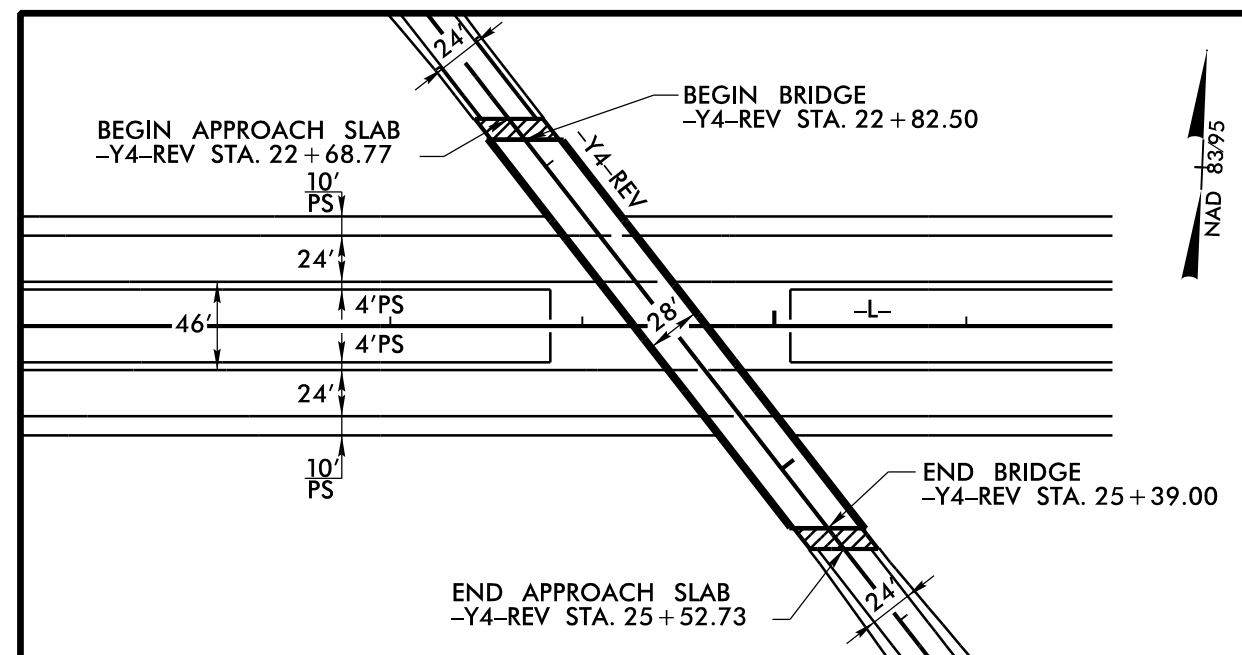


PROJECT REFERENCE NO. R-2707C		SHEET NO. 11	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		SEAL 15869	
BRIDGETTE M. EPPS DB 1625 PG 2466		SEAL 26971	
4/12/2017		4/12/2017	
moftatt & nichol		Sungate Design Group, P.A.	
1919 FRI-ROAD, SUITE 200, RALEIGH, NC 27603		1100 FALLS GATE ROAD, SUITE 300, RALEIGH, NC 27603	
919-881-8888		919-881-8888	
SDG		SDG	

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

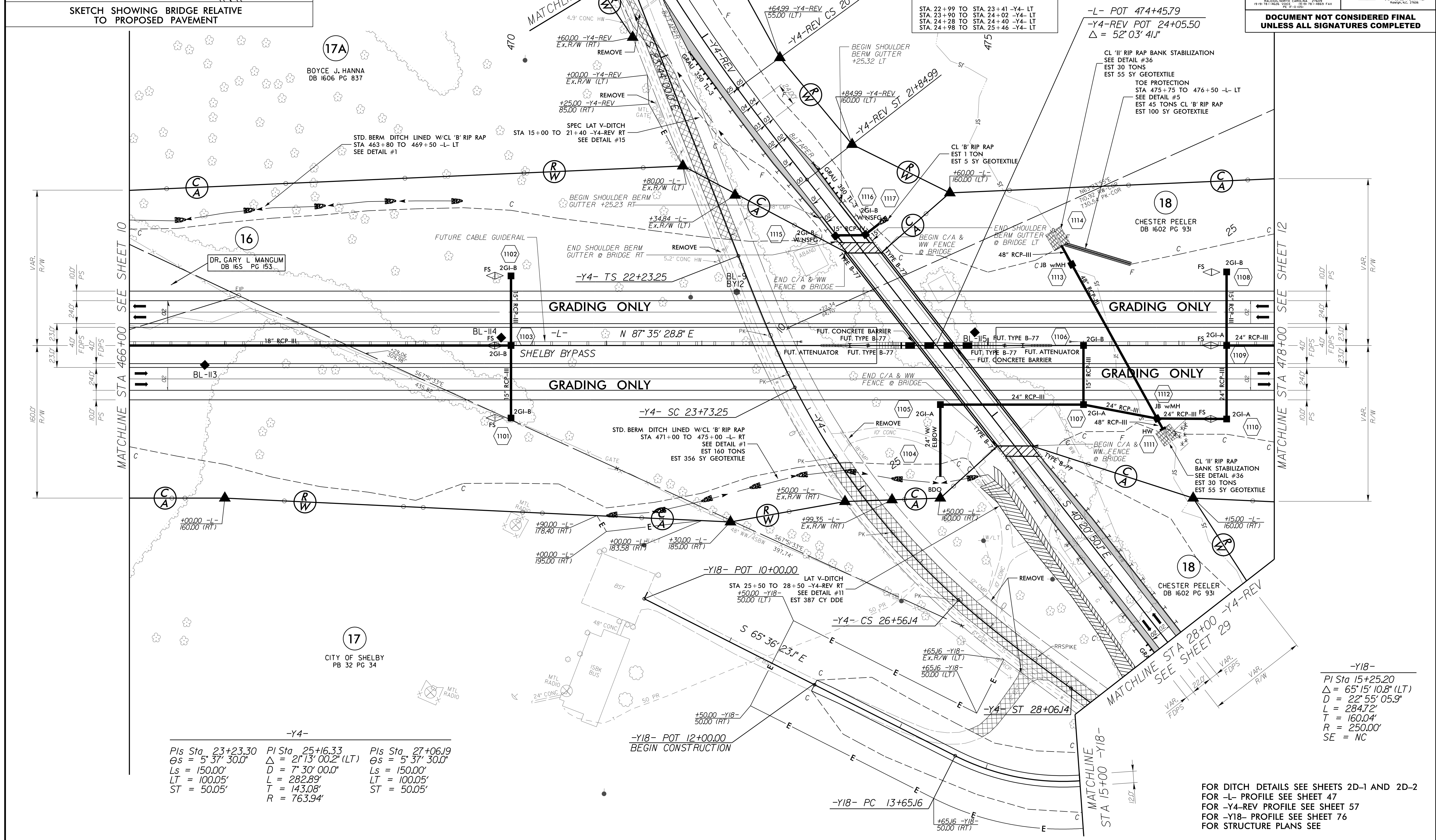


-Y4-REV
 PI Sta 18+44.49
 $\Delta = 13^{\circ}17'22.9''$ (LT)
 $D = 3^{\circ}00'00.0''$
 $L = 442.99'$
 $T = 222.49'$
 $R = 1,909.86'$
 $SE = .05$
 $RO = 120'$

PIs Sta 21+04.99
 $\Theta_s = 1^{\circ}48'00.0''$
 $L_s = 120.00'$
 $LT = 80.00'$
 $ST = 40.00'$

-Y4- DECK DRAIN RECOMMENDATIONS:
 RIGHT SIDE OF BRIDGE
 USE STD. 6" DECK DRAINS ON 6' CENTERS
 STA. 22+77 TO STA. 23+19 -Y4- RT
 STA. 23+71 TO STA. 24+83 -Y4- LT
 STA. 24+06 TO STA. 24+18 -Y4- RT
 STA. 24+72 TO STA. 25+26 -Y4- RT

LEFT SIDE OF BRIDGE
 USE STD. 6" DECK DRAINS ON 6' CENTERS
 STA. 22+99 TO STA. 23+41 -Y4- LT
 STA. 23+90 TO STA. 24+02 -Y4- LT
 STA. 24+28 TO STA. 24+40 -Y4- LT
 STA. 24+98 TO STA. 25+46 -Y4- LT



-Y4-
 PIs Sta 23+23.30
 $\Theta_s = 5^{\circ}37'30.0''$
 $L_s = 150.00'$
 $LT = 100.05'$
 $ST = 50.05'$

PI Sta 25+16.33
 $\Delta = 21^{\circ}13'00.2''$ (LT)
 $D = 7^{\circ}30'00.0''$
 $L = 282.89'$
 $T = 143.08'$
 $R = 763.94'$

PIs Sta 27+06.19
 $\Theta_s = 5^{\circ}37'30.0''$
 $L_s = 150.00'$
 $LT = 100.05'$
 $ST = 50.05'$

-Y18-
 PI Sta 15+25.20
 $\Delta = 65^{\circ}15'10.8''$ (LT)
 $D = 22^{\circ}55'05.9''$
 $L = 284.72'$
 $T = 160.04'$
 $R = 250.00'$
 $SE = NC$

FOR DITCH DETAILS SEE SHEETS 2D-1 AND 2D-2
 FOR -L- PROFILE SEE SHEET 47
 FOR -Y4-REV PROFILE SEE SHEET 57
 FOR -Y18- PROFILE SEE SHEET 76
 FOR STRUCTURE PLANS SEE