

CEE 4020 - Computer Applications in CEE

Introduction to Civil 3D: Environment and Drawing Settings

September 17, 2012

Modify Object and Label Styles

Objective: To be able to add and edit styles and understand basic annotation principles, use drawing: *class_09_17.dwg*.

Following steps:

- Zoom to Parcel *Single-Family : 8*
- Check the object style
- Check *Site parcel style*
- Check *Site label style*
- Change order of *Style display order*
- Go to Settings tab - investigate the *Single-Family parcel Style* - change layer configuration
- Add a parcel label - Parcel to Add Label
- Investigate label styles - choose to label a line segment - choose the lines around *Single-Family : 8*:
Note Line label Style
- Find Line Label Style to Bearing Over Distance in Settings tab and edit it to change the color of the bearing property
- Regenerate after each change in settings using the **regen** command.

Using Styles Hierarchy: Inheritance

Objective: To understand how the settings of an object can be inherited from its parent settings, use drawing: *class_09_17.dwg*. In this exercise we will change the properties of a point label style class and then change the properties of its parent class and investigate how inheritance can be forced.

Following steps:

- Edit point description text height of Point Label Style *Point#-Elevation-Description* in the Settings pane to 0.4"
- Next edit the Label Style Defaults of Label Styles and cancel child override.
- Regenerate using the **regen** command.

Drawing Settings, Viewport Scaling and Text Size

Objective: Modify drawing settings and use viewports to plot in appropriate scale, use drawing: *class_09_12.dwg*.
Following steps:

- Always plot from paper space
- Remember that the text height setting reflects the actual printed height of text
- Open the Drawing settings tab - investigate alternative scales
- Go to paper space and set viewport scale to 1"=40' while inside the viewport
- Regenerate using the **regen** command while in viewport

Command Settings

Objective: To be able to use command settings to control styles and parameters associated with Civil3D objects, use drawing: *class_09_17.dwg*.

Following steps:

- Open the Command Settings tab for points and edit the *CreatePoints* command.
- Edit the Default Styles - What happens to the Child Override box when you change the Point Style, why?
- Edit the Labeling prompt method under the Labeling tree
- Expand the Build Option section under the Surface tree and investigate
- Test the ability to change object settings using the AddParcel command.
- Identify a Civil 3D object and a default design parameter defining it that you can set using this technique.

Transparent Commands

Objective: To identify the Transparent Commands menu in the interface and take advantage of cues while developing precision drawings, use drawing: *class_09_17.dwg*. These commands are free methods that are inherited by other methods, and therefore can only be accessed from while the parent method is being called.

Following steps:

- Locate the transparent commands menu
- Try to create points using the create points command - use the transparent commands to help precision.

Creating a Drawing Template File

Objective: To develop a drawing template file that can be used through out the semester, use *class_09_17.dwg*.
Following steps:

- Delete all objects and drawing elements - this includes blocks and xrefs. Use the **purge** command.
- Establish drawing layers - a layer for each object - using drawing settings.
- Establish all drawing settings parameters including annotation scale, datum and projection standards.
- Modify settings styles and command setting styles, setting up default design parameters only where absolutely necessary. Remember to check for overrides.
- Setting up a few reasonable layouts, along with an easy to use, presentable title block.
- Save the file using the **.dwt* extension.