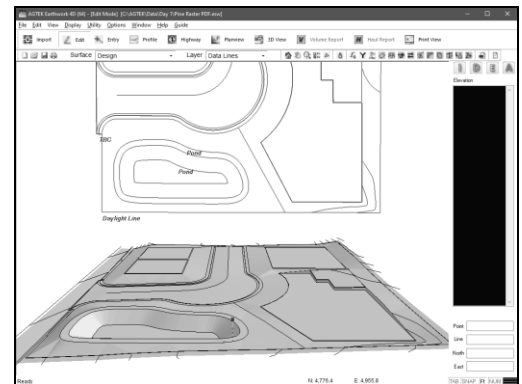
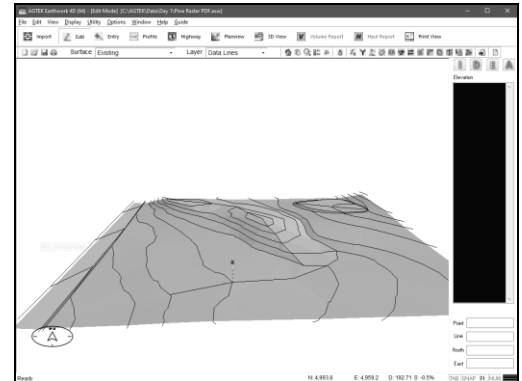


Modeling with Vector Data Step-by-Step Checklist to Complete the Earthwork Takeoff

With the preceding 2D-to-3D conversion steps completed, the resulting 3D line work for our *Existing* and *Design* surfaces essentially matches the 3D line work that resulted from our manual digitized raster PDF plan sheets in the *Day 1 Seminar* (but with much better horizontal accuracy). If our goal is to make a complete earthwork takeoff, we would repeat the remaining *Day 1* entries listed below (don't worry, we're not going to repeat all these *Day 1* entries again here—this is just a reminder) . . .

- Enter **Existing Perimeter** (pages 73-74 in *Day 1 Seminar Handbook*).
- Enter additional *Existing* surface break lines as needed to correct interpolation errors (use the surface error-checking methodology as detailed on pages 82-108 in *Day 1 Seminar Handbook*).
- Enter **Design Perimeter** (pages 156-157 in *Day 1 Seminar Handbook*).
- Enter *Design* surface break lines as needed to correct interpolation errors (use the surface error-checking methodology as detailed on pages 158-164 in *Day 1 Seminar Handbook*).
- Enter and verify **Stripping Areas** (pages 166-171 in *Day 1 Seminar Handbook*).
- Enter and verify **Report Regions** and **Sectional Areas** (pages 172-192 in *Day 1 Seminar Handbook*).
- **Calculate volumes** and review volume report (pages 208-214 in *Day 1 Seminar Handbook*).

[Note: The **Pine CAD Complete.esw** data file (see Appendix C) includes all data from the preceding *Day 2 Step-by-Step* entries plus all data resulting from the *Day 1 Seminar* entries listed above. **We will open and use the Pine CAD Complete.esw file for the remainder of this Day 2 Step-by-Step exercise.**]



Other manipulations of interest to AGTEK earthwork software users (most of these are documented in the *Day 3 Seminar Handbook*):

- Document quantities with tabular and graphical reporting options (*Appendix E* in *Day 1 Seminar Handbook*).
- Export data for other applications (*Appendix D* in this *Day 2 Seminar Handbook*).
- Use the *Stage Into/Stage-Overex/Apply Survey/Apply Template* utilities to model and stage extra surfaces representing intermediate grading and removals (see numerous examples in the *Day 3 Seminar Handbook*).
- Enter any required Strata Layers from geotechnical report (*Day 3 Seminar Handbook*).
- If applicable, adjust grades to balance onsite cut and fill (*Day 3 Seminar Handbook*).
- If applicable, enter Balance Regions to analyze hauls (*Appendix I* of the *Day 3 Seminar Handbook*).

