

**This electronic collection of documents is provided
for the convenience of the user
and is Not a Certified Document –**

**The documents contained herein were originally issued
and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

**This file or an individual page
shall not be considered a certified document.**

-L- NC 69	
9,300	9,620
13,780	14,240
110	440
180	650
2020 ADT	
560	560
2040 ADT	
830	830
-Y3-	
SR 1190	
McCLURE RD	

-L-	-Y2-	-Y3-	-Y4-
PI Sta 61+27.03	PI Sta 12+31.89	PI Sta 11+15.65	PI Sta 12+05.58
$\Delta = 31^{\circ} 27' 02.4''$ (LT)	$\Delta = 9^{\circ} 10' 34.3''$ (LT)	$\Delta = 14^{\circ} 34' 30.8''$ (LT)	$\Delta = 3^{\circ} 53' 59.9''$ (RT)
D = 1' 54' 35.5"	D = 4' 46' 28.7"	D = 14' 19' 26.2"	D = 5' 43' 46.5"
L = 1,646.75'	L = 192.19'	L = 101.75'	L = 68.07'
T = 844.69'	T = 96.30'	T = 51.5'	T = 34.05'
R = 3,000.00'	R = 1,200.00'	R = 400.00'	R = 1,000.00'
SE = 0.03	SE = 0.02	SE = N.C.	SE = 0.02
RO = 150'	RO = 30'	V = STOP COND.	RO = 30'
V = 50 mph	V = STOP COND.		V = 15 mph

SEE SHEET 23 FOR -L- PROFILE
 SEE SHEET 31 FOR -Y2- & -Y3- PROFILES
 SEE SHEET 32 FOR -Y4- & -Y5- PROFILES
 SEE SHEET 2B-2 FOR -Y2-, -Y3-, & -Y4- INTERSECTION DETAILS
 SEE SHEET 2B-3 FOR -Y5- INTERSECTION DETAIL

DRIVEWAY RADII ARE 10'- UNLESS NOTED OTHERWISE.

NOTE 1: TRANSITION 1'-6" C&G TO 2'-9" C&G:
 -L- STA. 54+05 TO 53+80 RT MED
 -L- STA. 59+45 TO 59+60 RT MED
 -L- STA. 62+28 TO 62+53 RT MED
 SEE DETAIL SHEET 2C-3

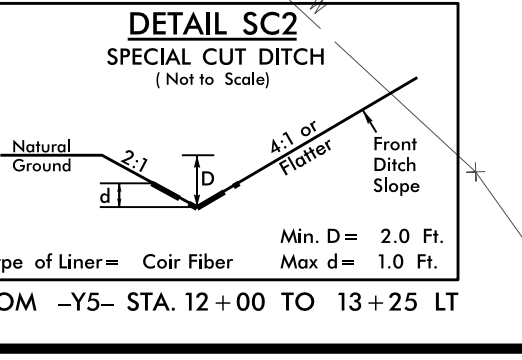
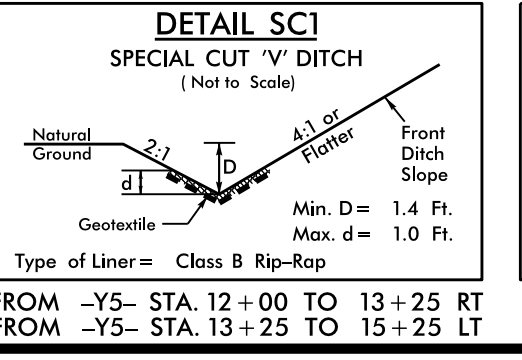
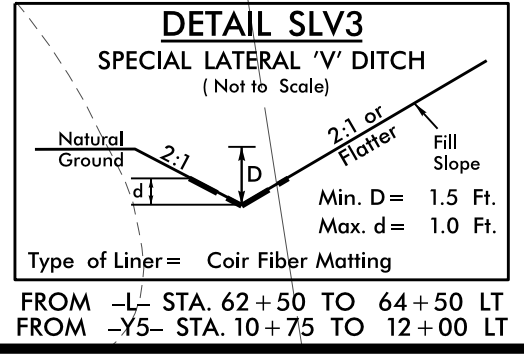
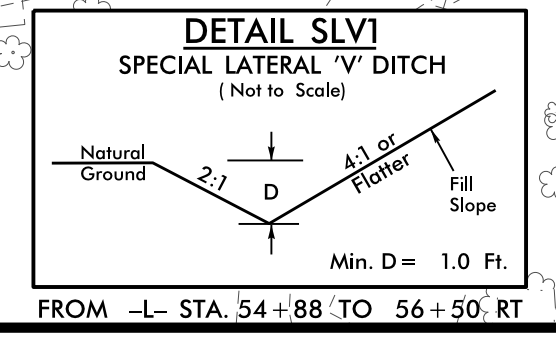
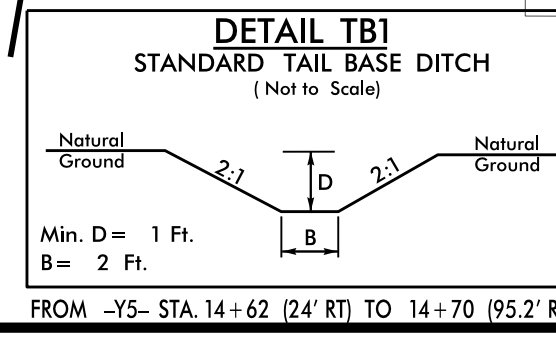
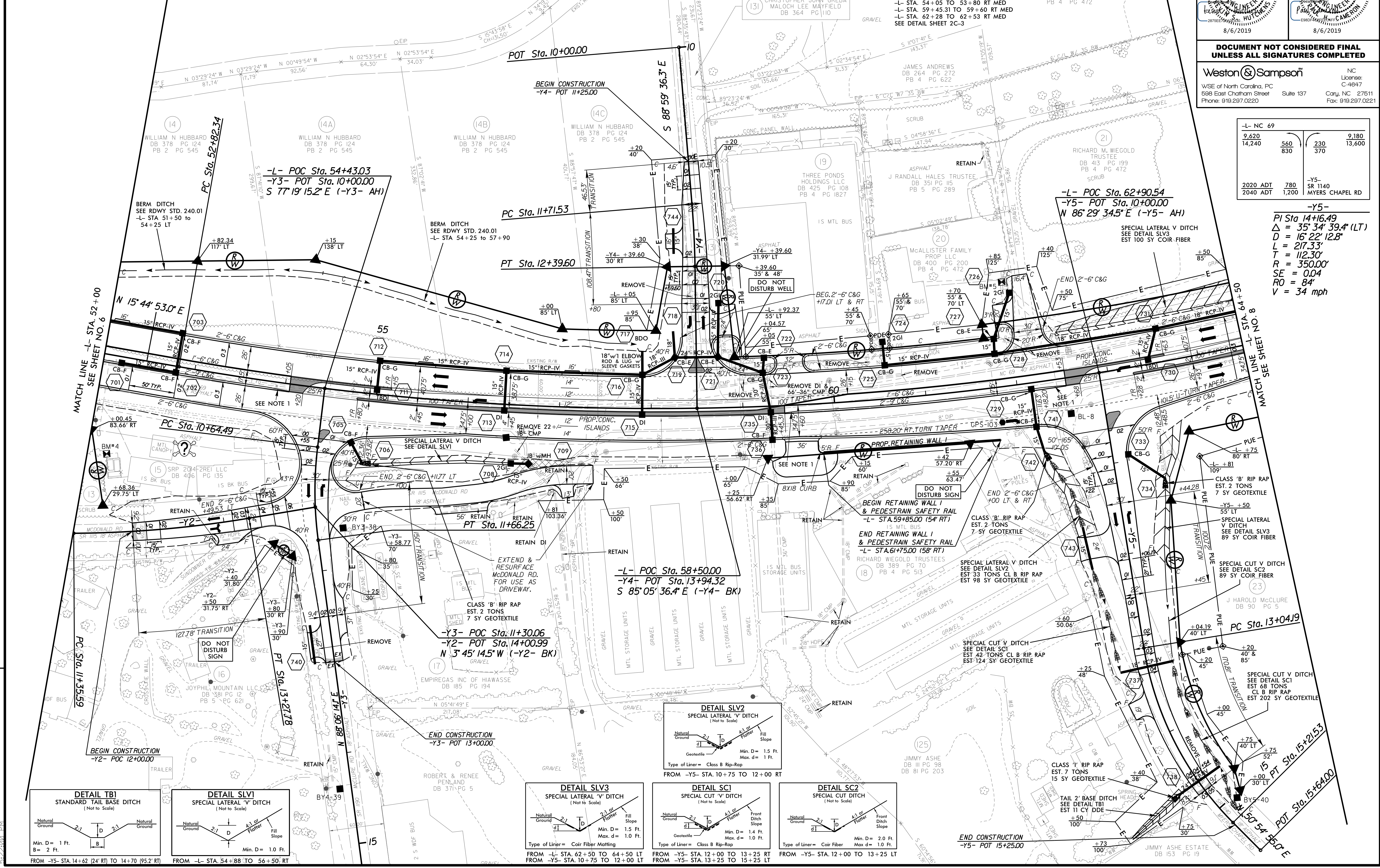
PROJECT REFERENCE NO.	SHEET NO.
A-0011C	7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
8/6/2019	8/6/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Weston Sampson NC License: C-4847
 WSE of North Carolina, PC
 598 East Chatham Street Suite 137 Cary, NC 27511
 Phone: 919.297.0220 Fax: 919.297.0221

-L- NC 69	
9,620	9,180
14,240	13,600
560	230
830	370
2020 ADT	
780	780
2040 ADT	
1,200	1,200
-Y5-	
SR 1140	
MYERS CHAPEL RD	

-Y5-
 PI Sta 14+16.49
 $\Delta = 35^{\circ} 34' 39.4''$ (LT)
 D = 16' 22' 12.8"
 L = 217.33'
 T = 112.30'
 R = 350.00'
 SE = 0.04
 RO = 84'
 V = 34 mph



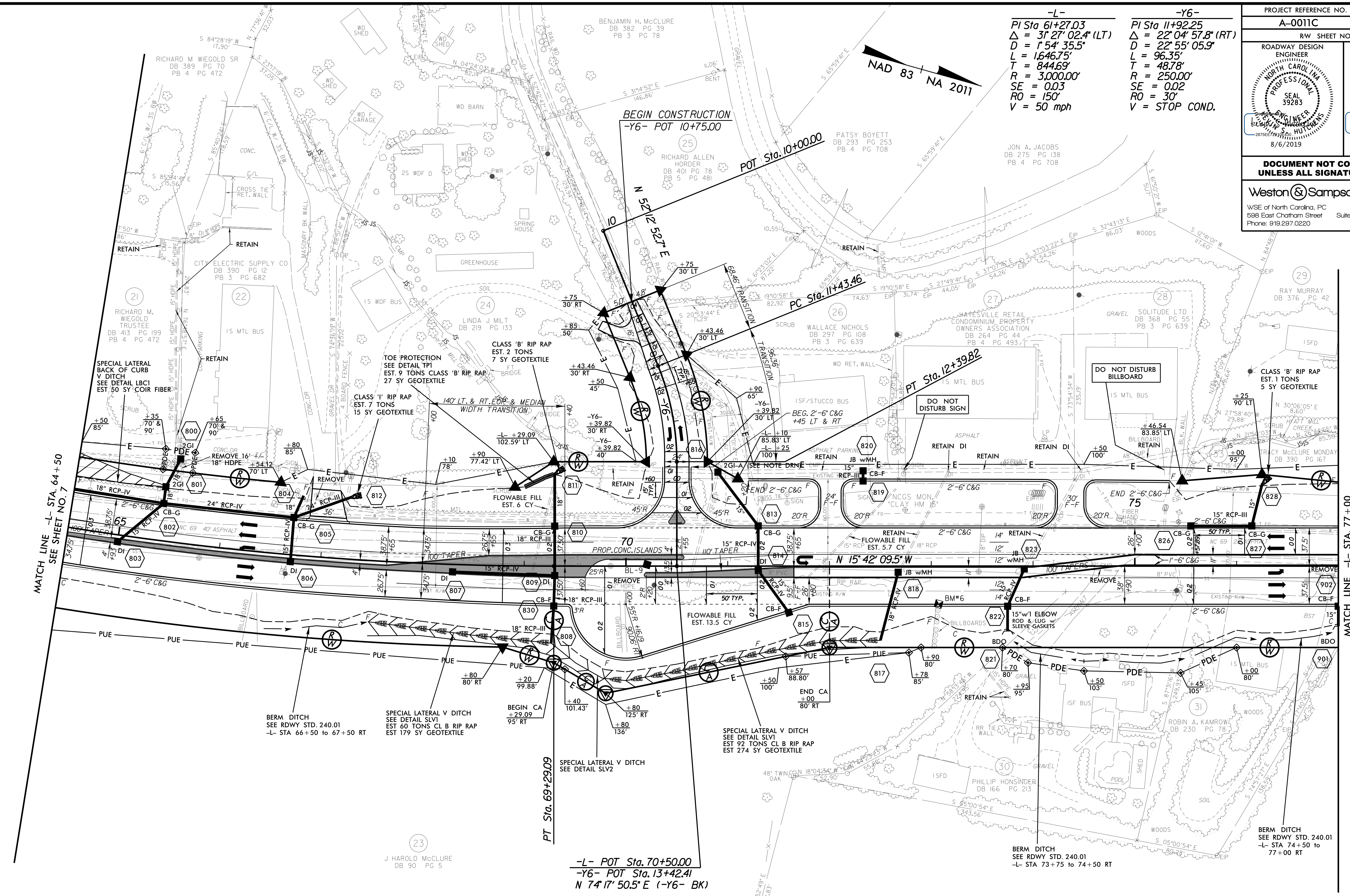
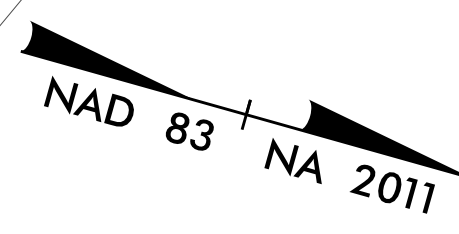
REVISIONS

8/5/2019
 SR 1140
 MYERS CHAPEL RD
 15222000.dgn

PROJECT REFERENCE NO. A-0011C	SHEET NO. 8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER WESTON SAMPSON SEAL 39283 8/6/2019	HYDRAULICS ENGINEER WESTON SAMPSON SEAL 40801 8/6/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Weston Sampson WSE of North Carolina, PC 598 East Chatham Street Suite 137 Phone: 919.297.0220	
NC License: C-4847 Cary, NC 27511 Fax: 919.297.0221	

-L-
 PI Sta 61+27.03
 $\Delta = 31' 27" 02.4" (LT)$
 $D = 1' 54' 35.5"$
 $L = 1,646.75'$
 $T = 844.69'$
 $R = 3,000.00'$
 $SE = 0.03$
 $VO = 150'$
 $V = 50 \text{ mph}$

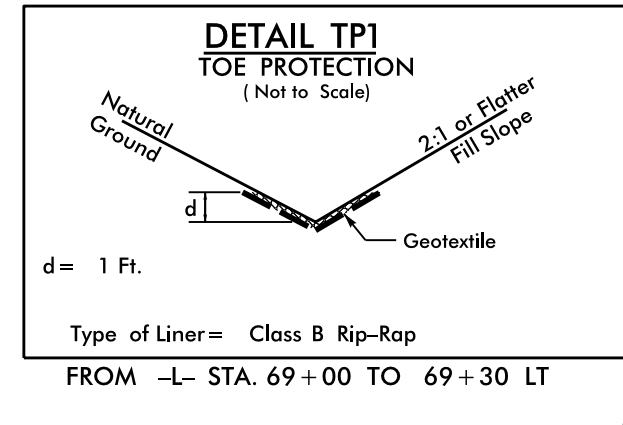
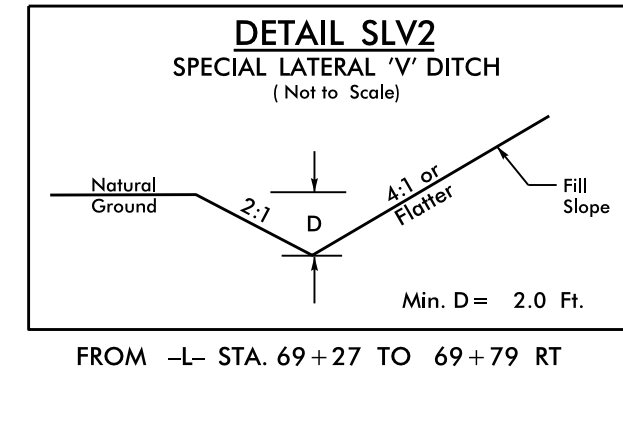
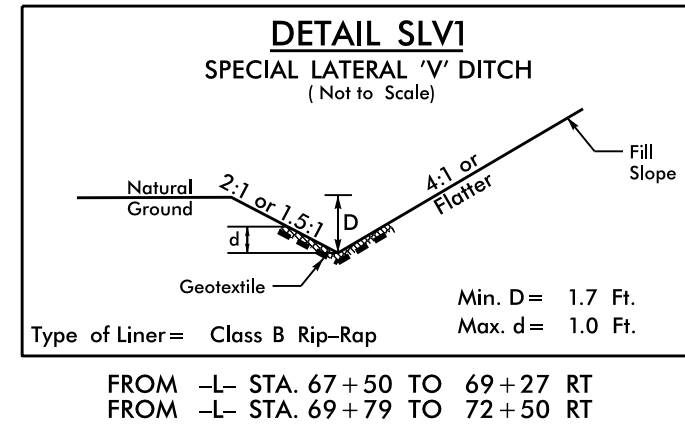
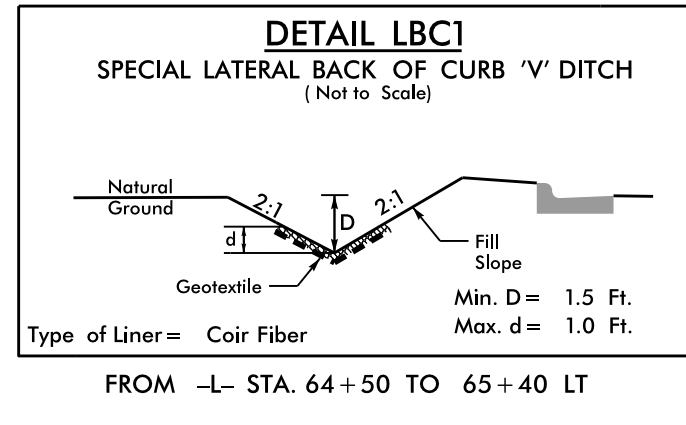
-Y6-
 PI Sta 11+92.25
 $\Delta = 22' 04' 57.8" (RT)$
 $D = 2' 55' 05.9"$
 $L = 96.35'$
 $T = 48.78'$
 $R = 250.00'$
 $SE = 0.02$
 $VO = 30'$
 $V = \text{STOP COND.}$



MATCH LINE -L- STA. 64+50
SEE SHEET NO. 7

MATCH LINE -L- STA. 77+00
SEE SHEET NO. 9

NOTE DRN
 EXISTING DRAINAGE STRUCTURES MAY BE RETAINED AT THE DIRECTION OF THE ENGINEER



SEE SHEET 24 FOR -L- PROFILE
 SEE SHEET 32 FOR -Y6- PROFILE
 SEE SHEET 2B-3 FOR -Y6- INTERSECTION DETAIL

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

REVISIONS

B:\5\2019\1522504\proj\A0011C_Rdw_psf08.dgn
 8/17/19

2020 ADT	340	-Y7-	-Y7- 1116
2040 ADT	550		MATHESON COVE RD
9,180	230	110	9,070
13,600	370	180	13,410
-L- NC 69			

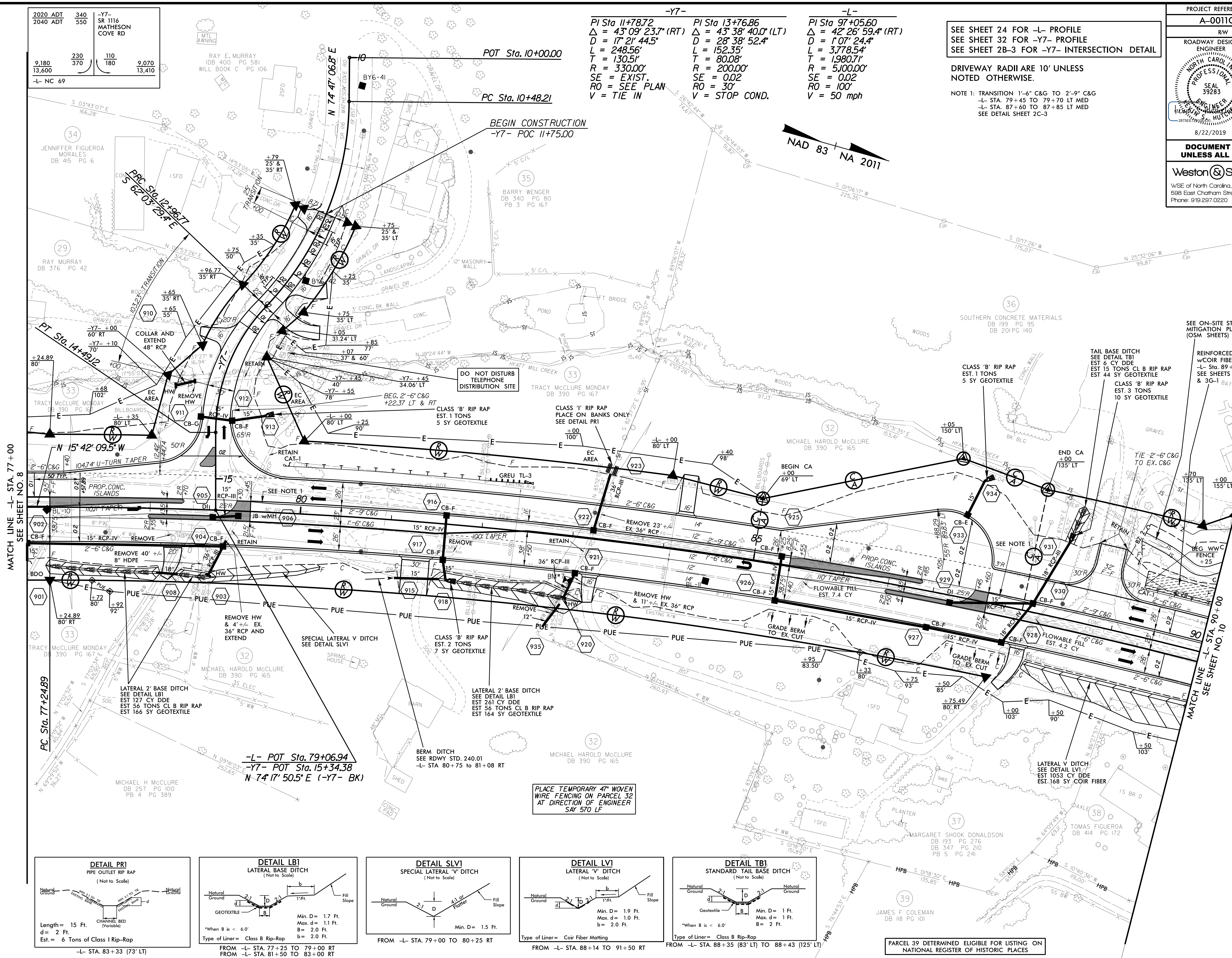
-Y7-	-L-
PI Sta 11+78.72	PI Sta 13+76.86
$\Delta = 43^{\circ} 09' 23.7" (RT)$	$\Delta = 43^{\circ} 38' 40.0" (LT)$
$D = 17^{\circ} 21' 44.5"$	$D = 28^{\circ} 38' 52.4"$
$L = 248.56'$	$L = 152.35'$
$T = 130.51'$	$T = 80.08'$
$R = 330.00'$	$R = 200.00'$
$SE = EXIST.$	$SE = 0.02$
$RO = SEE PLAN$	$RO = 30'$
$V = TIE IN$	$V = STOP COND.$

SEE SHEET 24 FOR -L- PROFILE
 SEE SHEET 32 FOR -Y7- PROFILE
 SEE SHEET 2B-3 FOR -Y7- INTERSECTION DETAIL

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

NOTE 1: TRANSITION 1'-6" C&G TO 2'-9" C&G
 -L- STA. 79+45 TO 79+70 LT MED
 -L- STA. 87+60 TO 87+85 LT MED
 SEE DETAIL SHEET 2C-3

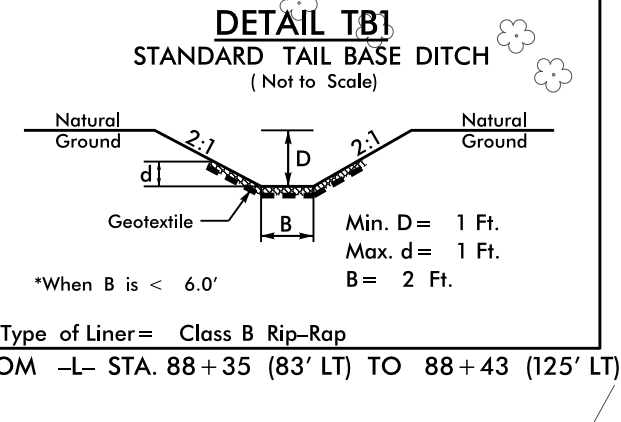
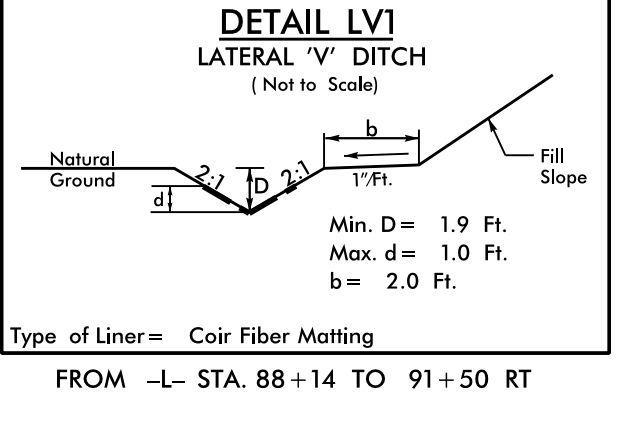
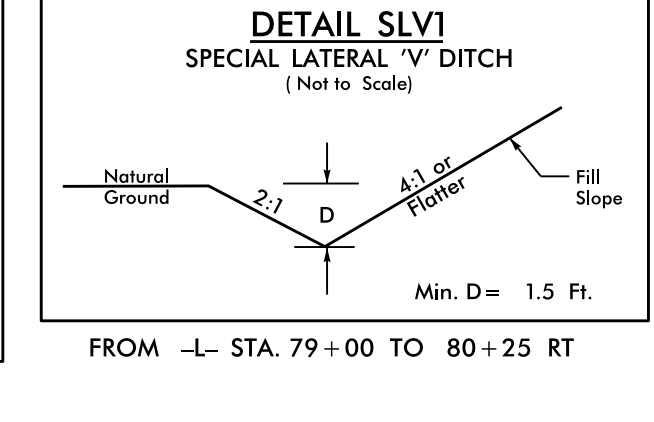
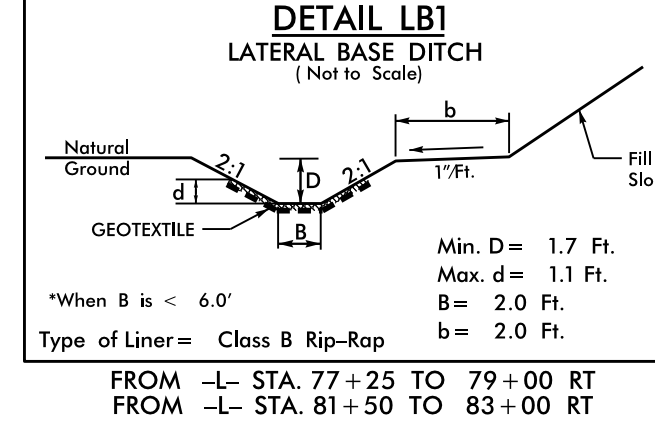
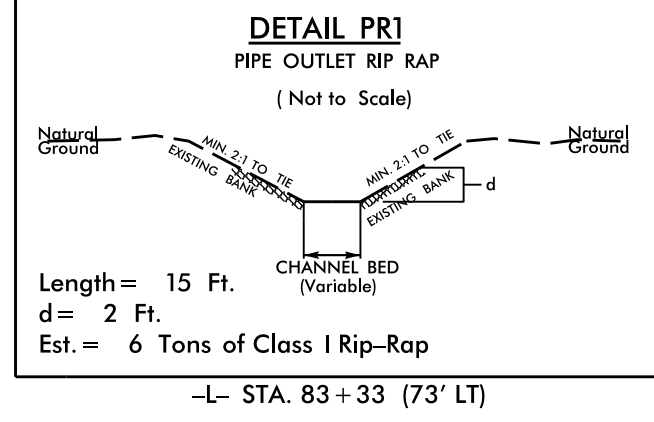
PROJECT REFERENCE NO. A-0011C	SHEET NO. 9
ROADWAY DESIGN ENGINEER WESTON & SAMPSON	HYDRAULICS ENGINEER WESTON & SAMPSON
SEAL 39283 8/22/2019	SEAL 40801 8/22/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Weston & Sampson WSE of North Carolina, PC 598 East Chatham Street Phone: 919.297.0220	NC License: C-4847 Cary, NC 27511 Fax: 919.297.0221



REVISIONS

MATCH LINE -L- STA. 77+00 SEE SHEET NO. 8

MATCH LINE -L- STA. 90+00 SEE SHEET NO. 10



PARCEL 39 DETERMINED ELIGIBLE FOR LISTING ON NATIONAL REGISTER OF HISTORIC PLACES

8/20/2019 P:\Projects\A0011C_Rd\A0011C_Rd.dwg

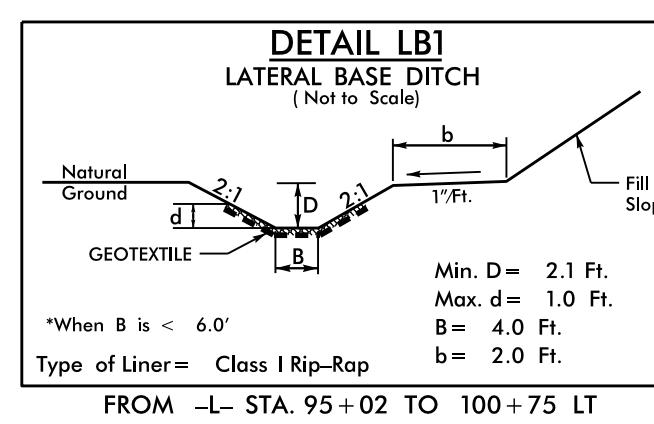
Weston & Sampson
 WSE of North Carolina, PC
 588 East Chatham Street, Suite 137
 Phone: 919.287.0220

NC License: C-4847
 Conj. NC: 27611
 Fax: 919.287.0221

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

PROJECT REFERENCE NO. A-0011C	SHEET NO. 10
ROADWAY DESIGN ENGINEER SEAL 39283 8/22/2019	HYDRAULICS ENGINEER SEAL 40801 8/22/2019

-L-	-Y8-
PI Sta 97+05.60	PI Sta 11+09.42
$\Delta = 42' 26" 59.4" (RT)$	$\Delta = 16' 40" 10.3" (LT)$
$D = 1' 07" 24.4"$	$D = 9' 05" 40.4"$
$L = 3,778.54'$	$L = 183.29'$
$T = 1,980.71'$	$T = 92.30'$
$R = 5,100.00'$	$R = 630.00'$
$SE = EX.$	$SE = EX.$
$RO = 100'$	$RO = N/A$
$V = 40 \text{ mph}$	$V = 40 \text{ mph}$



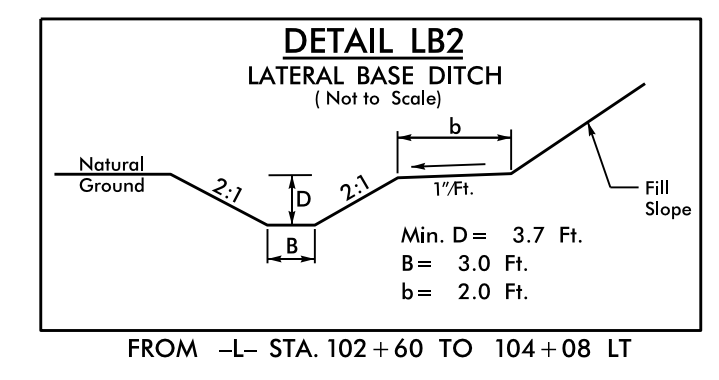
2020 ADT	670	-Y8-	SR 1116
2040 ADT	1,010		MATHESON COVE RD
9,070	110	560	9,510
13,410	180	830	14,060

-L- NC 69

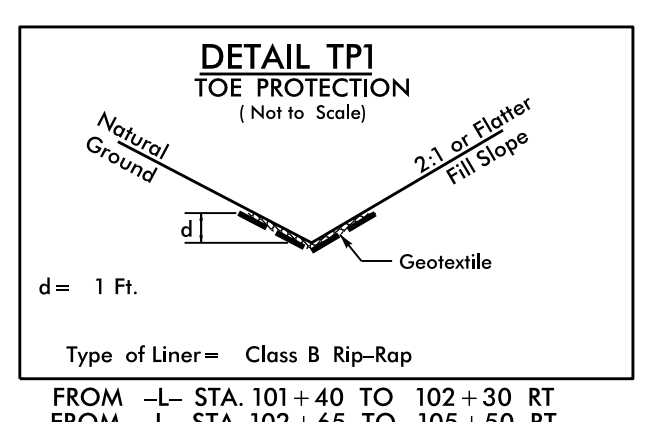
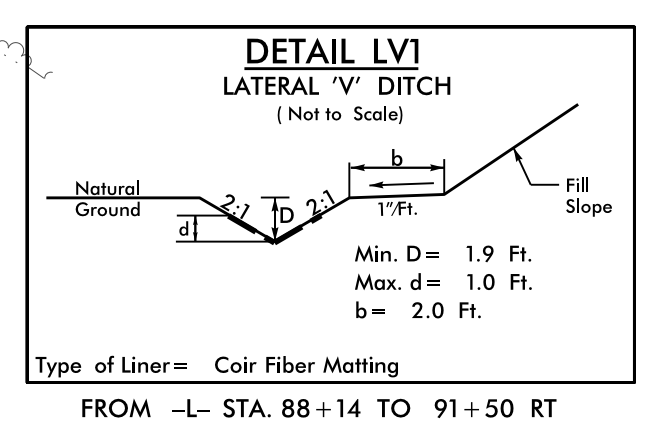
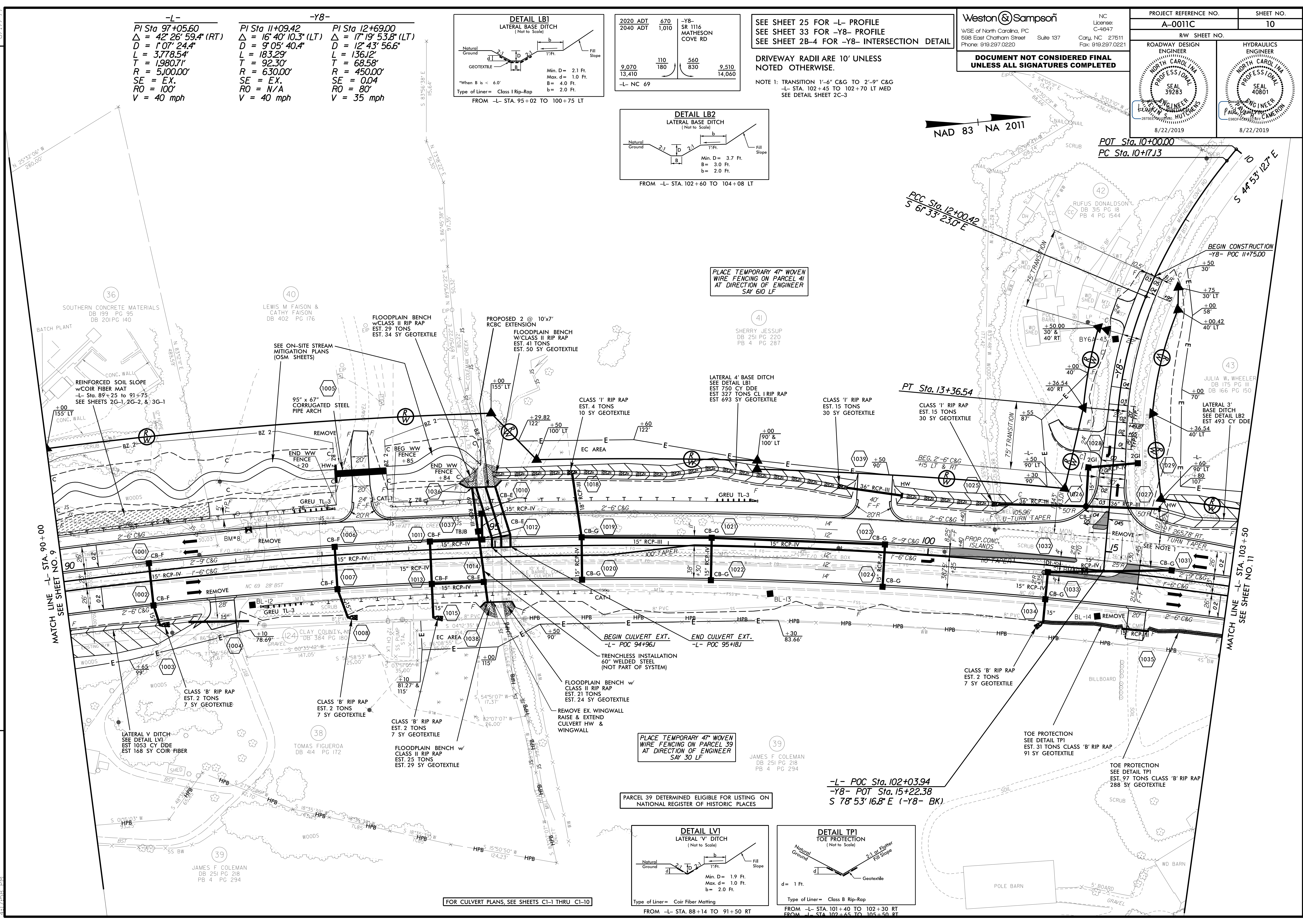
SEE SHEET 25 FOR -L- PROFILE
 SEE SHEET 33 FOR -Y8- PROFILE
 SEE SHEET 2B-4 FOR -Y8- INTERSECTION DETAIL

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

NOTE 1: TRANSITION 1'-6" C&G TO 2'-9" C&G
 -L- STA. 102+45 TO 102+70 LT MED
 SEE DETAIL SHEET 2C-3



NAD 83 NA 2011



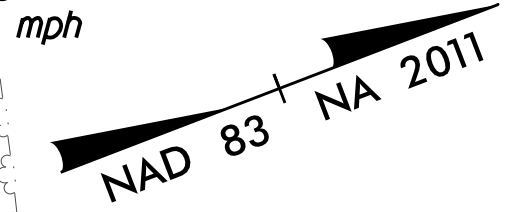
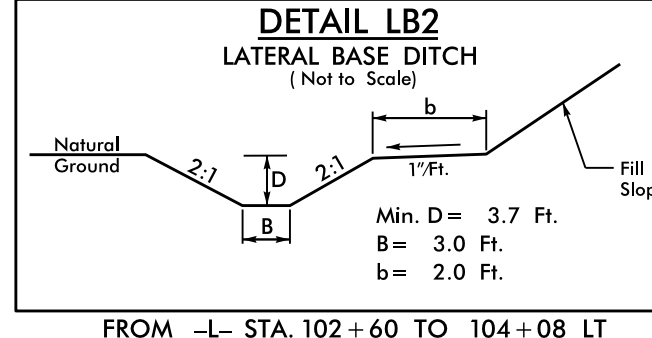
8/20/2019
 P:\Projects\2019\A0011C_Rd\psh10.dgn
 4:17:58 PM

PROJECT REFERENCE NO. A-0011C	SHEET NO. 11
ROADWAY DESIGN ENGINEER WESTON SAMPSON	HYDRAULICS ENGINEER WESTON SAMPSON
SEAL 39283	SEAL 40801
8/6/2019	8/6/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Weston Sampson
 NC License: C-4847
 WSE of North Carolina, PC
 598 East Chatham Street Suite 137 Cary, NC 27511
 Phone: 919.297.0220 Fax: 919.297.0221

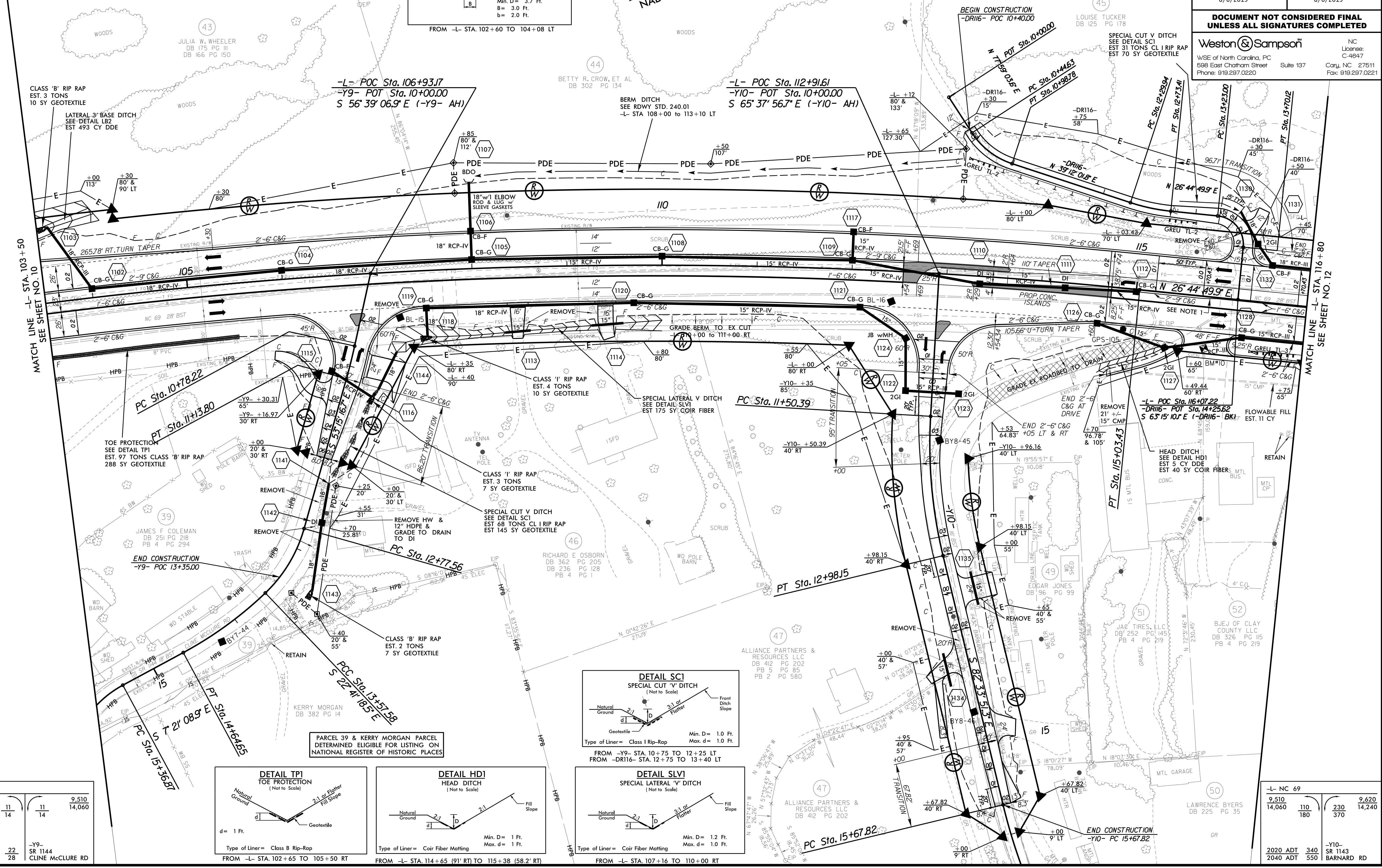
-L-	-Y9-	-Y10-	-DR116-
PI Sta 97+05.60 Δ = 42° 26' 59.4" (RT) D = 1' 07" 24.4" L = 3778.54' T = 1980.71' R = 5100.00' SE = 0.02 RO = 100' V = 50 mph	PI Sta 10+96.01 Δ = 3° 23' 50.2" (RT) D = 9' 32' 57.5" L = 35.58' T = 17.79' R = 600.00' SE = 0.02 RO = N/A V = STOP COND.	PI Sta 13+18.55 Δ = 30° 33' 58.2" (RT) D = 38' 11" 49.9" L = 80.02' T = 40.99' R = 150.00'	PI Sta 14+11.44 Δ = 15° 20' 09.6" (RT) D = 14' 19' 26.2" L = 107.07' T = 53.85' R = 400.00'
PI Sta 15+87.95 Δ = 49° 49' 04.7" (LT) D = 52' 05" 13.5" L = 95.64' T = 51.08' R = 110.00'	PI Sta 12+24.81 Δ = 16° 55' 54.6" (LT) D = 11' 27' 33.0" L = 147.76' T = 74.42' R = 500.00' SE = 0.03 RO = 60' V = 25 mph	PI Sta 16+17.26 Δ = 9° 25' 21.3" (LT) D = 9' 32' 57.5" L = 98.67' T = 49.45' R = 600.00'	PI Sta 10+72.79 Δ = 38° 47' 01.9" (LT) D = 71' 37' 11.0" L = 54.51' T = 28.16' R = 80.00'
PI Sta 12+51.76 Δ = 12° 27' 11.8" (LT) D = 28' 38' 52.4" L = 43.47' T = 21.82' R = 200.00'	PI Sta 13+53.00 Δ = 90° 00' 00.0" (RT) D = 190' 59' 09.4" L = 47.12' T = 30.00' R = 30.00'		



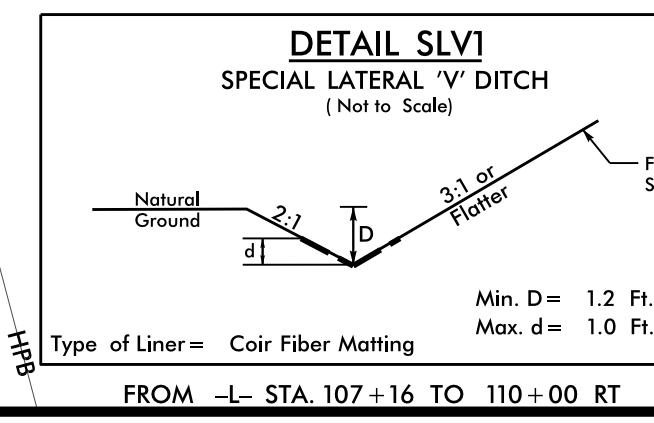
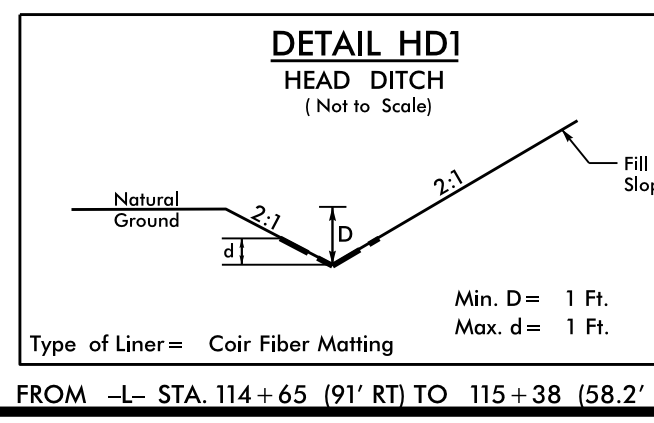
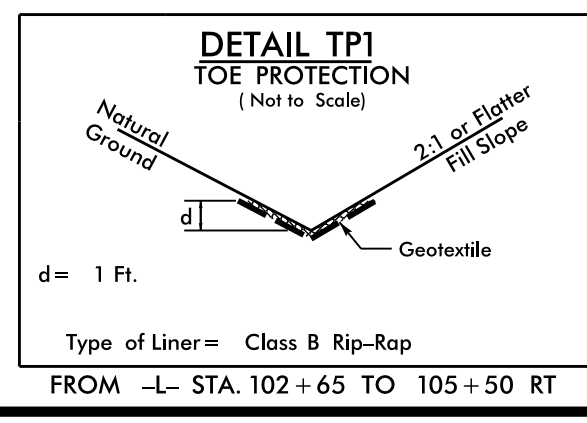
SEE SHEET 25 FOR -L- PROFILE
 SEE SHEET 33 FOR -Y9- & -Y10- PROFILES
 SEE SHEET 38 FOR -DR116- PROFILE
 SEE SHEET 2B-4 FOR -Y9-, -Y10-, & -DR116- INTERSECTION DETAILS

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

NOTE 1: TRANSITION 1'-6" C&G TO 2'-9" C&G
 -L- STA. 115+85.43 TO 115+70.43 RT MED
 SEE DETAIL SHEET 2C-3



-L- NC 69	9,510	11	9,510
	14,060	14	14,060
2020 ADT	22	-Y9-	
2040 ADT	28	SR 1144	
		CLINE McCLURE RD	



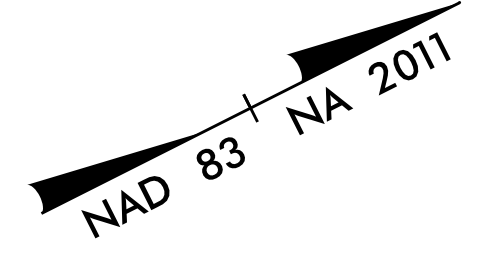
-L- NC 69	9,510	110	9,620
	14,060	180	14,240
2020 ADT	340	-Y10-	
2040 ADT	550	SR 1143	
		BARNARD RD	

REVISIONS

8/5/2019
 C:\Users\jveron\OneDrive\AutoCAD\Projects\A0011C_Rd\psh11.dgn
 15:22:19

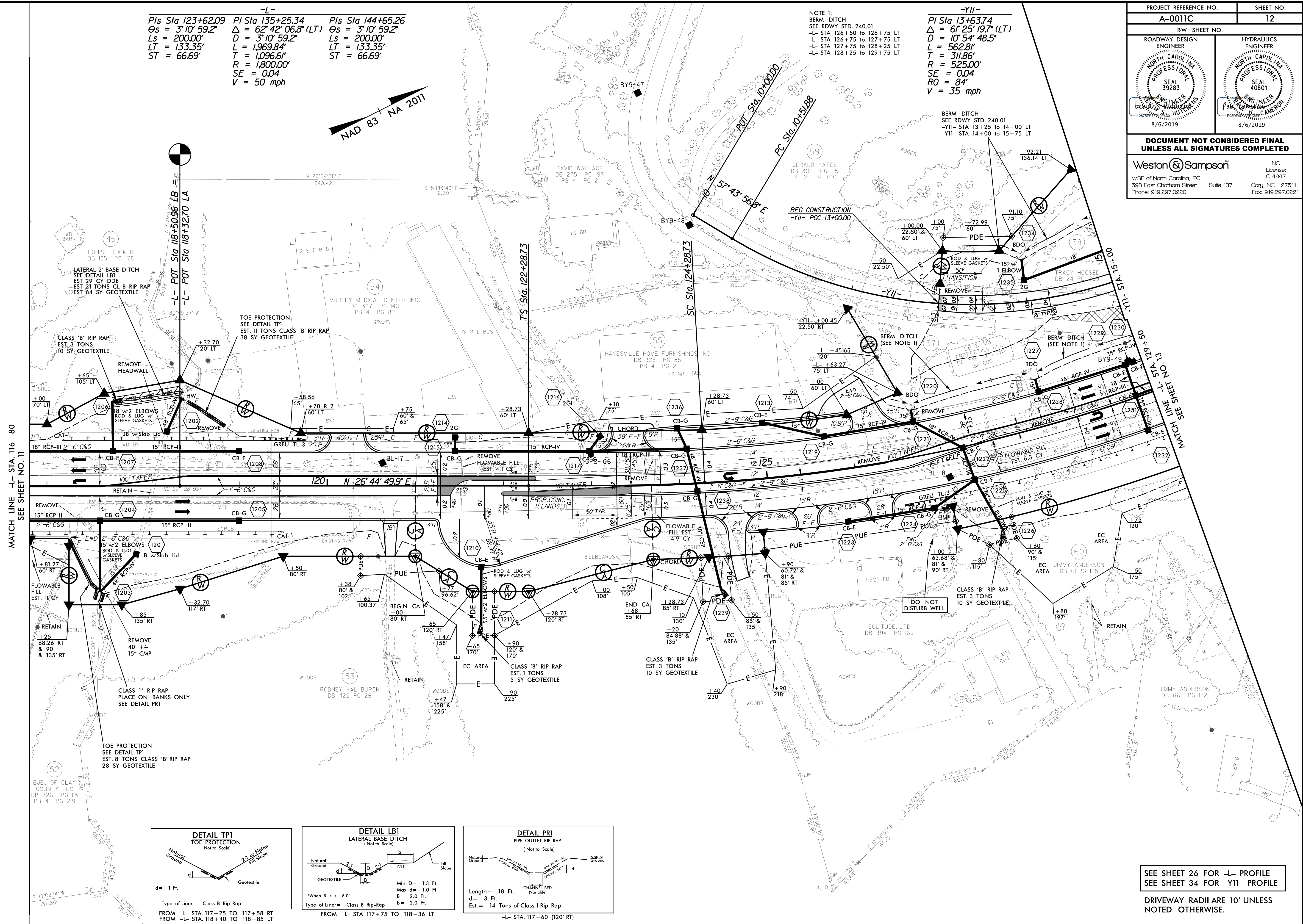
PROJECT REFERENCE NO.	SHEET NO.
A-0011C	12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Weston Sampson	
WSE of North Carolina, PC 598 East Chatham Street Phone: 919.297.0220	NC License: C-4847 Cary, NC 27511 Fax: 919.297.0211

-L-		
Pls Sta 123+62.09 $\Delta s = 3' 10'' 59.2''$ $Ls = 200.00'$ $LT = 133.35'$ $ST = 66.69'$	PI Sta 135+25.34 $\Delta = 62' 42'' 06.8''$ (LT) $D = 3' 10'' 59.2''$ $L = 1,969.84'$ $T = 1,096.61'$ $R = 1,800.00'$ $SE = 0.04$ $V = 50$ mph	Pls Sta 144+65.26 $\Delta s = 3' 10'' 59.2''$ $Ls = 200.00'$ $LT = 133.35'$ $ST = 66.69'$



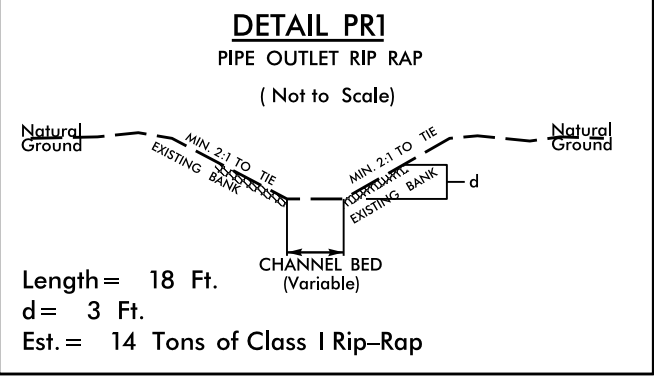
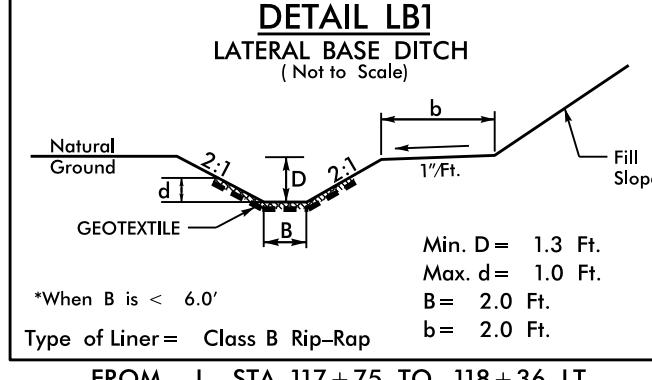
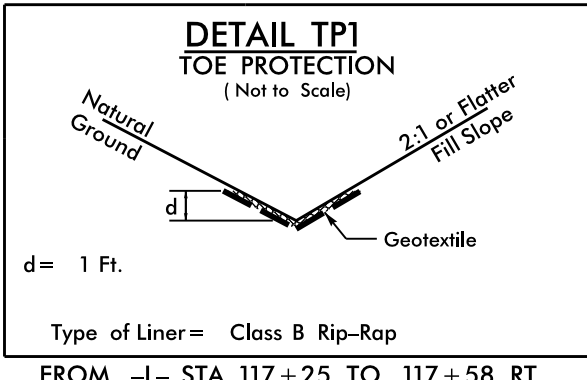
NOTE 1:
BERM DITCH
SEE RDWY STD. 240.01
-L- STA 126 + 50 TO 126 + 75 LT
-L- STA 126 + 75 TO 127 + 75 LT
-L- STA 127 + 75 TO 128 + 25 LT
-L- STA 128 + 25 TO 129 + 75 LT

-YII-	
PI Sta 13+63.74	$\Delta = 61' 25'' 19.7''$ (LT)
$D = 10' 54'' 48.5''$	$L = 562.81'$
$T = 311.86'$	$R = 525.00'$
$SE = 0.04$	$RO = 84'$
$V = 35$ mph	



MATCH LINE -L- STA. 116 + 80
SEE SHEET NO. 11

MATCH LINE SEE SHEET NO. 13
STA. 118 + 35



SEE SHEET 26 FOR -L- PROFILE
SEE SHEET 34 FOR -YII- PROFILE

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

REVISIONS

B:\5\2019\05\15\00111C_Rdwy_psh12.dgn
15:22:16 PM

PROJECT REFERENCE NO. A-0011C	SHEET NO. 13
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	SEAL 39283
PROFESSIONAL SEAL	PROFESSIONAL SEAL 40801
8/6/2019	8/6/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Weston Sampson	NC License: C-4847
WSE of North Carolina, PC 598 East Chatham Street Phone: 919.297.0220	Suite 137 Cary, NC 27511 Fax: 919.297.0221

2020 ADT	110	-Y11- SR 1119 ROSS RD
2040 ADT	180	
9,620	30	110
14,240	40	180
-L- NC 69		

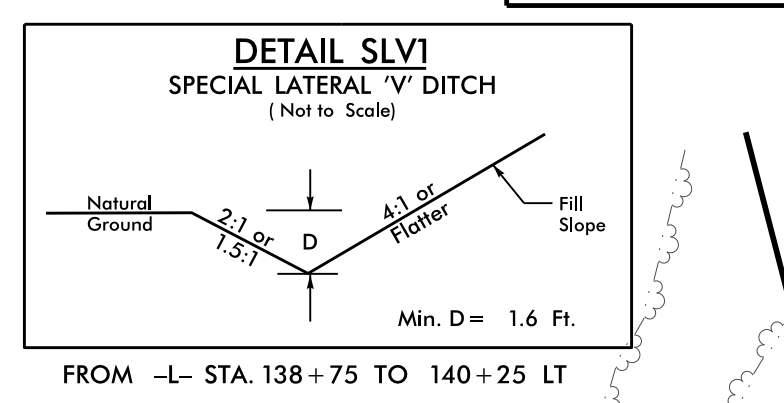
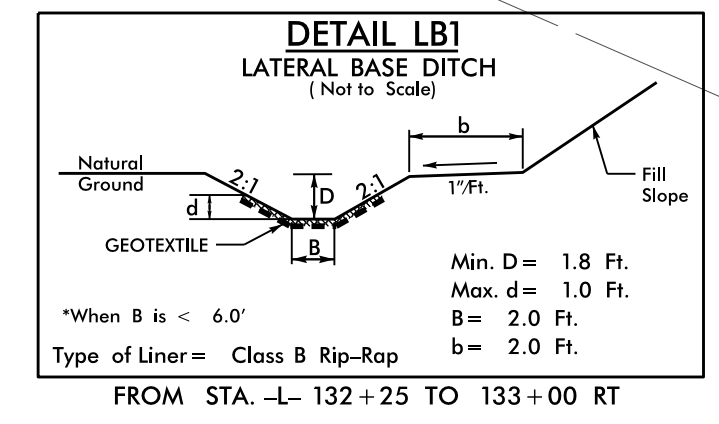
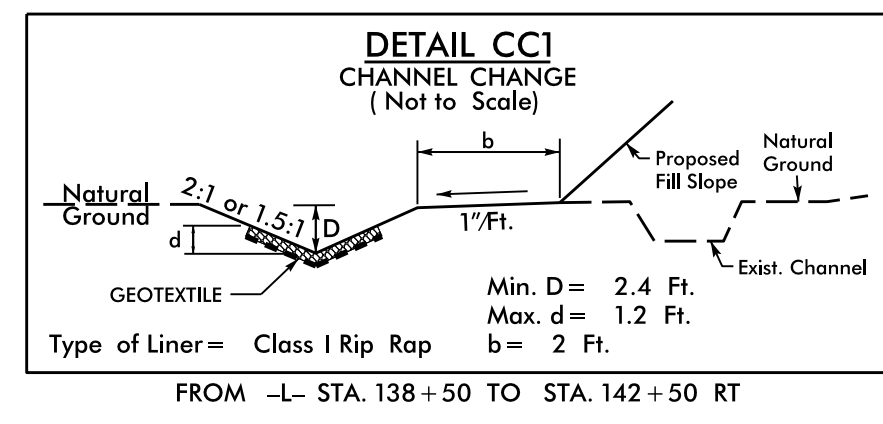
2020 ADT	340	-Y12- SR 1141 SWAIMS RD
2040 ADT	550	
9,740	110	230
14,430	180	370
-L- NC 69		

-Y11-
 PI Sta 13+63.74 Δ = 61°25'19.7" (LT) D = 10°54'48.5" L = 562.81' T = 311.86' R = 525.00' SE = 0.04 RO = 84' V = 35 mph
 PI Sta 18+97.89 Δ = 86°58'26.4" (RT) D = 71°37'11.0" L = 121.44' T = 75.88' R = 800.00' SE = 0.04 RO = 60' V = STOP COND.

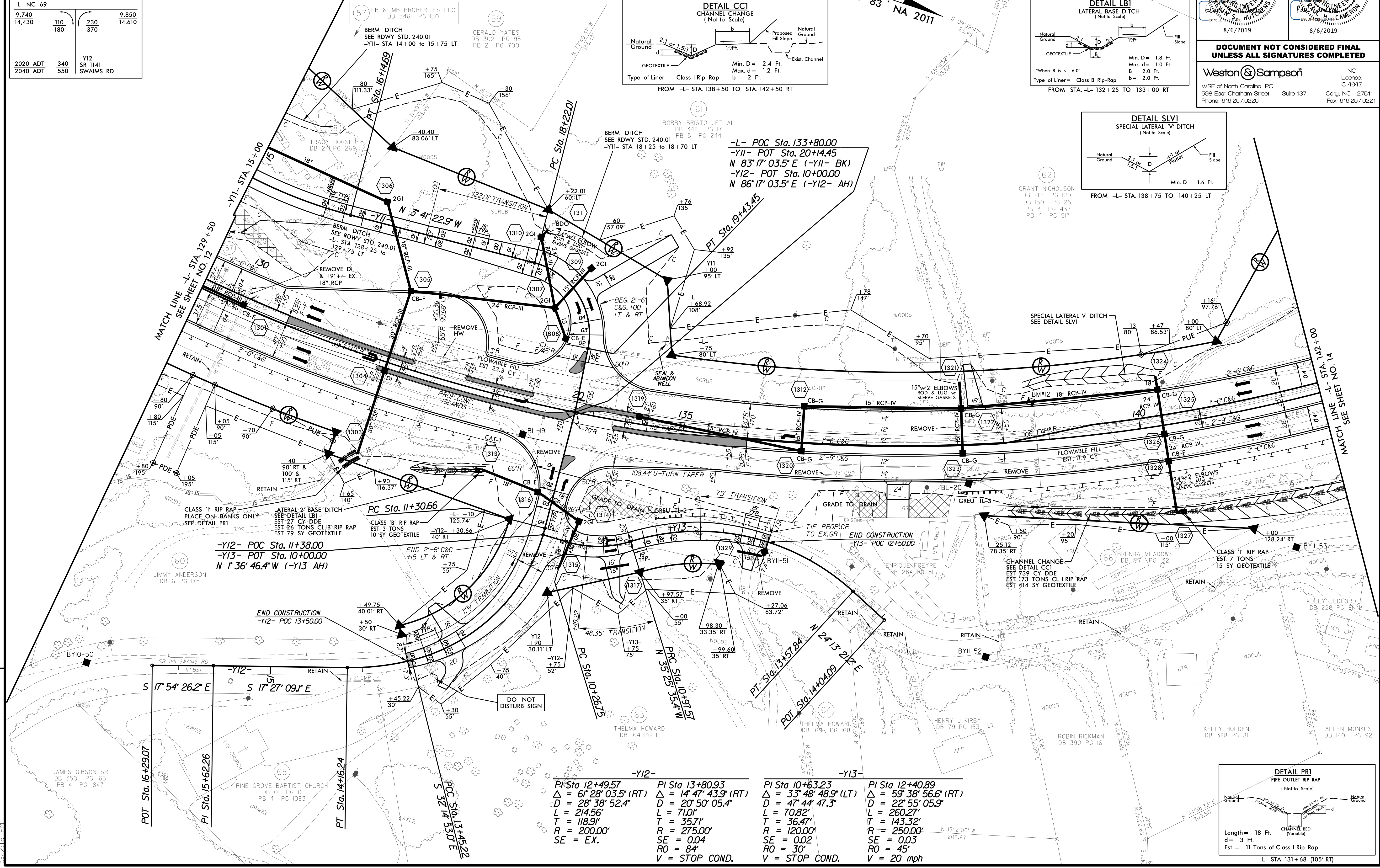
-L-
 PIs Sta 123+62.09 Δs = 3°10'59.2" Ls = 200.00' LT = 133.35' ST = 66.69'
 PI Sta 135+25.34 Δ = 62°42'06.8" (LT) D = 3°10'59.2" L = 1,969.84' T = 1,096.61' R = 1,800.00' SE = 0.04 V = 50 mph
 PIs Sta 144+65.26 Δs = 3°10'59.2" Ls = 200.00' LT = 133.35' ST = 66.69'

SEE SHEET 26 FOR -L- PROFILE
 SEE SHEET 34 FOR -Y11-, -Y12-, & -Y13- PROFILES
 SEE SHEET 2B-4 FOR -Y11-, -Y12- & -Y13- INTERSECTION DETAILS

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

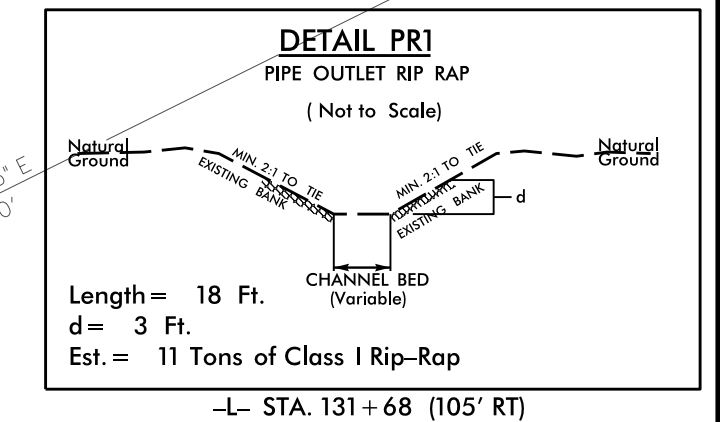


-L- POC Sta. 133+80.00
-Y11- POT Sta. 20+14.45
N 83°17'03.5" E (-Y11- BK)
-Y12- POT Sta. 10+00.00
N 86°17'03.5" E (-Y12- AH)



-Y12-
 PI Sta 12+49.57 Δ = 61°28'03.5" (RT) D = 28°38'52.4" L = 214.56' T = 118.91' R = 200.00' SE = EX.
 PI Sta 13+80.93 Δ = 14°47'43.9" (RT) D = 20°50'05.4" L = 71.01' T = 35.71' R = 275.00' SE = 0.04 RO = 84' V = STOP COND.

-Y13-
 PI Sta 10+63.23 Δ = 33°48'48.9" (LT) D = 47°44'47.3" L = 70.82' T = 36.47' R = 120.00' SE = 0.02 RO = 30' V = STOP COND.
 PI Sta 12+40.89 Δ = 59°38'56.6" (RT) D = 22°55'05.9" L = 260.27' T = 143.32' R = 250.00' SE = 0.03 RO = 45' V = 20 mph



8/5/2019
 P:\2019\A0011C_Rd\psh13.dgn
 15:22:18

PROJECT REFERENCE NO. A-0011C		SHEET NO. 14	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>			
Weston & Sampson		NC License: C-4847	
WSE of North Carolina, PC 598 East Chatham Street, Suite 137 Phone: 919.297.0220		Cary, NC 27511 Fax: 919.297.0221	

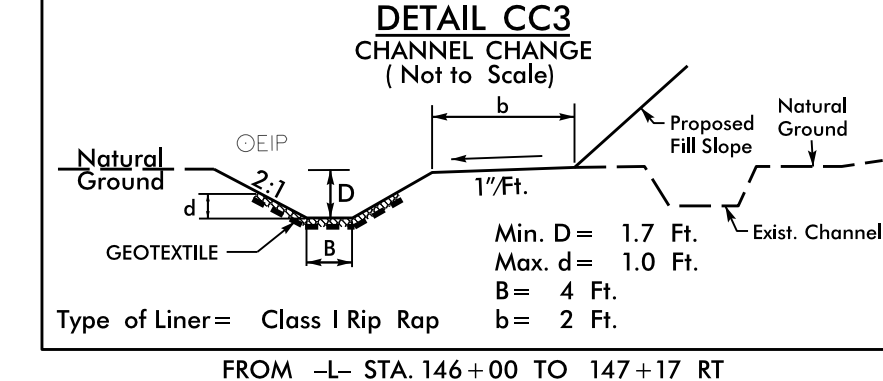
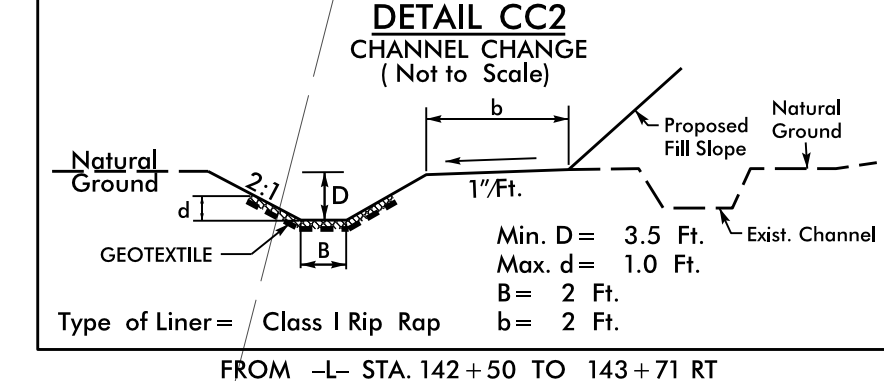
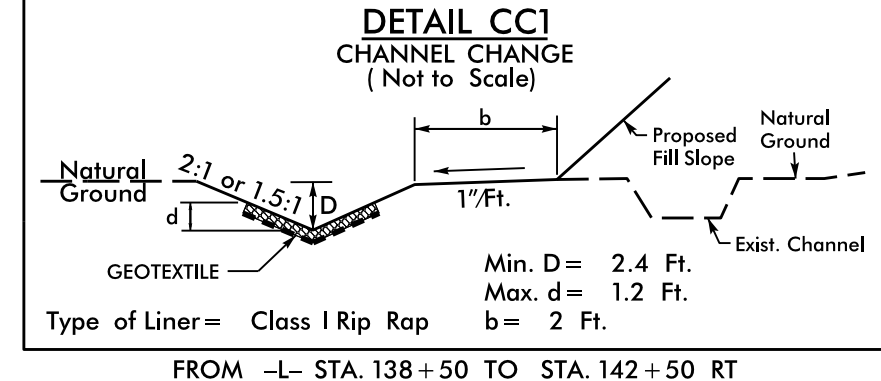
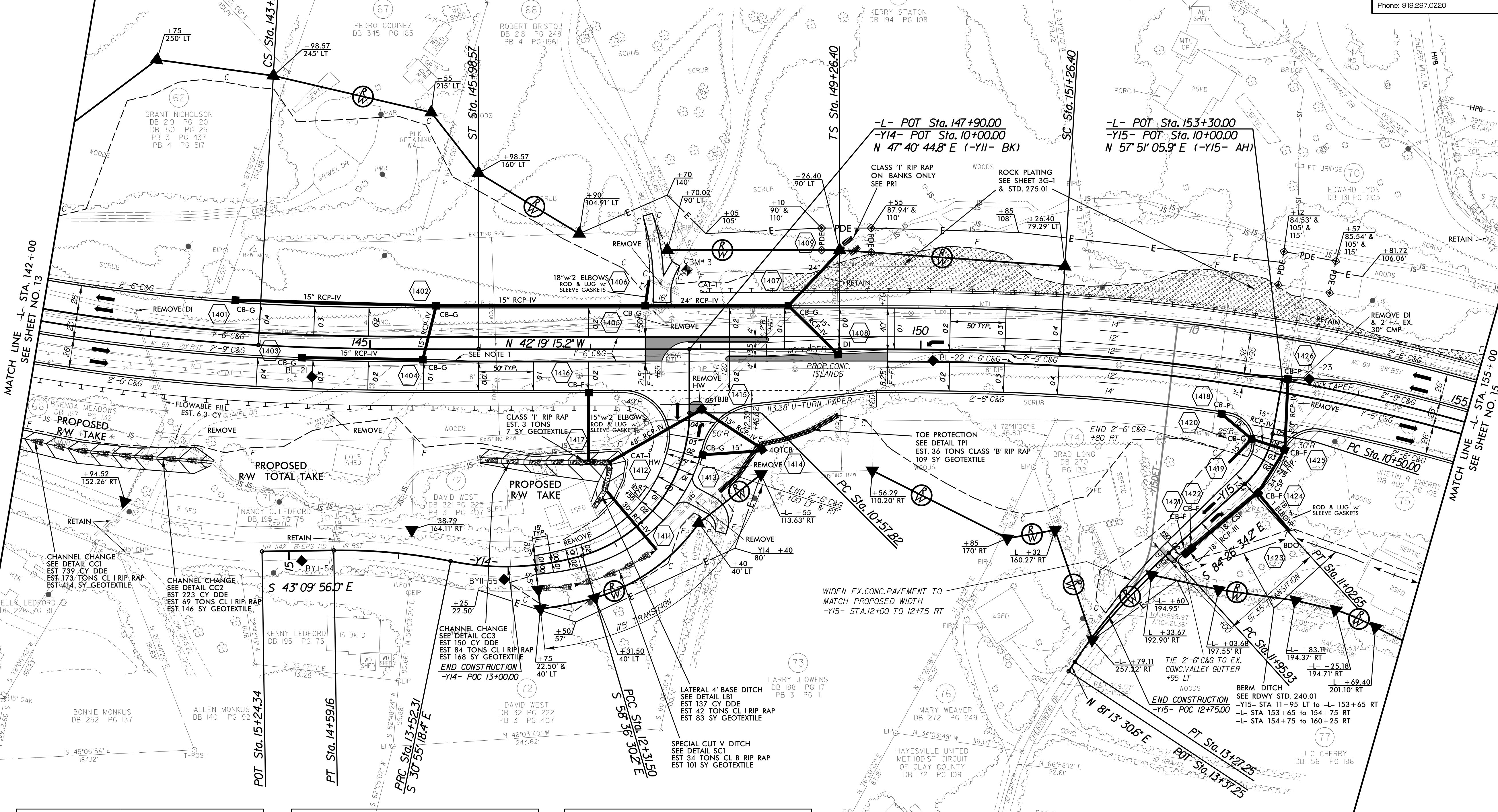
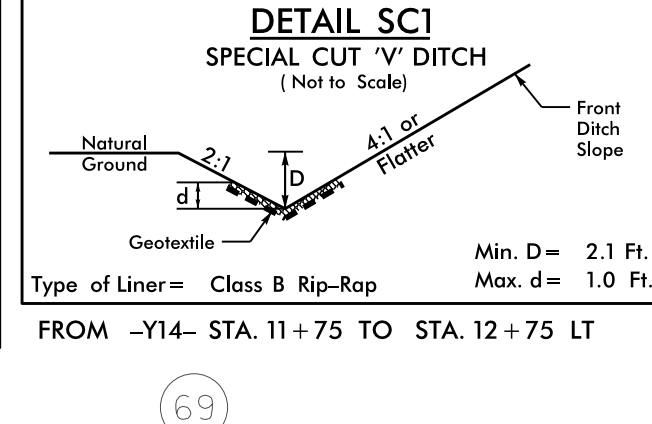
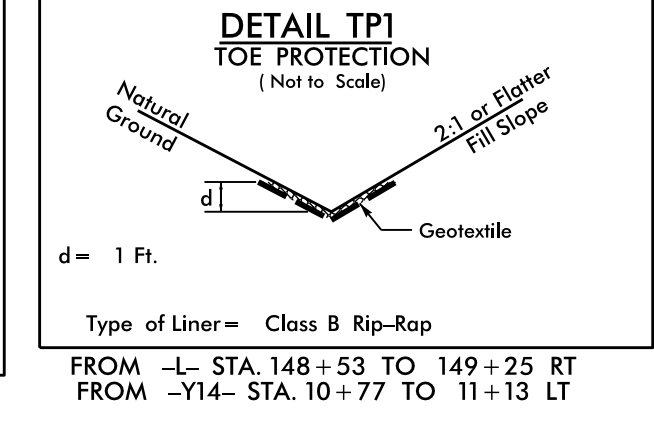
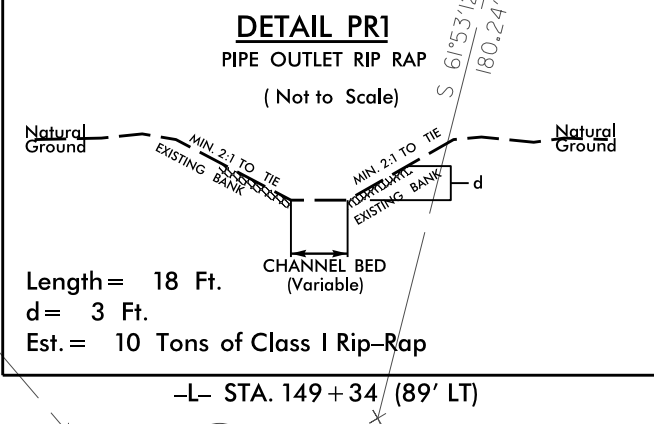
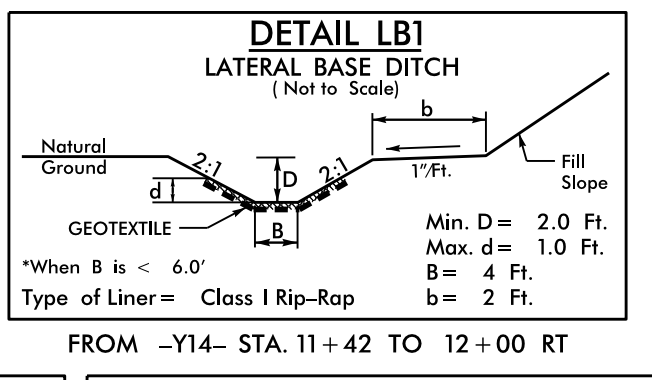
SEE SHEET 27 FOR -L- PROFILE
SEE SHEET 35 FOR -Y14- & -Y15- PROFILES
SEE SHEET 2B-5 FOR -Y14- & -Y15- INTERSECTION DETAILS

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

NOTE 1: TRANSITION 1'-6" C&G TO 2'-9" C&G
-L- STA. 145+65 TO 145+90 RT MED
SEE DETAIL SHEET 2C-3

-L-
 Pls Sta 123+62.09 $\Delta = 3^{\circ}10'59.2"$ $Ls = 200.00'$ $LT = 133.35'$ $ST = 66.69'$
 Pls Sta 135+25.34 $\Delta = 62^{\circ}42'06.8"$ (LT) $D = 3^{\circ}10'59.2"$ $L = 1,969.84'$ $T = 1,096.61'$ $R = 1,800.00'$ $SE = 0.04$ $V = 50$ mph
 Pls Sta 144+65.26 $\Delta = 3^{\circ}10'59.2"$ $Ls = 200.00'$ $LT = 133.35'$ $ST = 66.69'$
 Pls Sta 150+59.76 $\Delta = 3^{\circ}21'02.3"$ $Ls = 200.00'$ $LT = 133.36'$ $ST = 66.69'$
 Pls Sta 163+28.63 $\Delta = 70^{\circ}13'07.7"$ (RT) $D = 3^{\circ}21'02.3"$ $L = 2,095.69'$ $T = 1,202.23'$ $R = 1,710.00'$ $SE = 0.04$ $V = 50$ mph
 Pls Sta 172+88.78 $\Delta = 3^{\circ}21'02.3"$ $Ls = 200.00'$ $LT = 133.36'$ $ST = 66.69'$

-Y14-
 PI Sta 11+59.02 $\Delta = 73^{\circ}42'45.0"$ (RT) $D = 42^{\circ}26'28.7"$ $L = 173.68'$ $T = 101.20'$ $R = 135.00'$ $SE = 0.02$ $RO = 30'$ $V = STOP$ COND.
 PI Sta 12+93.11 $\Delta = 27^{\circ}41'11.8"$ (RT) $D = 22^{\circ}55'05.9"$ $L = 120.81'$ $T = 61.61'$ $R = 250.00'$ $SE = EX.$
 PI Sta 14+05.94 $\Delta = 12^{\circ}14'37.6"$ (LT) $D = 11^{\circ}27'33.0"$ $L = 106.85'$ $T = 53.63'$ $R = 500.00'$



-Y15-
 PI Sta 10+77.32 $\Delta = 3^{\circ}42'19.9"$ (RT) $D = 71^{\circ}37'11.0"$ $L = 52.65'$ $T = 27.32'$ $R = 80.00'$ $SE = N/A$
 PI Sta 12+61.94 $\Delta = 14^{\circ}19'55.2"$ (LT) $D = 10^{\circ}54'48.5"$ $L = 131.32'$ $T = 66.01'$ $R = 525.00'$

-L- NC 69		9,970	
9,850	14,610	10	14,790
		20	160
2020 ADT	110	-Y14-	
2040 ADT	180	SR 1142	
		BYERS RD	

REVISIONS

8/17/19

8/5/2019
C:\Users\jveron\OneDrive\Documents\A0011C_Rd\psh14.dgn
15:22:51

PROJECT REFERENCE NO. A-0011C	SHEET NO. 15
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 39283 8/6/2019	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 40801 8/6/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Weston & Sampson
WSE of North Carolina, PC
598 East Chatham Street Suite 137
Phone: 919.297.0220

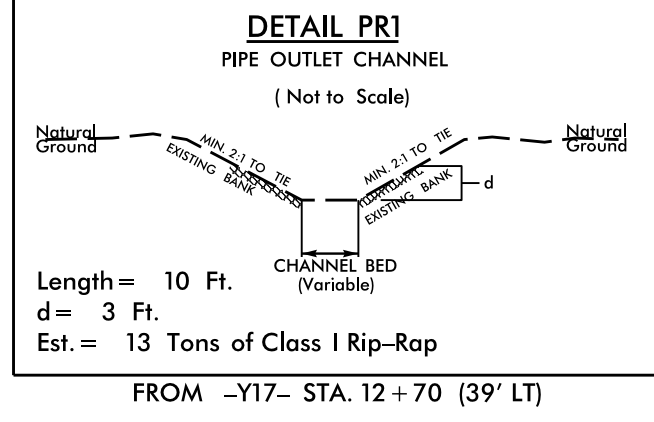
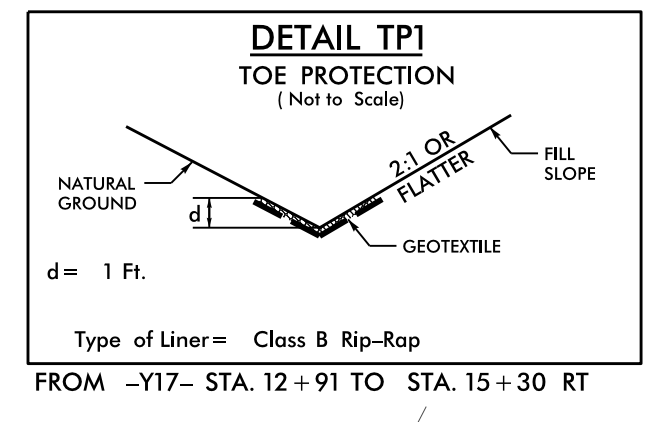
NC License: C-4847
Cary, NC 27511
Fax: 919.297.0221

-Y16-		-L-	
PI Sta 10+56.66 Δ = 8° 49' 08.7" (LT) D = 9' 14" 28.5" L = 95.43' T = 47.81' R = 620.00' SE = EX. RO = 30'	PI Sta 11+43.01 Δ = 14° 42' 42.4" (LT) D = 19' 05" 54.9" L = 77.03' T = 38.73' R = 300.00' SE = 0.02 RO = 30'	PIs Sta 150+59.76 Os = 3' 21" 02.3" Ls = 200.00' LT = 133.36' ST = 66.69'	PIs Sta 163+28.63 Δ = 70° 13' 07.7" (RT) Ds = 3' 21" 02.3" Ls = 200.00' LT = 133.36' ST = 66.69'

-Y17-	
PI Sta 12+22.63 Δ = 38° 32' 15.0" (LT) D = 15' 04" 40.2" L = 255.59' T = 132.84' R = 380.00' SE = 0.04 RO = 84' V = 35 mph	PI Sta 15+13.18 Δ = 44° 40' 46.6" (RT) D = 38' 11" 49.9" L = 116.97' T = 61.64' R = 150.00' SE = 0.02 RO = 42' V = STOP COND.

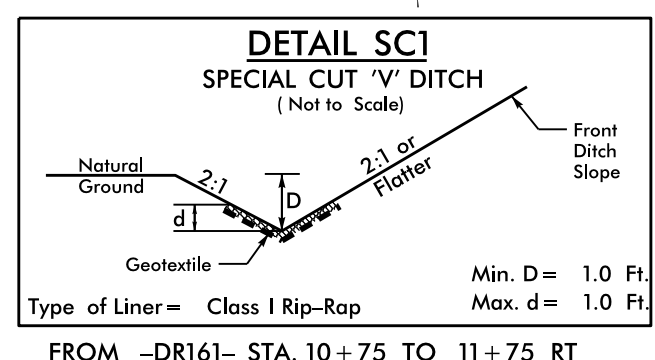
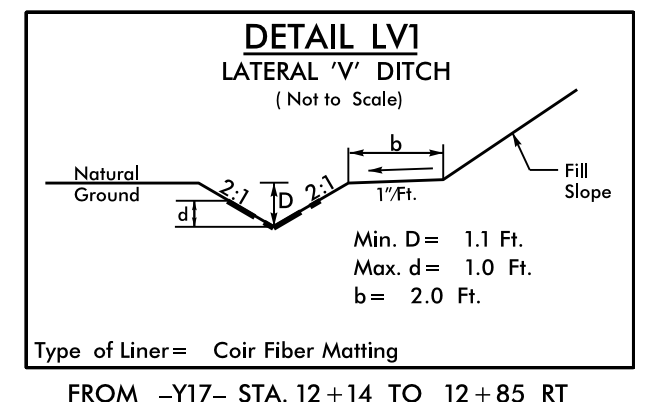
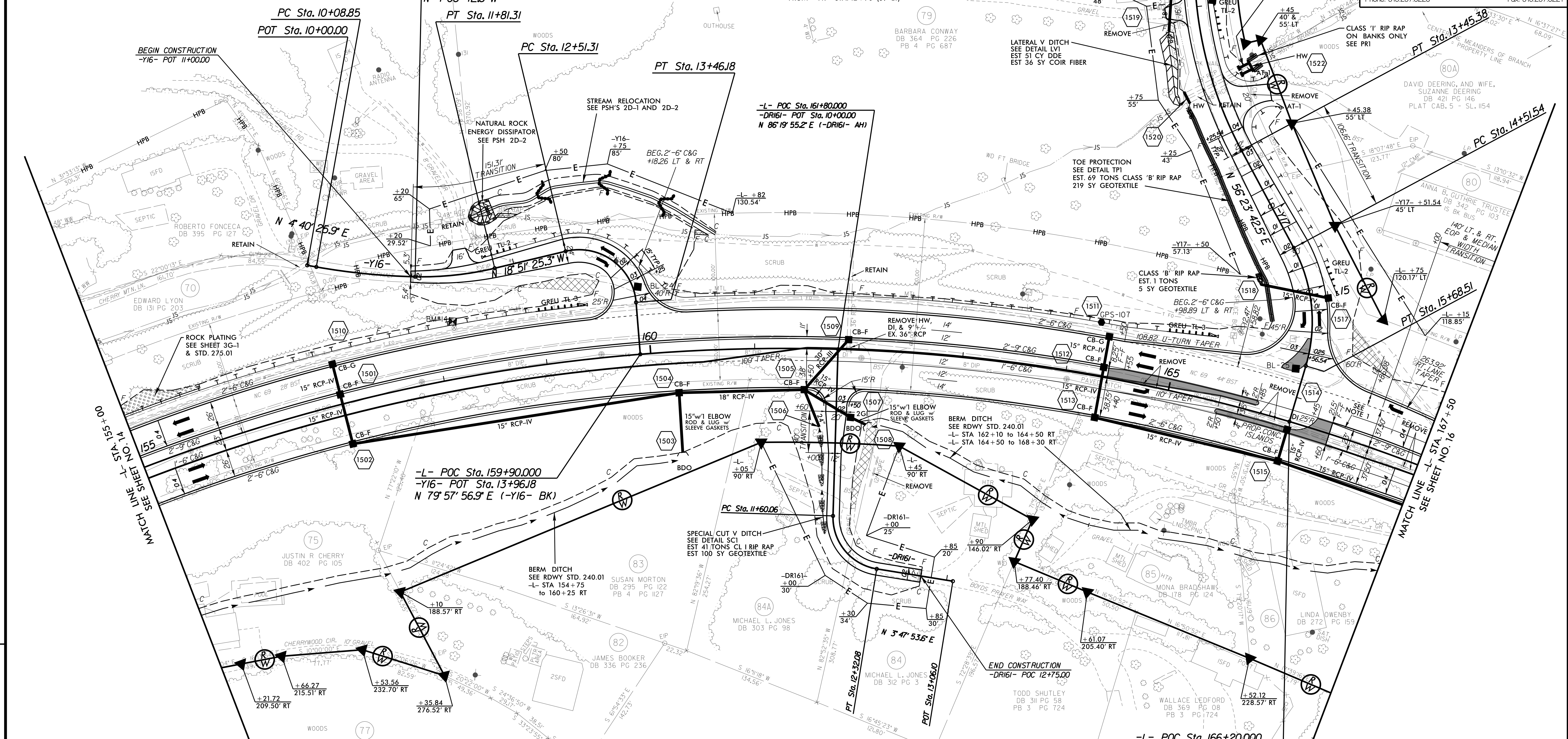
PARCELS 78 & 79 DETERMINED ELIGIBLE FOR LISTING ON NATIONAL REGISTER OF HISTORIC PLACES

NAD 83 NA 2011



78

79



SEE SHEET 27 FOR -L- PROFILE
SEE SHEET 35 FOR -Y16- & -Y17- PROFILES
SEE SHEET 38 FOR -DR161- PROFILE
SEE SHEET 2B-5 FOR -Y16-, -Y17-, & -DR161- INTERSECTION DETAILS

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

NOTE 1: TRANSITION 1'-6" C&G TO 2'-9" C&G
-L- STA. 166+40 TO 166+85 LT MED
SEE DETAIL SHEET 2C-3

-DR161- PI Sta 12+03.93 Δ = 82° 32' 01.6" (LT) D = 114' 35" 29.6" L = 72.02' T = 43.87' R = 500.00'

2020 ADT	770	-Y17-	
2040 ADT	1,110	SR 1118	CHERRY RD
9,970	330	440	10,080
14,790	470	650	14,980
-L- NC 69			

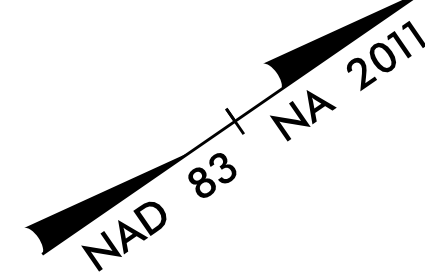
REVISIONS

8/5/2019
E:\Projects\2019\A0011C_Rdwy_PSH15.dgn
15:22:24

8/17/19

80A
DAVID DEERING, AND WIFE,
SUZANNE DEERING
DB 421 PG 146
PLAT CAB. 5 - SL. 1154

-L-
Pls Sta 150+59.76 PI Sta 163+28.63 Pls Sta 172+88.78
θs = 3° 21' 02.3" Δ = 70° 13' 07.7" (RT) θs = 3° 21' 02.3"
Ls = 200.00' D = 3° 21' 02.3" Ls = 200.00'
LT = 133.36' L = 2,095.69' LT = 133.36'
ST = 66.69' T = 1,202.23' ST = 66.69'
R = 1,710.00'
SE = 0.04
V = 50 mph



—PCE— PERMANENT CONSTRUCTION EASEMENT

SEE SHEET 28 FOR -L- PROFILE

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

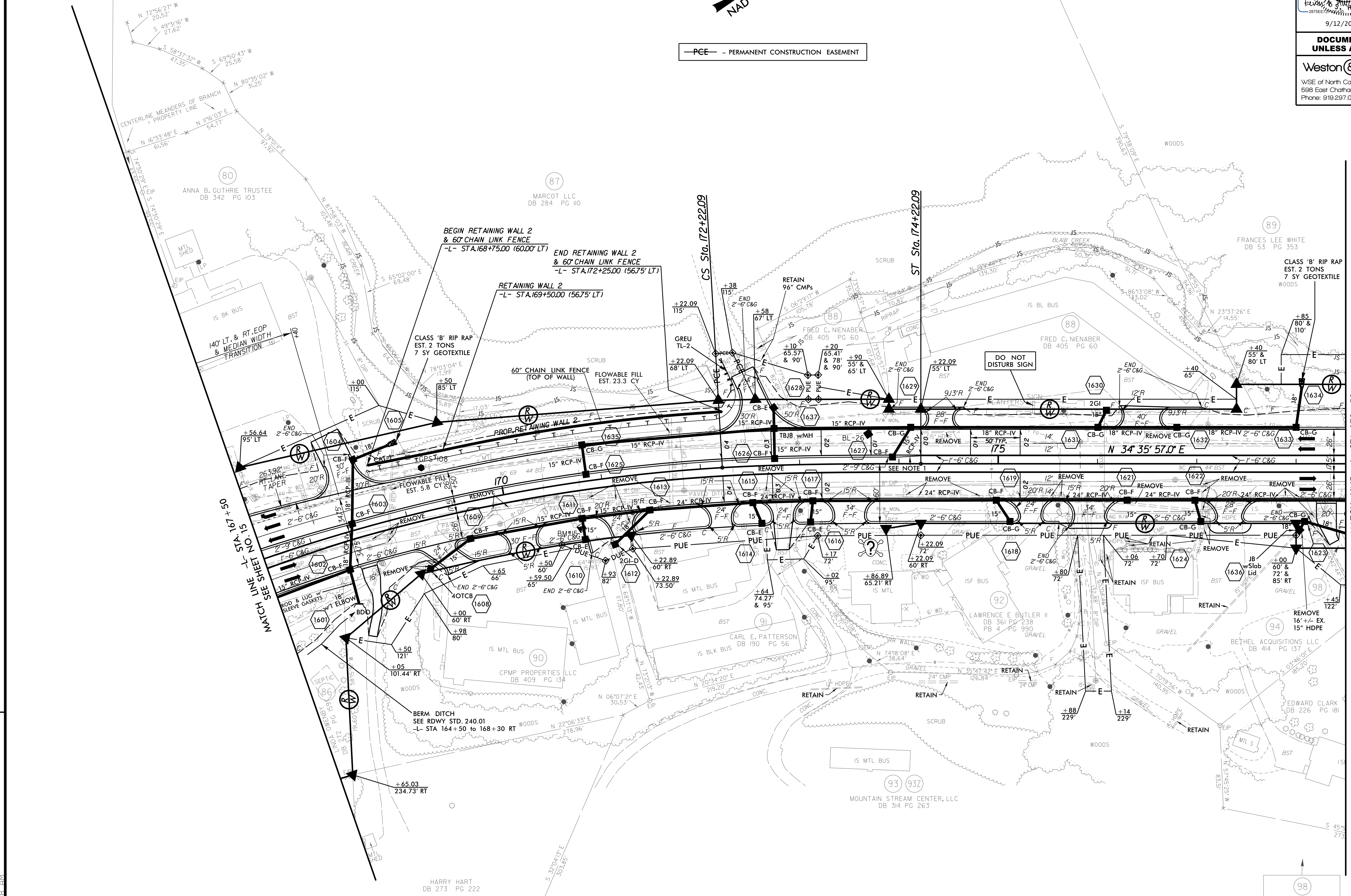
NOTE 1: TRANSITION 1'-6" C&G TO 2'-9" C&G:
-L- STA. 174+22.09 TO 174+00 LT MED
SEE DETAIL SHEET 2C-3

PROJECT REFERENCE NO. A-0011C	SHEET NO. 16
RW SHEET NO.	
ROADWAY DESIGN ENGINEER WESTON SAMPSON SEAL 39283 9/12/2019	HYDRAULICS ENGINEER WESTON SAMPSON SEAL 40801 9/12/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Weston Sampson NC License: C-4847
WSE of North Carolina, PC 598 East Chatham Street Suite 137 Cary, NC 27511
Phone: 919.297.0220 Fax: 919.297.0221

REVISIONS



MATCH LINE TO SHEET NO. 15 STA. 151+91.50

MATCH LINE TO SHEET NO. 17 STA. 178+50

9/12/2019
P:\Projects\A0011C_Rdwy_psh16.dgn
10:34:38 AM

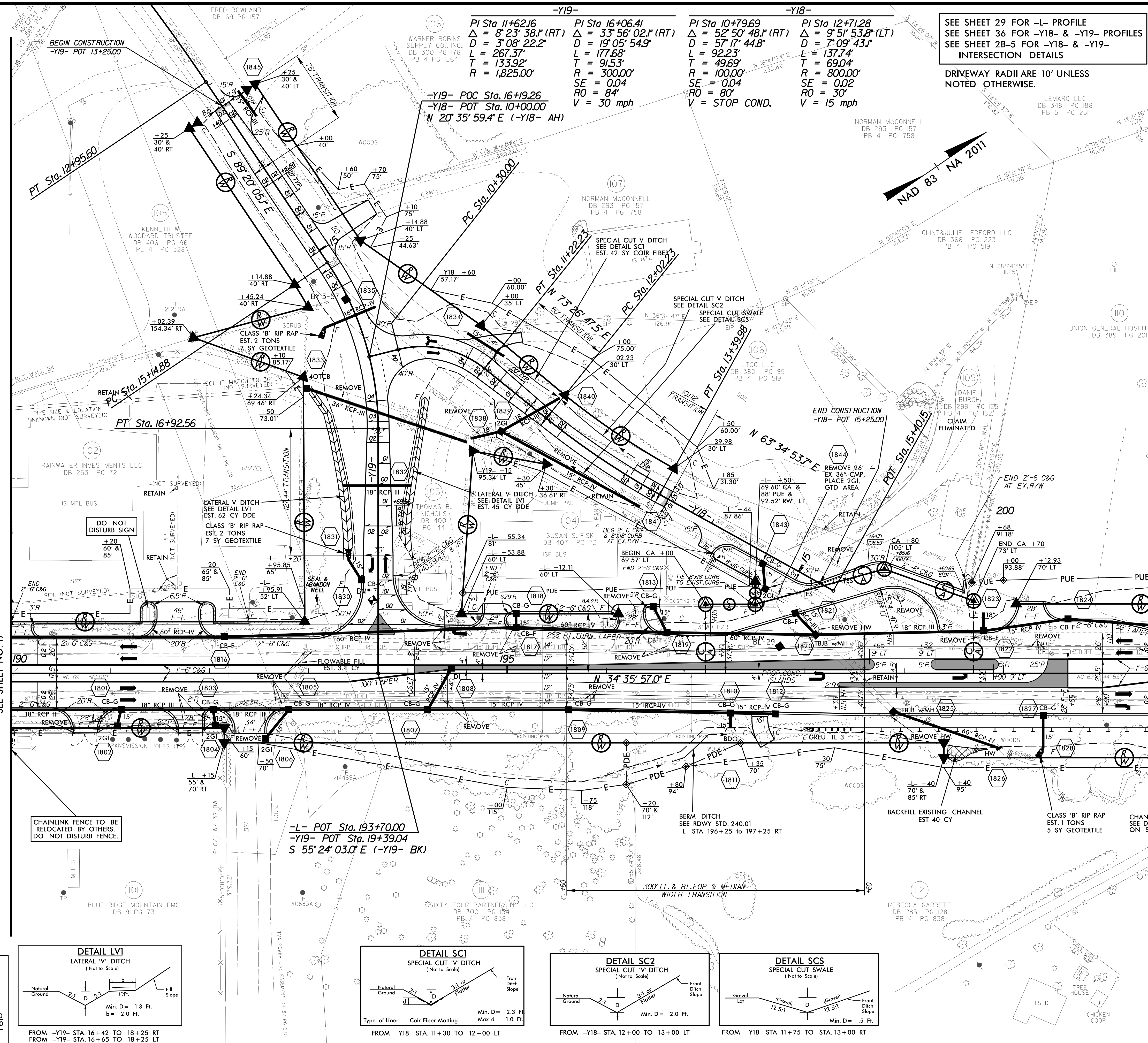
HARRY HART
DB 273 PG 222

98
FRANCIS H GARRETT
LIFE ESTATE
DB 406 PG 73

PROJECT REFERENCE NO. A-0011C	SHEET NO. 18
RW SHEET NO.	
ROADWAY DESIGN ENGINEER WESTON SAMPSON SEAL 39283 8/6/2019	HYDRAULICS ENGINEER WESTON SAMPSON SEAL 40801 8/6/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Weston Sampson WSE of North Carolina, PC 598 East Chatham Street Suite 137 Phone: 919.297.0220	
NC License: C-4847 Cary, NC 27511 Fax: 919.297.0221	

SEE SHEET 29 FOR -L- PROFILE
 SEE SHEET 36 FOR -Y18- & -Y19- PROFILES
 SEE SHEET 2B-5 FOR -Y18- & -Y19- INTERSECTION DETAILS

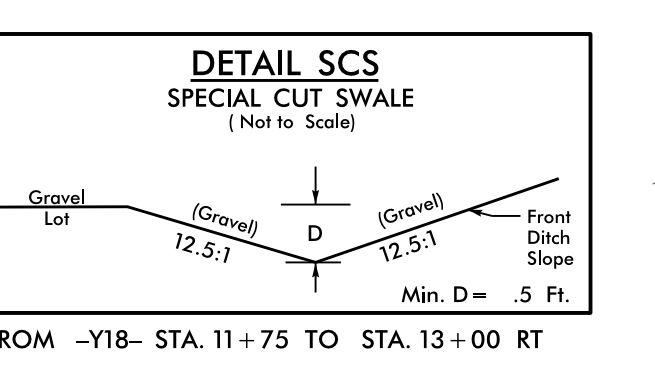
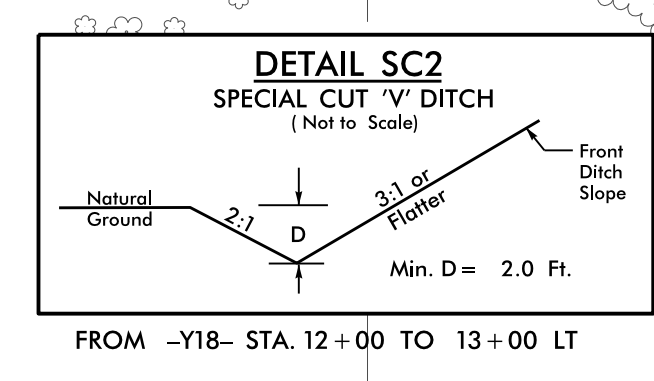
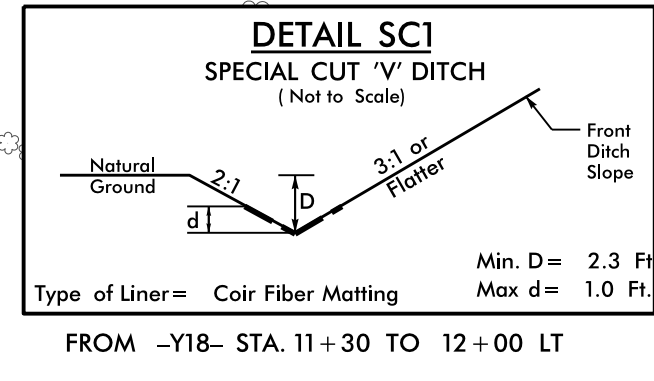
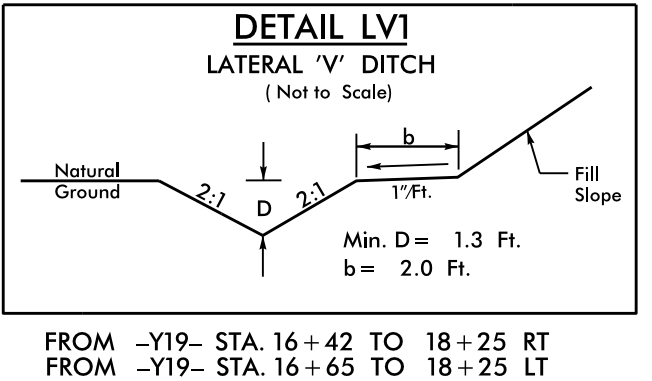
DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.



MATCH LINE -L- STA. 190+00
SEE SHEET NO. 17

MATCH LINE -L- STA. 202+00
SEE SHEET NO. 19

2020 ADT	460	-Y19- SR 1120 WALDROUP RD
2040 ADT	730	
11,730	230	230
17,390	370	370
-L- NC 69		



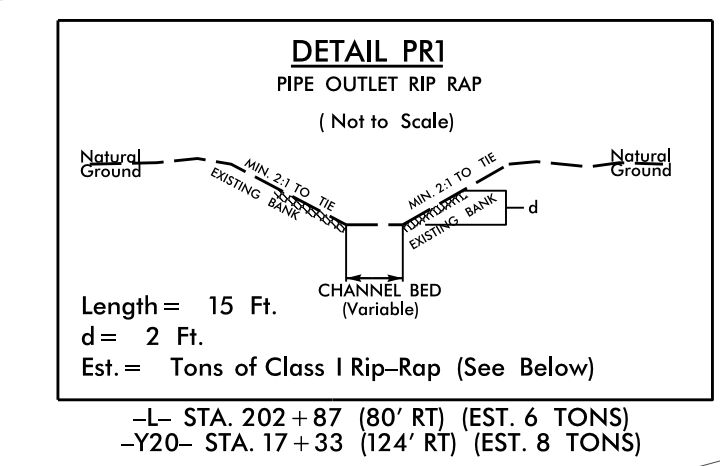
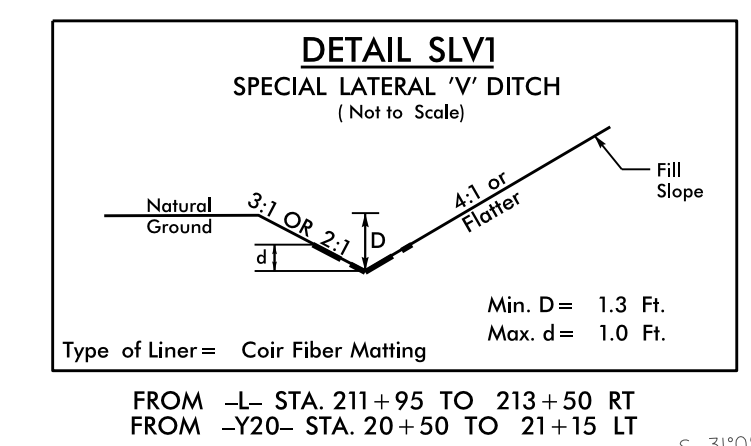
REVISIONS

8/5/2019
C:\Users\jerry\OneDrive\Documents\A0011C_Rd\psh18.dgn
15:22:32

PROJECT REFERENCE NO.	SHEET NO.
A-0011C	19
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SEE SHEET 29 FOR -L- PROFILE
 SEE SHEET 37 FOR -Y20- PROFILE
 SEE SHEET 2B-6 FOR -Y20- INTERSECTION DETAIL

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.



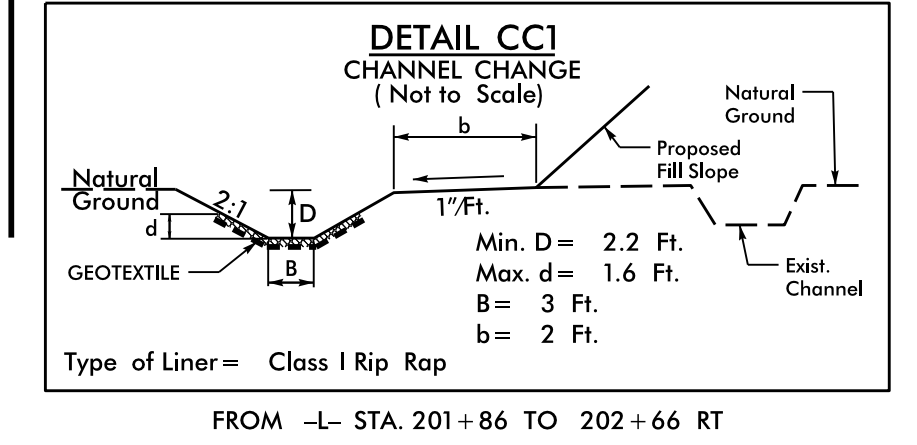
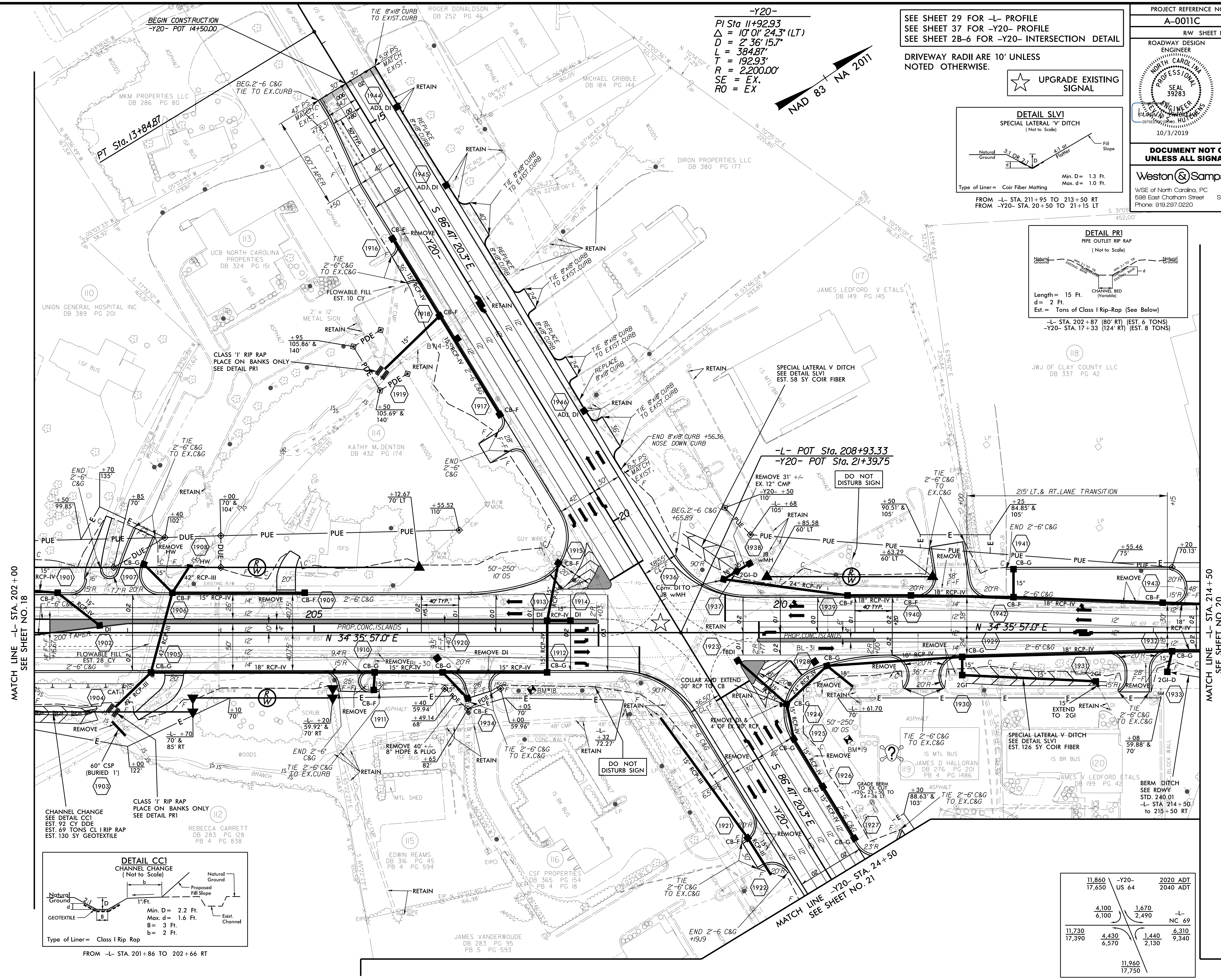
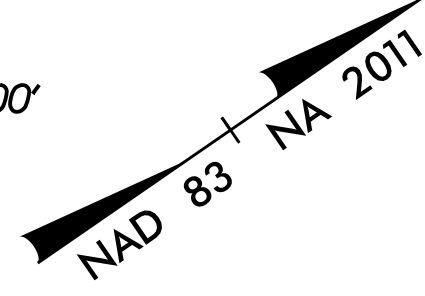
DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

Weston Sampson

WSE of North Carolina, PC
 598 East Chatham Street
 Phone: 919.297.0220

NC License: C-4847
 Cary, NC 27511
 Fax: 919.297.0221

-Y20-
 PI Sta 11+92.93
 $\Delta = 10' 01" 24.3' (LT)$
 $D = 2' 36" 15.7'$
 $L = 384.87'$
 $T = 192.93'$
 $R = 2,200.00'$
 $SE = EX$
 $RO = EX$



11,860	-Y20-	2020 ADT	
17,650	US 64	2040 ADT	
	4,100	1,670	-L-
	6,100	2,490	NC 69
11,730	4,430	1,440	6,310
17,390	6,570	2,130	9,340
		11,960	17,750

REVISIONS

MATCH LINE -L- STA. 202+00
 SEE SHEET NO. 18

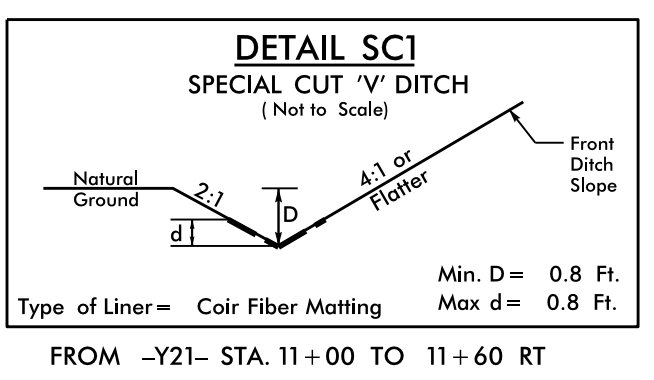
MATCH LINE -L- STA. 214+50
 SEE SHEET NO. 20

10/3/2019
 P:\2019\A0011C_Rdwy_psh19.dgn

8/17/19

-Y21-

PI Sta 10+72.09
 $\Delta = 31^{\circ}02'59.2" (RT)$
 $D = 23^{\circ}52'23.7"$
 $L = 130.06'$
 $T = 66.67'$
 $R = 240.00'$
 $SE = 0.02$
 $RO = 30'$
 $V = STOP COND.$



NOTE DRN
 EXISTING DRAINAGE STRUCTURE MAY BE RETAINED AT THE DIRECTION OF THE ENGINEER

SEE SHEET 30 FOR -L- PROFILE
 SEE SHEET 38 FOR -Y21- PROFILE
 SEE SHEET 2B-6 FOR -Y21- INTERSECTION DETAIL

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

PROJECT REFERENCE NO. A-0011C	SHEET NO. 20
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
8/6/2019	8/6/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

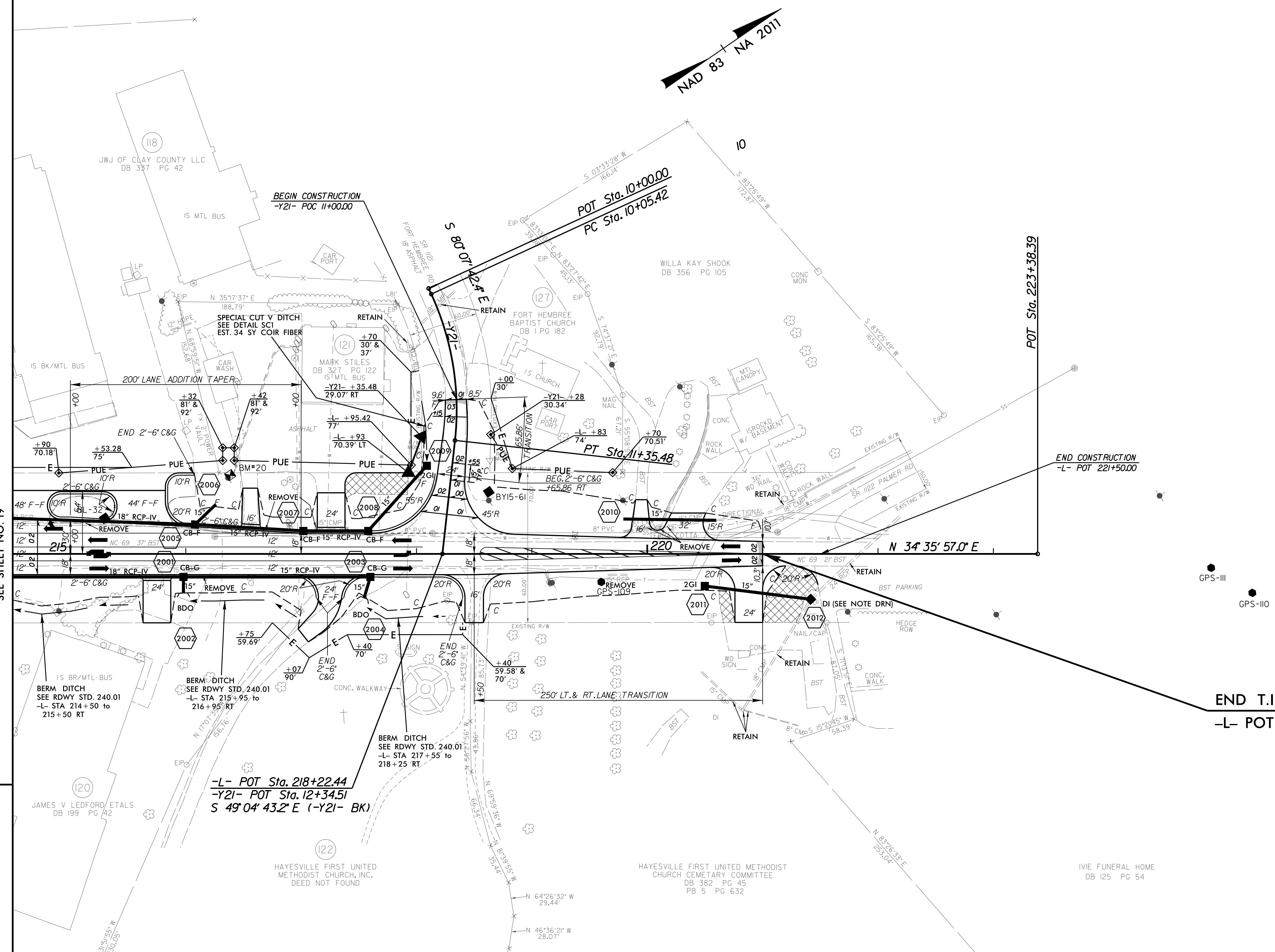
Weston Sampson
 WSE of North Carolina, PC
 598 East Chatham Street Suite 137
 Phone: 919.297.0220

NC License: C-4847
 Cary, NC 27511
 Fax: 919.297.0221

REVISIONS

MATCH LINE -L- STA. 214+50
 SEE SHEET NO. 19

MATCH LINE
 SEE SHEET NO. 21

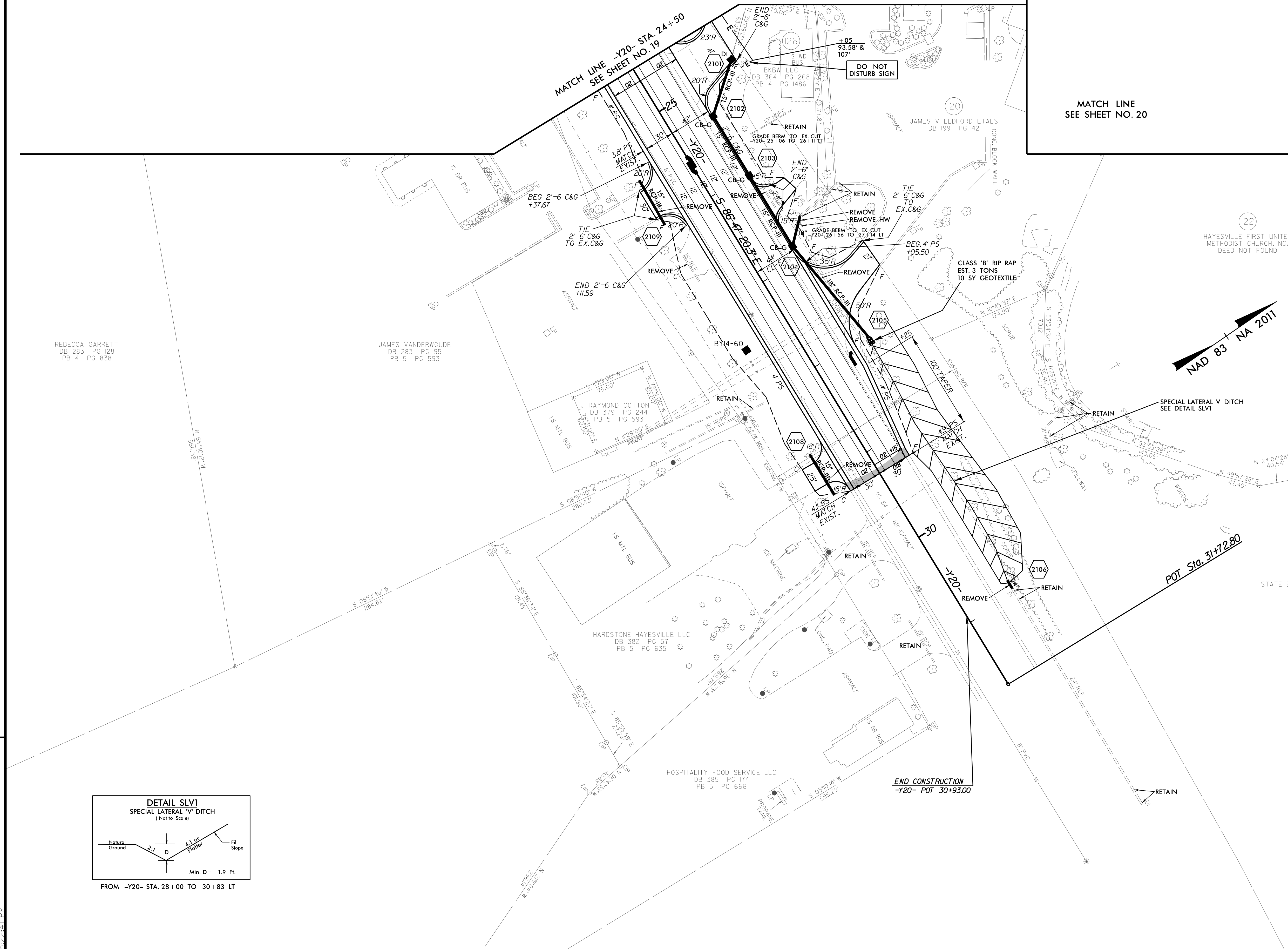


8/5/2019
 P:\Projects\A0011C_Rdwy\psf\20.dgn
 15:22:38

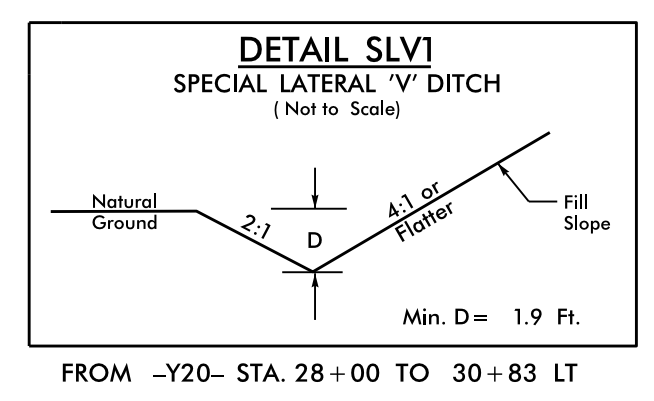
8/17/19

PROJECT REFERENCE NO. A-0011C	SHEET NO. 21
RW SHEET NO.	
ROADWAY DESIGN ENGINEER PAUL CAMPBELL NORTH CAROLINA PROFESSIONAL SEAL 39283 8/6/2019	HYDRAULICS ENGINEER PAUL CAMPBELL NORTH CAROLINA PROFESSIONAL SEAL 40801 8/6/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Weston Sampson NC License: C-4847 WSE of North Carolina, PC 598 East Chatham Street Suite 137 Cary, NC 27511 Phone: 919.297.0220 Fax: 919.297.0221	

MATCH LINE SEE SHEET NO. 20



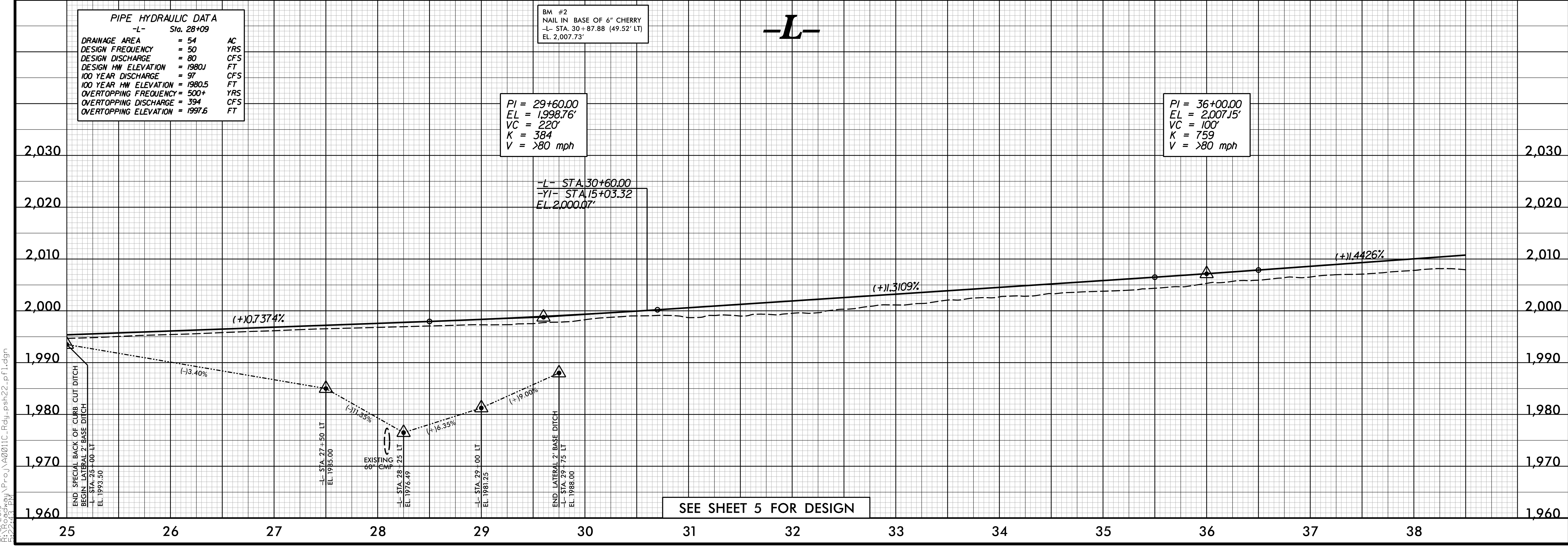
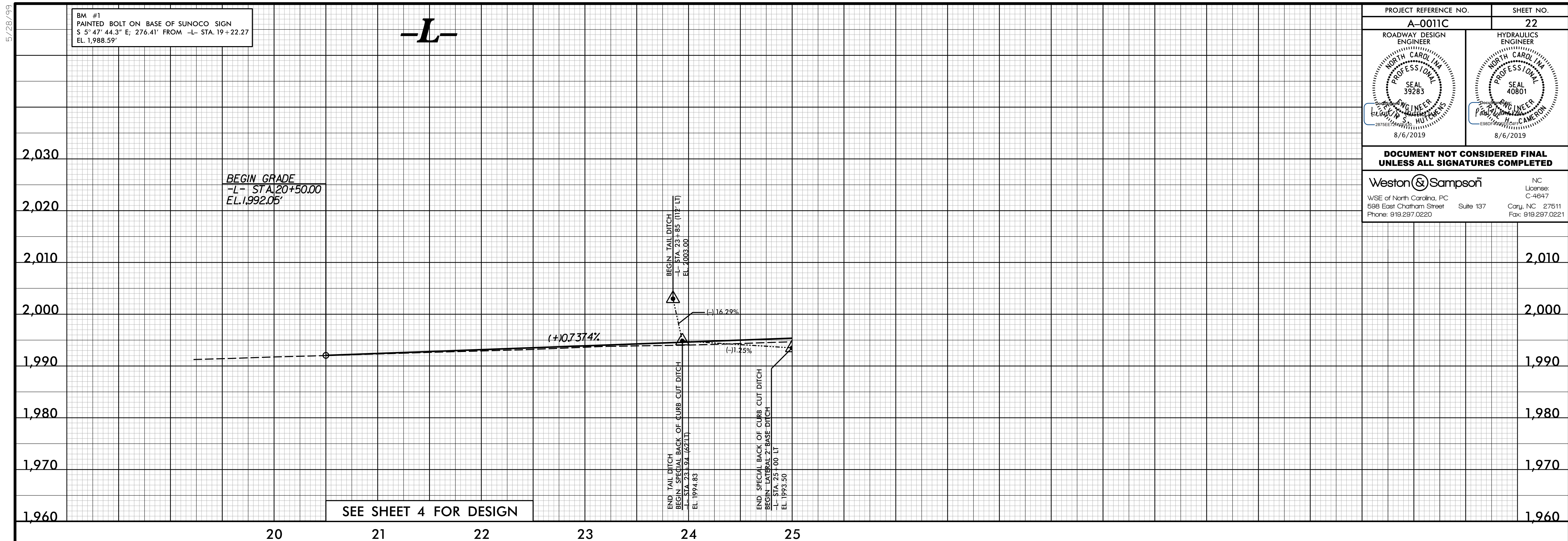
REVISIONS



SEE SHEET 37 FOR -Y20- PROFILE
DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

8/5/2019
E:\CS\Projects\A0011C_Rdy_psh21.dgn
15:22:41 PM

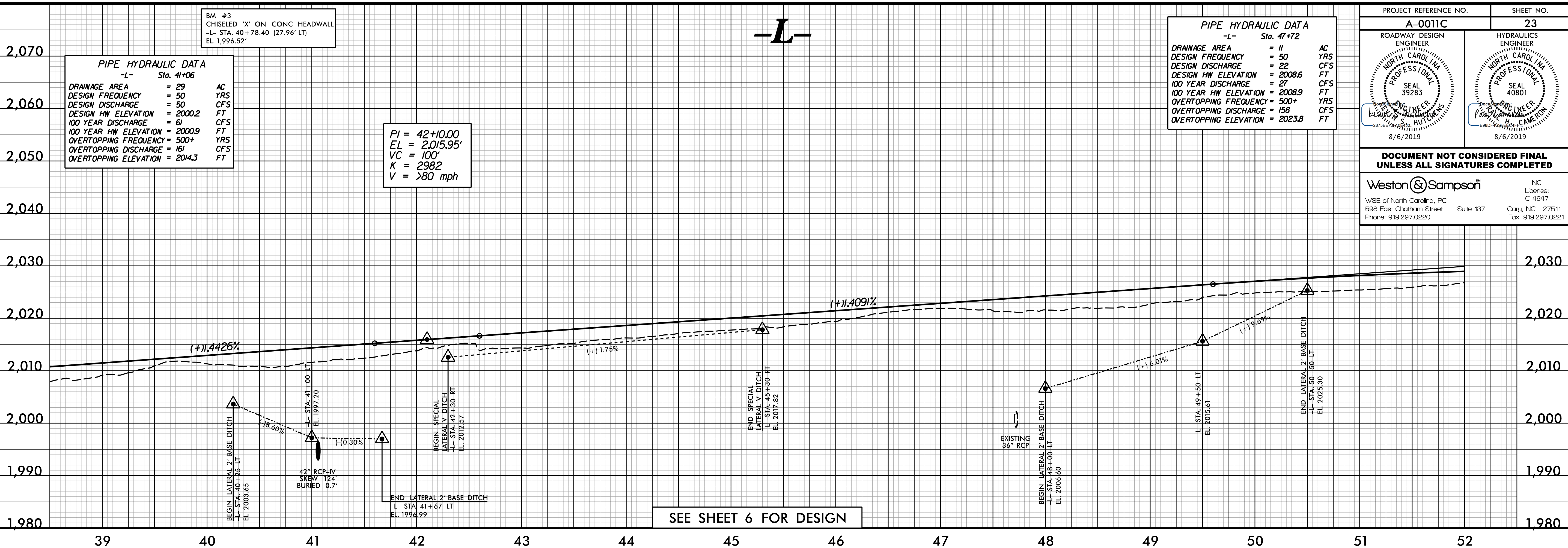
PROJECT REFERENCE NO. A-0011C	SHEET NO. 22
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 39283 8/6/2019	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 40801 8/6/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Weston & Sampson WSE of North Carolina, PC 588 East Chatham Street Suite 137 Phone: 919.297.0220	
NC License: C-4647 Cary, NC 27511 Fax: 919.297.0221	



8/15/2019 8:22:53 AM
C:\Users\p\OneDrive\Projects\A0011C_Rdwy\esh22.plt.dgn

5/28/19

8/15/2018 8:22:23 AM \\P:\proj\A0011C_Road\esh23.plt.dgn



PIPE HYDRAULIC DATA
-L- Sta. 41+06

DRAINAGE AREA	= 29	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 50	CFS
DESIGN HW ELEVATION	= 2000.2	FT
100 YEAR DISCHARGE	= 61	CFS
100 YEAR HW ELEVATION	= 2000.9	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 161	CFS
OVERTOPPING ELEVATION	= 2014.3	FT

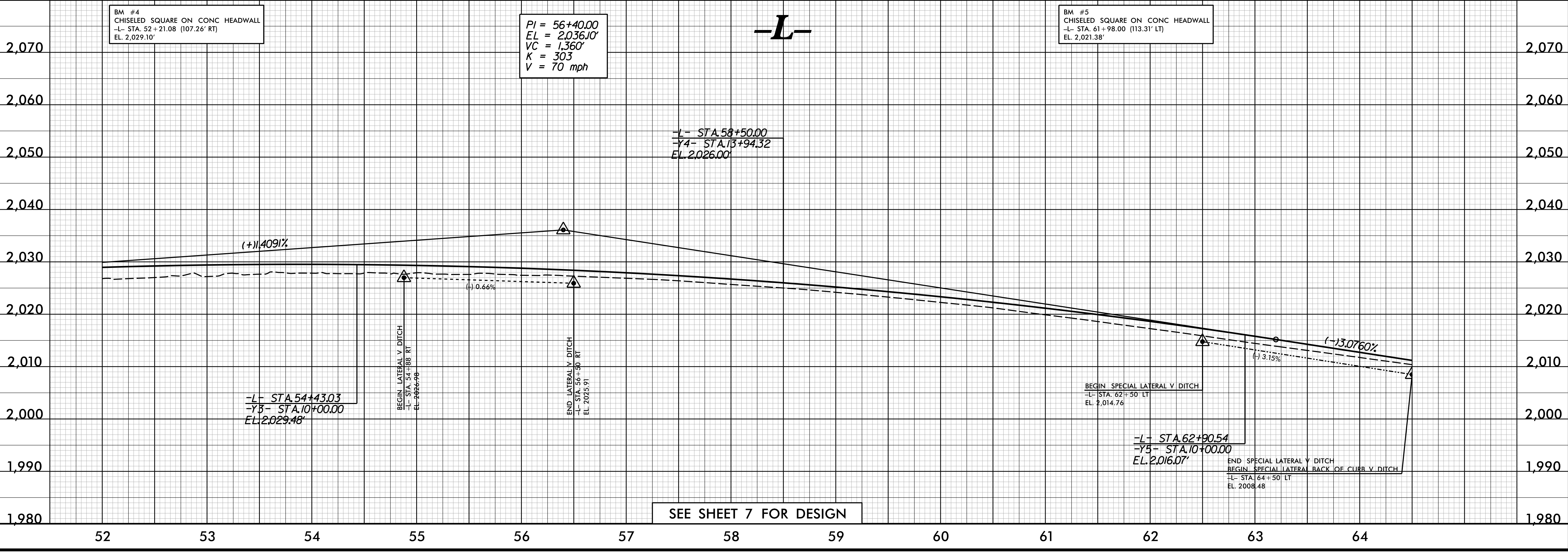
PI = 42+10.00
EL = 2,015.95'
VC = 100'
K = 2982
V = >80 mph

PIPE HYDRAULIC DATA
-L- Sta. 47+72

DRAINAGE AREA	= 11	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 22	CFS
DESIGN HW ELEVATION	= 2008.6	FT
100 YEAR DISCHARGE	= 27	CFS
100 YEAR HW ELEVATION	= 2008.9	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 158	CFS
OVERTOPPING ELEVATION	= 2023.8	FT

PROJECT REFERENCE NO.	A-0011C	SHEET NO.	23
ROADWAY DESIGN ENGINEER	SEAL 39283	HYDRAULICS ENGINEER	SEAL 40801
WESTON & SAMPTSON		WESTON & SAMPTSON	
WSE of North Carolina, PC		WSE of North Carolina, PC	
588 East Chatham Street		588 East Chatham Street	
Cary, NC 27511		Cary, NC 27511	
Phone: 919.297.0220		Phone: 919.297.0220	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

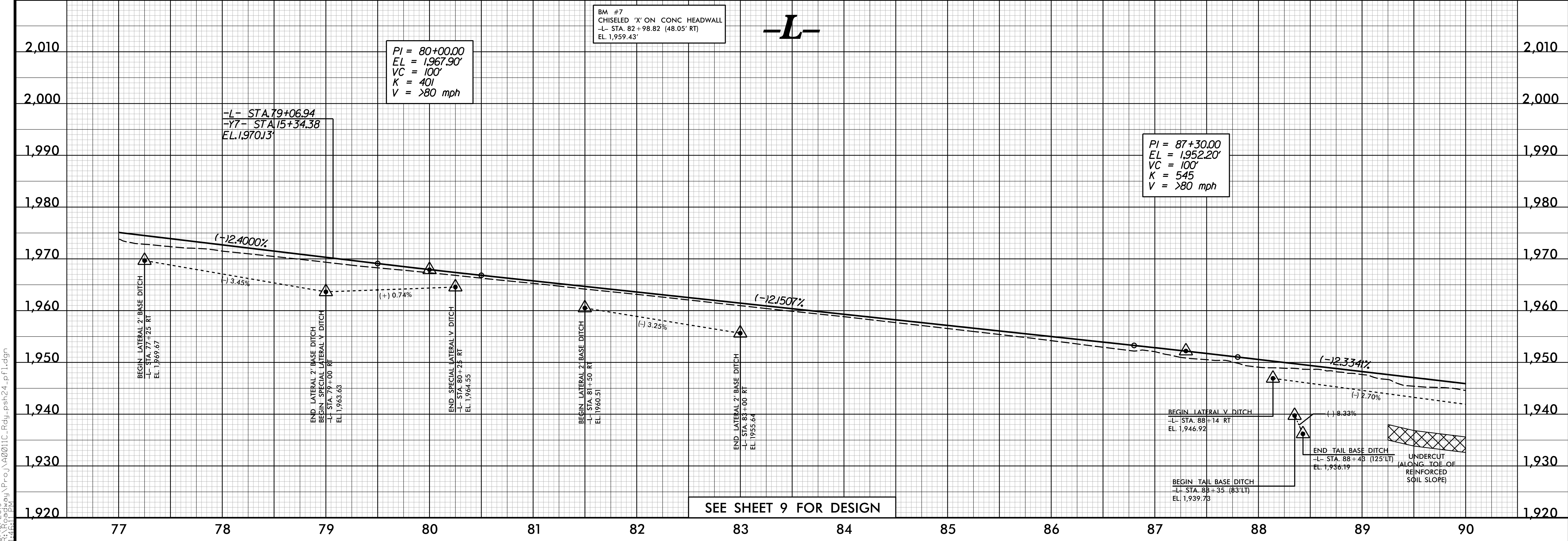
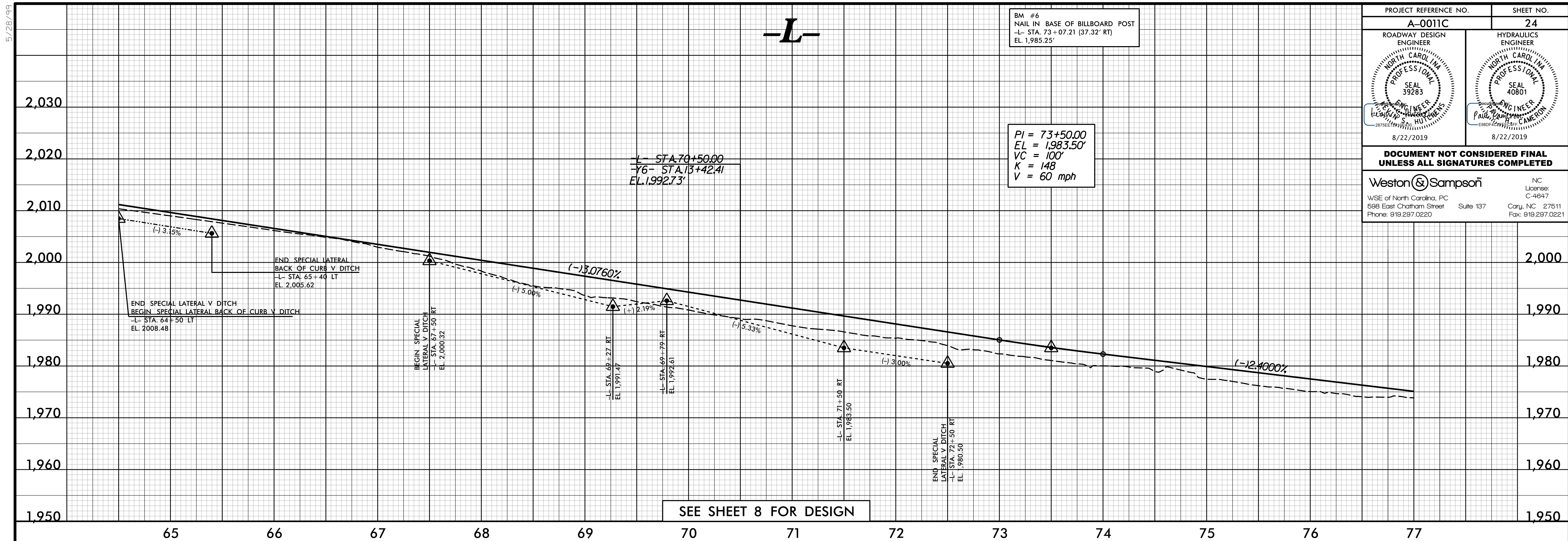


PI = 56+40.00
EL = 2,036.10'
VC = 1,360'
K = 303
V = 70 mph

BM #5
CHISELED SQUARE ON CONC HEADWALL
-L- STA. 61+98.00 (113.31' LT)
EL. 2,021.38'

SEE SHEET 7 FOR DESIGN

PROJECT REFERENCE NO. A-0011C	SHEET NO. 24
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 39283 8/22/2019	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 40801 8/22/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Weston & Sampson WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	
NC License: C-4647 Cary, NC 27511 Fax: 919.297.0221	



8/22/2019 1:26:07 PM \\P:\proj\A0011C_Reddy\esh24_pl1.dgn

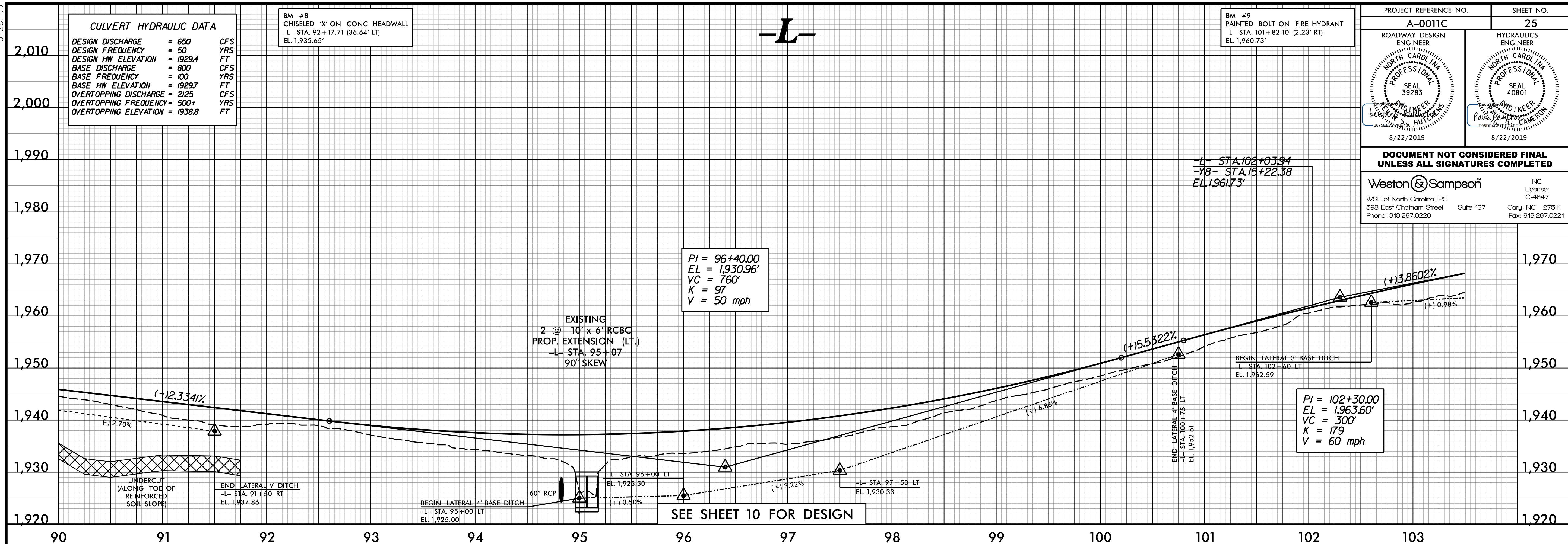
PROJECT REFERENCE NO. A-0011C	SHEET NO. 25
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 39283 8/22/2019	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 40801 8/22/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Weston & Sampson WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	
NC License: C-4647 Cary, NC 27511 Fax: 919.297.0221	

CULVERT HYDRAULIC DATA

DESIGN DISCHARGE	= 650	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 1929.4	FT
BASE DISCHARGE	= 800	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 1929.7	FT
OVERTOPPING DISCHARGE	= 2125	CFS
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING ELEVATION	= 1938.8	FT

BM #8
CHISELED 'X' ON CONC HEADWALL
-L- STA. 92+17.71 (36.64' LT)
EL. 1,935.65'

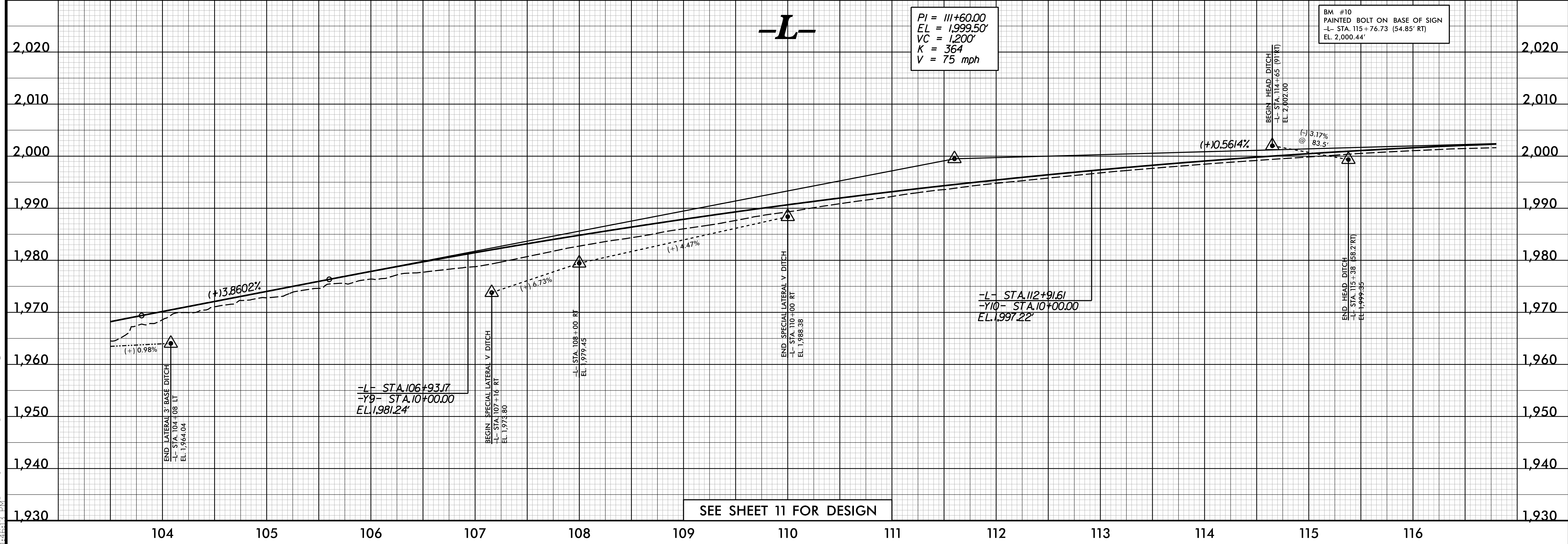
BM #9
PAINTED BOLT ON FIRE HYDRANT
-L- STA. 101+82.10 (2.23' RT)
EL. 1,960.73'



SEE SHEET 10 FOR DESIGN

BM #10
PAINTED BOLT ON BASE OF SIGN
-L- STA. 115+76.73 (54.85' RT)
EL. 2,000.44'

PI = 111+60.00
EL = 1,999.50'
VC = 1,200'
K = 364
V = 75 mph



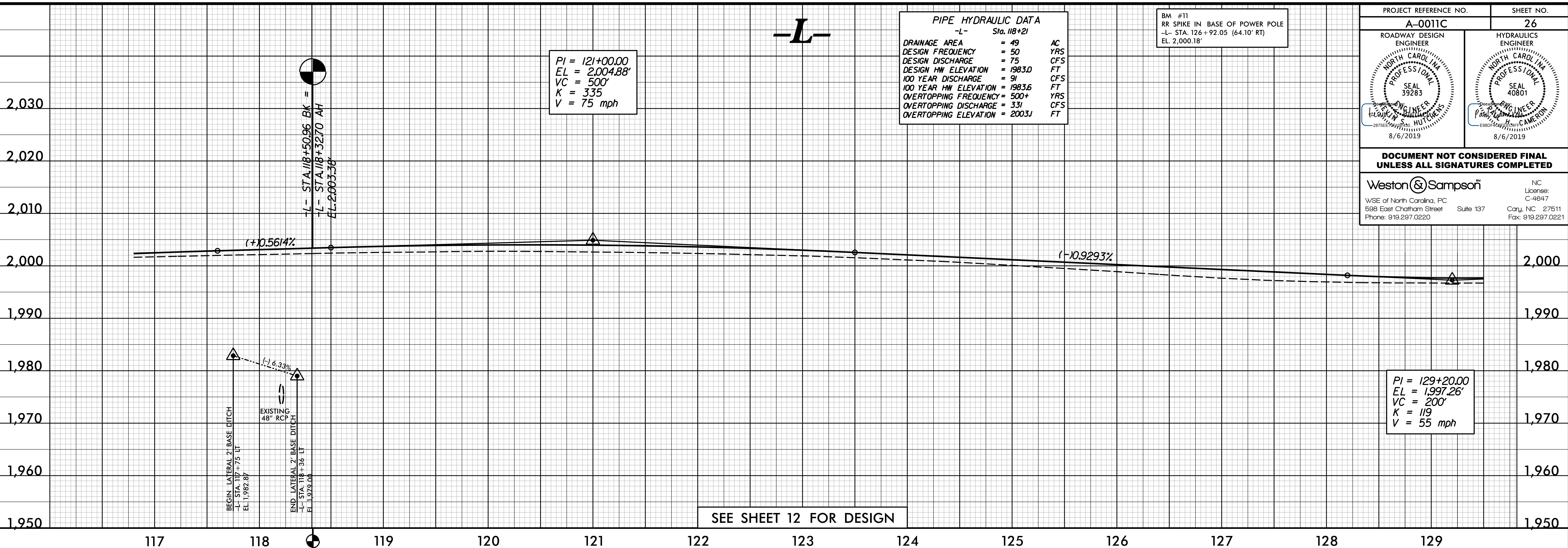
SEE SHEET 11 FOR DESIGN

5/28/2019

R:\16/2019\126303000\Proj\A0011C_Reddy_psh25.plt.dgn

5/26/19

8/15/2019 8:22:50 AM \\P:\proj\A0011C_Rdy\esh26.plt.dgn



PIPE HYDRAULIC DATA

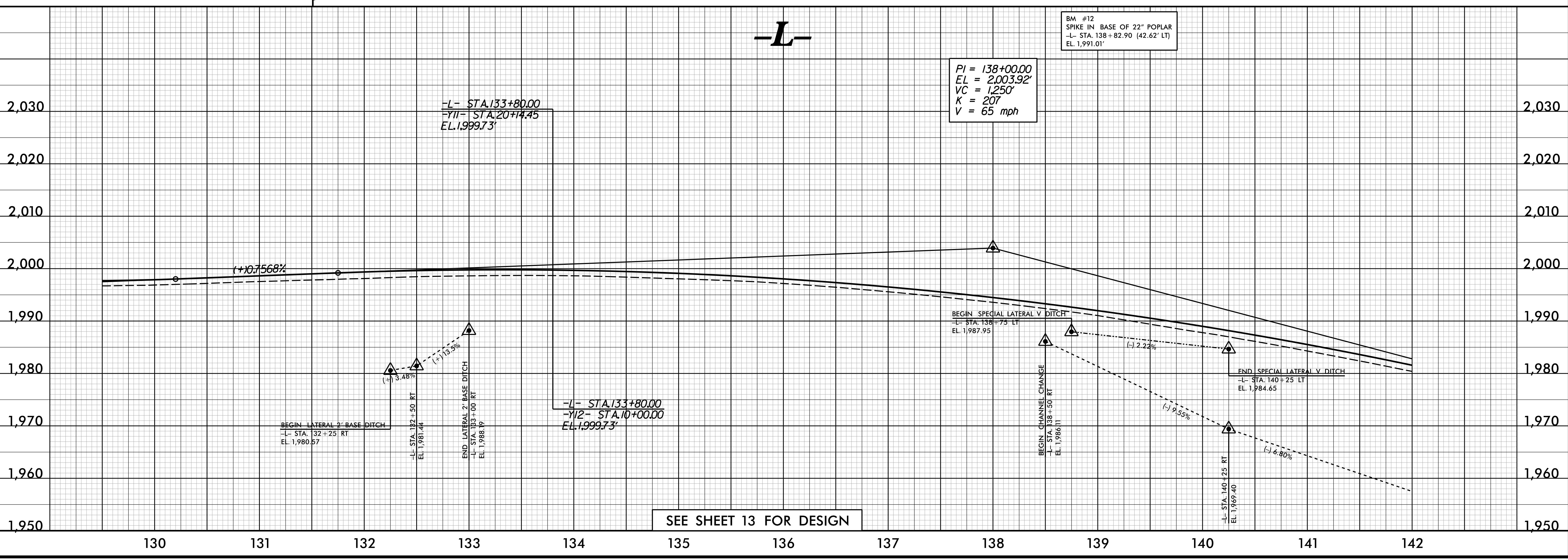
-L- Sta. 118+21

DRAINAGE AREA	= 49	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 75	CFS
DESIGN HW ELEVATION	= 1983.0	FT
100 YEAR DISCHARGE	= 91	CFS
100 YEAR HW ELEVATION	= 1983.6	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 331	CFS
OVERTOPPING ELEVATION	= 2003J	FT

BM #11
RR SPIKE IN BASE OF POWER POLE
-L- STA. 126 + 92.05 (64.10' RT)
EL. 2,000.18'

PROJECT REFERENCE NO.	A-0011C	SHEET NO.	26
ROADWAY DESIGN ENGINEER	[Signature]	HYDRAULICS ENGINEER	[Signature]
[Professional Seal: SEAL 39283]		[Professional Seal: SEAL 40801]	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			
Weston & Sampson		NC License: C-4647	
WSE of North Carolina, PC 688 East Chatham Street Phone: 919.297.0220		Cary, NC 27511 Suite 137 Fax: 919.297.0221	

PI = 129+20.00
EL = 1,997.26'
VC = 200'
K = 119
V = 55 mph



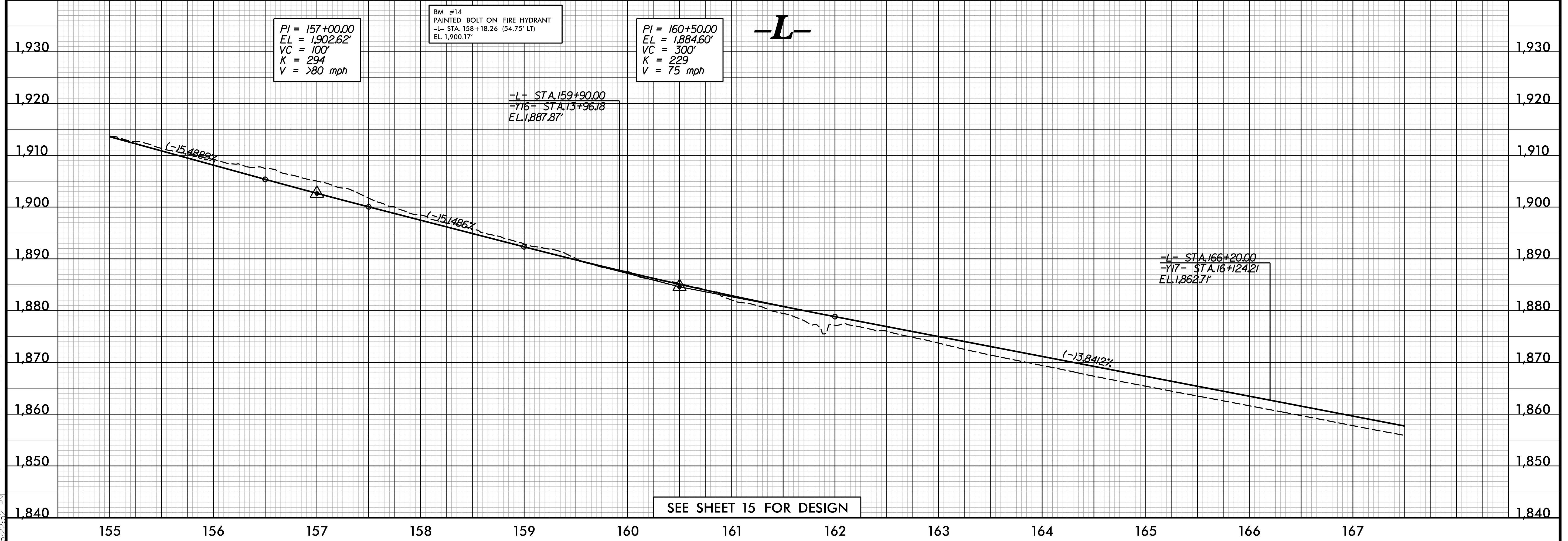
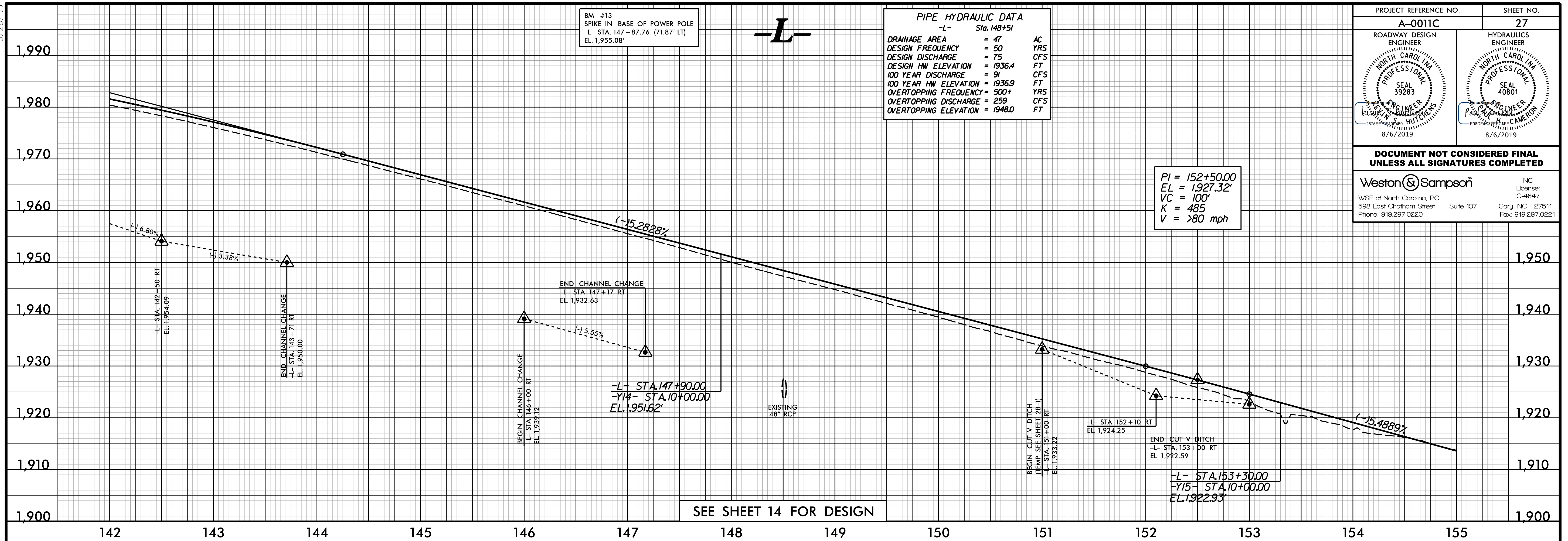
PI = 138+00.00
EL = 2,003.92'
VC = 1,250'
K = 207
V = 65 mph

BM #12
SPIKE IN BASE OF 22" POPLAR
-L- STA. 138 + 82.90 (42.62' LT)
EL. 1,991.01'

SEE SHEET 13 FOR DESIGN

PROJECT REFERENCE NO. A-0011C		SHEET NO. 27	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 39283 ELWELL & HUTCHENS 2875 E. HARRIS ST. Raleigh, NC 27604 8/6/2019		HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 40801 PAUL R. CAMERON 2875 E. HARRIS ST. Raleigh, NC 27604 8/6/2019	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			
Weston & Sampson WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220		NC License: C-4647 Cary, NC 27511 Suite 137 Fax: 919.297.0221	

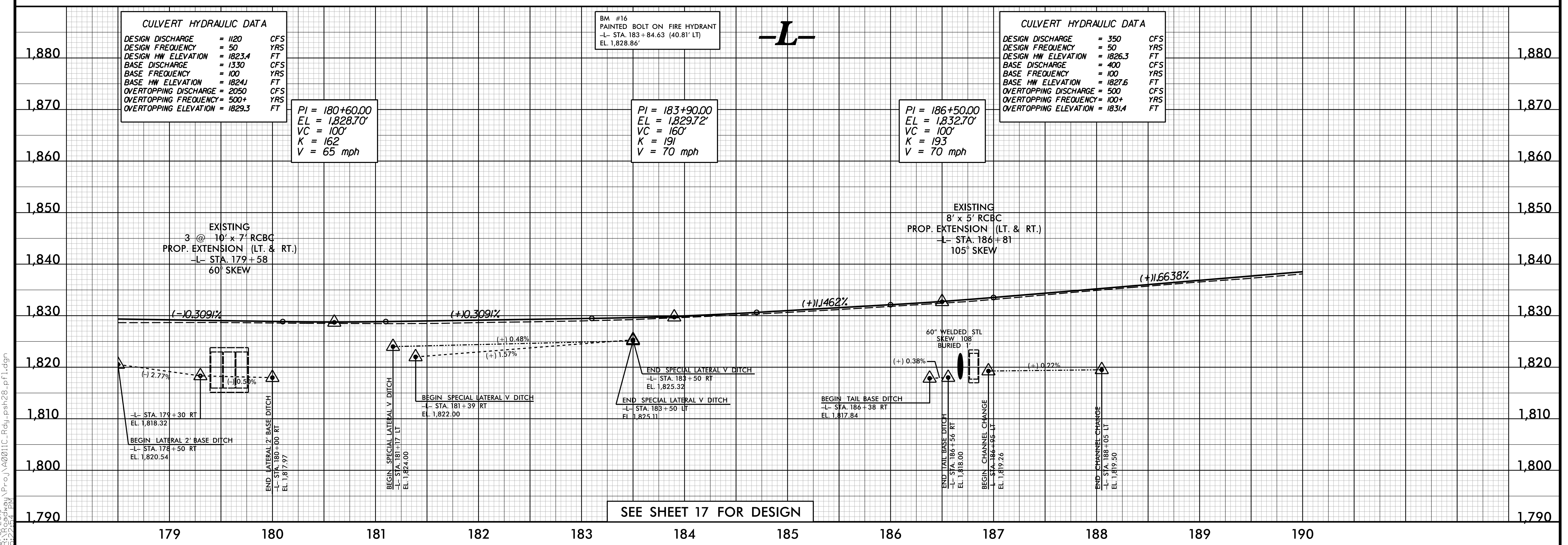
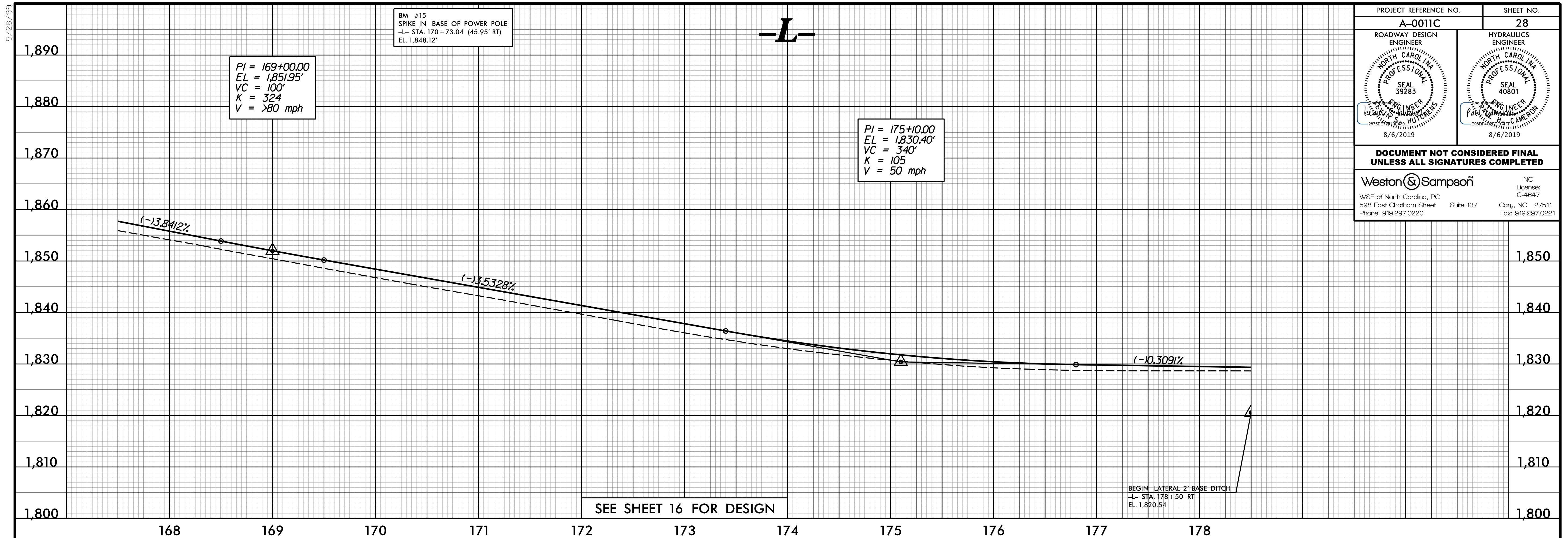
PIPE HYDRAULIC DATA	
-L- Sta. 148+51	
DRAINAGE AREA	= 47 AC
DESIGN FREQUENCY	= 50 YRS
DESIGN DISCHARGE	= 75 CFS
DESIGN HW ELEVATION	= 1936.4 FT
100 YEAR DISCHARGE	= 91 CFS
100 YEAR HW ELEVATION	= 1936.9 FT
OVERTOPPING FREQUENCY	= 500+ YRS
OVERTOPPING DISCHARGE	= 259 CFS
OVERTOPPING ELEVATION	= 1948.0 FT



5/28/2019

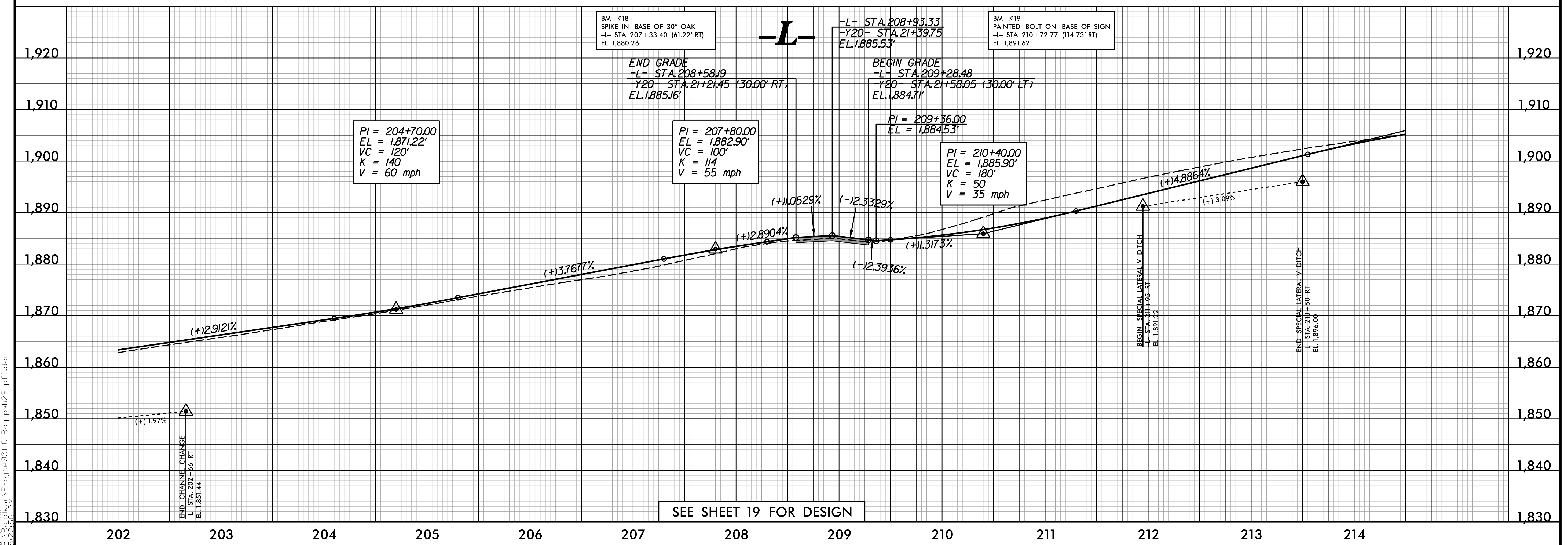
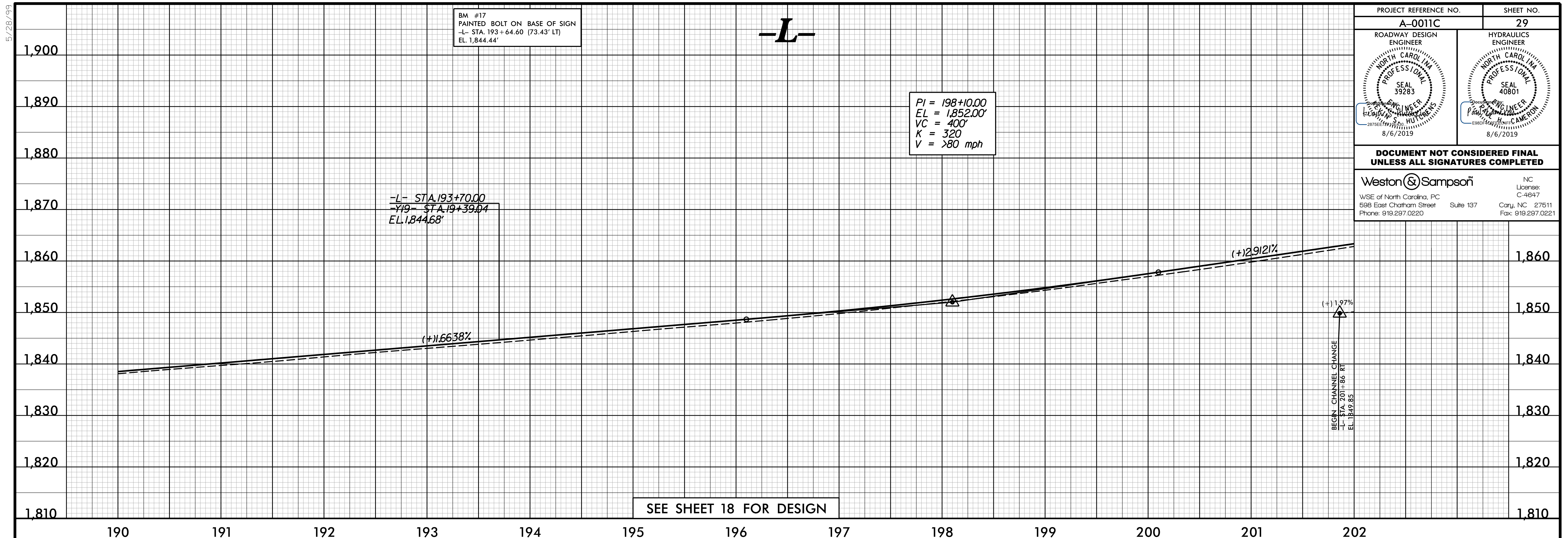
8/15/2019
C:\Users\p\Documents\Projects\A0011C\Redu\esh27.plt.dgn
15/2/2019 1:54

PROJECT REFERENCE NO. A-0011C	SHEET NO. 28
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 39283 8/6/2019	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 40801 8/6/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Weston & Sampson WSE of North Carolina, PC 598 East Chatham Street, Suite 137 Phone: 919.297.0220	
NC License: C-4647 Cary, NC 27511 Fax: 919.297.0221	



5/28/19
 8/15/2019
 C:\Users\p\Documents\Projects\A0011C_Roadway\A0011C_Roadway\A0011C_Roadway.dgn

PROJECT REFERENCE NO. A-0011C	SHEET NO. 29
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 39283 8/6/2019	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 40801 8/6/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Weston & Sampson WSE of North Carolina, PC 588 East Chatham Street Suite 137 Cary, NC 27511 Phone: 919.297.0220 Fax: 919.297.0221	



5/28/19
8/15/2019
C:\Users\p\Documents\Projects\A0011C_Redm_psh29_p1.dgn
15:22:56

PROJECT REFERENCE NO. A-0011C	SHEET NO. 30
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 39283 8/6/2019	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 40801 8/6/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
<small>WSE of North Carolina, PC 588 East Chatham Street Suite 137 Cary, NC 27511 Phone: 919.297.0220</small>	
<small>NC License: C-4647 Cary, NC 27511 Fax: 919.297.0221</small>	

5/28/19

-L-

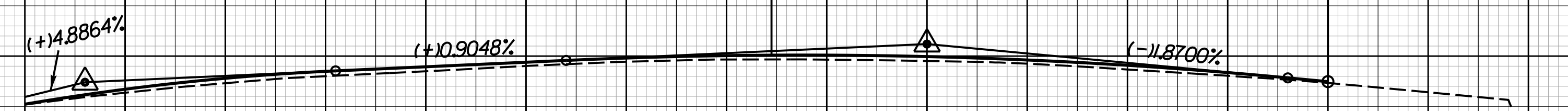
BM #20
SPIKE IN BASE OF POWER POLE
-L- STA. 216+38.48 (68.32' LT)
EL. 1,912.28'

END GRADE
-L- STA. 221+00.00
EL. 1,907.46'

PI = 214+80.00
EL = 1,907.40'
VC = 250'
K = 63
V = 45 mph

-L- STA. 218+22.44
-Y2I- STA. 12+34.51
EL. 1,910.09'

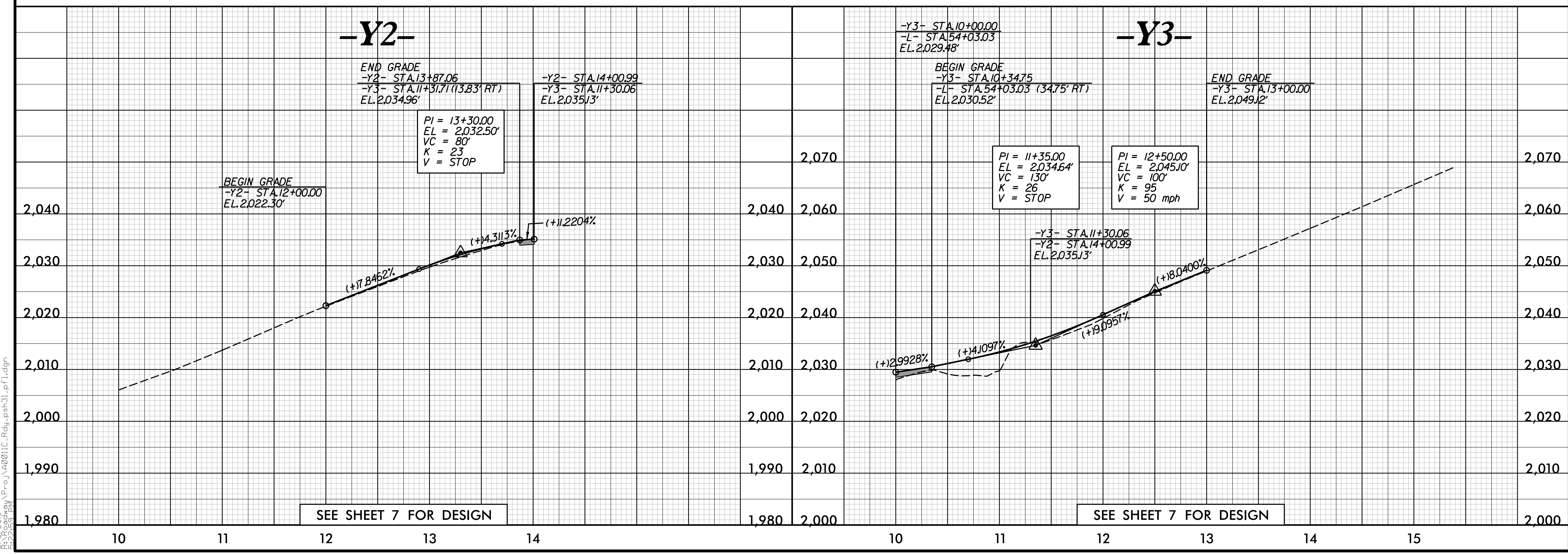
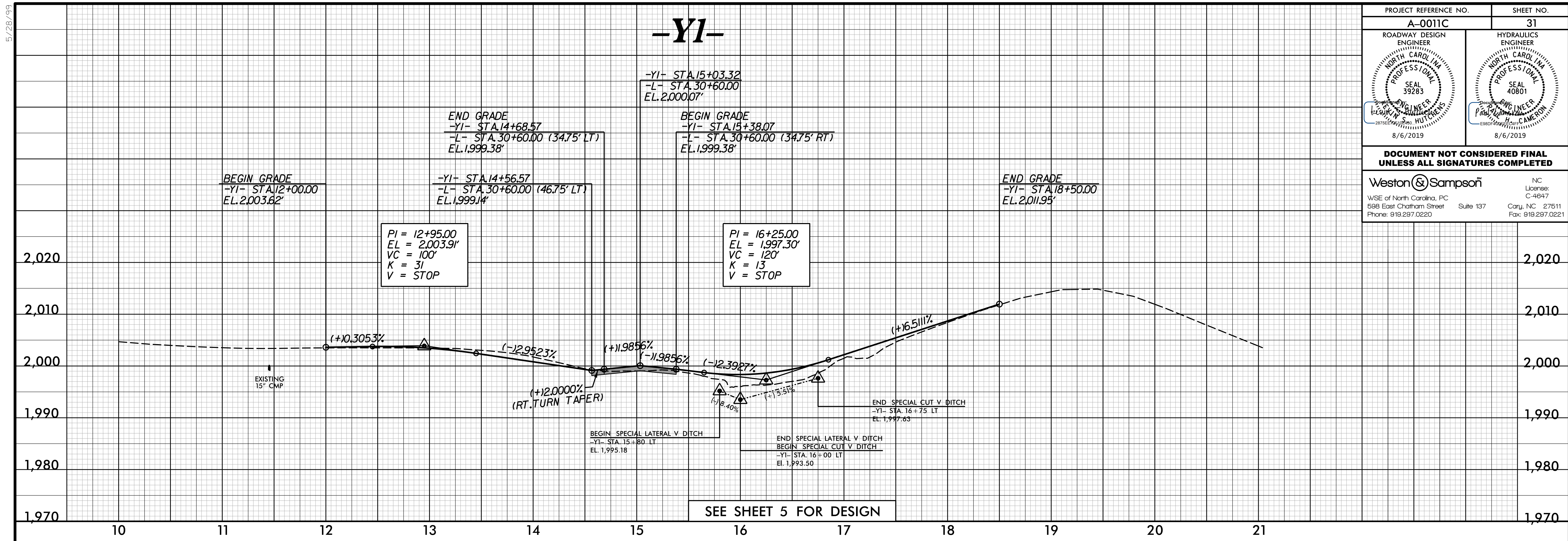
PI = 219+00.00
EL = 1,911.20'
VC = 360'
K = 130
V = 55 mph



SEE SHEET 20 FOR DESIGN

8/15/2019 8:22:58 AM C:\Users\pcoj\OneDrive\Projects\A0011C\Redu\esh30.plt.dgn

PROJECT REFERENCE NO. A-0011C	SHEET NO. 31
ROADWAY DESIGN ENGINEER WESTON & SAMPSOHN PROF. EST. 10/11 SEAL 39283 8/6/2019	HYDRAULICS ENGINEER WESTON & SAMPSOHN PROF. EST. 10/11 SEAL 40801 8/6/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Weston & Sampson WSE of North Carolina, PC 588 East Chatham Street Suite 137 Phone: 919.297.0220	
NC License: C-4647 Cary, NC 27511 Fax: 919.297.0221	



8/15/2019 10:22:58 AM P:\proj\A0011C_Rdwy_psh31.pfl.dgn

5/28/19

-Y4-

BEGIN GRADE
-Y4- STA.11+25.00
EL.2,049.75'

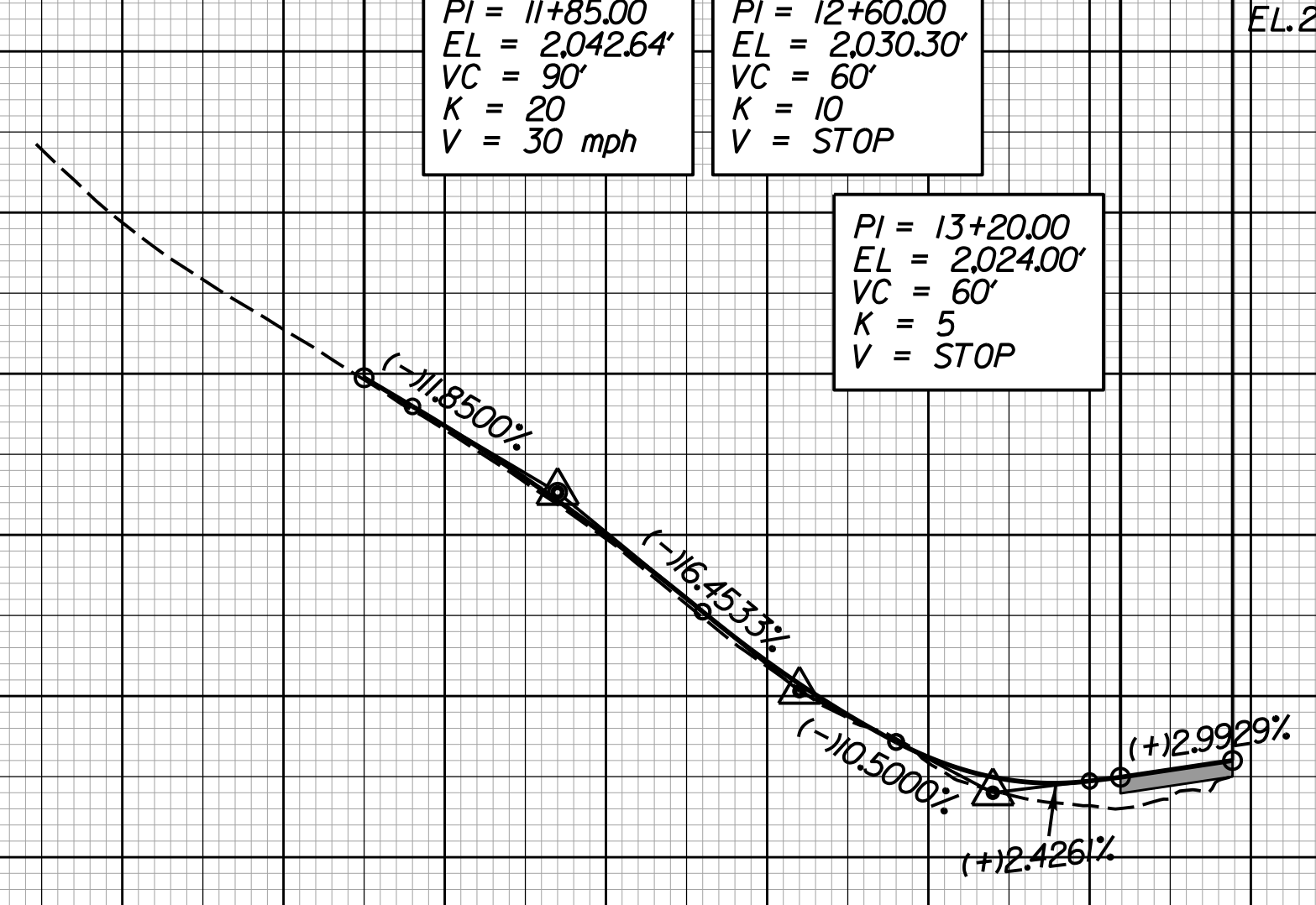
END GRADE
-Y4- STA.13+59.57
-L- STA.58+50.00 (34.75' LT)
EL.2,024.96'

PI = 11+85.00
EL = 2,042.64'
VC = 90'
K = 20
V = 30 mph

PI = 12+60.00
EL = 2,030.30'
VC = 60'
K = 10
V = STOP

PI = 13+20.00
EL = 2,024.00'
VC = 60'
K = 5
V = STOP

-Y4- STA.13+94.32
-L- STA.58+50.00
EL.2,026.00'



SEE SHEET 7 FOR DESIGN

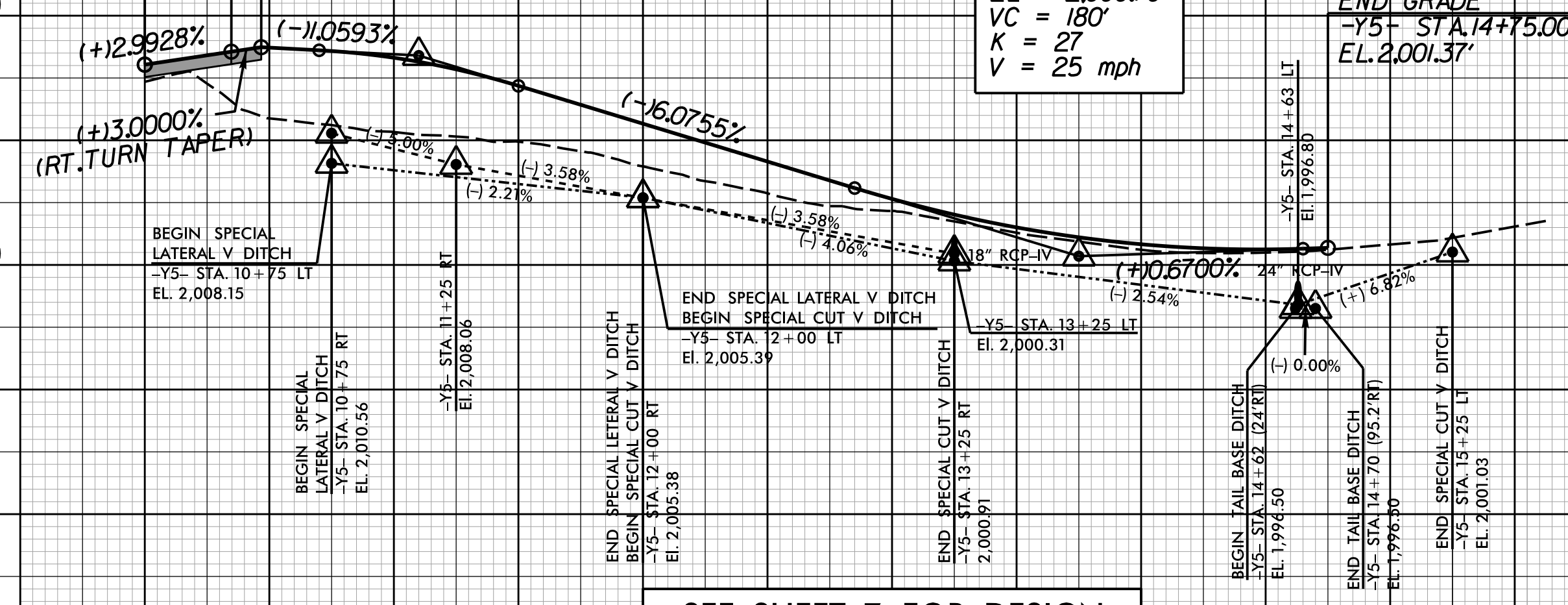
-Y5-

-Y5- STA.10+00.00
-L- STA.62+90.54
EL.2,016.07'

BEGIN GRADE
-Y5- STA.10+34.75
-L- STA.62+90.54 (34.75' RT)
EL.2,017.41'

PI = 11+00.00
EL = 2,016.80'
VC = 80'
K = 16
V = STOP

-Y5- STA.10+46.75
-L- STA.62+90.54 (46.75' LT)
EL.2,017.41'



SEE SHEET 7 FOR DESIGN

PI = 13+75.00
EL = 2,000.70'
VC = 180'
K = 27
V = 25 mph

PIPE HYDRAULIC DATA
-Y5- Sta. 14+25
DRAINAGE AREA = 0.8 AC
DESIGN FREQUENCY = 25 YRS
DESIGN DISCHARGE = 2.9 CFS
DESIGN HW ELEVATION = 2001.8 FT
100 YEAR DISCHARGE = 3.5 FT
100 YEAR HW ELEVATION = 2001.9 FT
OVERTOPPING FREQUENCY = 500+ YRS
OVERTOPPING DISCHARGE = 15.6 CFS
OVERTOPPING ELEVATION = 2004.4 FT

PIPE HYDRAULIC DATA
-Y5- Sta. 14+63
DRAINAGE AREA = 8 AC
DESIGN FREQUENCY = 25 YRS
DESIGN DISCHARGE = 17 CFS
DESIGN HW ELEVATION = 2000.5 FT
100 YEAR DISCHARGE = 21 CFS
100 YEAR HW ELEVATION = 2001.4 FT
OVERTOPPING FREQUENCY = 10+ YRS
OVERTOPPING DISCHARGE = 16 CFS
OVERTOPPING ELEVATION = 2000.3 FT

PROJECT REFERENCE NO. A-0011C	SHEET NO. 32
ROADWAY DESIGN ENGINEER PAUL W. HUNTER SEAL 39283 8/6/2019	HYDRAULICS ENGINEER PAUL W. HUNTER SEAL 40801 8/6/2019

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

Weston & Sampson
NC License: C-4647
588 East Chatham Street Suite 137 Cary, NC 27511
Phone: 919.297.0220 Fax: 919.297.0221

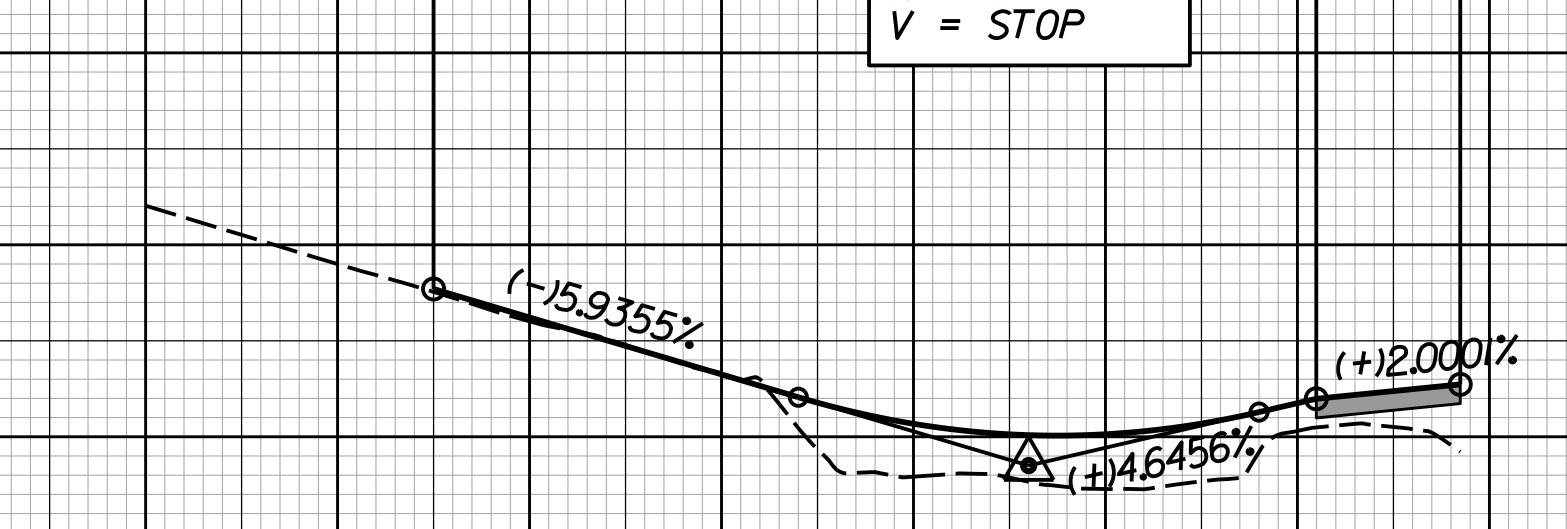
-Y6-

BEGIN GRADE
-Y6- STA.10+75.00
EL.1,997.70'

END GRADE
-Y6- STA.13+04.91
-L- STA.70+50.00 (37.50' LT)
EL.1,991.98'

PI = 12+30.00
EL = 1,988.50'
VC = 120'
K = 11
V = STOP

-Y6- STA.13+42.41
-L- STA.70+50.00
EL.1,992.73'



SEE SHEET 8 FOR DESIGN

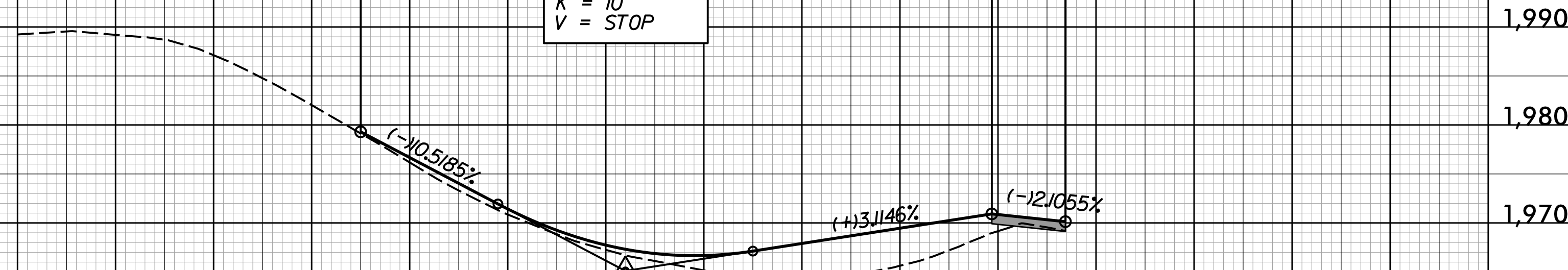
-Y7-

BEGIN GRADE
-Y7- STA.11+75.00
EL.1,979.30'

END GRADE
-Y7- STA.14+96.86
-L- STA.76+05.61 (37.50' LT)
EL.1,970.92'

PI = 13+10.00
EL = 1,965.10'
VC = 130'
K = 10
V = STOP

-Y7- STA.15+34.38
-L- STA.76+06.94
EL.1,970.13'



SEE SHEET 9 FOR DESIGN

8/15/2018 10:30:00 AM \\P:\proj\A0011C_Road\esh32.dgn