

5/28/2016

BM #18 ELEVATION = 808.40'
N = 872785 E = 1753511
-Y8- STATION 10+00
N 18° 44' 24.6" W DIST 575.94'
R/R SPIKE SET IN 22" OAK

HNTB HNTB NORTH CAROLINA, P.C.
248 E. 5th Street, Suite 200
Raleigh, North Carolina 27609
NC License No. C-1584

PLANS PREPARED BY:
PARSONS
RALEIGH, NORTH CAROLINA, (919) 854-1345
NC LICENSE NO. F-0246
FOR NORTH CAROLINA DEPT. OF TRANSPORTATION

PROJECT REFERENCE NO. U-2524D	SHEET NO. 22
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

-Y8-

BEGIN GRADE
STA. 11+00.00 -Y8-
EL = 796.87

CULVERT HYDRAULIC DATA

DESIGN DISCHARGE	= 712 CFS
DESIGN FREQUENCY	= 50 YRS
DESIGN HW ELEVATION	= 772.0 FT
BASE DISCHARGE	= 902 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 773.64 FT
OVERTOPPING DISCHARGE	= 1100 CFS
OVERTOPPING FREQUENCY	= 100+ YRS
OVERTOPPING ELEVATION	= 777.39 FT

☒ -LREV-

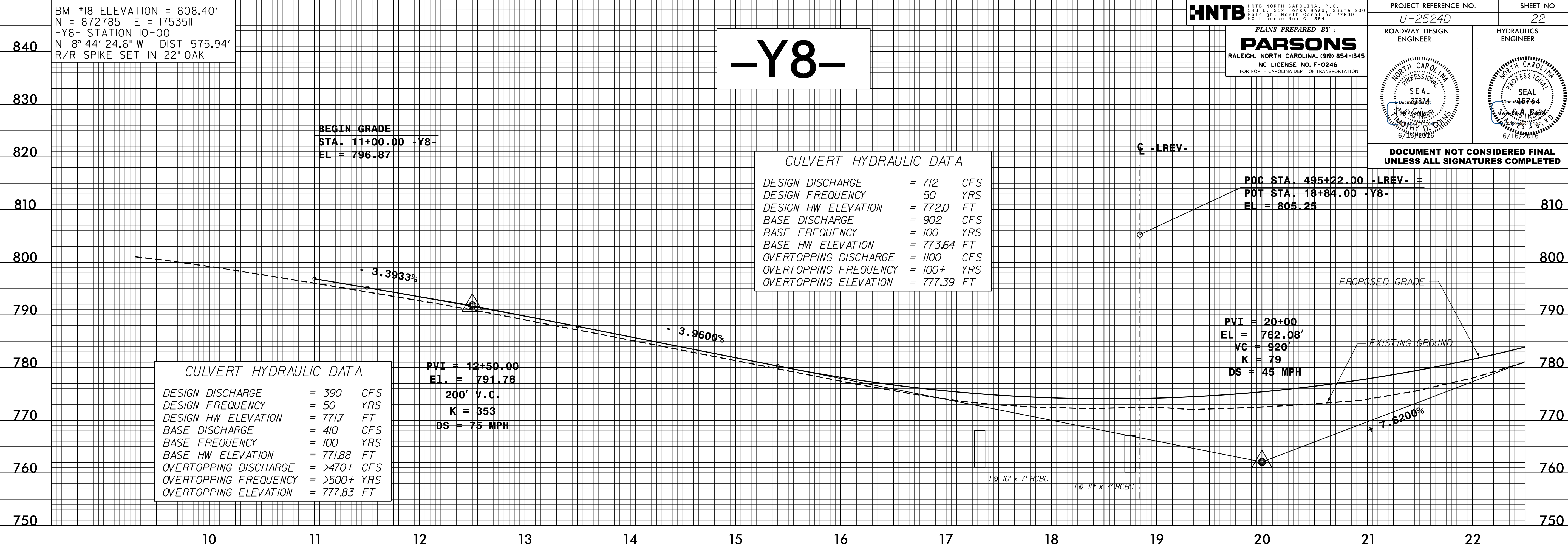
POC STA. 495+22.00 -LREV- =
POT STA. 18+84.00 -Y8-
EL = 805.25

CULVERT HYDRAULIC DATA

DESIGN DISCHARGE	= 390 CFS
DESIGN FREQUENCY	= 50 YRS
DESIGN HW ELEVATION	= 771.7 FT
BASE DISCHARGE	= 410 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 771.88 FT
OVERTOPPING DISCHARGE	= >470+ CFS
OVERTOPPING FREQUENCY	= >500+ YRS
OVERTOPPING ELEVATION	= 777.83 FT

PVI = 12+50.00
EL = 791.78
200' V.C.
K = 353
DS = 75 MPH

PVI = 20+00
EL = 762.08'
VC = 920'
K = 79
DS = 45 MPH



-Y8-

END GRADE
STA. 27+00.00 -Y8-
EL = 813.54

BM #19 ELEVATION = 841.27'
N = 869867 E = 1754214
-Y8- STATION 31+26
S 22° 19' 57.9" E DIST 312.72'
R/R SPIKE SET IN 18" OAK

PROPOSED GRADE

+ 7.6200% + 7.0600% + 5.7000%

+ 6.3400%

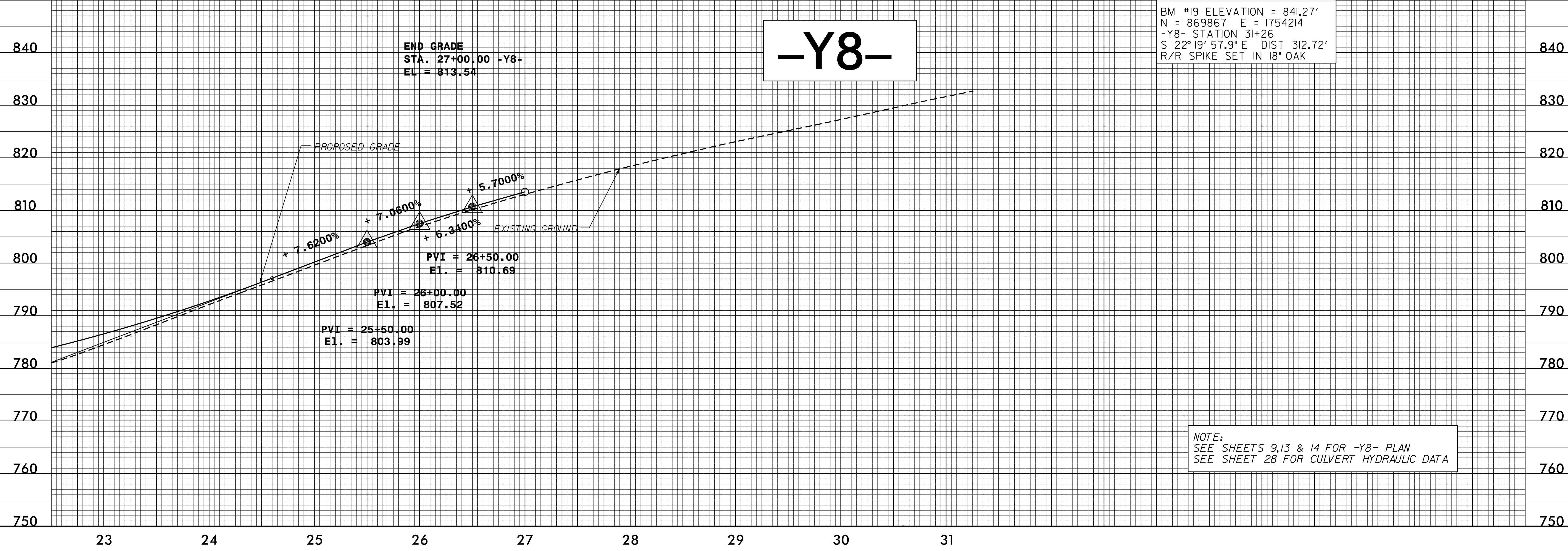
EXISTING GROUND

PVI = 26+50.00
EL = 810.69

PVI = 26+00.00
EL = 807.52

PVI = 25+50.00
EL = 803.99

NOTE:
SEE SHEETS 9,13 & 14 FOR -Y8- PLAN
SEE SHEET 28 FOR CULVERT HYDRAULIC DATA



24 MAY 2016 2:53 PM P:\Projects\U2524D_RDY_PSH_22.dgn