

Day 3 Seminar Class Outline

*Note: Although Earthwork Software Services **no longer conducts** the Day 3 AGTEK seminar, the Day 3 handbook is **the textbook** that the Day 3 seminar class was taught from and the latest updated edition of the Day 3 textbook can be ordered at www.earthworksoftwareservices.com/hbk-replace-order.aspx.*

(Morning Class Session)

- 8:00 Sign-In and Seating
- 8:30 (Class Begins) Brief Seminar and Documentation Overview
- 8:40 Modeling Subsurface Strata
 - Strata Layers List Entries
 - Strata Borehole Entries
 - Interpolation Options
 - Strata Volume Calculations and Reporting
- 10:00 Morning Break
- 10:15 "Stripping" the Upper Strata Material
 - Volume of a Strata Seam
 - Balancing Onsite Cut and Fill
 - Identifying Work Areas with Cut-Fill Lines
 - Stripping Area Conflict at Strata Cut
 - Model Subsidence Loss at Fill Areas
 - Stripping Areas by Cut/Fill Depth
 - Waste Areas by Depth of Cover
- 12:00 Lunch Break (Lunch Provided by Earthwork Software Services)

Day 3 Seminar Class Outline (Cont.)

(Afternoon Class Session)

- 1:00 Modeling Vertically-Staged Earthwork
- Five Approaches to a Soil Undercut
- (1) Transfer Subgrade Utility
 (2) New Surface and Stage Into Utilities (AGTEK 4D)
 (3) Apply Survey Utility
 (4) Stage Over-Ex Utility
 (5) Apply Template Utility (AGTEK 4D)
- 2:15 Afternoon Break
- 2:30 Modeling Vertically-Staged Earthwork (Cont.)
- Modeling for Retaining Wall Cut Back
- Create *Diff* Calculation Surface with Lowest Surface Utility
- Create Wall Cut Back Model (AGTEK 4D Method)
- Apply Template Utility for Cut Back Lines and
 Staged Wall-Cut Surface
- Calculate Cut Back and Backfill Volumes
- Backfill Volume by Vertical Interval Option
- Measure Wall's Face Area
- Rock Undercut Volume (Subtraction Method)
- Variable-Depth Removal of Expansive Clay
- Use Cut-Fill Line Utility for Removal Transition
- Use Stage Over-Ex Utility for Composite Cut Surface
- Calculate and Evaluate Volumes
- 4:00~4:30 Class Adjourns