

5/28/2020

-Y7RPA-

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

PROJECT REFERENCE NO. **W-5600** SHEET NO. **41**

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

ROADWAY DESIGN ENGINEER
Jonathan C. Heiser
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 35016
 12/15/2020 16:25 PST

HYDRAULICS ENGINEER
K. S. Cap...
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 31977
 12/15/2020 16:23 PST

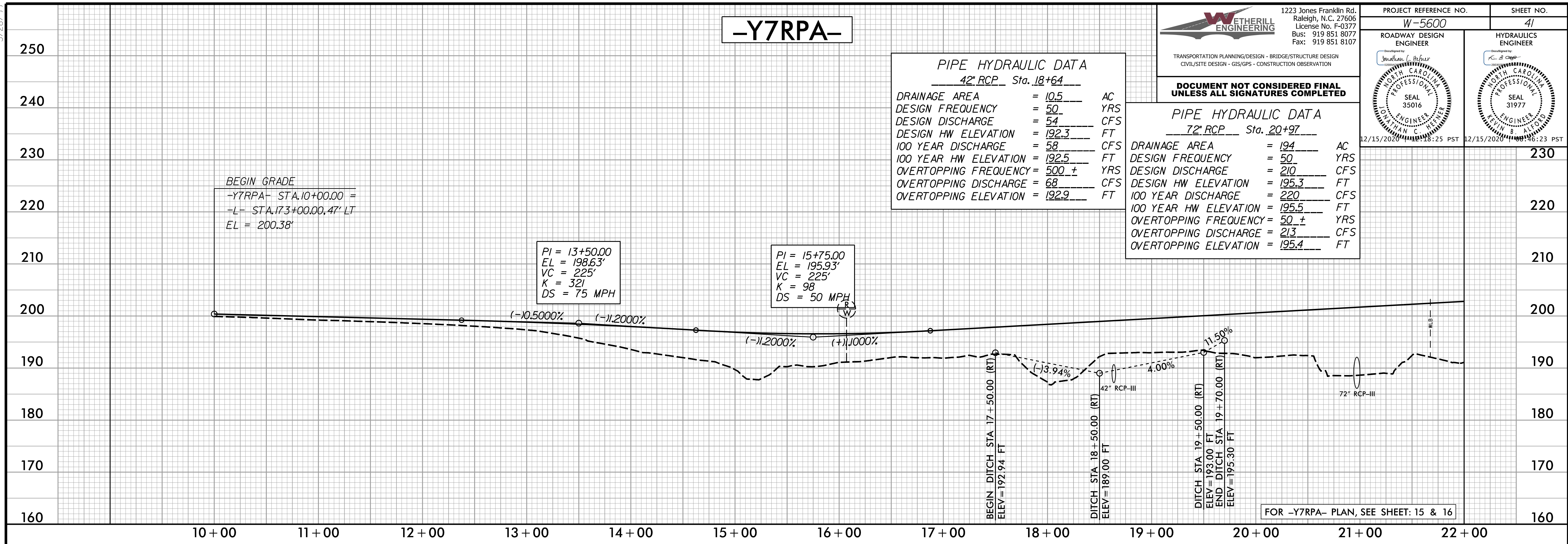
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PIPE HYDRAULIC DATA
42" RCP Sta. 18+64

DRAINAGE AREA	= 10.5	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 54	CFS
DESIGN HW ELEVATION	= 192.3	FT
100 YEAR DISCHARGE	= 58	CFS
100 YEAR HW ELEVATION	= 192.5	FT
OVERTOPPING FREQUENCY	= 500 ±	YRS
OVERTOPPING DISCHARGE	= 68	CFS
OVERTOPPING ELEVATION	= 192.9	FT

PIPE HYDRAULIC DATA
72" RCP Sta. 20+97

DRAINAGE AREA	= 194	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 210	CFS
DESIGN HW ELEVATION	= 195.3	FT
100 YEAR DISCHARGE	= 220	CFS
100 YEAR HW ELEVATION	= 195.5	FT
OVERTOPPING FREQUENCY	= 50 ±	YRS
OVERTOPPING DISCHARGE	= 213	CFS
OVERTOPPING ELEVATION	= 195.4	FT



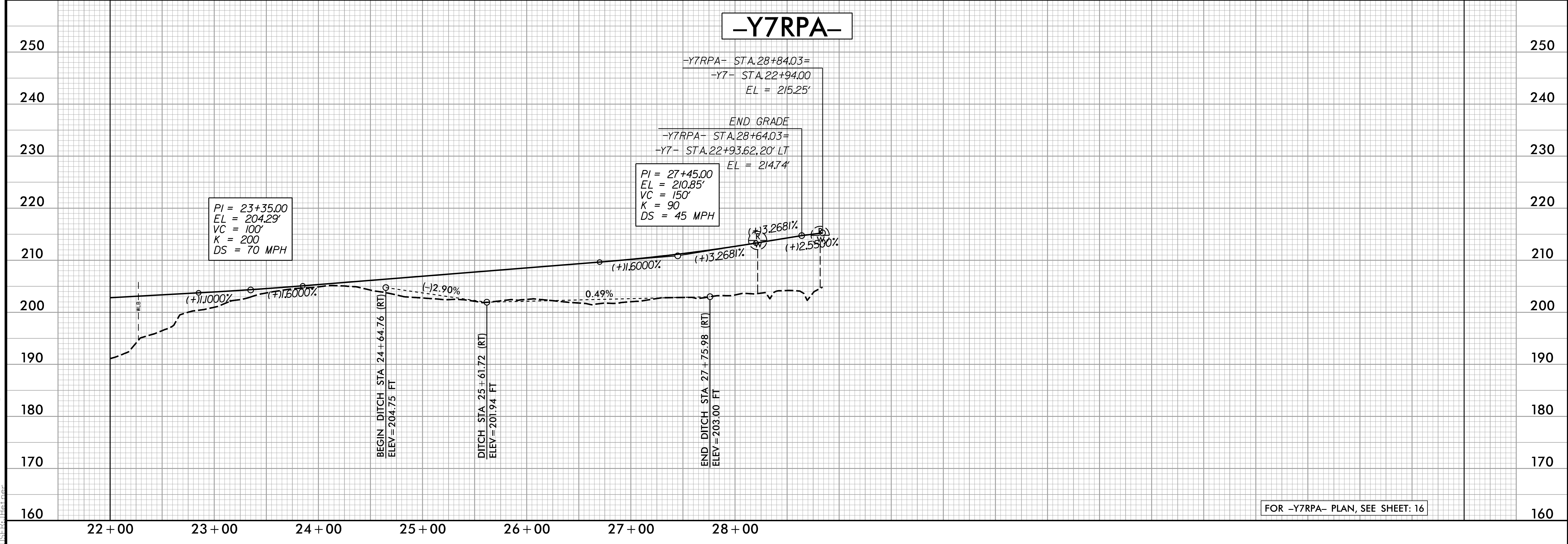
-Y7RPA-

END GRADE
 -Y7RPA- STA.28+84.03=
 -Y7- STA.22+94.00
 EL = 215.25'

END GRADE
 -Y7RPA- STA.28+64.03=
 -Y7- STA.22+93.62, 20' LT
 EL = 214.74'

PI = 27+45.00
 EL = 210.85'
 VC = 150'
 K = 90
 DS = 45 MPH

PI = 23+35.00
 EL = 204.29'
 VC = 100'
 K = 200
 DS = 70 MPH



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