

5/14/19

BRIDGE HYDRAULIC DATA

| | | |
|----------------------------------|------------|-----|
| DESIGN DISCHARGE | = 5,800 | CFS |
| DESIGN FREQUENCY | = 25 | YRS |
| DESIGN HW ELEVATION | = 2,201.8 | FT |
| BASE DISCHARGE | = 8,000 | CFS |
| BASE FREQUENCY | = 100 | YRS |
| BASE HW ELEVATION | = 2,202.36 | FT |
| OVERTOPPING DISCHARGE | = 3,600 | CFS |
| OVERTOPPING FREQUENCY | = 10 (-) | YRS |
| OVERTOPPING ELEVATION | = 2,201.03 | FT |
| DATE OF SURVEY | = 11/11/15 | |
| W.S. ELEVATION AT DATE OF SURVEY | = 2,194.1 | FT |

-L- SR 1740

BM#2 ELEV. 2223.33'
 -L- Sta. 16+90.12 26.15' LT
 8" SPIKE SET IN BASE OF 18" WHITEOAK

| | | | |
|---|-----------------|---------------------|---------------|
| PROJECT REFERENCE NO. | B-5159 | SHEET NO. | 5 |
| ROADWAY DESIGN ENGINEER | ANDREW P. YOUNG | HYDRAULICS ENGINEER | JAMES A. BYRD |
| SEAL 034407 | | SEAL 15764 | |
| DATE: 3/30/2017 | | DATE: 3/30/2017 | |
| STEWART | | HNTB | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | | | |

2,230
2,220
2,210
2,200
2,190
2,180
2,170
2,160

2,210
2,200
2,190
2,180
2,170
2,160

BEGIN GRADE
 -L- STA. 10+10.00
 ELEV. = 2,201.03'

BEGIN BRIDGE
 -L- Sta. 10+37.81

BEGIN APPROACH SLAB
 -L- Sta. 10+26.94

END BRIDGE
 -L- Sta. 11+45.19

END APPROACH SLAB
 -L- Sta. 11+36.07

PI = 14+00.00
 EL = 2,213.97'
 VC = 175'
 K = 76
 V = 45MPH

PI = 16+00.00
 EL = 2,219.57'
 VC = 160'
 K = 77
 V = 45MPH

END GRADE
 -L- STA. 16+90.00
 ELEV. = 2,220.21'

OVERTOPPING STA. -L- 10+10.00
 ELEV. = 2,201.03'
 Q AT SAG EL = 2,196.3'

5'-W x 3'-D (CL. RIP RAP) (STR. PAY ITEM)

THEORETICAL QT SCOUR BED MATERIAL: SAND W/ COBBLE

BEGIN DITCH GRADE
 -L- Sta. 11+13.50
 ELEV. = 2,195.30'

-L- Sta. 11+50.00
 ELEV. = 2,195.30'

END DITCH GRADE
 -L- Sta. 15+00.00
 ELEV. = 2,215.00'

-L- Sta. 12+50.00
 ELEV. = 2,198.40'

-L- Sta. 14+00.00
 ELEV. = 2,210.90'

EXISTING BRIDGE OPENING BELOW LOW CHORD = 438 sf
 PROPOSED BRIDGE OPENING BELOW LOW CHORD = 554 sf
 MATERIAL TO BE REMOVED = 500 cy

BM#1 ELEV. 2203.08'
 -L- Sta. 11+34.28 27.51' RT
 8" SPIKE SET IN BASE OF 20" SYCAMORE

10 11 12 13 14 15 16 17

RIGHT DITCH -----

FOR PLAN VIEW, SEE SHEET 4

FOR STRUCTURE PLANS, SEE SHEETS S-1 THRU S-17

-YI- SR 1737

BEGIN GRADE
 -YI- STA. 11+75.00
 ELEV. = 2,198.67'

PI = 12+75.00
 EL = 2,199.17'
 VC = 200'
 K = 1351
 V > 55MPH

PI = 15+25.00
 EL = 2,200.05'
 VC = 200'
 K = 1153
 V > 55MPH

END GRADE
 -YI- STA. 21+15.00
 ELEV. = 2,203.15'

2,210
2,200
2,190
2,180
2,170
2,160
2,150

2,210
2,200
2,190
2,180
2,170
2,160
2,150

BEGIN DITCH GRADE
 -YI- Sta. 12+50.00
 ELEV. = 2,195.50'

END DITCH GRADE
 -YI- Sta. 14+00.00
 ELEV. = 2,196.50'

-YI- Sta. 13+00.00
 ELEV. = 2,194.50'

-L- Sta. 10+00.00
 -YI- Sta. 16+74.00

RIGHT DITCH -----

FOR PLAN VIEW, SEE SHEET 4

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

REVISIONS

3/28/2017 B-5159_Rdy_p1_05.dgn