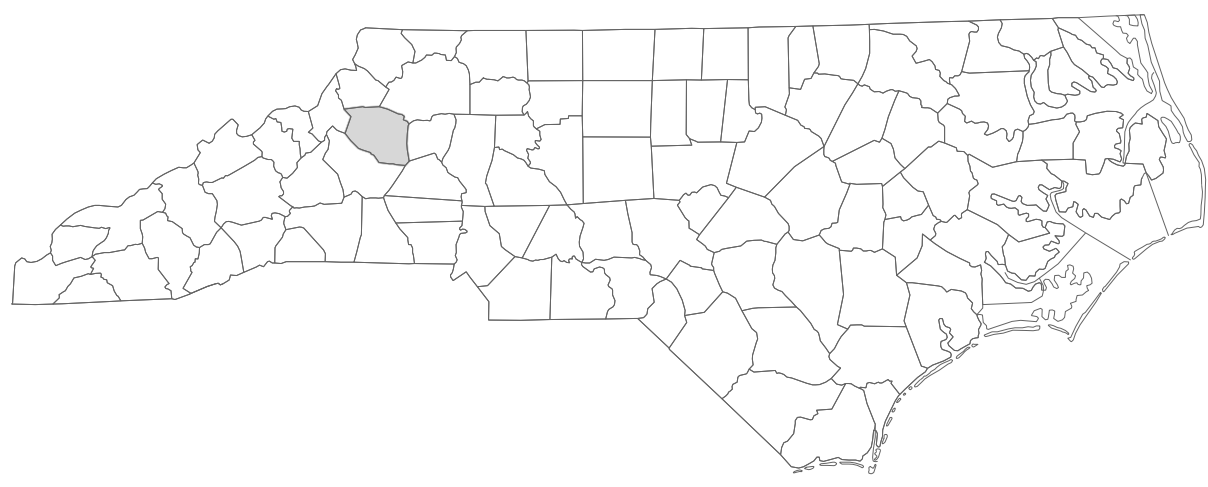


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**TIP PROJECT: U-6035**



**VICINITY MAP (NTS)**



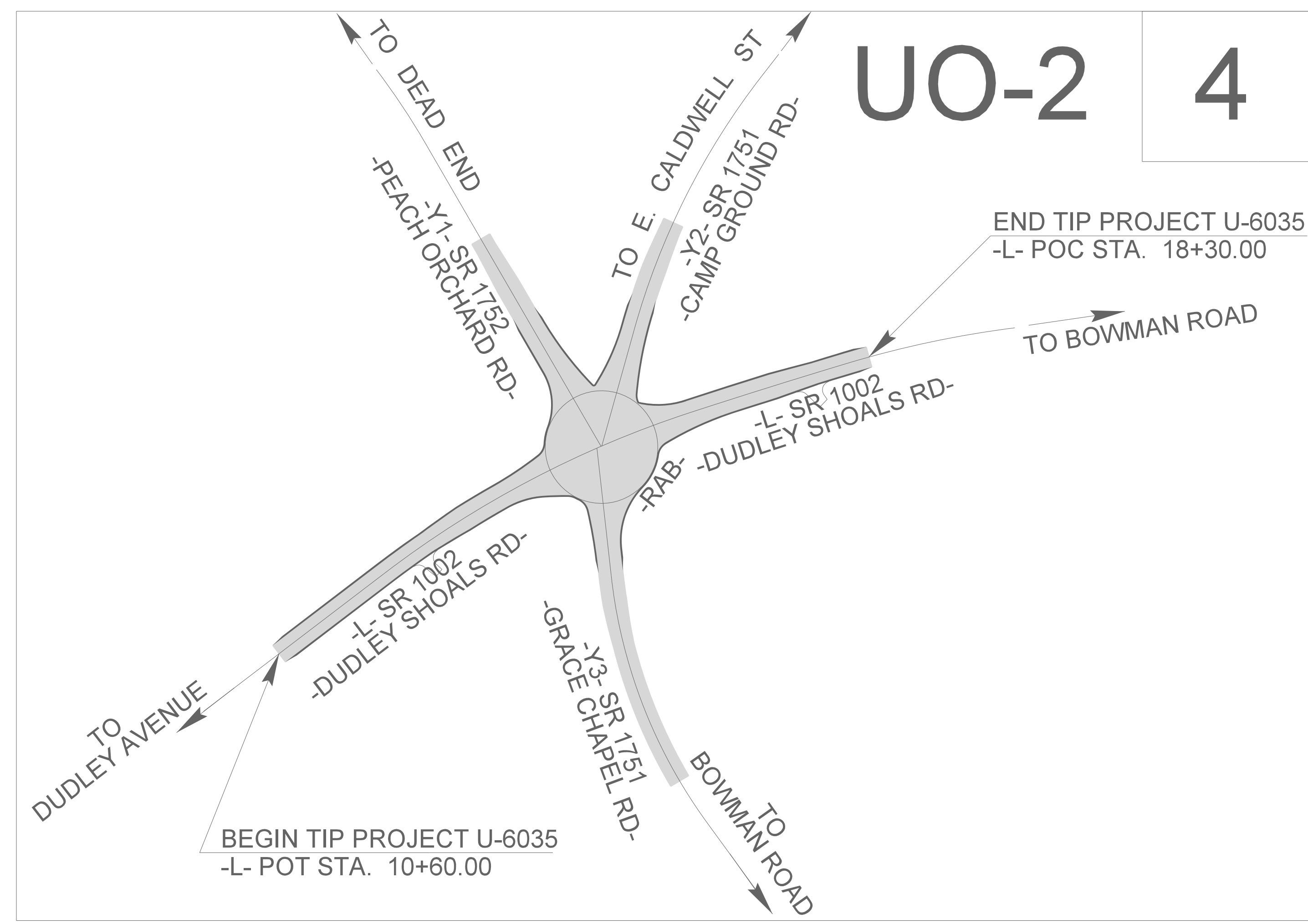
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**UTILITIES BY OTHERS PLANS  
CALDWELL COUNTY**

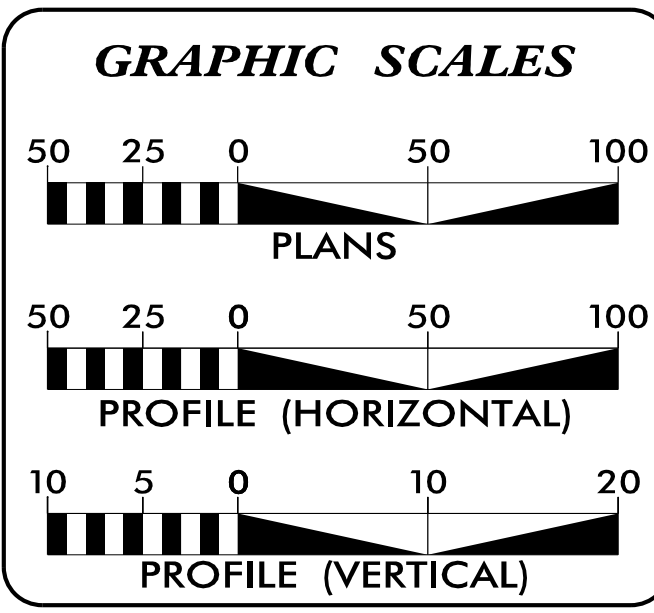
**LOCATION: DUDLEY SHOALS ROAD - SR 1002 (DUDLEY SHOALS RD),  
SR 1752 (PEACH ORCHARD RD), AND SR 1751 (CAMPGROUND RD/  
GRACE CHAPEL RD) INTERSECTION**  
**TYPE OF WORK: UTILITY RELOCATION**

T.I.P. NO.	SHEET NO.
U-6035	UO-1

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



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II  
THIS PROJECT IS NOT LOCATED WITHIN ANY MUNICIPAL BOUNDARY



**INDEX OF SHEETS**

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

**UTILITY OWNERS WITH CONFLICTS**

(A) POWER - BLUE RIDGE ENERGY  
(B) TELECOMMUNICATION - CENTURYLINK  
(C) TELECOMMUNICATION - CHARTER

PREPARED IN THE OFFICE OF:

License No. C-2639  
7520 E. Independence Blvd., Suite 230 Charlotte, NC 28227  
(704) 814-4407

Michael E. Davis	UTILITY COORDINATION PROJECT MANAGER
Todd E. Butner	PROJECT UTILITY COORDINATOR
Andrew S. Walston	PROJECT UTILITY DESIGNER

**DIVISION OF HIGHWAYS  
UTILITIES UNIT**  
1555 MAIL SERVICES CENTER  
RALEIGH NC 27699-1555  
PHONE (919) 707-6690  
FAX (919) 250-4151

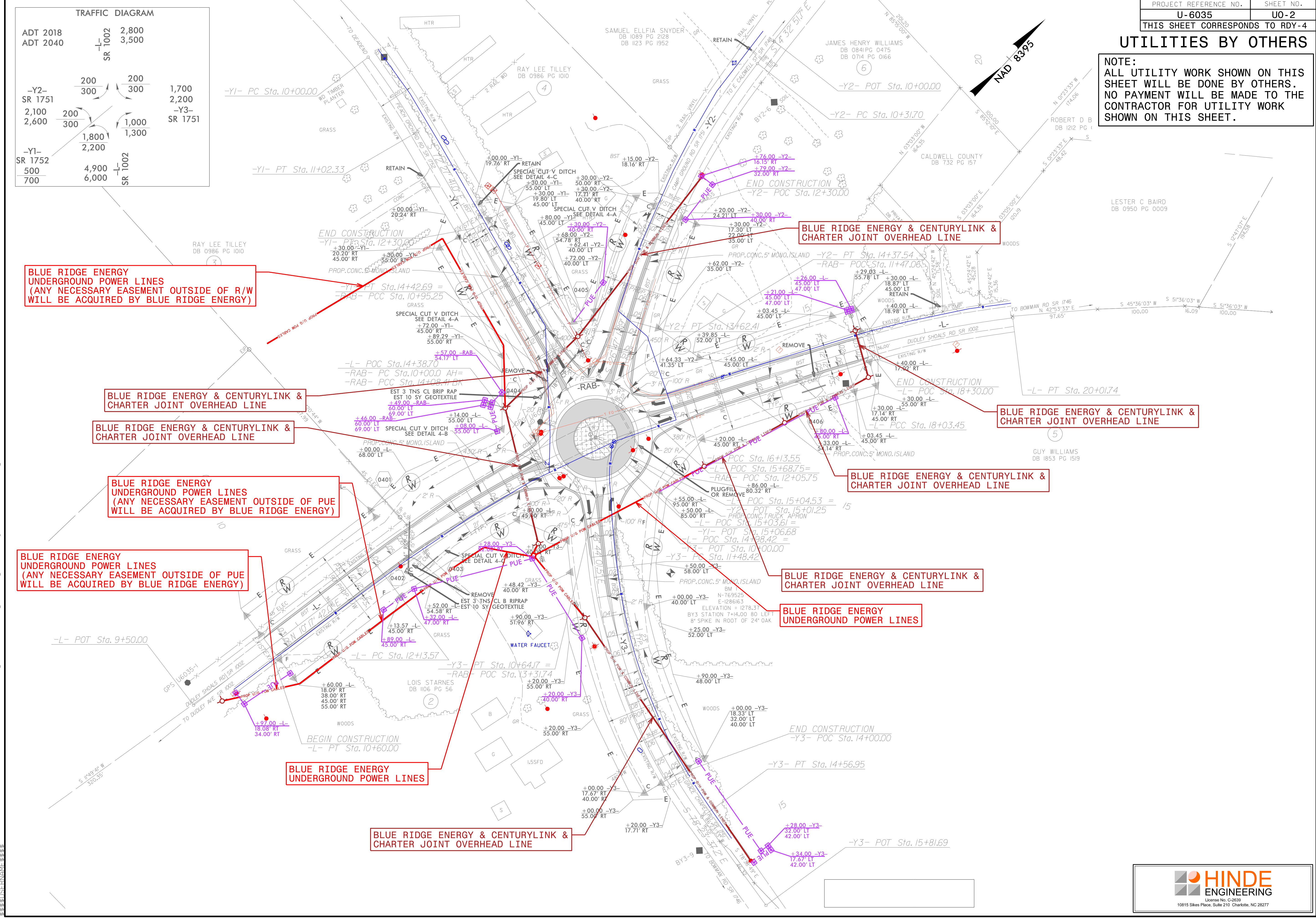
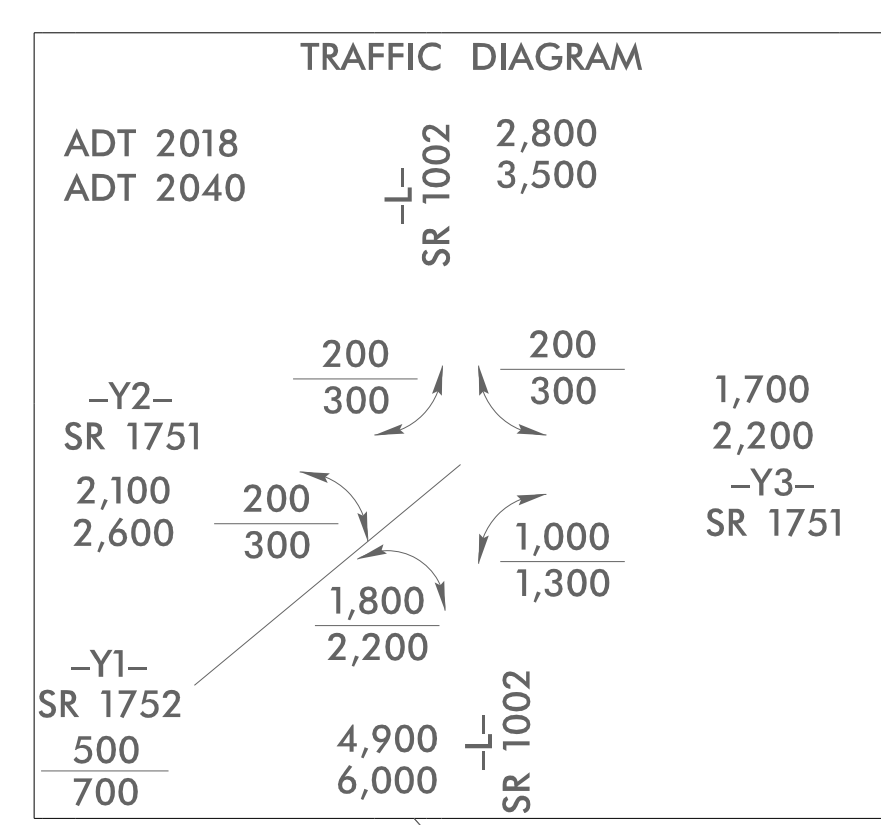
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Xxxx X.Xxxx	UTILITIES ENGINEER
Xxxx X.Xxxx	UTILITIES AREA COORDINATOR
Xxxx X.Xxxx	UTILITIES COORDINATOR

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### UTILITIES BY OTHERS

**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.



BLUE RIDGE ENERGY  
 UNDERGROUND POWER LINES  
 (ANY NECESSARY EASEMENT OUTSIDE OF R/W  
 WILL BE ACQUIRED BY BLUE RIDGE ENERGY)

BLUE RIDGE ENERGY & CENTURYLINK &  
 CHARTER JOINT OVERHEAD LINE

BLUE RIDGE ENERGY & CENTURYLINK &  
 CHARTER JOINT OVERHEAD LINE

BLUE RIDGE ENERGY  
 UNDERGROUND POWER LINES  
 (ANY NECESSARY EASEMENT OUTSIDE OF PUE  
 WILL BE ACQUIRED BY BLUE RIDGE ENERGY)

BLUE RIDGE ENERGY  
 UNDERGROUND POWER LINES  
 (ANY NECESSARY EASEMENT OUTSIDE OF PUE  
 WILL BE ACQUIRED BY BLUE RIDGE ENERGY)

BLUE RIDGE ENERGY & CENTURYLINK &  
 CHARTER JOINT OVERHEAD LINE

BLUE RIDGE ENERGY & CENTURYLINK &  
 CHARTER JOINT OVERHEAD LINE

BLUE RIDGE ENERGY & CENTURYLINK &  
 CHARTER JOINT OVERHEAD LINE

BLUE RIDGE ENERGY & CENTURYLINK &  
 CHARTER JOINT OVERHEAD LINE

BLUE RIDGE ENERGY  
 UNDERGROUND POWER LINES

BLUE RIDGE ENERGY  
 UNDERGROUND POWER LINES

BLUE RIDGE ENERGY & CENTURYLINK &  
 CHARTER JOINT OVERHEAD LINE

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# DUDLEY SHOALS ROAD – SR 1002

## CALDWELL COUNTY

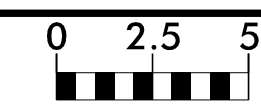
### T.I.P. PROJECT U-6035

<u>LINE</u>	<u>SHEET NO.</u>
-L-	X-2 THRU X-6
-Y1-	X-7 THRU X-8
-Y2-	X-9 THRU X-10
-Y3-	X-11 THRU X-13
-RAB-	X-14 THRU X-16

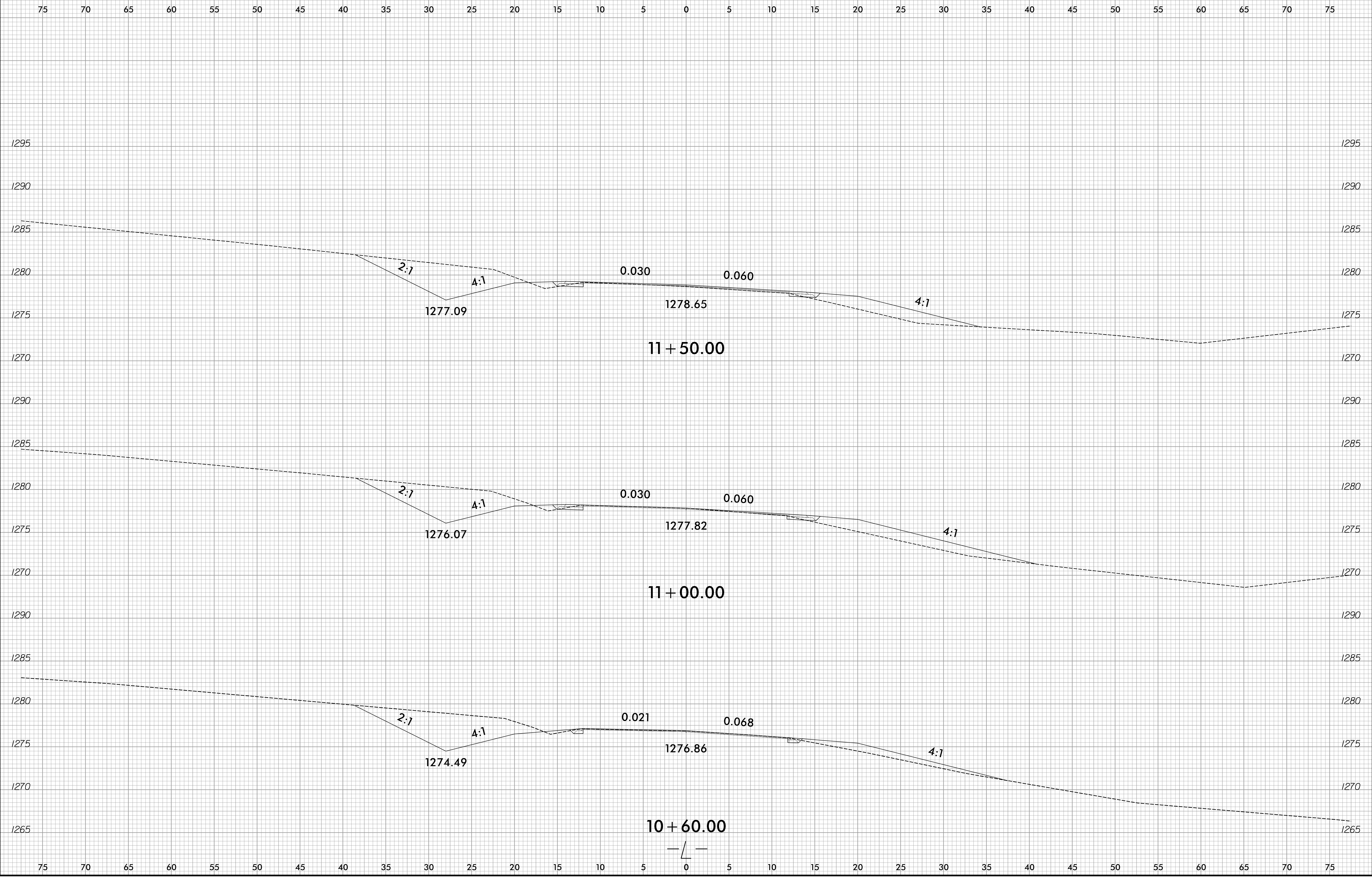


Quantities are approximate only. The Resident Engineer will recross-section the work accurately when the project is staked out. These cross-section notes will be used in computing the final quantities for which the contractor will be paid.						STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS		PROJ. REFERENCE NO.		SHEET NO.	
						CROSS-SECTION SUMMARY		U-6035		X-1A	
NOTE: EMBANKMENT COLUMN INCLUDES BACKFILL FOR UNDERCUT											
Station	Uncl. Exc.	Embt	Station	Uncl. Exc.	Embt						
L	(cu. yd.)	(cu. yd.)	RAB	(cu. yd.)	(cu. yd.)						
10+60.0000	0	0	10+00.0000	0	0						
11+00.0000	73	29	10+50.0000	34	270						
11+50.0000	84	44	11+00.0000	34	295						
12+00.0000	74	40	11+50.0000	0	285						
12+50.0000	69	25	12+00.0000	0	221						
13+00.0000	113	33	12+50.0000	0	336						
13+50.0000	130	64	13+00.0000	0	438						
14+00.0000	91	82	13+50.0000	0	353						
14+38.7000	29	85	14+00.0000	0	306						
			14+08.4070	0	50						
Station	Uncl. Exc.	Embt									
L	(cu. yd.)	(cu. yd.)									
15+68.7500	0	0									
16+00.0000	5	47									
16+50.0000	37	29									
17+00.0000	82	13									
17+50.0000	156	6									
18+00.0000	230	3									
18+30.0000	146	6									
Station	Uncl. Exc.	Embt									
Y1	(cu. yd.)	(cu. yd.)									
12+30.0000	0	0									
12+50.0000	20	5									
13+00.0000	69	17									
13+50.0000	93	17									
14+00.0000	98	25									
14+42.6900	51	50									
Station	Uncl. Exc.	Embt									
Y2	(cu. yd.)	(cu. yd.)									
12+30.0000	0	0									
12+50.0000	52	1									
13+00.0000	106	4									
13+50.0000	75	14									
14+00.0000	44	48									
14+37.4500	12	38									
Station	Uncl. Exc.	Embt									
Y3	(cu. yd.)	(cu. yd.)									
10+64.1700	0	0									
11+00.0000	9	216									
11+50.0000	30	126									
12+00.0000	18	72									
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13+00.0000	1	46									
13+50.0000	39	35									
14+00.0000	81	23									

6/23/16



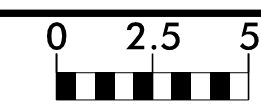
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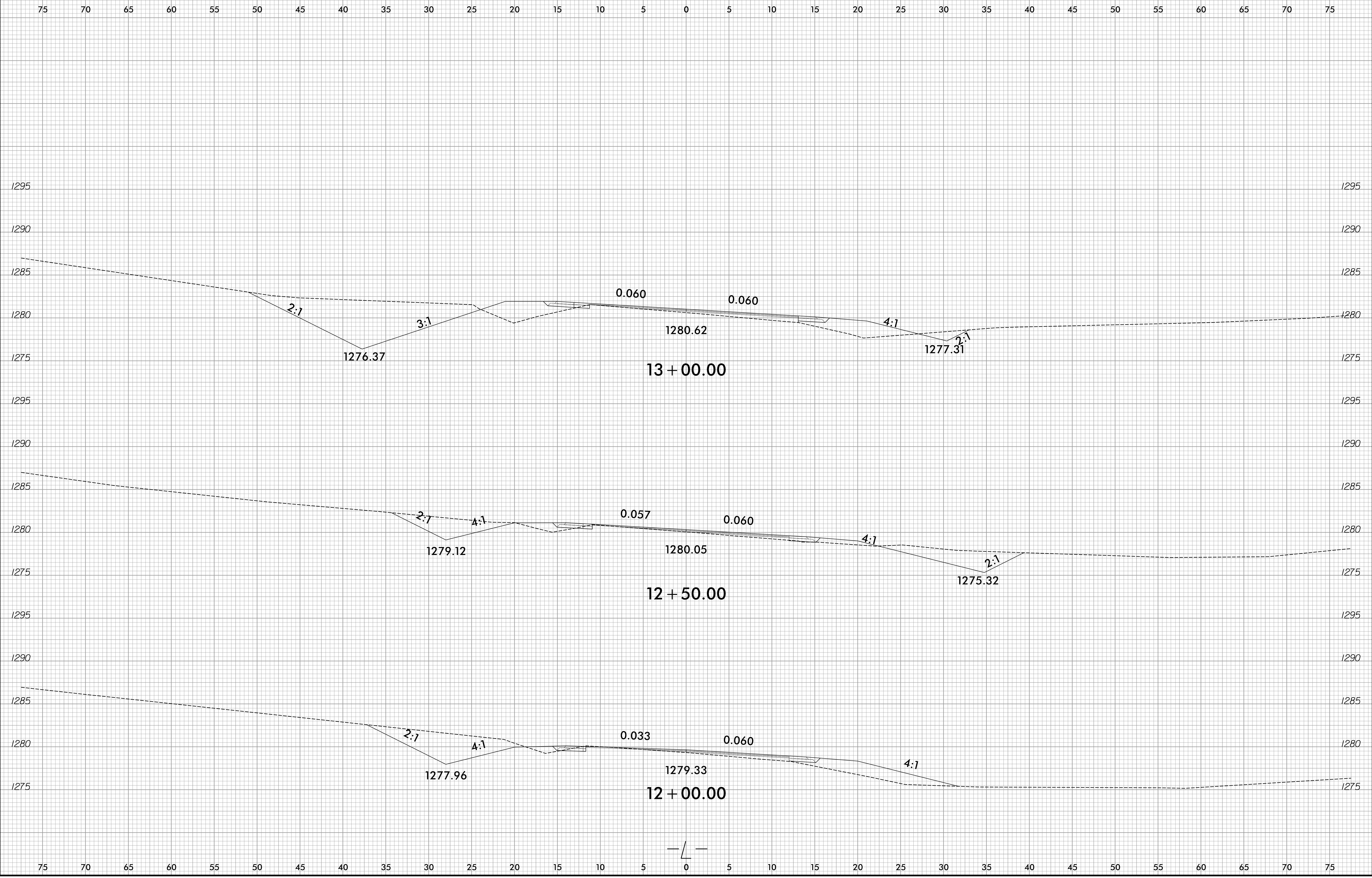
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6/23/16

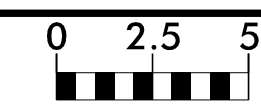


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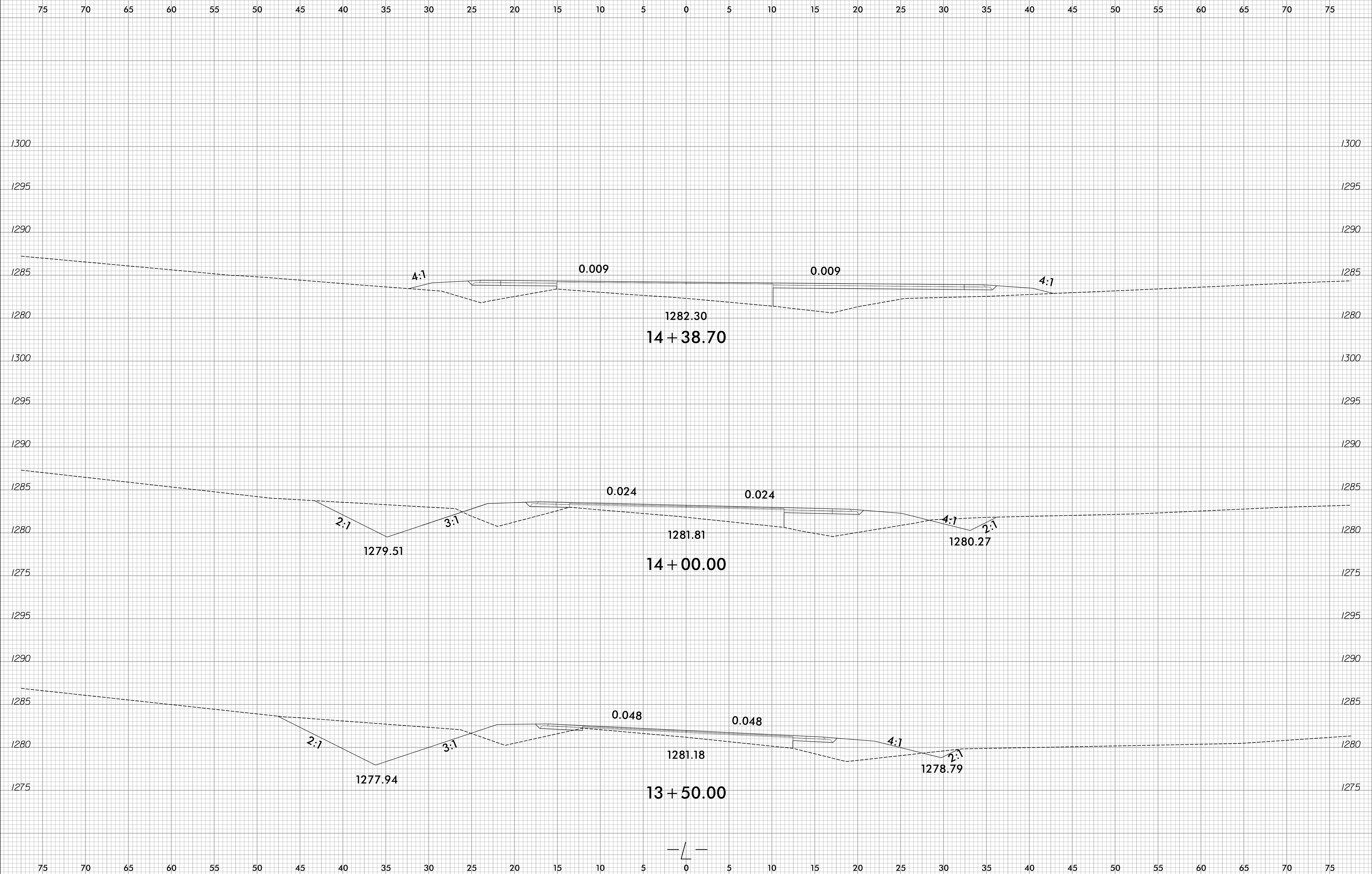


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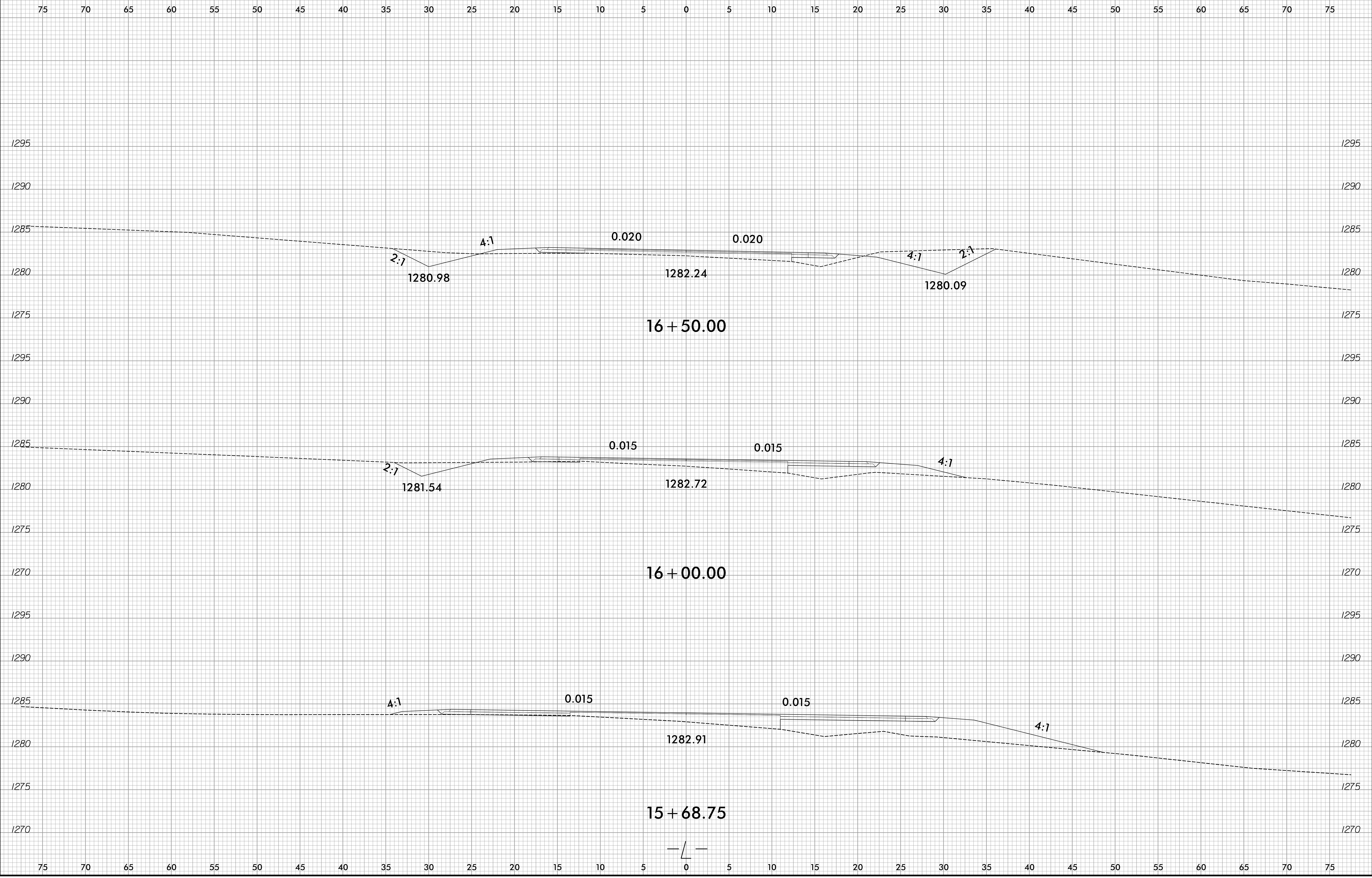


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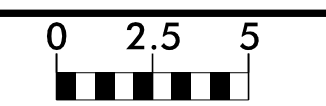
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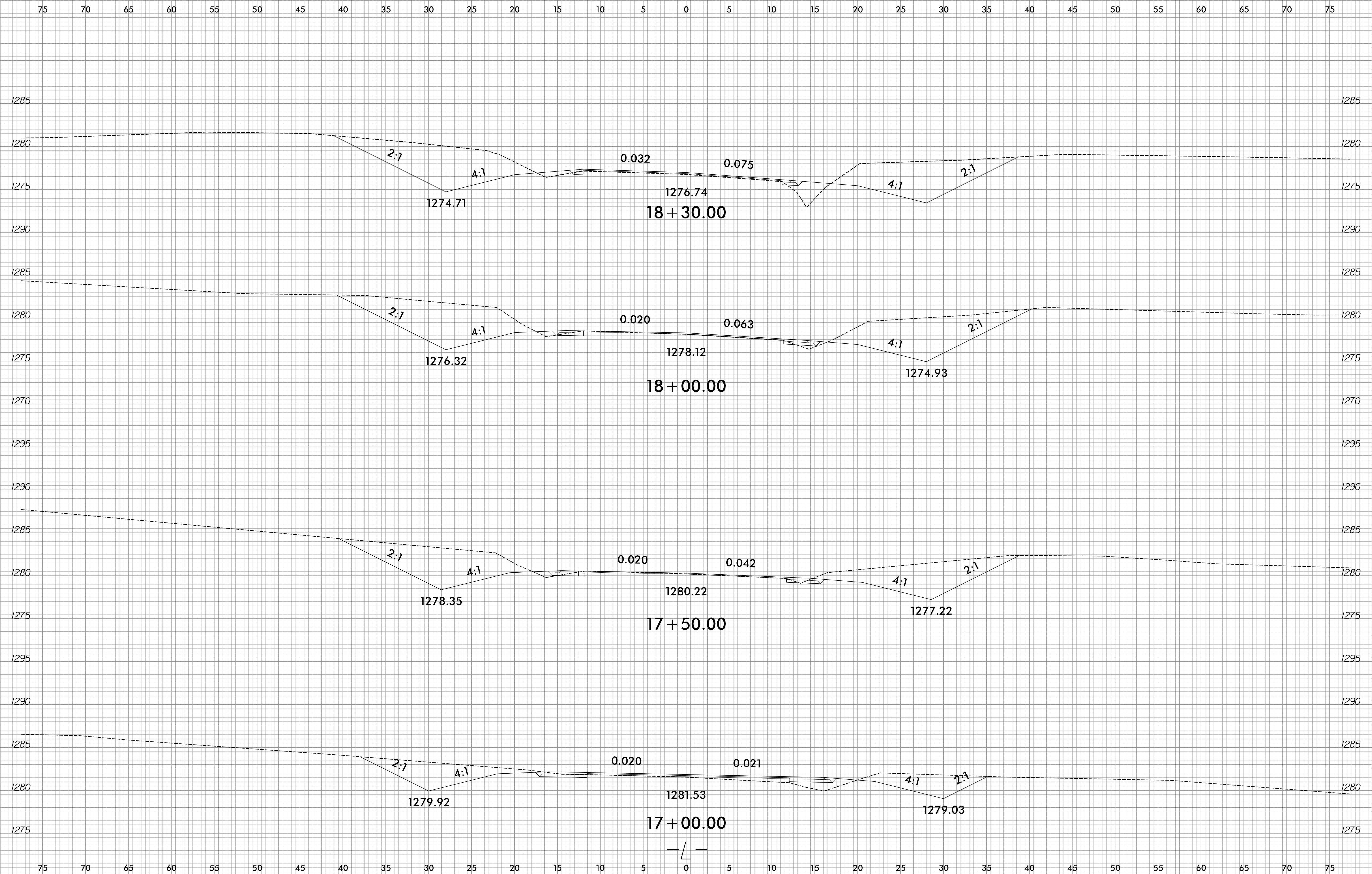


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Regan, Corbett

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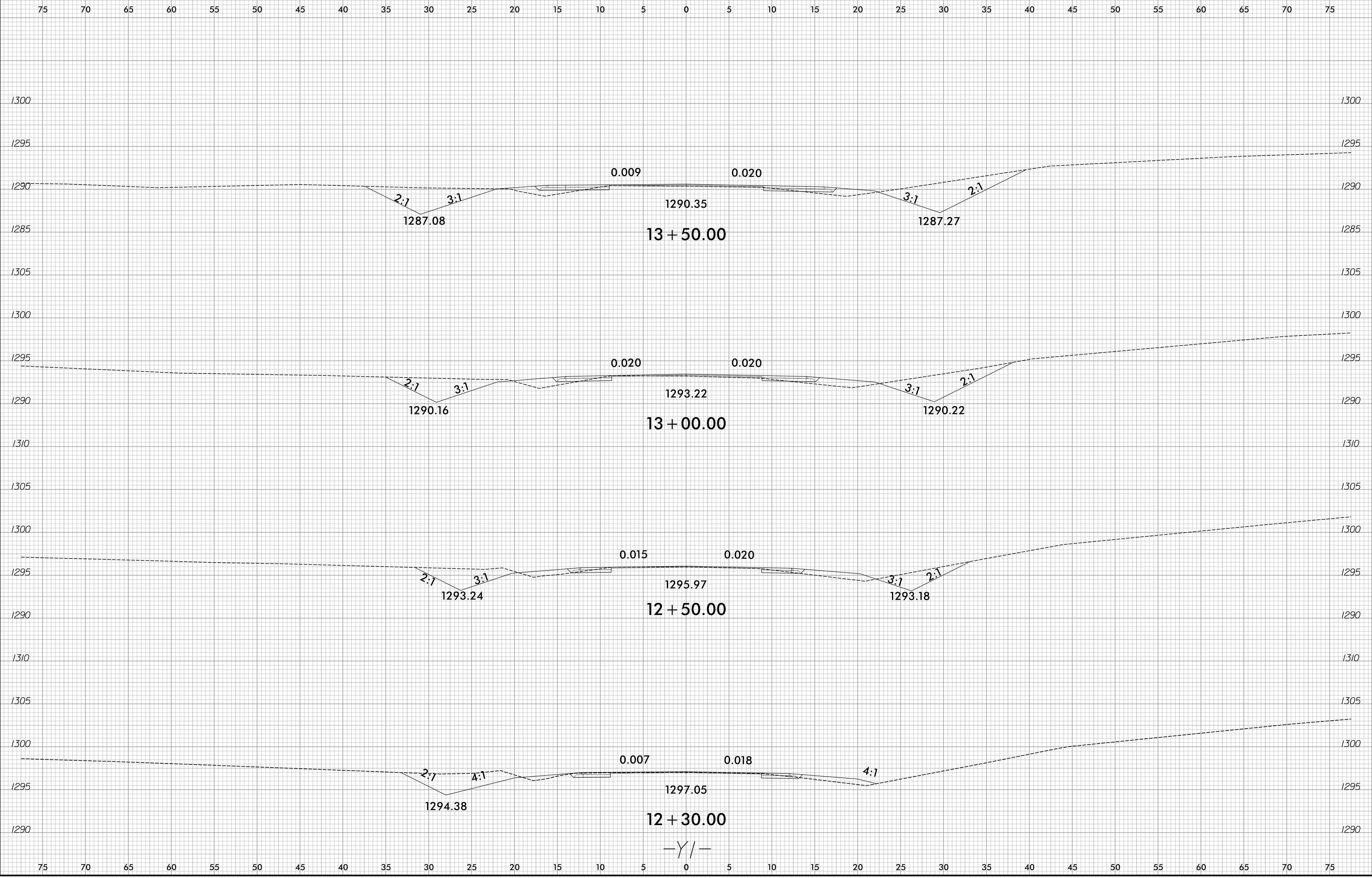


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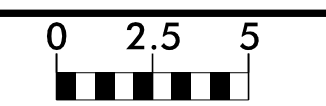
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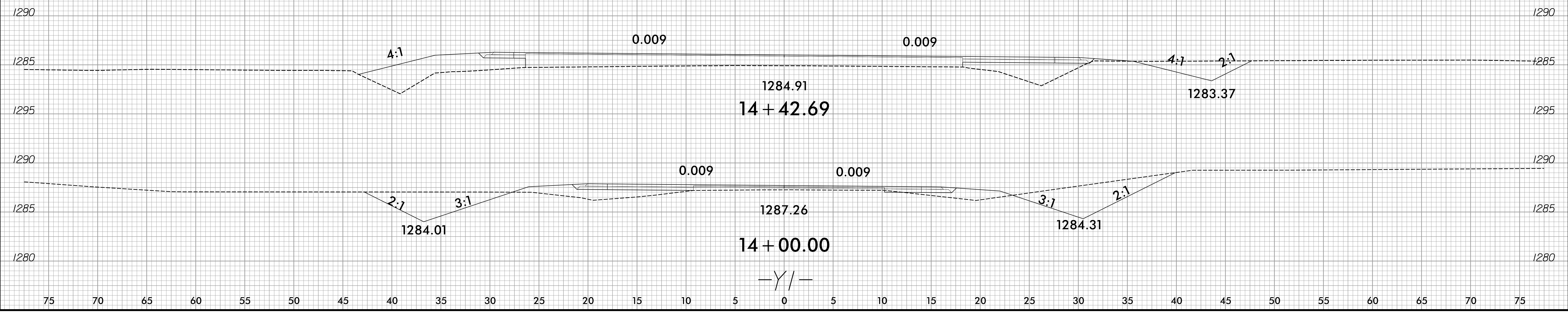
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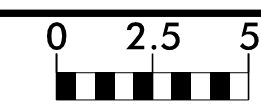
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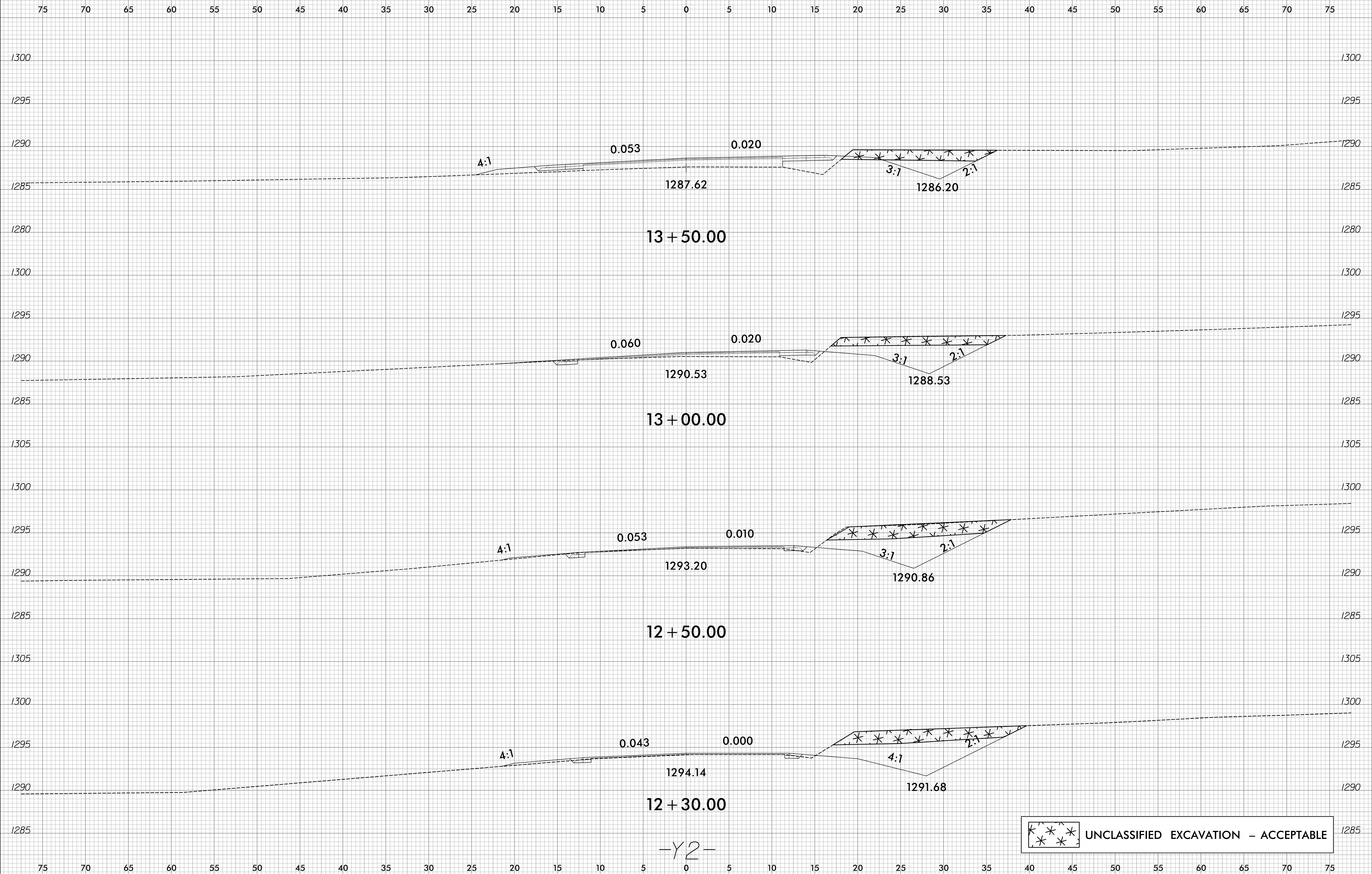
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6/23/16



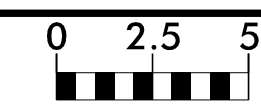
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U-6035	X-9



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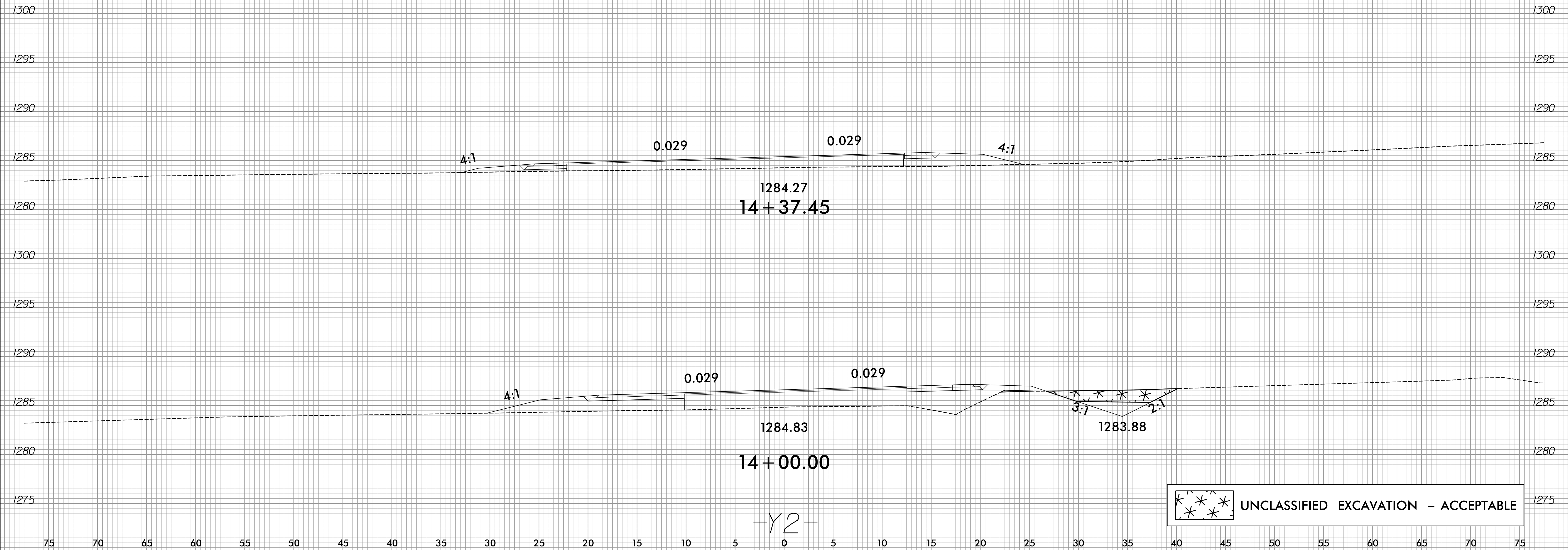
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 Regan, C.

6/23/16



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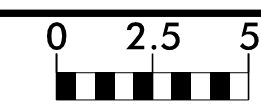
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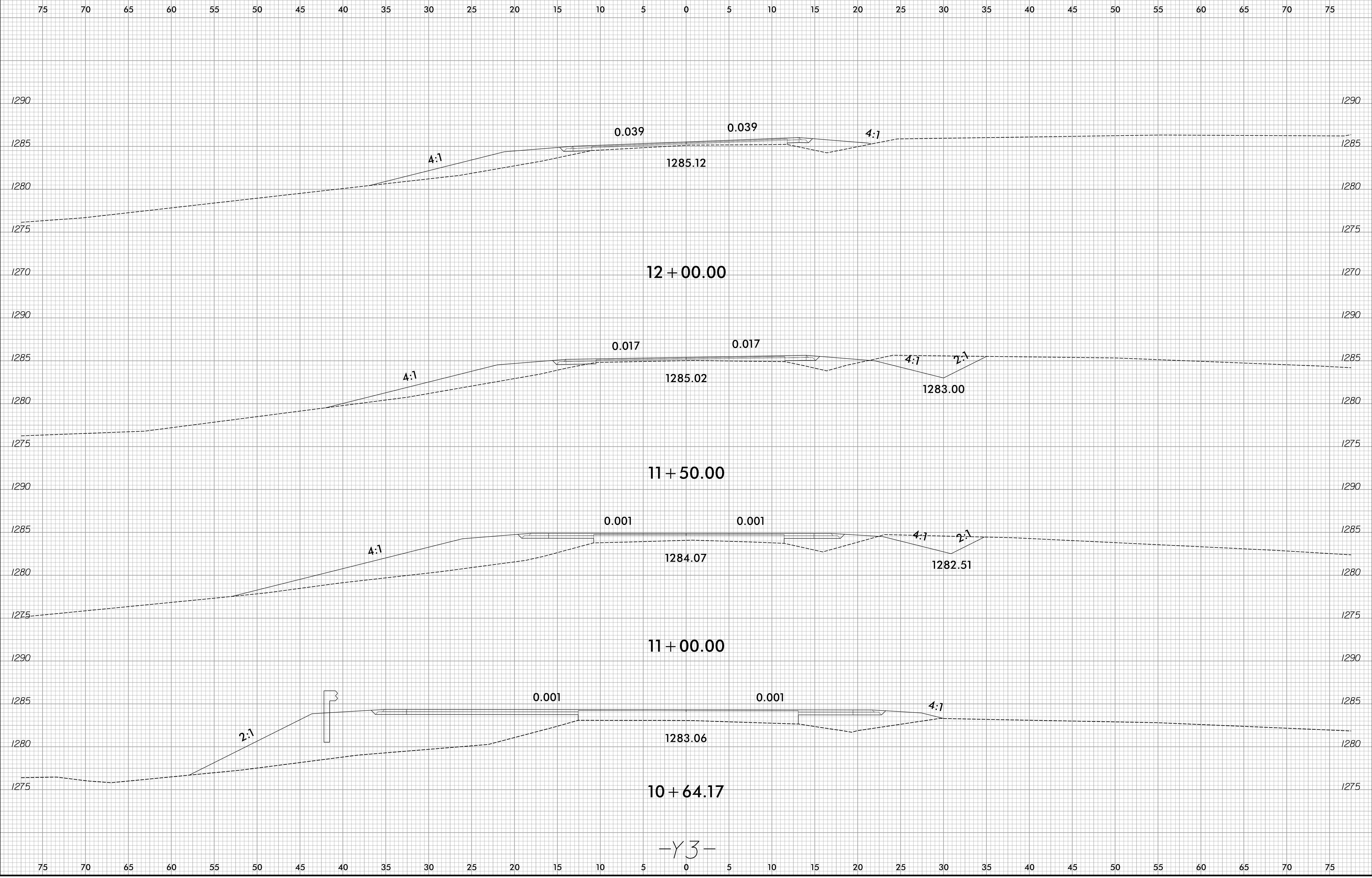
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6/23/16



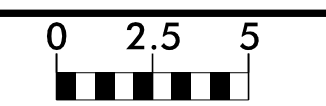
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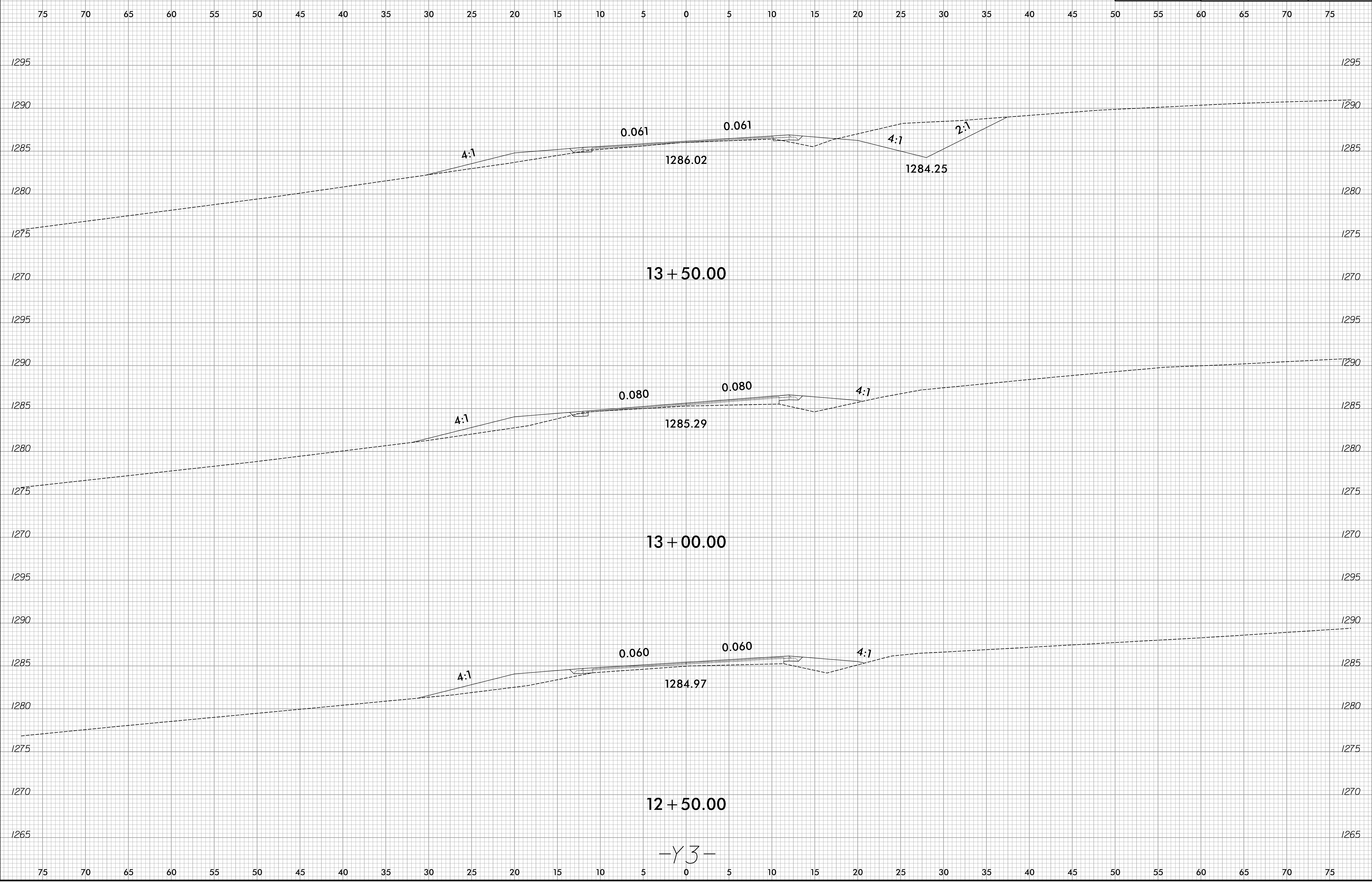
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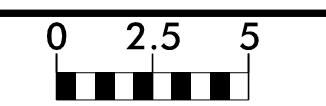
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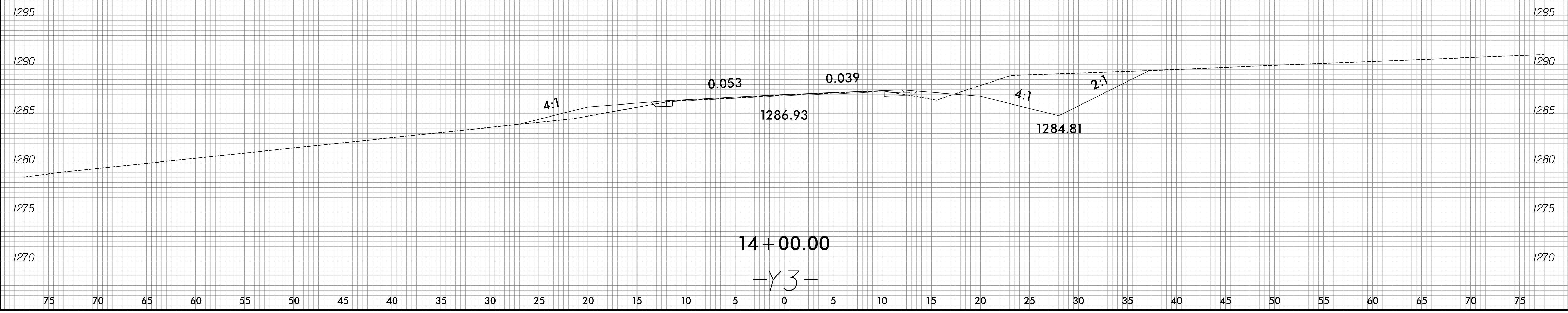


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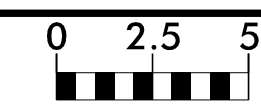
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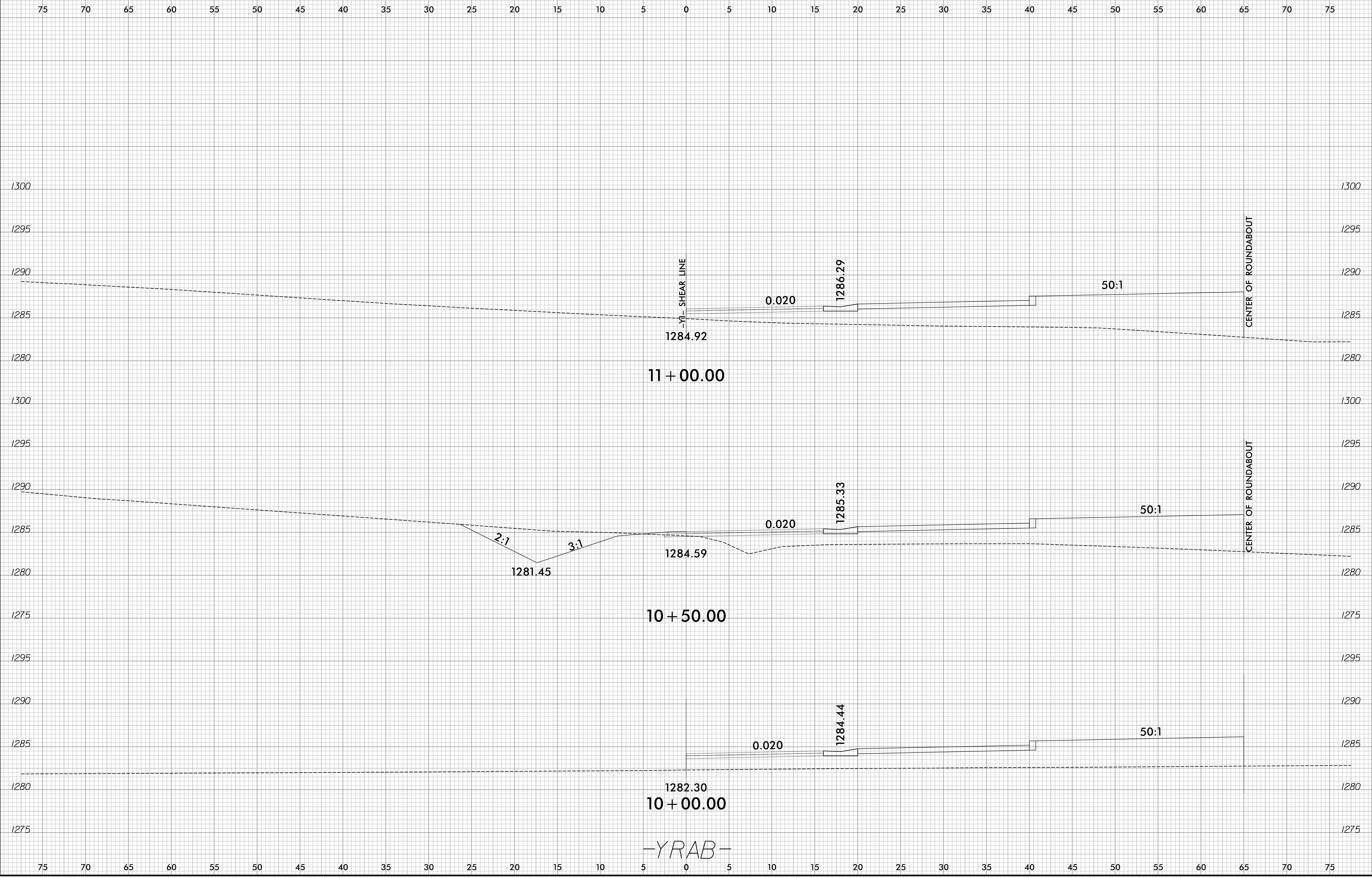


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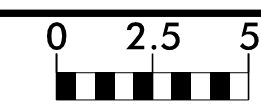


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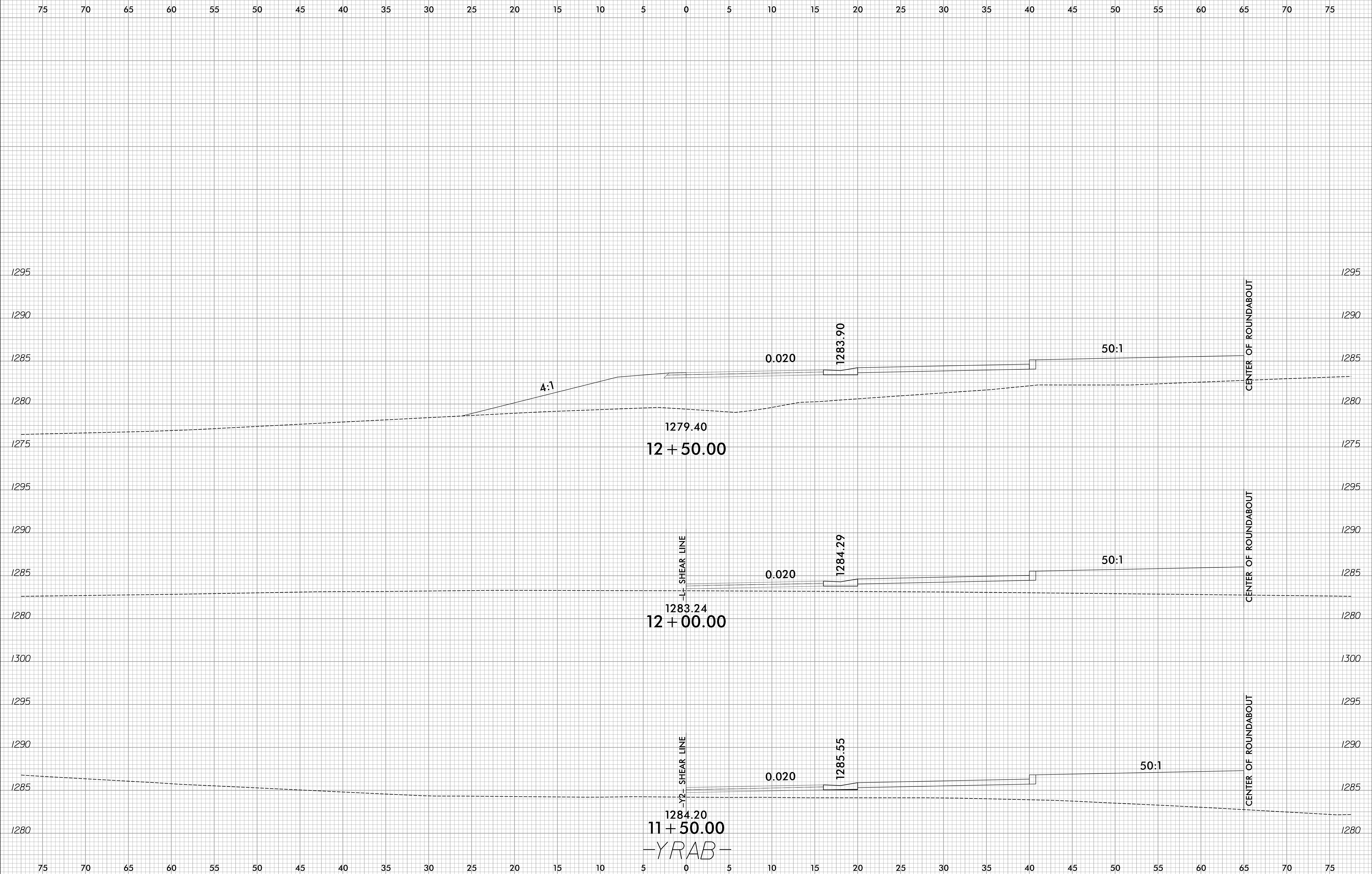
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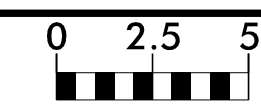


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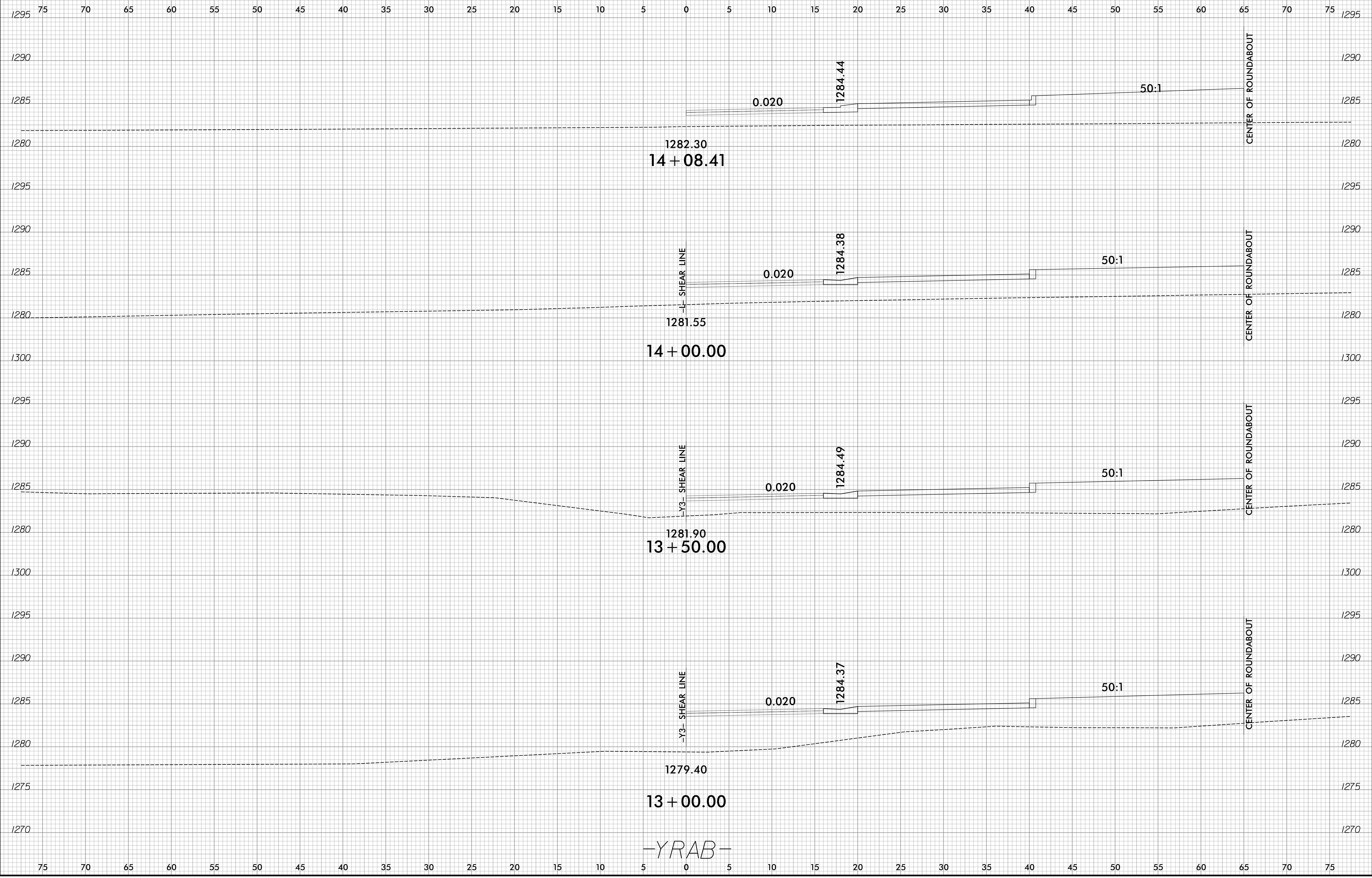


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