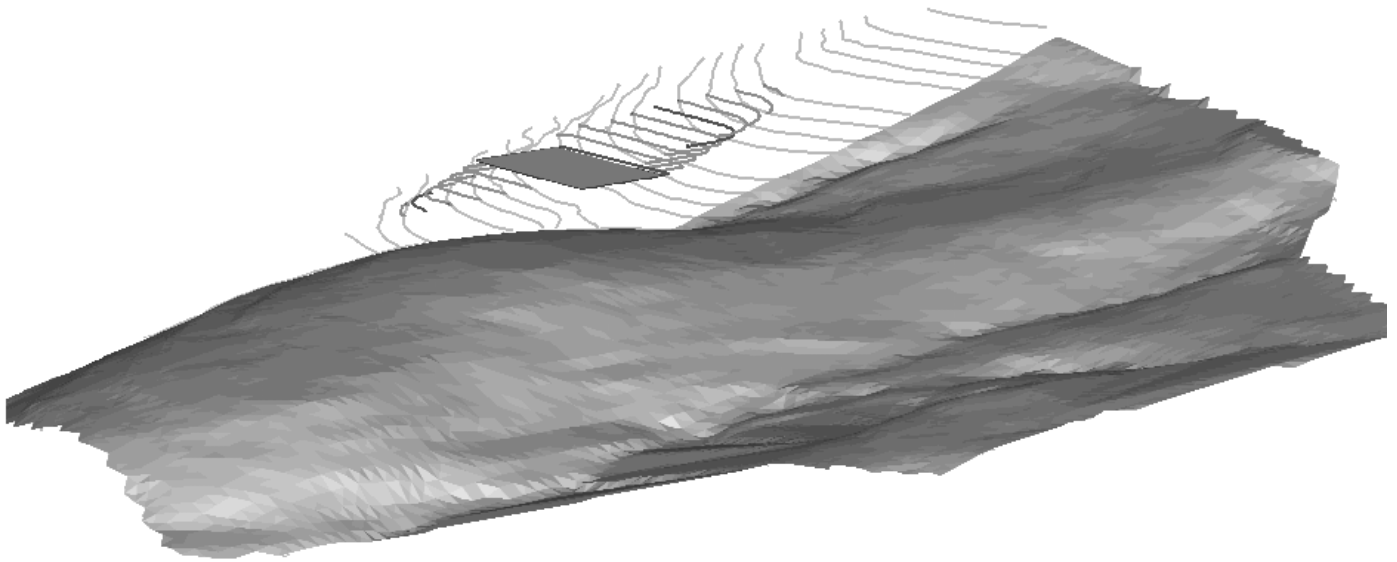


Introduction to Land Development Desktop R3

With

**AutoCAD Map 2002
&
Civil Design R3**

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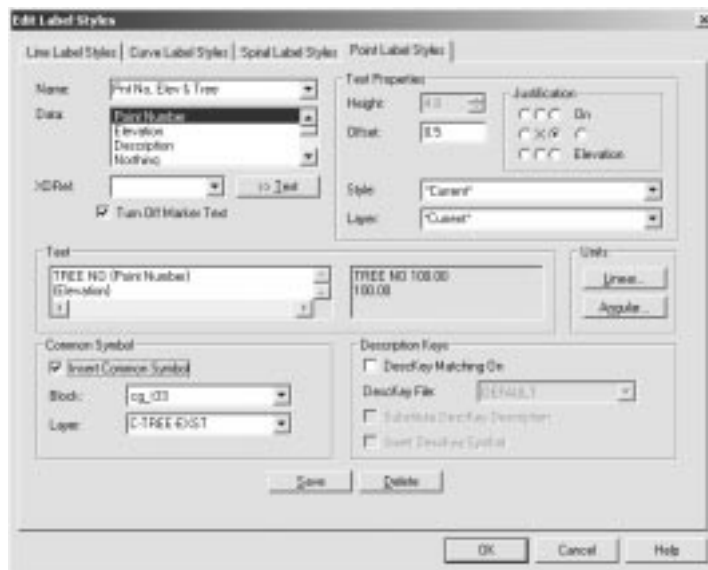
LDD Point Labeling with Description Keys

Goals and Objectives

When AEC points are inserted into the drawing environment, they display the point marker, number, elevation and raw description by default. The point settings can be configured to show any combination of number, elevation and raw description or configured not to show any of them at all. The “Point Settings” configuration only affects points about to be inserted into a drawing environment. If it is desired to change the appearance of points already in the drawing environment without reinserting them, then users must use the command “Points→Edit Points→Display Properties.”

Just as we labeled lines in previous lessons, points can also be labeled. One advantage to using point labels as opposed to standard point markers (Marker, number, elevation, Description) is that users can display more information with point labels than a standard point marker. Point labels can be used to label points with any text string, and/or a variety of other information such as Northings and Eastings which may be extracted from the external COGO (Coordinate Geometry) points database. Point labeling also gives users the flexibility of including a symbol in the form of a block with their label.

One popular point labeling application occurs with tree labeling. A label style can be set up so that points shot on trees only display a tree number, elevation and symbol. If tree points are inserted into the drawing environment using point labels in the above referenced application, then the tree block comes in automatically along with the tree number and elevation.



The point label style shown above will generate a point label displaying the tree number, elevation and COGO tree symbol t33 upon point(s) insertions into the drawing

environment. The symbol block path is specified on the “Insert” tab of the “Point Settings” dialogue box. Point labeling must also be enabled on this tab if it is desired that LDD label points.

Users might also choose to set up additional label styles for importing utility points. As an example, a label style could be set up for inserting points and symbols locating fire hydrants. In this case, a user may only want to display the fire hydrant and spot elevation.

Although point labels in the above applications will save users time, it is not desirable to set different label styles current as points are inserted to the drawing environment by group or description. In the above referenced examples, users would have needed to set each of the label styles current prior to bringing in points respective to the point labels. The tree label style would have needed to be set current prior to inserting tree points, just as the fire hydrant label style would have needed to be set current prior to inserting fire hydrant points.

Before you set up point label styles for every manhole, mailbox, catch basin, tree, sign and bush, there is another LDD feature that enables users to automate labeling to some degree. This feature is referred to as “Description Keys.” “Description Keys” are used in conjunction with point labeling and are quite powerful. Whereas point labeling allows users to label batches of points inserted to the drawing environment having common parameters, the implementation of “Description Keys” permits users to read in and label all points at once regardless of what they are. “Description Keys” permit block symbol & layer mapping as well as scaling. Symbol blocks can be scaled by parameters in the point descriptor. For instance, the descriptor “T O 7” can be read in and manipulated using “Description Keys” and point labeling to read “7 inch Oak” in the drawing, be assigned a tree number, be mapped to a tree symbol and have the symbol scaled by a factor of 7 upon its insertion into the drawing environment. In this example, the layer containing the point marker could be placed on one layer, while the point label be placed on a second layer and the block symbol placed on a third layer. In the above referenced example, the description “T O 7” represents the “Raw Description” and “7 inch Oak” takes the place of the “Full Description.”

In this assignment, you will create a point label style for trees, and a point label style for all other points to be inserted into the drawing environment. You will also create a description key file to map descriptors with the label styles, layers, text and symbol blocks.

Exercise Instructions

- Logon to your workstation and start a session of LDD.
- Begin a new drawing by selecting “File→New.” Choose to create a new project. Give the project the name “Assign10.” Write “Point Labeling” in the description and Key Word areas. Save the drawing using the Acad.dwt template as Assign10-XX to your project folder where the “XX” designates the number which I assigned to you on the first day of class. If the number that I assigned to you is a single digit (for example 4 as opposed to 14), then enter a zero preceding the single digit (such as 04).

- You will be prompted with the “Create Point Database” dialogue box. Accept the default settings and choose “OK.”
- At the load “Load Settings” dialogue box click “Next” and set up your project with the following parameters:

Units Tab

Linear Units = Feet
 Angle Units = Degrees
 Angle Display Style = Bearings
 Display Precision Linear = 2
 Display Precision Elevation = 2
 Display Precision Coordinate = 5
 Display Precision Angular = 4
 “Next”

Scale Tab

Horizontal = 60
 Vertical = 1
 Paper Size = 8 x 11
 “Next”

Zone Tab

“Next”

Orientation Tab

“Next”

Text Style Tab

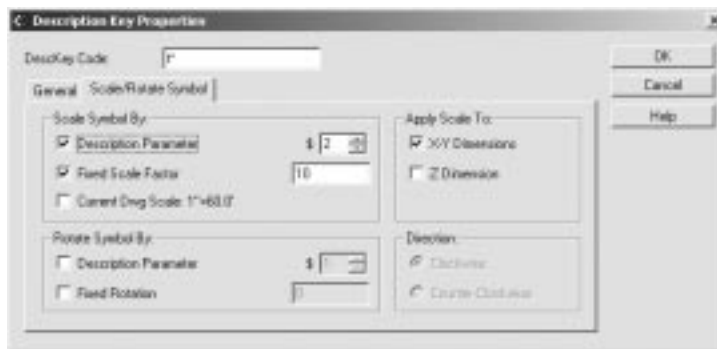
Leroy.stp
 L80

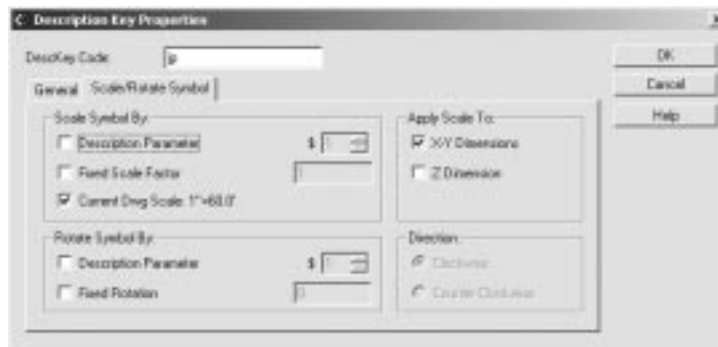
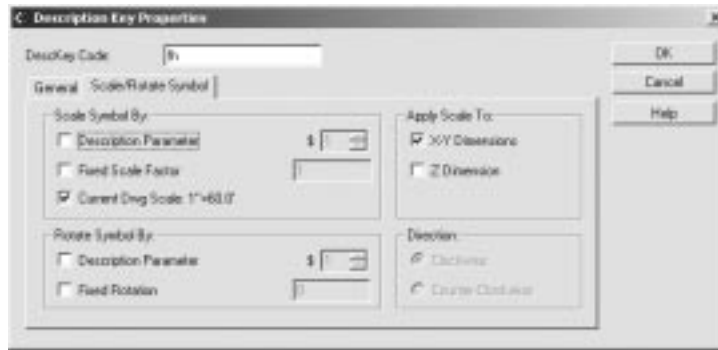
- Create several new layers with the following parameters:

<u>Layer</u>	<u>Color</u>	<u>Linetype</u>
C-PNTS-TREE	Red	Continuous
C-PNTS-UTIL	Green	Continuous
C-ANNO-VPRT	White	Continuous
C-TREE-EXST	Green	Continuous
C-UTIL-SYMB	Cyan	Continuous

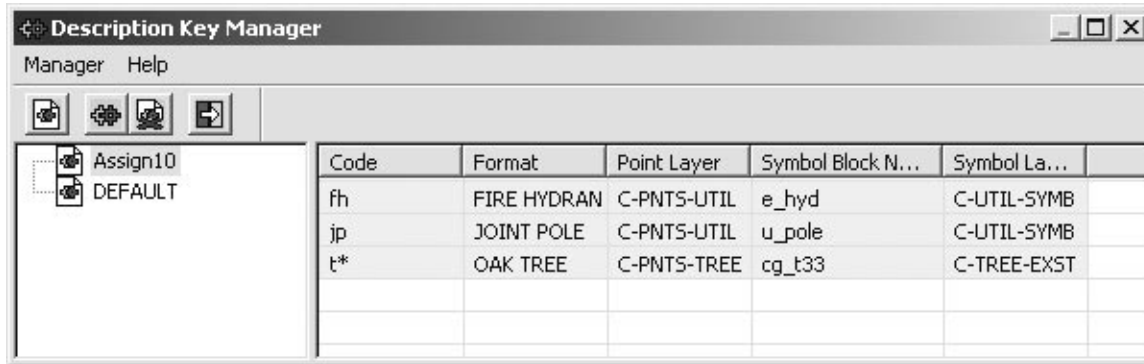
- Set your point settings (Refer to Assignment 3 if you can't remember how this was accomplished) so that your point text comes in with the L80 text style. Using the “+” marker, your marker height should be set at ½ the model space text height. The corresponding marker height for a text height of 4.8 units is 2.4. Set a text rotation angle of 30 degrees.

- Launch the description key manager through the menu “Points→Point Management→Description Key Manager.” After the dialogue box opens, select “Manager→Create Desckey File” and give it the file name “Assign10.” Right select on the newly created description key file and select “Create Desckey.” Proceed to fill out information as shown in the dialogue box below. In the “Desckey Code” area type “t*.” Fill in areas as shown below for three different Description keys.

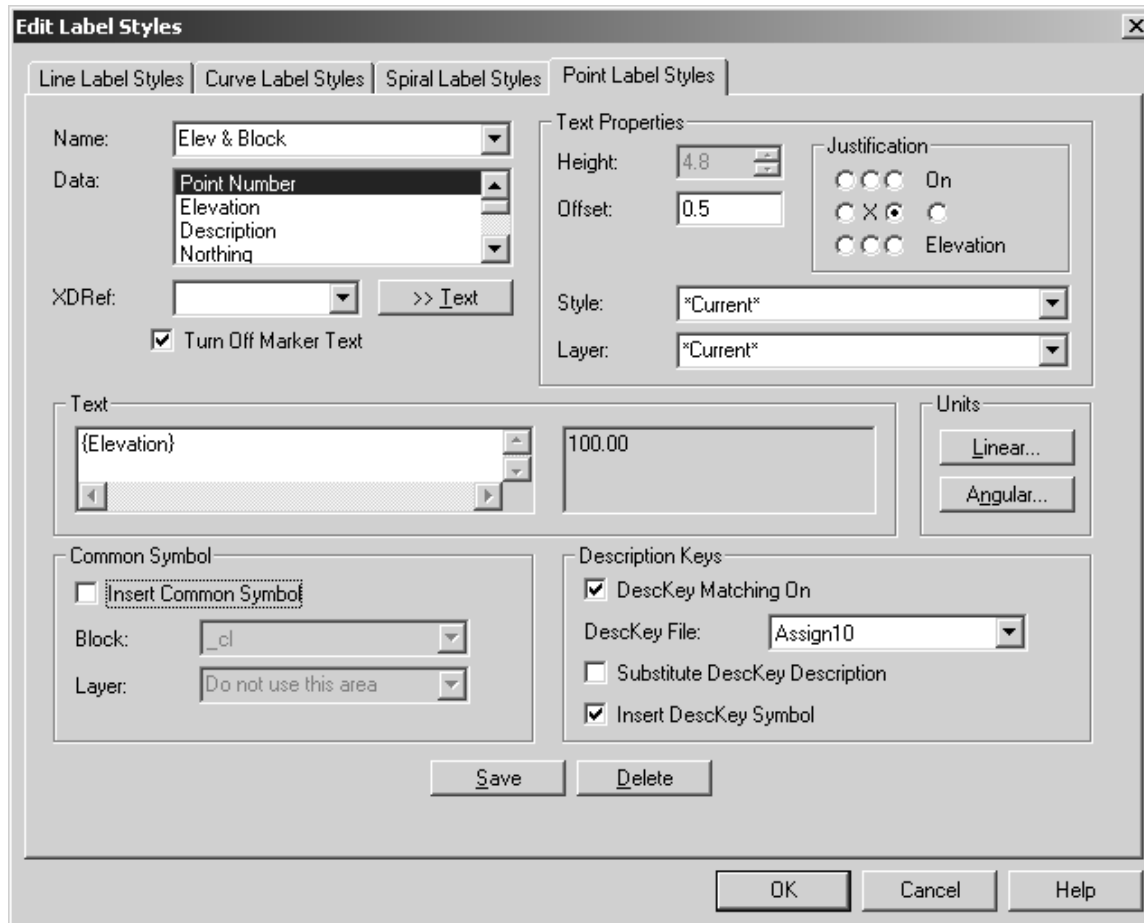


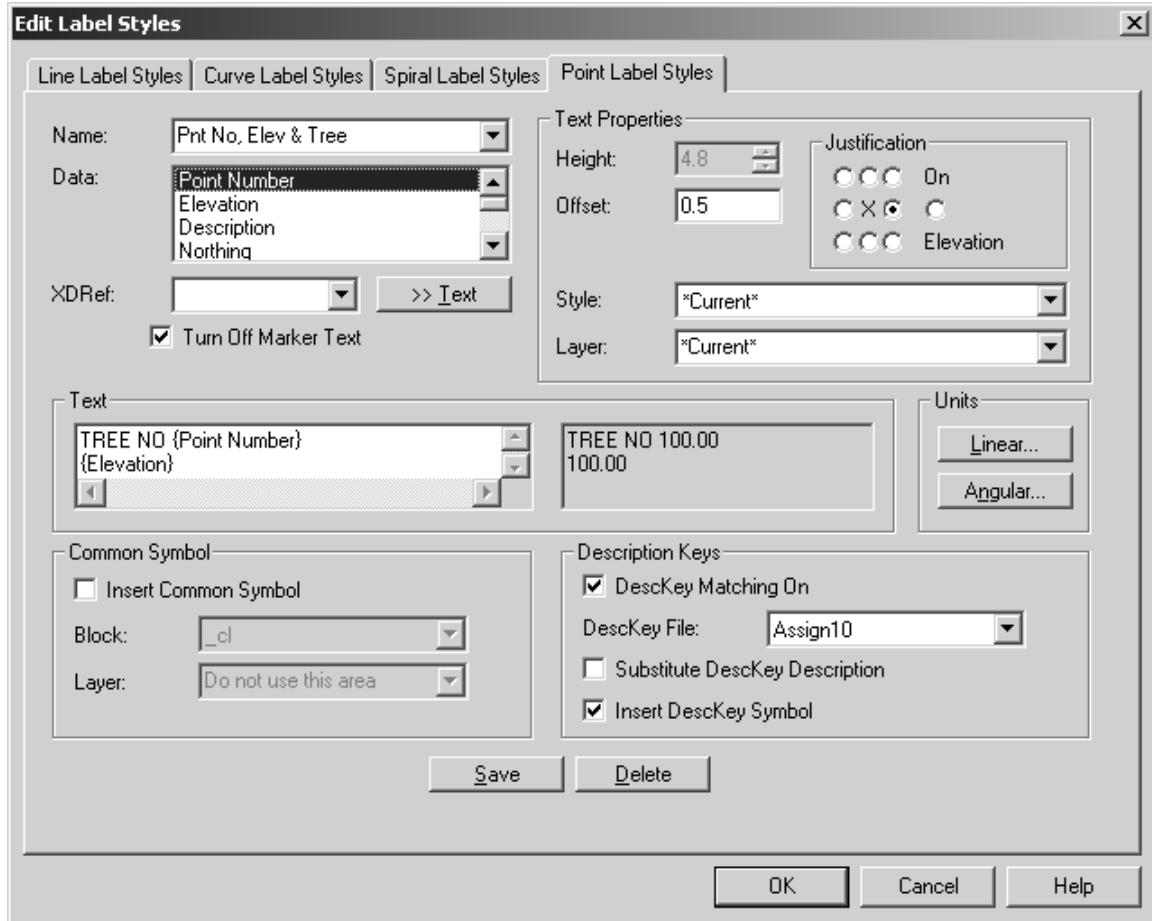


- The “Description Parameter” specified for the tree description key “2” shown above on the “Scale/Rotate Symbol” tab reads the second parameter past the base descriptor. In the description “Tree O 7,” the base descriptor is “Tree.” The 1st parameter is “O” for Oak tree. The 2nd parameter is the number “7.” The \$2 instructs LDD to scale the symbol by a factor of 7.
- When you are finished entering description key information, the dialogue box should look something like the one below.



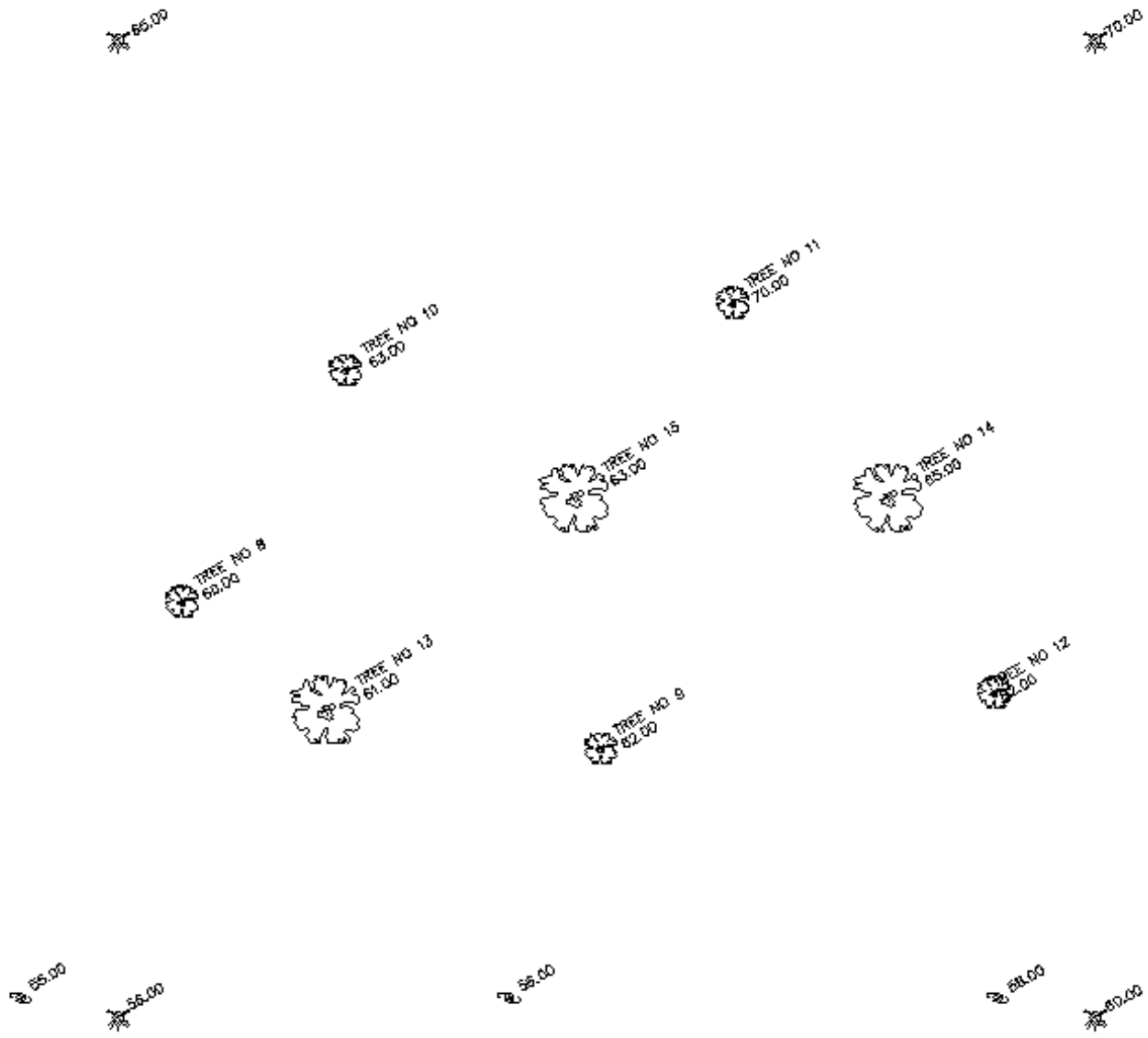
- Exit the description key manager and select “Labels→Edit Label Styles→Point Label Styles” to create two new point label styles as shown below.





- Select “Labels→Settings→Point Labels” and set the “Elev & Block” label style which you just created current. Specify a rotation angle of 30 degrees.
- Select “Points→Import/Export Points→Import” and using the “PNEZD” comma delimited format while on the “C-PNTS-UTIL” layer read in points from the file downloaded from <http://www.schroffl.com> (“..\Assign10\Import.txt”). As you read these points in, add them to a new point group named “All_Points.” You should see spot elevations and symbols in the drawing environment.
- In “Labels→Settings→Point Labels” set the “Pnt No, Elev & Tree” label style current. While on the “C-PNTS-TREE” layer, insert only points having the description tree. Refer to Assignments 4 & 5 if you can't remember how this was done. Choose to replace all points when prompted. The tree spot elevations are now on their respective layer. Tree symbols have been inserted to the drawing environment and scaled.

- Pick the layout tab currently titled “Layout1” so that this layout becomes active. Right click on the this tab and choose to rename the layout tab to “Plan View.” Now that you are in paperspace, change to the layer “C-ANNO-VPRT” and create a landscape viewport 11'x8.5' at a 60 scale for the map.
- Save and exit this drawing. You have successfully completed this assignment.



Reference Figure: Assignment 10