## ★SUMMARY OF EARTHWORK
*IN CUBIC YARDS*

| STATION | STATION | UNCL. EXCAV. | EMBANK. +% | BORROW | WASTE |
|---|---|---|---|---|---|
| | | | | | |
| -L- STA. 11+00.00 | -L- STA. 13+73.26 BEGIN BRIDGE | 340 | 269 | 0 | 71 |
| SUBTOTAL | | 340 | 269 | 0 | 71 |
| | | | | | |
| -L- STA. 14+60.74 END BRIDGE | -L- STA. 18+00.00 | 271 | 38 | 0 | 233 |
| SUBTOTAL | | 271 | 38 | 0 | 233 |
| | | | | | |
| PROJECT TOTALS | | 611 | 307 | 0 | 304 |
| | | | | | |
| GRAND TOTALS | | 611 | | | 304 |
| SAY | | 650 | | | |

ESTIMATED UNDERCUT EXCAVATION = 200 C.Y.
ESTIMATED SELECT GRANULAR MATERIAL = 200 C.Y.

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.

## ★ASPHALT PAVEMENT REMOVAL SUMMARY
*IN SQUARE YARDS*

| SURVEY LINE | STATION | STATION | LOCATION LT/RT/CL | $YD^2$ |
|---|---|---|---|---|
| | | | | |
| -L- | 11+00.00 | 13+87.13 | EXIST. ROAD | 649 |
| | | | | |
| -L- | 14+37.56 | 18+00.00 | EXIST. ROAD | 798 |
| | | | | |
| | | | TOTAL: | 1,447 |
| | | | | |
| | | | SAY: | 1,450 |

## SHOULDER BERM GUTTER SUMMARY
*IN LINEAR FEET*

| SURVEY LINE | STATION | STATION | LOCATION | LENGTH (FT) |
|---|---|---|---|---|
| | | | | |
| -L- | 13+43.00 | 13+57.72 | RT | 14.72 |
| | | | | |
| -L- | 14+70.08 | 14+86.00 | RT | 15.92 |
| | | | | |
| | | | TOTAL: | 30.64 |
| | | | | |
| | | | SAY: | 35 |

★ Approximate quantities only. Unclassified Excavation, Fine Grading, Clearing and Grubbing, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading."

"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

## GUARDRAIL SUMMARY

| SURVEY LINE | BEG. STA. | END STA. | LOCATION | LENGTH: STRAIGHT | LENGTH: SHOP CURVED | LENGTH: DOUBLE FACED | WARRANT POINT: APPROACH END | WARRANT POINT: TRAILING END | "N" DIST. FROM E.O.L. | TOTAL SHOUL. WIDTH | FLARE LENGTH: APPROACH END | FLARE LENGTH: TRAILING END | W: APPROACH END | W: TRAILING END | ANCHORS: TYPE III SHOP CURVED | ANCHORS: GRAU 350 TL-2 | ANCHORS: CAT-1 | ANCHORS: VI MOD | ANCHORS: BIC | ANCHORS: AT-1 | ANCHORS: | ANCHORS: | IMPACT ATTENUATOR TYPE 350: EA | IMPACT ATTENUATOR TYPE 350: G | IMPACT ATTENUATOR TYPE 350: NG | SINGLE FACED GUARDRAIL | REMOVE EXISTING GUARDRAIL | REMOVE AND STOCKPILE EXISTING GUARDRAIL | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- | 13+23.08 | 13+79.33 (BR) | LT | 56.25′ | | | 13+79.33 (BR) | | 3.67′ | 7.00′ | | 25′ | | 0.5′ | 1 | 1 | | | | | | | | | | | | | CURVE TYPE III ANCHOR UNIT |
| -L- | 13+12.93 | 13+69.18 (BR) | RT | 56.25′ | | | | 13+69.18 (BR) | 3.33′ | 7.00′ | 25′ | | 0.5′ | | 1 | 1 | | | | | | | | | | | | | CURVE TYPE III ANCHOR UNIT |
| -L- | 14+62.04 (BR) | 15+18.29 | LT | 56.25′ | | | | 14+62.04 (BR) | 4.50′ | 7.50′ | 25′ | | 0.5′ | | 1 | 1 | | | | | | | | | | | | | CURVE TYPE III ANCHOR UNIT |
| -L- | 14+57.34 (BR) | 15+13.59 | RT | 56.25′ | | | 14+57.34 (BR) | | 3.92′ | 7.00′ | | 25′ | | 0.5′ | 1 | 1 | | | | | | | | | | | | | CURVE TYPE III ANCHOR UNIT |
| | | | SUBTOTAL: | 225′ | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ANCHOR DEDUCTION: | | -175′ | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | TOTAL: | 50′ | | | | | | | | | | | 4 | 4 | | | | | | | | | | | | | |
| | | | SAY: | 75′ | | | | | | | | | | | | | | | | | | | | | | | | | |

ANCHOR DEDUCTION:
TYPE III
SHOP CURVED : 4 @ 18.75′ = 75′
GRAU 350 TL-2 : 4 @ 25′ = 100′
} 175′
ADDITIONAL GUARDRAIL POSTS : 5