| COMPUTED BY: MBL | DATE: 9 /13 /18 |
|---|---|
| CHECKED BY: MDL | DATE: 11 /02 /18 |

12/06/07

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-5754 | 3B-1 |

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
G = GATING IMPACT ATTENUATOR TYPE TL-3
NG = NON-GATING IMPACT ATTENUATOR TYPE TL-3

## GUARDRAIL SUMMARY

| SURVEY LINE | BEG. STA. | END STA. | LOCATION | LENGTH | | | WARRANT POINT | | "N" DIST. FROM E.O.L. | TOTAL SHOUL. WIDTH | FLARE LENGTH | | W | | ANCHORS | | | | | | | | IMPACT ATTENUATOR TYPE TL-3 | | | SINGLE FACED GUARDRAIL | REMOVE EXISTING GUARDRAIL | REMOVE AND STOCKPILE EXISTING GUARDRAIL | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STRAIGHT | SHOP CURVED | DOUBLE FACED | APPROACH END | TRAILING END | | | APPROACH END | TRAILING END | APPROACH END | TRAILING END | XI MOD | XI | GREU TL-3 | M-350 | XIII | CAT-1 | VI MOD | B-77 | AT-1 | EA | G | NG | | | | |
| -Y2- | 11+97.04 | 13+75.00 | RT | 177.96' | | | | | 10' | 13' | | | | | | | | | | 1 | | 1 | | | | | | 177' | | |
| -Y2- | 22+00.05 | 24+40.84 | LT | 240.79' | | | | | 8' | 4' | 50' | | 1' | | | | 1 | | | | | 1 | | | | | | 527' | | |
| -Y2- | 19+60.00 | 25+50.00 | RT | 590' | | | | | 4' | 7' | 50' | | 1' | | | | 1 | | | | | 1 | | | | | | 602' | | |
| -Y2- | 46+43.00 | 49+49.50 | RT | 306.50' | | | | | 4' | 4' | 50' | | 1' | | | | 1 | | | 1 | | | | | | | | | | |
| | | | SUBTOTAL | 1315.25' | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | LESS ANCHOR DEDUCTIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | GREU TL-3 | 3 @ 50' | | 150' | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | B-77 | 3 @ 22.875' | | 68.625' | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | CAT-1 | 2 @ 6.25' | | 12.5' | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | TOTAL | 1084.125' | | | | | | | | | | | | | 3 | | | 2 | | 3 | | | | | | 1,306 | | |
| | | | SAY | 1087.50' | | | | | | | | | | | | | | | | | | | | | | | | 1,310 | | |

ADDITIONAL GUARDRAIL POSTS = 5 EA

## EXPRESSWAY GUTTER SUMMARY

| SURVEY LINE | STATION | STATION | LENGTH |
|---|---|---|---|
| -Y2- LT | 16+55.24 | 24+25.47 | 770.23' |
| | | TOTAL: | 770.23' |
| | | SAY: | 780' |

## PAVEMENT REMOVAL SUMMARY

| SURVEY LINE | STATION | STATION | LOCATION LT/RT/CL | $YD^2$ |
|---|---|---|---|---|
| Y1 | 57+97 | 68+33 | RT | 465.89 |
| Y1 | 11+97 | 18+45 | RT | 1120.44 |
| Y2 | 16+54 | 36+12 | LT | 1522.00 |
| Y2 | 30+00 | 35+98 | RT | 645.56 |
| | | | TOTAL: | 3753.90 |
| | | | SAY: | 3760.00 |

## SUMMARY OF EARTHWORK

*IN CUBIC YARDS*

| LOCATION | UNCLASSIFIED EXCAVATION | EMBT+% | BORROW | WASTE |
|---|---|---|---|---|
| SUMMARY NO. 1 | | | | |
| -Y1- STA. 65+17.80 TO STA. 68+33.11 | 61 | 210 | 149 | 0 |
| -Y2- STA. 12+00.00 TO STA. 38+00.00 | 2000 | 1420 | 0 | 580 |
| -Y1RP- STA. 12+50.00 TO STA. 18+11.99 | 154 | 496 | 342 | 0 |
| -Y2RP- STA. 13+00.00 TO STA. 15+00.00 | 44 | 23 | 0 | 21 |
| SUBTOTAL NO. 1 | 2259 | 2148 | 491 | 601 |
| TOTAL | 2259 | 2148 | 491 | 601 |
| WASTE IN LIEU OF BORROW | | | -491 | -491 |
| PROJECT TOTAL | | | | 110 |
| ESTIMATE 5% FOR TOPSOIL ON BORROW PIT | | | | |
| GRAND TOTAL | 2259 | 2148 | | |
| SAY | 2300 | | | |

Shoulder Borrow: 550 CY

Note: Unclassified Excavation, Shoulder Borrow, Fine Grading, and Removal of Existing Asphalt Pavement will be paid for at the contract lump sum price for "Grading".

NOTE: Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

## SINGLE FACE CONCRETE BARRIER SUMMARY

| SURVEY LINE | STATION | STATION | LENGTH |
|---|---|---|---|
| -Y2- LT | 24+40.84 | 29+56.50 | 516.66' |
| -Y2- RT | 25+50.00 | 29+75.01 | 425.01' |
| | | TOTAL: | 940.67' |
| | | SAY: | 950' |

2/6/2019
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mitchelfield