GRADING SUMMARY

Station to Station	Roadway Excavation		Pay Item 20401-0000	Additional Excavation For info only		For info only		Embankment For info only		For info only			For Info Only
	Prismoidal Volume	Approach Roads	ROADWAY EXCAVATION	(+) Available Material (see note 3)	(-) Unavailable Material (see note 4)	Shrink/Swell Factor	Total Excavation Avaliable For Fills	Prismoidal Volume	Approach Roads	(+) Various Additional Backfill Material Needed Onsite (see note 5)	Total Embankment	Excavation-Embankment	UNCLASSIFIED BORROW (see note 6)
	BCY	BCY	CUYD	BCY	BCY		CCY	CCY	CCY	CCY	CCY	CCY	CUYD
Secondary Alignment													
TOTALS	0	0	0	0	0		0	0	0	0	0	0	NA

NOTE:

1. Quantities based on prismoidal (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 additional backfill material needed onsite includes <<INSERT PROJECT SPECIFIC INFORMATION****>>.
6. Waste 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.
   Or
   Unclassified borrow quantity calculated using volumes adjusted for shrink/swell. An assumed value of 0.9 was used for calculations. The contractor is responsible for determining the shrink/swell on the borrow material.

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.
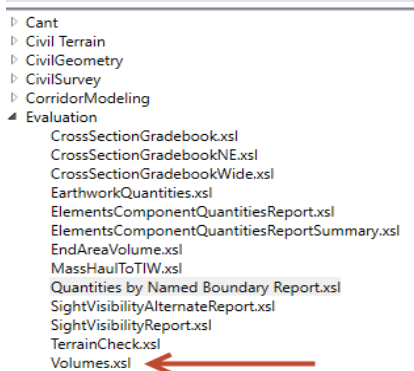
	Roadway Excavation			Additional Excavation For info only		For info only		Embankment		Pay Item 20420-0000	For info only			For info only
Station to Station	Prismoidal Volume	Approach Roads	Roadway Excavation	(+) Available Material (see note 3)	(-) Unavailable Material (see note 4)	Shrink/Swell Factor	Total Excavation Available For Fills	Prismoidal Volume	Approach Roads	Embankment Construction	(+) Various Additional Backfill Material Needed Onsite (see note 5)	Total Embankment	Excavation - Embankment	Estimated Unclassified Borrow Volume (see note 6)
	BCY	BCY	BCY	BCY	BCY		CCY	CCY	CCY	CUYD	CCY	CCY	CCY	BCY
Secondary Alignment														
TOTALS	0	0	0	0	0		0	0	0	0	0	0	0	0

NOTE:

1. Quantities based on prismoidal (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 additional backfill material needed onsite includes <<INSERT PROJECT SPECIFIC INFORMATION****>>.

6. Unclassified borrow quantity calculated using volumes adjusted for shrink/swell. An assumed value of 0.9 was used for calculations. The contractor is responsible for determining the shrink/swell on the borrow material.

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.

Instructions:

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

4. The report should be in the following format:

5. 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.

Click here to format worksheet

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.