

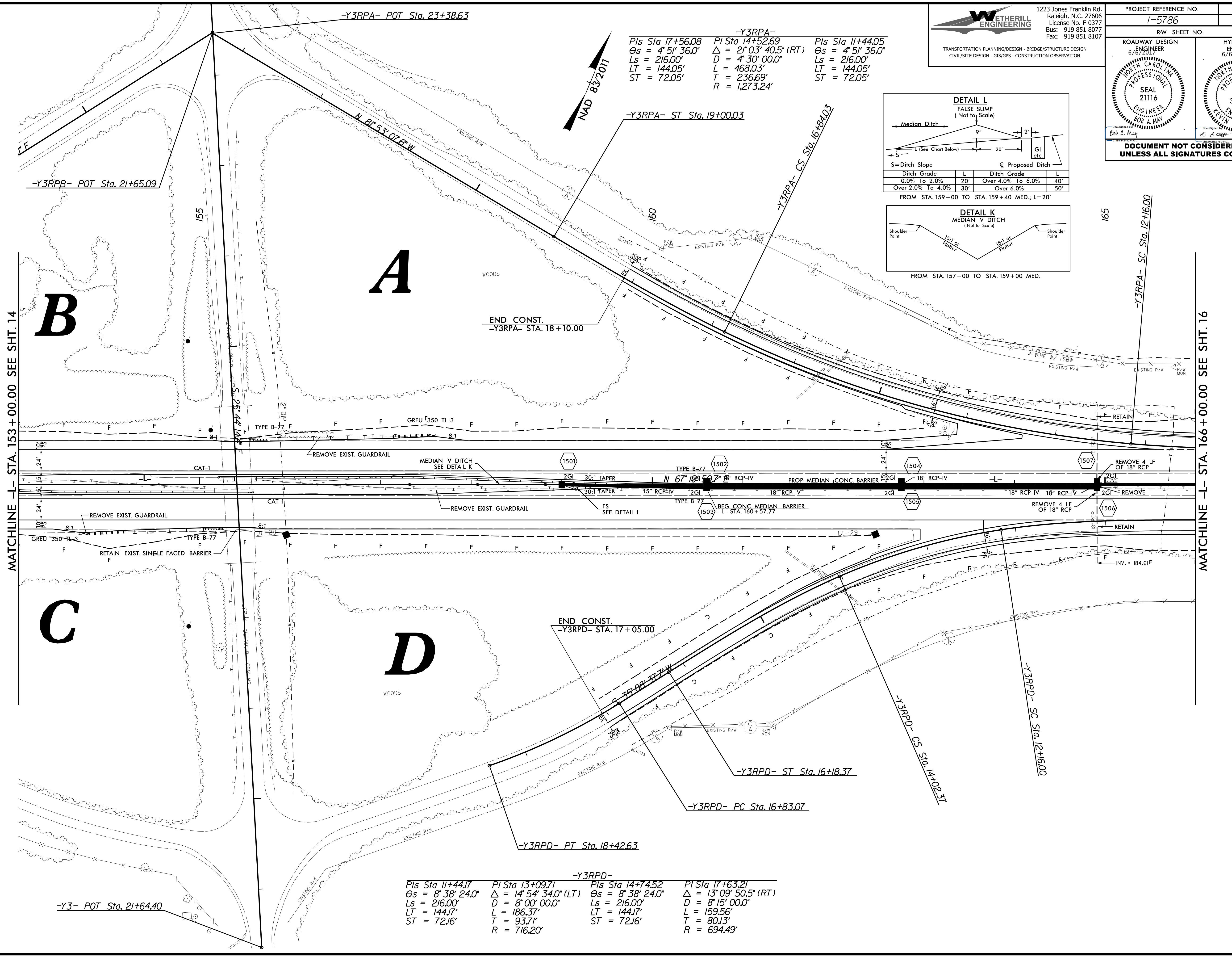
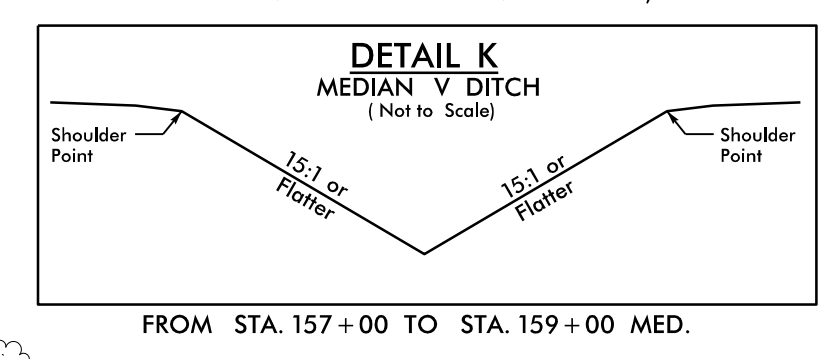
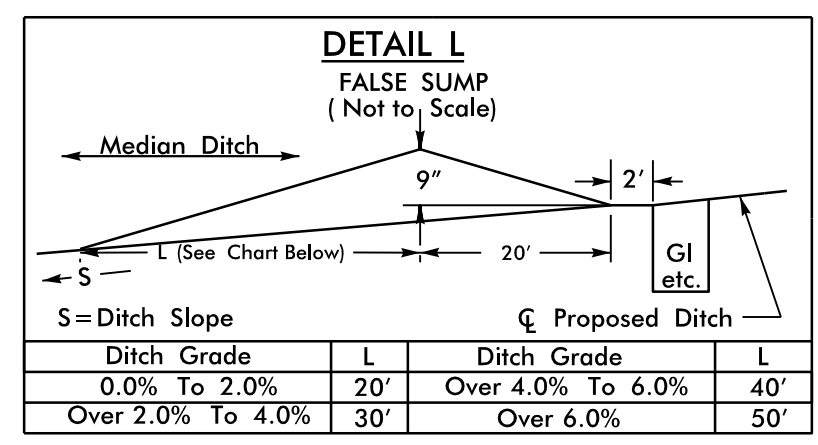
5/14/15

**WETHERILL ENGINEERING**  
 1223 Jones Franklin Rd.  
 Raleigh, N.C. 27606  
 License No. F-0377  
 Bus: 919 851 8077  
 Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

PROJECT REFERENCE NO. <b>1-5786</b>	SHEET NO. <b>15</b>
RW SHEET NO.	HYDRAULICS ENGINEER 6/6/2017
ROADWAY DESIGN ENGINEER 6/6/2017 SEAL 21116 ENG. IN CA. 2008 A.M.A.	SEAL 31977 ENG. IN N.C. 2017 FELIX B. ALFORD
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

**-Y3RPA-**  
 Pls Sta 17+56.08 PI Sta 14+52.69 Pls Sta 11+44.05  
 $\Theta_s = 4' 51' 36.0''$   $\Delta = 21' 03' 40.5''$  (RT)  $\Theta_s = 4' 51' 36.0''$   
 $L_s = 216.00'$   $D = 4' 30' 00.0''$   $L_s = 216.00'$   
 $LT = 144.05'$   $L = 468.03'$   $LT = 144.05'$   
 $ST = 72.05'$   $T = 236.69'$   $ST = 72.05'$   
 $R = 1,273.24'$



**-Y3RPD-**  
 Pls Sta 11+44.17 PI Sta 13+09.71 Pls Sta 14+74.52 PI Sta 17+63.21  
 $\Theta_s = 8' 38' 24.0''$   $\Delta = 14' 54' 34.0''$  (LT)  $\Theta_s = 8' 38' 24.0''$   $\Delta = 13' 09' 50.5''$  (RT)  
 $L_s = 216.00'$   $D = 8' 00' 00.0''$   $L_s = 216.00'$   $D = 8' 15' 00.0''$   
 $LT = 144.17'$   $L = 186.37'$   $LT = 144.17'$   $L = 159.56'$   
 $ST = 72.16'$   $T = 93.71'$   $ST = 72.16'$   $T = 80.13'$   
 $R = 716.20'$   $R = 694.49'$

MATCHLINE -L- STA. 153+00.00 SEE SHT. 14

MATCHLINE -L- STA. 166+00.00 SEE SHT. 16

6/5/2017 1:57:86 PM J:\esh15.dgn