**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# EARTHWORKS

| STATION | DIST | TOTAL EXCAVATION EARTH AND ROCK AREA S.F. | TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y. | ROCK EXCAVATION AREA S.F. | ROCK EXCAVATION VOLUME C.Y. | EMBANKMENT AREA S.F. | EMBANKMENT VOLUME C.Y. | AREA S.F. | VOLUME C.Y. |
|---|---|---|---|---|---|---|---|---|---|
| **U.S. ROUTE 7** | | | | | | | | | |
| | | | | | | | | | |
| 17+60 | | 10 | | | | 0 | | | |
| | 40 | | 15 | | | | 5 | | |
| 18+00 | | 10 | | | | 6 | | | |
| | 20 | | 8 | | | | 4 | | |
| 18+20 | | 12 | | | | 6 | | | |
| | 30 | | 16 | | | | 3 | | |
| 18+50 | | 17 | | | | 1 | | | |
| | 50 | | 35 | | | | 0 | | |
| 19+00 | | 21 | | | | 0 | | | |
| | 50 | | 42 | | | | 0 | | |
| 19+50 | | 24 | | | | 0 | | | |
| | 50 | | 47 | | | | 0 | | |
| 20+00 | | 26 | | | | 0 | | | |
| | 50 | | 66 | | | | 6 | | |
| 20+50 | | 45 | | | | 7 | | | |
| | 50 | | 90 | | | | 9 | | |
| 21+00 | | 52 | | | | 3 | | | |
| | 50 | | 120 | | | | 3 | | |
| 21+50 | | 78 | | | | 0 | | | |
| | 50 | | 153 | | | | | | |
| 22+00 | | 88 | | | | 0 | | | |
| | 25 | | 75 | | | | | | |
| 22+25 | | 75 | | | | 0 | | | |
| | 25 | | 62 | | | | | | |
| 22+50 | | 59 | | | | 0 | | | |
| | 50 | | 97 | | | | | | |
| 23+00 | | 46 | | | | 0 | | | |
| | 42 | | 64 | | | | 1 | | |
| 23+42 | | 36 | | | | 2 | | | |
| | 8 | | 10 | | | | 1 | | |
| 23+50 | | 33 | | | | 5 | | | |
| | 50 | | 50 | | | | 25 | | |
| 24+00 | | 21 | | | | 22 | | | |
| | 23 | | 22 | | | | 17 | | |
| 24+23 | | 32 | | | | 17 | | | |
| | 27 | | 29 | | | | 12 | | |
| 24+50 | | 26 | | | | 7 | | | |
| | 50 | | 57 | | | | 8 | | |
| 25+00 | | 35 | | | | 2 | | | |
| | 50 | | 71 | | | | 5 | | |
| 25+50 | | 41 | | | | 3 | | | |
| | 50 | | 87 | | | | 5 | | |
| 26+00 | | 53 | | | | 2 | | | |
| | 50 | | 102 | | | | 4 | | |
| 26+50 | | 57 | | | | 2 | | | |
| | 23 | | 48 | | | | 1 | | |
| 26+73 | | 55 | | | | 0 | | | |
| | 27 | | 59 | | | | 0 | | |
| 27+00 | | 62 | | | | 0 | | CUT | 3363 |
| | 50 | | 114 | | | | | ROCK | 0 |
| 27+50 | | 61 | | | | 0 | | R.FAC | 0 |
| | 50 | | 121 | | | | | FILL | 116 |
| 28+00 | | 70 | | | | 0 | | F.FAC | 1 |
| | 38 | | 95 | | | | | EX. C | 3230 |
| 28+38 | | 65 | | | | 0 | | | |
| | 12 | | 29 | | | | | | |
| 28+50 | | 64 | | | | 0 | | | |
| | 50 | | 116 | | | | | | |
| 29+00 | | 62 | | | | 0 | | | |
| | 18 | | 41 | | | | | | |
| 29+18 | | 63 | | | | 0 | | | |
| | 32 | | 75 | | | | | | |
| 29+50 | | 64 | | | | 0 | | | |
| | 50 | | 116 | | | | | | |
| 30+00 | | 62 | | | | 0 | | | |
| | 50 | | 114 | | | | | | |
| 30+50 | | 61 | | | | 0 | | | |
| | 50 | | 112 | | | | | | |
| 31+00 | | 61 | | | | 0 | | | |
| | 50 | | 111 | | | | | | |
| 31+50 | | 60 | | | | 0 | | | |
| | 10 | | 22 | | | | | | |
| 31+60 | | 60 | | | | 0 | | | |
| | 40 | | 91 | | | | | | |
| 32+00 | | 63 | | | | 0 | | | |
| | 45 | | 104 | | | | | | |
| 32+45 | | 62 | | | | 0 | | | |
| | 5 | | 11 | | | | | | |
| 32+50 | | 61 | | | | 0 | | | |
| | 25 | | 55 | | | | 2 | | |
| 32+75 | | 59 | | | | 4 | | | |
| | 25 | | 55 | | | | 3 | | |
| 33+00 | | 61 | | | | 1 | | | |
| | 50 | | 112 | | | | 2 | | |
| 33+50 | | 61 | | | | 1 | | | |
| | 50 | | 116 | | | | 1 | | |
| 34+00 | | 65 | | | | 0 | | | |

| STATION | DIST | TOTAL EXCAVATION EARTH AND ROCK AREA S.F. | TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y. | ROCK EXCAVATION AREA S.F. | ROCK EXCAVATION VOLUME C.Y. | EMBANKMENT AREA S.F. | EMBANKMENT VOLUME C.Y. | AREA S.F. | VOLUME C.Y. |
|---|---|---|---|---|---|---|---|---|---|
| | 20 | | 48 | | | | | | |
| 34+20 | | 66 | | | | 0 | | | |
| | 30 | | 71 | | | | | | |
| 34+50 | | 62 | | | | 0 | | | |
| | 50 | | 109 | | | | | | |
| 35+00 | | 56 | | | | 0 | | | |
| | 19 | | 39 | | | | | | |
| 35+19 | | 54 | | | | 0 | | | |
| | 17 | | 33 | | | | | | |
| 35+36 | | 51 | | | | 0 | | | |
| | 14 | | 27 | | | | | | |
| 35+50 | | 52 | | | | 0 | | | |
| | | | 0 | | | | | | |
| **ACCESS RD.** | | | | | | | | | |
| 10+00 | | 23 | | | | 0 | | | |
| | 50 | | 25 | | | | | | |
| 10+50 | | 4 | | | | 0 | | | |
| | 50 | | 10 | | | | 0 | | |
| 11+00 | | 7 | | | | 0 | | | |
| | 11 | | 4 | | | | | | |
| 11+11 | | 11 | | | | 0 | | CUT | 67 |
| | 39 | | 13 | | | | | ROCK | 0 |
| 11+50 | | 6 | | | | 0 | | R.FAC | 0 |
| | 34 | | 7 | | | | 0 | FILL | 1 |
| 11+84 | | 5 | | | | 0 | | F.FAC | 1 |
| | 16 | | 3 | | | | 0 | EX. C | 66 |
| 12+00 | | 5 | | | | 0 | | | |
| | 23 | | 5 | | | | 0 | | |
| 12+23 | | 8 | | | | 0 | | | |
| **PARK & RIDE** | | | | | | | | | |
| 1+28 | | 525 | | | | 0 | | | |
| | 22 | | 410 | | | | | | |
| 1+50 | | 481 | | | | 0 | | | |
| | 50 | | 836 | | | | | | |
| 2+00 | | 423 | | | | 0 | | | |
| | 50 | | 807 | | | | | | |
| 2+50 | | 449 | | | | 0 | | | |
| | 50 | | 844 | | | | | CUT | 6488 |
| 3+00 | | 463 | | | | 0 | | ROCK | 0 |
| | 50 | | 948 | | | | | R.FAC | 0 |
| 3+50 | | 561 | | | | 0 | | FILL | 183 |
| | 50 | | 1041 | | | | | F.FAC | 1 |
| 4+00 | | 563 | | | | 0 | | EX. C | 6277 |
| | 50 | | 956 | | | | 95 | | |
| 4+50 | | 470 | | | | 103 | | | |
| | 43 | | 646 | | | | 88 | | |
| 4+93 | | 341 | | | | 8 | | | |

**ADDITIONAL COMMON EX. TO EXTEND BOX CUT TO EDGE OF BIT. CONC. SLAB BENEATH RTE. 7**

| | | | |
|---|---|---|---|
| Additional Area of Excavation | 7691 | SF | |
| Depth of Excavation | 3 | LF | |
| Volume of Excavation | 712 | CY | |

| | |
|---|---|
| CUT | 712 |
| ROCK | 0 |
| R.FAC | 0 |
| FILL | 0 |
| F.FAC | 1.150 |
| EX. C | 0 |

| STATION | DIST | TOTAL EXCAVATION EARTH AND ROCK AREA S.F. | TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y. | ROCK EXCAVATION AREA S.F. | ROCK EXCAVATION VOLUME C.Y. | EMBANKMENT AREA S.F. | EMBANKMENT VOLUME C.Y. | AREA S.F. | VOLUME C.Y. |
|---|---|---|---|---|---|---|---|---|---|

## SUMMARY AND BALANCES

| STATION TO STATION | | TOT EXC. EARTH & ROCK C.Y. | ROCK EXCAV C.Y. | EMBANK C.Y. | EXCESSES CUT | EXCESSES FILL | ACUMULATIVE EXCESSES CUT | ACUMULATIVE EXCESSES FILL |
|---|---|---|---|---|---|---|---|---|
| **U.S. ROUTE 7** | | | | | | | | |
| 17+60 | 35+50 | 3363 | | 116 | 3230 | | 3230 | |
| **ACCESS ROAD** | | | | | | | | |
| 10+00 | 12+23 | 67 | | 1 | 66 | | 3296 | |
| **PARK & ROUTE** | | | | | | | | |
| 1+28 | 4+93 | 6488 | | 183 | 6278 | | 9574 | |
| **DRAINAGE DITCH AT EXT. PARK & RIDE** | | 54 | | 0 | 54 | | 9628 | |
| **ADDITIONAL EX. TO EXTEND BOX CUT** | | 712 | | 0 | 0 | | 9628 | |

## REMARKS

| | |
|---|---|
| EARTH AND ROCK EXCAVATION | 10684 |
| SOLID ROCK EXCAVATION | 0 |
| MINUS EXCAVATION REQUIRED TO EXTEND BOX CUT (NOT USE | 712 |
| EARTH EXCAVATION | 9972 |
| | |
| PLANIMETERED FILL | 300 |
| LESS FACTORED SOLID ROCK | - |
| LESS DISPLACEMENT OF ANY LARGE STRUCTURES | - |
| NET PLANIMETERED FILL | 300 |
| FACTOR (0.15) | 45 |
| PLANIMETERED FILL INCLUDING FACTOR | 345 |
| | |
| MATERIALS AVAILABLE FOR FILLS | |
| EARTH EXCAVATION | 9972 |
| CHANNEL EXCAVATION | 0 |
| UNDERDRAIN EXCAVATION (373.4 X 0.60) | 224 |
| STRUCTURE EXCAVATION | 0 |
| | |
| TOTAL MATERIAL AVAILABLE FOR FILL | 10196 |
| | |
| TOTAL FILL INCLUDING FACTOR | 345 |
| TOTAL MATERIAL FOR FILL | 10196 |
| BORROW | 0 |
| EXCESS EXCAVATION | 9850 |

Dufresne-Henry

PROJECT NAME: **COLCHESTER PARK-AND-RIDE**
PROJECT NUMBER: **CMG(18)S**

FILE NAME: **earthworks.xls**
PROJECT LEADER: **WLD**
DESIGNED BY: **CSP**
**EARTHWORK SHEET #1**

PLOT DATE: **5/24/2002**
DRAWN BY: **GGG**
CHECKED BY: **CSP**
SHEET **11** OF **56**