

DIVISION OF HIGHWAYS  
 STATE OF NORTH CAROLINA

**SUMMARY OF EARTHWORK**  
 IN CUBIC YARDS

| STATION                                    | STATION                  | UNCLASSIFIED EXCAVATION | UNDERCUT     | EMBT +%       | BORROW        | WASTE        |
|--|--------------------------|-------------------------|--------------|---------------|---------------|--------------|
| <b>PHASE I</b>                             |                          |                         |              |               |               |              |
| -L- LT 12+32.17                            | 42+00.00                 | 2,556                   |              | 3,634         | 2,494         | 1,416        |
| -Y1- 13+45.00                              | 19+94.59                 | 548                     |              | 518           | 450           | 480          |
|  | <b>SUBTOTAL</b>          | <b>3,104</b>            |              | <b>4,152</b>  | <b>2,944</b>  | <b>1,896</b> |
| -L- LT 42+00.00                            | 48+50.00                 | 50                      |              | 1,456         | 1,406         |              |
| -L- 48+50.00                               | 52+00.00                 | 368                     |              | 994           | 626           |              |
| -L- RT 52+00.00                            | 72+00.00                 | 310                     | 1,800        | 16,994        | 16,684        | 1,800        |
| -Y4- LT 10+30.00                           | 12+43.00                 | 4                       |              | 143           | 139           |              |
| -DRW1- 10+42.00                            | 10+78.00                 | 235                     |              | 36            |               | 199          |
|  | <b>SUBTOTAL</b>          | <b>967</b>              | <b>1,800</b> | <b>19,623</b> | <b>18,855</b> | <b>1,999</b> |
| -L- RT 72+00.00                            | 91+80.00                 | 1,816                   |              | 3,124         | 1,834         | 526          |
| -DRW2- 10+42.00                            | 10+52.78                 | 146                     |              | 4             |               | 142          |
|  | <b>SUBTOTAL</b>          | <b>1,962</b>            |              | <b>3,128</b>  | <b>1,834</b>  | <b>668</b>   |
|  | <b>PHASE I SUBTOTAL</b>  | <b>6,033</b>            | <b>1,800</b> | <b>26,903</b> | <b>23,633</b> | <b>4,563</b> |
| <b>PHASE II</b>                            |                          |                         |              |               |               |              |
| -L- RT 12+32.17                            | 42+00.00                 | 891                     |              | 3,221         | 2,672         | 342          |
| -Y2- 10+30.15                              | 18+14.00                 | 960                     |              | 775           | 564           | 749          |
| -Y3- 10+30.00                              | 13+25.00                 | 82                      |              | 77            | 74            | 79           |
|  | <b>SUBTOTAL</b>          | <b>1,933</b>            |              | <b>4,073</b>  | <b>3,310</b>  | <b>1,170</b> |
| -L- RT 42+00.00                            | 48+50.00                 | 14                      |              | 458           | 444           |              |
| -L- LT 52+00.00                            | 72+00.00                 | 739                     |              | 4,703         | 4,100         | 136          |
| -L- LT 56+20.00 DRIVEWAY                   | 57+30.00                 |                         |              | 806           | 806           |              |
| -Y4- RT 10+30.00                           | 12+43.00                 | 32                      |              | 91            | 59            |              |
| -Y5- 10+30.02                              | 11+85.00                 | 54                      |              | 42            |               | 12           |
|  | <b>SUBTOTAL</b>          | <b>839</b>              |              | <b>6,100</b>  | <b>5,409</b>  | <b>148</b>   |
| -L- LT 72+00.00                            | 91+00.00                 | 545                     |              | 3,151         | 2,928         | 322          |
| -Y6- 12+90.00                              | 17+79.81                 | 433                     |              | 1,028         | 595           |              |
| -Y6- 14+19.00 DRIVEWAY                     | 14+45.00                 |                         |              | 16            | 16            |              |
| -Y7- 11+00.00                              | 12+46.72                 | 28                      |              | 16            |               | 12           |
|  | <b>SUBTOTAL</b>          | <b>1,006</b>            |              | <b>4,211</b>  | <b>3,539</b>  | <b>334</b>   |
|  | <b>PHASE II SUBTOTAL</b> | <b>3,778</b>            |              | <b>14,384</b> | <b>12,258</b> | <b>1,652</b> |
|  | <b>SUMMARY TOTALS</b>    | <b>9,811</b>            | <b>1,800</b> | <b>41,287</b> | <b>35,891</b> | <b>6,215</b> |
| MATERIAL FOR SHOULDER CONSTRUCTION         |                          |                         |              | 12            | 12            |              |
| LOSS DUE TO CLEARING & GRUBBING            |                          | -3,500                  |              |               | 3,500         |              |
| SELECT GRANULAR MATERIAL IN LIEU OF BORROW |                          |                         |              | -2,160        | -2,160        |              |
| ADDITIONAL UNDERCUT EXCAVATION             |                          |                         | 200          | 240           | 240           | 200          |
| WASTE IN LIEU OF BORROW                    |                          |                         |              |               | -365          | -365         |
|  | <b>PROJECT TOTALS</b>    | <b>6,311</b>            | <b>2,000</b> | <b>39,379</b> | <b>37,118</b> | <b>6,050</b> |
| EST. 5% TO REPLACE TOP SOIL ON BORROW PIT  |                          |                         |              |               | 1,856         |              |
|  | <b>GRAND TOTAL</b>       | <b>6,311</b>            | <b>2,000</b> |               | <b>38,974</b> |              |
|  | <b>SAY</b>               | <b>6,400</b>            | <b>2,000</b> |               | <b>39,100</b> |              |

PAVEMENT ALTERNATE 1 STRUCTURE VOLUME 23,040 CY

| STATION   | STATION               | UNCLASSIFIED EXCAVATION | UNDERCUT     | EMBT +%       | BORROW        | WASTE        |
|---|-----------------------|-------------------------|--------------|---------------|---------------|--------------|
| <b>EARTHWORK TOTALS FOR ALTERNATE PAVEMENT DESIGN</b> |                       |                         |              |               |               |              |
| <b>SUMMARY TOTALS</b>                                 |                       | <b>9,811</b>            | <b>1,800</b> | <b>41,287</b> | <b>35,891</b> | <b>6,215</b> |
| ADJ. FOR ALTERNATE PAVEMENT DESIGN                    |                       | 1,877                   |              | -3,058        | -4,887        | 48           |
| MATERIAL FOR SHOULDER CONSTRUCTION                    |                       |                         |              | 552           | 552           |              |
| LOSS DUE TO CLEARING & GRUBBING                       |                       | -3,500                  |              |               | 3,500         |              |
| SELECT GRANULAR MATERIAL IN LIEU OF BORROW            |                       |                         |              | -2,160        | -2,160        |              |
| ADDITIONAL UNDERCUT EXCAVATION                        |                       |                         | 200          | 240           | 240           | 200          |
| WASTE IN LIEU OF BORROW                               |                       |                         |              |               | -413          | -413         |
|   | <b>PROJECT TOTALS</b> | <b>8,188</b>            | <b>2,000</b> | <b>36,861</b> | <b>32,723</b> | <b>6,050</b> |
| EST. 5% TO REPLACE TOP SOIL ON BORROW PIT             |                       |                         |              |               | 1,636         |              |
|   | <b>GRAND TOTAL</b>    | <b>8,188</b>            | <b>2,000</b> |               | <b>34,359</b> |              |
|   | <b>SAY</b>            | <b>8,200</b>            | <b>2,000</b> |               | <b>34,400</b> |              |

PAVEMENT ALTERNATE 2 STRUCTURE VOLUME 31,760 CY

EST. DDE = 70 CUBIC YARDS

ESTIMATED 1,800 CY OF UNCLASSIFIED EXCAVATION PER GEOTECH RECOMMENDATION ACCEPTABLE BUT NOT TO BE USED IN THE TOP 3 FT OF EMBANKMENT OR BACKFILL

ESTIMATED 2,850 CY AND ADDITIONAL OF 300 CY AS CONTINGENCY OF SHALLOW UNDERCUT PER GEOTECH RECOMMENDATION

CLASS IV SUBGRADE STABILIZATION TO REPLACE SHALLOW UNDERCUT (PER GEOTECH RECOMMENDATION) = 6,200 TONS

NOTE:  
 APPROXIMATE QUANTITIES ONLY, UNCLASSIFIED EXCAVATION, BORROW EXCAVATION, FINE GRADING, CLEARING AND GRUBBING, BREAKING OF EXISTING PAVEMENT, AND REMOVAL OF EXISTING PAVEMENT WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR "GRADING".

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