

COMPUTED BY: K.R. PLUMMER DATE: AUGUST 2024
CHECKED BY: A.F. RIGGS, JR. DATE: AUGUST 2024

(9-17-24)

PROJECT NO.
R-5759

SHEET NO.
3G-1

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

SUMMARY OF SUBSURFACE DRAINAGE

LINE	Station	Station	Location LT/RT/CL	Drain Type* UD/BD/SD	LF
-L-	99+00	103+00	LT/RT	SD	800
-L-	154+75	163+75	LT/RT	SD	1800
CONTINGENCY					1000
				TOTAL LF:	3600

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

SUMMARY OF GEOTEXTILE FOR SUBGRADE STABILIZATION

LINE	Station	Station	Geotextile for Subgrade Stabilization SY
L	39+75	43+25	630
L	46+25	46+75	60
L	63+75	64+75	475
L	72+75	73+25	70
L	74+25	74+75	70
L	81+75	82+75	690
L	83+75	86+25	705
L	92+25	95+25	620
L	108+25	110+25	140
L	114+75	117+75	280
L	129+75	130+75	80
L	132+75	135+25	430
L	134+75	137+25	620
Y4	10+70	11+75	230
CONTINGENCY			
		TOTAL SY:	5100*

*Total square yards of "Geotextile for Subgrade Stabilization" is only the estimated quantity for subgrades and may only represent a portion of the geotextile quantity shown in the Item Sheets of the Proposal.

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

[illegible]

*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 AGGREGATE SUBGRADE/STABILIZATION

[illegible]

*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.

PARCEL INDEX SHEET

PARCEL No.	SHEET No.	PROPERTY OWNER NAME
1	4	BETTY JO BROOKSHIRE BLACKBURN
2	4	FLYNN HARROLD
2A	4	FLYNN HARROLD
3	4, 17	JANET AND JAMES HARTLEY
4	4	BRUSHY MOUNTAIN HOLDINGS, LLC
5	4	JENNIFER ROBERTS
6	4	ROBERT E. ASHLEY LINDA K. ASHLEY CALL JAMES M.
7	5, 17	JOHN F. DONOGHUE, BISHOP OF THE ROMAN CATHOLIC
8	5	PETER J. JUGIS, BISHOP OF THE ROMAN CATHOLIC
9	5, 17	WILKES COUNTY BOARD OF EDUCATION
10	5	F & S INVESTMENTS
11	5	F & S INVESTMENTS
12	5	J. TERRY BUMGARNER
13	5, 6	DENNIS M. BROWN
14	5	DENNIS M. BROWN
15	5, 17	LINDSEY MINTON
16	5, 6	WILLIAM McKINLEY AND REBECCA H. MINTON
17	5, 6	THURMAN AND JEWEL A. BROWN
18	6	AB HOLDINGS, LLC
19	6	JIMMIE M. AND MARY F. BRINEGAR
20	6, 17	BLANCHE G. BAITY
21	6	JIMMIE B. AND MARY F. BRINEGAR
22	6	KENNETH DALE AND LARUE C. JOHNSON
23	6	MONTY S. JOHNSON
24	6, 7	CARMEN JAMES
25	6	REDMOND REAL ESTATE, LLC
26	6	REDMOND REAL ESTATE, LLC
27	6	REDMOND REAL ESTATE, LLC
28	6	ANGEL LOIS FOSTER SHEILA ELIZABETH PAIT
29		NO CLAIM
30	6	WILLIAM MUDD, JR.
31	6	ELIZABETH A. BROOKS
32	6	WILLIAM MUDD, JR.
33	6	SUE SIGMON AND LARRY ADAMS
34	6	THE TOWN OF NORTH WILKESBORO
35	6, 7	RANDALL H. BURCHAM
36	7	JANINA SHOEMAKER
37	7	REBECCA BENNETT
38	7	EULA FAYE BALL (LIFE ESTATE)
39	7	ELMER, JR. AND GLADYS W. COOPER
40	7	PERRY D. AND PATRICIA S. WHITE
41	7	JAMES G. BROOKS
42	7	ELIZABETH ANN KEATLEY
43	7	JOHNNY JUNIOR AND BETTY SUE BELL MASTIN
44	7	BENNY COMBS
45	7, 8	TRACY WATCHER MOORE
46	7, 8	CARMEN ELIZABETH JAMES CARISSA ANN AND LINWOOD
47		NO CLAIM
48	8	BENNIE M. COMBS
49	8	TERRY LEE AND ELLA B. PREVETTE
50	8	CLAY RICHARD AND JUDY A. JOHNSON
51	8	THOMAS AND LINDA S. GORICH
52	8	BROADWAY WATER ASSOCIATION
53	8	CLIFTON BROWN
54	8	DENNIS M. BROWN

PARCEL No.	SHEET No.	PROPERTY OWNER NAME
55	8, 9	DENNIS M. BROWN
56	8	JO ANNE L. AND DAVID LEE WHITTINGTON
57	8	JAMES D. JOHNSON
58	8	JAMES D. JOHNSON
59	8	JAMES D. AND SHIRLEY A. JOHNSON, ET AL
60	8	JAMES D. AND SHIRLEY A. JOHNSON, ET AL
61	8	DANIEL K. HUFFMAN
62	8, 9	C & S PROPERTY 1, LLC
63	9	KLR REAL ESTATE, LLC
64	9	JAMES CLAYTON FAW
65	9	KENNETH UMANA
66	9	ROGER PHILLIP JOHNSTON
67	9, 10	JERRY N. AND PAMELA C. CURRY
68	9	DENNIS BROWN
69	9	SUSAN MICHELLE COLVARD
70	9	JERRY & PAMELA CURRY
71	9, 10	HAROLD T AND LINDA A CALL
71A	9	NICHOLAS PHILBRICK
72	10	HAROLD T. AND KAY A. CALL
73	10	HAROLD T. AND LINDA A. CALL
73A	10	HAROLD T. AND LINDA KAY ASHLEY CALL
74	10	BROADWAY FIRE DEPARTMENT, INC.
75	10	DUKE POWER COMPANY
76	10	STEPHEN E. BLACKBURN
77	10	JOHN R. BLACKBURN
78	10	JOHN R. BLACKBURN
79	10	LEONARD TABOR STEPHEN BLACKBURN
80	10	TRUSTEES OF DAMASCUS BAPTIST CHURCH
81	10	GLADYS B. SHELTON
82	10	GAIRA AND EULOGIO CRUZ
83	10, 11	JAMES A. AND OLLIE BAILEY
84	10	WILLIAM HAMBY
85	10	JAMES A. AND ELIZABETH C. WILLIAMS
86	10	HAROLD T AND LINDA A CALL
87	10	CAROLINA MOTEL, LLC
88		NO CLAIM
89	11, 18	TERESA CODY
90	11, 18	MAZIE ARLEEN JOHNSON
91	11	DAVID WELBORN
92	11, 12	HAYES AND FAYE YATES REYNOLDS
93	11	DENNIS M. BROWN
94	11	FREDRICK I. AND SAVANNAH F. BARBER
94A	11	MARQUITA L. MARCH
95	11	JEWEL BROWN
96	11	JEWEL BROWN
97	11	ELICENDA ISENHOUR
98	11	ELICENDA ISENHOUR
99	11	ROBERT LOVE SPRAGUE
100	11	WAYNE McKINLEY AND SHIRLEY STEELMAN CURRY
101	11	ROBERT CHURCH
102	11, 12	NEW DIRECTION MINISTRY
103	12	TIMOTHY AND KATHY REYNOLDS
104	12	NORMAN AND BETTY JO WILLIAMS
105	12	TRACY L. BROOKS
106	12	TERRENCE W. AND DAWN B. QUEEN

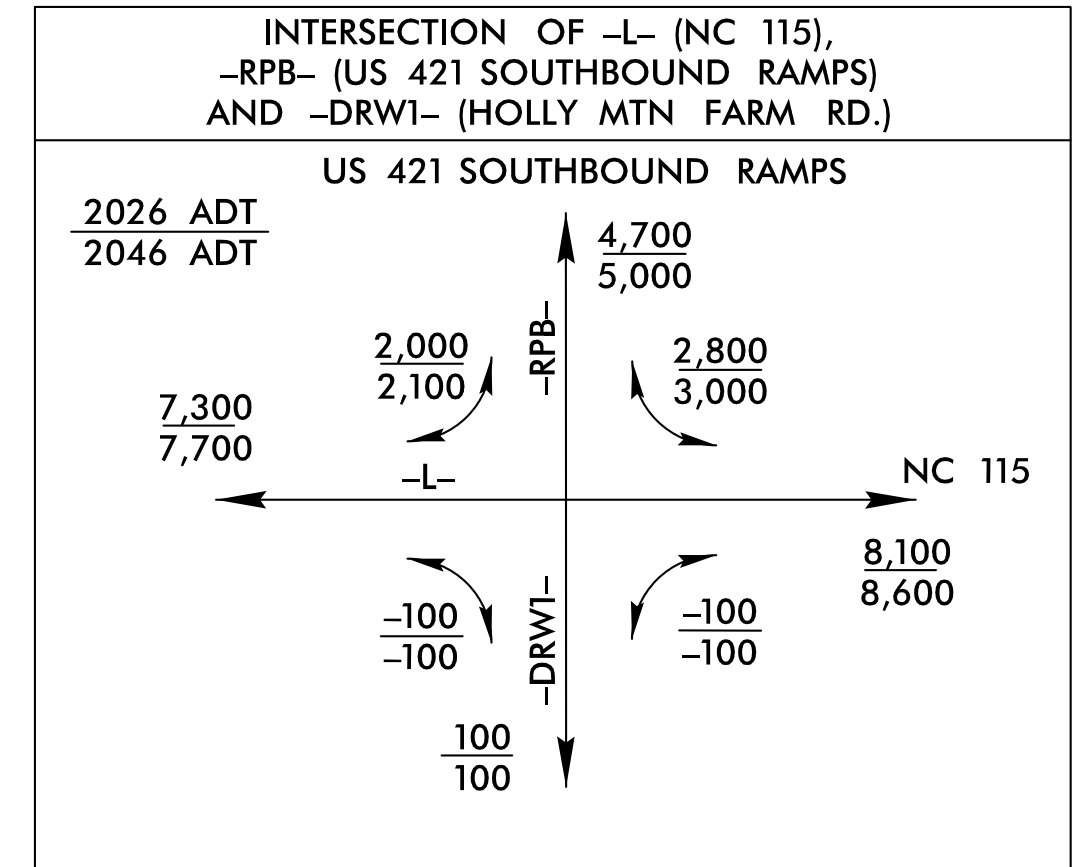
PARCEL INDEX SHEET

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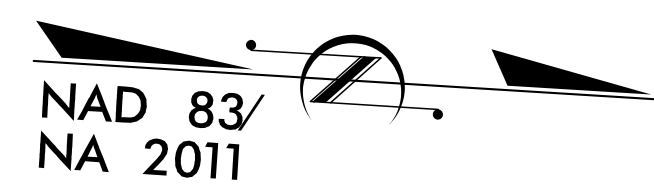
-L-		-DRWI-		-LPB-		-RPB-		-CI-	
PI Sta 7+49.59	PI Sta 13+21.80	PI Sta 11+65.61	PI Sta 12+33.57	PI Sta 11+87.20	PI Sta 16+47.34	PI Sta Undefined	PI Sta Undefined	PI Sta Undefined	PI Sta Undefined
$\Delta = 2^{\circ} 55' 57.7''$ (LT)	$\Delta = 15^{\circ} 32' 23.7''$ (LT)	$\Delta = 51^{\circ} 02' 41.8''$ (LT)	$\Delta = 75^{\circ} 59' 11.6''$ (LT)	$\Delta = 21^{\circ} 30' 0''$ (RT)	$\Delta = 30^{\circ} 43' 28''$ (LT)	$\Delta = 360^{\circ} 00' 00.0''$ (LT)	$\Delta = 360^{\circ} 00' 00.0''$ (LT)	$\Delta = 65^{\circ} 28' 51.2''$	$\Delta = 65^{\circ} 28' 51.2''$
D = 1' 38' 13.3"	D = 5' 35' 23.4"	D = 47' 44' 47.3"	D = 33' 30' 22.7"	D = 5' 48' 39"	D = 18' 28' 57.0"	D = 166.24'	D = 274.89'	D = 274.89'	D = 274.89'
L = 179.15'	L = 278.00'	L = 106.91'	L = 226.78'	L = 370.00'	L = 166.24'	L = 166.24'	L = 274.89'	L = 274.89'	L = 274.89'
T = 89.59'	T = 139.86'	T = 57.29'	T = 133.57'	T = 187.20'	T = 85.17'	T = 85.17'	T = 85.17'	T = 85.17'	T = 85.17'
R = 3,500.00'	R = 1,025.00'	R = 120.00'	R = 171.00'	R = 986.00'	R = 310.00'	R = 310.00'	R = 310.00'	R = 87.50'	R = 87.50'
SE = EXISTING	SE = 6%	SE = 2%	SE = 8%	SE = 8%	SE = 6%	SE = 6%	SE = 6%	SE = 2%	SE = 2%
RO = SEE PLANS	RO = 156.00'	RO = 32.00'	RO = 144.00'	RO = 144.00'	RO = 108.00'	RO = 108.00'	RO = 108.00'	RO = SEE PLANS	RO = SEE PLANS
V = 40 MPH	V = 40 MPH	V = 20 MPH	V = 25 MPH	V = 60 MPH	V = 60 MPH	V = 60 MPH	V = 60 MPH	V = 35 MPH	V = 35 MPH



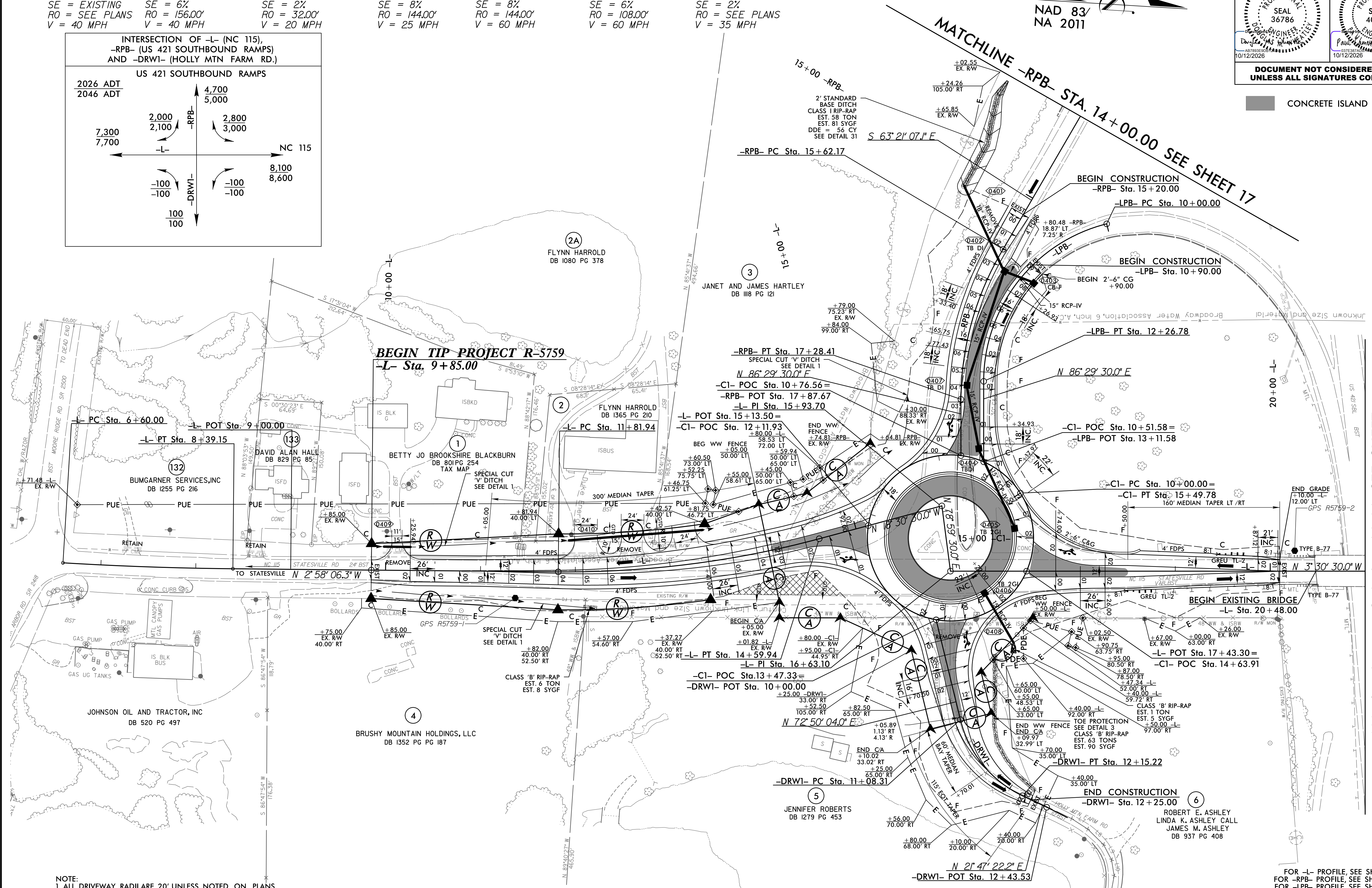
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HNTB NORTH CAROLINA, P.C.
4000 Center at North Hills St
Suite 500
Raleigh, North Carolina 27609
NC License No: C-1554

PROJECT REFERENCE NO.		SHEET NO.
R-5759		4
RW SHEET NO.		HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		



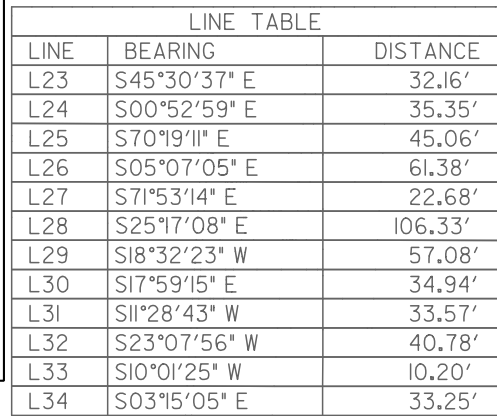
CONCRETE ISLAND



- NOTE:
1. ALL DRIVEWAY RADII ARE 20' UNLESS NOTED ON PLANS.
 2. ALL OUTSIDE CURB & GUTTER ARE 2'-6" UNLESS OTHERWISE NOTED.
 3. ALL ISLANDS ARE KEYED-IN 5" MONOLITHIC CONCRETE ISLANDS UNLESS OTHERWISE NOTED.
 4. FOR ROUNDABOUT DIMENSIONS, SEE DETAIL SHEET 2B-1.

FOR -L- PROFILE, SEE SHEET 19
FOR -RPB- PROFILE, SEE SHEET 25
FOR -LPB- PROFILE, SEE SHEET 25
FOR -CI- PROFILE, SEE SHEET 26
FOR -DRWI- PROFILE, SEE SHEET 26
FOR CONDUIT DETAILS SEE UC-04

MATCHLINE -L- STA. 21 + 00.00 SEE SHEET 5



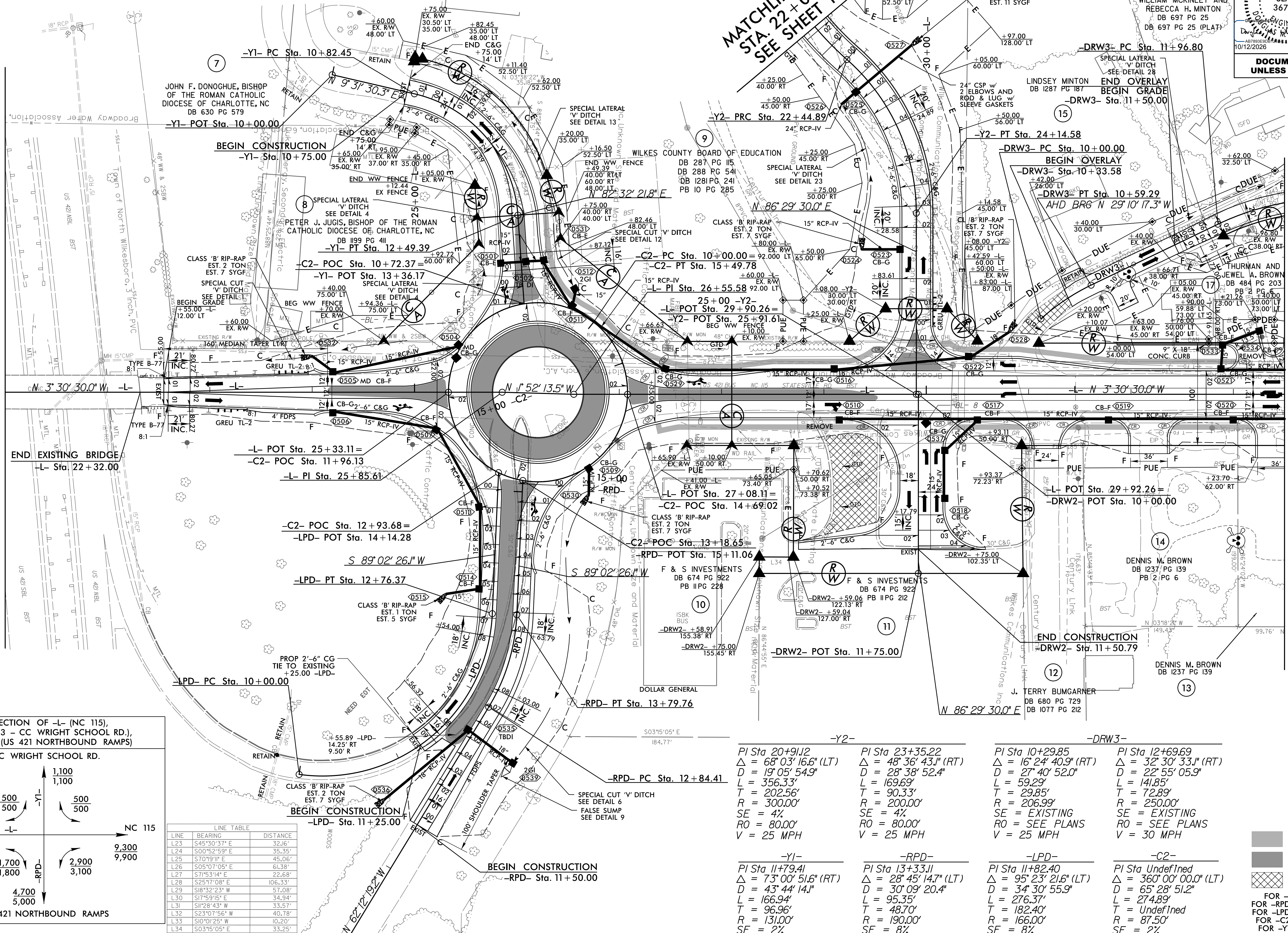
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4. FOR ROUNDABOUT DIMENSIONS, SEE DETAIL SHEETS 2B-2 AND 2B-3.

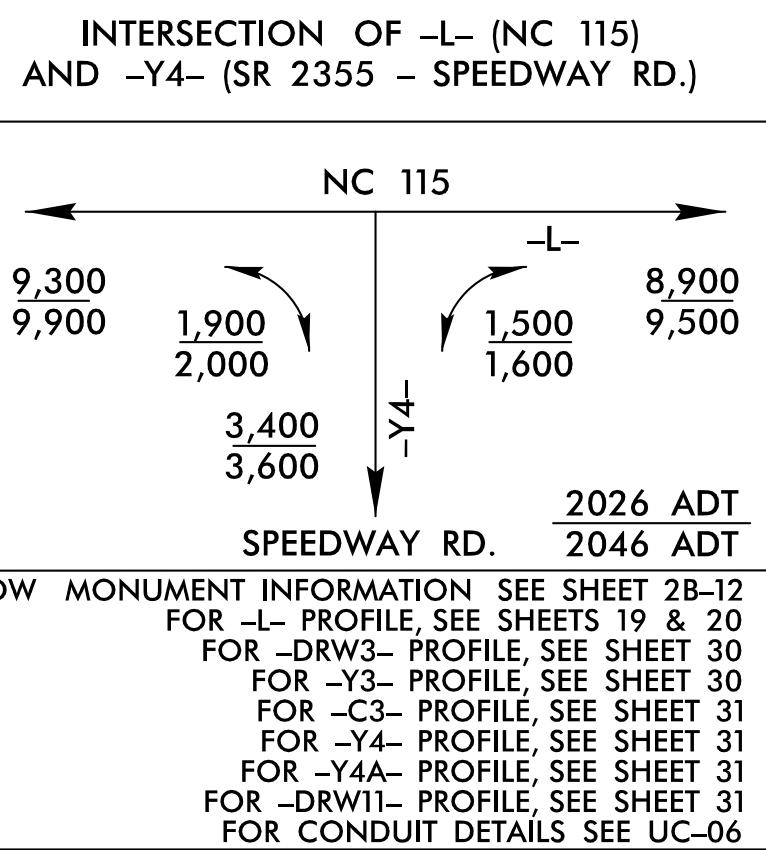


NAD 83
NA 2011

MATCHLINE -Y2-
STA. 22+00.00
SEE SHEET T7



	CONCRETE SIDEWALK
	CONCRETE ISLAND
	PAVEMENT REMOVAL
FOR -L- PROFILE, SEE SHEET 19	
FOR -RPD- PROFILE, SEE SHEET 27	
FOR -LPD- PROFILE, SEE SHEET 27	
FOR -C2- PROFILE, SEE SHEET 28	
FOR -Y1- PROFILE, SEE SHEET 28	
FOR -Y2- PROFILE, SEE SHEET 29	
FOR -WR2- PROFILE, SEE SHEET 30	
FOR -DRW3- PROFILE, SEE SHEET 30	
FOR CONDUIT DETAILS SEE UC-05	



8/17/99

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Suite 500
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NC License No: C-1554

PROJECT REFERENCE NO.
R-5759

SHEET NO.
7

ROADWAY DESIGN
ENGINEER

HYDRAULICS
ENGINEER

NORTH CAROLINA
PROFESSIONAL
SEAL
36786
DAVID S. HUNTER
10/12/2026

NORTH CAROLINA
PROFESSIONAL
SEAL
40801
PAUL J. HUNTER
10/12/2026

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

MATCHLINE -L- STA. 47 + 00.00 SEE SHEET 6

MATCHLINE -L- STA. 60 + 50.00 SEE SHEET 8

NOTE:
1. ALL DRIVEWAY RADII ARE 20' UNLESS NOTED ON PLANS.
2. ALL OUTSIDE CURB & GUTTER ARE 2'-6" UNLESS OTHERWISE NOTED.
3. ALL ISLANDS ARE KEYED-IN 5" MONOLITHIC CONCRETE ISLANDS UNLESS OTHERWISE NOTED.
4. FOR ISLAND DIMENSIONS, SEE DETAIL 2B-5.

HPB

HPB

CONCRETE SIDEWALK

CONCRETE ISLAND

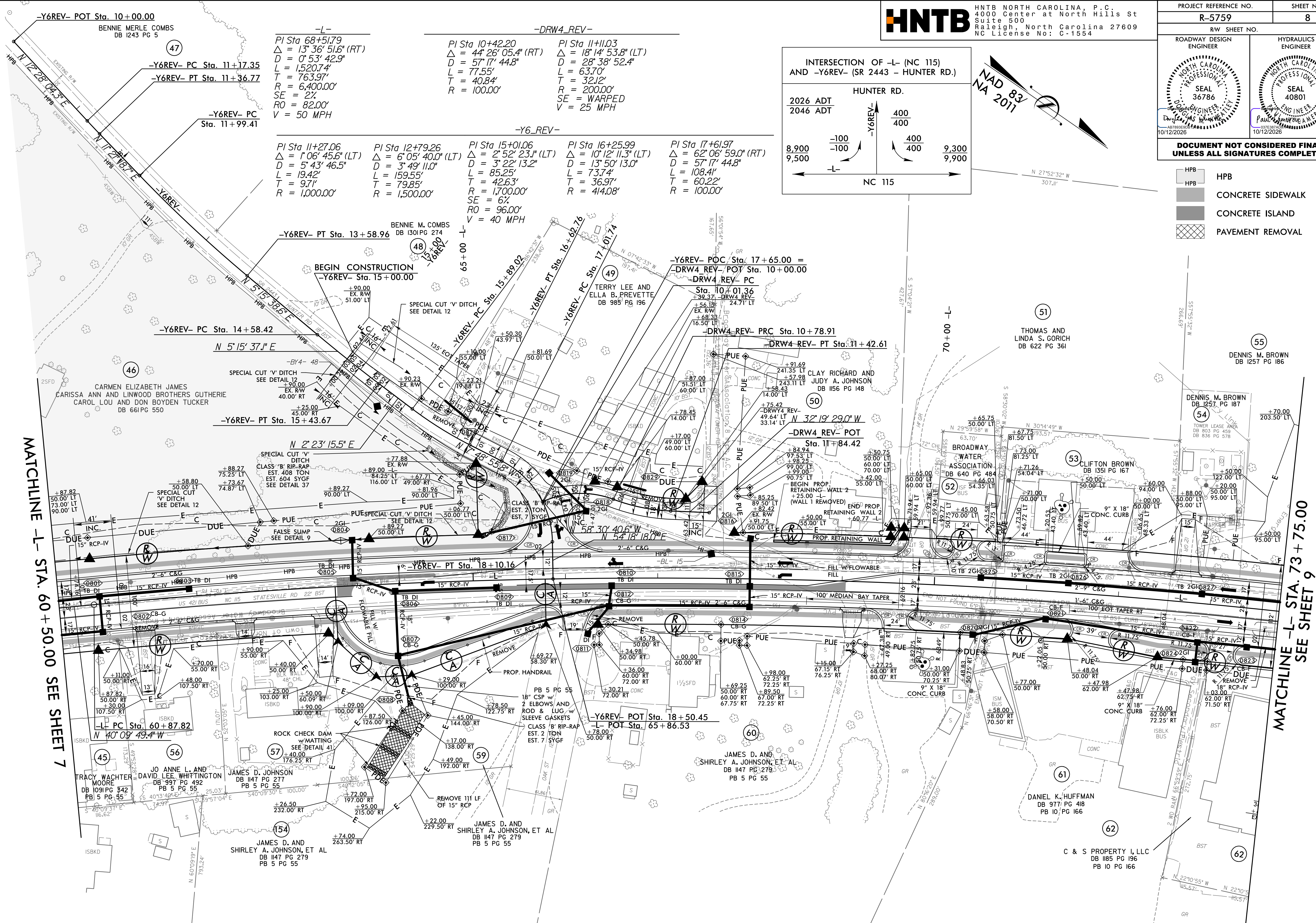
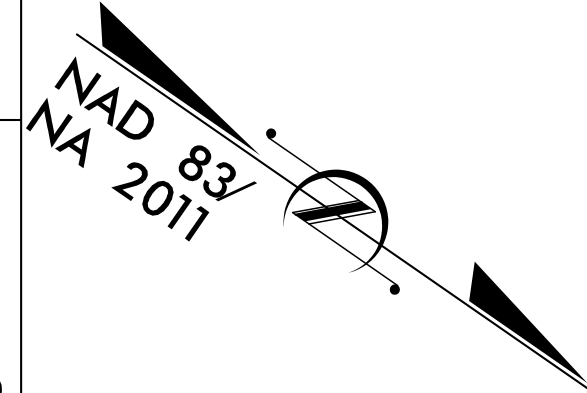
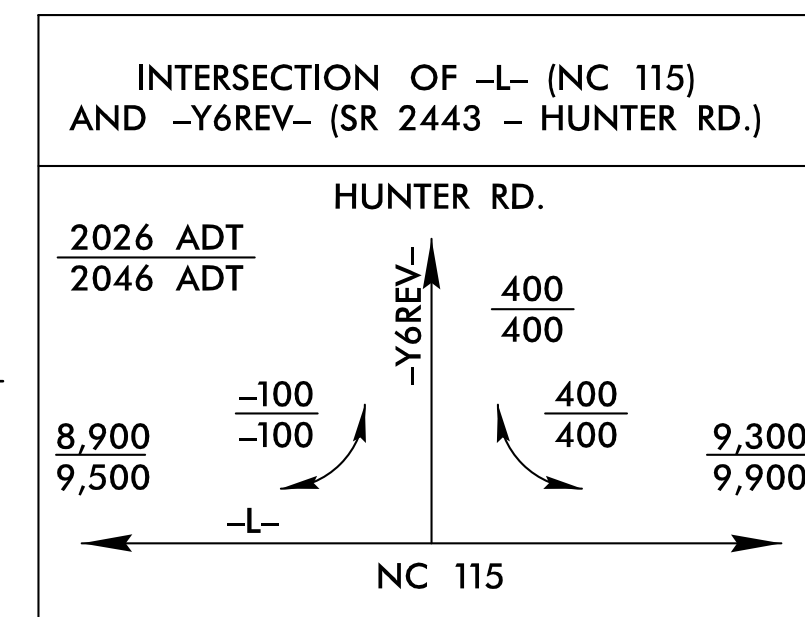
FOR -L- PROFILE, SEE SHEET 20
FOR -Y5- PROFILE, SEE SHEET 32



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PROJECT REFERENCE NO.		SHEET NO.	
R-5759		8	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
			
10/12/2026 10/12/2026		10/12/2026 10/12/2026	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

	HPB
	CONCRETE SIDEWALK
	CONCRETE ISLAND
	PAVEMENT REMOVAL



NOTE:

- NOTE:
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3. ALL ISLANDS ARE KEYED-IN 5" MONOLITHIC CONCRETE ISLANDS UNLESS OTHERWISE NOTED

FOR -L- PROFILE, SEE SHEETS 20 & 21

FOR -Y6REV- PROFILE, SEE SHEET 32

FOR -DRW4 REV- PROFILE, SEE SHEET 33

FOR -DRW4 REV- PROFILE, SEE SHEET 33

ALL AL -L-, -Y6REV-, & -DRW4 REV-, SEE SHEET 2B-6
FOR WALL 2 PLANS SEE SHEETS W2-1 THRU W2-7

8/17/99

-L-
PI Sta 68+51.79
 $\Delta = 13^{\circ} 36' 51.6"$ (RT)
 $D = 0^{\circ} 53' 42.9"$
 $L = 1520.74'$
 $T = 763.97'$
 $R = 6,400.00'$
 $SE = 2\%$
 $RO = 82.00'$
 $V = 50$ MPH

PIs Sta 85+86.17
 $\Delta s = 5^{\circ} 04' 25.4"$
 $Ls = 164.00'$
 $LT = 109.38'$
 $ST = 54.71'$

PI Sta 87+56.55
 $\Delta = 14^{\circ} 15' 04.0"$ (LT)
 $D = 6^{\circ} 11' 14.8"$
 $L = 230.32'$
 $T = 115.75'$
 $R = 926.00'$
 $SE = 4\%$
 $RO = 164.00'$
 $V = 50$ MPH

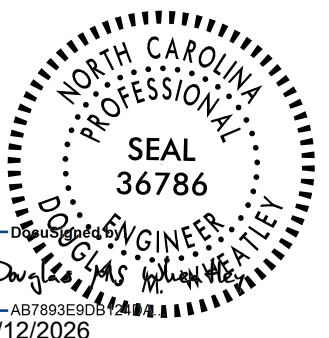
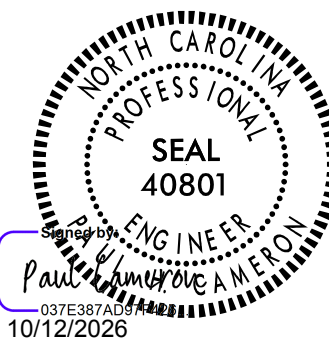
-Y7-
PI Sta 12+04.86
 $\Delta = 9^{\circ} 55' 22.9"$ (RT)
 $D = 5^{\circ} 21' 17.1"$
 $L = 185.31'$
 $T = 92.89'$
 $R = 1,070.00'$
 $SE = 4\%$
 $RO = 72.00'$
 $V = 35$ MPH

PI Sta 13+86.54
 $\Delta = 11^{\circ} 53' 08.7"$ (LT)
 $D = 6^{\circ} 40' 54.4"$
 $L = 177.88'$
 $T = 89.26'$
 $R = 857.49'$
 $SE = EXISTING$
 $RO = SEE PLANS$
 $V = 50$ MPH

-DRW8-
PI Sta 11+10.55
 $\Delta = 96^{\circ} 32' 47.1"$ (LT)
 $D = 95^{\circ} 29' 34.7"$
 $L = 101.0'$
 $T = 67.28'$
 $R = 60.00'$
 $SE = 2\%$
 $RO = 26.00'$
 $V = 15$ MPH

PI Sta 12+72.72
 $\Delta = 104^{\circ} 09' 06.3"$ (RT)
 $D = 57^{\circ} 17' 44.8"$
 $L = 181.78'$
 $T = 128.34'$
 $R = 100.00'$
 $SE = 2\%$
 $RO = 26.00'$
 $V = 15$ MPH

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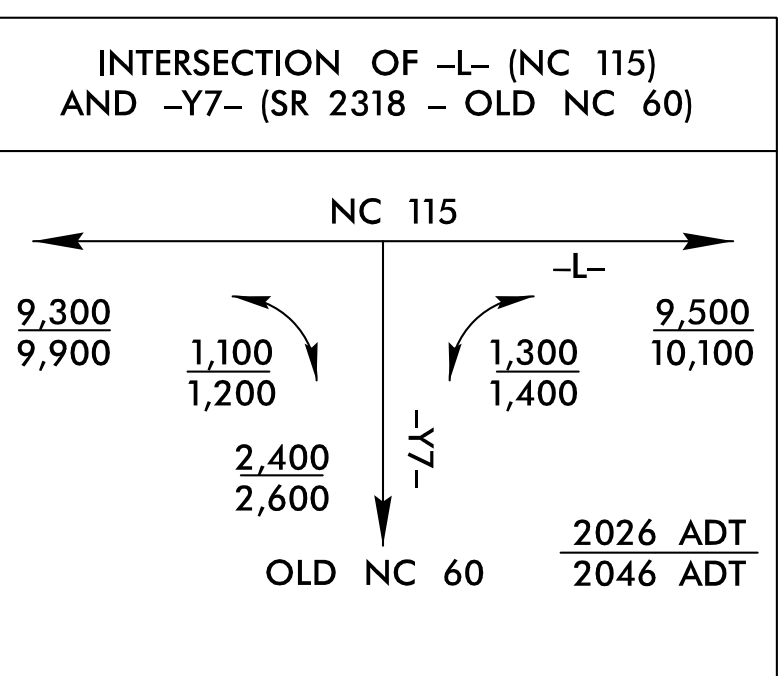
PROJECT REFERENCE NO. R-5759		SHEET NO. 9
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

CONCRETE SIDEWALK
CONCRETE ISLAND

MATCHLINE -L- STA. 73 + 75.00 SEE SHEET 8

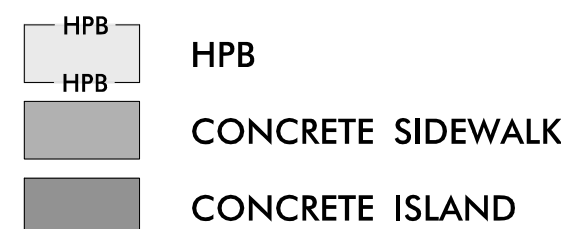
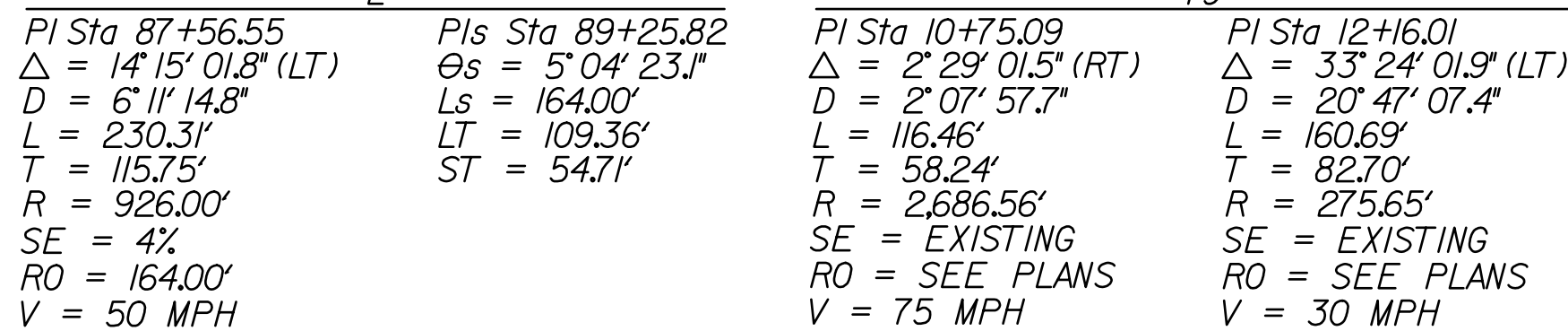
MATCHLINE -L- STA. 86 + 50.00 SEE SHEET 10

NOTE:
1. ALL DRIVEWAY RADII ARE 20' UNLESS NOTED ON PLANS.
2. ALL OUTSIDE CURB & GUTTER ARE 2'-6" UNLESS OTHERWISE NOTED.
3. ALL ISLANDS ARE KEYED-IN 5' MONOLITHIC CONCRETE ISLANDS UNLESS OTHERWISE NOTED.
4. FOR ISLAND DIMENSIONS, SEE DETAIL 2B-7 AND 2B-8.

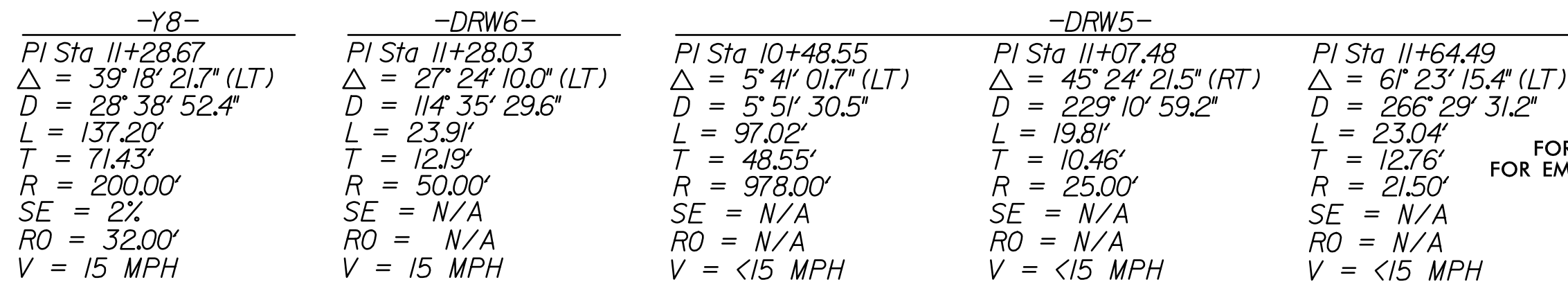


LINE	BEARING	DISTANCE
L60	N65°00'43" E	4.54'
L61	N61°28'39" E	15.66'
L62	N64°42'25" E	70.38'
L63	S22°21'29" E	10.68'
L64	S49°42'40" E	21.52'
L65	S65°23'50" E	23.98'
L66	S22°49'28" E	23.03'
L67	S48°46'26" E	26.78'
L68	S26°00'02" E	34.64'
L69	S70°54'50" E	37.06'
L70	S03°39'13" W	18.19'
L71	S42°36'40" E	21.52'
L72	S28°19'47" E	26.19'
L73	S63°05'20" W	6.79'

FOR -L- PROFILE, SEE SHEET 21
FOR -Y7- & -DRW8- PROFILES, SEE SHEET 33



NOTE:
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4. FOR ISLAND DIMENSIONS, SEE DETAIL 2B-9.



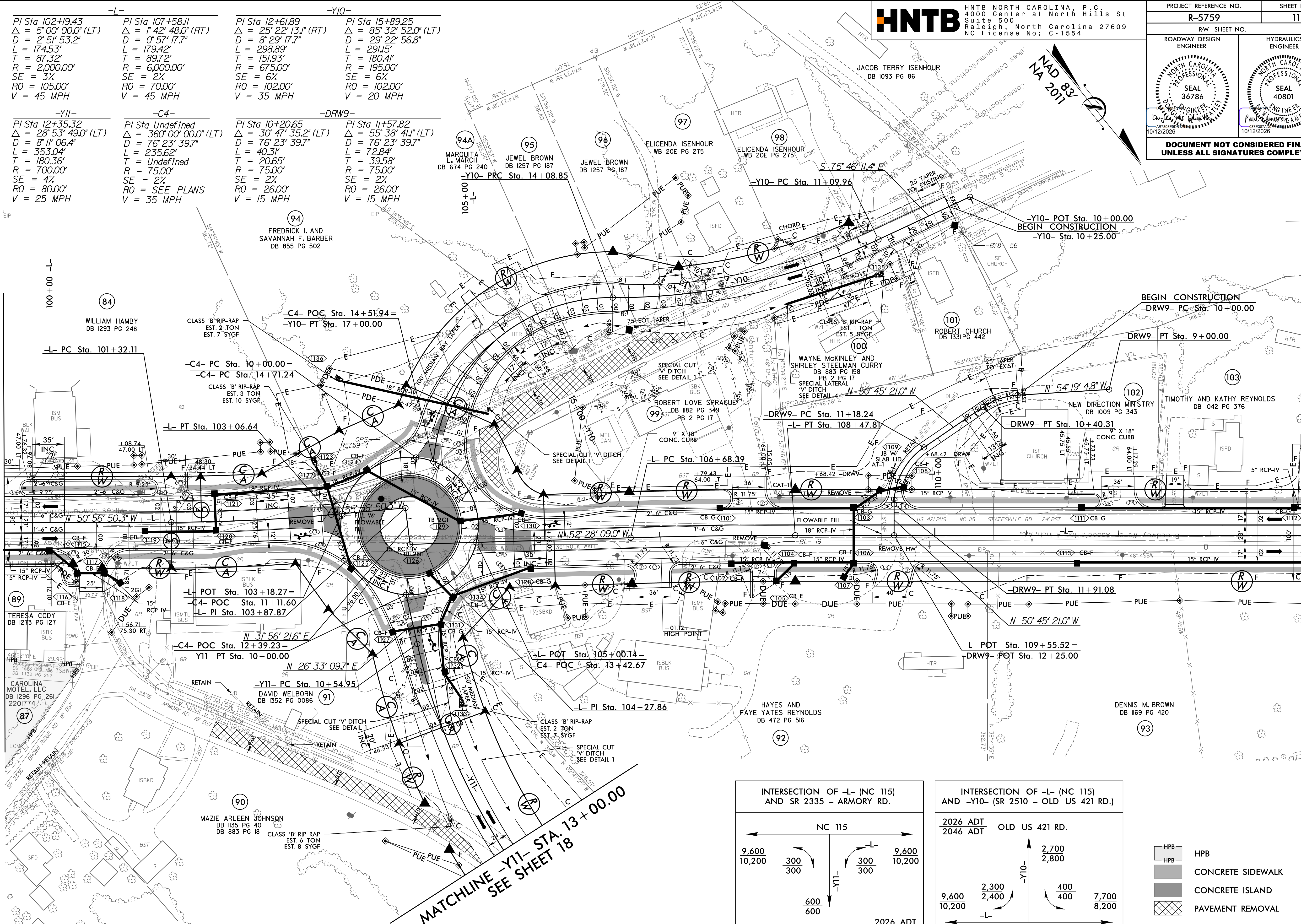
FOR ROW MONUMENT INFORMATION SEE PSH 2B-13
FOR EMERGENCY VEHICLE ACCESS DETAIL SEE SHEET 2B-15
FOR -L- PROFILE, SEE SHEETS 21 & 22
FOR -Y8- PROFILE, SEE SHEET 34
FOR -DRW5- PROFILE, SEE SHEET 34
FOR -DRW6- PROFILE, SEE SHEET 35
FOR -Y9- PROFILE, SEE SHEET 35
FOR RETAINING WALL 3 PLANS, SEE SHEETS W3-1 THRU W3-7

	HNTB NORTH CAROLINA, P.C. 4000 Center at North Hills St Suite 500 Raleigh, North Carolina 27609 NC License No: C-1554					
	PROJECT REFERENCE NO.					
	R-5759					
SHEET NO.		10				
RW SHEET NO.						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center; padding: 5px;"> ROADWAY DESIGN ENGINEER </td> <td style="width: 50%; text-align: center; padding: 5px;"> HYDRAULICS ENGINEER </td> </tr> <tr> <td style="text-align: center; padding: 20px;"> </td> <td style="text-align: center; padding: 20px;"> </td> </tr> </table>		ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER					
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED						

8/17/2026

$\Delta = 5^{\circ}00'00.0"$ (LT) $D = 2^{\circ}51'53.2"$ $L = 174.53'$ $T = 87.32'$ $R = 2,000.00'$ $SE = 3\%$ $RO = 105.00'$ $V = 45$ MPH	$\Delta = 1^{\circ}42'48.0"$ (RT) $D = 0^{\circ}57'17.7"$ $L = 179.42'$ $T = 89.72'$ $R = 6,000.00'$ $SE = 2\%$ $RO = 70.00'$ $V = 45$ MPH	$\Delta = 25^{\circ}22'13.1"$ (RT) $D = 8^{\circ}29'17.7"$ $L = 298.89'$ $T = 151.93'$ $R = 675.00'$ $SE = 6\%$ $RO = 102.00'$ $V = 35$ MPH	$\Delta = 85^{\circ}32'52.0"$ (LT) $D = 29^{\circ}22'56.8"$ $L = 291.15'$ $T = 180.41'$ $R = 195.00'$ $SE = 6\%$ $RO = 102.00'$ $V = 20$ MPH
$\Delta = 12^{\circ}35.32'$ $D = 8^{\circ}11'06.4"$ $L = 353.04'$ $T = 180.36'$ $R = 700.00'$ $SE = 4\%$ $RO = 80.00'$ $V = 25$ MPH	$\Delta = 360^{\circ}00'00.0"$ (LT) $D = 76^{\circ}23'39.7"$ $L = 235.62'$ $T = 72.84'$ $R = 75.00'$ $SE = 2\%$ $RO = 26.00'$ $V = 15$ MPH	$\Delta = 30^{\circ}47'35.2"$ (LT) $D = 76^{\circ}23'39.7"$ $L = 40.31'$ $T = 20.65'$ $R = 75.00'$ $SE = 2\%$ $RO = 26.00'$ $V = 15$ MPH	$\Delta = 55^{\circ}38'41.1"$ (LT) $D = 76^{\circ}23'39.7"$ $L = 72.84'$ $T = 39.58'$ $R = 75.00'$ $SE = 2\%$ $RO = 26.00'$ $V = 15$ MPH

MATCHLINE -L- STA. 99 + 50.00 SEE SHEET 10



- NOTE:
1. ALL DRIVEWAY RADII ARE 20' UNLESS NOTED ON PLANS.
 2. ALL OUTSIDE CURB & GUTTER ARE 2'-6" UNLESS OTHERWISE NOTED.
 3. ALL ISLANDS ARE KEYED-IN 5" MONOLITHIC CONCRETE ISLANDS UNLESS OTHERWISE NOTED.
 4. FOR ROUNDABOUT DIMENSIONS, SEE DETAIL SHEET 2B-10.

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PROJECT REFERENCE NO.

R-5759

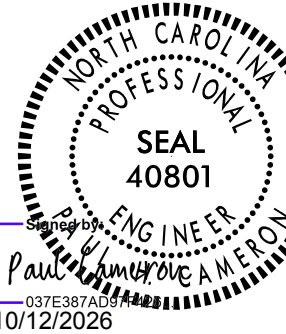
SHEET NO.

11

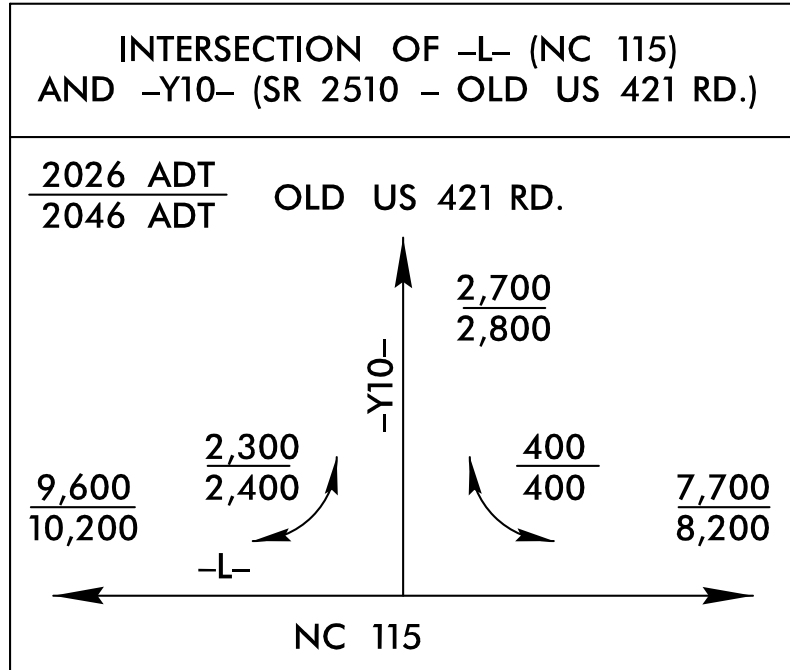
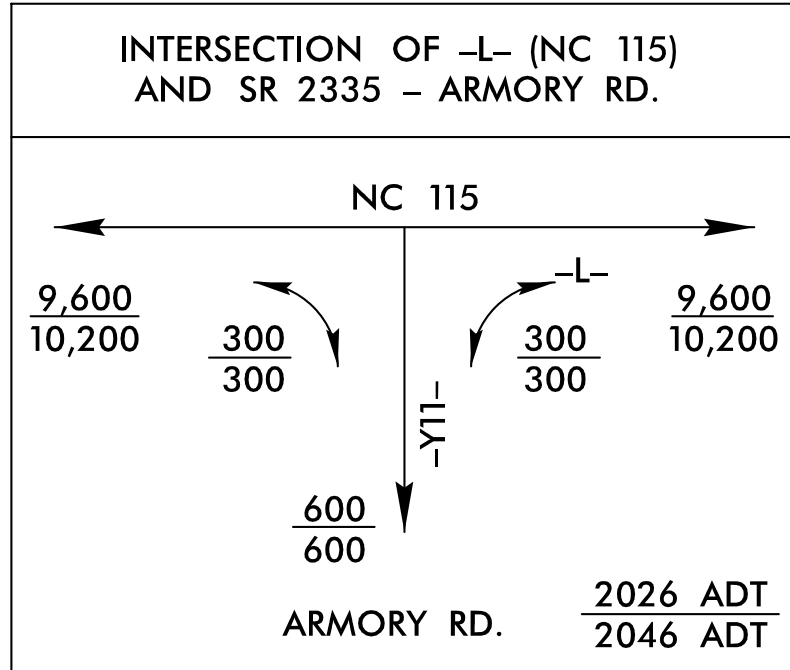
RW SHEET NO.

ROADWAY DESIGN
ENGINEER

HYDRAULICS
ENGINEER



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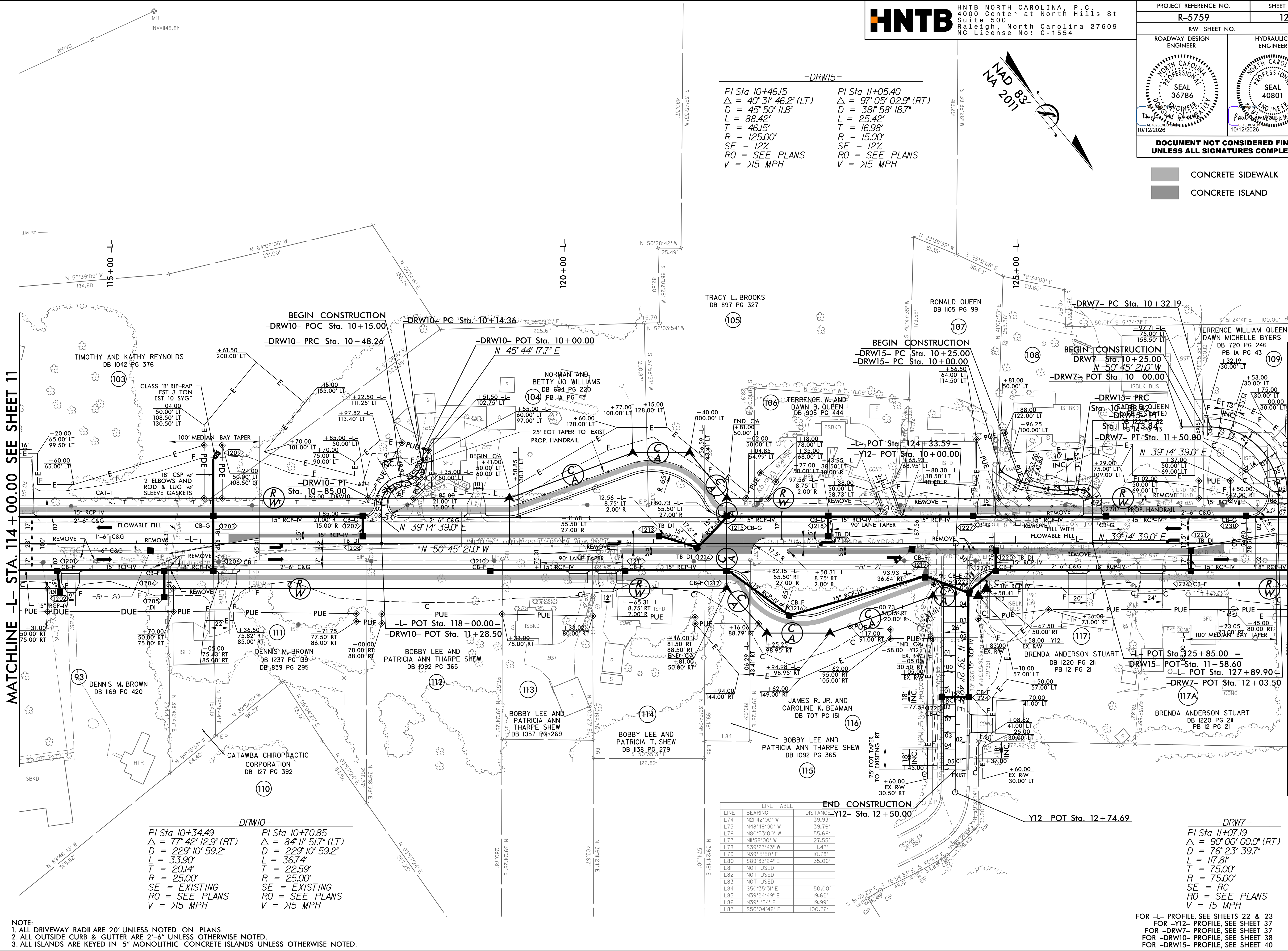
- HPB HPB
- CONCRETE SIDEWALK
- CONCRETE ISLAND
- PAVEMENT REMOVAL

FOR ROW MONUMENTS SEE SHEET 2B-14
FOR -L- PROFILE, SEE SHEET 22
FOR -Y10- AND -Y11- PROFILES, SEE SHEET 36
FOR -C4- AND -DRW9- PROFILES, SEE SHEET 37
FOR CONDUIT DETAILS SEE UC-11

MATCHLINE -L- STA. 114 + 00.00 SEE SHEET 12

8/17/99

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HNTB



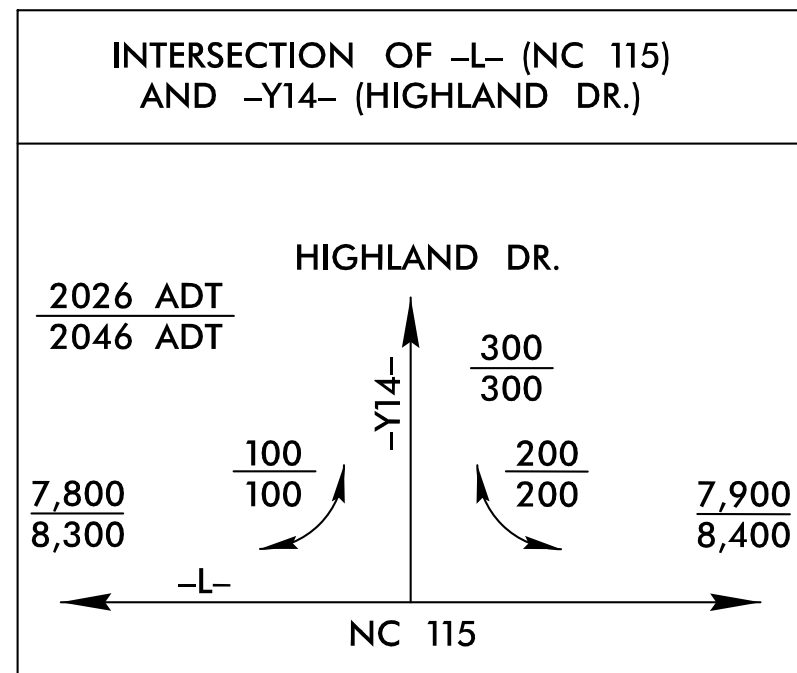
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PROJECT REFERENCE NO.		SHEET NO.
R-5759		12
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

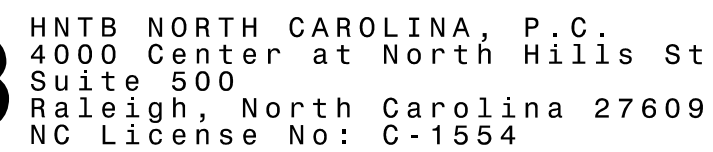
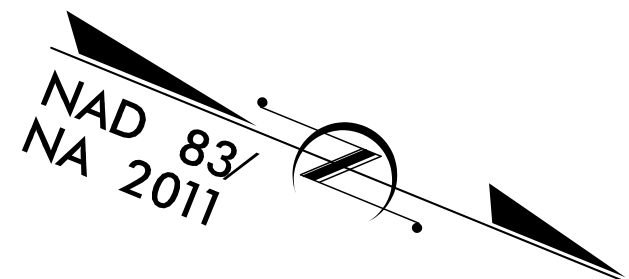
CONCRETE SIDEWALK
CONCRETE ISLAND

LINE TABLE		
LINE	BEARING	DISTANCE
L74	N21°42'00" W	39.93'
L75	N48°49'00" W	39.76'
L76	N80°53'00" W	55.66'
L77	N10°58'00" W	27.55'
L78	S39°23'43" W	1.47'
L79	N39°15'50" E	10.78'
L80	S89°33'24" E	35.06'
L81	NOT USED	
L82	NOT USED	
L83	NOT USED	
L84	S50°35'30" E	50.00'
L85	N39°24'49" E	19.52'
L86	N39°11'24" E	19.99'
L87	S50°04'46" E	100.76'

FOR -L- PROFILE, SEE SHEETS 22 & 23
FOR -Y12- PROFILE, SEE SHEET 37
FOR -DRW7- PROFILE, SEE SHEET 37
FOR -DRW10- PROFILE, SEE SHEET 38
FOR -DRW15- PROFILE, SEE SHEET 40



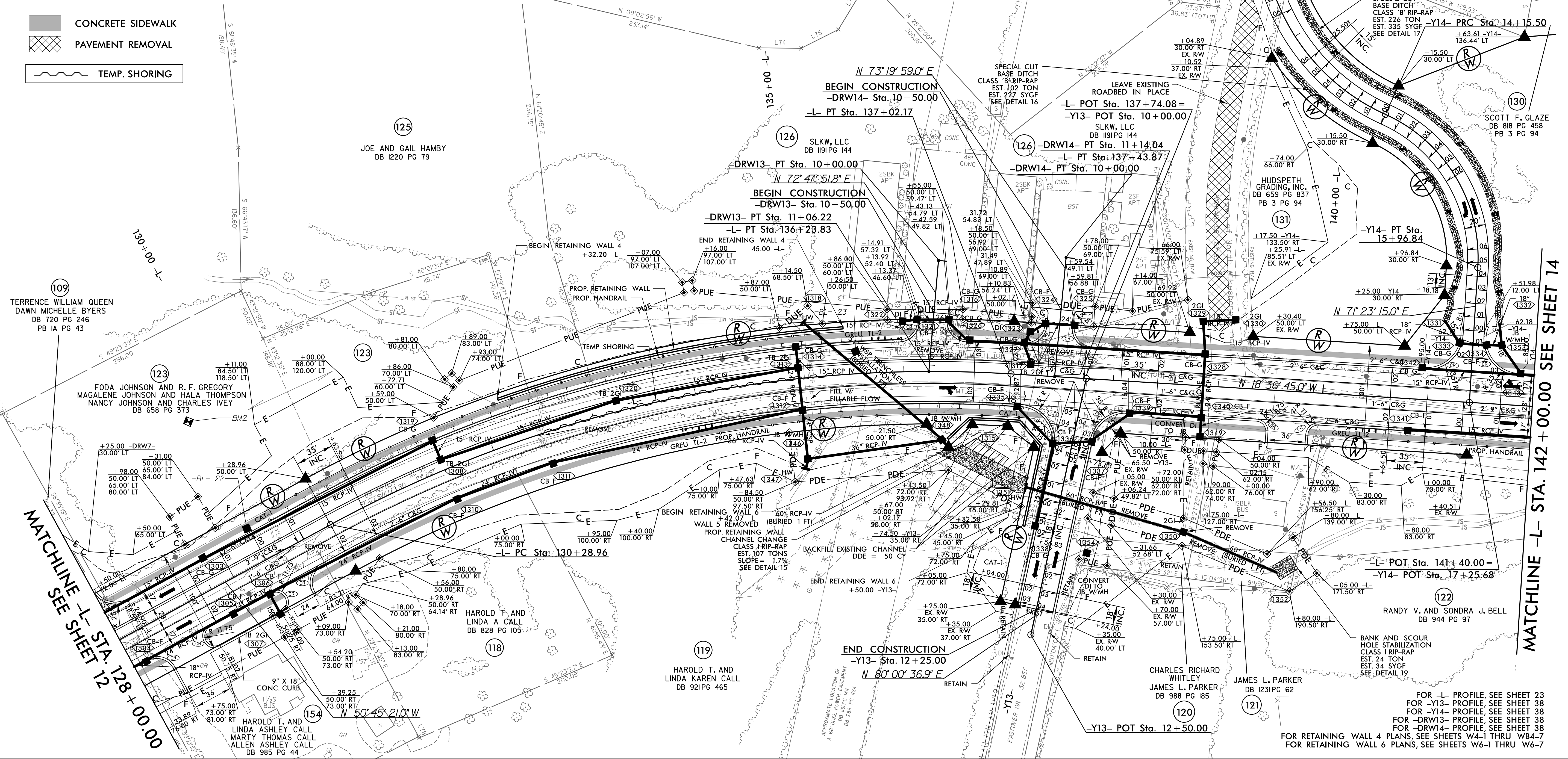
NOTE:
1. ALL DRIVEWAY RADII ARE 20' UNLESS NOTED ON PLANS.
2. ALL OUTSIDE CURB & GUTTER ARE 2'-6" UNLESS OTHERWISE NOTED.
3. ALL ISLANDS ARE KEYED-IN 5" MONOLITHIC CONCRETE ISLANDS UNLESS OTHERWISE NOTED.



PROJECT REFERENCE NO.	SHEET NO.
R-5759	13
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
10/12/2026 AUTHORIZED SIGNATURE	10/12/2026 AUTHORIZED SIGNATURE
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

-L-		-Y14-	
<i>PI Sta 133+74.68</i>	<i>PI Sta 11+30.21</i>	<i>PI Sta 13+74.96</i>	<i>PI Sta 15+91.0</i>
$\Delta = 32^{\circ} 08' 36.1''$ (RT)	$\Delta = 32^{\circ} 15' 59.1''$ (RT)	$\Delta = 66^{\circ} 02' 11.3''$ (LT)	$\Delta = 69^{\circ} 16' 03.2''$ (RT)
<i>D = 4' 46' 28.7"</i>	<i>D = 28' 38' 52.4"</i>	<i>D = 28' 38' 52.4"</i>	<i>D = 38' 11' 49.9"</i>
<i>L = 673.21'</i>	<i>L = 1126.3'</i>	<i>L = 230.51'</i>	<i>L = 181.34'</i>
<i>T = 345.72'</i>	<i>T = 57.85'</i>	<i>T = 129.97'</i>	<i>T = 103.61'</i>
<i>R = 1,200.00'</i>	<i>R = 200.00'</i>	<i>R = 200.00'</i>	<i>R = 150.00'</i>
<i>SE = 3%</i>	<i>SE = 5%</i>	<i>SE = 6%</i>	<i>SE = 6%</i>
<i>RO = 105.00'</i>	<i>RO = 75.00'</i>	<i>RO = 90.00'</i>	<i>RO = 78.00'</i>
<i>V = 40 MPH</i>	<i>V < 15 MPH</i>	<i>V = 25 MPH</i>	<i>V = 25 MPH</i>

 CONCRETE SIDEWALK
 PAVEMENT REMOVAL
 TEMP. SHORING



PG 62

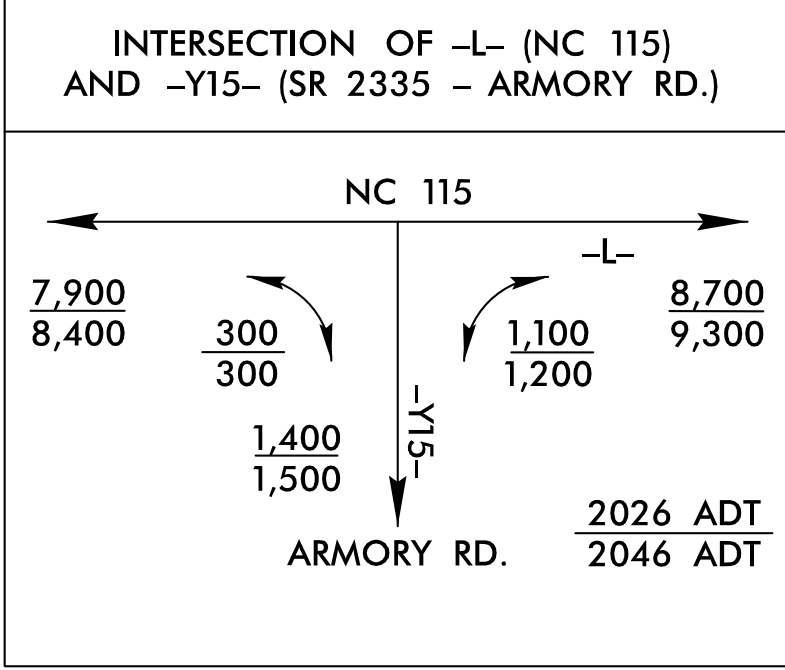
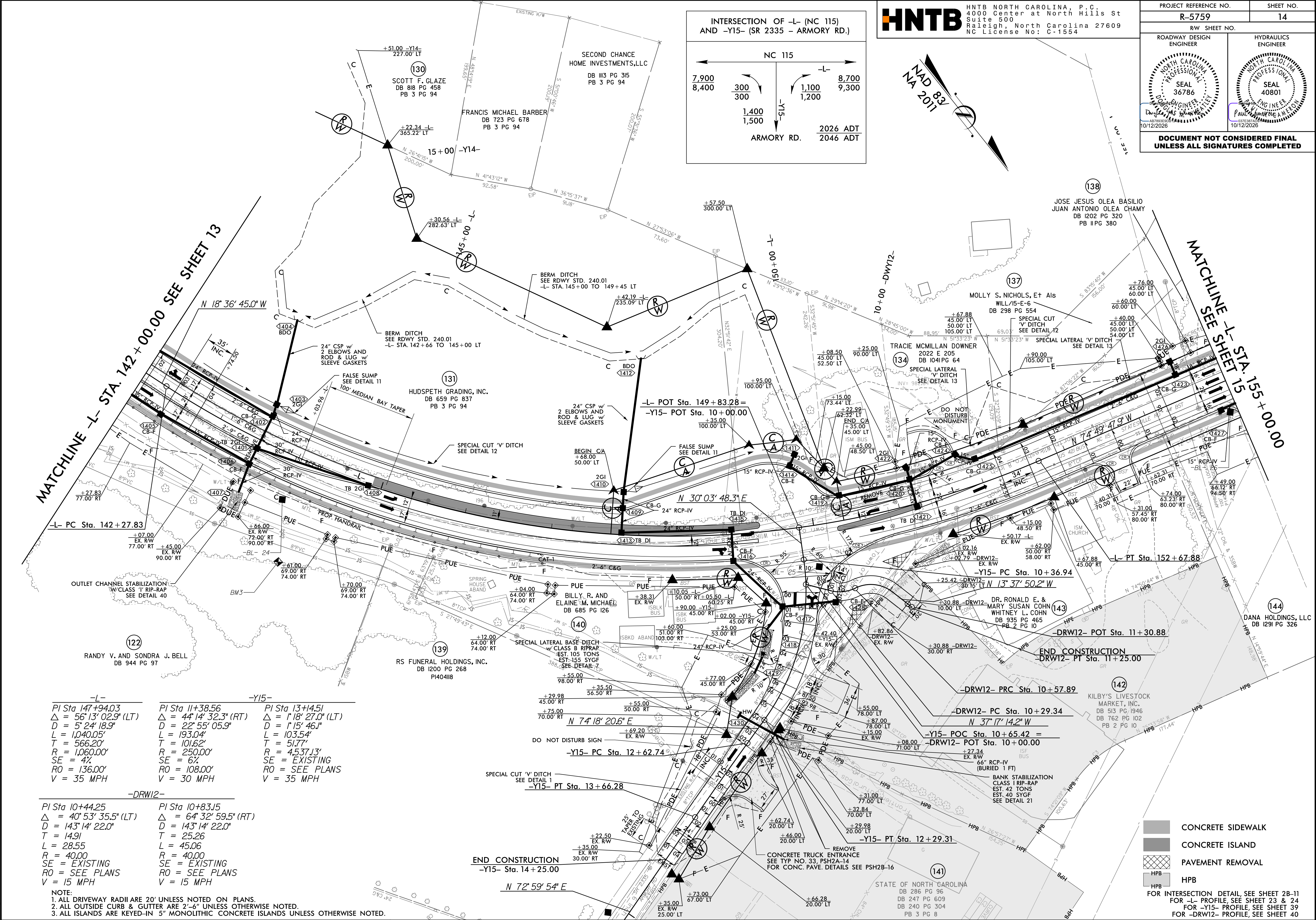
FOR -L- PROFILE, SEE SHEET 23
FOR -Y13- PROFILE, SEE SHEET 38
FOR -Y14- PROFILE, SEE SHEET 38
FOR -DRW13- PROFILE, SEE SHEET 38
FOR -DRW14- PROFILE, SEE SHEET 38
FOR RETAINING WALL 4 PLANS, SEE SHEETS W4-1 THRU W4-7
FOR RETAINING WALL 6 PLANS, SEE SHEETS W6-1 THRU W6-7

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8/17/2026

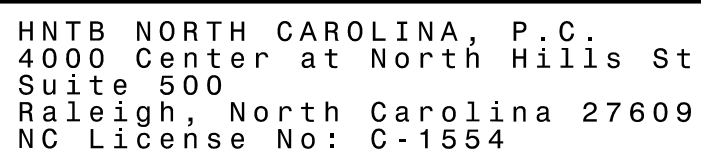
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14

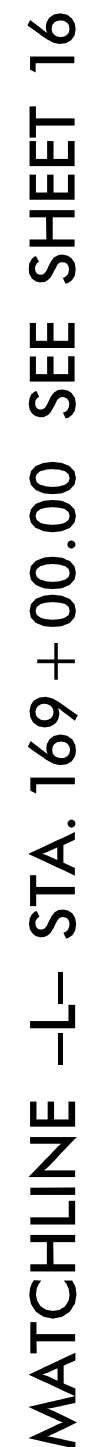


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PROJECT REFERENCE NO.		SHEET NO.
R-5759		14
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
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**DOCUMENT NOT CONSIDERED FINAL
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-Y16-

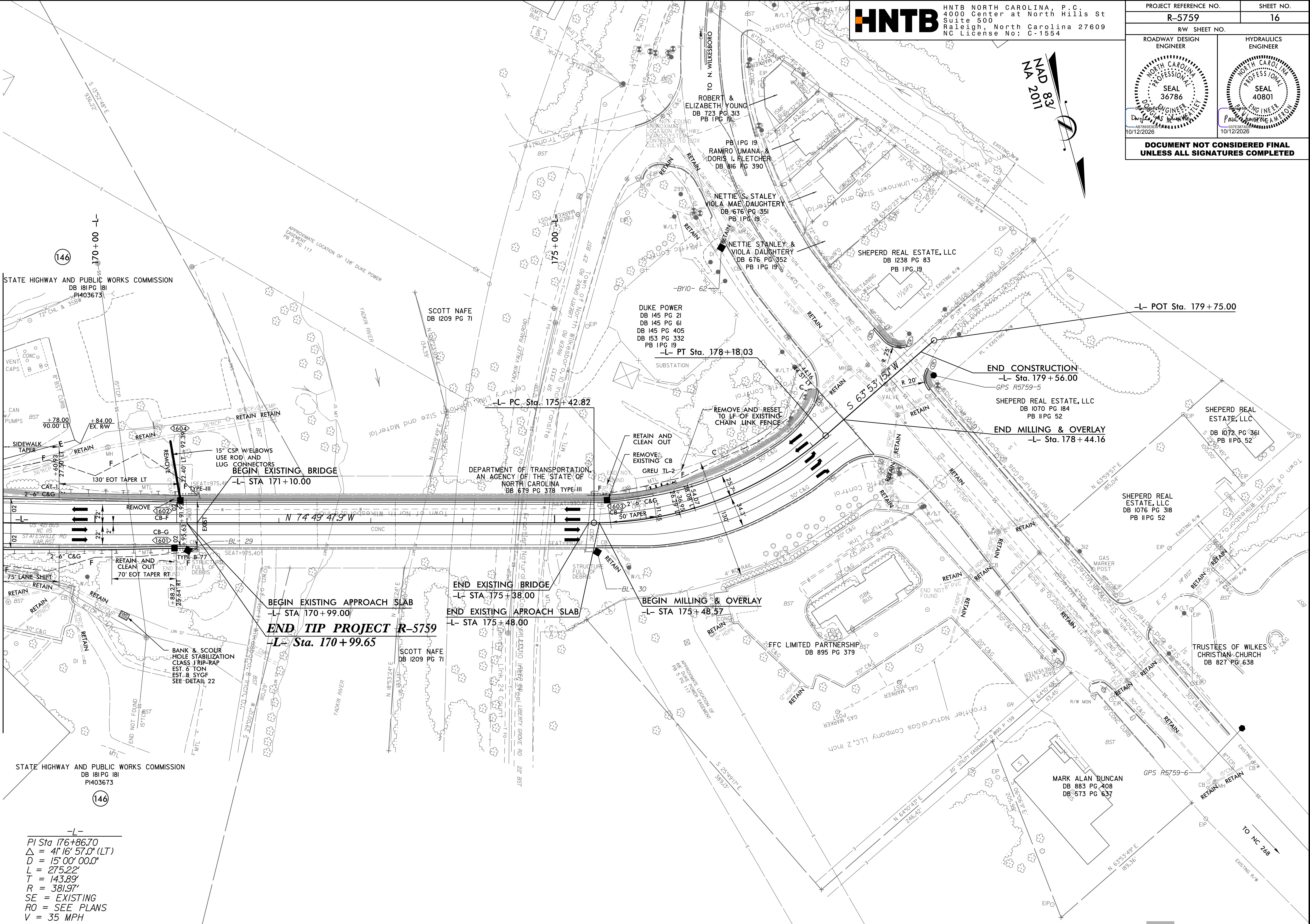
PI Sta 10+85.12
 $\Delta = 29^{\circ} 05' 48.1''$ (LT)
 $D = 20^{\circ} 06' 13.6''$
 $L = 144.73'$
 $T = 73.96'$
 $R = 285.00'$
 $SE = 2\%$
 $RO = 38.00'$
 $V = 25 \text{ MPH}$

FOR -L- PROFILE, SEE SHEET 24
FOR -Y16- PROFILE, SEE SHEET 39

8/17/99

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HNTB

MATCHLINE -L- STA. 169 + 00.00 SEE SHEET 15



-L-
PI Sta 176+86.70
 $\Delta = 41' 16" 57.0" (LT)$
 $D = 15' 00" 00.0"$
 $L = 275.22'$
 $T = 143.89'$
 $R = 381.97'$
 $SE = EXISTING$
 $RO = SEE PLANS$
 $V = 35 \text{ MPH}$

NOTE:
1. ALL DRIVEWAY RADII ARE 20' UNLESS NOTED ON PLANS.
2. ALL OUTSIDE CURB & GUTTER ARE 2'-6" UNLESS OTHERWISE NOTED.
3. ALL ISLANDS ARE KEYED-IN 5" MONOLITHIC CONCRETE ISLANDS UNLESS OTHERWISE NOTED.

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PROJECT REFERENCE NO.		SHEET NO.
R-5759		16
RW SHEET NO.		HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

CONCRETE SIDEWALK

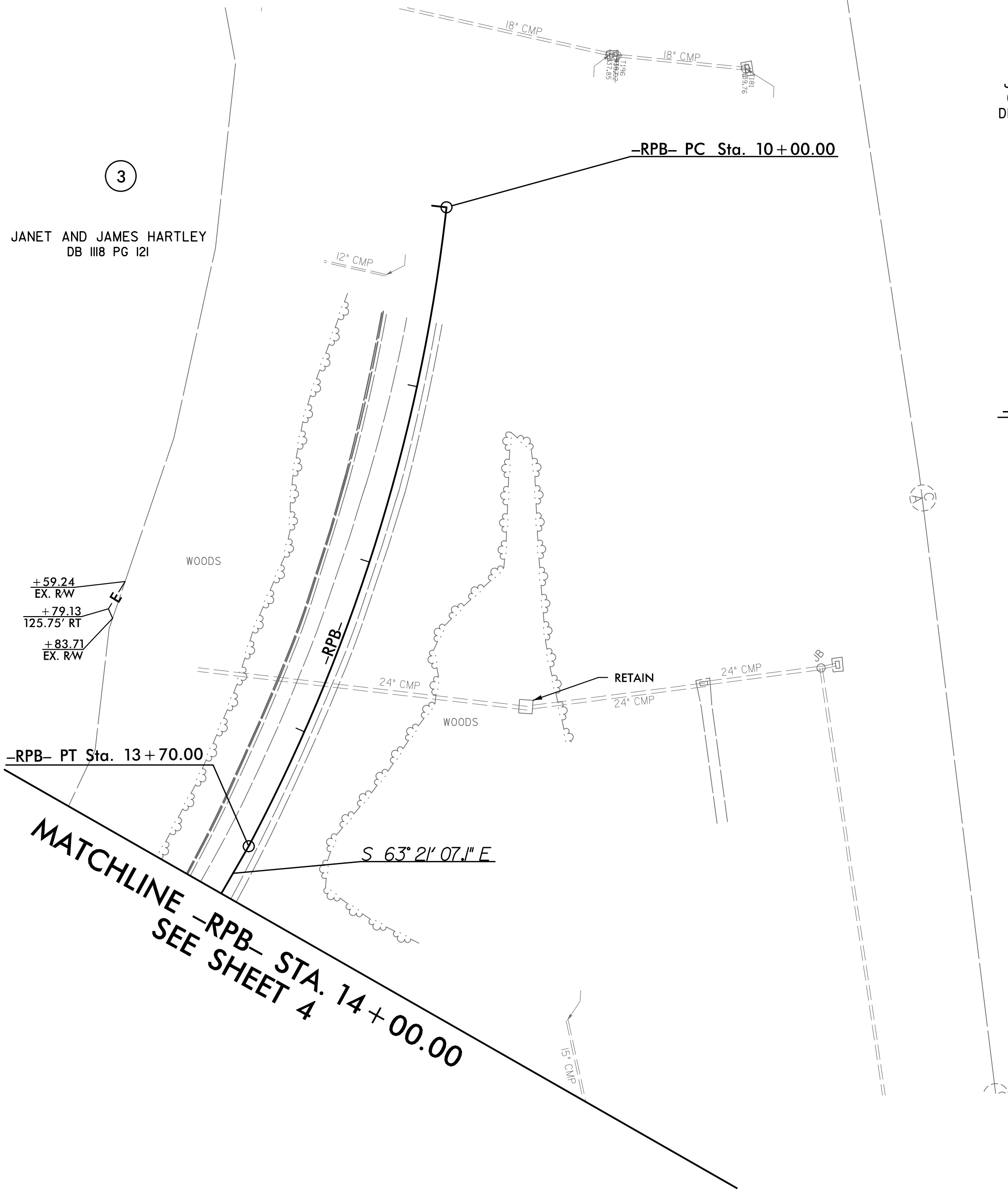
FOR -L- PROFILE, SEE SHEET 24

8/17/2026

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HNTB

-Y2-				
PI Sta 12+45.36 Δ = 9° 19' 50.9" (RT) D = 114' 35' 29.6" L = 79.70' T = 51.18' R = 50.00' SE = EXISTING RO = SEE PLANS V = 25 MPH	PI Sta 13+82.19 Δ = 47° 45' 47.3" (RT) D = 57' 17' 44.8" L = 83.36' T = 44.28' R = 100.00' SE = EXISTING RO = SEE PLANS V = 25 MPH	PI Sta 14+68.29 Δ = 50° 21' 54.5" (LT) D = 57' 17' 44.8" L = 87.90' T = 47.02' R = 100.00' SE = EXISTING RO = SEE PLANS V = 25 MPH	PI Sta 17+06.13 Δ = 102° 58' 13.3" (RT) D = 62' 16' 40.9" L = 165.34' T = 115.60' R = 92.00' SE = 4% RO = 80.00' V = 25 MPH	PI Sta 20+91.12 Δ = 68° 03' 16.6" (LT) D = 19' 05' 54.9" L = 356.33' T = 202.56' R = 300.00' SE = 4% RO = 80.00' V = 25 MPH

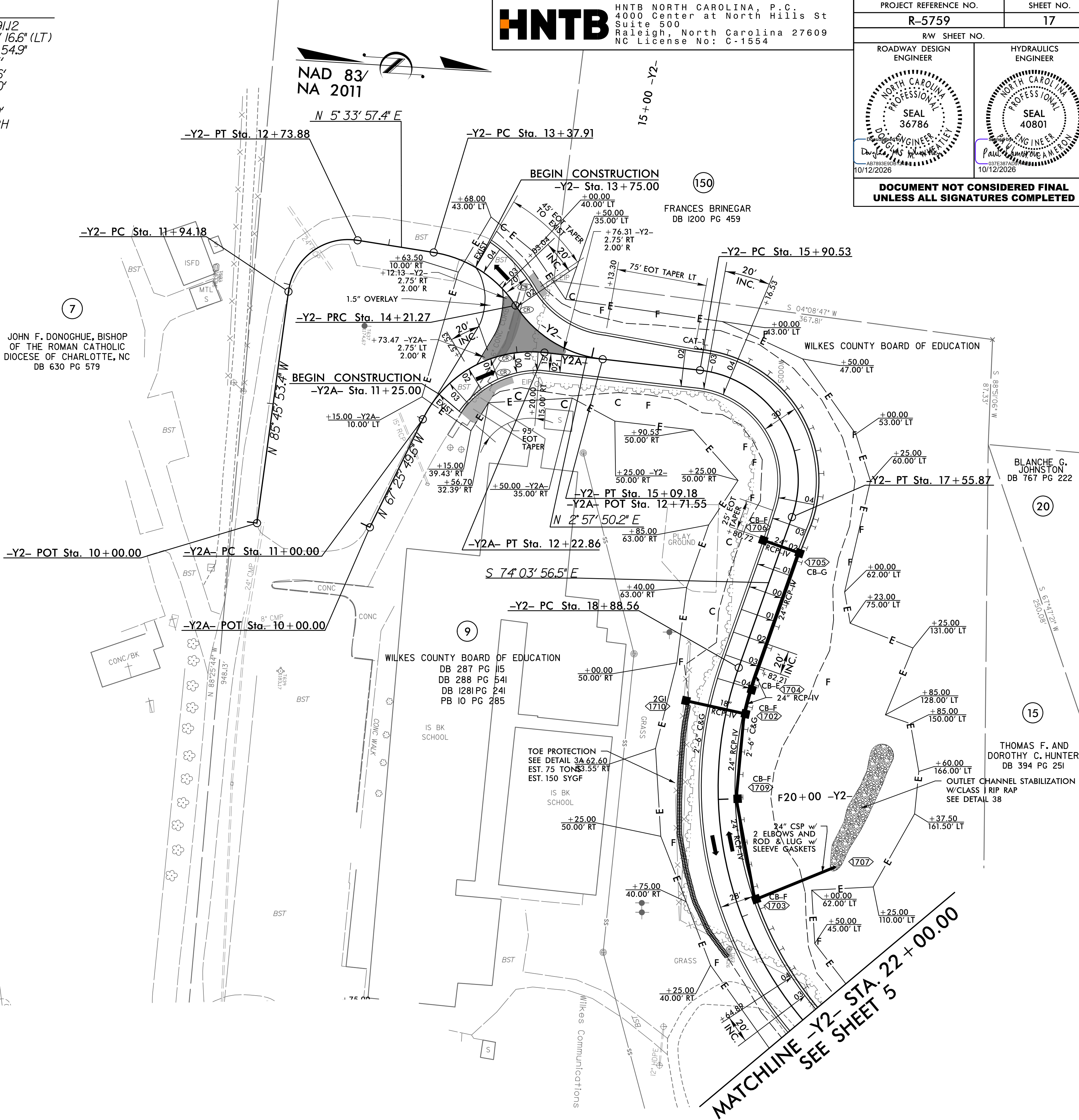
-Y2A-	-RPB-
PI Sta 11+70.53 Δ = 70° 23' 39.7" (RT) D = 57' 17' 44.8" L = 122.86' T = 70.53' R = 100.00' SE = EXISTING RO = SEE PLANS V = 20 MPH	PI Sta 11+87.20 Δ = 21° 30' 0" (RT) D = 5' 48' 39" L = 370.00' T = 187.20' R = 986.00' SE = 8% RO = 144.00' V = 60 MPH



CONCRETE SIDEWALK
CONCRETE ISLAND

FOR -RPB- PROFILE, SEE SHEET 25
FOR -Y2- PROFILE, SEE SHEET 29

NOTE:
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2. ALL OUTSIDE CURB & GUTTER ARE 2'-6" UNLESS OTHERWISE NOTED.
3. ALL ISLANDS ARE KEYED-IN 5" MONOLITHIC CONCRETE ISLANDS UNLESS OTHERWISE NOTED.

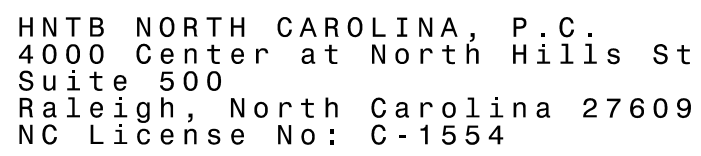


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PROJECT REFERENCE NO.		SHEET NO.
R-5759		17
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
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FOR -RPB- PROFILE, SEE SHEET 25
FOR -Y2- PROFILE, SEE SHEET 29
FOR -Y2A- PROFILE, SEE SHEET 29



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$-YII-$	$-YII-$
$PI\ St\alpha\ 12+35.32$	$PI\ St\alpha\ 14+58.45$
$\Delta = 28^\circ 53' 49.0'' (LT)$	$\Delta = 10^\circ 17' 46.2'' (RT)$
$D = 8' 11'' 06.4''$	$D = 10' 13' 53.0''$
$L = 353.04'$	$L = 100.63'$
$T = 180.36'$	$T = 50.45'$
$R = 700.00'$	$R = 560.00'$
$SE = 4\%$	$SE = 2\%$
$RO = 80.00'$	$RO = 40.00'$
$V = 25\ MPH$	$V = 40\ MPH$

FOR -Y11- PROFILE, SEE SHEET 36

5/28/24



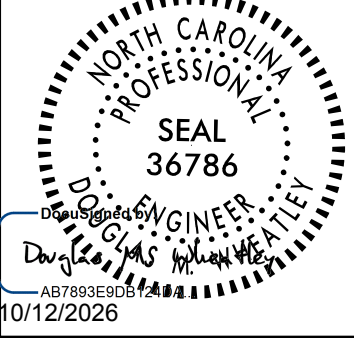
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R-5759

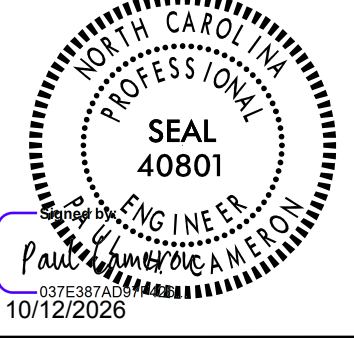
ROADWAY DESIGN
ENGINEER

SHEET NO.
20

HYDRAULICS
ENGINEER



David M. McWhorter
Professional Engineer
No. 36786
State of North Carolina
Expires 10/12/2026



Paul J. McWhorter
Professional Engineer
No. 40801
State of North Carolina
Expires 10/12/2026

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Vertical Curve Data:

- PI = 37+45.00, EL = 1,167.72', K = 97, VC = 390', V = 50 MPH
- PI = 43+35.00, EL = 1,128.23', K = 77, VC = 130', V = 40 MPH
- PI = 46+65.00, EL = 1,119.94', K = 42, VC = 160', V = 30 MPH
- PI = 48+80.00, EL = 1,127.42', K = 133, VC = 270', V = 55 MPH

Centerline Intersections:

- C3- STA 14+84.55 = -L- STA 44+01.48, ELEV. = 1,124.91'
- C3- STA 12+31.81 = -L- STA 45+81.82, ELEV. = 1,120.19'
- DRWI- STA 11+99.09 = -L- STA 47+10.83

Ditch Data:

- BEGIN DITCH: PI = 43+00.00 (LT), E/I = 1128.96
- END DITCH: PI = 44+00.00 (LT), E/I = 1120.96
- BEGIN DITCH: PI = 45+17.27 (LT), E/I = 1119.1
- BEGIN DITCH: PI = 46+50.00 (LT), E/I = 1110.78
- END DITCH: PI = 47+50.00 (LT), E/I = 1113.30
- BEGIN DITCH: PI = 53+00.00 (RT), E/I = 1146.98
- END DITCH: PI = 54+5.87 (RT), E/I = 1153.12
- BEGIN DITCH: PI = 62+84.26 (LT), E/I = 1179.07
- BEGIN DITCH: PI = 63+71.06 (LT), E/I = 1180.00

Grades:

- (-)2.6824%
- (-)6.6935%
- (-)6.6935%
- (-)8.0067%
- (-)5.0000%
- (-)0.3000%
- (-)10.5805%
- (+)3.4800%
- (+)2.5180%
- (+)3.4800%
- (+)5.5100%
- (+)1.8850%

Other Notes:

- BM1 RR SPIKE IN A 12" MAPLE -L- STA. 58+17.96, 102.51' LT, EL = 1182.60
- FOR -L- PLAN, SEE SHEETS 6 & 7

07-AUG-2026 14:10
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HNTB

Vertical Curve Data:

- PI = 48+80.00, EL = 1,127.42', K = 133, VC = 270', V = 55 MPH
- PI = 56+00.00, EL = 1,167.10', K = 110, VC = 400', V = 50 MPH

Centerline Intersections:

- L- STA 54+57.31 = -Y5- STA 10+00.00

Ditch Data:

- BEGIN DITCH: PI = 50+00.00 (LT), E/I = 1133.00
- BEGIN DITCH: PI = 53+00.00 (RT), E/I = 1146.98
- END DITCH: PI = 54+5.87 (RT), E/I = 1153.12
- END DITCH: PI = 55+50.00 (LT), E/I = 1162.00
- END DITCH: PI = 62+84.26 (LT), E/I = 1179.07
- BEGIN DITCH: PI = 63+71.06 (LT), E/I = 1180.00

Grades:

- (+)5.5100%
- (+)5.2727%
- (+)5.2990%
- (+)5.2727%
- (+)5.5100%
- (+)1.8850%
- (+)2.3244%
- (+)2.4188%
- (+)1.8850%

Other Notes:

- FOR -L- PLAN, SEE SHEETS 7 & 8

5/28/24



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PROJECT REFERENCE NO.
R-5759

ROADWAY DESIGN
ENGINEER

SEAL
36786

PAUL W. HAYES
10/12/2026

SEAL
40801

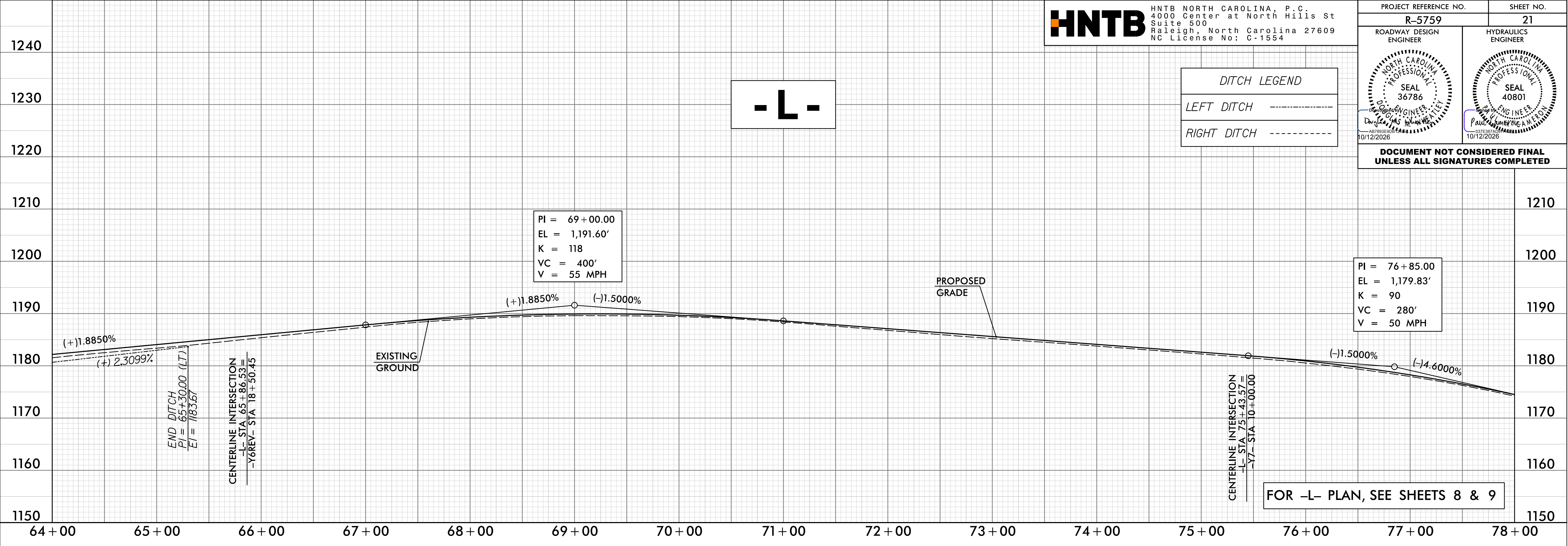
PAUL W. HAYES
10/12/2026

HYDRAULICS
ENGINEER

PAUL W. HAYES
10/12/2026

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DITCH LEGEND	
LEFT DITCH	-----
RIGHT DITCH	-----

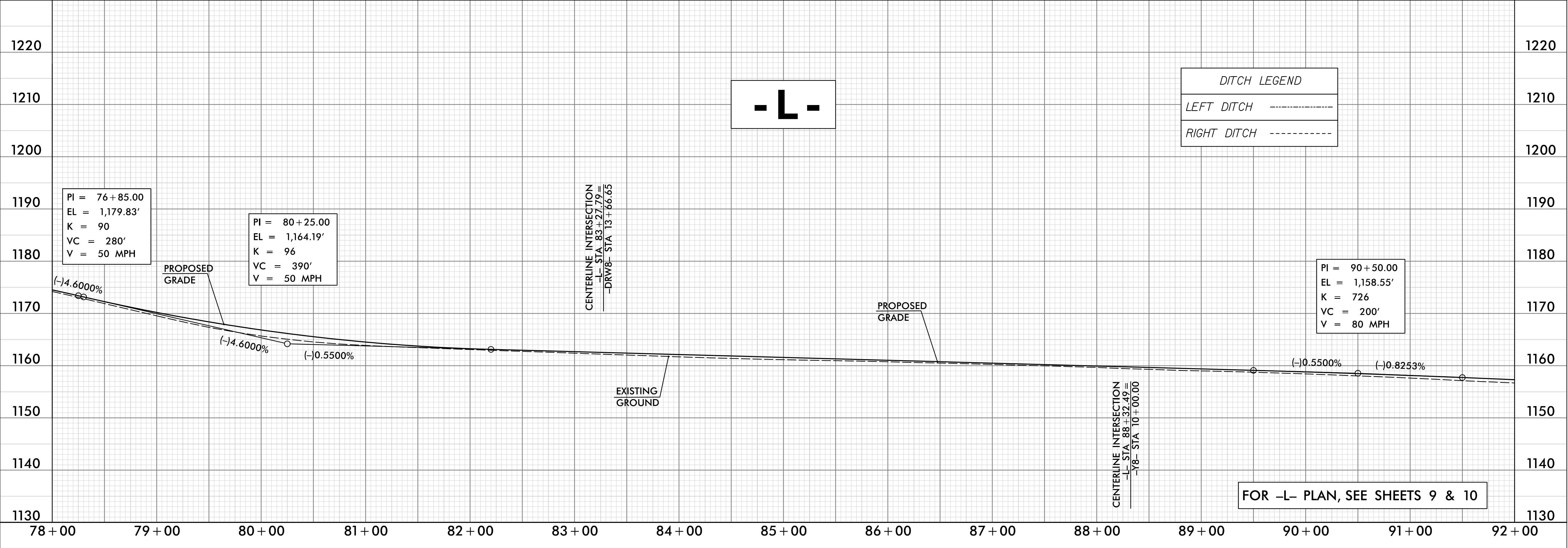


FOR -L- PLAN, SEE SHEETS 8 & 9

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HNTB

-L-

DITCH LEGEND	
LEFT DITCH	-----
RIGHT DITCH	-----



FOR -L- PLAN, SEE SHEETS 9 & 10

