

5/28/24

BM #1  
8" SPIKE SET ON TOP OF A WHITE PINE STUMP  
-L- STA. 12 + 49.58 (28.21' LT)  
EL. 911.72'

BM #2  
8" SPIKE SET ON TOP OF A WOOD  
POST AT NORTHWEST END OF BRIDGE  
-L- STA. 20 + 67.06 (17.89' LT)  
EL. 884.01'

Weston & Sampson  
WSE of North Carolina, PC  
2062 Energy Drive  
Phone: 919.297.0220  
NC License: C-4847  
Apex, NC 27502  
westonandsampson.com

PROJECT REFERENCE NO.  
**BPI4-R04I**

ROADWAY DESIGN  
ENGINEER  
SEAL 39283  
KYLE S. HUTCHINS  
5/10/2025

SHEET NO.  
**6**

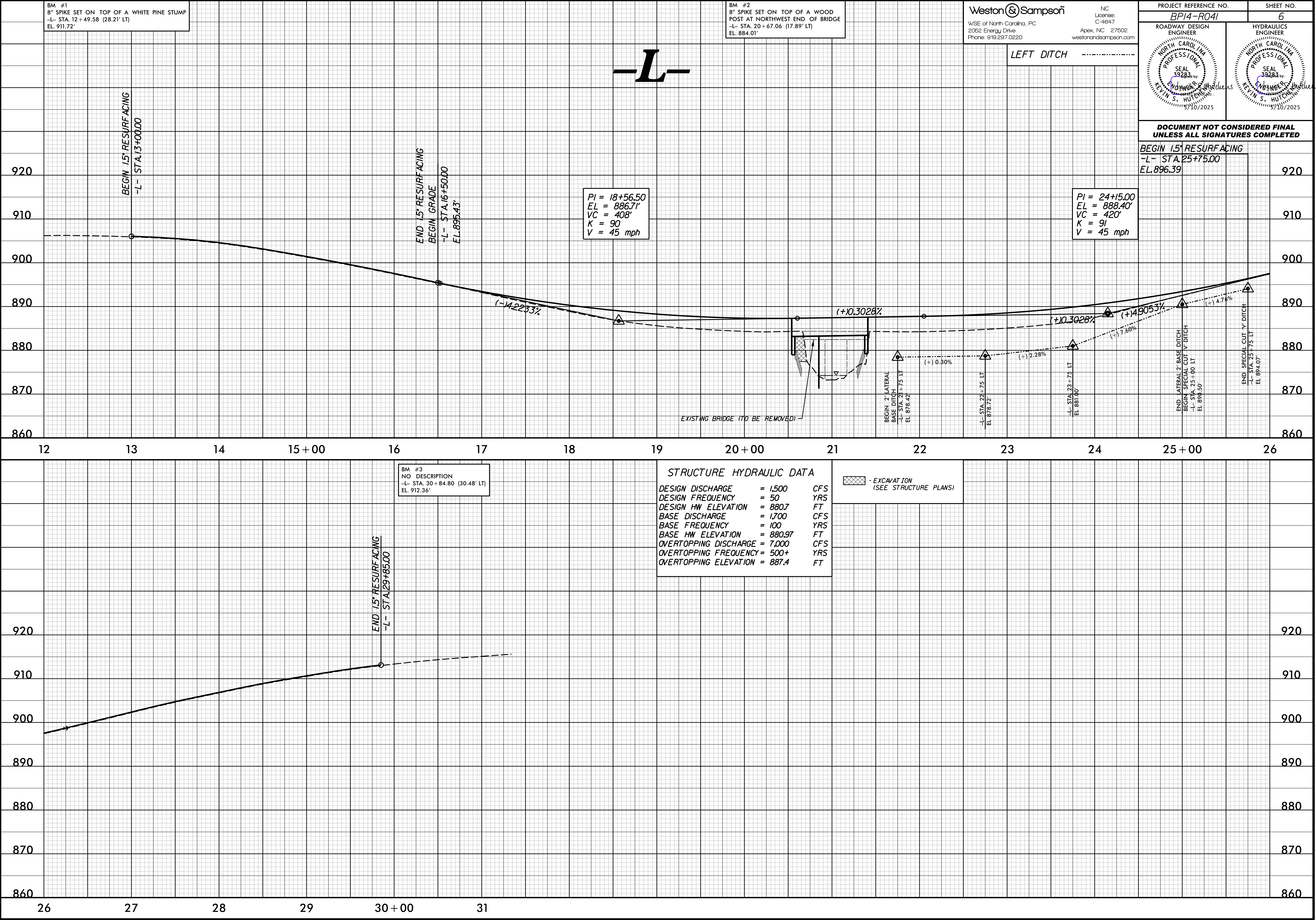
HYDRAULICS  
ENGINEER  
SEAL 39283  
KYLE S. HUTCHINS  
5/10/2025

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

BEGIN 1.5' RESURFACING  
-L- STA. 25 + 75.00  
EL. 896.39

PI = 24 + 15.00  
EL = 888.40'  
VC = 420'  
K = 91  
V = 45 mph

PI = 18 + 56.50  
EL = 886.71'  
VC = 408'  
K = 90  
V = 45 mph



BM #3  
NO DESCRIPTION  
-L- STA. 30 + 84.80 (30.48' LT)  
EL. 912.36'

STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE = 1,500 CFS  
DESIGN FREQUENCY = 50 YRS  
DESIGN HW ELEVATION = 880.7 FT  
BASE DISCHARGE = 1,700 CFS  
BASE FREQUENCY = 100 YRS  
BASE HW ELEVATION = 880.97 FT  
OVERTOPPING DISCHARGE = 7,000 CFS  
OVERTOPPING FREQUENCY = 500+ YRS  
OVERTOPPING ELEVATION = 887.4 FT

EXCAVATION  
(SEE STRUCTURE PLANS)

END 1.5' RESURFACING  
-L- STA. 29 + 85.00

5/16/2025  
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