

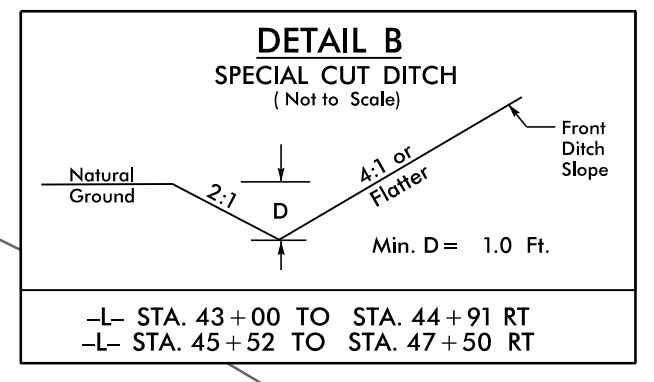
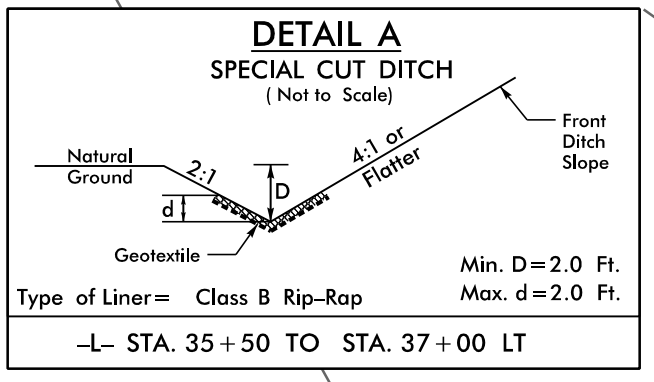
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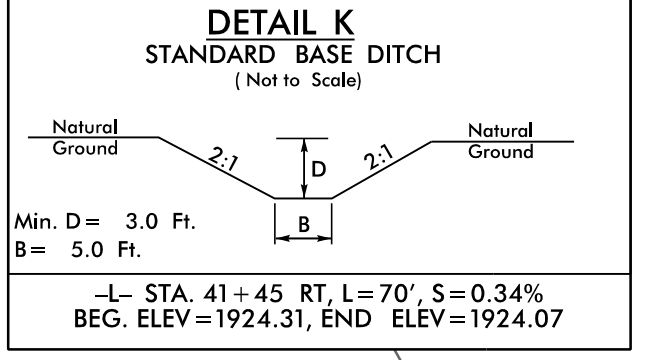
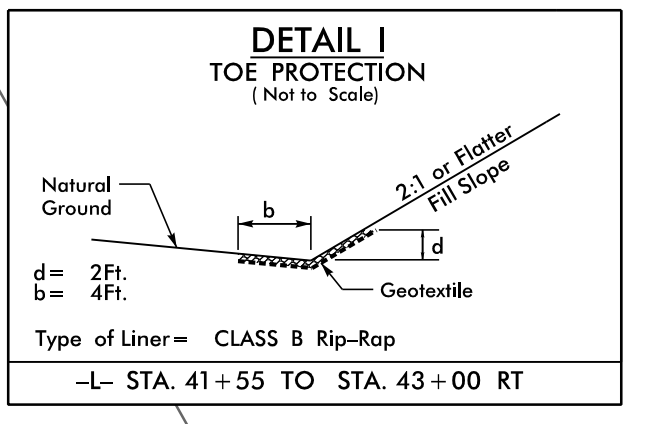
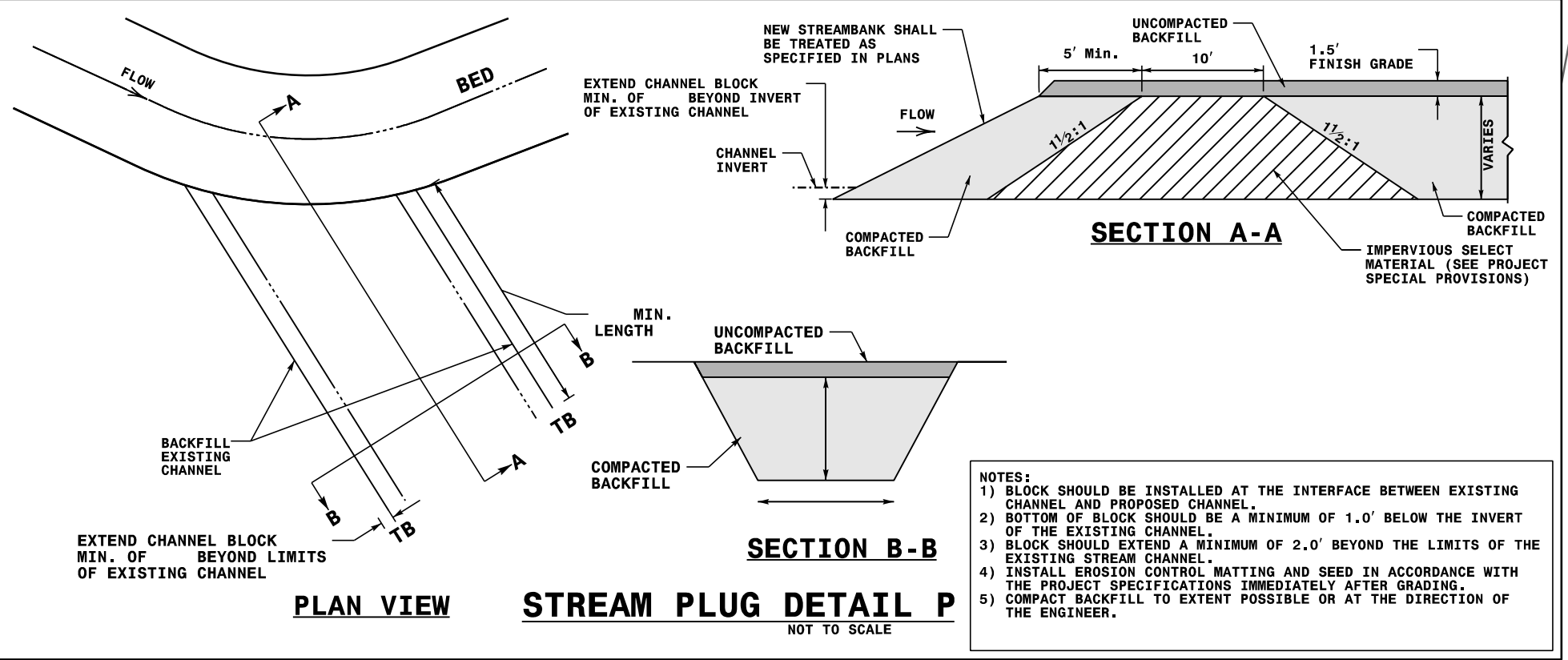
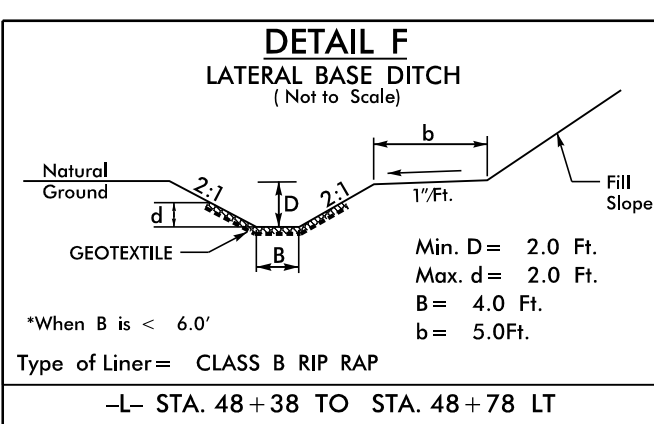
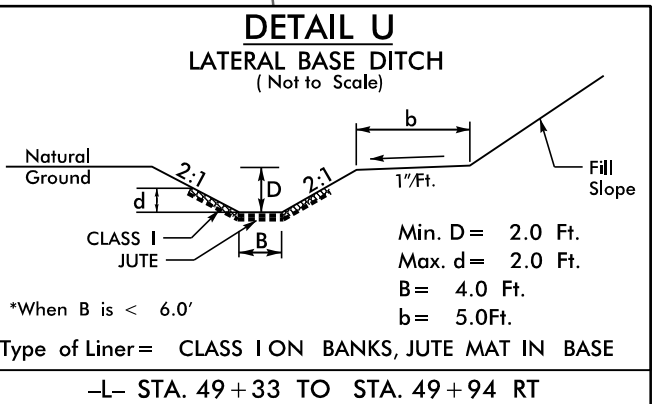
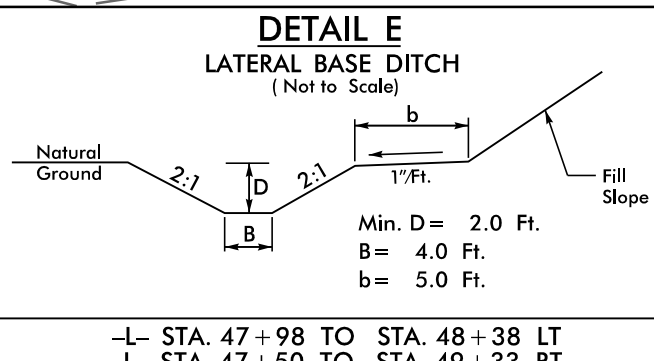
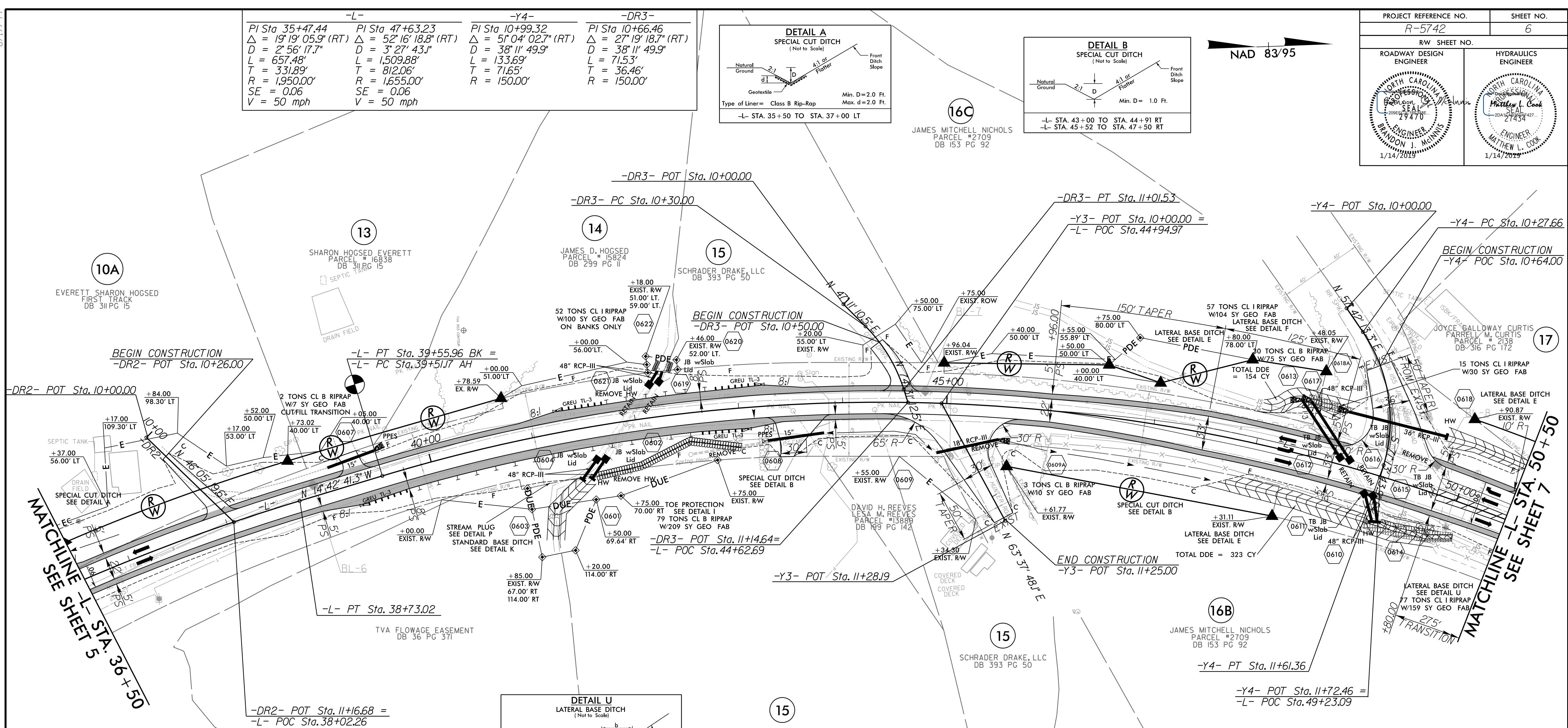
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shall not be considered a certified document.**

PROJECT REFERENCE NO. R-5742		SHEET NO. 6	
ROADWAY DESIGN ENGINEER BRANNON J. MCINNIS 1/14/2019		HYDRAULICS ENGINEER MATTHEW L. COOK 1/14/2019	

-L-	-Y4-	-DR3-
PI Sta 35+47.44 Δ = 19'19" 05.9" (RT) D = 2'56" 17.7" L = 657.48' T = 331.89' R = 1,950.00' SE = 0.06 V = 50 mph	PI Sta 47+63.23 Δ = 52'16" 18.8" (RT) D = 3'27" 43.1" L = 1,509.88' T = 812.06' R = 1,655.00' SE = 0.06 V = 50 mph	PI Sta 10+99.32 Δ = 51'04" 02.7" (RT) D = 38'11" 49.9" L = 133.69' T = 71.65' R = 150.00'



NAD 83/95



PAVEMENT REMOVAL

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RK&K

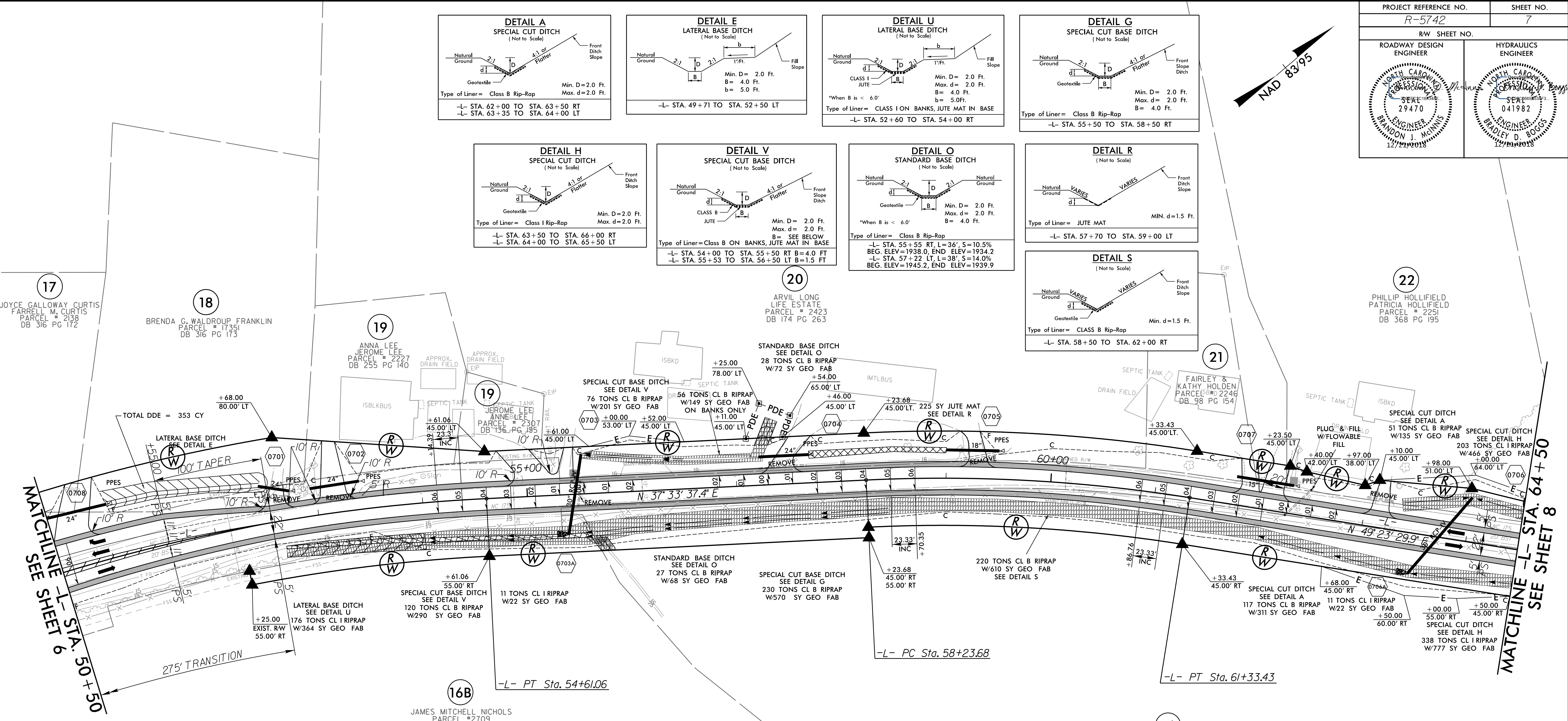
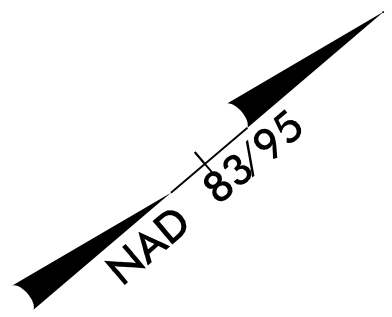
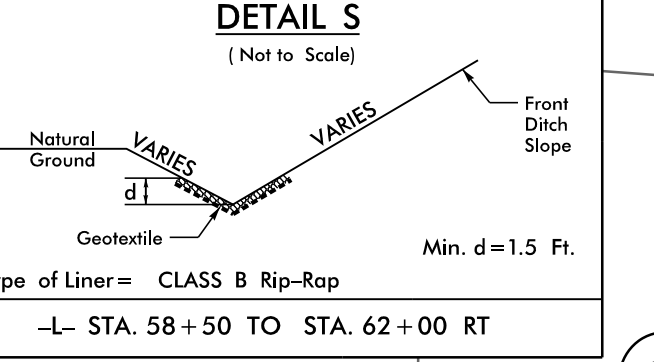
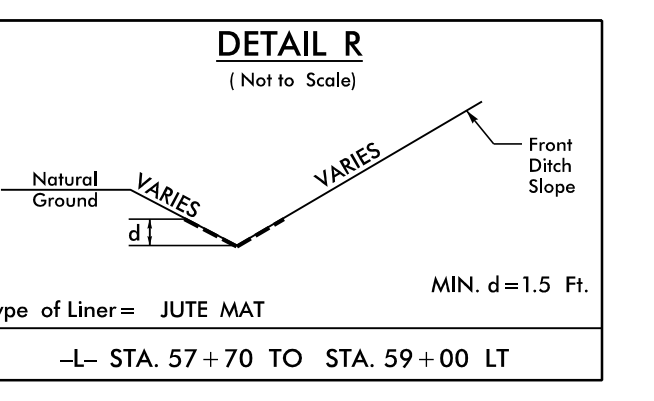
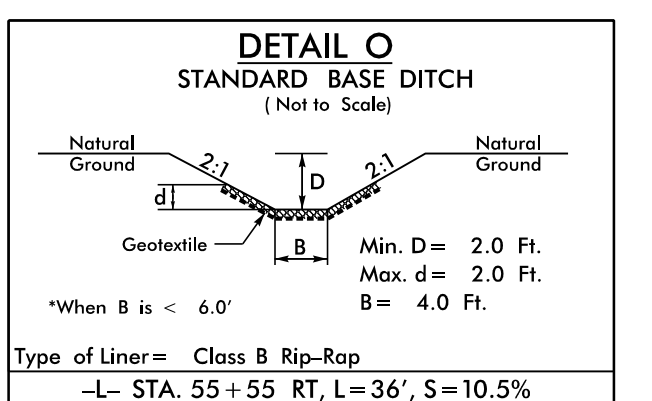
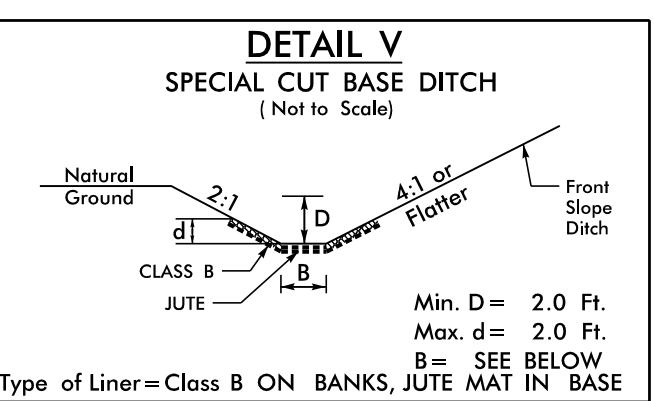
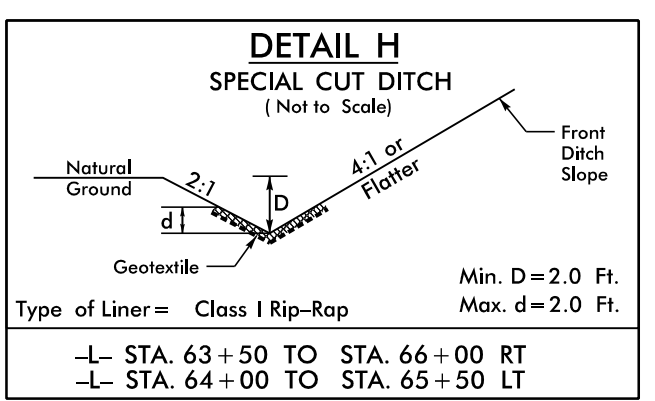
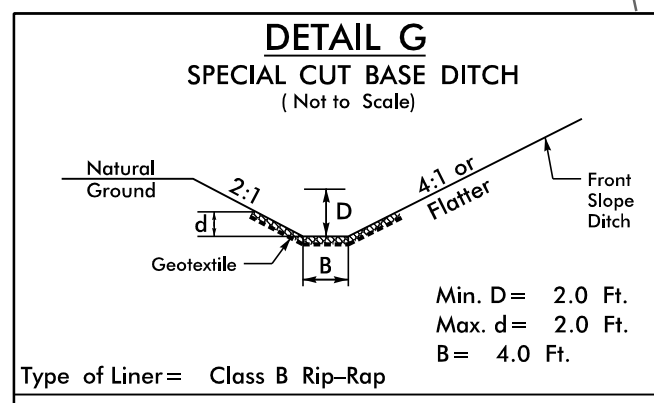
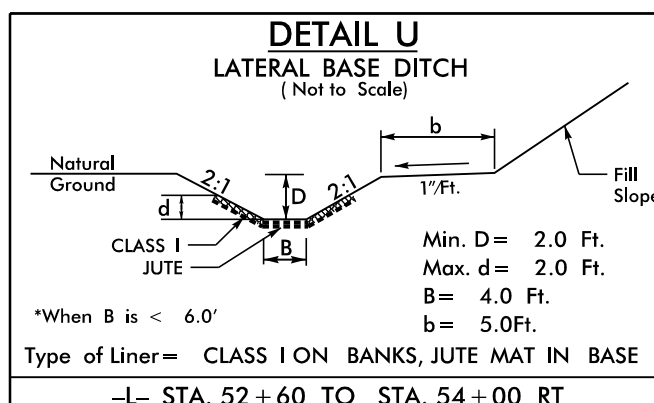
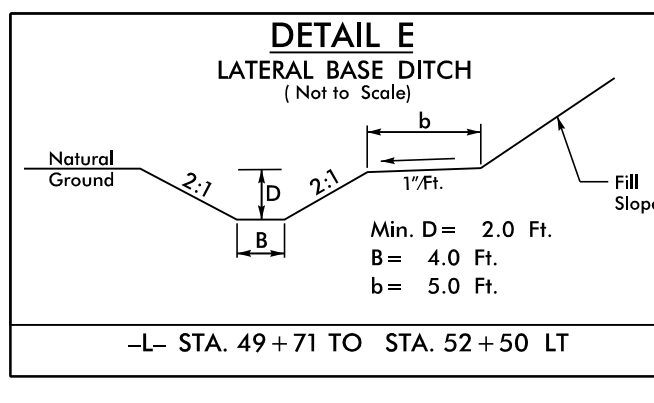
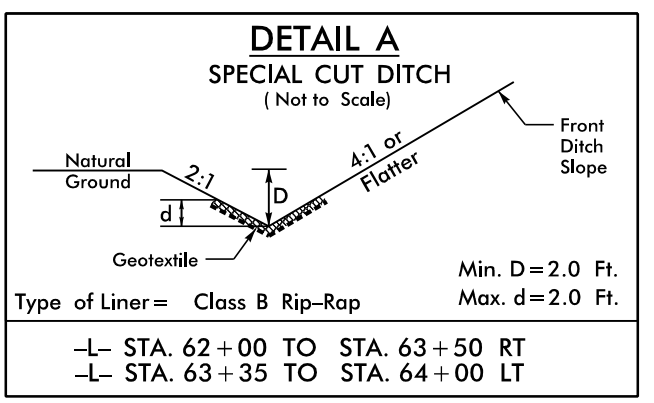
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FOR -L- PROFILE SEE SHTS. 20 & 21
FOR -Y3- & -Y4- PROFILES SEE SHT. 30
FOR -DR2- & -DR3- PROFILES SEE SHT. 28
FOR -DET 1- PLAN PROFILE SEE SHT. 2B-1

NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED.
ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

8/17/99
 1/14/2019
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 11/14/2019

PROJECT REFERENCE NO. R-5742		SHEET NO. 7	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER BRANDON J. MCINNIS 12/21/2018		HYDRAULICS ENGINEER BRADLEY D. BOGGS 12/21/2018	



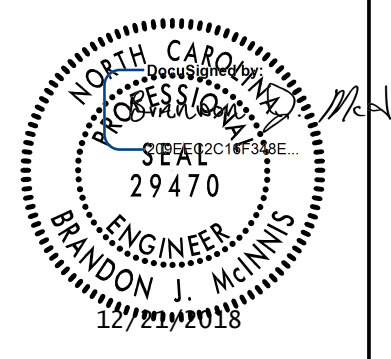
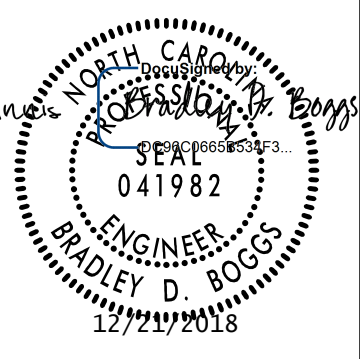
PI Sta 46+19.01	PI Sta 59+79.11
$\Delta = 67^{\circ}16'02.0''$ (RT)	$\Delta = 11^{\circ}49'52.5''$ (RT)
$D = 3^{\circ}27'43.1''$	$D = 3^{\circ}49'11.0''$
$L = 1943.03'$	$L = 309.74'$
$T = 1100.98'$	$T = 155.42'$
$R = 1655.00'$	$R = 1500.00'$
$SE = 0.06$	$SE = 0.06$
$V = 50$ mph	$V = 50$ mph

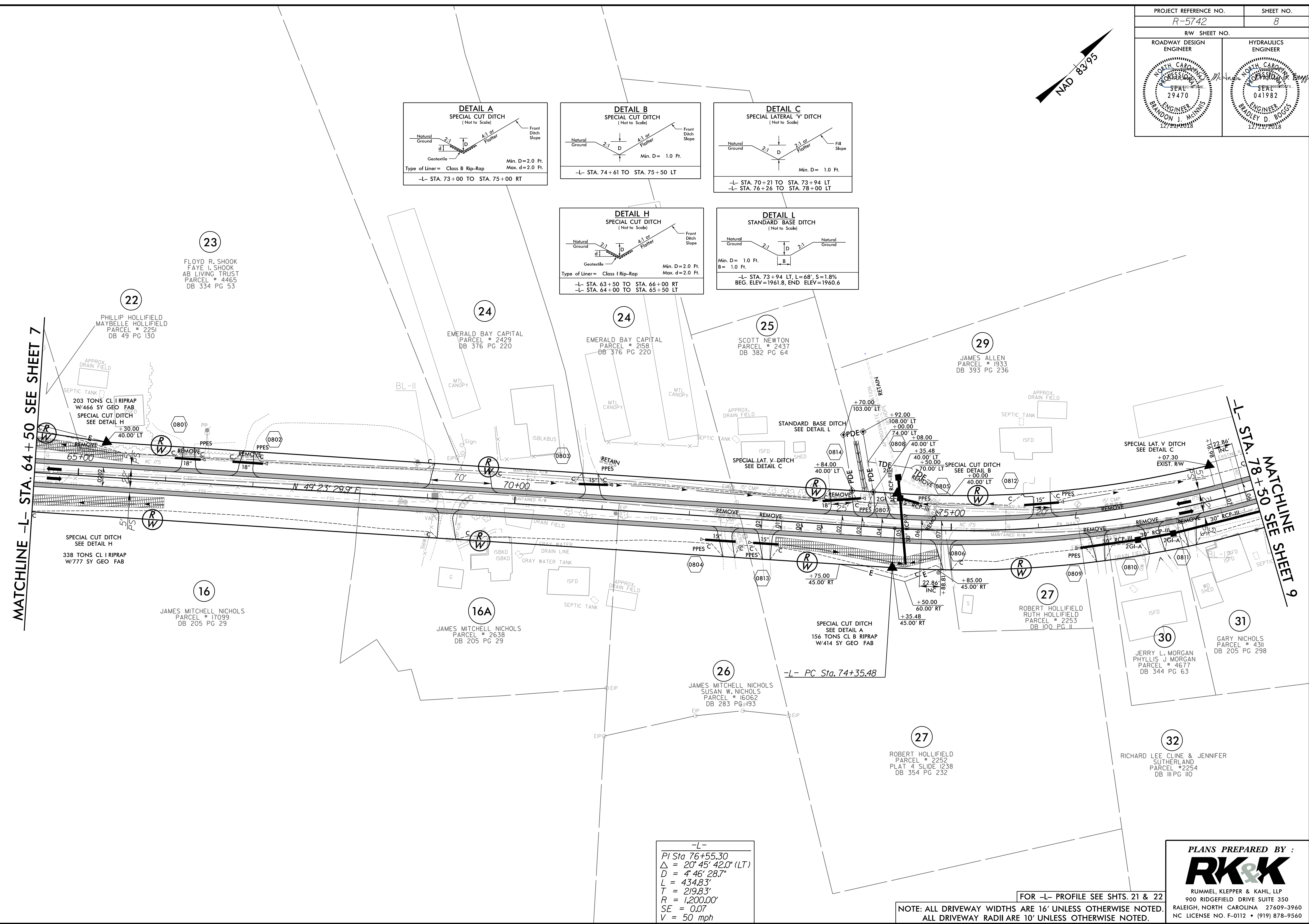
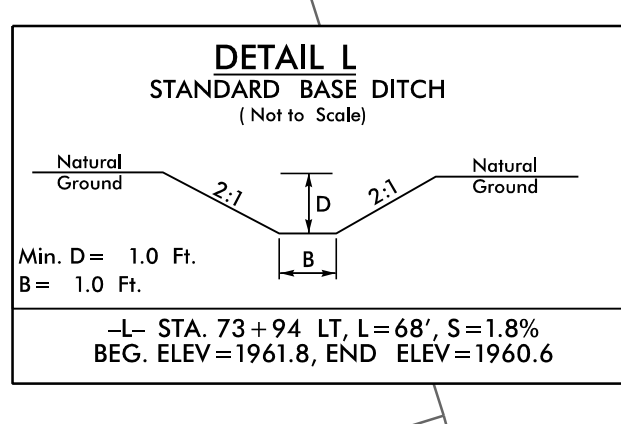
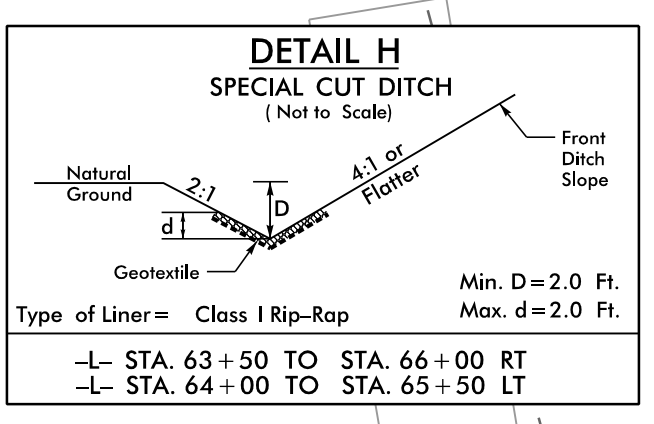
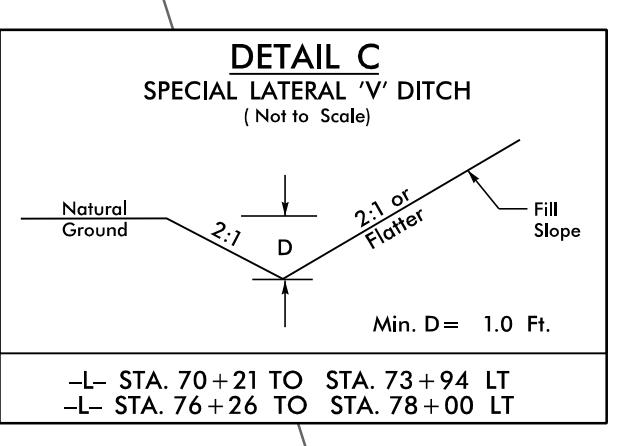
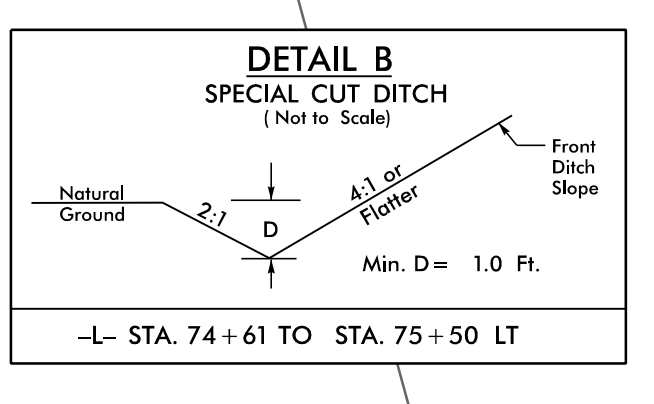
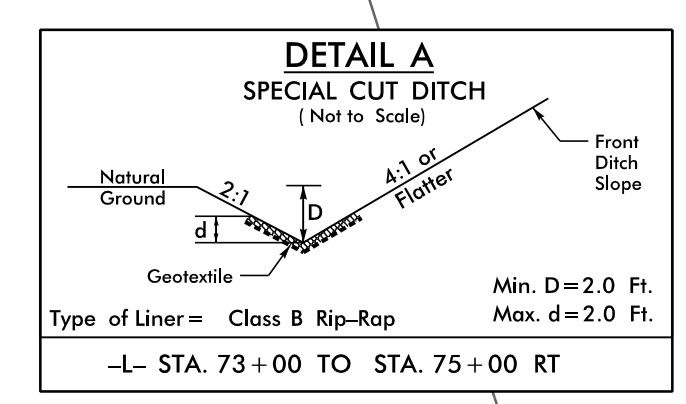
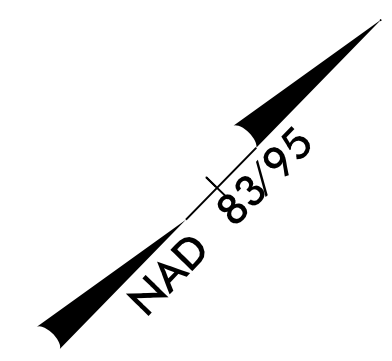
NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED.
ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

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PROJECT REFERENCE NO. <i>R-5742</i>		SHEET NO. <i>8</i>	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
			



MATCHLINE -L- STA. 64 + 50 SEE SHEET 7


MATCHLINE SHEET 9

-L-
 PI Sta 76+55.30
 $\Delta = 20^\circ 45' 42.0''$ (LT)
 $D = 4' 46' 28.7''$
 $L = 434.83'$
 $T = 219.83'$
 $R = 1,200.00'$
 $SE = 0.07$
 $V = 50$ mph

FOR -L- PROFILE SEE SHTS. 21 & 22

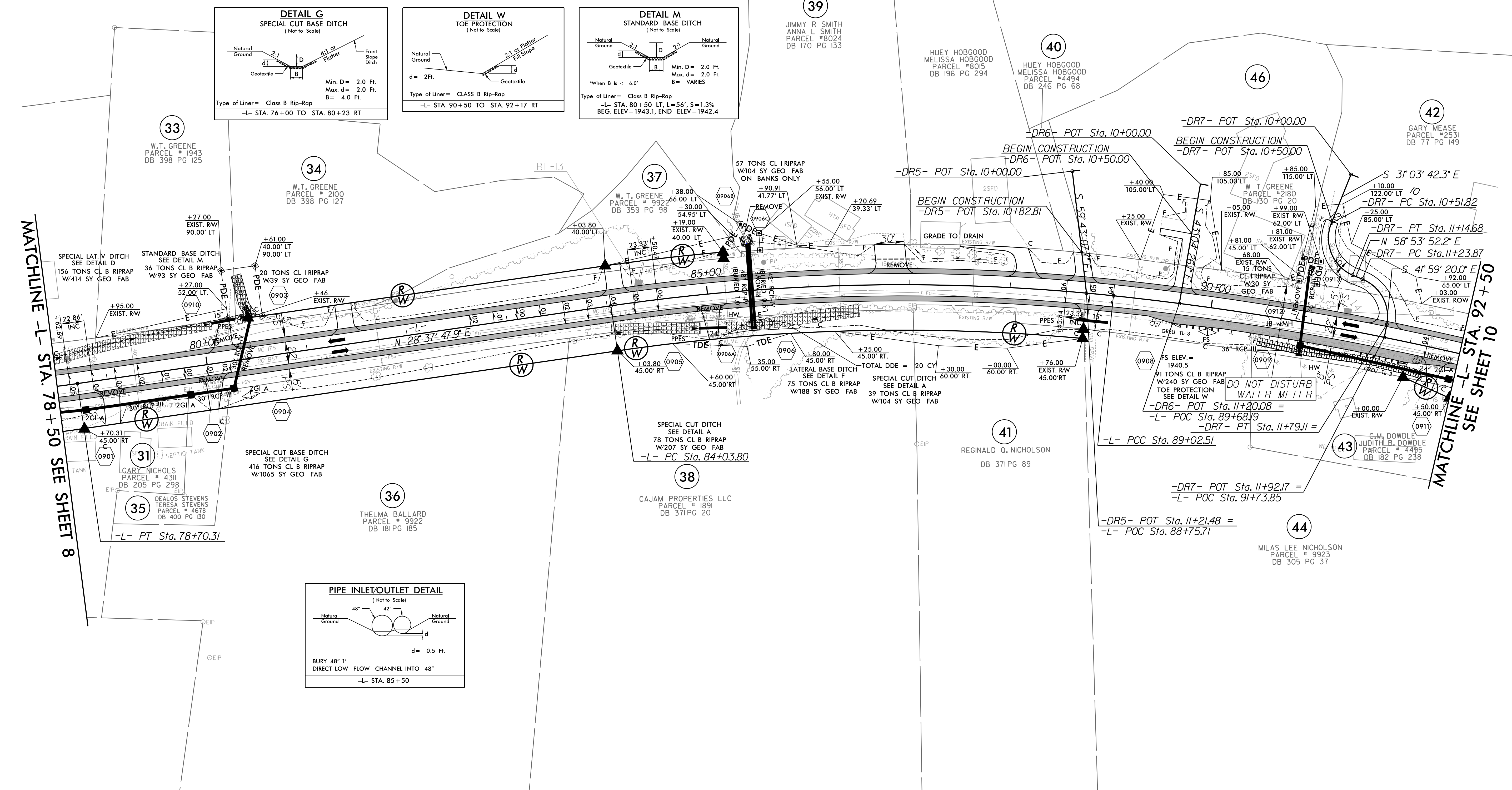
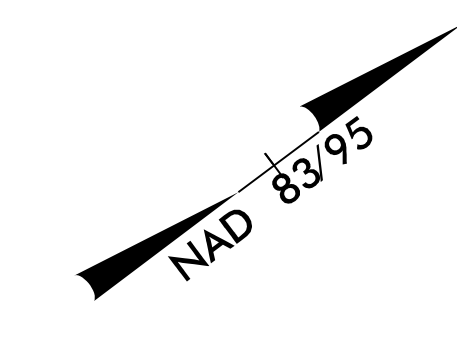
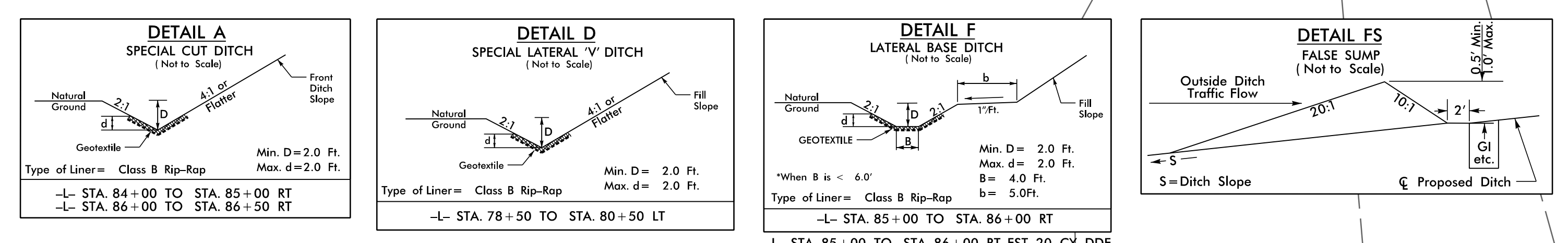
NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED.
ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

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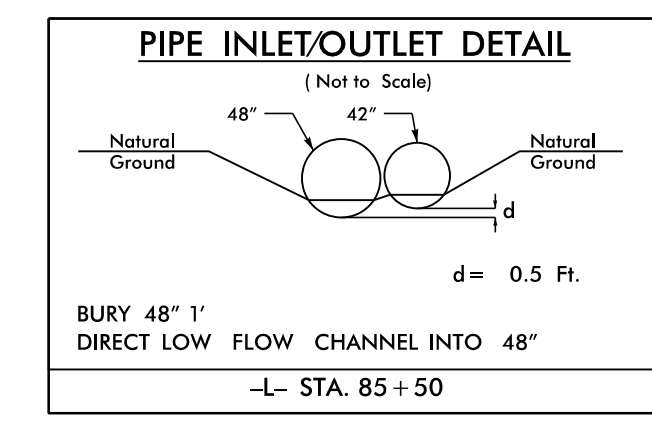
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PROJECT REFERENCE NO. R-5742		SHEET NO. 9	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



MATCHLINE -L- STA. 78 + 50 SEE SHEET 8

MATCHLINE -L- STA. 92 + 50 SEE SHEET 10



-L-			-DR7-		
PI Sta 76+55.30	PI Sta 86+54.46	PI Sta 92+17.44	PI Sta 10+90.54	PI Sta 11+56.91	
$\Delta = 20^{\circ} 45' 42.0''$ (LT)	$\Delta = 14^{\circ} 17' 13.4''$ (RT)	$\Delta = 12^{\circ} 36' 41.3''$ (RT)	$\Delta = 89^{\circ} 12' 35.1''$ (LT)	$\Delta = 79^{\circ} 06' 47.8''$ (RT)	
D = 4' 46" 28.7"	D = 2' 51" 53.2"	D = 2' 00" 37.4"	D = 143' 14" 22.0"	D = 143' 14" 22.0"	
L = 434.83'	L = 498.71'	L = 627.32'	L = 62.28'	L = 55.23'	
T = 219.83'	T = 250.66'	T = 314.93'	T = 39.45'	T = 33.04'	
SE = 1,200.00'	SE = 2,000.00'	R = 2,850.00'	R = 40.00'	R = 40.00'	
SE = 0.07	SE = 0.06	SE = 0.04			
V = 50 mph	V = 50 mph	V = 50 mph			

FOR -L- PROFILE SEE SHT. 22
FOR -DR5-, -DR6- & -DR7- PROFILES SEE SHT. 28

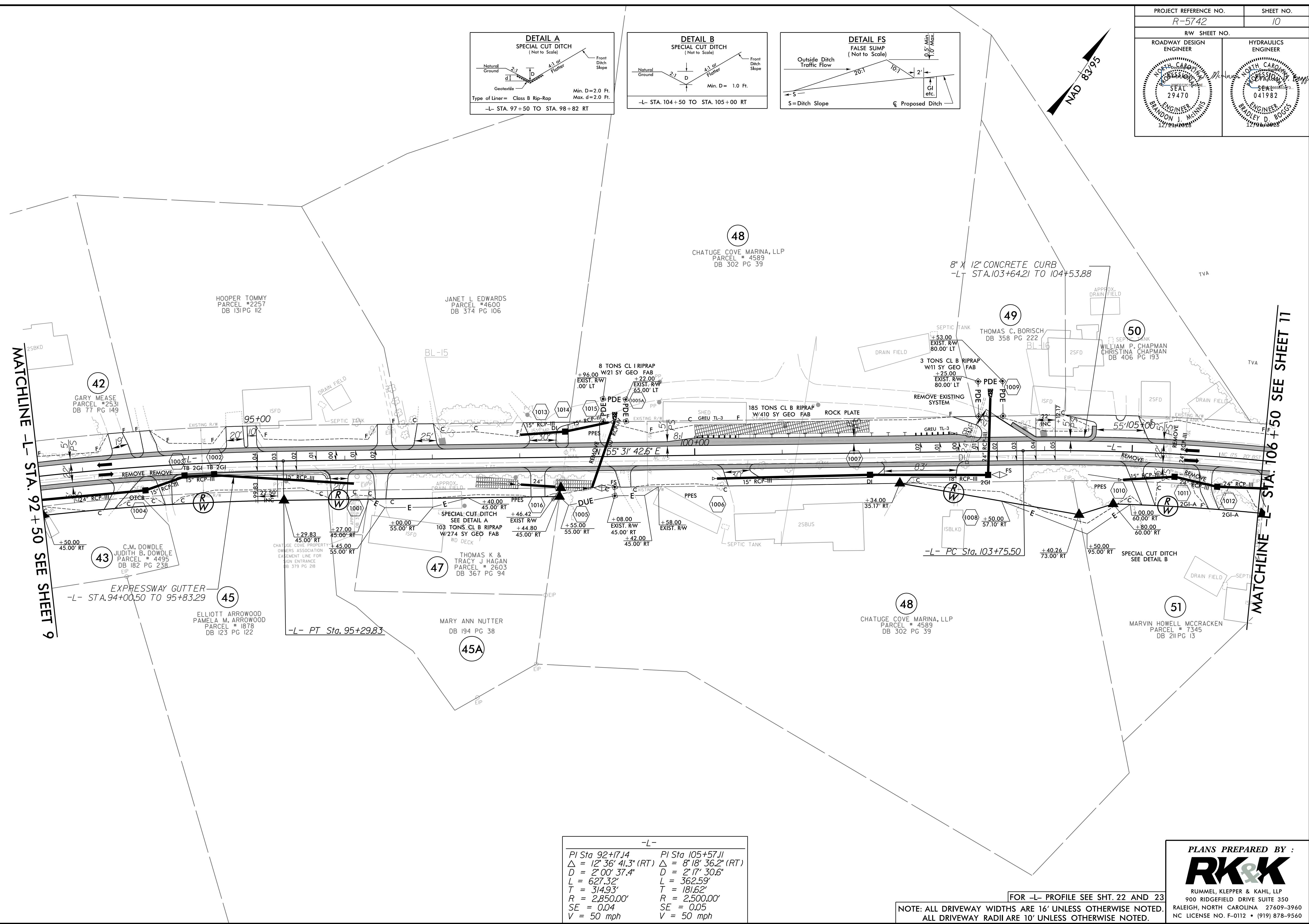
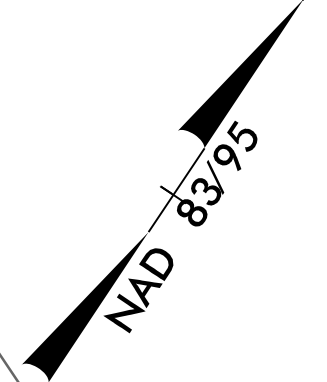
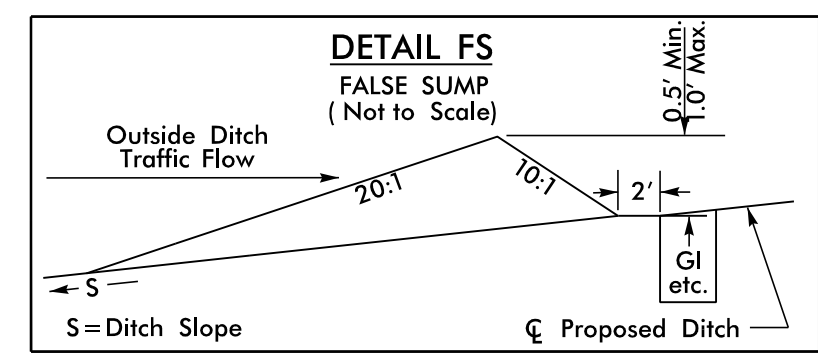
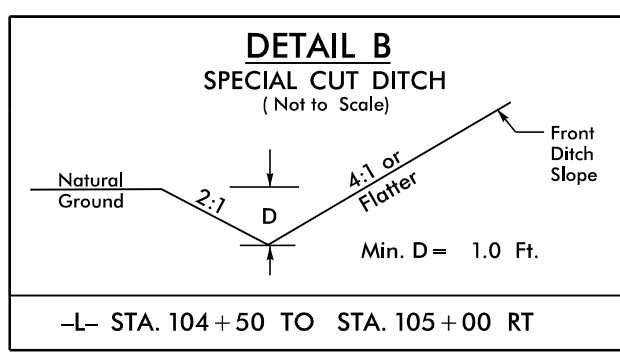
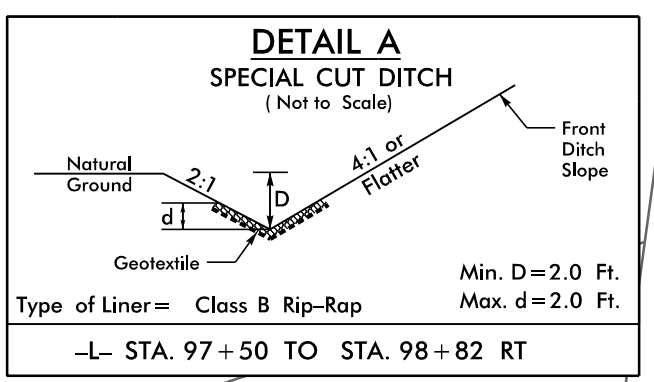
NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED.
ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

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PROJECT REFERENCE NO. R-5742		SHEET NO. 10	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



-L-

PI Sta 92+17.14	PI Sta 105+57.11
$\Delta = 12' 36" 41.3" (RT)$	$\Delta = 8' 18" 36.2" (RT)$
$D = 2' 00" 37.4"$	$D = 2' 17" 30.6"$
$L = 627.32'$	$L = 362.59'$
$T = 314.93'$	$T = 181.62'$
$R = 2,850.00'$	$R = 2,500.00'$
$SE = 0.04$	$SE = 0.05$
$V = 50 \text{ mph}$	$V = 50 \text{ mph}$

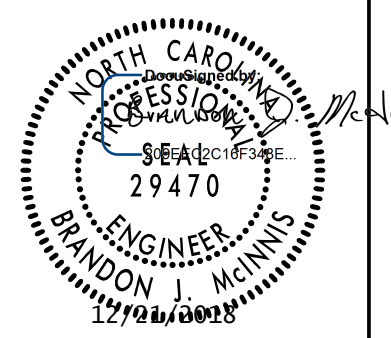
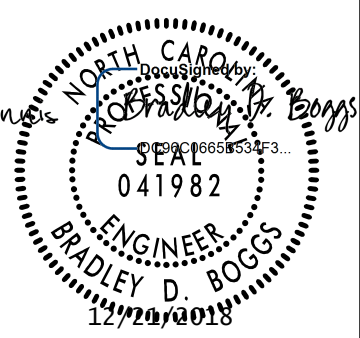
FOR -L- PROFILE SEE SHT. 22 AND 23
NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED.
ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

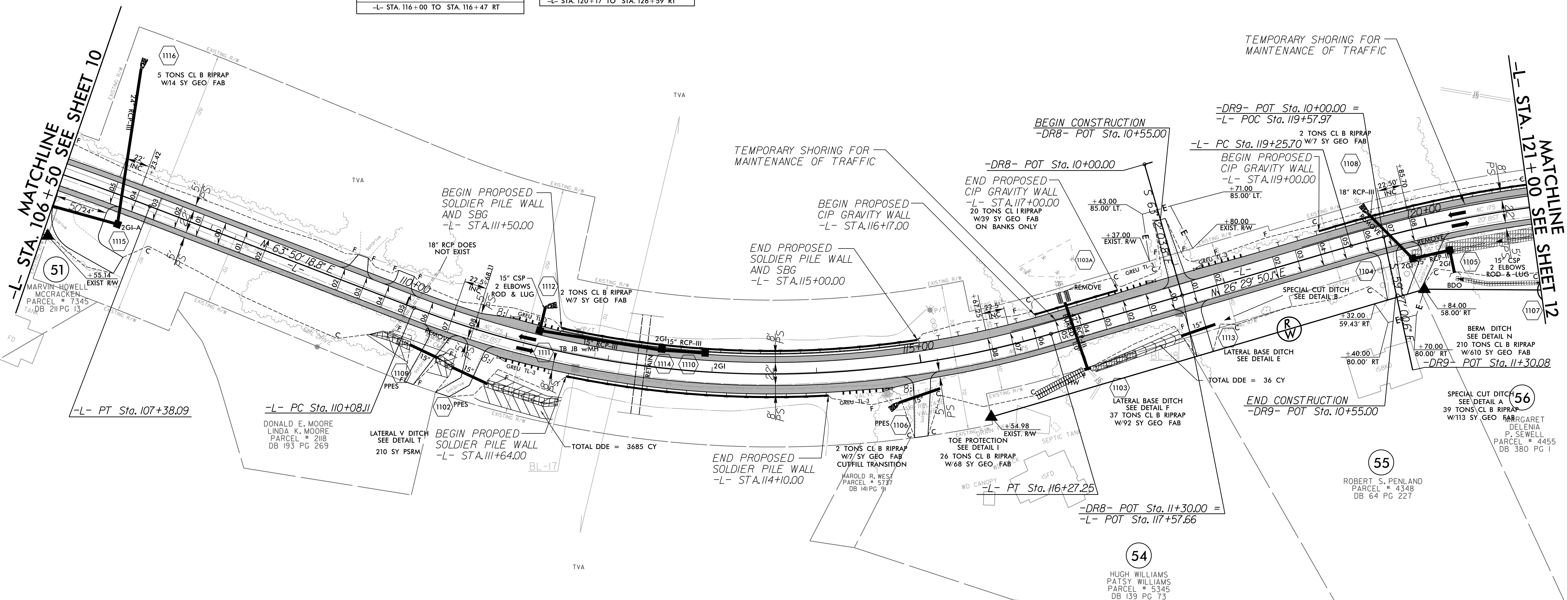
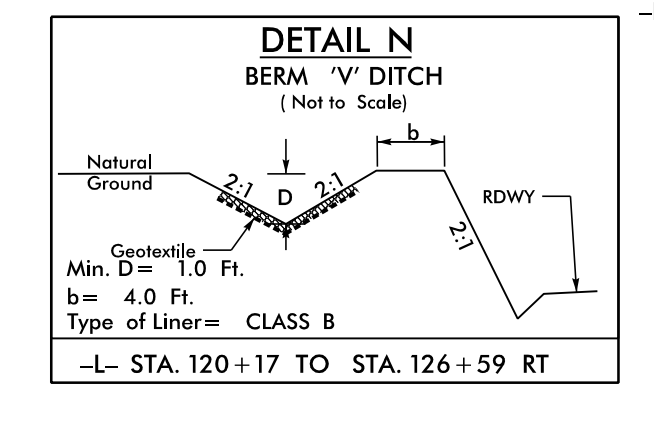
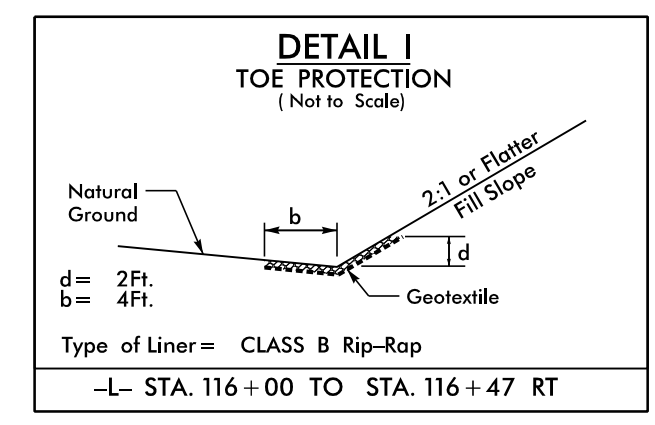
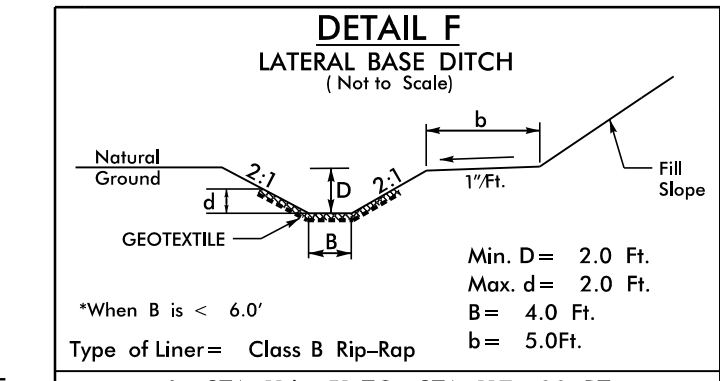
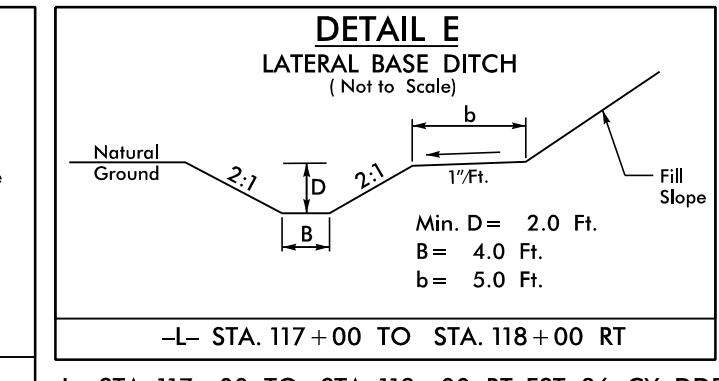
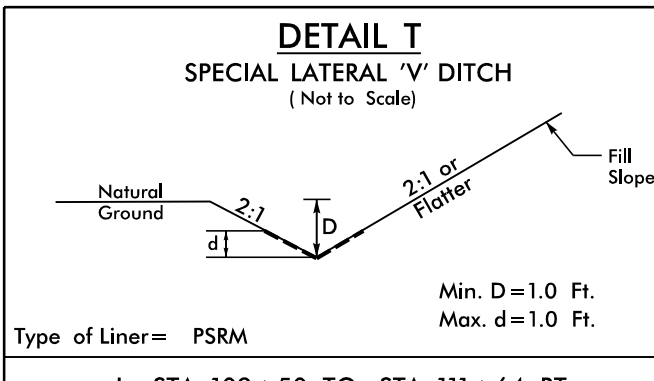
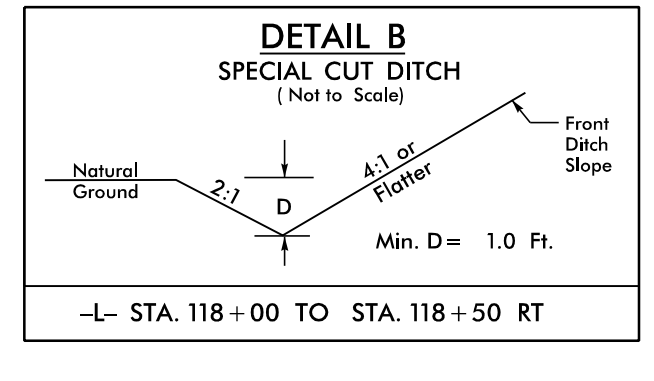
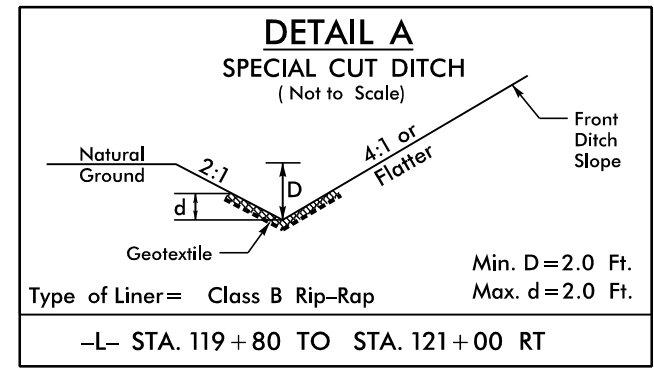
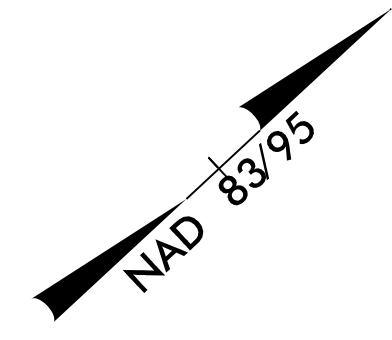
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PROJECT REFERENCE NO. <i>R-5742</i>		SHEET NO. <i>11</i>	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
			



-L-		
PI Sta 105+57.11	PI Sta 113+29.12	PI Sta 124+82.88
$\Delta = 8' 18" 36.2" (RT)$	$\Delta = 37' 20" 28.7" (LT)$	$\Delta = 50' 33" 06.6" (RT)$
D = 2' 17" 30.6"	D = 6' 01" 52.1"	D = 4' 51" 20.1"
L = 362.59'	L = 619.14'	L = 1,041.11'
T = 181.62'	T = 321.01'	T = 557.18'
R = 2,500.00'	R = 950.00'	R = 1,180.00'
SE = 0.05	SE = 0.08	SE = 0.08
V = 50 mph	V = 50 mph	V = 50 mph

FOR -L- PROFILE SEE SHT. 23
FOR -DR8- & -DR9- PROFILES SEE SHT. 28
FOR WALLS 1&2 PROFILES SEE SHT. W-2
FOR WALLS 6&7 PROFILES SEE SHT. W-3

NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED.
ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

FOR LIMITS OF TEMPORARY SHORING, SEE TRAFFIC CONTROL PLANS

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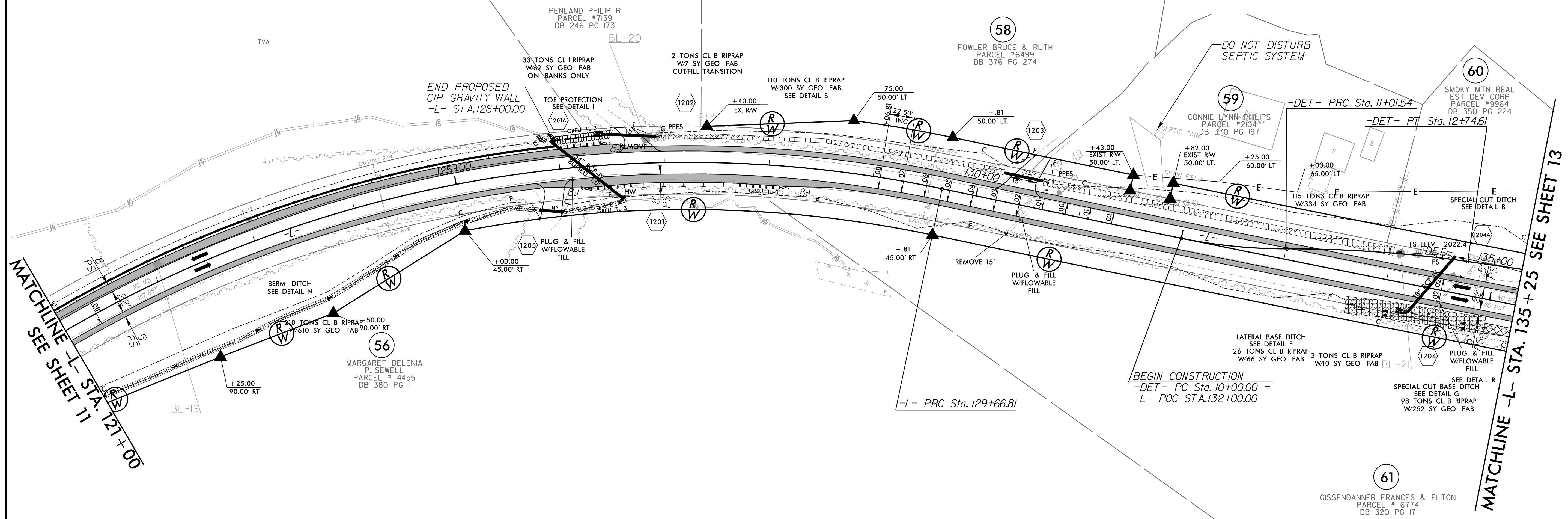
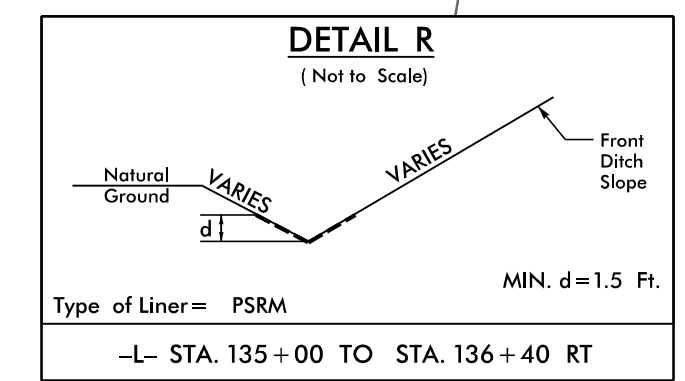
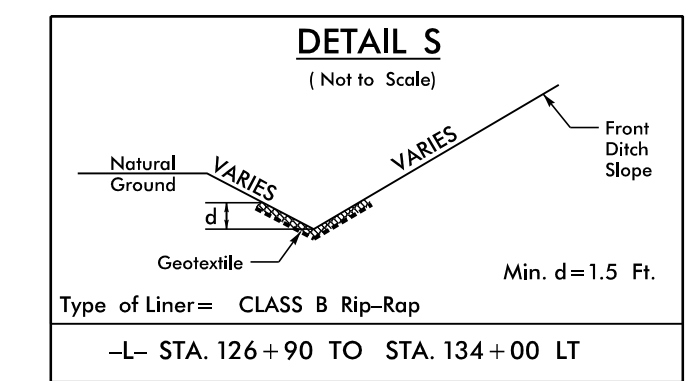
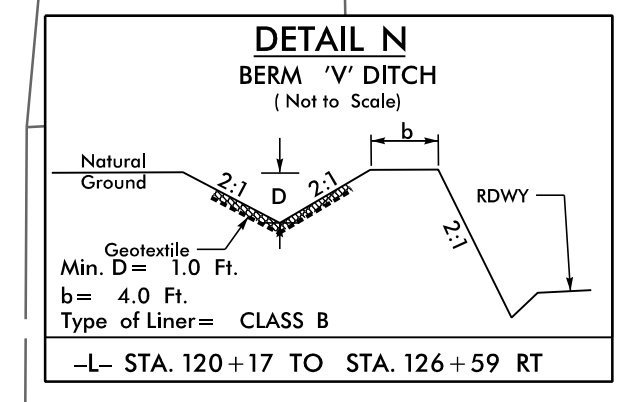
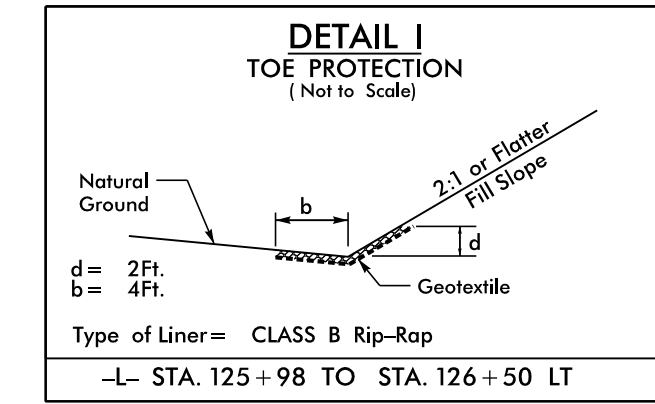
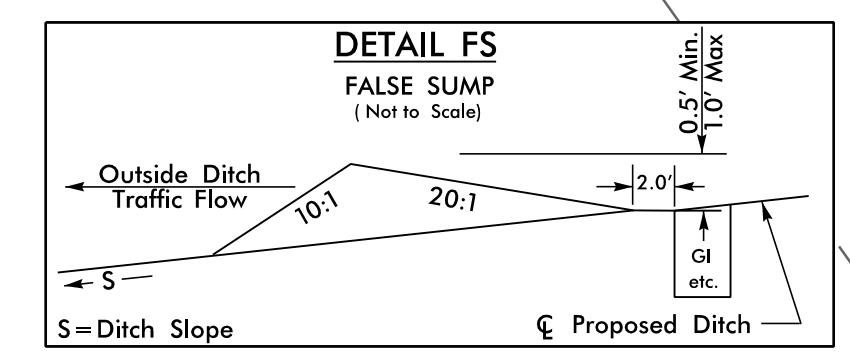
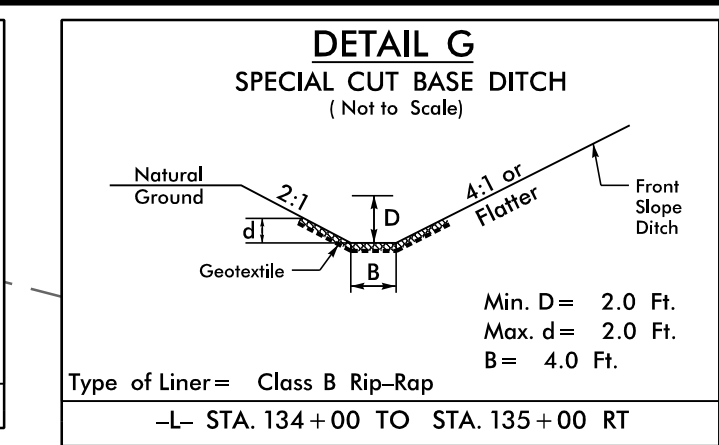
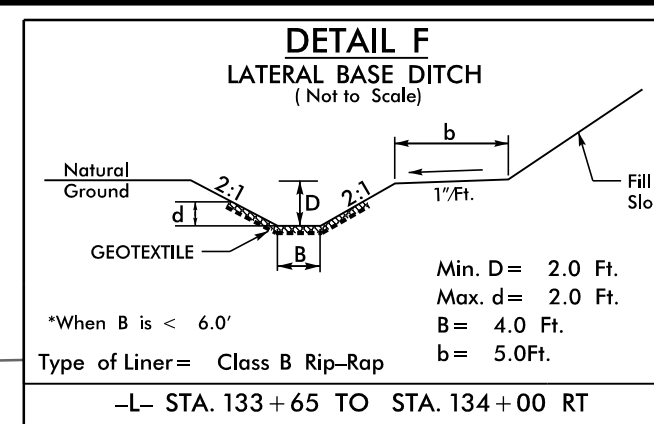
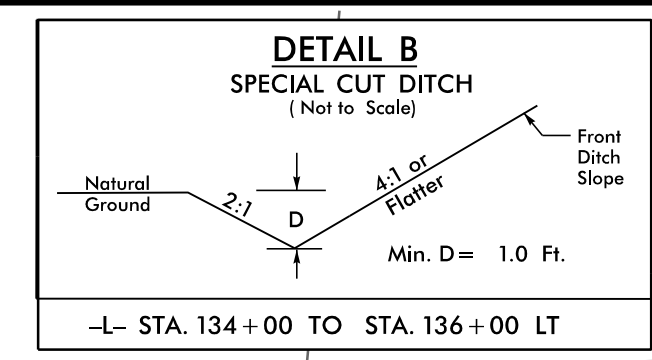
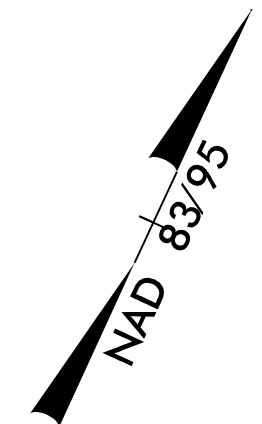


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8/17/95

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PROJECT REFERENCE NO. R-5742		SHEET NO. 12	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



MATCHLINE -L- STA. 121+00
SEE SHEET 11

MATCHLINE -L- STA. 135+25
SEE SHEET 13

-L-	
PI Sta 124+82.88	PI Sta 135+37.30
$\Delta = 50^{\circ} 33' 06.6''$ (RT)	$\Delta = 1^{\circ} 38' 03.2''$ (LT)
D = 4' 51' 20.1"	D = 0' 08' 35.7"
L = 1,041.11'	L = 1,140.90'
T = 557.18'	T = 570.49'
R = 1,180.00'	R = 40,000.00'
SE = 0.08	SE = NC
V = 50 mph	V = 50 mph

FOR -L- PROFILE SEE SHTS. 23 & 24
FOR -DET- PLAN/PROFILE SEE SHT. 2B-2
FOR WALL 2 PROFILE SEE SHT. W-2

NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED.
ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

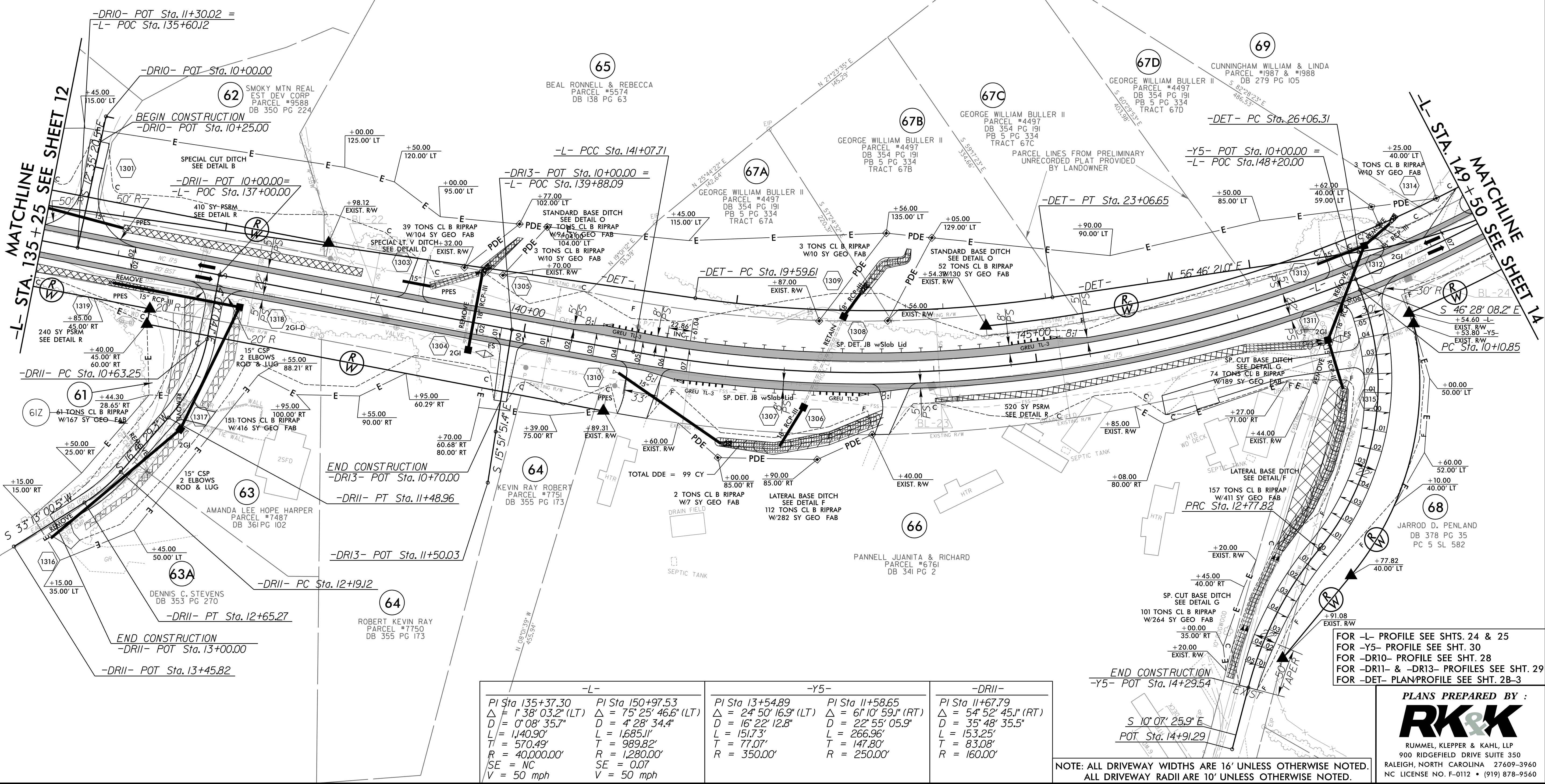
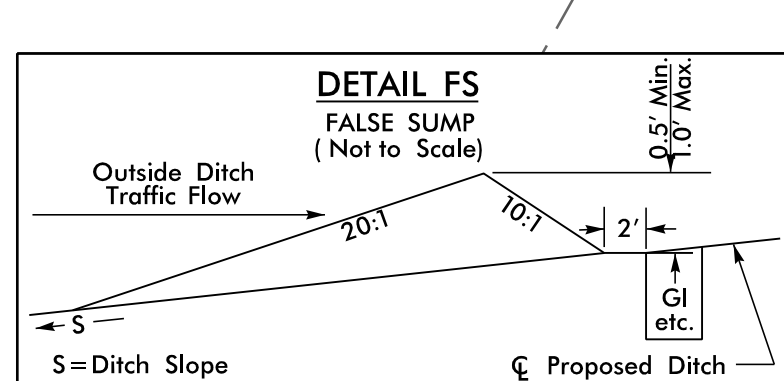
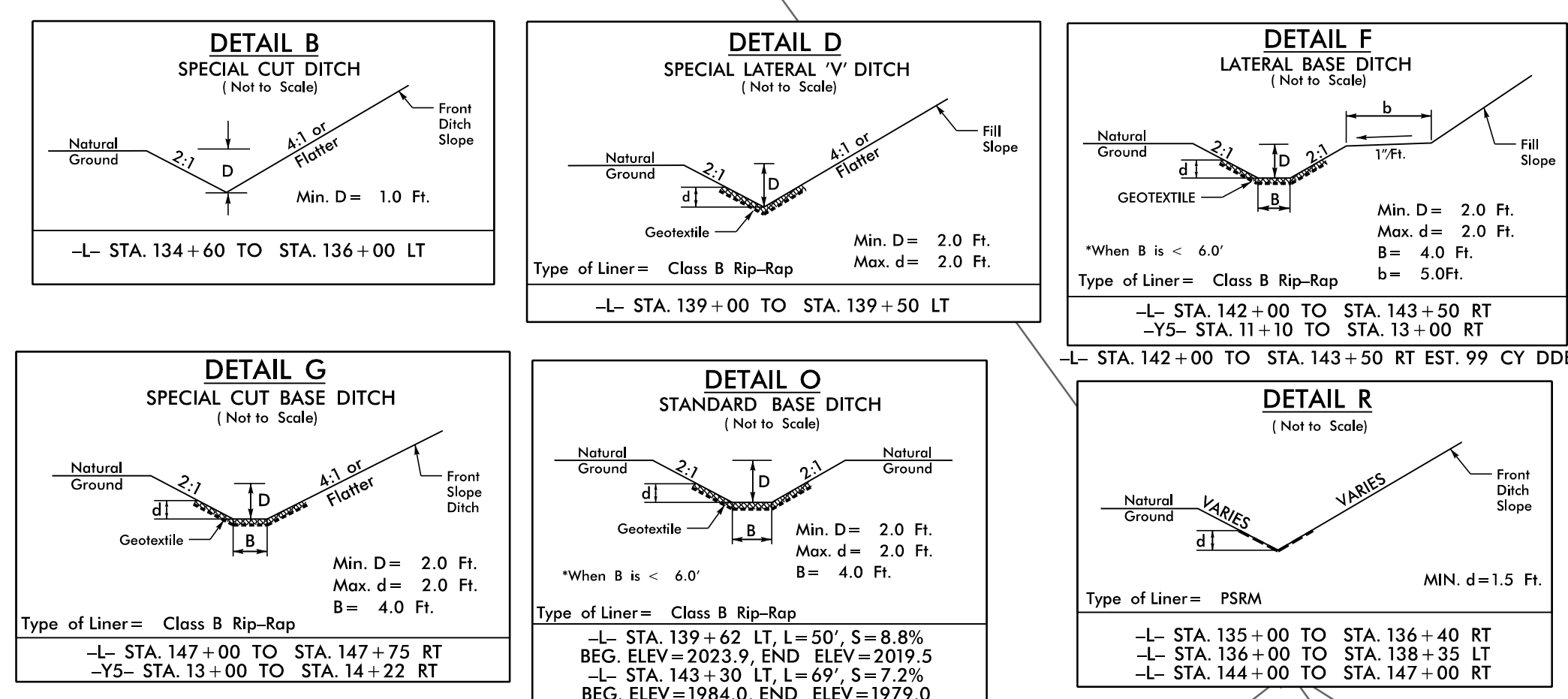
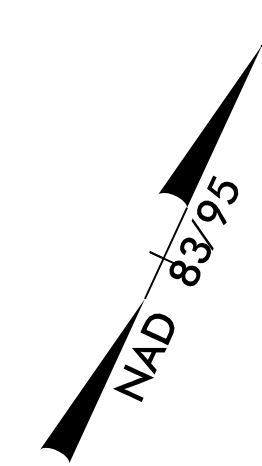
PLANS PREPARED BY :

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PROJECT REFERENCE NO. R-5742		SHEET NO. 13	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



MATCHLINE
-L- STA. 135+25 SEE SHEET 12

MATCHLINE
-L- STA. 149+50 SEE SHEET 14

-L-		-Y5-		-DR11-	
PI Sta 135+37.30	PI Sta 150+97.53	PI Sta 13+54.89	PI Sta 11+58.65	PI Sta 11+67.79	
$\Delta = 1' 38" 03.2" (LT)$	$\Delta = 75' 25" 46.6" (LT)$	$\Delta = 24' 50' 16.9" (LT)$	$\Delta = 6' 10' 59.1" (RT)$	$\Delta = 54' 52' 45.1" (RT)$	
$D = 0' 08" 35.7"$	$D = 4' 28" 34.4"$	$D = 16' 22" 12.8"$	$D = 22' 55' 05.9"$	$D = 35' 48' 35.5"$	
$L = 1140.90'$	$L = 1685.11'$	$L = 151.73'$	$L = 266.96'$	$L = 153.25'$	
$T = 570.49'$	$T = 989.82'$	$T = 77.07'$	$T = 147.80'$	$T = 83.08'$	
$R = 40,000.00'$	$R = 1,280.00'$	$R = 350.00'$	$R = 250.00'$	$R = 160.00'$	
$SE = NC$	$SE = 0.07$				
$V = 50 \text{ mph}$	$V = 50 \text{ mph}$				

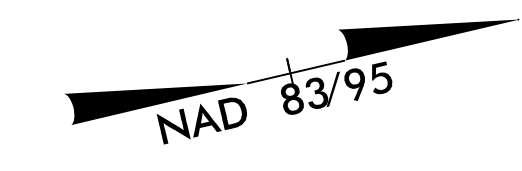
FOR -L- PROFILE SEE SHTS. 24 & 25
 FOR -Y5- PROFILE SEE SHT. 30
 FOR -DR10- PROFILE SEE SHT. 28
 FOR -DR11- & -DR13- PROFILES SEE SHT. 29
 FOR -DET- PLAN/PROFILE SEE SHT. 2B-3

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NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED.
 ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

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PROJECT REFERENCE NO. R-5742		SHEET NO. 14	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



DETAIL B
SPECIAL CUT DITCH
(Not to Scale)

Min. D = 1.0 Ft.

-L- STA. 157+50 TO STA. 159+00 RT
-L- STA. 160+12 TO STA. 162+10 RT

DETAIL F
LATERAL BASE DITCH
(Not to Scale)

Min. D = 2.0 Ft.
Max. d = 2.0 Ft.
B = 4.0 Ft.
b = 5.0 Ft.

*When B is < 6.0'

Type of Liner = Class B Rip-Rap

-L- STA. 152+00 TO STA. 157+50 RT
-L- STA. 155+50 TO STA. 156+72 LT
-L- STA. 152+00 TO STA. 157+50 RT EST. 781 CY DDE

DETAIL FS
FALSE SUMP
(Not to Scale)

S = Ditch Slope

Proposed Ditch

DETAIL R
(Not to Scale)

MIN. d = 1.5 Ft.

Type of Liner = PSRM

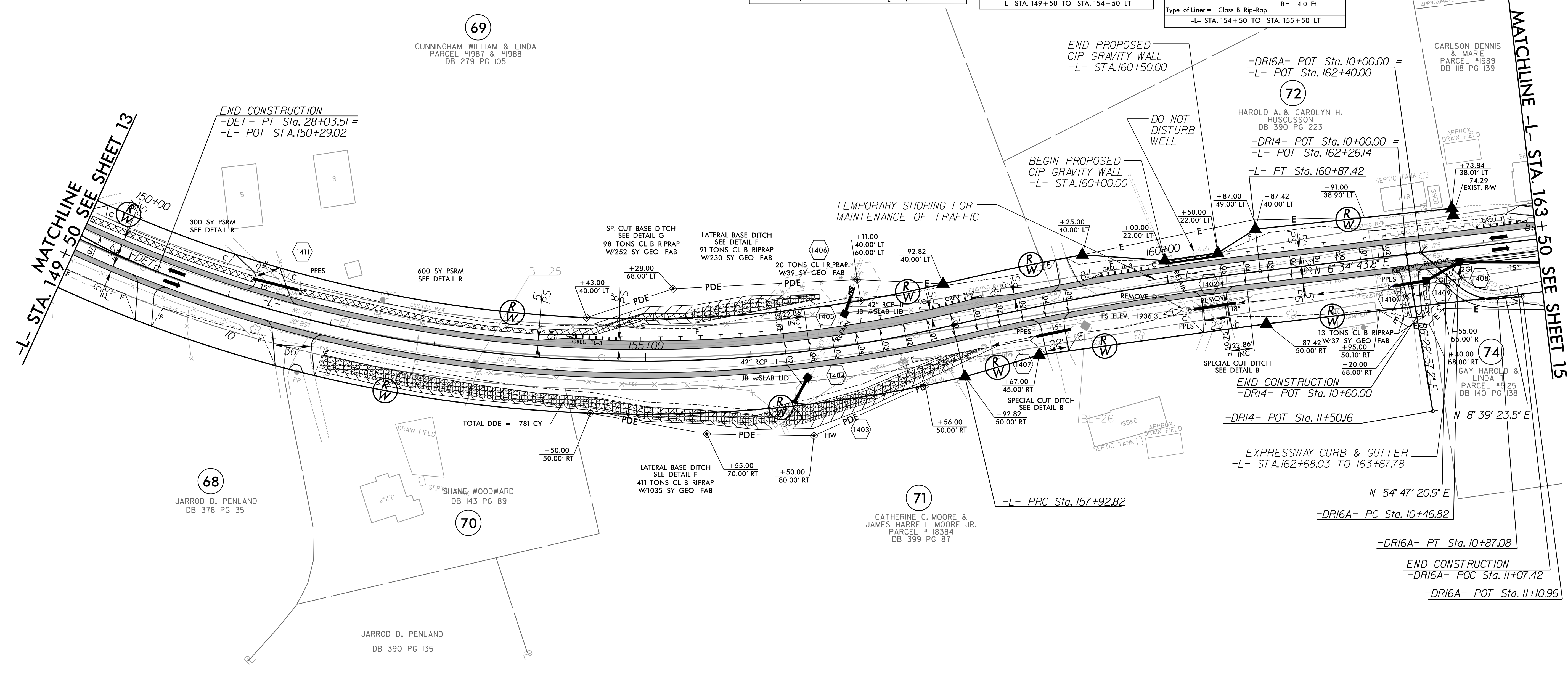
-L- STA. 149+50 TO STA. 154+50 LT

DETAIL G
SPECIAL CUT BASE DITCH
(Not to Scale)

Min. D = 2.0 Ft.
Max. d = 2.0 Ft.
B = 4.0 Ft.

Type of Liner = Class B Rip-Rap

-L- STA. 154+50 TO STA. 155+50 LT



-DR16A-		-L-	
PI Sta 10+68.11	PI Sta 150+97.53	PI Sta 159+40.29	
Δ = 46° 07' 57.4" (LT)	Δ = 75° 25' 46.6" (LT)	Δ = 6° 35' 36.5" (RT)	
D = 114' 35' 29.6"	D = 4' 28' 34.4"	D = 2' 14' 17.2"	
L = 40.26'	L = 1,685.11'	L = 294.60'	
T = 21.29'	T = 989.82'	T = 147.46'	
R = 50.00'	R = 1,280.00'	R = 2,560.00'	
	SE = 0.07	SE = 0.05	
	V = 50 mph	V = 50 mph	

FOR LIMITS OF TEMPORARY SHORING, SEE TRAFFIC CONTROL PLANS.
 FOR -L- PROFILE SEE SHT. 25
 FOR -DR14- PROFILE SEE SHT. 29
 FOR -DET- PLAN/PROFILE SEE SHT. 2B-3
 FOR WALL 3 PROFILE SEE SHT. W-2

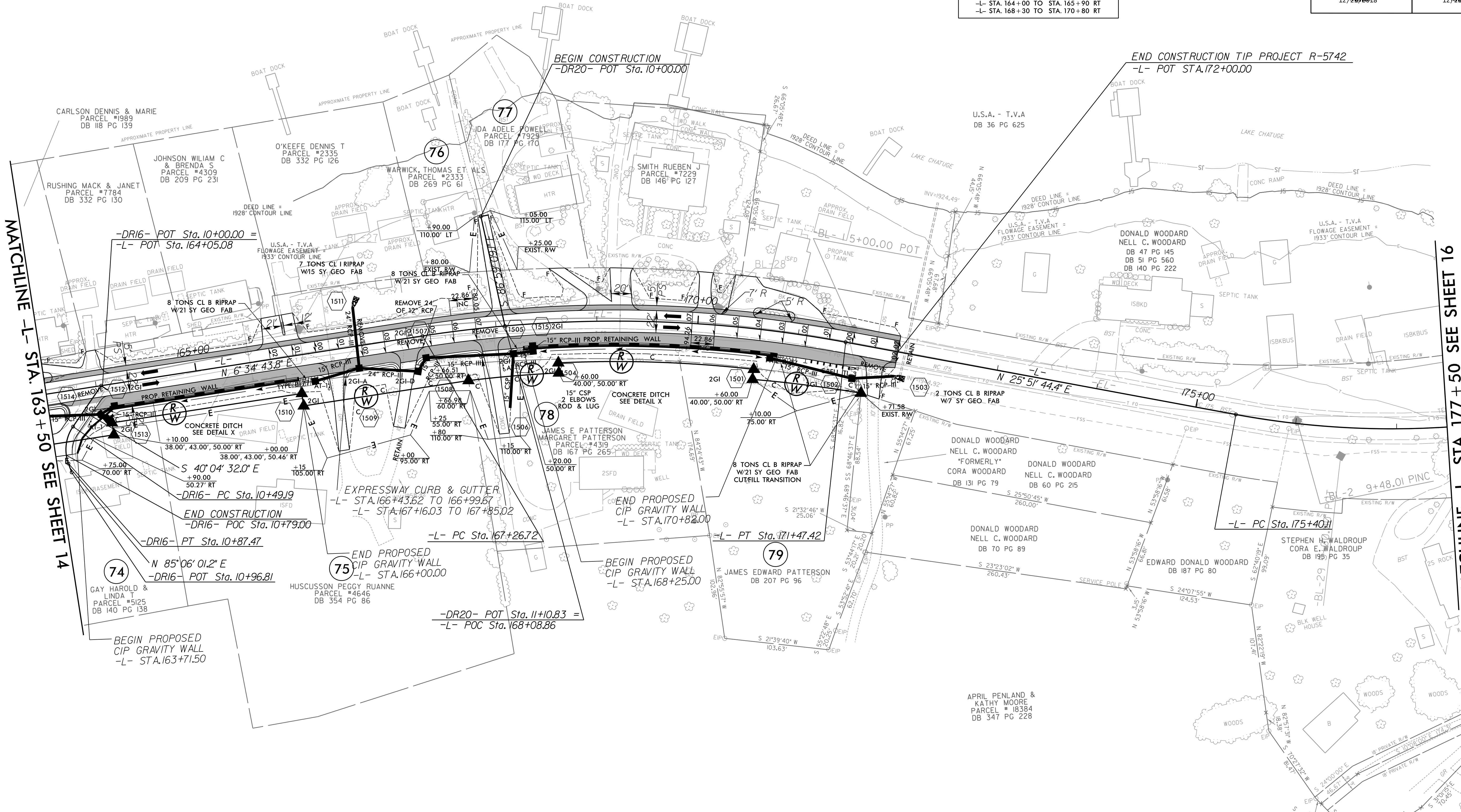
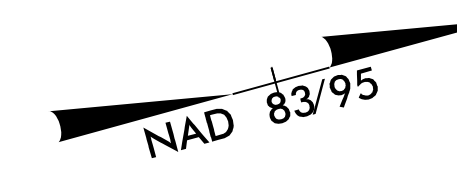
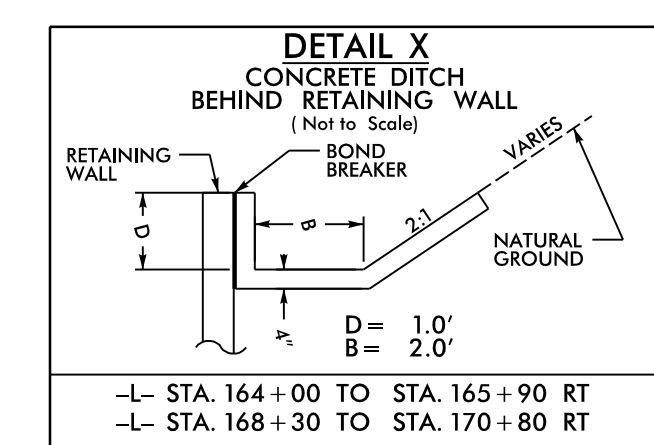
NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED.
 ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

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PROJECT REFERENCE NO. R-5742		SHEET NO. 15	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



-L-		-DR16-	
PI Sta 169+39.08	PI Sta 177+07.00	PI Sta 10+69.94	
$\Delta = 19' 17' 00.6' (RT)$	$\Delta = 22' 12' 59.2' (LT)$	$\Delta = 54' 49' 26.8' (LT)$	
$D = 4' 35' 01.2'$	$D = 6' 44' 26.4'$	$D = 143' 14' 22.0'$	
$L = 420.70'$	$L = 329.59'$	$L = 38.27'$	
$T = 212.36'$	$T = 166.89'$	$T = 20.74'$	
$R = 1,250.00'$	$R = 850.00'$	$R = 40.00'$	
$SE = 0.07$			
$V = 50 \text{ mph}$			

FOR -L- PROFILE SEE SHTS. 25 & 26
 FOR -DR16- & -DR20- PROFILES SEE SHT. 29
 FOR WALLS 4&5 PROFILES SEE SHT. W-3

NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED.
 ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

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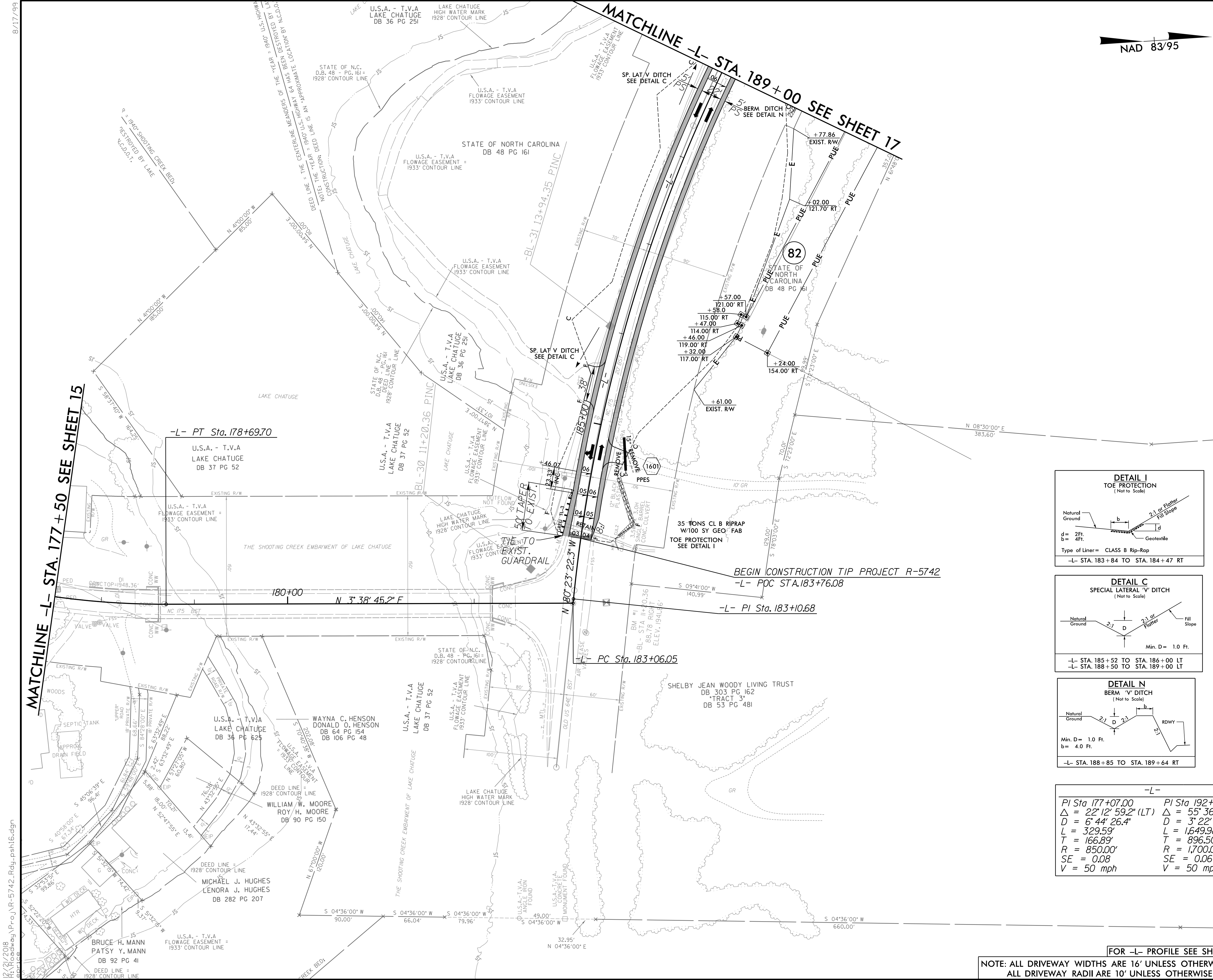
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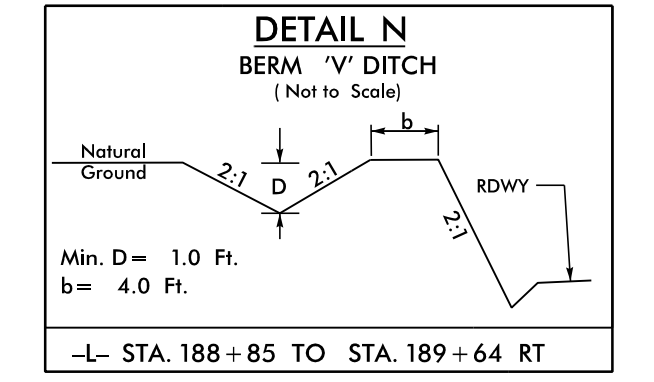
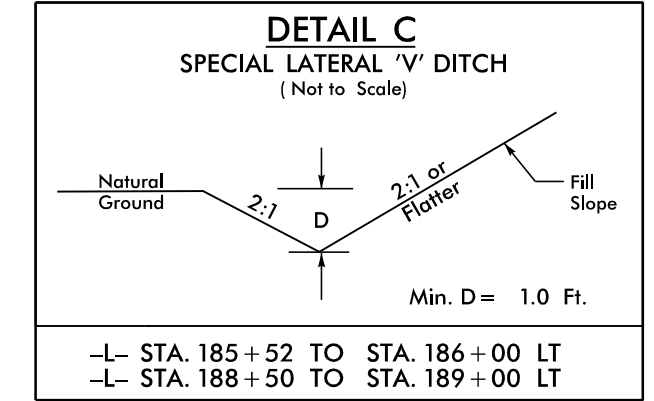
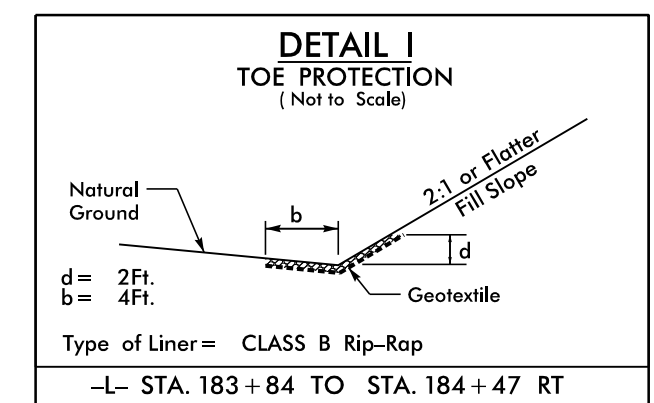
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PROJECT REFERENCE NO. <i>R-5742</i>		SHEET NO. 16	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



-L-

<i>PI Sta. 177+07.00</i>	<i>PI Sta. 192+07.18</i>
$\Delta = 22' 12" 59.2" (LT)$	$\Delta = 55' 36" 35.8" (RT)$
$D = 6' 44" 26.4"$	$D = 3' 22" 13.2"$
$L = 329.59'$	$L = 1,649.98'$
$T = 166.89'$	$T = 896.50'$
$R = 850.00'$	$R = 1,700.00'$
$SE = 0.08$	$SE = 0.06$
$V = 50 \text{ mph}$	$V = 50 \text{ mph}$

NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED.
ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

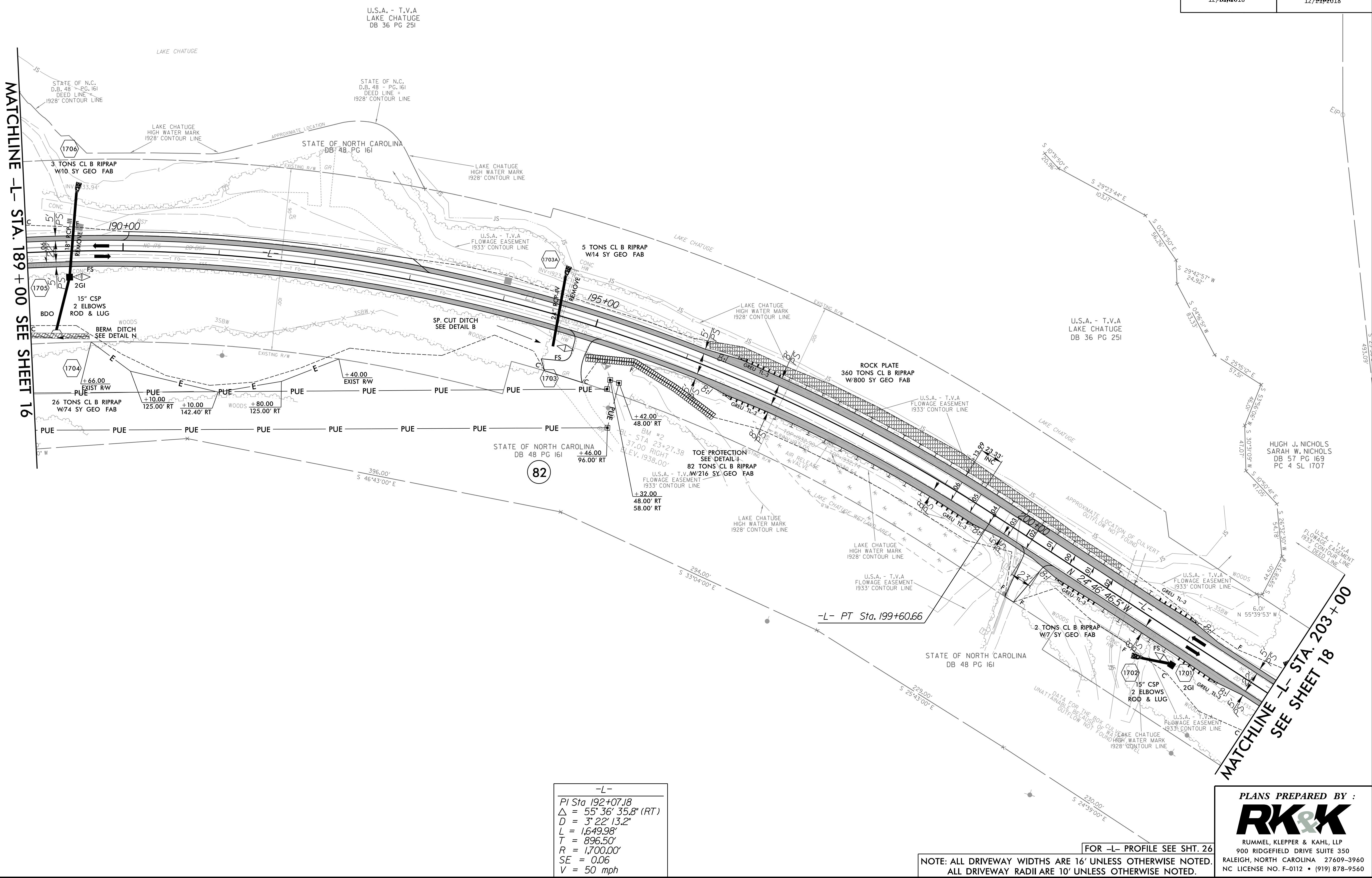
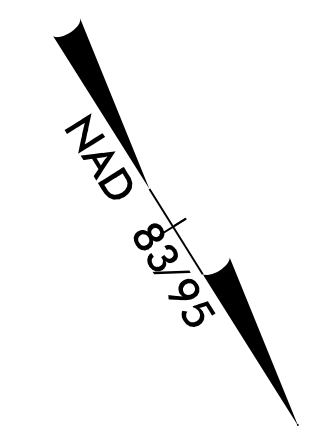
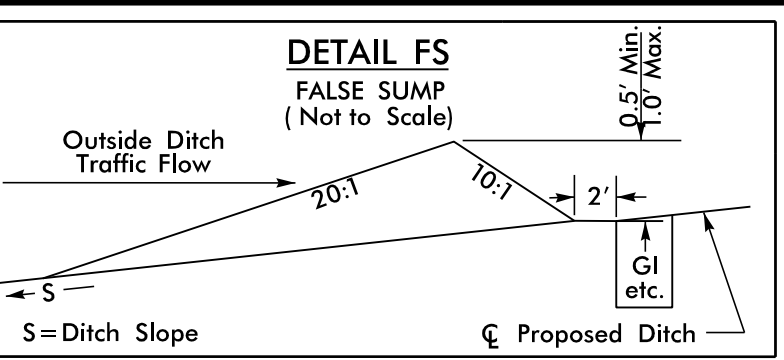
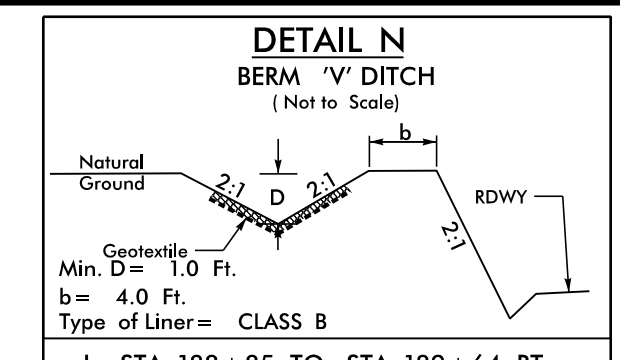
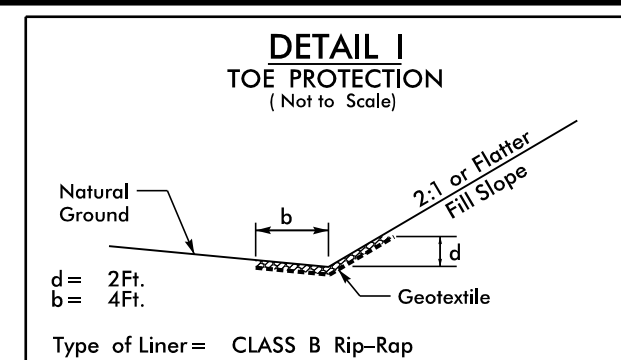
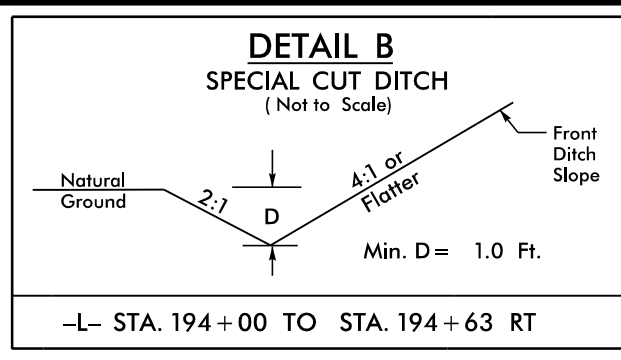
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PROJECT REFERENCE NO. <i>R-5742</i>		SHEET NO. <i>17</i>	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER <i>BRANDON J. MCINNIS</i>		HYDRAULICS ENGINEER <i>BRADLEY D. BOGGS</i>	
SEAL 29470		SEAL 041982	

TELEPHONE
FRONTIER COMMUNICATIONS
765 CHURCH STREET
MURPHY, N.C. 28906
828-637-5800

SEWER
CLAY COUNTY WATER & SEWER
33 MAIN ST.
HAYESVILLE, N.C.
828-389-1361



MATCHLINE -L- STA. 189 + 00 SEE SHEET 16

MATCHLINE -L- STA. 203 + 00
SEE SHEET 18

-L-

PI Sta 192+07.18
$\Delta = 55^{\circ} 36' 35.8''$ (RT)
D = 3' 22' 13.2"
L = 1,649.98'
T = 896.50'
R = 1,700.00'
SE = 0.06
V = 50 mph

NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED.
ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

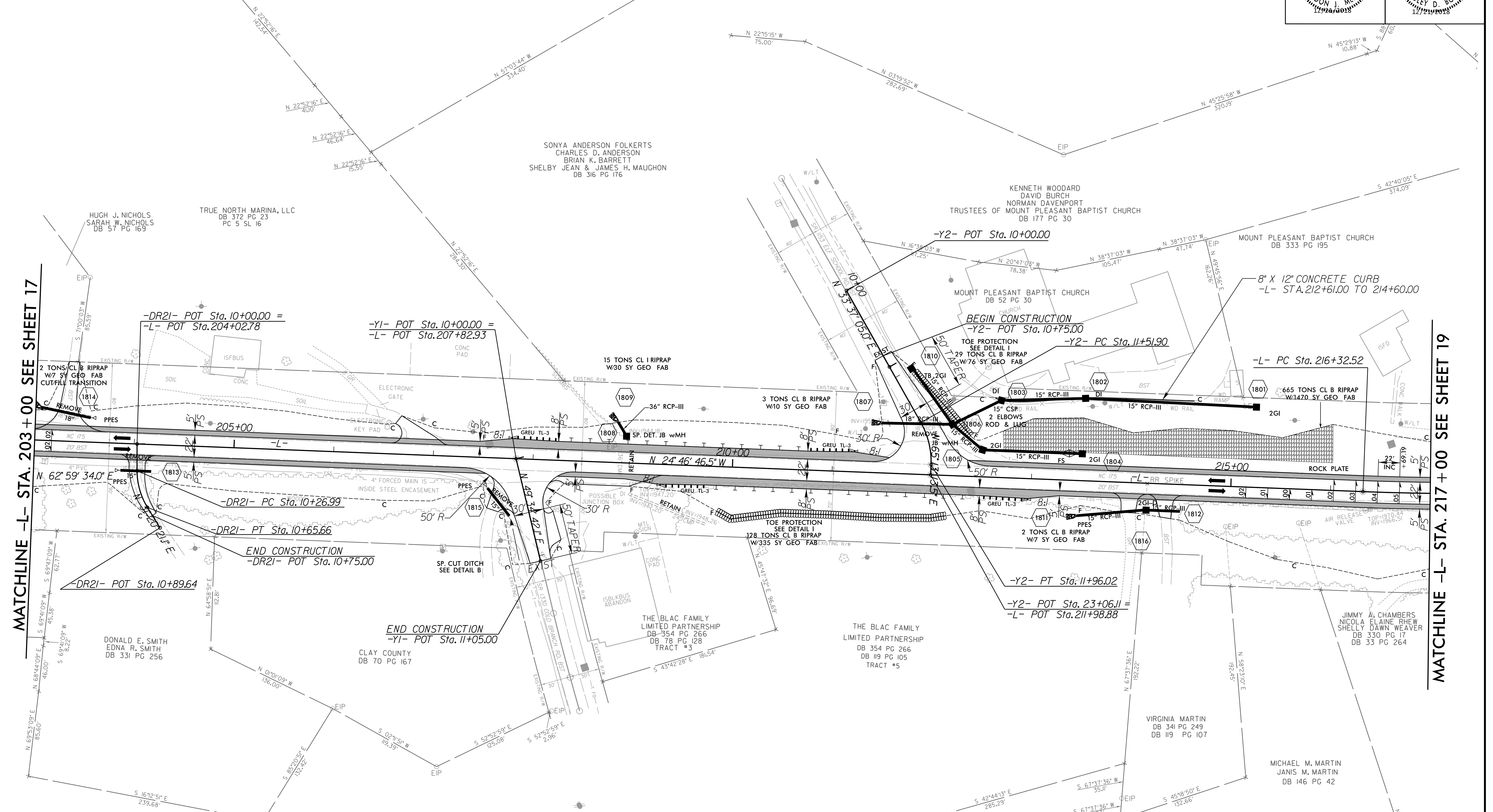
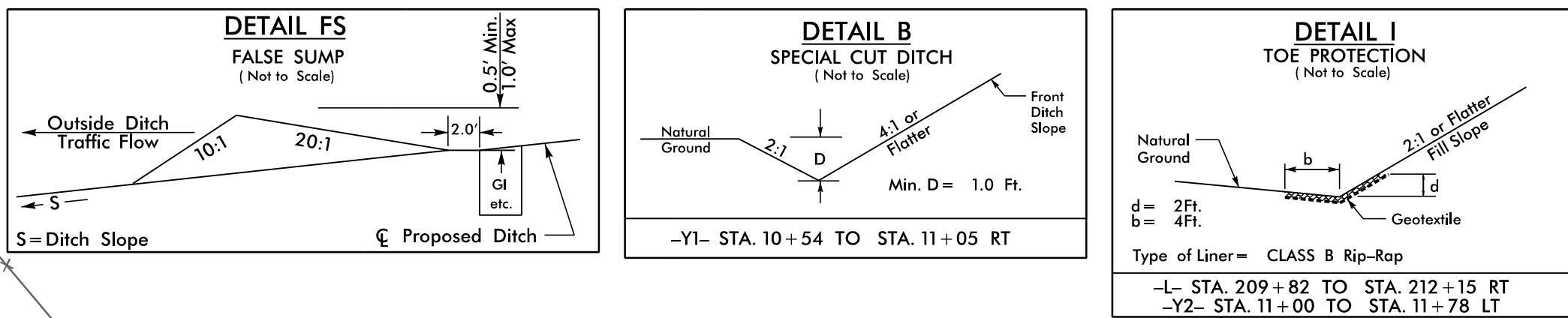
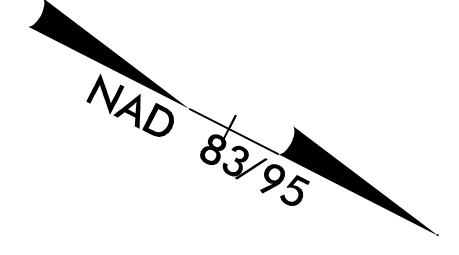
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PROJECT REFERENCE NO. R-5742	SHEET NO. 18
RW SHEET NO.	
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER



MATCHLINE -L- STA. 203+00 SEE SHEET 17

MATCHLINE -L- STA. 217+00 SEE SHEET 19

-L-	-Y2-	-DR21-
PI Sta 220+75.12	PI Sta 11+74.54	PI Sta 10+46.83
$\Delta = 19^{\circ} 53' 04.6" (LT)$	$\Delta = 31^{\circ} 36' 07.5" (RT)$	$\Delta = 31^{\circ} 39' 13.0" (LT)$
$D = 2' 16" 08.9"$	$D = 7' 37' 11.0"$	$D = 8' 5' 04.0"$
$L = 876.31'$	$L = 441.2'$	$L = 38.67'$
$T = 442.60'$	$T = 22.64'$	$T = 19.84'$
$R = 2,525.00'$	$R = 80.00'$	$R = 70.00'$
$SE = 0.05$		
$V = 50 \text{ mph}$		

APPROXIMATE LOCATION OF EXISTING STRUCTURE BASED ON AERIAL IMAGERY.
FOR -L- PROFILE SEE SHTS. 26 & 27
FOR -Y1- & -Y2- PROFILES SEE SHT. 29
FOR -DR21- PROFILE SEE SHT. 29

NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED.
ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

PLANS PREPARED BY :

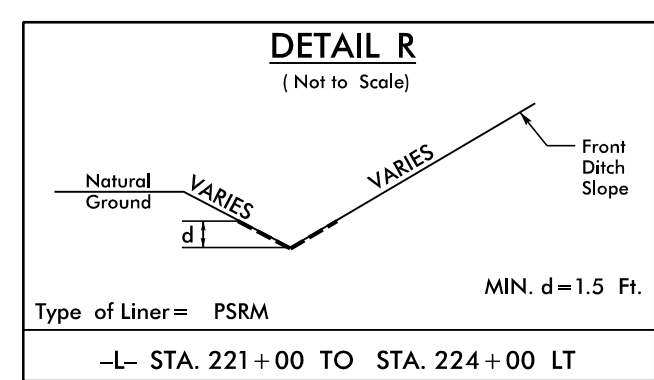
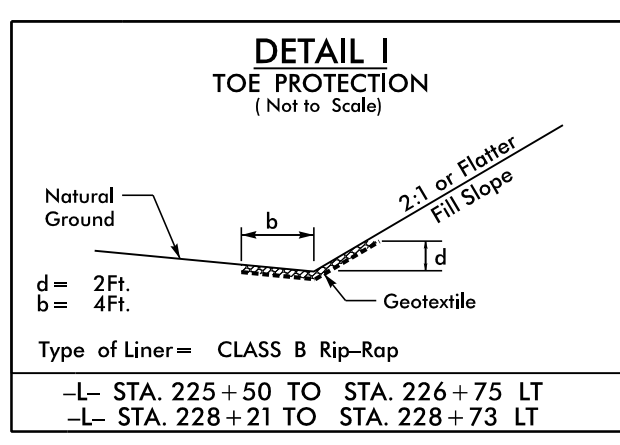
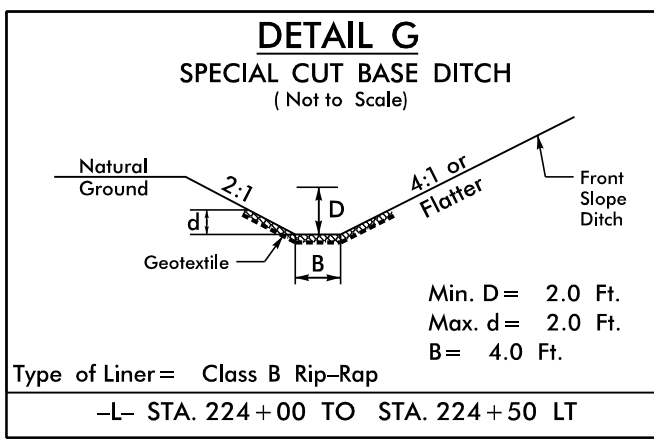
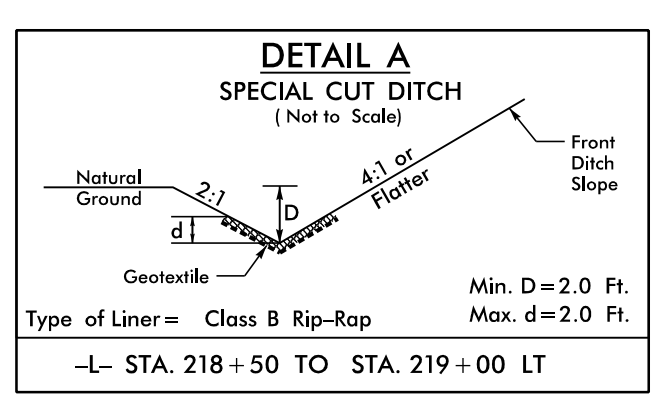
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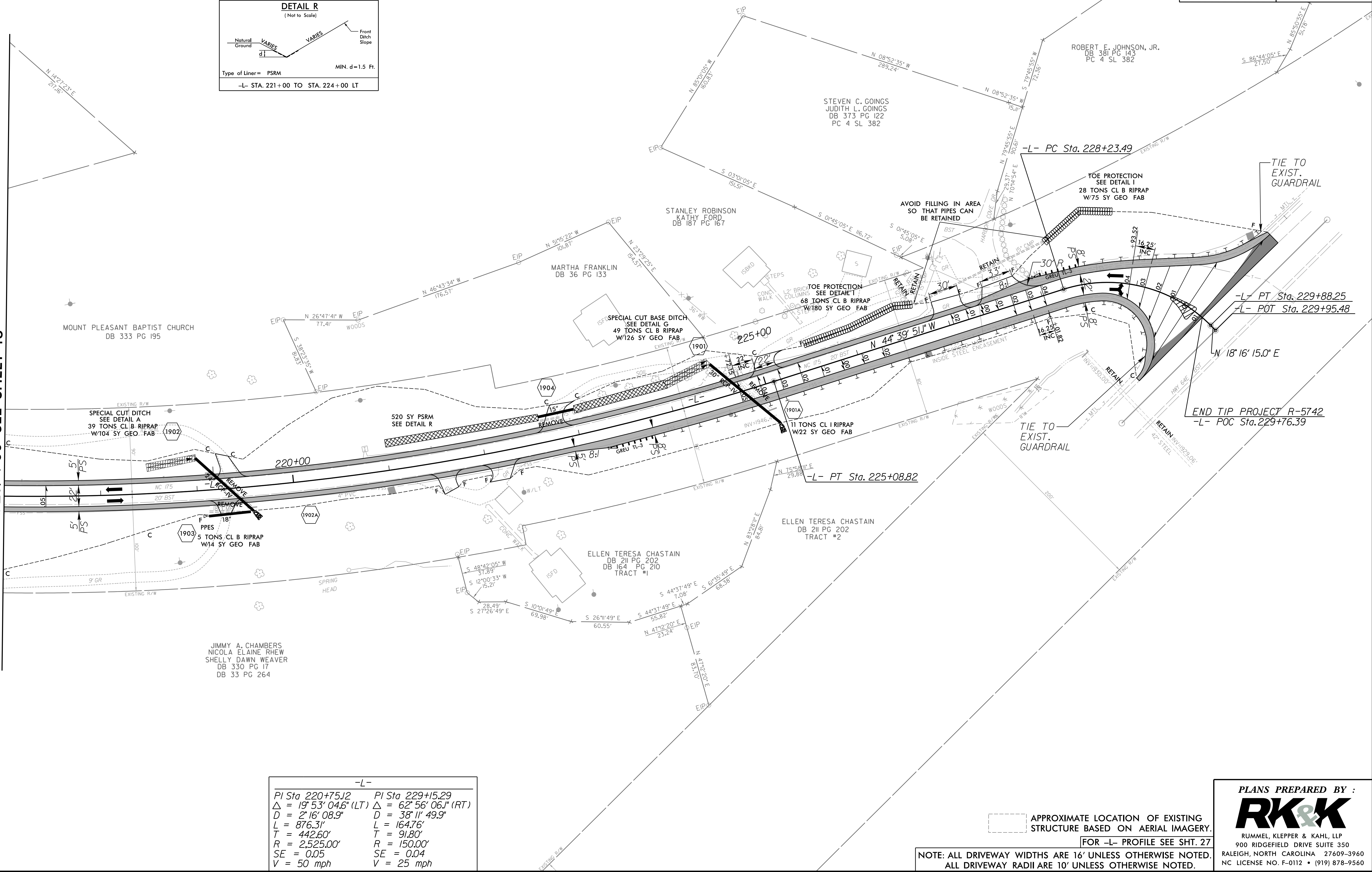
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PROJECT REFERENCE NO. R-5742		SHEET NO. 19	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER BRANDON J. McINNIS SEAL NO. 29470 12/19/2018		HYDRAULICS ENGINEER BRADLEY D. BOGGS SEAL NO. 041982 12/19/2018	



MATCHLINE -L- STA. 217+00 SEE SHEET 18



-L-

PI Sta 220+75.12	PI Sta 229+15.29
$\Delta = 19^{\circ} 53' 04.6''$ (LT)	$\Delta = 62^{\circ} 56' 06.1''$ (RT)
D = 2' 16" 08.9"	D = 38' 11" 49.9"
L = 876.31'	L = 164.76'
T = 442.60'	T = 91.80'
R = 2,525.00'	R = 150.00'
SE = 0.05	SE = 0.04
V = 50 mph	V = 25 mph

APPROXIMATE LOCATION OF EXISTING STRUCTURE BASED ON AERIAL IMAGERY.

NOTE: ALL DRIVEWAY WIDTHS ARE 16' UNLESS OTHERWISE NOTED. ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

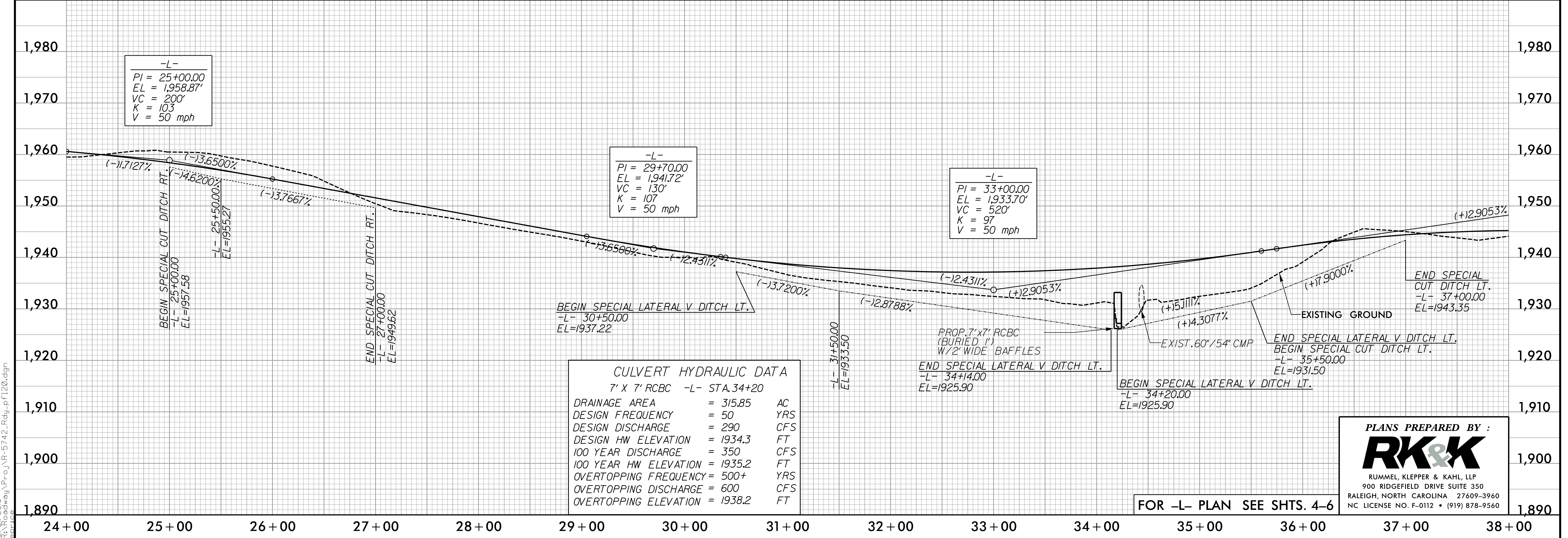
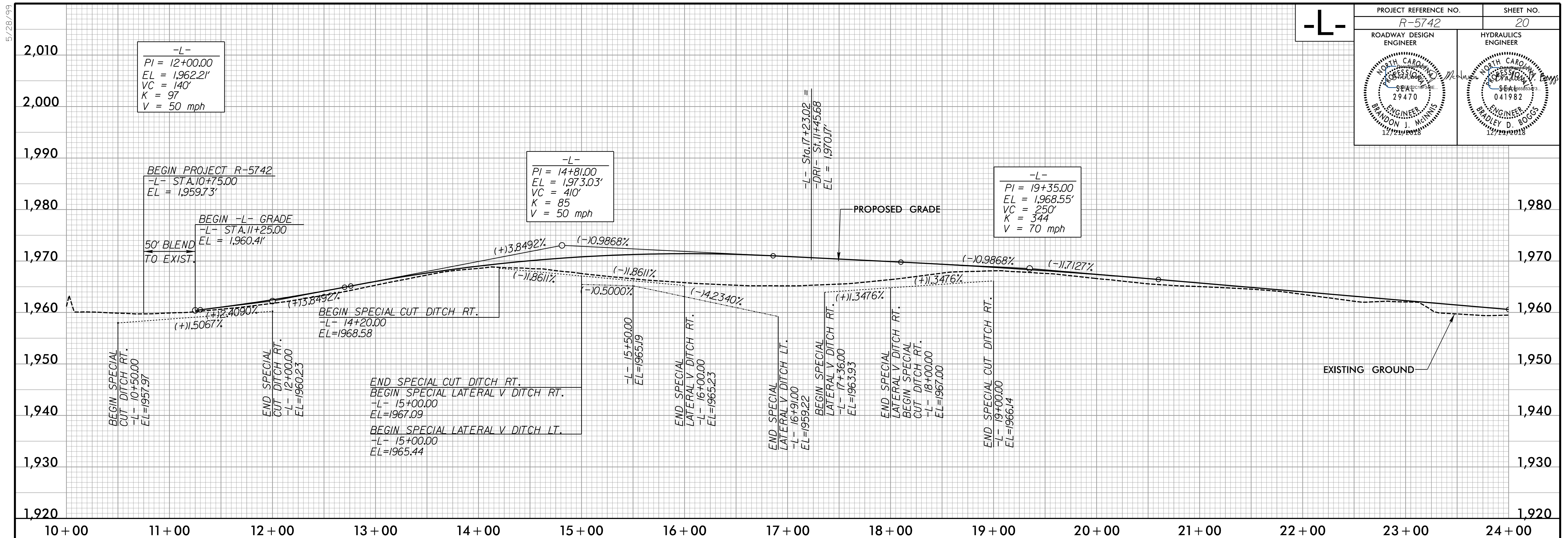
PLANS PREPARED BY :

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PROJECT REFERENCE NO. R-5742		SHEET NO. 20
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER



CULVERT HYDRAULIC DATA

7' X 7' RCBC -L- STA. 34+20

DRAINAGE AREA	= 315.85	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 290	CFS
DESIGN HW ELEVATION	= 1934.3	FT
100 YEAR DISCHARGE	= 350	CFS
100 YEAR HW ELEVATION	= 1935.2	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 600	CFS
OVERTOPPING ELEVATION	= 1938.2	FT

PROP. 7' X 7' RCBC (BURIED 1') W/ 2' WIDE BAFFLES

END SPECIAL LATERAL V DITCH LT. -L- 34+14.00 EL=1925.90

BEGIN SPECIAL LATERAL V DITCH LT. -L- 34+20.00 EL=1925.90

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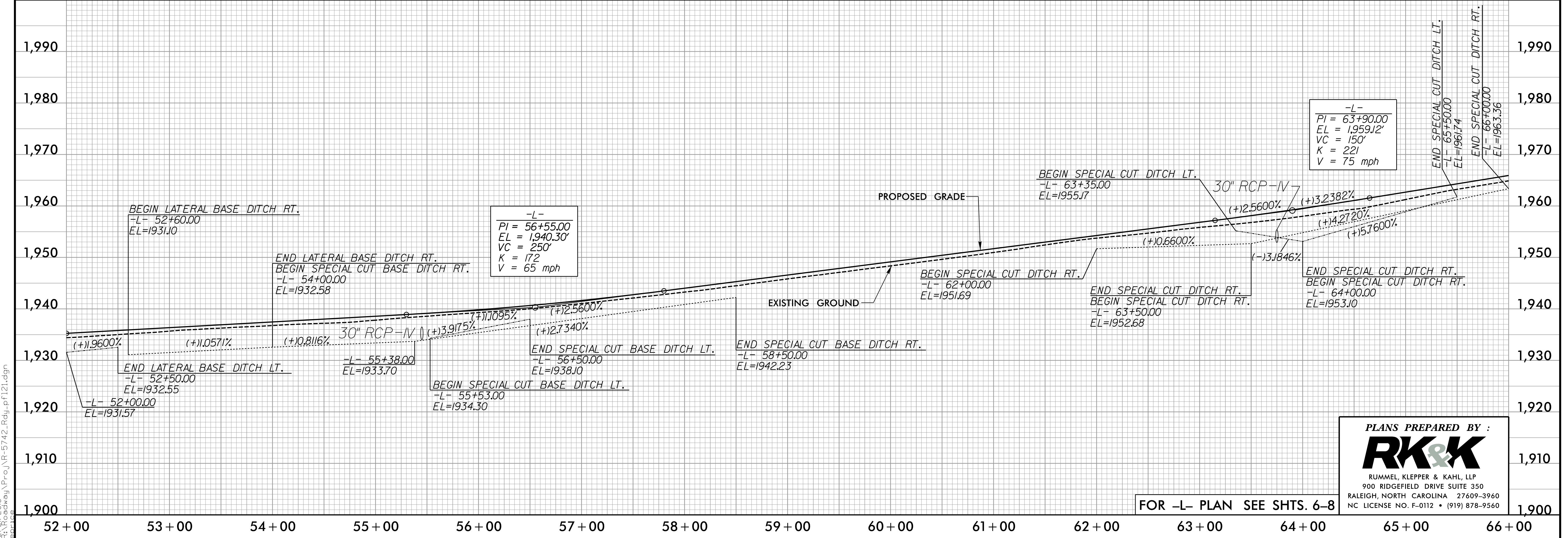
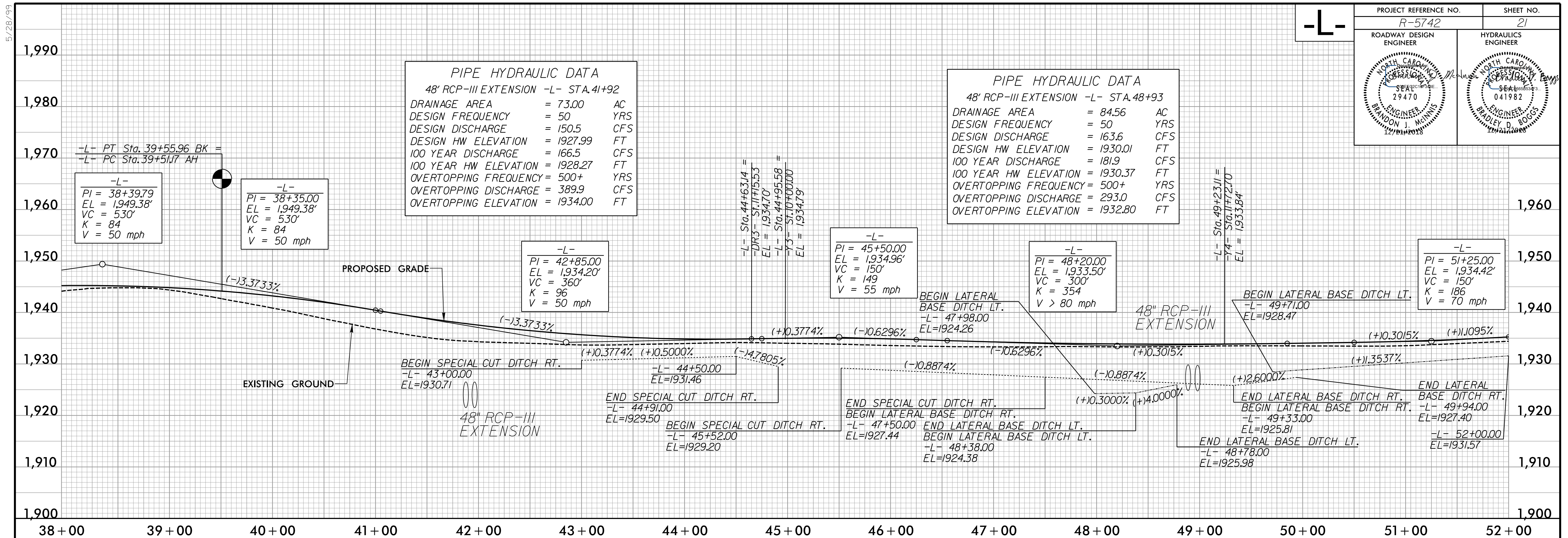
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FOR -L- PLAN SEE SHTS. 4-6

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PROJECT REFERENCE NO. R-5742		SHEET NO. 21	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



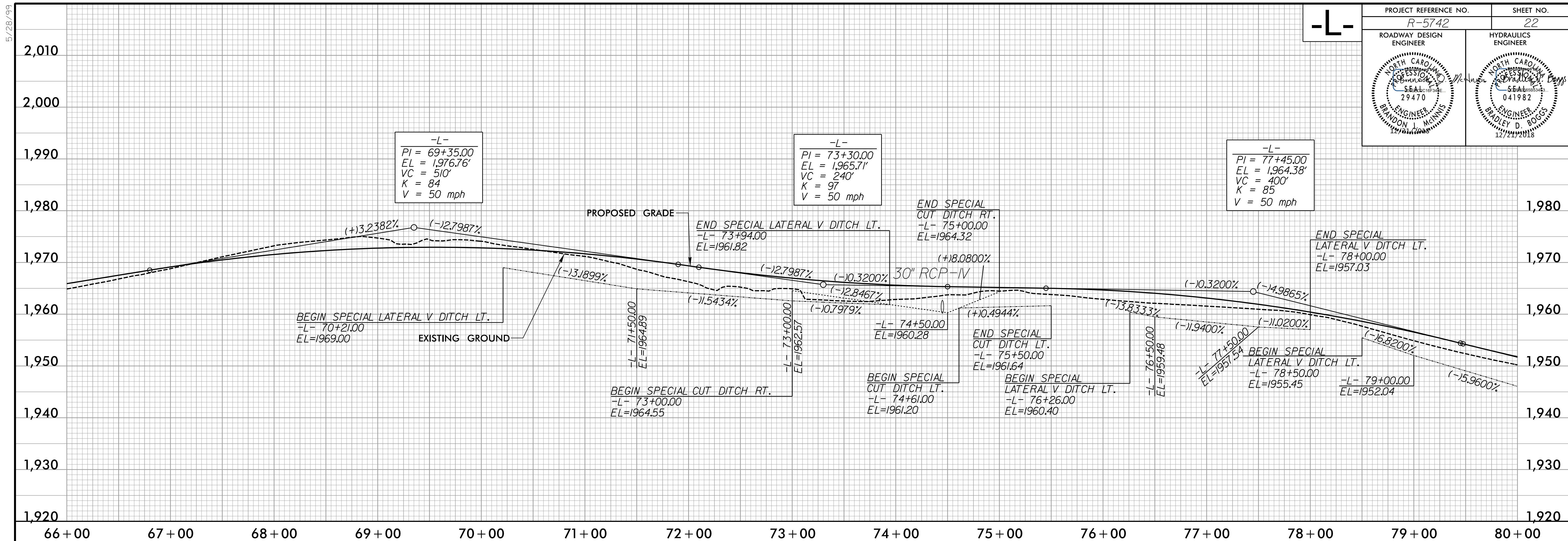
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FOR -L- PLAN SEE SHTS. 6-8

PROJECT REFERENCE NO. R-5742	SHEET NO. 22
ROADWAY DESIGN ENGINEER [Stamp]	HYDRAULICS ENGINEER [Stamp]



PIPE HYDRAULIC DATA

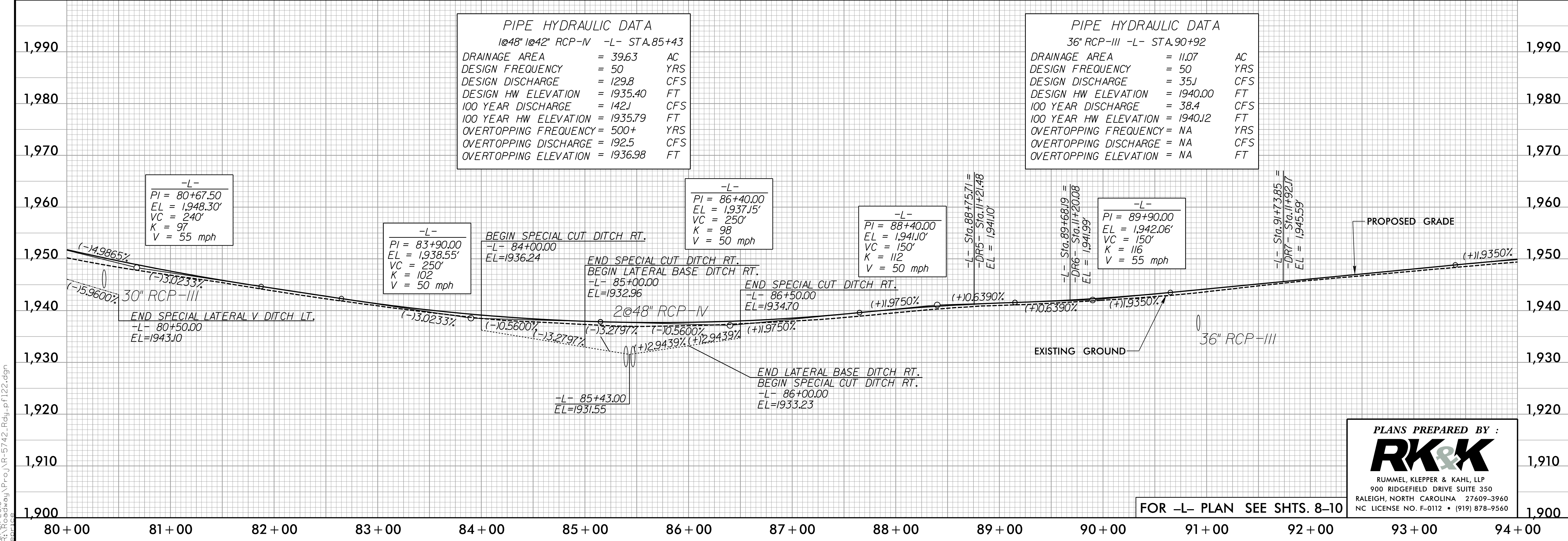
1 @ 48" 1 @ 42" RCP-IV -L- STA.85+43

DRAINAGE AREA	= 39.63	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 129.8	CFS
DESIGN HW ELEVATION	= 1935.40	FT
100 YEAR DISCHARGE	= 142.1	CFS
100 YEAR HW ELEVATION	= 1935.79	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 192.5	CFS
OVERTOPPING ELEVATION	= 1936.98	FT

PIPE HYDRAULIC DATA

36" RCP-III -L- STA.90+92

DRAINAGE AREA	= 11.07	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 35.1	CFS
DESIGN HW ELEVATION	= 1940.00	FT
100 YEAR DISCHARGE	= 38.4	CFS
100 YEAR HW ELEVATION	= 1940.12	FT
OVERTOPPING FREQUENCY	= NA	YRS
OVERTOPPING DISCHARGE	= NA	CFS
OVERTOPPING ELEVATION	= NA	FT



PLANS PREPARED BY :

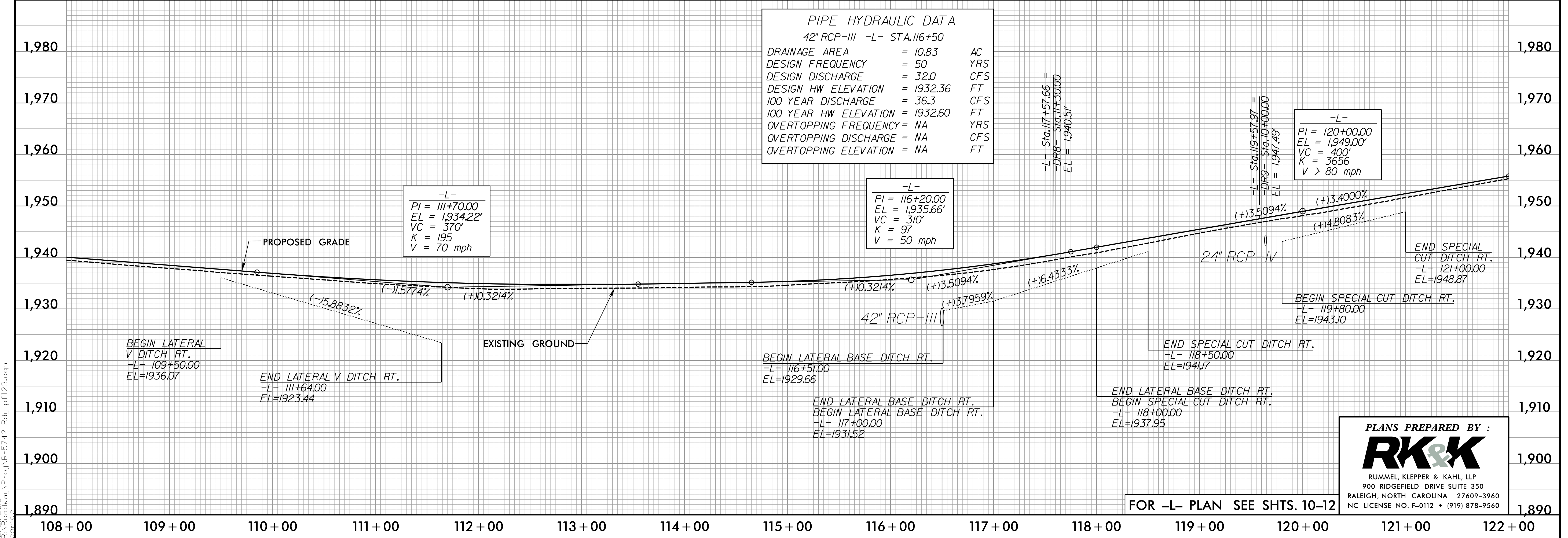
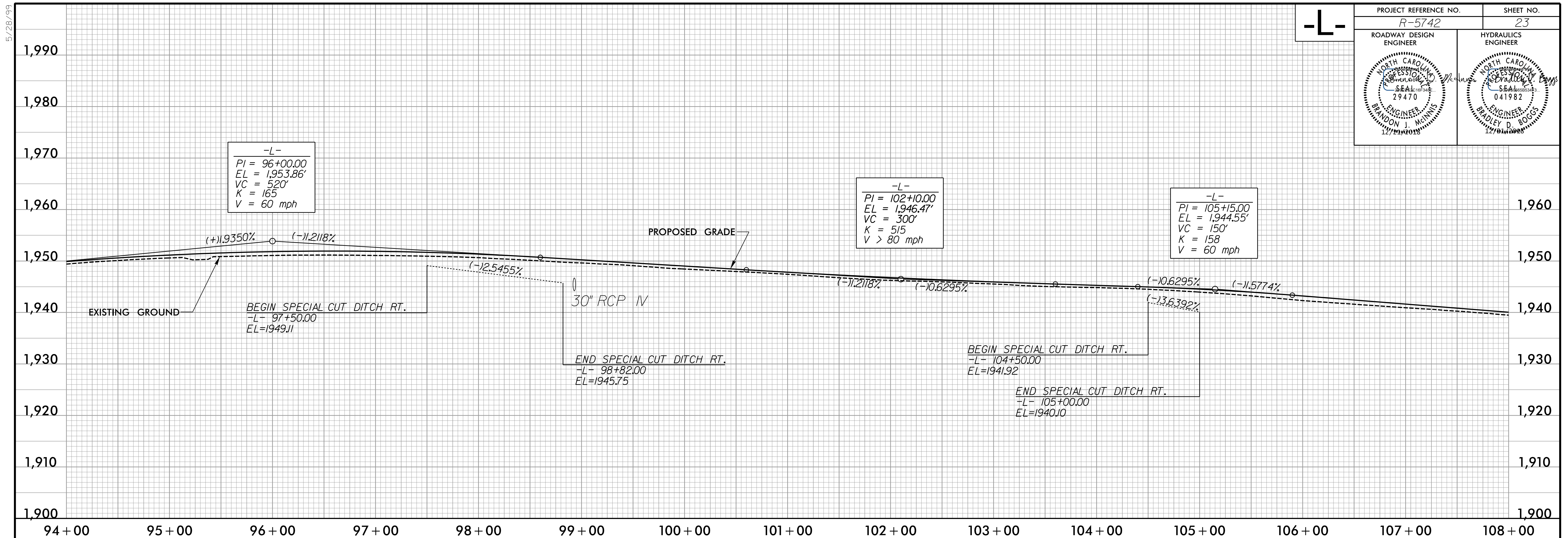
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FOR -L- PLAN SEE SHTS. 8-10

12/14/2018 10:20:18 C:\pwork\pwork\pwork\R-5742-Rdy-pl122.dgn

PROJECT REFERENCE NO. R-5742		SHEET NO. 23
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	



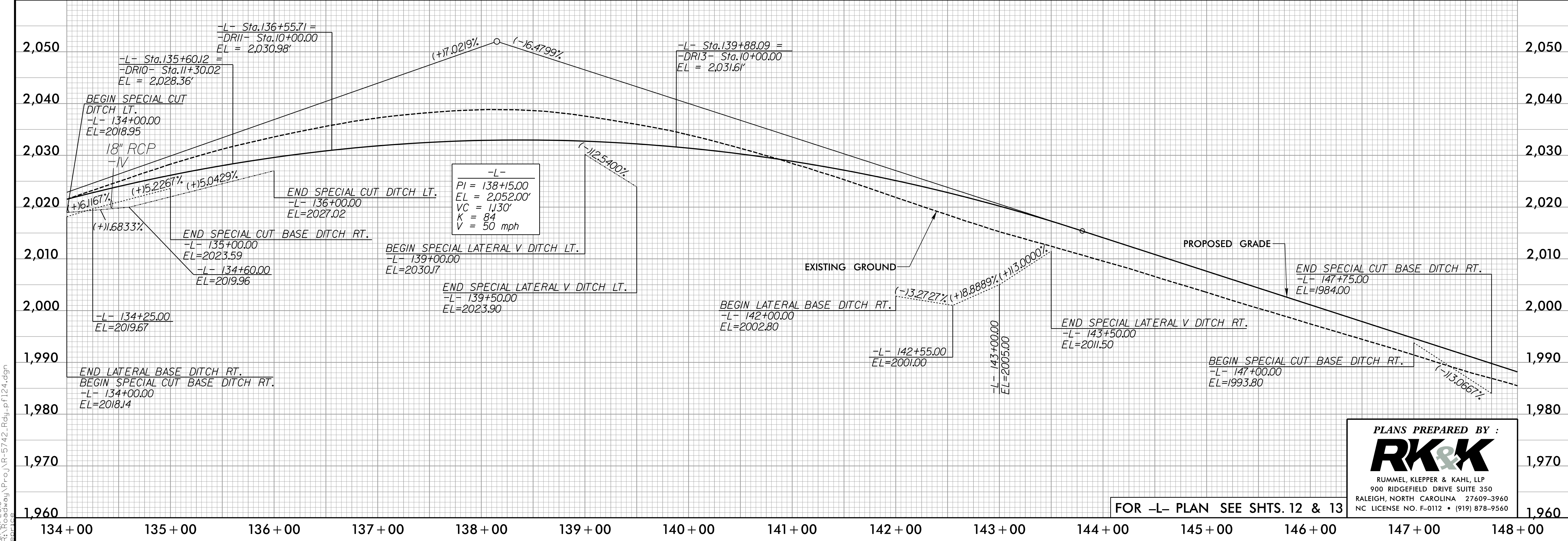
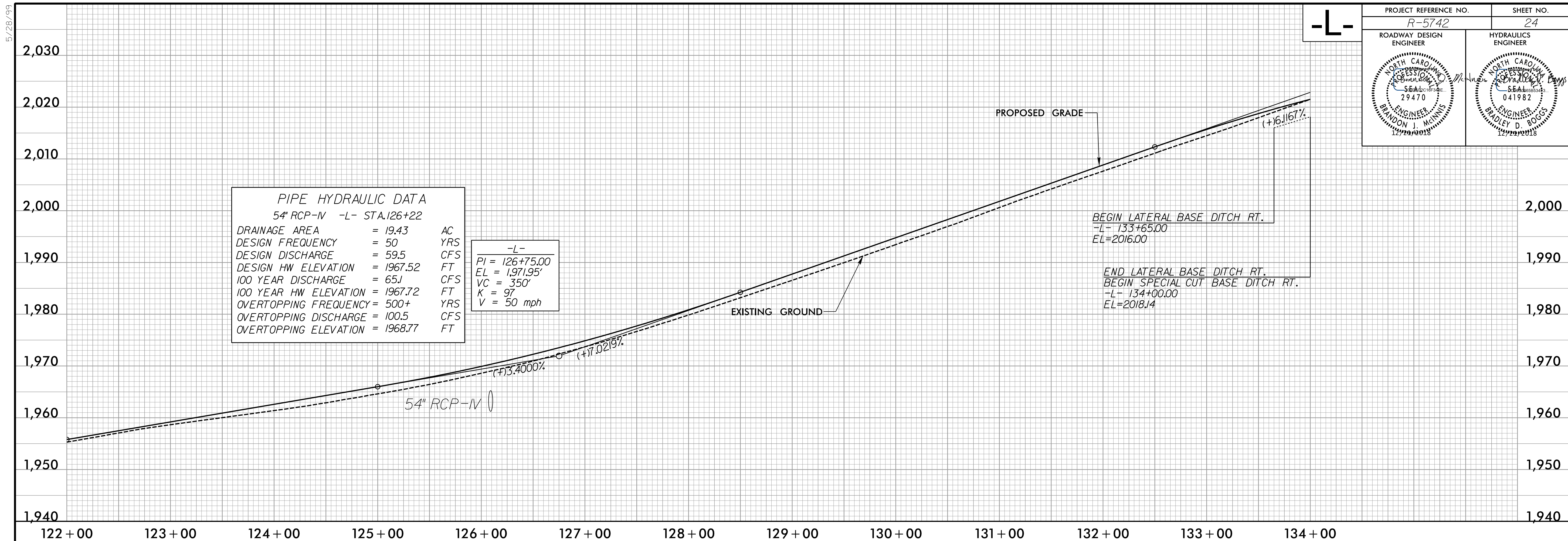
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FOR -L- PLAN SEE SHTS. 10-12

PROJECT REFERENCE NO. R-5742		SHEET NO. 24
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	



5/28/99
12/1/2018
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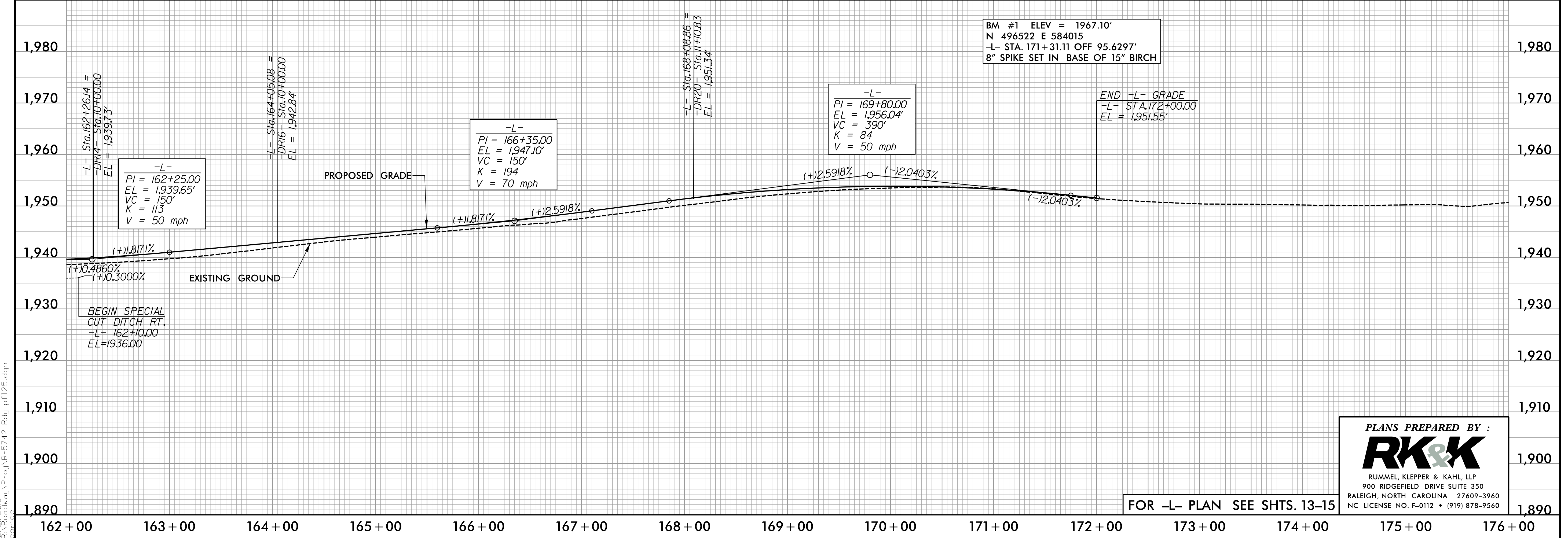
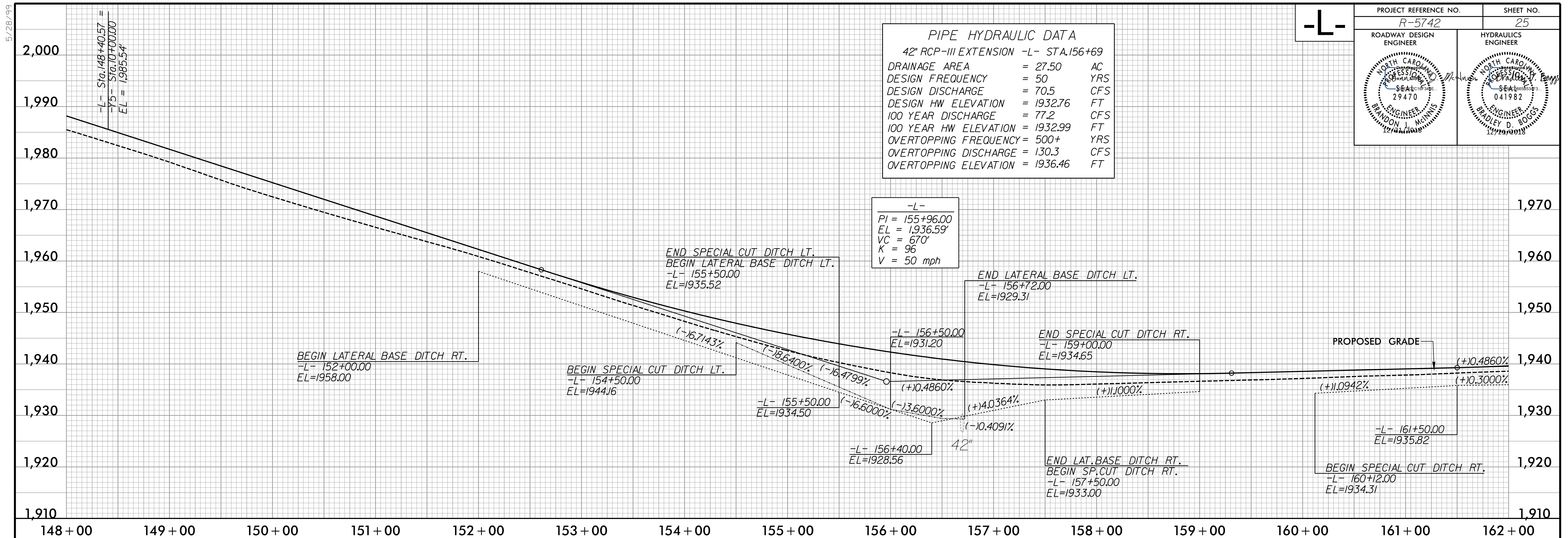
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FOR -L- PLAN SEE SHTS. 12 & 13

PROJECT REFERENCE NO. R-5742		SHEET NO. 25
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	

PIPE HYDRAULIC DATA
 42" RCP-III EXTENSION -L- STA.156+69
 DRAINAGE AREA = 27.50 AC
 DESIGN FREQUENCY = 50 YRS
 DESIGN DISCHARGE = 70.5 CFS
 DESIGN HW ELEVATION = 1932.76 FT
 100 YEAR DISCHARGE = 77.2 CFS
 100 YEAR HW ELEVATION = 1932.99 FT
 OVERTOPPING FREQUENCY = 500+ YRS
 OVERTOPPING DISCHARGE = 130.3 CFS
 OVERTOPPING ELEVATION = 1936.46 FT



BM #1 ELEV = 1967.10'
 N 496522 E 584015
 -L- STA. 171+31.11 OFF 95.6297'
 8" SPIKE SET IN BASE OF 15" BIRCH

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FOR -L- PLAN SEE SHTS. 13-15

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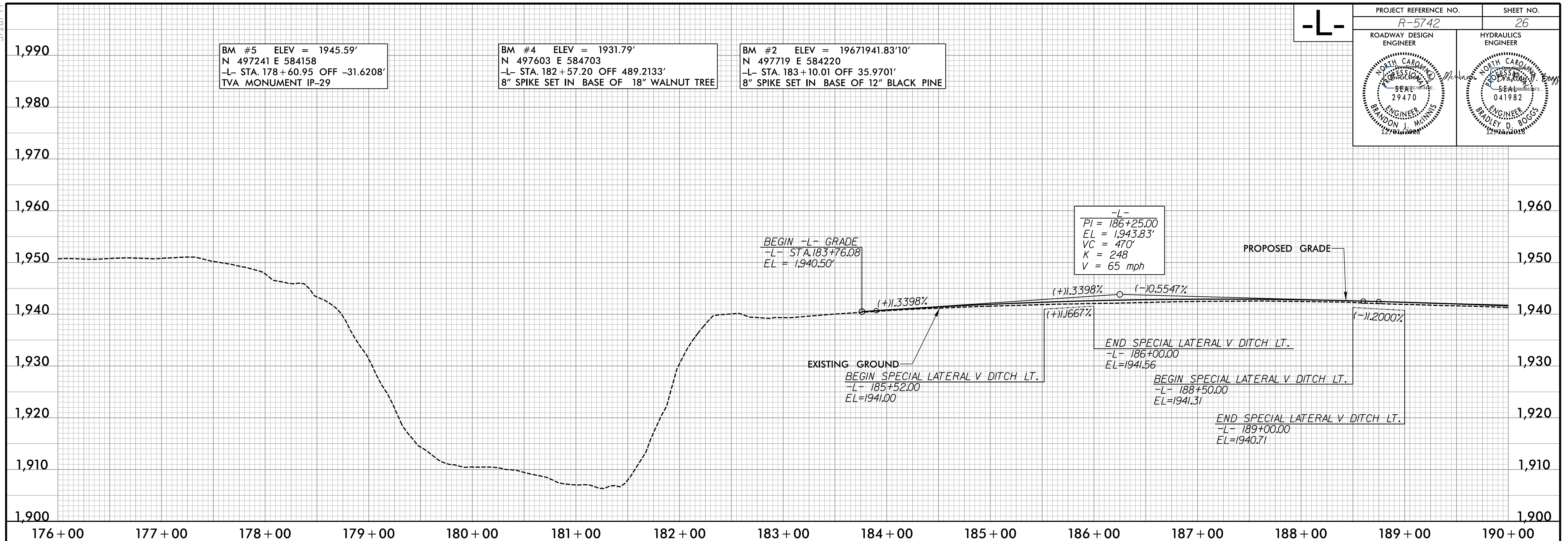
-L-

PROJECT REFERENCE NO. R-5742	SHEET NO. 26
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

BM #5 ELEV = 1945.59'
N 497241 E 584158
-L- STA. 178+60.95 OFF -31.6208'
TVA MONUMENT IP-29

BM #4 ELEV = 1931.79'
N 497603 E 584703
-L- STA. 182+57.20 OFF 489.2133'
8" SPIKE SET IN BASE OF 18" WALNUT TREE

BM #2 ELEV = 19671941.83'10"
N 497719 E 584220
-L- STA. 183+10.01 OFF 35.9701'
8" SPIKE SET IN BASE OF 12" BLACK PINE

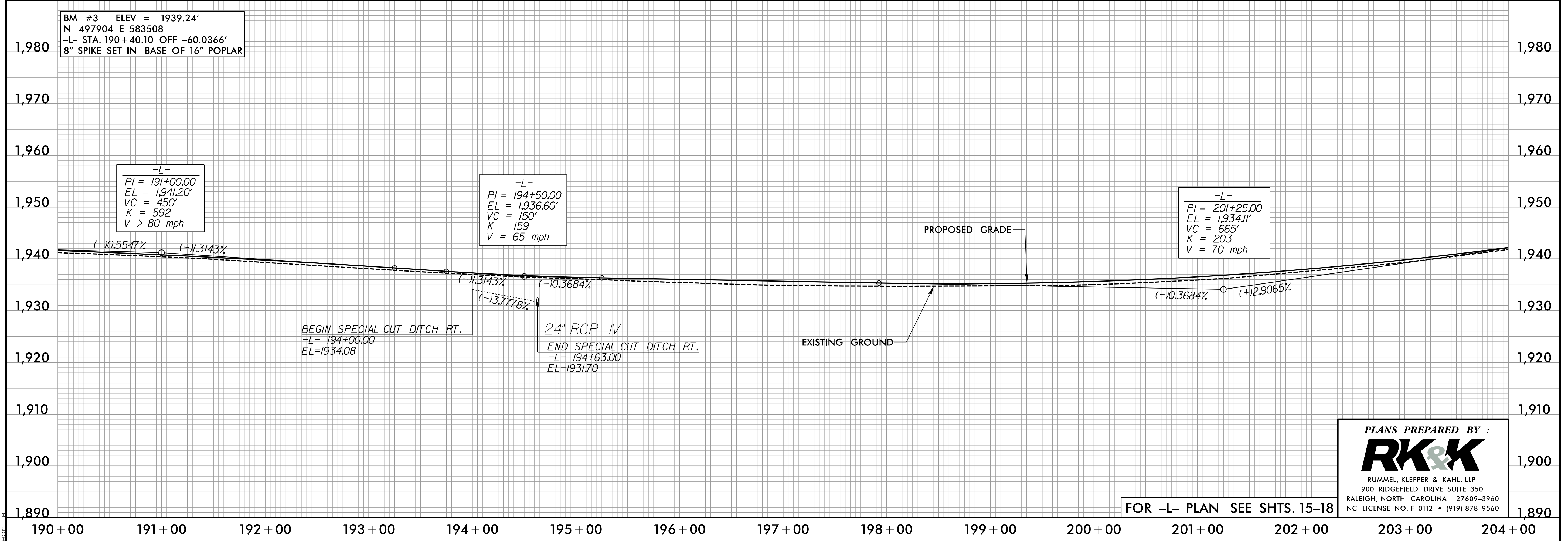


BM #3 ELEV = 1939.24'
N 497904 E 583508
-L- STA. 190+40.10 OFF -60.0366'
8" SPIKE SET IN BASE OF 16" POPLAR

-L-
PI = 191+00.00
EL = 1,941.20'
VC = 450'
K = 592
V > 80 mph

-L-
PI = 194+50.00
EL = 1,936.60'
VC = 150'
K = 159
V = 65 mph

-L-
PI = 201+25.00
EL = 1,934.11'
VC = 665'
K = 203
V = 70 mph



BEGIN SPECIAL CUT DITCH RT.
-L- 194+00.00
EL=1934.08

24" RCP IV
END SPECIAL CUT DITCH RT.
-L- 194+63.00
EL=1931.70

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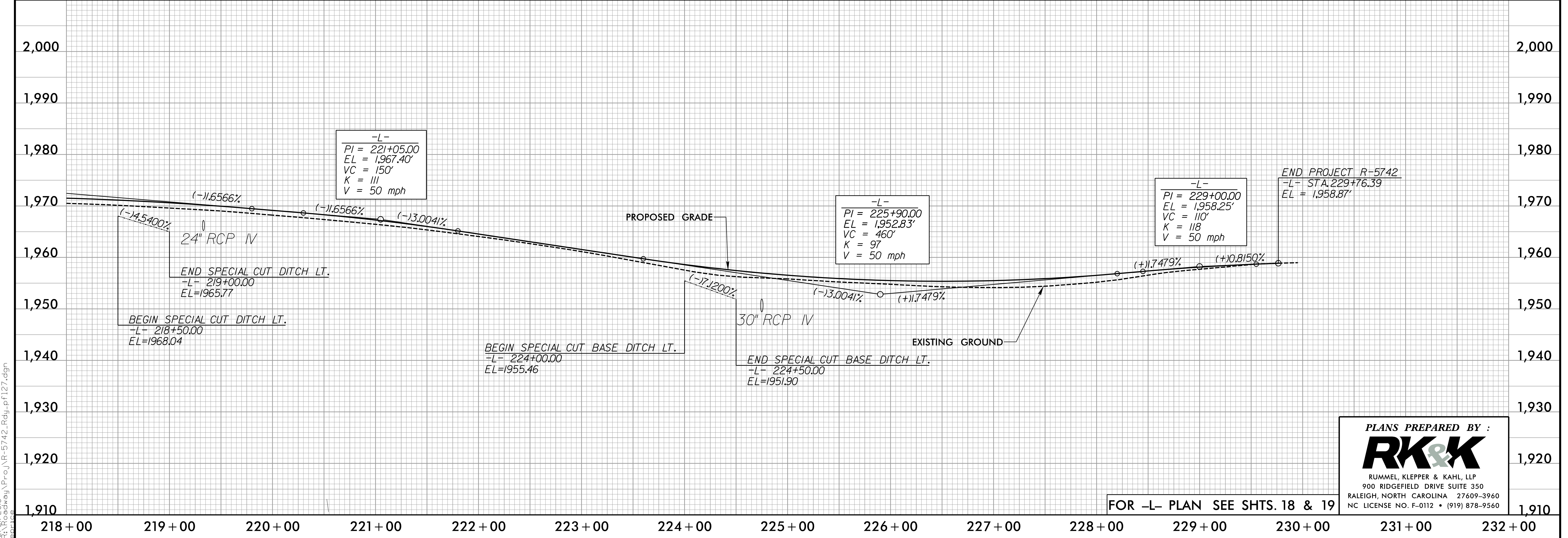
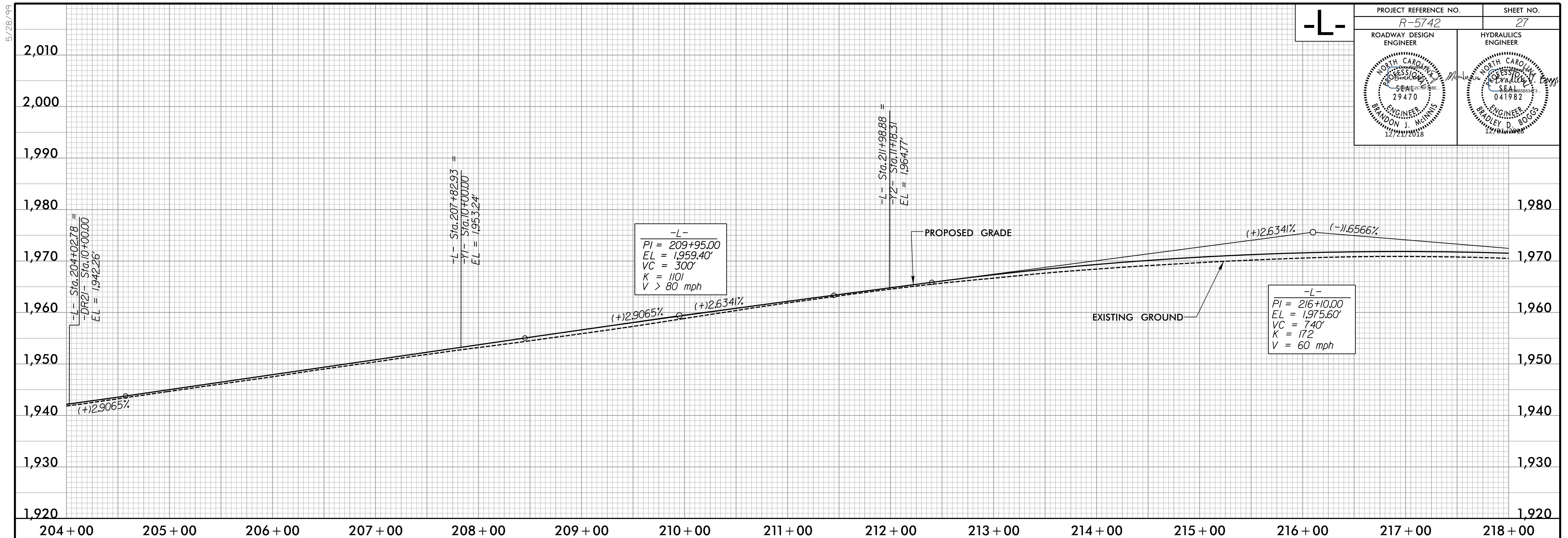
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FOR -L- PLAN SEE SHTS. 15-18

12/21/2018 10:20:00 AM C:\Users\pcoj\OneDrive\Documents\Projects\R-5742-Rdy-pl126.dgn

-L-

PROJECT REFERENCE NO. R-5742	SHEET NO. 27
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



5/28/18
12/1/2018
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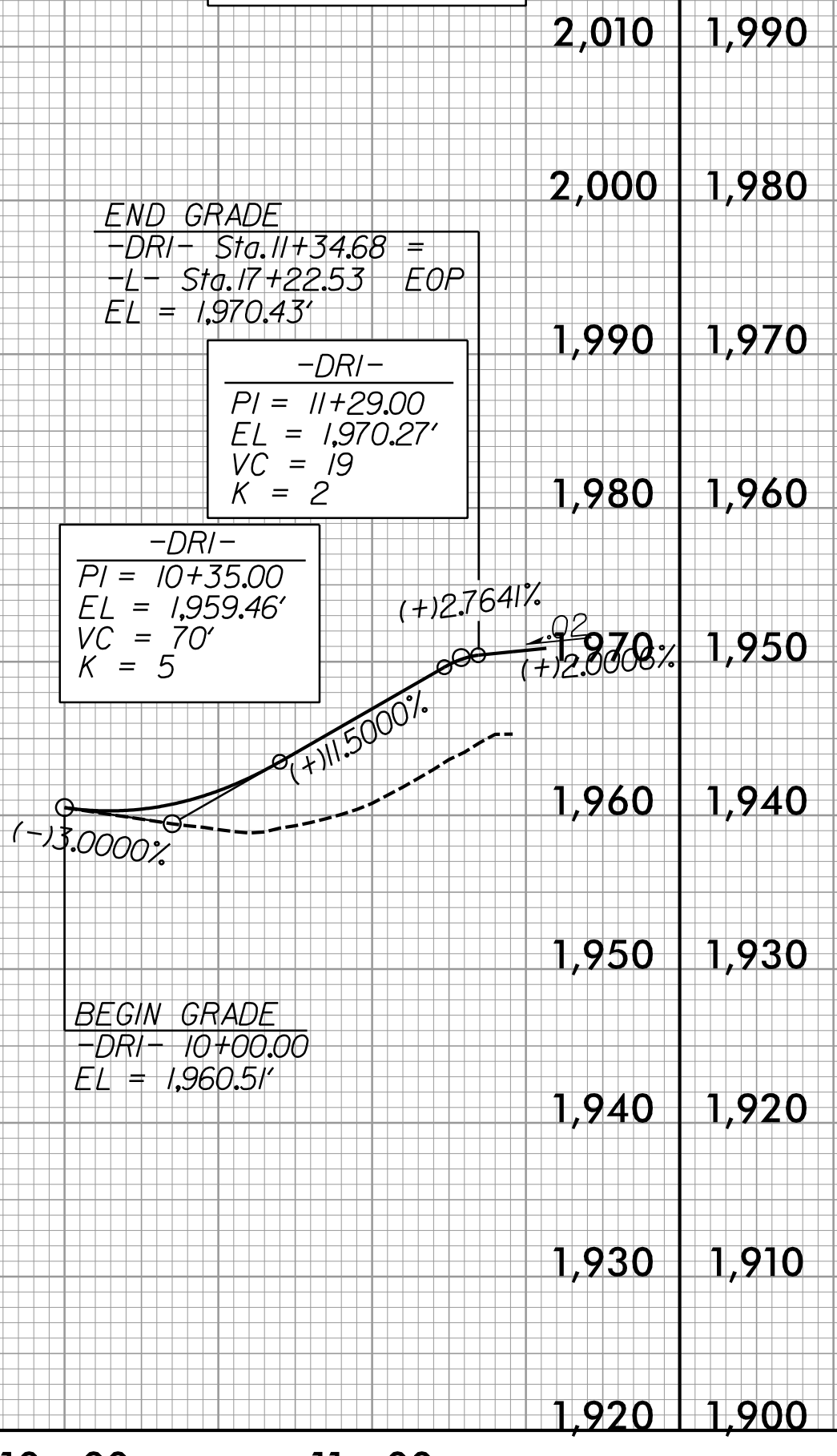
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FOR -L- PLAN SEE SHTS. 18 & 19

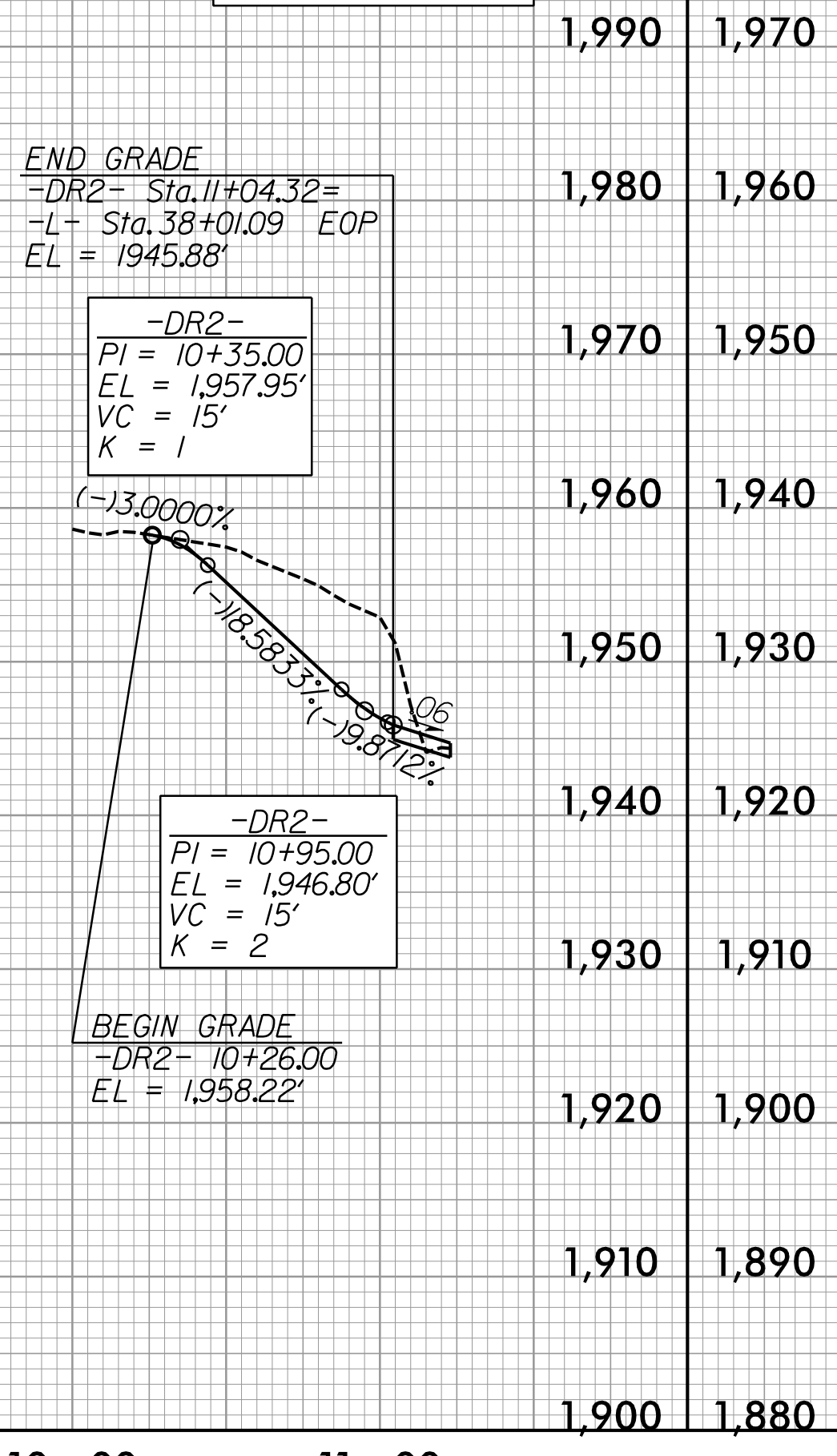
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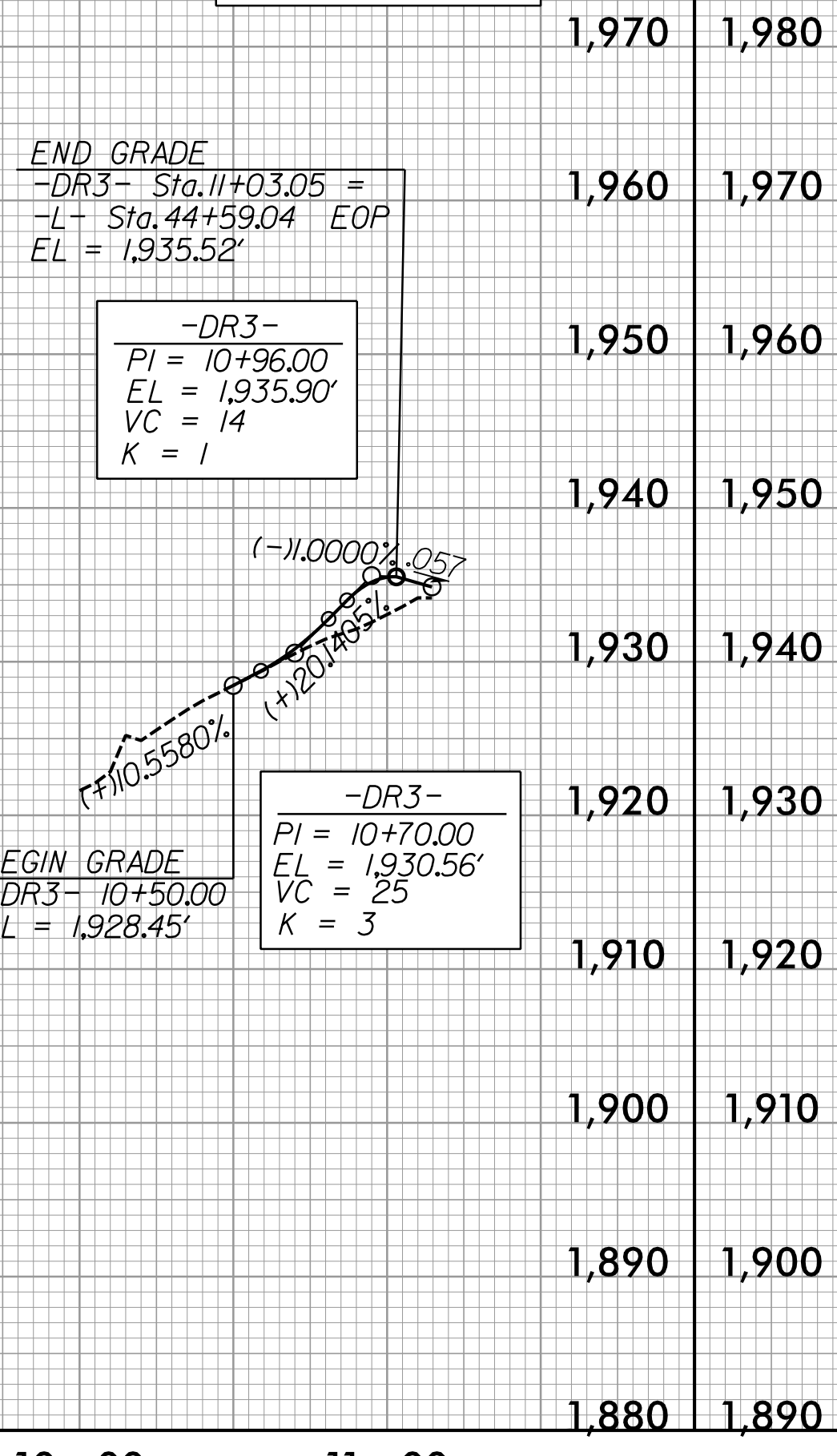
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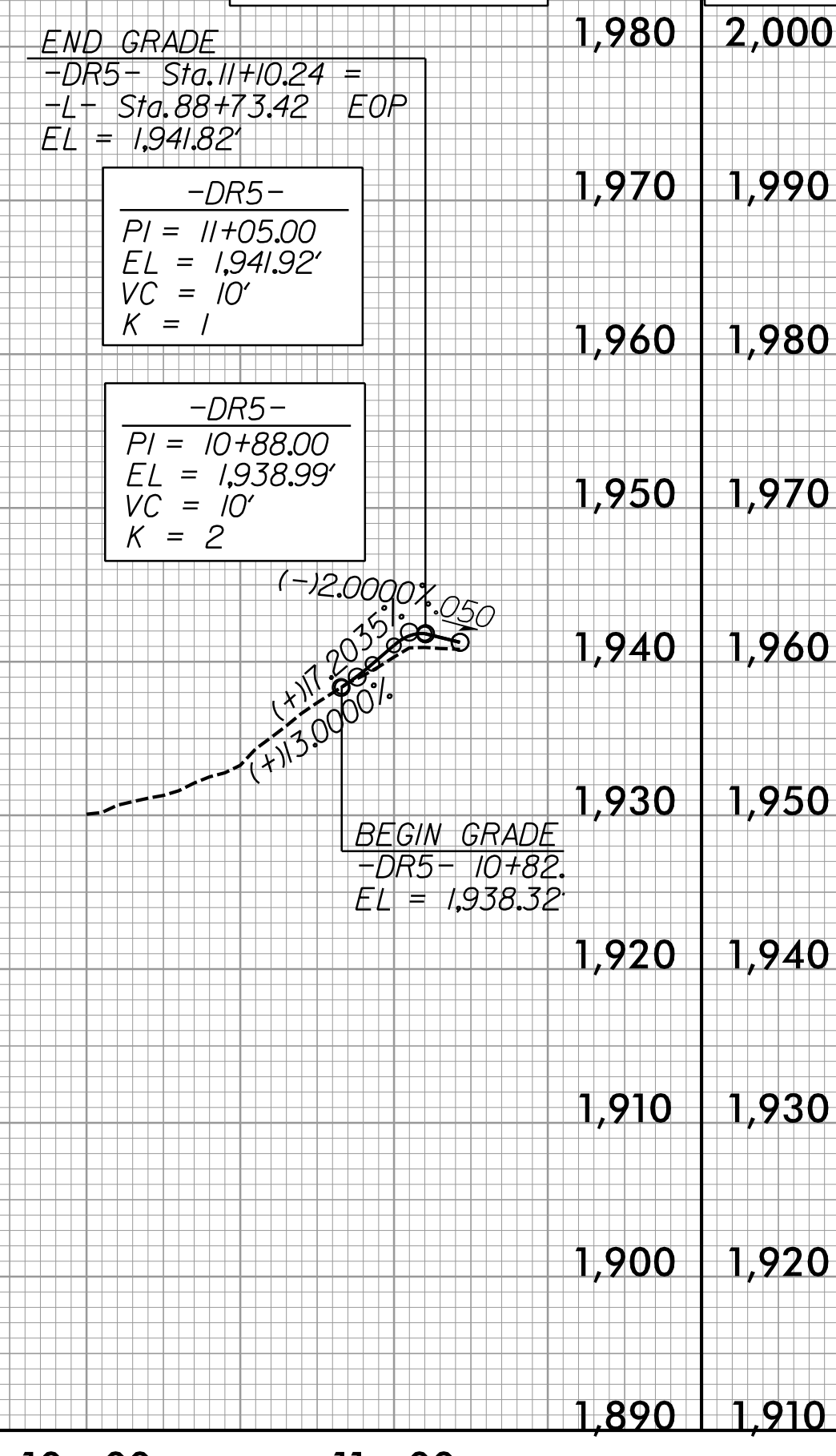
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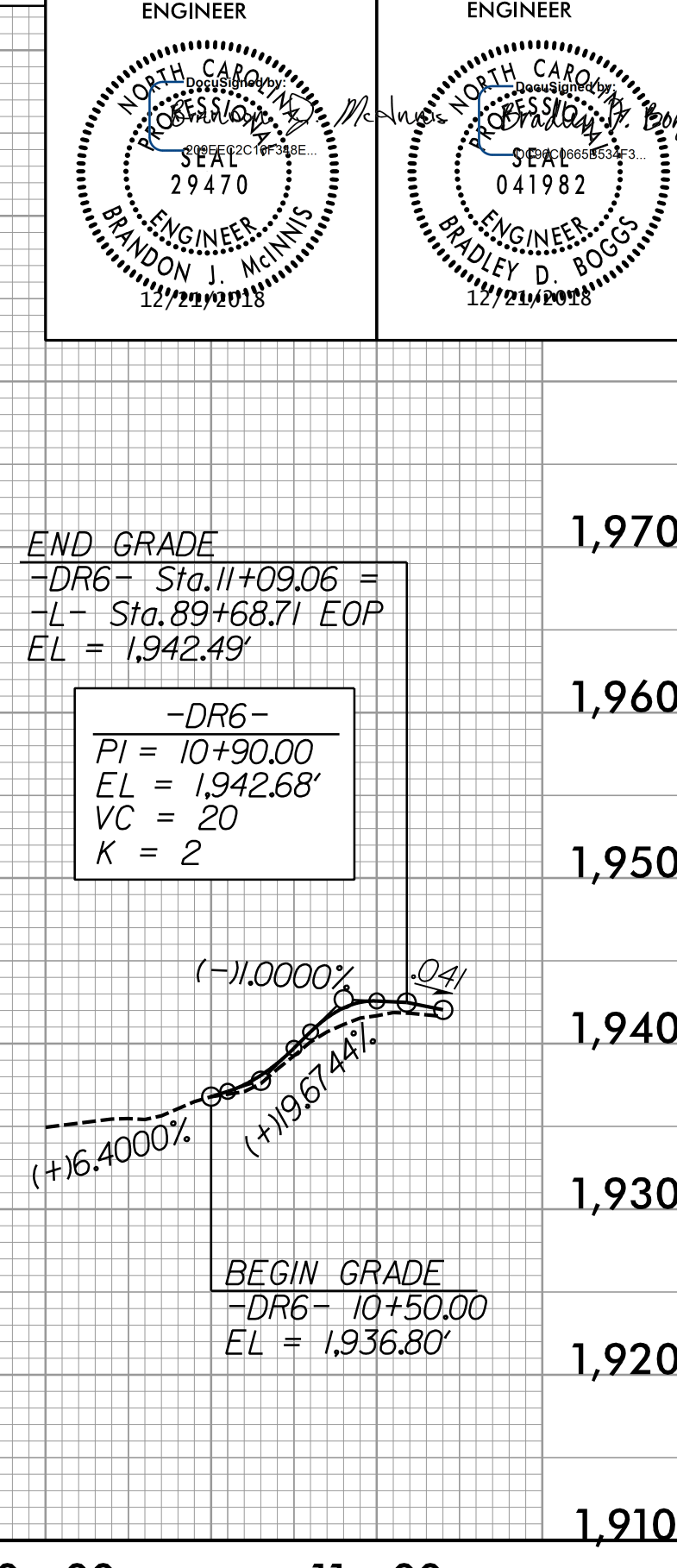
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-DR5-

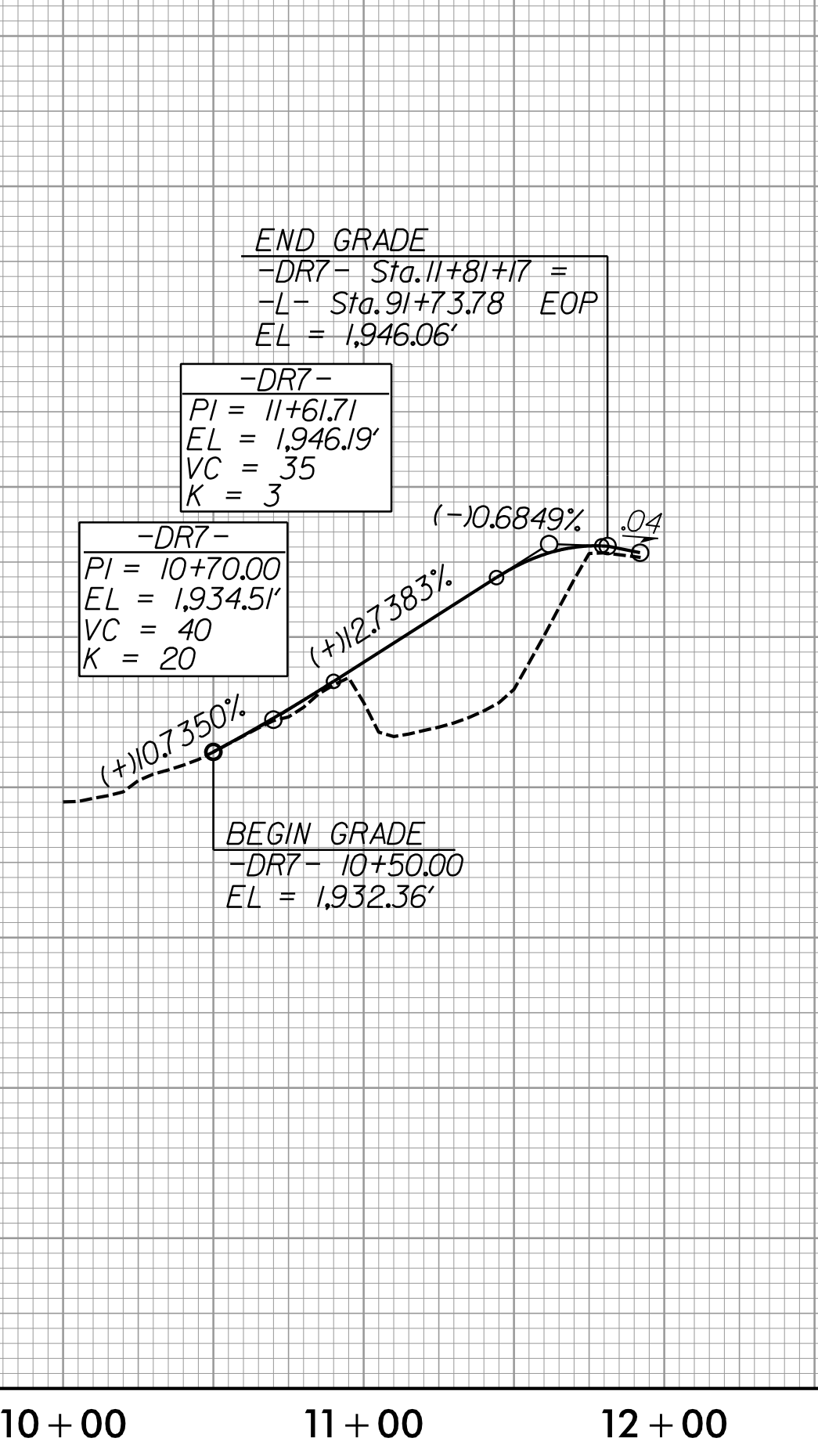


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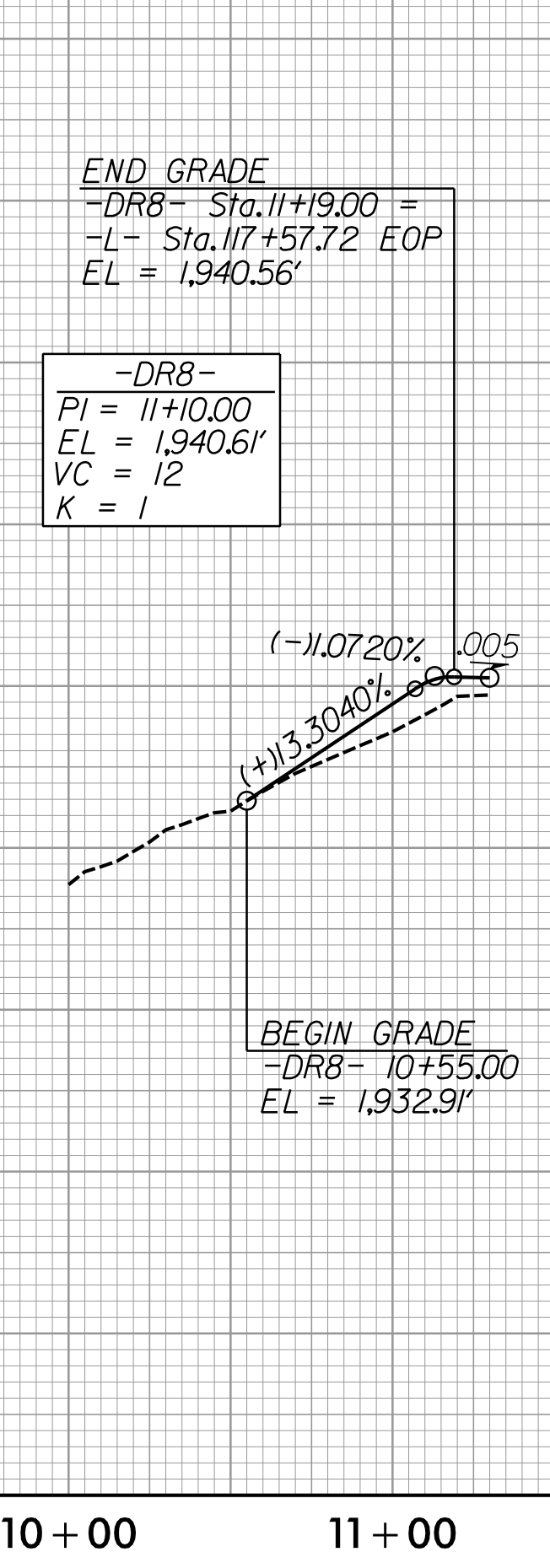


PROJECT REFERENCE NO. R-5742	SHEET NO. 28
ROADWAY DESIGN ENGINEER BRANDON J. MAINIS 12/21/2018	HYDRAULICS ENGINEER BRADLEY D. BOGS 12/21/2018

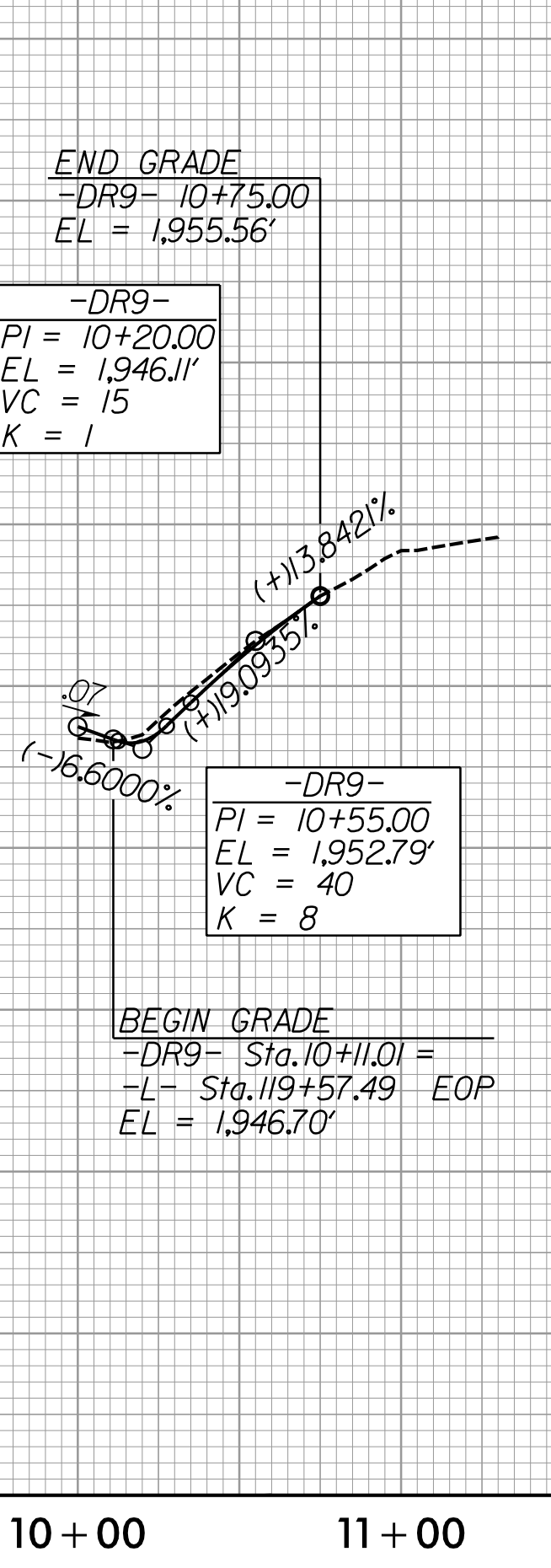
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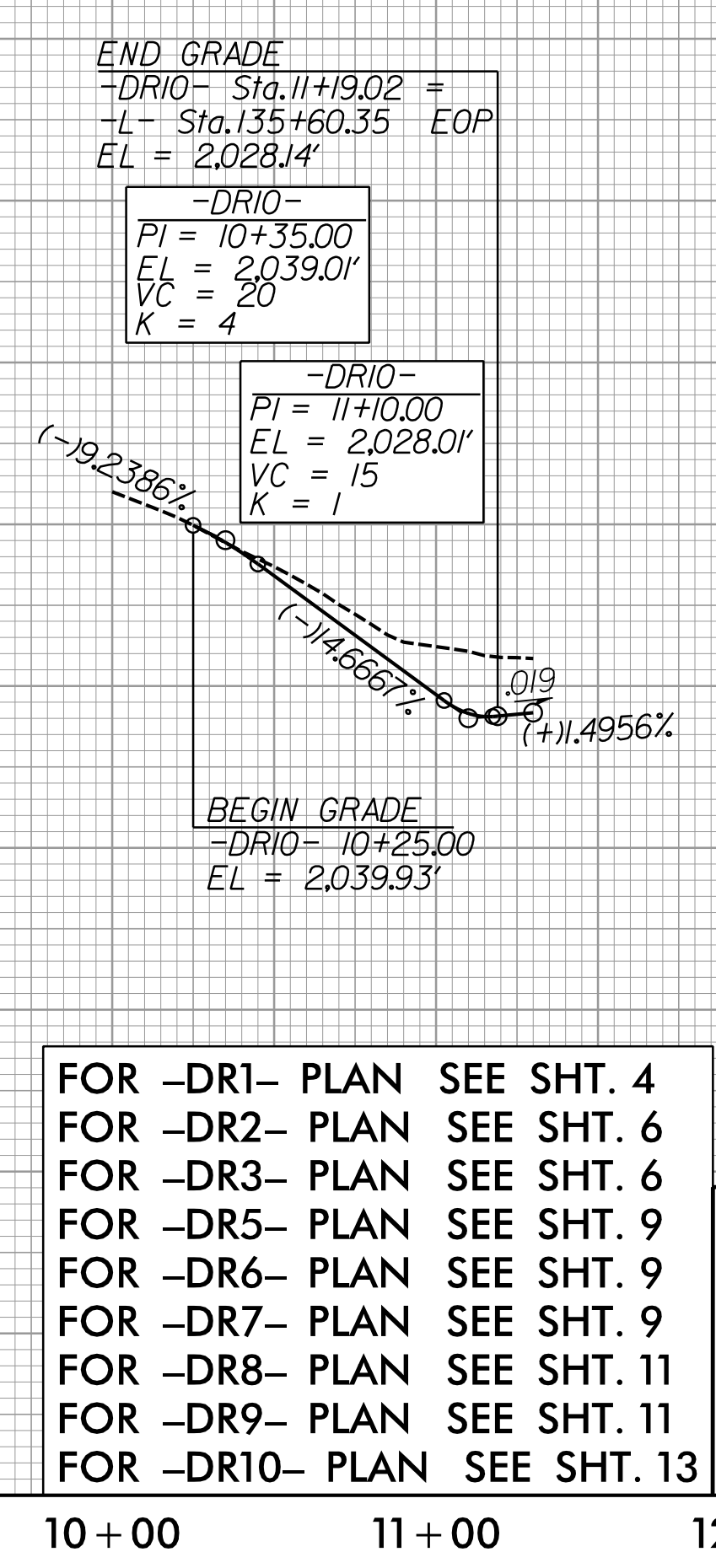
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-DR9-



-DR10-



FOR -DR1- PLAN SEE SHT. 4
 FOR -DR2- PLAN SEE SHT. 6
 FOR -DR3- PLAN SEE SHT. 6
 FOR -DR5- PLAN SEE SHT. 9
 FOR -DR6- PLAN SEE SHT. 9
 FOR -DR7- PLAN SEE SHT. 9
 FOR -DR8- PLAN SEE SHT. 11
 FOR -DR9- PLAN SEE SHT. 11
 FOR -DR10- PLAN SEE SHT. 13

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