| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| B-4983 | 3-B |

# 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 350 | | | 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 | TL-2 | M-350 | III | AT-1 | VI MOD | BIC | CAT-1 | EA | G | NG | | | | |
| –L– | 11+51.49 | 12+88.99 | RIGHT | 137.50 | | | 12+88.99 | | 7.5 | 8 | 0 | | 0 | | | | 1 | | 1 | | | | | | | | | | | |
| –L– | 11+20.60 | 12+95.60 | LEFT | 175.00 | | | | 12+95.60 | 4 | 8 | | 0 | | 0 | | | 1 | | 1 | | | | | | | | | | | |
| –L– | 14+24.83 | 16+12.33 | RIGHT | 187.50 | | | | 14+24.83 | 7.5 | 8 | | 0 | | 0 | | | 1 | | 1 | | | | | | | | | | | |
| –L– | 14+31.44 | 16+06.44 | LEFT | 137.50 | 37.50 | | 14+31.44 | | 4 | 8 | 100 | | 2 | | | | | | 1 | 1 | | | | | | | | | | |
| | | | SUBTOTALS: | 637.50 | 37.50 | | | | | | | | | | | | 3 | | 4 | 1 | | | | | | | | | | |
| ANCHOR DEDUCTIONS: 4 TYPE III @ 18.75' EACH | | | | 75.00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 Type TL-2 @ 25.00' EACH | | | | 75.00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 TYPE AT-1 @ 6.25' EACH | | | | | 6.25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| PROJECT TOTALS: | | | | 487.50 | 31.25 | | | | | | | | | | | | 3 | | 4 | 1 | | | | | | | | | | |
| SAY: | | | | 500.00 | 37.50 | | | | | | | | | | | | 3 | | 4 | 1 | | | | | | | | | | |
| | | | | | | | | | ADDITIONAL GUARDRAIL POST = 5 ea | | | | | | | | | | | | | | | | | | | | | |

"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 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

## SUMMARY OF ASPHALT PAVEMENT REMOVAL

| SURVEY LINE | STATION | STATION | LOCATION LT/RT/CL | SY |
|---|---|---|---|---|
| –L– | 10+14.21 | 10+40.00 | CL | 313.44 |
| –L– | 12+16.94 | 12+66.94 | CL | 138.22 |
| –L– | 14+39.00 | 15+50.00 | CL | 305.22 |
| | | | TOTAL: | 756.92 |
| | | | SAY: | 760 |

## SUMMARY OF SHOULDER BERM GUTTER

| SURVEY LINE | STATION | STATION | LOCATION | LENGTH |
|---|---|---|---|---|
| –L– | 11+74.08 | 12+71.04 | LEFT | 97.00 |
| –L– | 14+55.18 | 15+81.07 | LEFT | 125.90 |
| | | | TOTAL: | 222.90 |
| | | | SAY: | 225.00 |

## SUMMARY OF EARTHWORK

| STATION | STATION | UNCL. EXCAV. | EMBANK. +% | BORROW | WASTE |
|---|---|---|---|---|---|
| –L– 10+14.21 | –L– 13+12.23 | 8 | 2,485 | 2,477 | |
| –DR1– 10+14.00 | –DR1– 11+05.15 | 26 | 259 | 233 | |
| –DR2– 10+27.45 | –DR2– 11+70.86 | 131 | 18 | | 113 |
| SUMMARY 1 TOTAL: | | 165 | 2,762 | 2,710 | 113 |
| –L– 14+06.89 | –L– 16+50.00 | 9 | 2,315 | 2,306 | |
| SUMMARY 2 TOTAL: | | 9 | 2,315 | 2,306 | |
| | SUMMARY TOTALS: | 174 | 5,077 | 5,016 | 113 |
| WASTE IN LIEU OF BORROW | | | | –113 | –113 |
| LOSS DUE TO CLEARING & GRUBBING | | –15 | | 15 | |
| | PROJECT TOTALS: | 159 | 5,077 | 4,918 | |
| EST. 5% TO REPLACE TOP SOIL ON | | | | 246 | |
| BORROW PIT | | | | | |
| | GRAND TOTALS: | 159 | | 5,164 | |
| | SAY: | 165 | | 5,175 | |
| PER GEOTECH REPORT DTD 8/18/2011: | | | | | |
| GEOTEXTILE FOR SOIL STABILIZATION | | 100 SY | | | |
| CLASS IV SUBGRADE STABILIZATION | | 125 TONS | | | |
| SHALLOW UNDERCUT | | 140 CY | | | |
| UNDERCUT | | 100 CY | | | |
| SUBDRAINAGE-UNDERDRAIN | | 100 FT | | | |
| SELECT GRANULAR MATERIAL | | 100 CY | | | |

Approximate quantities only. Unclassified excavation, fine grading, clearing and grubbing, pavement removal and breaking of existing pavement will be paid for at the lump sum price of grading.

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.

## SUMMARY OF BREAKING EXISTING ASPHALT PAVEMENT

| SURVEY LINE | STATION | STATION | LOCATION LT/RT/CL | SY |
|---|---|---|---|---|
| –L– | 10+40.00 | 12+16.94 | CL | 698.52 |
| | | | TOTAL: | 698.52 |
| | | | SAY: | 700 |

## SUMMARY OF SUBSURFACE DRAINAGE

| LINE | STATION | STATION | LOCATION | DRAIN TYPE UD/BD/SD | LF |
|---|---|---|---|---|---|
| | CONTIGENCY | | | UD | 100 |
| | | | TOTAL: | | 100 |
| | | | SAY: | | 100 |

RS_MAN_LOPLOT_B4983_Rdy_sum.dgn
$$$$USERNAME$$$$