

PROJECT REFERENCE NO.	SHEET NO.
U-5810	3D-3

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

[illegible]

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

RK&K
P: (919) 878-9560
8601 Six Forks Road, Forum 1, Suite 700
Raleigh, North Carolina 27615-3960
NC License No. F-0112

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COMPUTED BY:			AMK																DATE:			3/2/2026					
CHECKED BY:			CAH																DATE:			3/3/2026					

[illegible]

PROJECT REFERENCE NO.	SHEET NO.
U-5810	3D-6

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PROJECT REFERENCE NO.	SHEET NO.
U-5810	3D-9

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LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 54" & OVER)

<u>ABBREVIATIONS</u>	
C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I.(N.S.)	(NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

12/06/07

5/27/2026
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COMPUTED BY: JOEY DAILY	DATE: 03/09/2026
CHECKED BY: LUIS CAMPOS	DATE: 03/09/2026

STATE OF NORTH CAROLINA

DIVISION OF HIGHWAYS

(9-17-24)

PROJECT REFERENCE NO.	SHEET NO.
U-5810	36-1

SUMMARY OF SUBSURFACE DRAINAGE

LINE	Station	Station	Location LT/RT/CL	Drain Type* UD/BD/SD	LF
L	40+25	41+75	LT & RT	SD	700
L	16+00	17+50	LT & RT	UD	200
L	58+25	60+00	LT & RT	UD	350
L	68+75	71+00	LT & RT	UD	250
L	102+75	104+25	RT	UD	200
CONTINGENCY				SD	500
CONTINGENCY				UD	500
				TOTAL SD LF:	1200
				TOTAL UD LF:	1500

*UD = Underdrain
*BD = Blind Drain
*SD = Subsurface Drain

SUMMARY OF SETTLEMENT GAUGES

Gauge No.	LINE and Station	Offset	
		Distance FT	Direction LT/RT
1	RAB3- 11+75	46	RT
2	-L3- 82+00	0	
3	-L3- 82+50	0	
4	-L3- 83+00	0	
5	-L3- 83+50	0	
6	-L3- 84+00	0	
7	-L3- 84+50	0	
8	-L3- 85+00	0	
9	-L3- 85+50	0	
10	-L3- 86+00	0	
11	-L3- 86+50	0	
12	-L3- 87+00	0	
	TOTAL GAUGES (EACH):	12	

SUMMARY OF EMBANKMENT
WAITING PERIODS

LINE	Station	Station	MONTHS
L3	81+50	87+00	2

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

LINE	Station	Station	Aggregate Type* ASU(1/2)/ AST	Aggregate Thickness INCHES [8" for ASU(2)]	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Subgrade Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
CONTINGENCY			ASU 1	12	500	1000	1500		
			TOTAL CY/TONS/SY:		500	1000**	1500**	0	0

*ASU(1/2) = Aggregate Subgrade (Type 1 or 2)
*AST = Aggregate Stabilization
**Total tons of "Class IV Subgrade Stabilization" and total square yards of "Geotextile for Subgrade Stabilization" are only the estimated quantities for ASU(1/2)/AST and may only represent a portion of the subgrade stabilization and geotextile quantities shown in the Item Sheets of the Proposal.

SUMMARY OF REINFORCED SOIL SLOPES AND SLOPE EROSION CONTROL

LINE	Beginning Slope/ RSS (H:V)	Approx. Station	Ending Slope/ RSS (H:V)	Approx. Station	Location LT/RT	Reinforced Soil Slope (RSS) SY	Geocells SY	Compost Blanket for Geocells SY	Coir Fiber Mat SY	Matting for Erosion Control SY
RAB1	1.5:1	12+00	1.5:1	12+50	RT	120				
DET	1.5:1	16+75	1.5:1	18+25	LT				260	
Y1	1.75:1	17+25	1.75:1	17+75	LT				190	
CONTINGENCY									150	
					TOTAL SY:	120	0	0	600*	0**

*Total square yards of "Coir Fiber Mat" is only the estimated quantity for slopes steeper than 2:1 (H:V) and may only represent a portion of the coir fiber mat quantity shown in the Item Sheets of the Proposal.
**Total square yards of "Matting for Erosion Control" is only the estimated quantity for RSS and may only represent a portion of the matting quantity shown in the Item Sheets of the Proposal.

SUMMARY OF PRE-SPLITTING OF ROCK

LINE	Beginning Rock Cut Slope (H:V)	Approx. Station	Ending Rock Cut Slope (H:V)	Approx. Station	Location LT/RT	Pre-splitting of Rock SY
L	0.5:1	90+75	0.5:1	91+75	RT	1120
L	1:1	100+25	1:1	100+75	RT	15
L	1:1	101+25	1:1	101+75	RT	15
CONTINGENCY						200
					TOTAL SY:	1350

SUMMARY OF BRIDGE WAITING PERIODS

Bridge Description	End Bent/ Bent No.	MONTHS
Bridge on SR 1514 (Bamboo Rd.) Over Radford Quarries	1	2
Bridge on SR 1514 (Bamboo Rd.) Over Radford Quarries	2	2

5/28/99
5/27/2026
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chopper

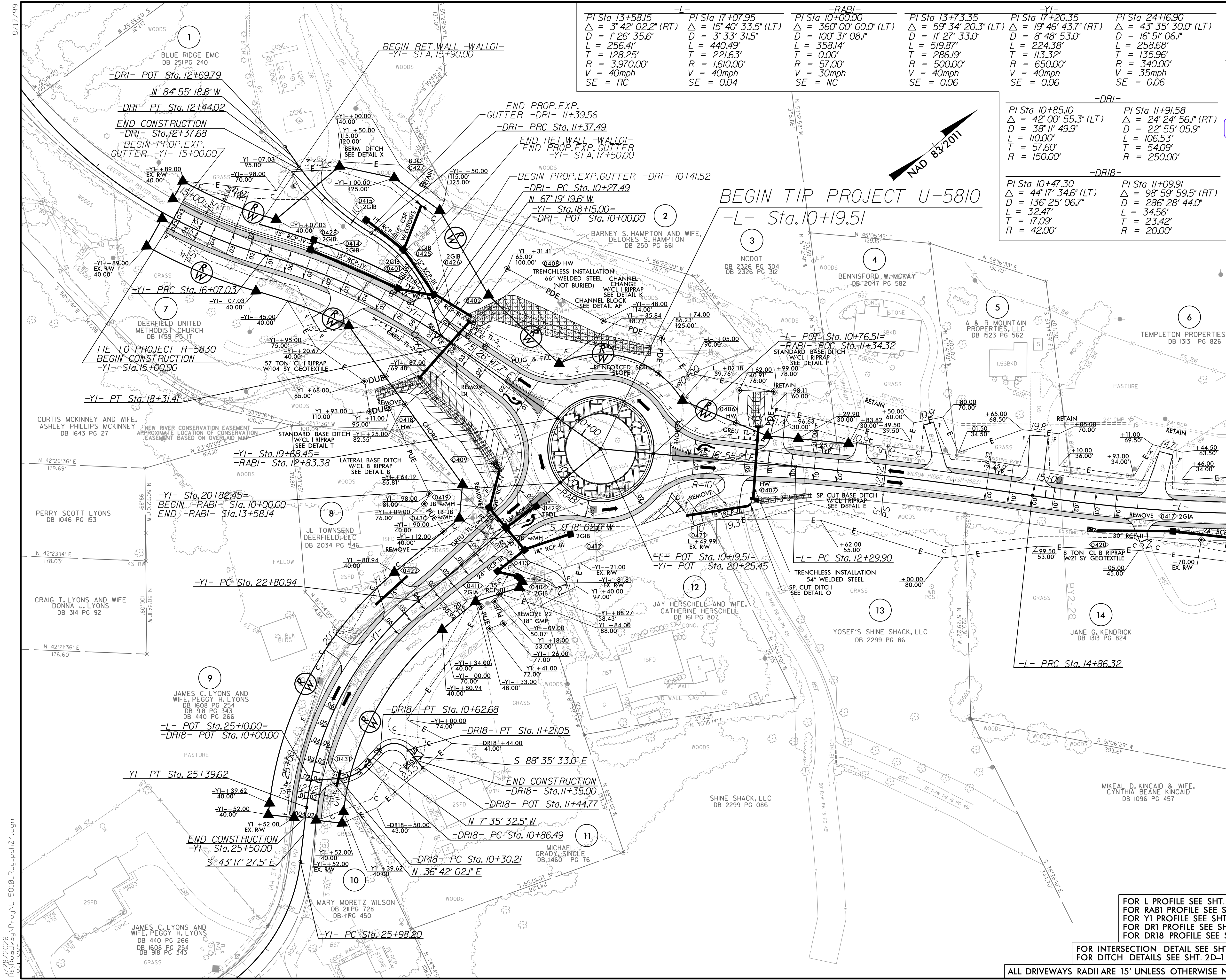
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PARCEL INDEX SHEET

PARCEL No.	SHEET No.	PROPERTY OWNER NAME
1	4	Blue Ridge EMC
2	4	Barney S. Hampton and Wife, Delores S. Hampton
3	4	NCDOT
4	4	Bennisford W. McKay
5	4	A & R Mountain Properties, LLC
6	4 & 5	Templeton Properties, LP
7	4	Deerfield United Methodist Church
8	4	JL Townsend Deerfield, LLC
9	4	James C. Lyons and Wife, Peggy H. Lyons
10	4	Mary Moretz Wilson
11	4	Michael Grady, Single
12	4	Jay Herschell and Wife, Catherine Herschell
13	4	Yosefs Shine Shack, LLC
14	4 & 5	Jane G. Kendrick
15	5 & 6	Templeton Properties, LP
16	5	Button Rentals, LLC
17	5	Brian K. Skeens and Wife, Angela B. Skeens
18		Not Used
19	5	Ann Keffer Pipes
20	5	John and Glenda Eggers
21	5 & 6	Wynfield Ridge Townhome Owners Association, Inc.
22	6	Jennifer L. Sirois
23	6	Michael Nevitt, et ux
24	6	NCDOT
25	6	David Stanton Whittaker Jr. and Wife, Kerri Brush Whittaker
26	6	Truman Critcher and Wife, Lenore Critcher
27	6	Patrick J. Donoghue, et ux
28	6 & 7	Glenn D. Andrews Jr., and Wife, Paulanne L. Andrews
29	6	NCDOT
30	6	Joe F. Greene and Wife, Ardease Critcher Greene
31	6 & 7	Mackie Lee Brown, Thomas Jerry Brown, and Leanna Victoria Brown
32	7	Martin Luther Bolick, et ux
33	7	Johns Carwile and Wife, Jeannette Carwile
35	7	David L. DeHart, et ux
36Z	7	Judy Trexler and Paula K. Trexler
37	7	Savva G. Kostis, et ux
38	7	Christian S. Teague and Heather A. Teague
39	7	NCDOT
40	7 & 8	James W. Woods, et ux
41	7	Courtney Leighanne Greene
42	7	Edward Dean Eggers, and David Charles Eggers
43	7	Meadowridge Homeowners Association
44	7	Courtney Leighanne Greene

PARCEL No.	SHEET No.	PROPERTY OWNER NAME
45	7	Claudia Huerta
46		Not Used
47	7	Brent A. Engel, et ux
48		Not Used
49	7 & 8	Shannon Hampton Greene, et al
50	8	NCDOT
51	8	Richard K. Holaday
52	8	NCDOT
53	8	NCDOT
54	8	Gregory Scott Patterson
55	8 & 9	T & R Enterprise, LLC
56	8	NCDOT
57	8	Sandra Nellely Alegria Olvera
58	8	Donovan Philips, Single and Wayne Phillips, Single
59	8	Christian Gale Redmond
60	8	The Lisa Lynette Brown Living Trust
61	8	Lewie L. Winebarger and Wife, Dorothy P. Winebarger
62	8 & 9	Mack D. Brown and Wife, Willa Jean Brown
63	9	Den Mac Condominium Property Owners Association
63A	9	East Boone Outpost, LLC
64	9 & 10	Radford Quarries of Boone, Inc
65	9	Steven David Martin, et ux
66	9	(Existing Private R/W)
67	9	James M. Jordan
68	9	NCDOT
69	9	Jasyn L. Klamborowski, et ux
70	9	NCDOT
71	10 & 11	Radford Properties, Inc.
72	11	LMOC Legacy, LLC

PROJECT REFERENCE NO.		SHEET NO.	
U-5810		4	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		7/8/2026	
7/8/2026		7/2/2026	
NORTH CAROLINA PROFESSIONAL SEAL 040878		NORTH CAROLINA PROFESSIONAL SEAL 51640	
Mary Moretz Wilson, Engineer		Douglas A. Vofsi, Engineer	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			
TRAFFIC DIAGRAM			

MATCHLINE -L- STA. 18+00 SEE SHEET 5

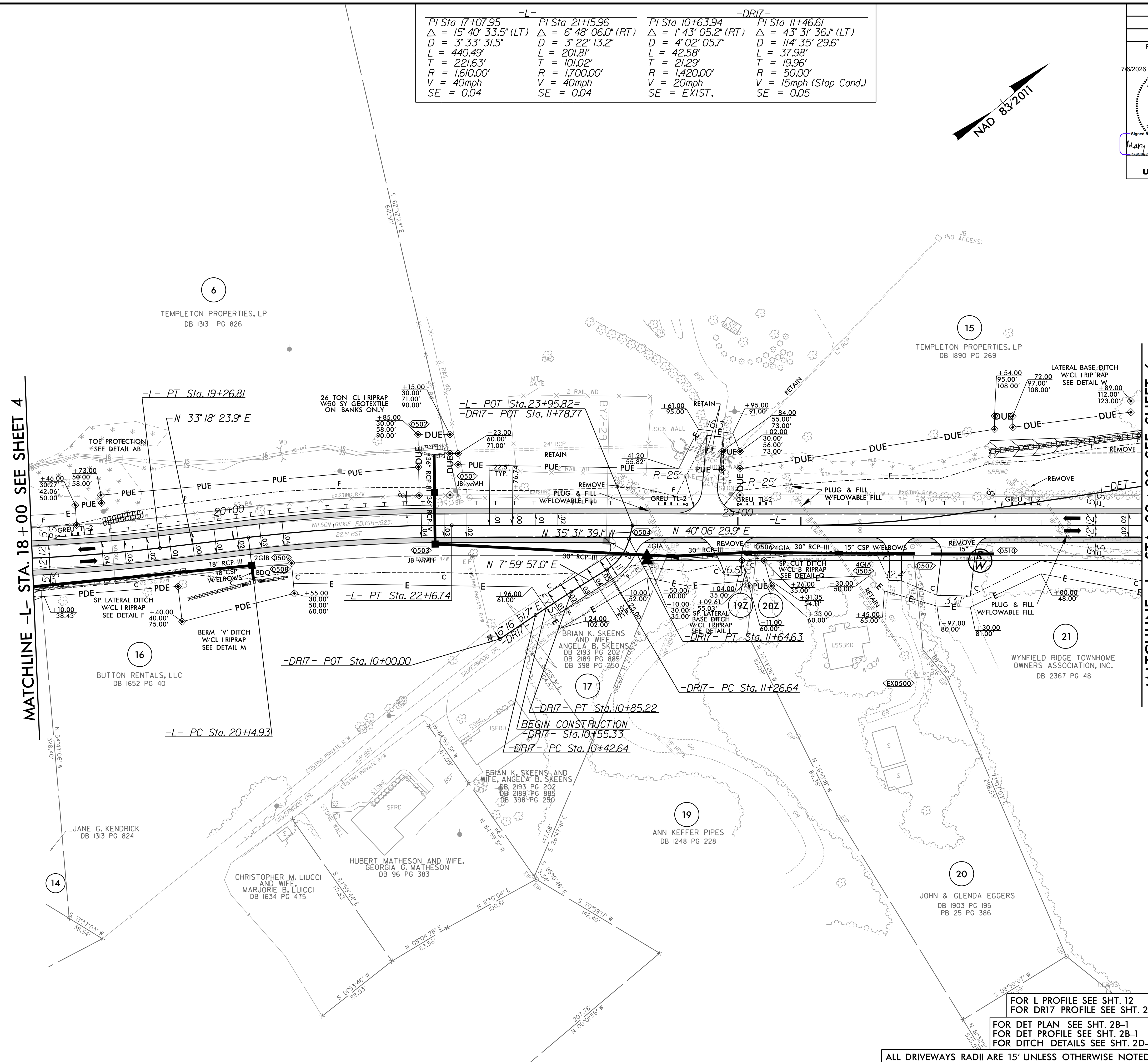


FOR L PROFILE SEE SHT. 12
FOR RABI PROFILE SEE SHT. 16
FOR Y1 PROFILE SEE SHT. 16
FOR DR1 PROFILE SEE SHT. 19
FOR DR18 PROFILE SEE SHT. 21

FOR INTERSECTION DETAIL SEE SHT. 2B-4
FOR DITCH DETAILS SEE SHT. 2D-1

ALL DRIVEWAYS RADII ARE 15' UNLESS OTHERWISE NOTED.

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FOR L PROFILE SEE SHT. 12
FOR DR17 PROFILE SEE SHT. 21

FOR DET PLAN SEE SHT. 2B-1
FOR DET PROFILE SEE SHT. 2B-1
FOR DITCH DETAILS SEE SHT. 2D-1

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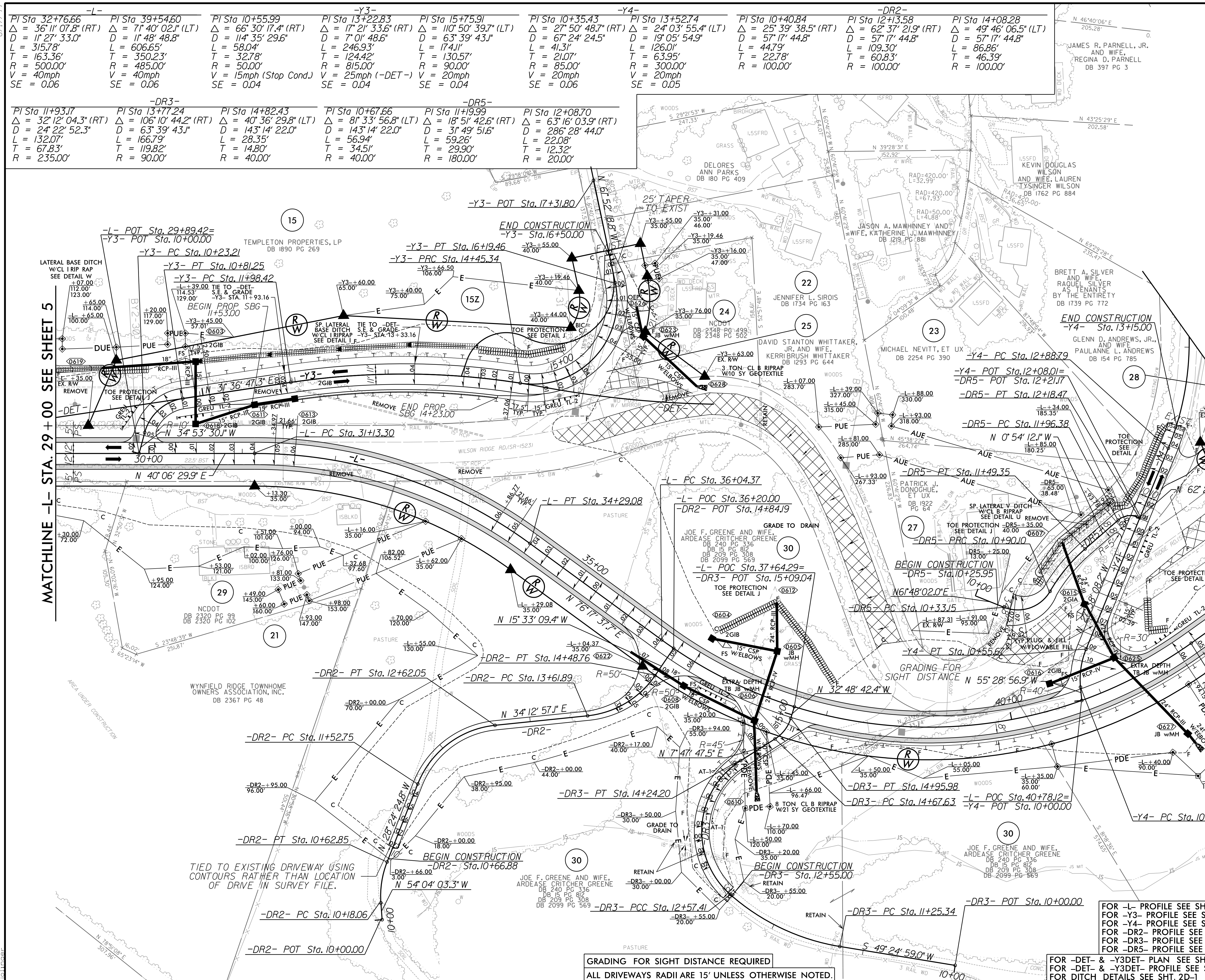
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ALL DRIVEWAYS RADII ARE 15' UNLESS OTHERWISE NOTED.

8/17/2026

5/28/2026
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PROJECT REFERENCE NO. U-5810		SHEET NO. 6	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		ENGINEER	
7/6/2026		7/2/2026	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



MATCHLINE -L- STA. 29 + 00 SEE SHEET 5

MATCHLINE -L- STA. 44 + 00 SEE SHEET 7

FOR -L- PROFILE SEE SHTS. 12-13
FOR -Y3- PROFILE SEE SHT. 17
FOR -Y4- PROFILE SEE SHT. 17
FOR -DR2- PROFILE SEE SHT. 19
FOR -DR3- PROFILE SEE SHT. 19
FOR -DR5- PROFILE SEE SHT. 20

FOR -DET- & -Y3DET- PLAN SEE SHT. 2B-1
FOR -DET- & -Y3DET- PROFILE SEE SHT. 2B-1
FOR DITCH DETAILS SEE SHT. 2D-1

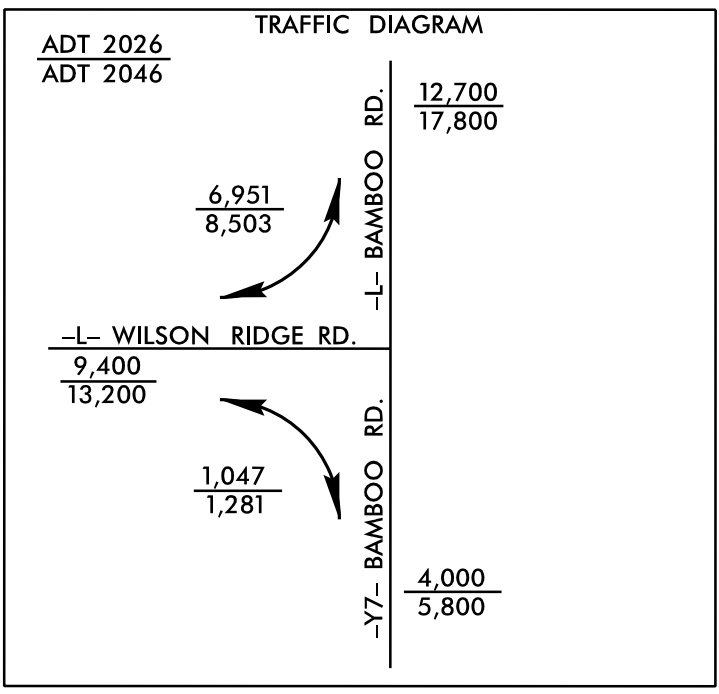
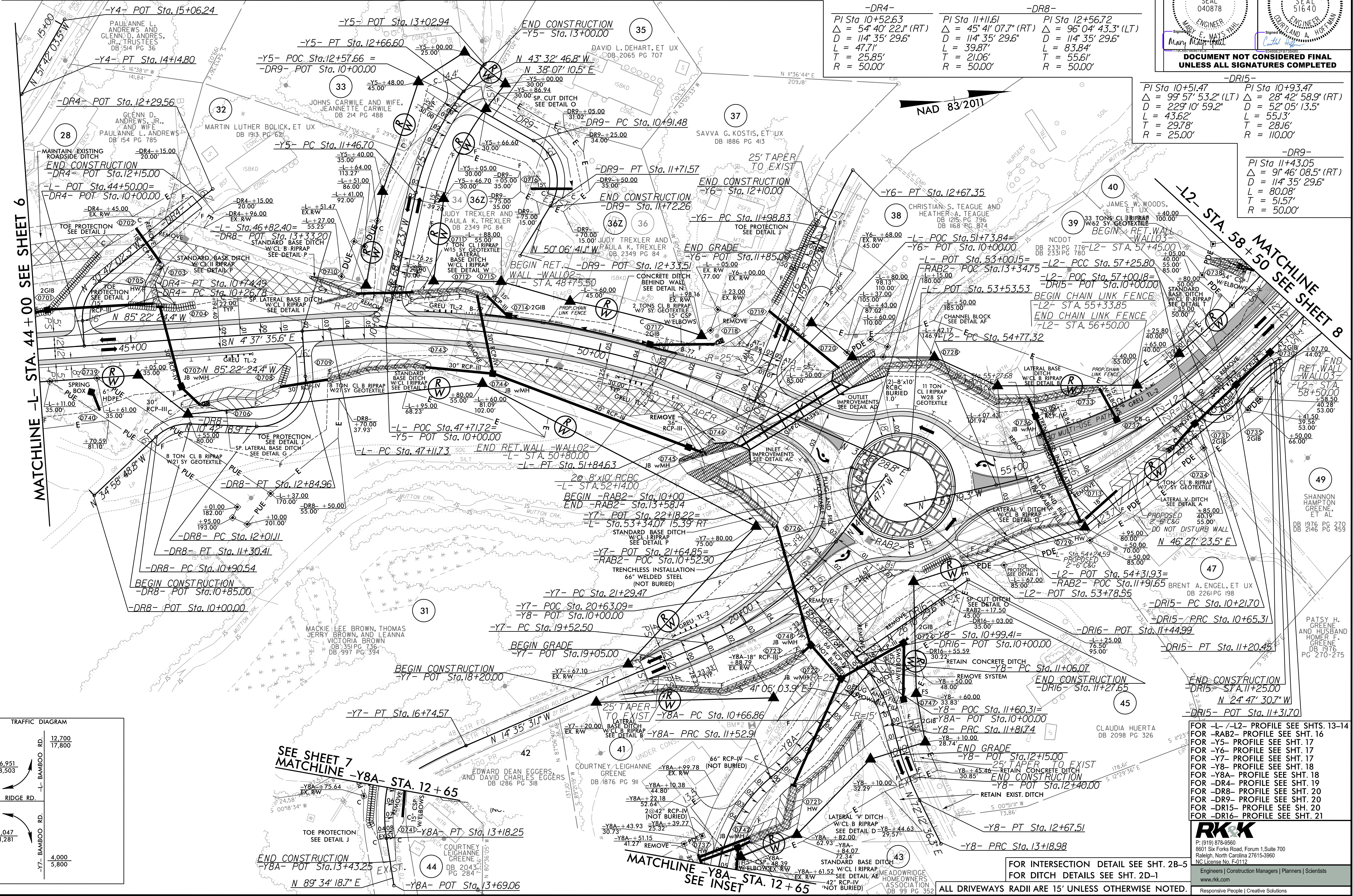
GRADING FOR SIGHT DISTANCE REQUIRED
ALL DRIVEWAYS RADII ARE 15' UNLESS OTHERWISE NOTED.

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-L-	-L2-	-RAB2-	-Y5-	-Y6-	-Y7-	-Y8-	-Y8A-
PI Sta 49+52.88 Δ = 27° 38' 53.2" (RT) D = 5' 50' 47.4" L = 472.90' T = 241.15' R = 980.00' V = 40mph SE = 0.05	PI Sta 56+04.08 Δ = 27° 54' 56.4" (LT) D = 1' 14' 04.1" L = 248.48' T = 126.76' R = 510.00' V = 40mph SE = 0.06	PI Sta 59+82.16 Δ = 28° 12' 56.9" (LT) D = 5' 37' 02.0" L = 502.31' T = 256.36' R = 1,020.00' V = 40mph SE = 0.05	PI Sta 10+00.00 Δ = 360° 00' 00.0" (LT) D = 100' 31' 08.1" L = 358.14' T = 60.95' R = 57.00' V = 20mph SE = 0.03	PI Sta 12+07.66 Δ = 25° 26' 36.3" (RT) D = 2' 13' 14.4" L = 119.90' T = 60.95' R = 270.00' V = 20mph SE = 0.03	PI Sta 12+33.14 Δ = 7° 51' 05.9" (RT) D = 1' 27' 33.0" L = 68.52' T = 34.31' R = 500.00' V = 20mph SE = 0.03	PI Sta 20+43.04 Δ = 29° 49' 16.6" (LT) D = 16' 51' 06.1" L = 176.96' T = 90.53' R = 340.00' V = 35mph SE = 0.04	PI Sta 11+44.73 Δ = 28° 54' 09.1" (RT) D = 38' 11' 49.9" L = 75.67' T = 38.66' R = 150.00' V = 20mph SE = 0.04
PI Sta 12+24.82 Δ = 13° 27' 50.2" (LT) D = 15' 41' 50.9" L = 85.77' T = 43.08' R = 365.00' V = 20mph SE = 0.03	PI Sta 11+09.99 Δ = 9° 51' 39.7" (RT) D = 11' 27' 33.0" L = 86.05' T = 43.13' R = 500.00' V = 20mph SE = 0.03	PI Sta 12+43.82 Δ = 59° 12' 17.1" (LT) D = 35' 48' 35.5" L = 165.33' T = 90.90' R = 160.00' V = 20mph SE = 0.04	PI Sta 12+56.72 Δ = 96° 04' 43.3" (LT) D = 114' 35' 29.6" L = 47.71' T = 21.06' R = 50.00'	PI Sta 11+11.61 Δ = 45° 41' 07.7" (RT) D = 114' 35' 29.6" L = 39.87' T = 21.06' R = 50.00'	PI Sta 12+56.72 Δ = 96° 04' 43.3" (LT) D = 114' 35' 29.6" L = 47.71' T = 21.06' R = 50.00'	PI Sta 12+56.72 Δ = 96° 04' 43.3" (LT) D = 114' 35' 29.6" L = 47.71' T = 21.06' R = 50.00'	PI Sta 12+56.72 Δ = 96° 04' 43.3" (LT) D = 114' 35' 29.6" L = 47.71' T = 21.06' R = 50.00'

PROJECT REFERENCE NO. U-5810		SHEET NO. 7	
ROADWAY DESIGN ENGINEER 7/6/2026 NORTH CAROLINA PROFESSIONAL SEAL 040878 Mary E. WAYS, P.E.		HYDRAULICS ENGINEER 7/2/2026 NORTH CAROLINA PROFESSIONAL SEAL 51640 Curtis A. ...	
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FOR L-2, Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHTS. 13-14
 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 16
 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 17
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 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 89
 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 90
 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 91
 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 92
 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 93
 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 94
 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 95
 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 96
 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 97
 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 98
 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 99
 FOR Y-5, Y-6, Y-7, Y-8, Y-8A PROFILE SEE SHT. 100

FOR INTERSECTION DETAIL SEE SHT. 2B-5
 FOR DITCH DETAILS SEE SHT. 2D-1
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-L2-		-Y9-	
PI Sta 59+82.16	PI Sta 66+99.5	PI Sta 71+29.52	PI Sta 10+42.78
$\Delta = 28' 12" 56.9" (LT)$	$\Delta = 8' 20' 46.3" (RT)$	$\Delta = 23' 01' 40.0" (LT)$	$\Delta = 13' 52' 41.5" (LT)$
$D = 5' 37' 02.0"$	$D = 3' 44' 41.4"$	$D = 4' 46' 28.7"$	$D = 23' 52' 23.7"$
$L = 502.31'$	$L = 222.87'$	$L = 482.29'$	$L = 581.3'$
$T = 256.36'$	$T = 111.63'$	$T = 244.45'$	$T = 29.21'$
$R = 1,020.00'$	$R = 1,530.00'$	$R = 1,200.00'$	$R = 240.00'$
$V = 40mph$	$V = 40mph$	$V = 40mph$	$V = 20mph$
$SE = 0.05$	$SE = 0.04$	$SE = 0.05$	$SE = 0.03$

PROJECT REFERENCE NO.
U-5810

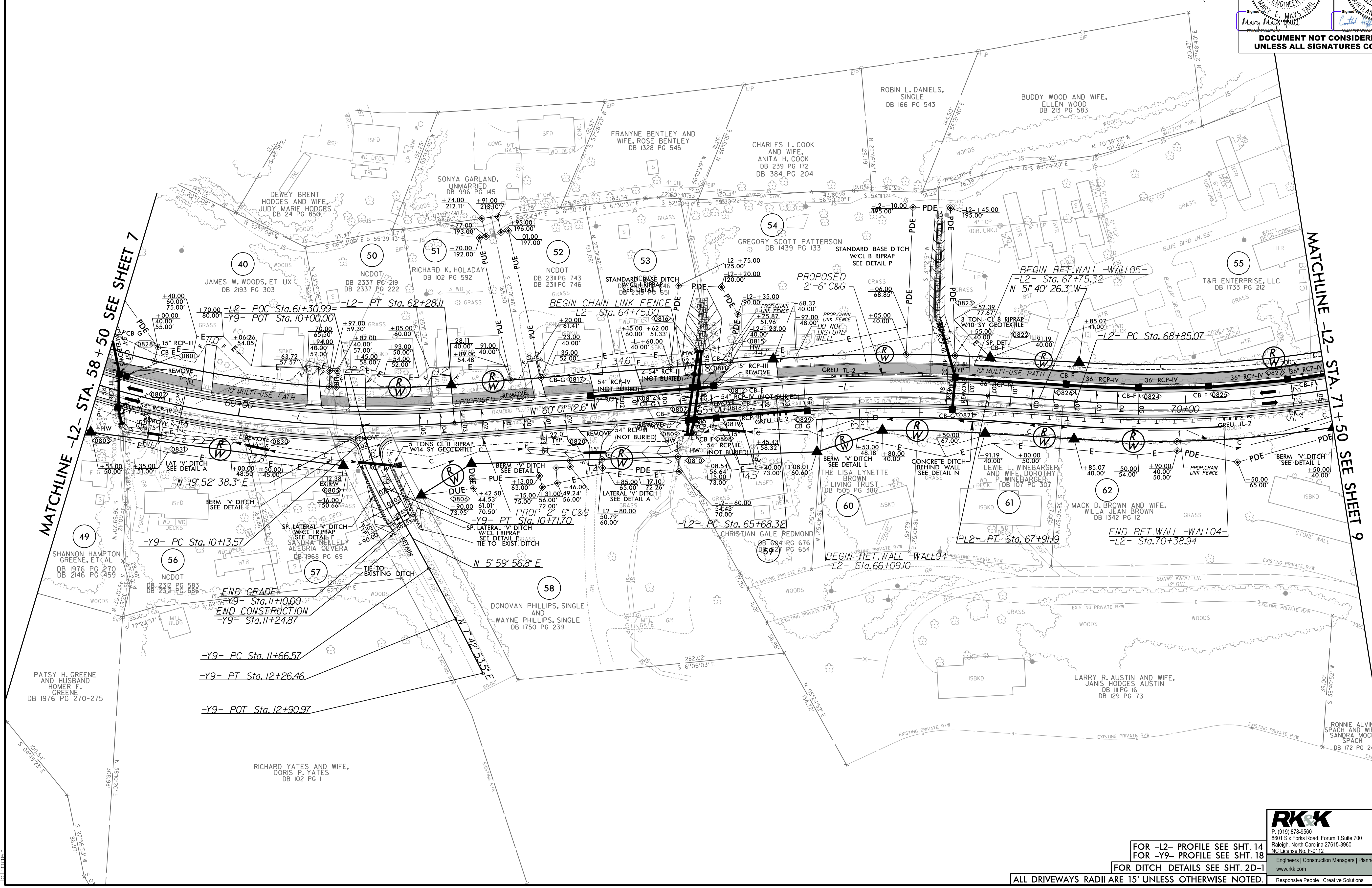
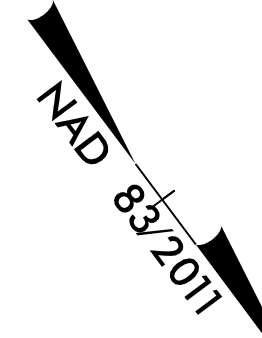
SHEET NO.
8

RW SHEET NO.

ROADWAY DESIGN ENGINEER
7/8/2026
NORTH CAROLINA PROFESSIONAL SEAL 040878
Mary Mays Hall

HYDRAULICS ENGINEER
7/2/2026
NORTH CAROLINA PROFESSIONAL SEAL 51640
Curtis Hall

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FOR -L2- PROFILE SEE SHT. 14
FOR -Y9- PROFILE SEE SHT. 18
FOR DITCH DETAILS SEE SHT. 2D-1

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5/28/2026
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psh08

PROJECT REFERENCE NO.		SHEET NO.	
U-5810		9	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
6/26/26		7/2/2026	
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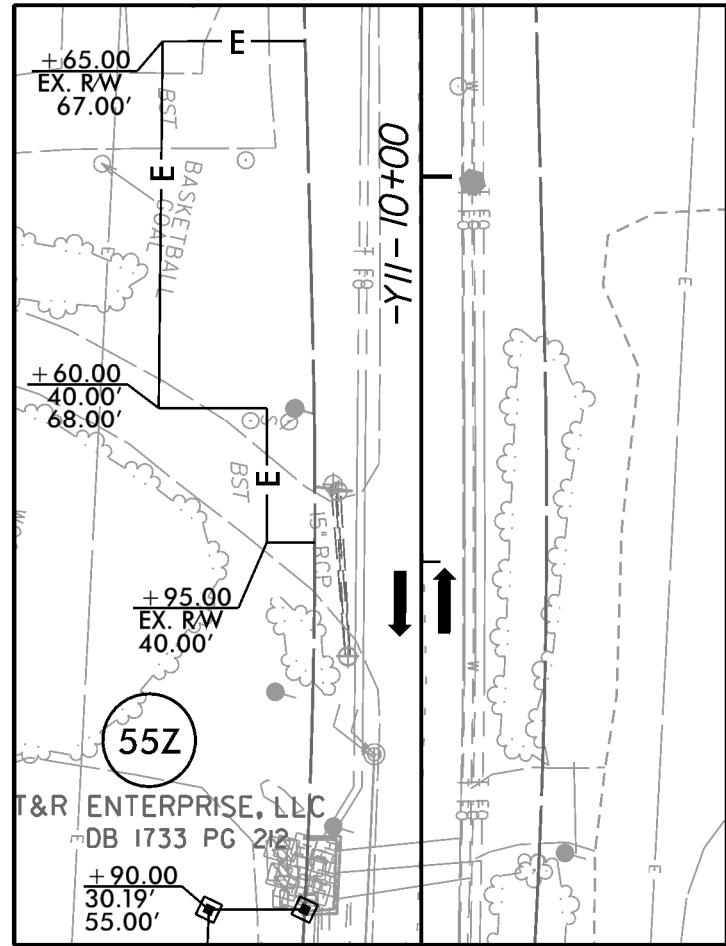
FOR -L2- /-L3- PROFILE SEE SHTS. 14-15
FOR -RAB3- PROFILE SEE SHT. 16
FOR -Y10- PROFILE SEE SHT. 18
FOR -Y11- PROFILE SEE SHT. 18
FOR -DR24- PROFILE SEE SHT. 21
FOR -DR25- PROFILE SEE SHT. 21

FOR -Y11_DET-, -DR24_DET- & -DR25_DET PLAN SEE SHT. 2B-2
FOR -Y11_DET-, -DR24_DET- & -DR25_DET PROFILE SEE SHT. 2B-3
FOR INTERSECTION DETAIL SEE SHT. 2B-6
FOR DITCH DETAIL SEE SHT. 2D-1

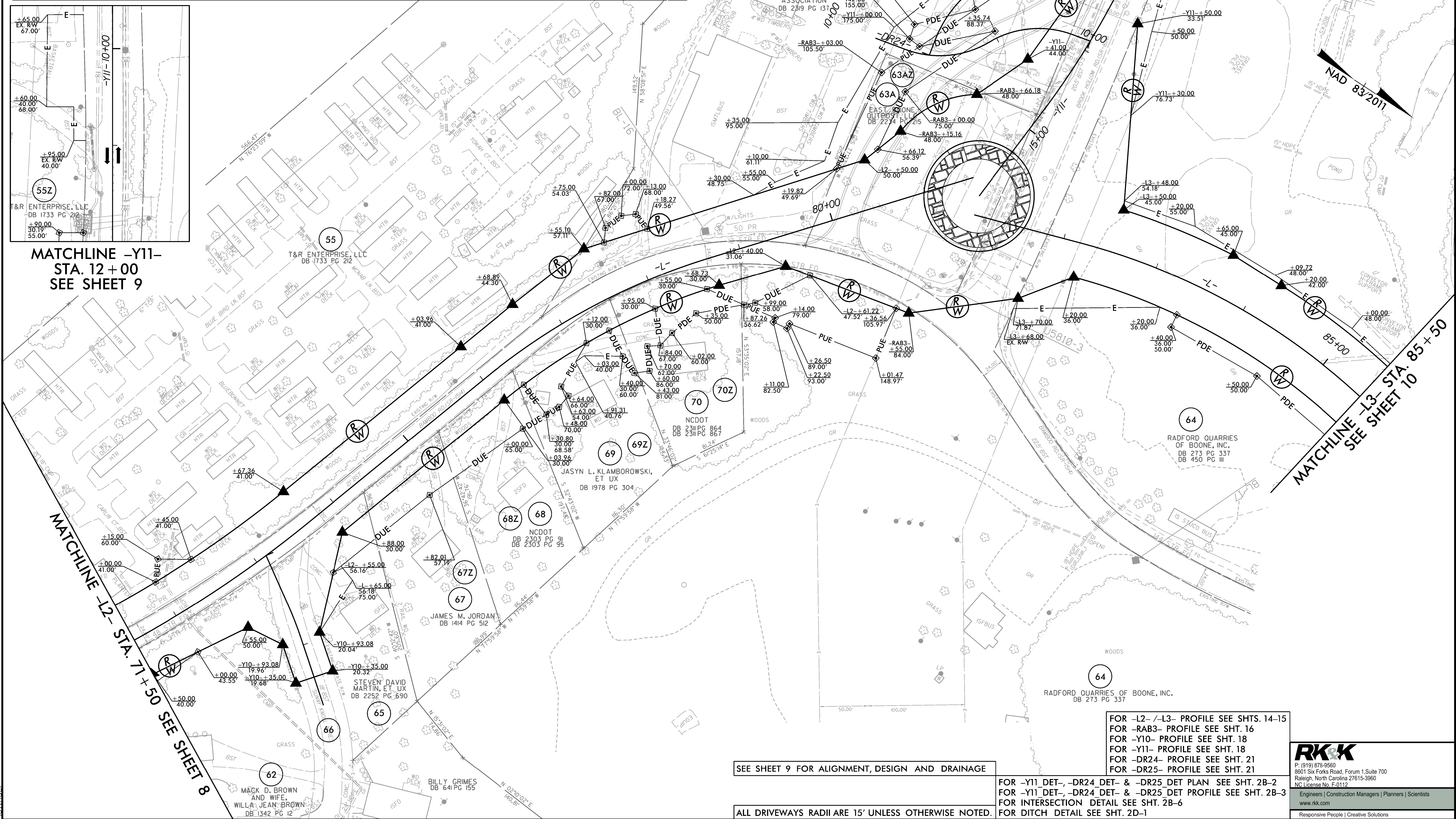


8/17/99

-L2-	-L3-	-RAB3-	-Y10-
PI Sta 71+29.52 $\Delta = 23^{\circ} 01' 40.0"$ (LT) D = 4' 46" 28.7" L = 482.29' T = 244.45' R = 1,200.00' V = 40mph SE = 0.05	PI Sta 77+38.04 $\Delta = 22^{\circ} 18' 32.2"$ (RT) D = 8' 25" 33.1" L = 264.77' T = 134.08' R = 680.00' V = 40mph SE = 0.06	PI Sta 84+65.66 $\Delta = 40^{\circ} 07' 28.6"$ (RT) D = 8' 25" 33.1" L = 476.21' T = 248.34' R = 680.00' V = 40mph SE = 0.06	PI Sta 10+00.00 $\Delta = 360^{\circ} 00' 00.0"$ (LT) D = 100' 31' 08.1" L = 358.14' T = 0.00' R = 57.00' SE = 30mph
-Y11-	-DR24-	-DR25-	
PI Sta 9+33.94 $\Delta = 0^{\circ} 40' 43.9"$ (RT) D = 1' 00' 00.0" L = 67.89' T = 33.94' R = 5729.58' V = 20mph SE = NC	PI Sta 13+43.04 $\Delta = 17^{\circ} 47' 07.7"$ (RT) D = 6' 21' 58.3" L = 279.37' T = 140.82' R = 900.00' V = 20mph SE = 0.03	PI Sta 10+67.59 $\Delta = 50^{\circ} 55' 51.6"$ (LT) D = 57' 17' 44.8" L = 88.89' T = 47.62' R = 100.00'	PI Sta 10+73.91 $\Delta = 5^{\circ} 29' 43.2"$ (RT) D = 14' 19' 26.2" L = 38.36' T = 19.20' R = 400.00' V = 20mph SE = 0.02



MATCHLINE -Y11-
STA. 12+00
SEE SHEET 9



PROJECT REFERENCE NO. U-5810		SHEET NO. 9-ROW	
RW SHEET NO. 9		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		7/2/2026	
NORTH CAROLINA PROFESSIONAL SEAL 040878 ENGINEER Mary E. Mays, P.E.		NORTH CAROLINA PROFESSIONAL SEAL 51640 ENGINEER Curtis A. Hoffman	
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SEE SHEET 9 FOR ALIGNMENT, DESIGN AND DRAINAGE

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FOR -L2- /-L3- PROFILE SEE SHTS. 14-15
FOR -RAB3- PROFILE SEE SHT. 16
FOR -Y10- PROFILE SEE SHT. 18
FOR -Y11- PROFILE SEE SHT. 18
FOR -DR24- PROFILE SEE SHT. 21
FOR -DR25- PROFILE SEE SHT. 21

FOR -Y11 DET-, -DR24 DET- & -DR25 DET PLAN SEE SHT. 2B-2
FOR -Y11 DET-, -DR24 DET- & -DR25 DET PROFILE SEE SHT. 2B-3
FOR INTERSECTION DETAIL SEE SHT. 2B-6
FOR DITCH DETAIL SEE SHT. 2D-1

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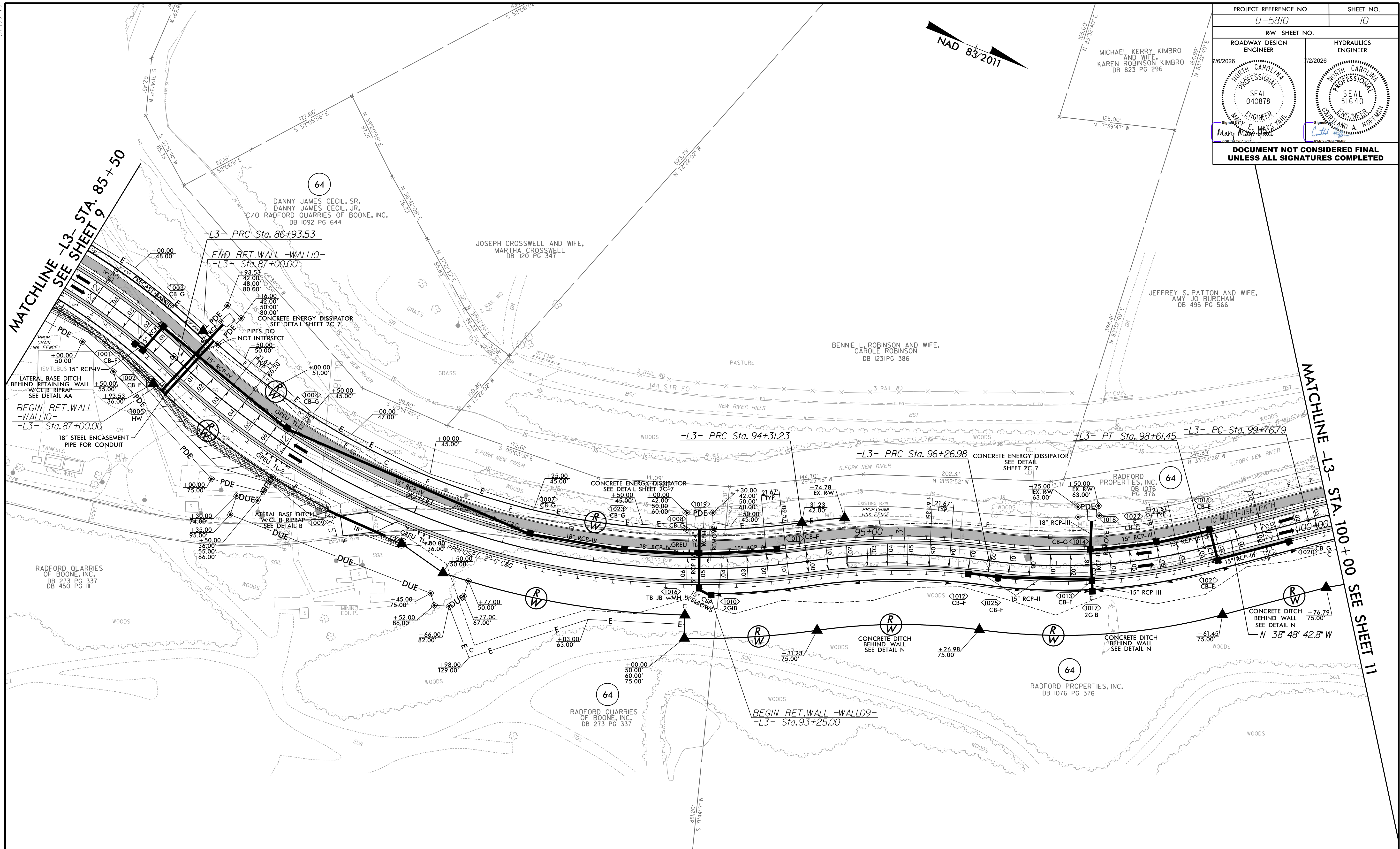
SHEET NO.
10

RW SHEET NO.

ROADWAY DESIGN ENGINEER
7/6/2026
NORTH CAROLINA PROFESSIONAL SEAL 040878
ENGINEER
Mary E. Mays, P.E.

HYDRAULICS ENGINEER
7/2/2026
NORTH CAROLINA PROFESSIONAL SEAL 51640
ENGINEER
Dorland A. Hoffman

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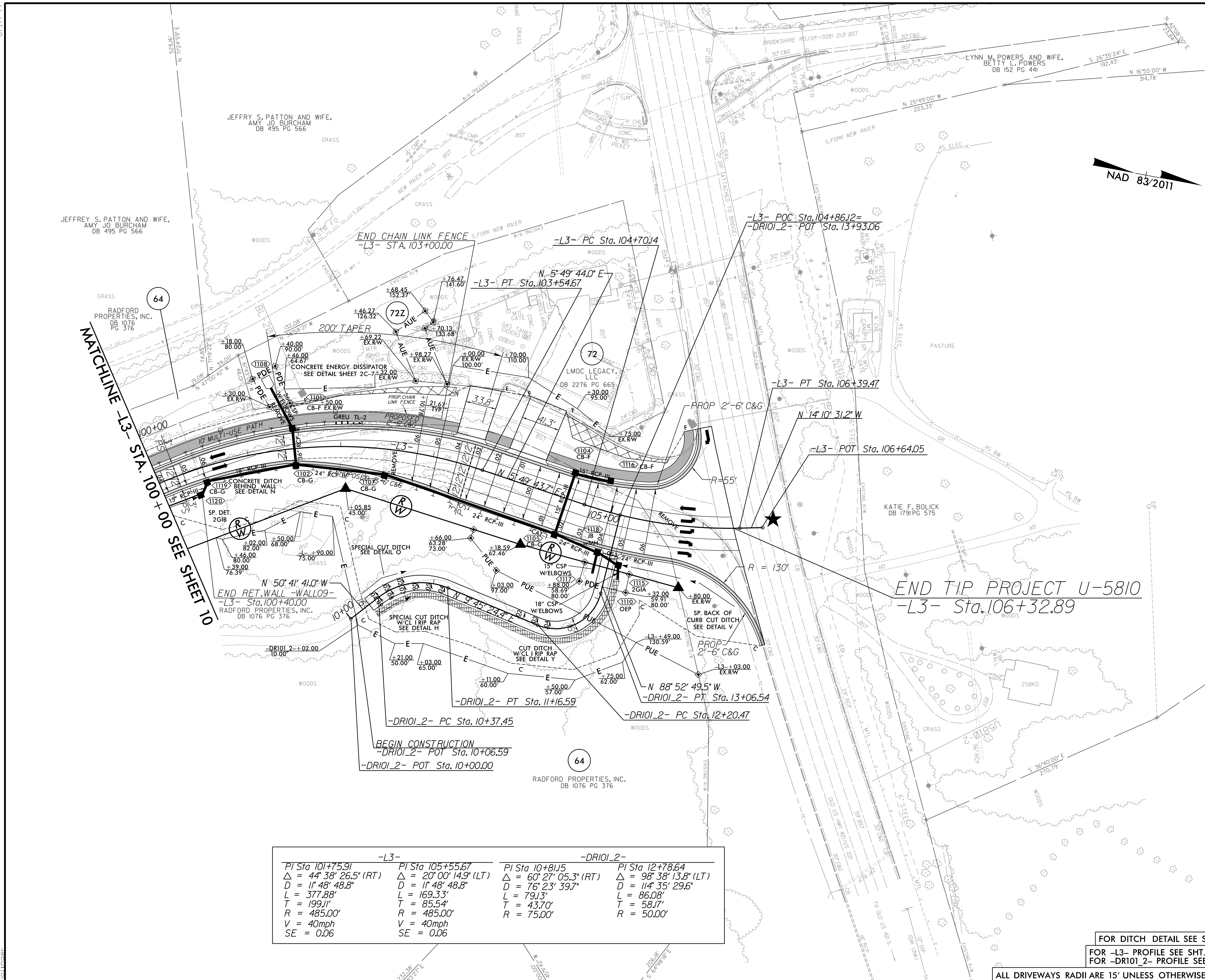
-L3-					
PI Sta 84+65.66	PI Sta 90+89.45	PI Sta 95+29.72	PI Sta 97+45.73	PI Sta 101+75.91	
$\Delta = 40^{\circ} 07' 28.6''$ (RT)	$\Delta = 51^{\circ} 32' 42.8''$ (LT)	$\Delta = 15^{\circ} 41' 09.9''$ (RT)	$\Delta = 22^{\circ} 23' 27.3''$ (LT)	$\Delta = 44^{\circ} 38' 26.5''$ (RT)	
D = 8' 25' 33.1"	D = 6' 59' 14.2"	D = 8' 00' 48.2"	D = 9' 32' 57.5"	D = 11' 48' 48.8"	
L = 476.21'	L = 737.70'	L = 195.75'	L = 234.48'	L = 377.88'	
T = 246.34'	T = 395.92'	T = 98.49'	T = 118.75'	T = 199.11'	
R = 680.00'	R = 820.00'	R = 715.00'	R = 600.00'	R = 485.00'	
V = 40mph	V = 40mph	V = 40mph	V = 40mph	V = 40mph	
SE = 0.06	SE = 0.06	SE = 0.06	SE = 0.06	SE = 0.06	

FOR -L3- PROFILE SEE SHT. 15
FOR DITCH DETAIL SEE SHT. 2D-1
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PROJECT REFERENCE NO. U-5810		SHEET NO. 11	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER 7/6/2026 NORTH CAROLINA PROFESSIONAL SEAL 040878 Mary E. Mays		HYDRAULICS ENGINEER 7/2/2026 NORTH CAROLINA PROFESSIONAL SEAL 51640 Courtland A. Hoffman	
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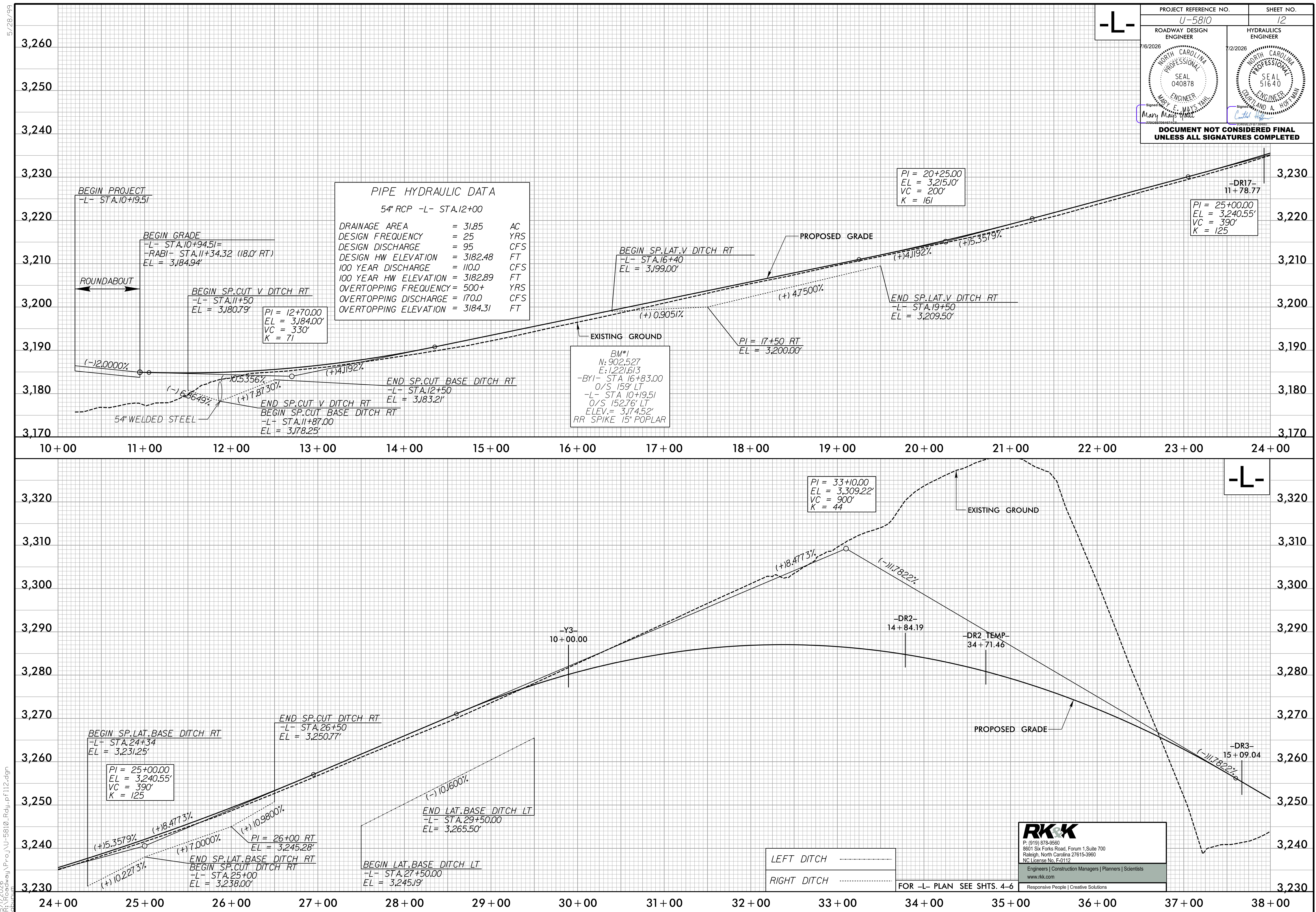
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ADT 2026 ADT 2046	US HWY 421 US 221
5,309 6,494	30,600 44,100
L- BAMBOO RD.	US HWY 421 US 221
12,700 17,800	30,600 47,000
5,389 6,593	

-L3-		-DR101.2-	
PI Sta 101+75.91	PI Sta 105+55.67	PI Sta 10+81.15	PI Sta 12+78.64
$\Delta = 44^{\circ} 38' 26.5''$ (RT)	$\Delta = 20^{\circ} 00' 14.9''$ (LT)	$\Delta = 60^{\circ} 27' 05.3''$ (RT)	$\Delta = 98^{\circ} 38' 13.8''$ (LT)
D = 11' 48" 48.8"	D = 11' 48" 48.8"	D = 76' 23" 39.7"	D = 114' 35" 29.6"
L = 377.88'	L = 169.33'	L = 79.13'	L = 86.08'
T = 199.11'	T = 85.54'	T = 43.70'	T = 58.17'
R = 485.00'	R = 485.00'	R = 75.00'	R = 50.00'
V = 40mph	V = 40mph		
SE = 0.06	SE = 0.06		

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PROPOSED SIGNAL

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5/16/2026
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-L-

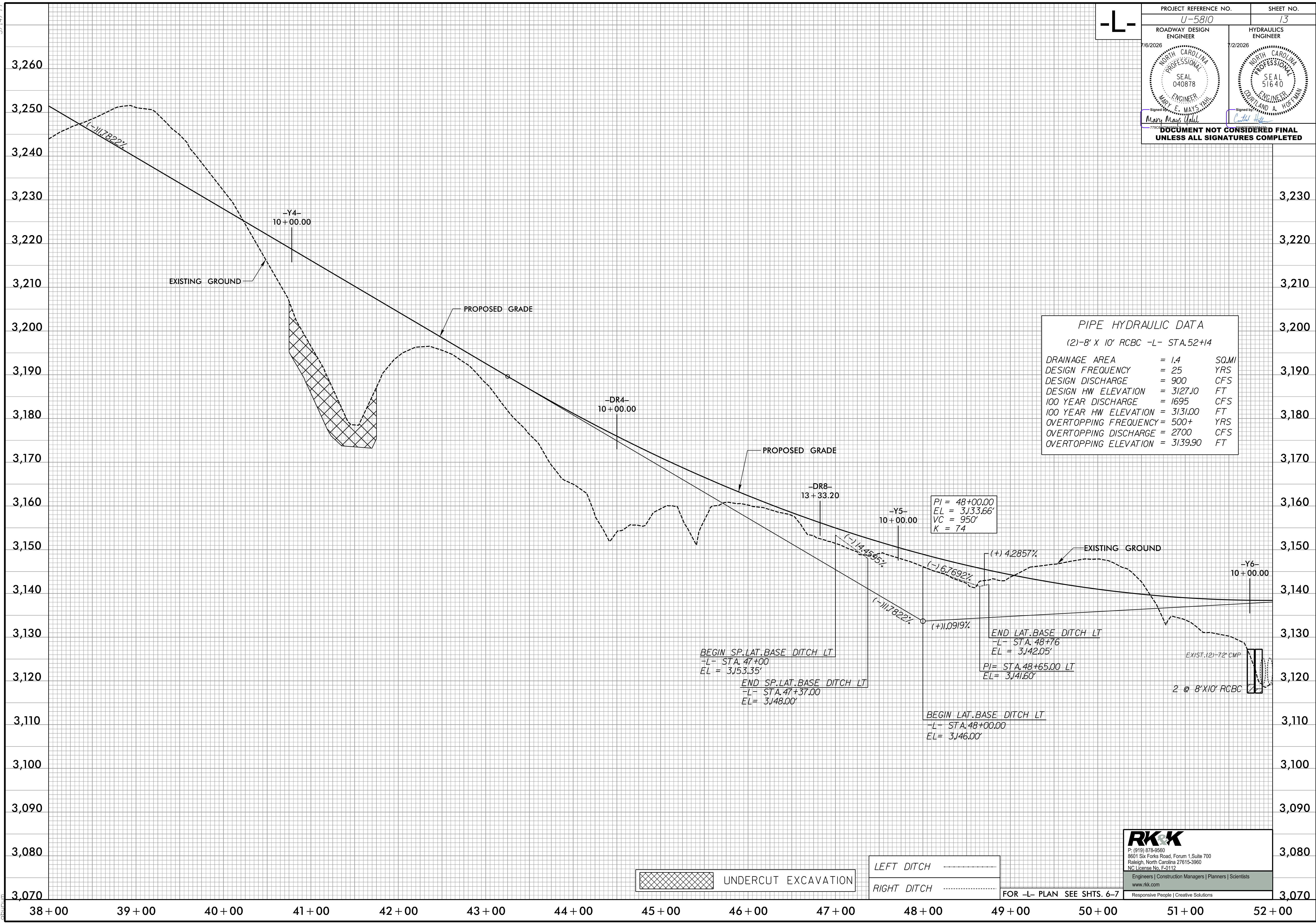
PROJECT REFERENCE NO.
U-5810

SHEET NO.
13

ROADWAY DESIGN ENGINEER
7/6/2026
NORTH CAROLINA PROFESSIONAL SEAL 040878
ENGINEER
Mary E. Mays
Signed Mary E. Mays

HYDRAULICS ENGINEER
7/2/2026
NORTH CAROLINA PROFESSIONAL SEAL 51640
ENGINEER
Curtis A. Hootman
Signed Curtis A. Hootman

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PIPE HYDRAULIC DATA		
(2)-8' X 10' RCBC -L- STA.52+14		
DRAINAGE AREA	= 1.4	SQ.MI
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 900	CFS
DESIGN HW ELEVATION	= 3127.10	FT
100 YEAR DISCHARGE	= 1695	CFS
100 YEAR HW ELEVATION	= 3131.00	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 2700	CFS
OVERTOPPING ELEVATION	= 3139.90	FT

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5/16/2026
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-L2- / -L3-

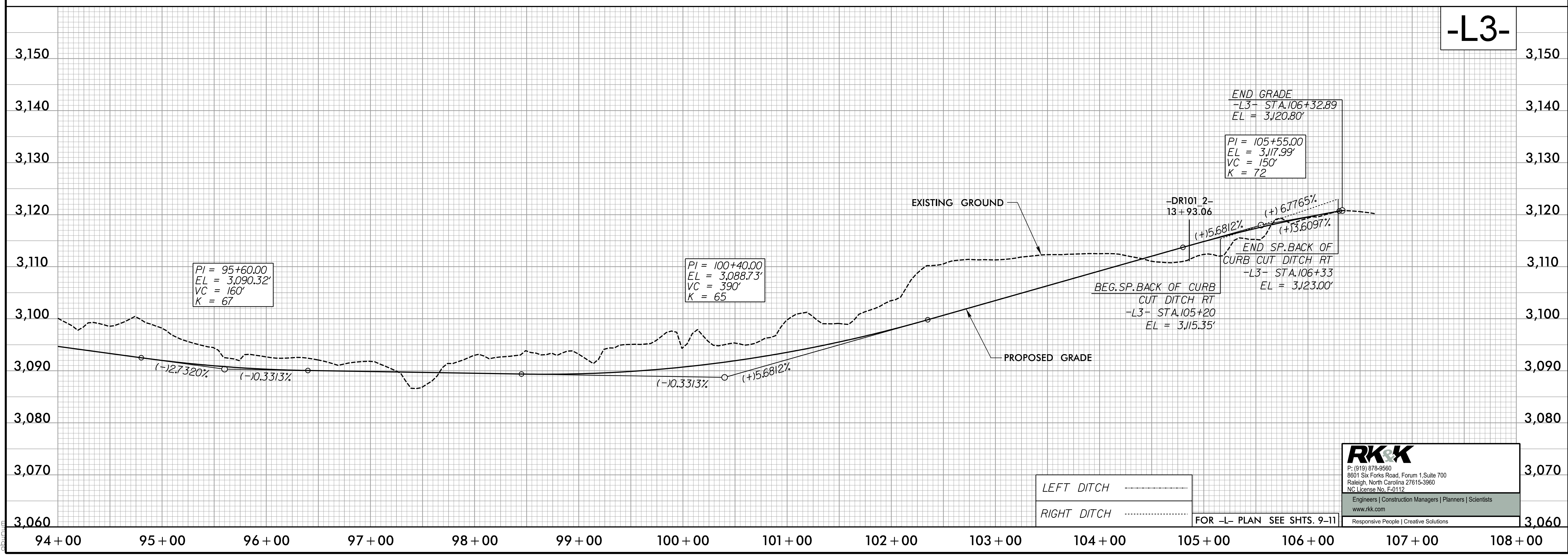
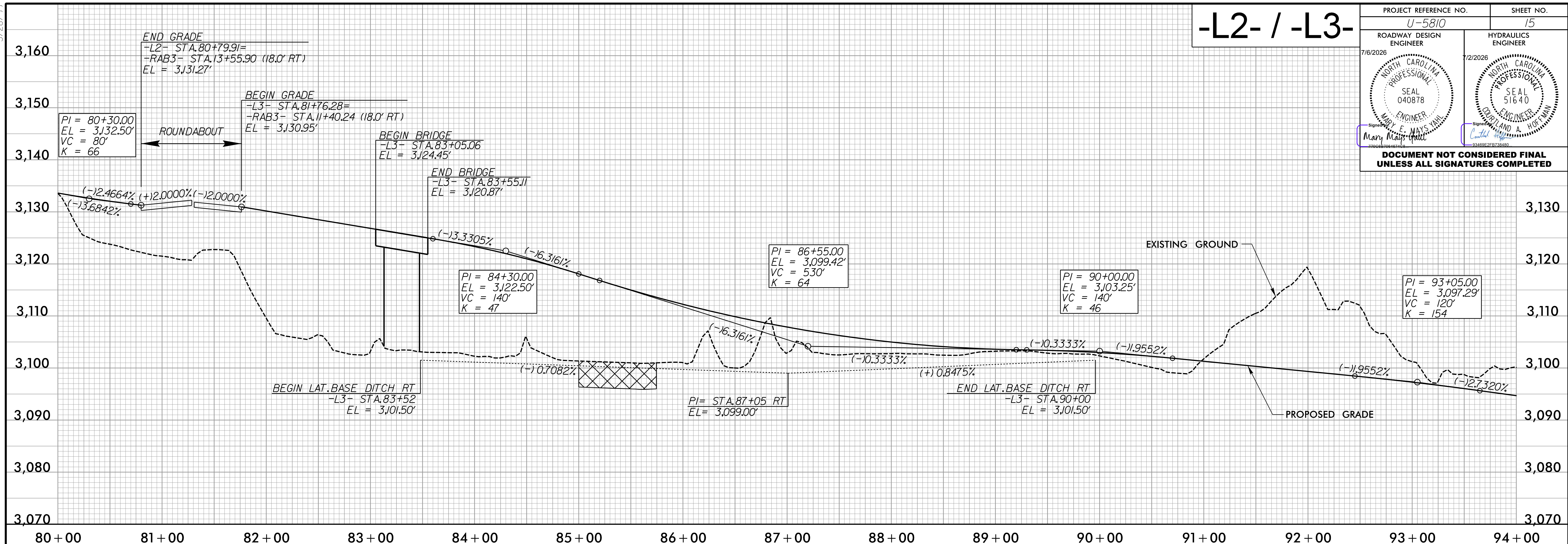
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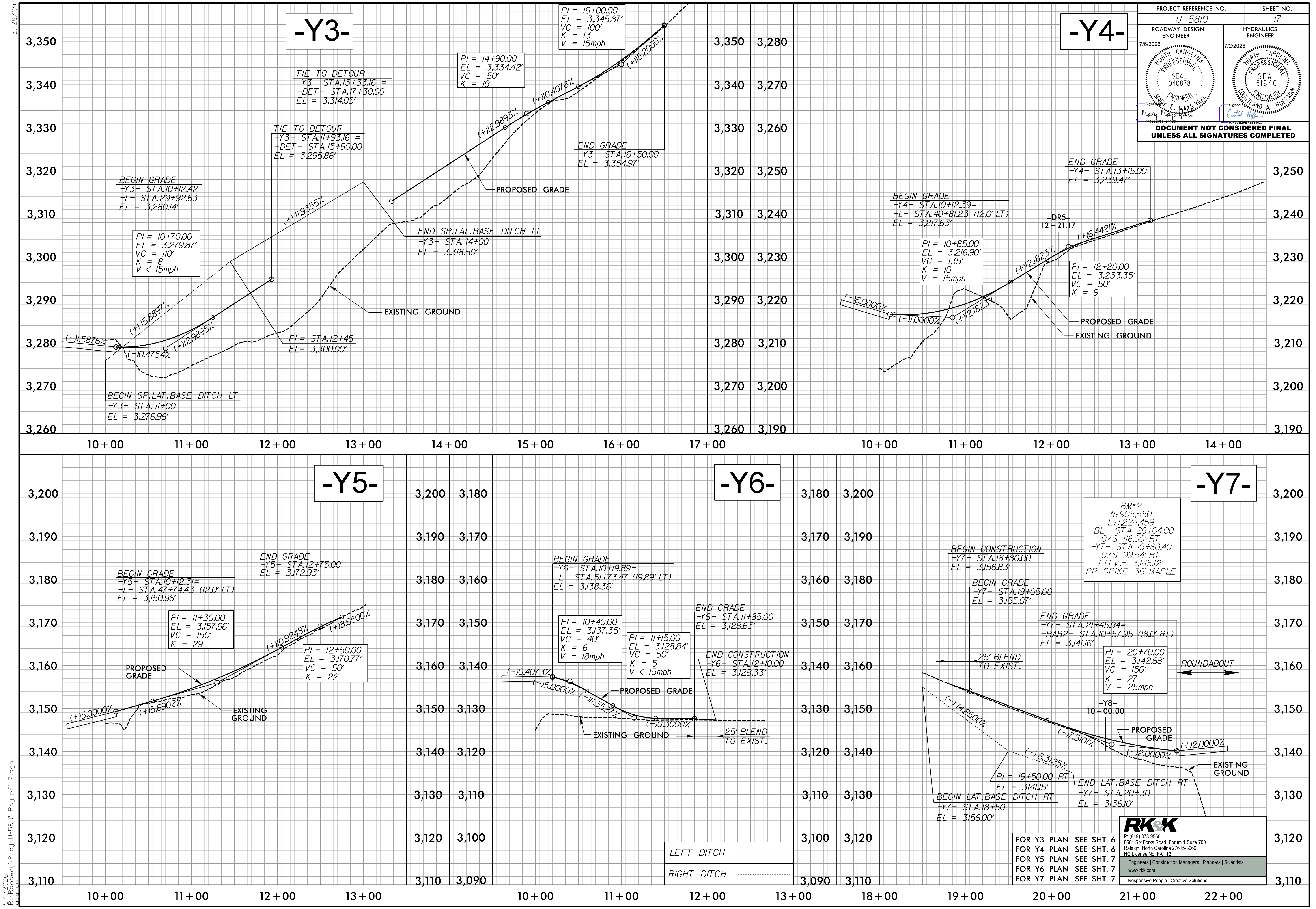
ROADWAY DESIGN ENGINEER
7/6/2026
NORTH CAROLINA PROFESSIONAL SEAL
040878
Mary E. Mays

SHEET NO.
15

HYDRAULICS ENGINEER
7/2/2026
NORTH CAROLINA PROFESSIONAL SEAL
51640
Curtis A. Hoffmann

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SHEET NO.
17

ROADWAY DESIGN
ENGINEER
7/6/2026

HYDRAULICS
ENGINEER
7/2/2026

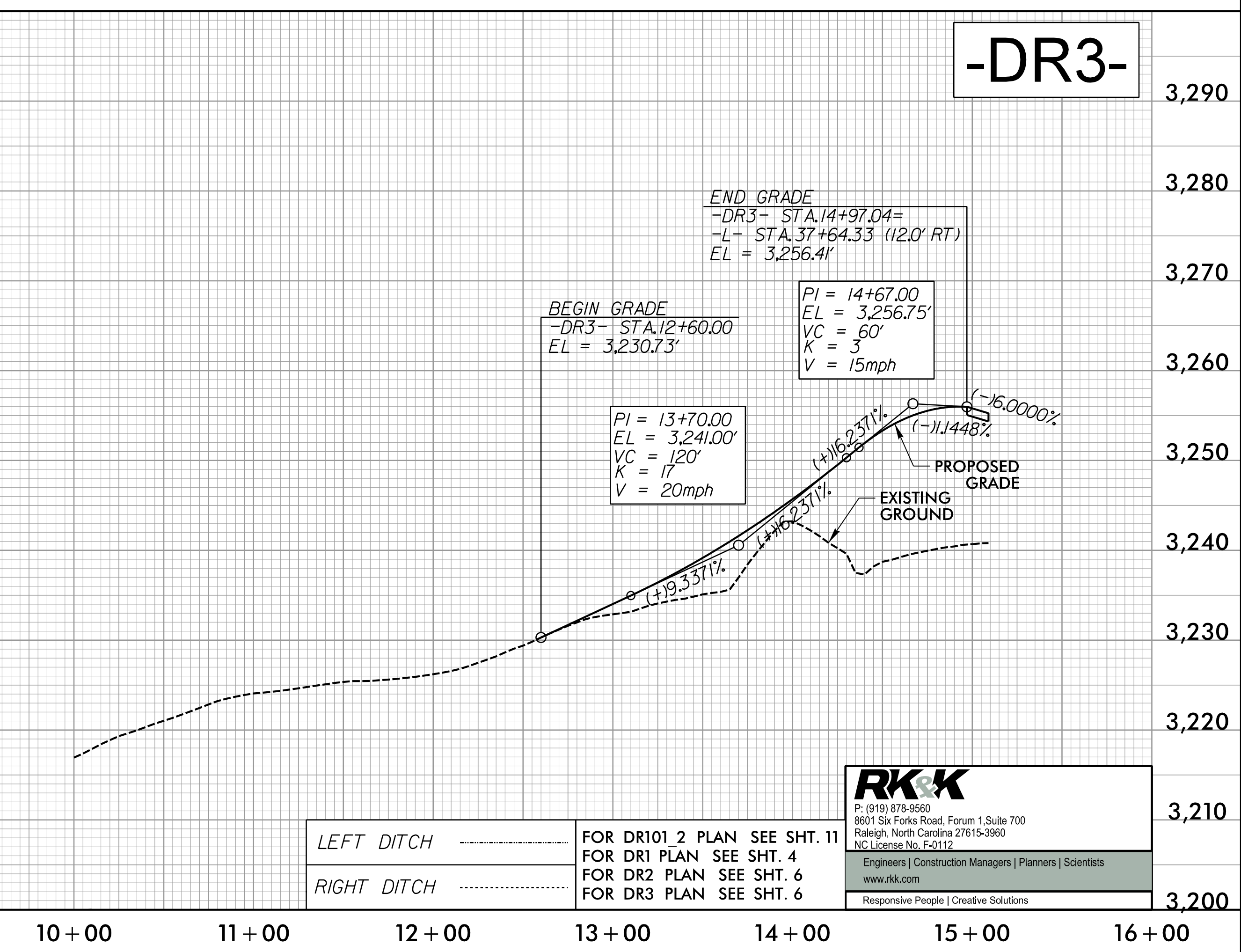
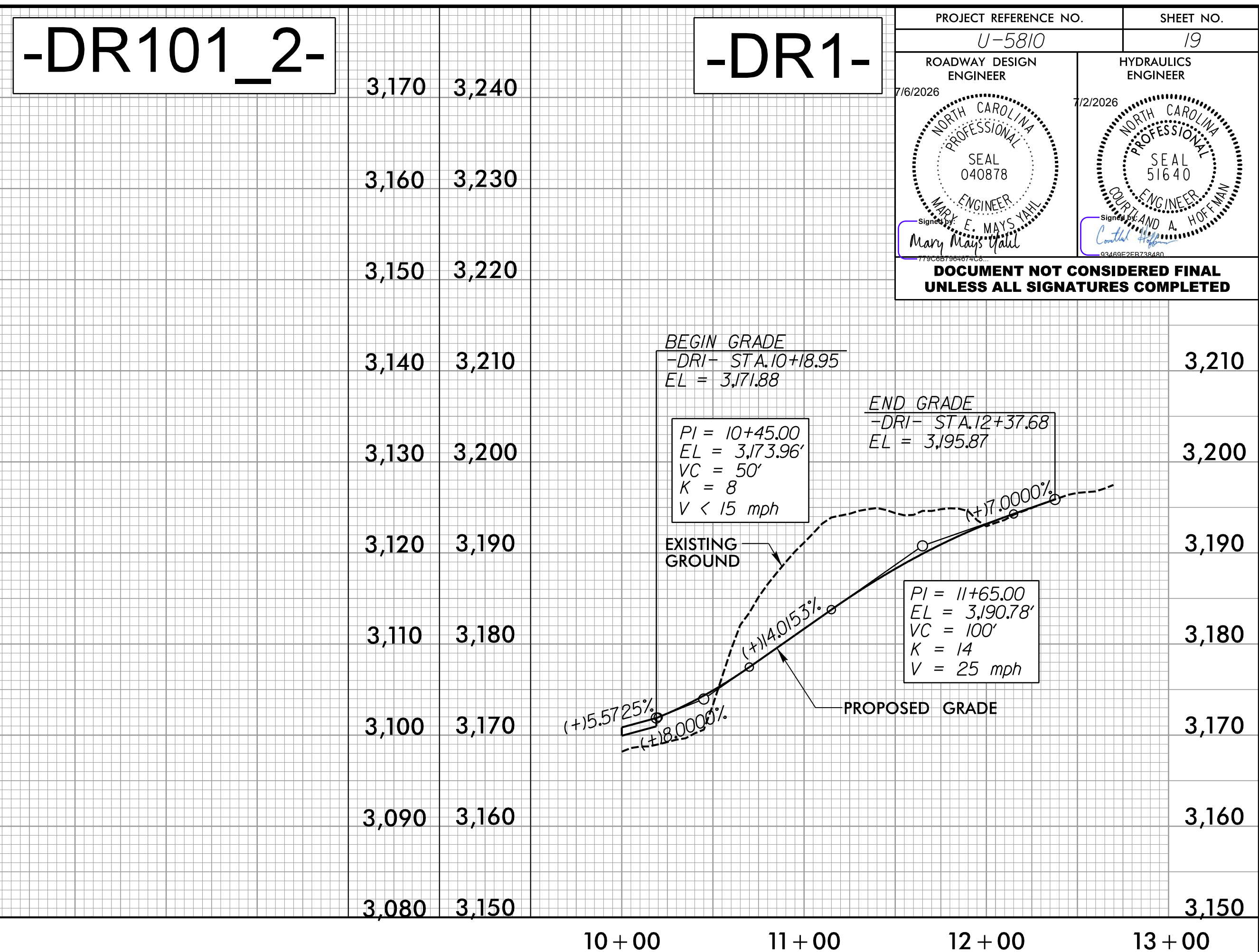
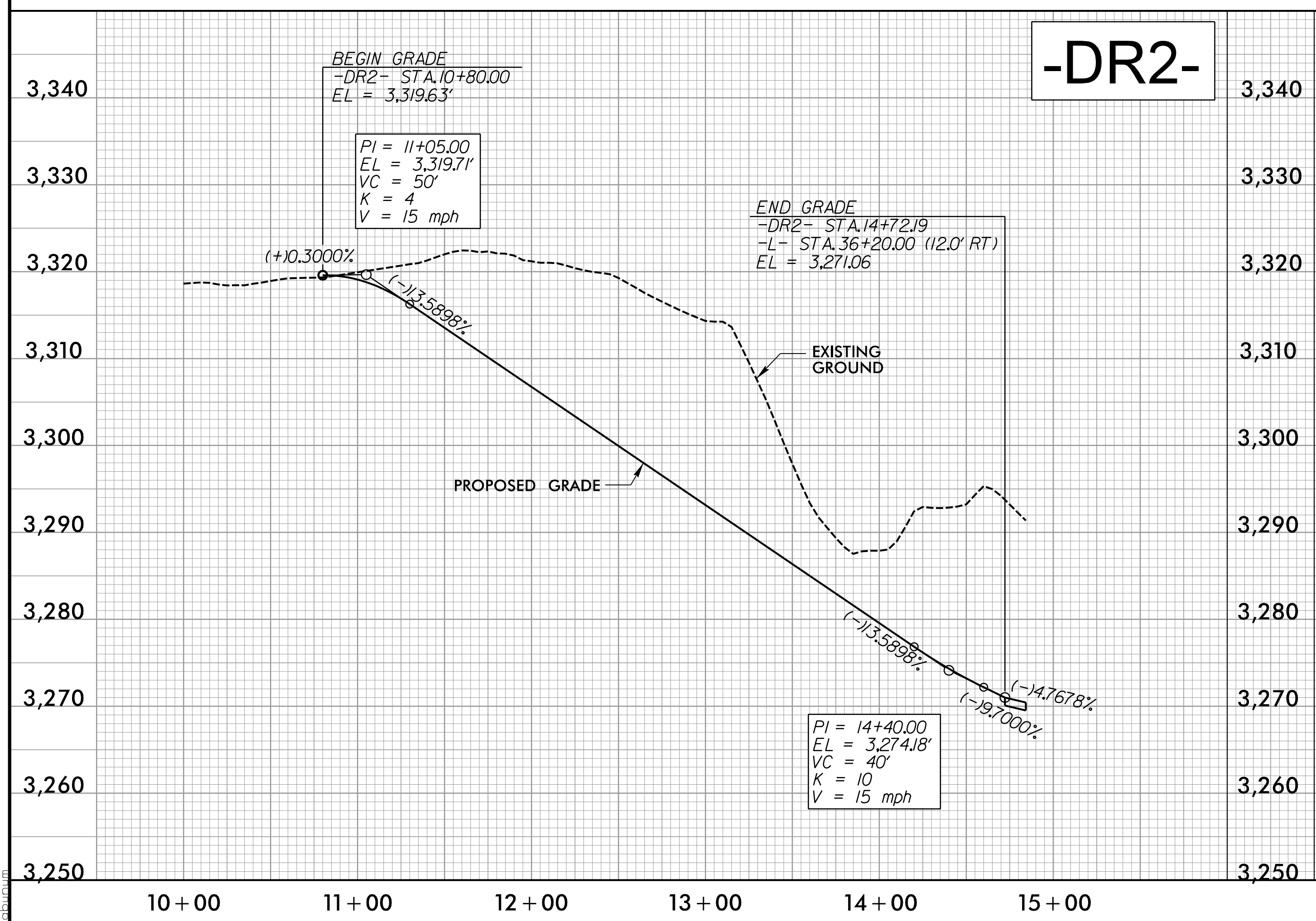
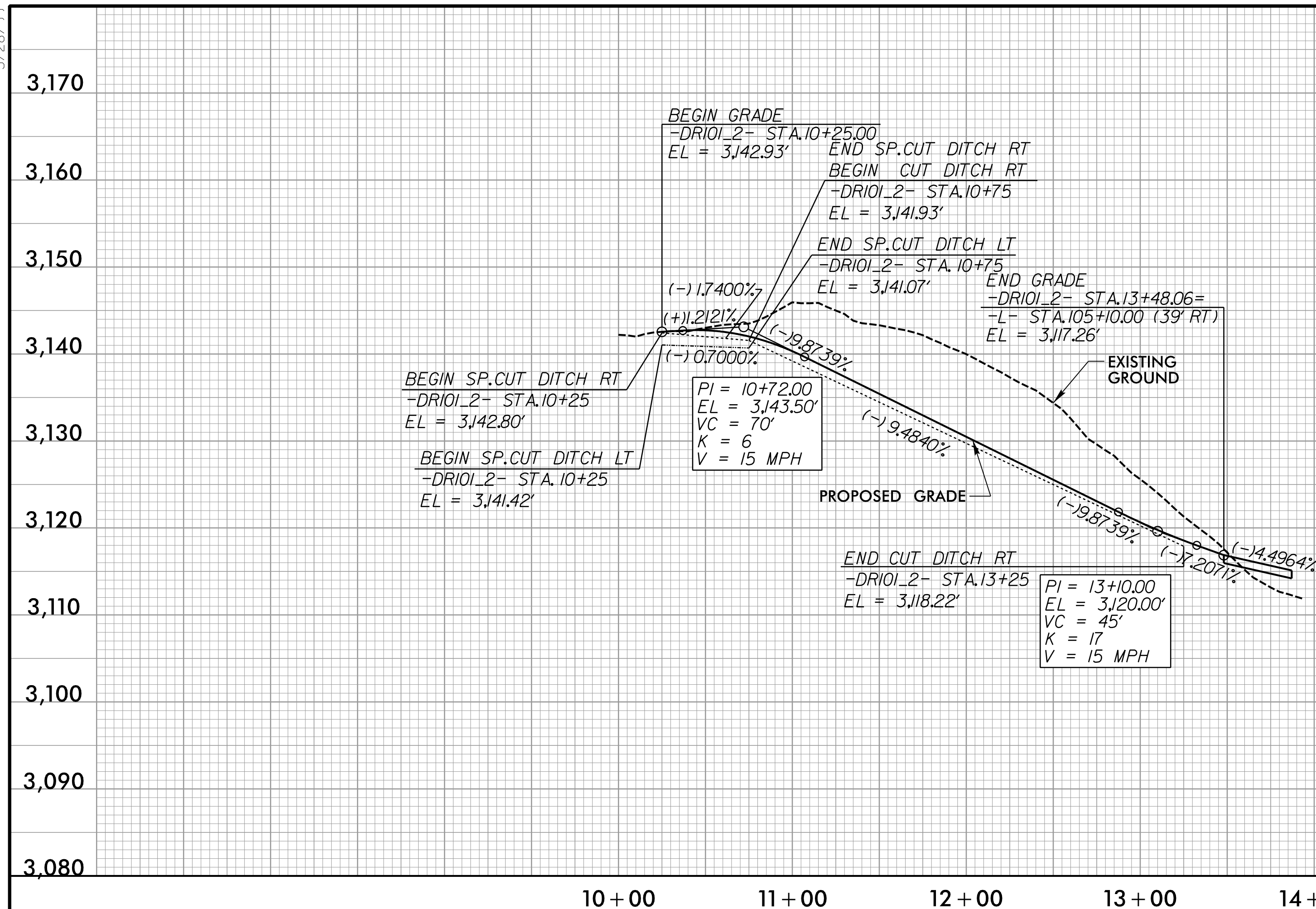
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5/28/24
5/16/2026
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FOR Y3 PLAN SEE SHT. 6
FOR Y4 PLAN SEE SHT. 6
FOR Y5 PLAN SEE SHT. 7
FOR Y6 PLAN SEE SHT. 7
FOR Y7 PLAN SEE SHT. 7

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