### GRADING SUMMARY

<table>
<thead>
<tr>
<th>Pay Item 20401-0000</th>
<th>Pay Item 20403-0000</th>
</tr>
</thead>
</table>

#### Roadway Excavation

<table>
<thead>
<tr>
<th>Station to Station</th>
<th>Prismodial Volume</th>
<th>Approach Roads</th>
<th>ROADWAY EXCAVATION</th>
<th>(+) Available Material (see note 3)</th>
<th>(-) Unavailable Material (see note 4)</th>
<th>Shrink/Swell Factor</th>
<th>Total Excavation Available For Fills</th>
<th>Prismatic Volume</th>
<th>Approach Roads</th>
<th>(+) Various Backfill Material Generated Onsite (see note 5)</th>
<th>Total Embankment</th>
<th>Excavation-Embarkment</th>
<th>UNCLASSIFIED BORROW (see note 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCY</td>
<td>BCY</td>
<td>CUYD</td>
<td>BCY</td>
<td>BCY</td>
<td>CCY</td>
<td>CCY</td>
<td>CCY</td>
<td>CCY</td>
<td>CCY</td>
<td>CCY</td>
<td>CCY</td>
<td>CCY</td>
<td>CUYD</td>
</tr>
</tbody>
</table>

#### Secondary Alignment

|                         |                    |                |                   |                                    |                                      |                    |                                    |                |                |                                |                |                |                            |

**TOTALS**

|                         | 0                  | 0              | 0                 | 0                                  | 0                                    | 0                  | 0                                  | 0              | 0              | 0                               | 0              | 0              | NA                          |

**NOTE:**

1. Quantities based on prismatic (surface to surface) volumes.
2. Conserve <<XXX>> inches of topsoil in cut and fill slope areas.
3. Available material includes <<INSERT PROJECT SPECIFIC INFORMATION>>.
4. Unavailable material includes <<INSERT PROJECT SPECIFIC INFORMATION>>.
5. Various backfill material generated onsite includes <<INSERT PROJECT SPECIFIC INFORMATION>>.
6. <<Waste or Unclassified borrow>> quantity calculated using volumes adjusted for shrink/swell. The average shrink/swell factor shown is computed by taking an average of recommended values over the specified range. Refer to the Geotech Report for recommended shrink/swell factors.
7. The quantities shown herein are approximations. Payment will be made for the actual quantities of work performed.
8. BCY = Bank cubic yard - one cubic yard of material as it lies in the natural state.
   CCY = Compacted cubic yard - one cubic yard of material after it has been compacted to specification density.
### GRADING SUMMARY

<table>
<thead>
<tr>
<th>Station to Station</th>
<th>Roadway Excavation</th>
<th>Additional Excavation</th>
<th>For info only</th>
<th>Embankment</th>
<th>Pay Item 20420-0000</th>
<th>For info only</th>
<th>For info only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BCY</td>
<td>BCY</td>
<td>BCY</td>
<td>BCY</td>
<td>CCY</td>
<td>CCY</td>
<td>CCY</td>
</tr>
</tbody>
</table>

### Secondary Alignment

|                     |                   |                       |               |             |                     |               |               |             |         |                  |                  |                   |

**TOTALS**

|                     | 0                  | 0                      | 0             | 0          | 0                   | 0              | 0              | 0           | 0       | 0                  | 0                  | 0                  |

---

**NOTE:**

1. Quantities based on prismodial (surface to surface) volumes.
2. Conserve <<XXX>> inches of topsoil in cut and fill slope areas.
3. Available material includes <<INSERT PROJECT SPECIFIC INFORMATION>>.
4. Unavailable material includes <<INSERT PROJECT SPECIFIC INFORMATION>>.
5. Various backfill material generated onsite includes <<INSERT PROJECT SPECIFIC INFORMATION>>.
6. <<Waste or Unclassified borrow>> quantity calculated using volumes adjusted for shrink/swell. The average shrink/swell factor shown is computed by taking an average of recommended values over the specified range. Refer to the Geotech
7. The quantities shown herein are approximations. Payment will be made for the actual quantities of work performed.
8. BCY = Bank cubic yard - one cubic yard of material as it lies in the natural state.
   CCY = Compacted cubic yard - one cubic yard of material after it has been compacted to specification density.
1. Add cut and fill volumes to the corridor
2. Run Quantities by Named boundary report and save file in excel format.
3. Select the volumes report

The report should be in the following format:

4. Right click on the report in ORD and select Export to Excel
6. Select entire sheet in the volumes excel spreadsheet. (CTRL-A or select the select all button)
7. Paste data in the quantities report tab in the grading summary spreadsheet.
8. Select the rows that contain the whole project totals and cut and paste to the Totals - QA_QC tab.
9. Go to the "Manual Inputs" page and click on the "Click Here to Format Worksheet" button.

9. Determine if it is an excavation or embankment job and fill out the appropriate table.
10. For major secondary roads use the secondary report tabs.