

Workflow 3: Drawing New Design Elements

Placing elements into a design file which have not been stored in the coordinate geometry database, will be drawn using the D & C Manager. The FLH criteria files search for plan graphic elements placed with the correct D & C Manager attributes when creating the proposed crosssections. The plan graphic elements used by the criteria to draw the proposed cross sections have intelligence; these intelligent attributes are known as **Adhocs**. On certain D&C Manager elements used by the criteria, the user has the option of assigning AdHocs to the element in order to directly control the criteria. The adhoc options will become visible to the user when an item is selected with the Adhoc Attribute toggled on in the Secondary D & C Manager dialog box. Any changes to the default adhoc attribute values can be made at the time when the plan graphic element is placed or the adhoc may be changed later using the Adhoc Attribute Manager and the Set Command.

The D & C Manager can be used in conjunction with both MicroStation commands, such as move parallel and place line, and GEOPAK commands, such as draw transition. When drawing plan graphics using D & C Manager, always turn on Place Influence and Adhoc Attribute toggles in the secondary D & C Manager dialog.

1. *From the D & C Manager dialog box, select the Define_dgn Category as shown below.*

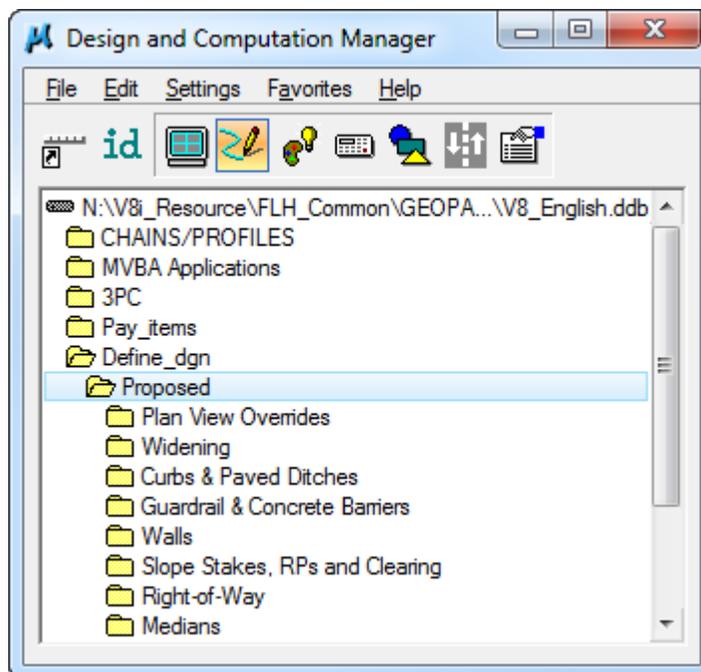


Figure 6.3-1: Select Define_dgn Category

Define_dgn category is broken into 2 subcategories: Proposed and Existing. In the proposed subcategories contains all the proposed plan view elements and in the existing subcategory contains all the existing plan view elements. Existing subcategory will be used to draw supplemental mapping features.

Proposed plan view elements drawn with the unit specific .ddb file is vital to the development of cross sections.

2. For example, from the Proposed subcategories select Walls. In the Walls subcategory multiple walls are available. For example, select the Prop. MSE Wall. When drawing new elements, make sure the Design mode button is selected.

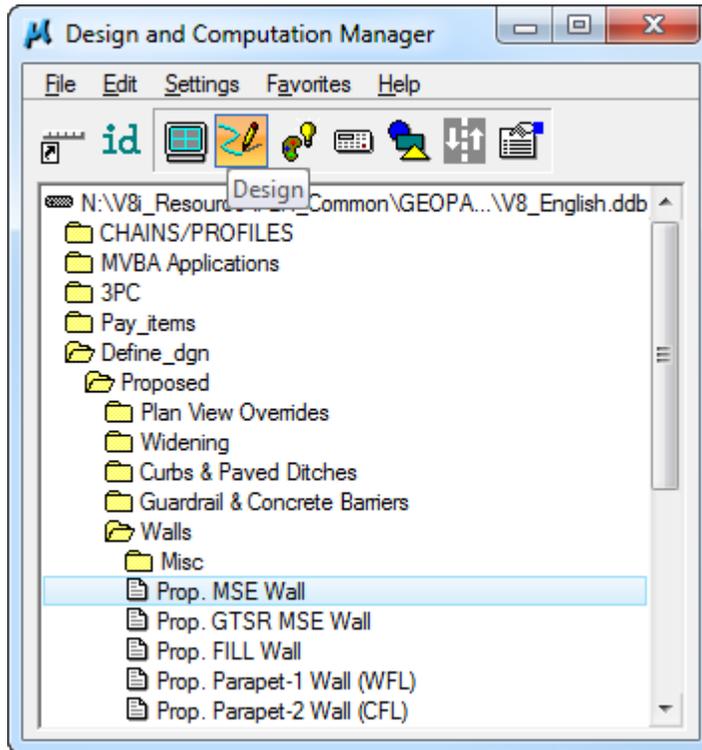


Figure 6.3-2: Select Proposed MSE Wall

3. Always toggle on Place Influence and Adhoc Attributes in the secondary D&C Manager dialog. New Element only can be toggled on when creating only new elements.

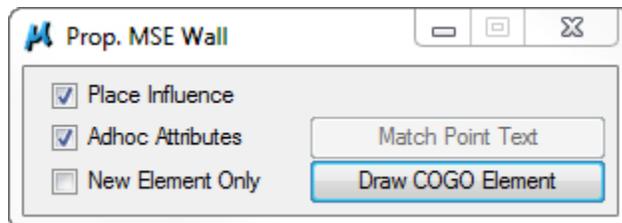


Figure 6.3-3: Place Influence & Adhoc Attribute

Toggling on place influence will allow the user to place any element with the attributes assigned to the element in the D & C Manager. With the Adhoc Attributes toggled on, GEOPAK will give the new or modified element the same adhoc values as the active item. With new element only toggled on, any modifications to a selected item will not result in changing the attributes of that element. In the example above, a line drawn using MicroStation's place line command will be drawn with the attributes of **Proposed MSE Wall**.

4. *toggling on the Place Influence and Adhoc Attribute will invoke the adhoc attribute dialog box for the proposed MSE Wall.*

The screenshot shows a dialog box titled "Prop. MSE Wall" with a table of attributes. The table has three columns: Name, Type, and Value. The attributes listed are:

Name	Type	Value
Wall Foreslope	String	-1:3
Wall Batter	String	-24:1
Leveling Pad Depth	Numeric	0.0
Wall Lift Height	Numeric	1.5
Set Back Width	Numeric	4.0
Wall Width Factor	Numeric	0.7
Additional Exc Width	Numeric	1.5
Min Reinforce Length	Numeric	0.0
Wall Excavation Slope	String	1:1
Embedment Depth	Numeric	2.0
BottomFootingProfName	String	none
WallChainName	String	none
UNLOCK Wall Foreslope	String	N
Foundation Depth	Numeric	0.0
Wall Backfill Depth	Numeric	2.0
MSE Wall Facing Width	Numeric	0.0

Figure 6.3-4: Proposed MSE Wall Adhoc Attribute table

If the D&C Manager item selected has adhoc attributes assigned to the item, then the default adhoc attributes dialog box will be pop up, allowing the user to enter project specific values. Adhoc attributes are programmed with default values and can be modified to accommodate the different projects.

5. Once the default MSE Wall adhoc attributes have been modified for access the Draw Transition tool by selecting the icon from the GEOPAK Road tool frame.

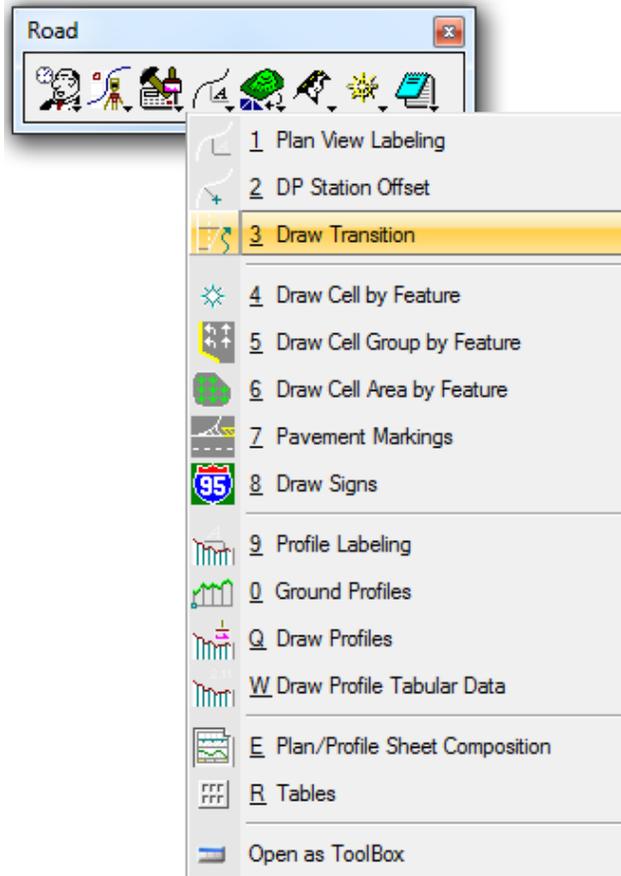


Figure 6.3-5: Access Draw Transition

Draw transition tool provides accuracy and efficiency when drawing plan graphic elements. The draw transition tool is recommended over the copy parallel command. Inaccurate plan graphic elements can result if copy parallel command is not used properly with the correct mode “Original”.

6. Populate the Draw Transition dialog for the project and select DRAW to place the Proposed MSE wall into Plan view.

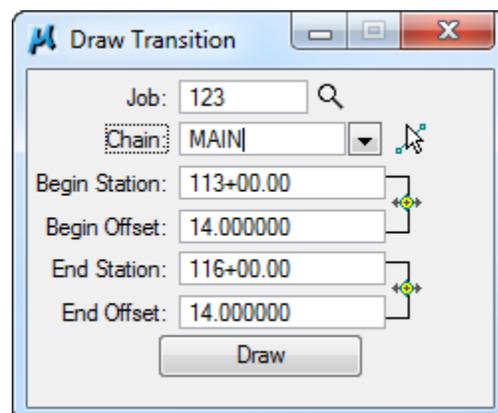


Figure 6.3-6: Draw Transition