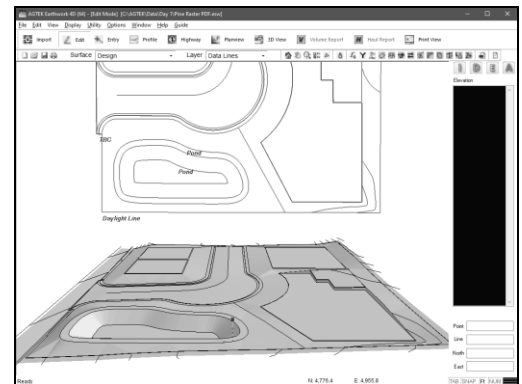
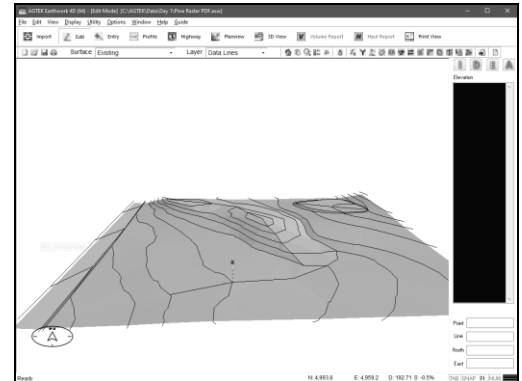


## Modeling with Vector Data Step-by-Step Checklist to Complete the Earthwork Takeoff

With the 2D-to-3D conversion steps completed (including the offset lines import shortcut on page 130), the 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 of these *Day 1* entries again here—this checklist is just a reminder) . . .

- Enter **Existing Perimeter** (review the details on pages 78-79 of the *Day 1 Handbook*).
- Enter additional *Existing* surface break lines as needed to correct interpolation errors (use the surface error-checking methodology detailed on pages 87-113 of the *Day 1 Handbook*).
- Enter **Design Perimeter** (pages 162-163 of the *Day 1 Handbook*).
- Enter *Design* surface break lines as needed to correct interpolation errors (use the surface error-checking methodology detailed on pages 164-170 of the *Day 1 Handbook*).
- Enter and verify **Stripping Areas** (pages 172-177 of the *Day 1 Handbook*).
- Enter and verify **Report Regions** and **Sectional Areas** (pages 178-199 of the *Day 1 Handbook*).
- **Calculate volumes** and review volume report (see pages 404, 410 in this *Day 2 Handbook* and details on pages 226-230 of the *Day 1 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 (some of these are documented in the *Day 1* and *Day 3 Handbooks* as indicated):

- Document quantities with tabular and graphical reporting options (*Appendix E* in the *Day 1 Handbook*).
- Export data for other applications (*Appendix D* in this *Day 2 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 Handbook*).
- Enter any required Strata Layers from soils report bore logs/test pits (pages 27-53 of the *Day 3 Handbook*).
- If applicable, adjust grades to balance onsite cut and fill (pages 404-410 in *Appendix J* of this *Day 2 Handbook*).
- If applicable, enter Balance Regions to analyze hauls (*Appendix I* of the *Day 3 Handbook*).

