## STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS GEOTECHNICAL ENGINEERING UNIT

## HELENE EMERGENCY REPAIRS

COUNTY HENDERSON

TO BAT CAVE

PROJECT DESCRIPTION US 64 FROM SLICK ROCK RD

| ROUTE | SITE#           | SITE LATITUDE | SITE LONGITUDE | <b>REPAIR OPTION 1</b>  | <b>REPAIR OPTION 2</b>   | <b>REPAIR OPTION 3</b>   |
|-------|-----------------|---------------|----------------|---|--|--|
| US 64 | 314A            | 35.4356356    | -82.3017179    | 1.25:1 Rock Embankment  | Wire Form Embankment + Shot Rock Plating                             |  |
|       | 314B Upstream   | 35.4359514    | -82.3013061    | Shotcrete Slope Stabilization                                       |  |  |
|       | 314B Downstream | 35.4359514    | -82.3013061    | Soil Nail Wall with Shotcrete<br>Face + 2x3 Micropile Grade<br>Beam |  |  |
|       | 335 Downstream  | 35.43802859   | -82.29929514   | 1.25:1 Rock Embankment  | Wire Form Embankment + Shot<br>Rock Plating                          |  |
|       | 335 Upstream    | 35.43802859   | -82.29929514   | Soil Nail Wall with Shotcrete<br>Face + 2x3 Micropile Grade<br>Beam |  |  |
|       | 321             | 35.44180048   | -82.29414738   | 1.25:1 Rock Embankment  | Wire Form Embankment + Shot<br>Rock Plating                          |  |
|       | 323A            | 35.4472345    | -82.2932373    | 1.25:1 Rock Embankment +<br>Micropile Knee Wall                     | Wire Form Embankment + Shot<br>Rock Plating + Micropile Knee<br>Wall |  |
|       | 323B            | 35.4478321    | -82.2926437    | 1.25:1 Rock Embankment  | Wire Form Embankment + Shot Rock Plating                             |  |
|       | 323C            | 35.4478604    | -82.2921445    | Soil Nail Wall with Shotcrete<br>Face + 2x3 Micropile Grade<br>Beam |  |  |
|       | 324             | 35.44874093   | -82.29107389   | 1.25:1 Rock Embankment +<br>Micropile Knee Wall                     | Wire Form Embankment + Shot<br>Rock Plating + Micropile Knee<br>Wall |  |
|       | 325             | 35.44962903   | -82.28911449   | 1.25:1 Rock Embankment +<br>Micropile Knee Wall                     | Wire Form Embankment + Shot<br>Rock Plating + Micropile Knee<br>Wall | Soil Nail Wall with Shotcrete<br>Face + 2x3 Micropile Grade<br>Beam + Class B Rock Plating |

WHEN MULTIPLE REPAIR OPTIONS ARE AVAILABLE AT A SITE LOCATION, THE CONTRACTOR SHALL PROCEED IN SEQUENTIAL ORDER AND CHOOSE THE FIRST OPTION THAT FITS WITHIN SITE CONSTRAINTS

PRIOR TO CONSTRUCTING THE GEOTECHNICAL REPAIRS, AN ON-SITE MEETING WITH THE PRIME CONTRACTOR, THE GEOTECHNICAL SPECIALTY SUBCONTRACTOR (IF APPLICABLE), THE DIVISION CONSTRUCTION REPRESENTATIVE AND THE GEOTECHNICAL OPERATIONS GROUP REPRESENTATIVE SHALL BE CONDUCTED

