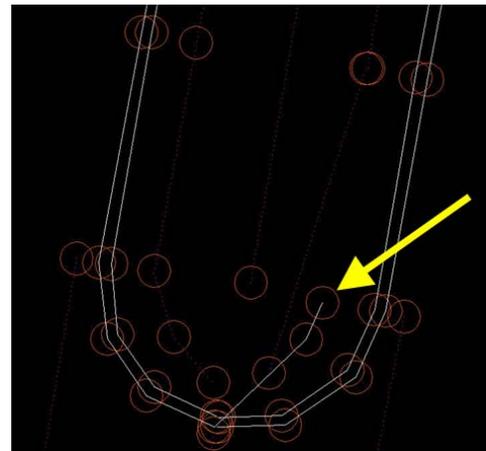


# Editing Survey Data

**Design Manual**  
**Chapter 40**  
**Design Survey**  
**Specifications**  
Originally Issued: 09-30-11

Geopak Survey Chains, Points, and COGO are accessed through the Geopak Survey menu.

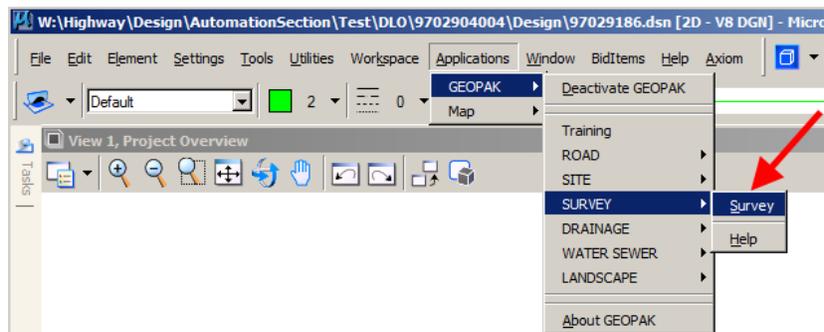
In the Picture at the right, two BL points were added to the end of a GU survey chain by mistake. This type of problem is to be corrected through Geopak menus, tools, and dialogs, as described below.



Start GEOPAK from the MicroStation menu by selecting **Applications > GEOPAK > Activate GEOPAK**, as shown at the right.



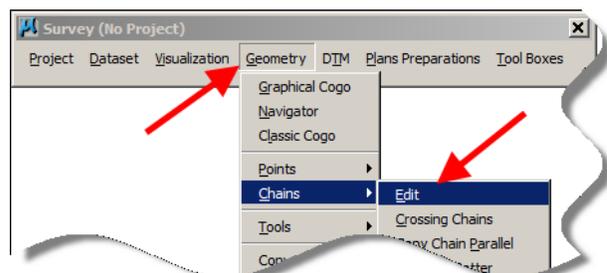
After GEOPAK has been activated, access the GEOPAK **Survey** menu from the MicroStation menu by selecting **Applications > GEOPAK > SURVEY > Survey**, as shown at the right.



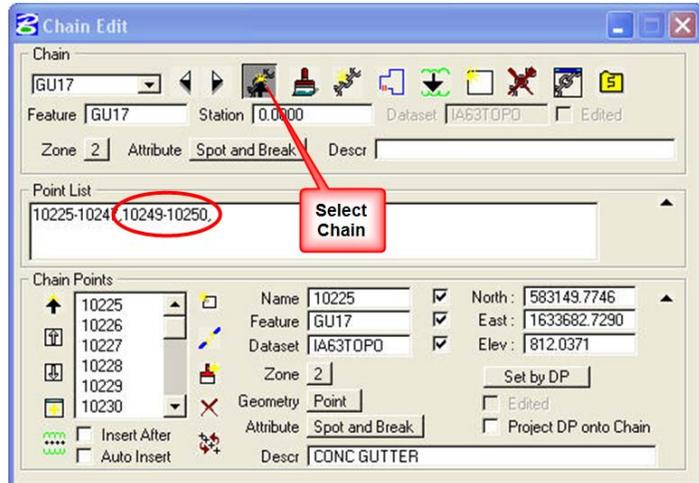
The **Survey** menu should display, as shown below.

From the GEOPAK **Survey** menu tool bar, select **Geometry > Chains > Edit** to fix the chain.

The **Chain Edit** dialog should open, as shown below.



On the **Chain Edit** dialog, *click* the **Select Chain** button, then in the MicroStation file, *data-point (select)* the chain that is to be edited. This will load all of the information for the chain into the **Chain Edit** dialog, as shown at the right.



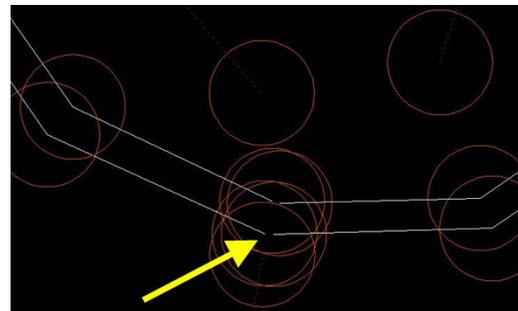
Points 10249 and 10250 are to be removed from the end of the chain. To do this, simply **delete** the points from the **Point List** portion of the dialog.

*Click* the **Update Chain** button to finalize the edit.

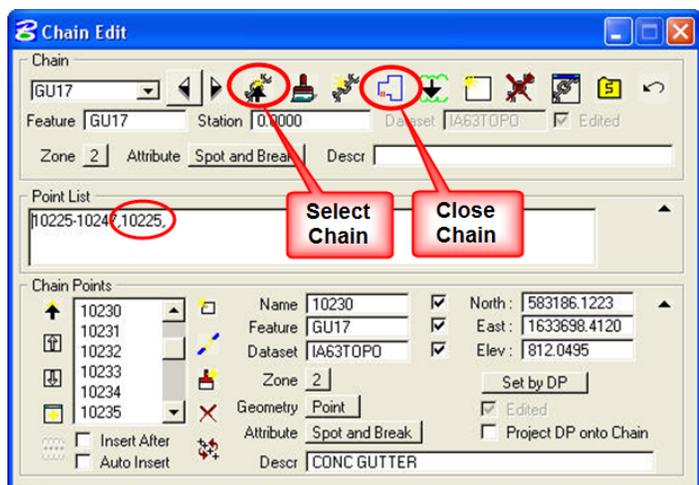
After *clicking* the **Update Chain** icon, the chain will be automatically updated in both the MicroStation and “gpk” files.



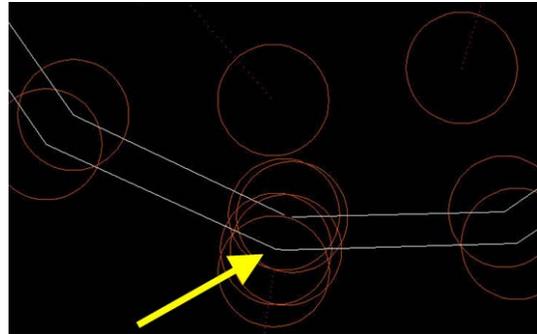
In the picture at the right, the CU chain and the GU chain both have gaps that should be connected.



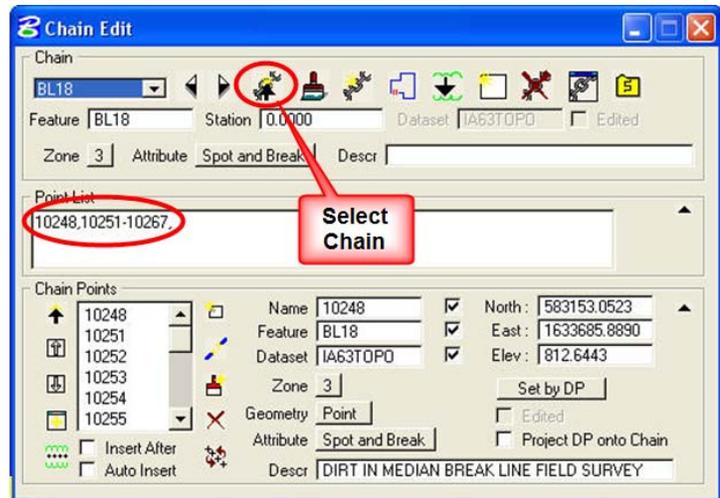
On the **Chain Edit** dialog, use the **Select Chain** button again to select the chain that is to have a gap closed up. *Click* the **Close Chain** button and the last point of the chain will be connected to the first point of the chain.



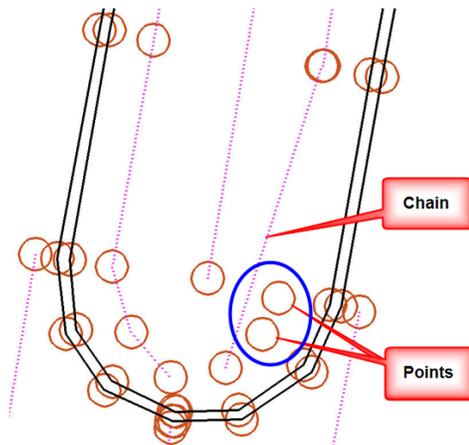
The closed chain appears as shown at the right.



To add the original points to the correct survey chain, *click* the **Select Chain** button again to identify the survey chain where the points are to be added.



The picture at the right shows the BL survey chain and the points that are to be added.

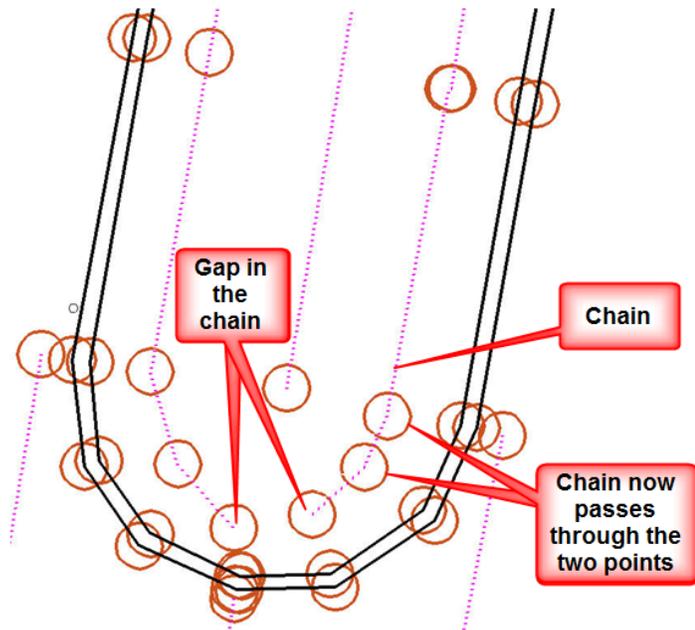


Since the two points to be added to the chain belong in the same sequential order as the other chain points, a hyphen can be used between the first and last point numbers, as shown at the right. If the points to be added were not in sequential order with the other chain points, they should be inserted at the appropriate locations and separated by commas.

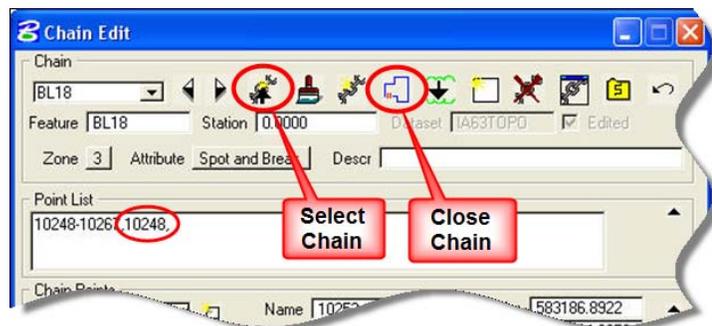


After the point numbers have been modified, *click* the **Update Chain** button.

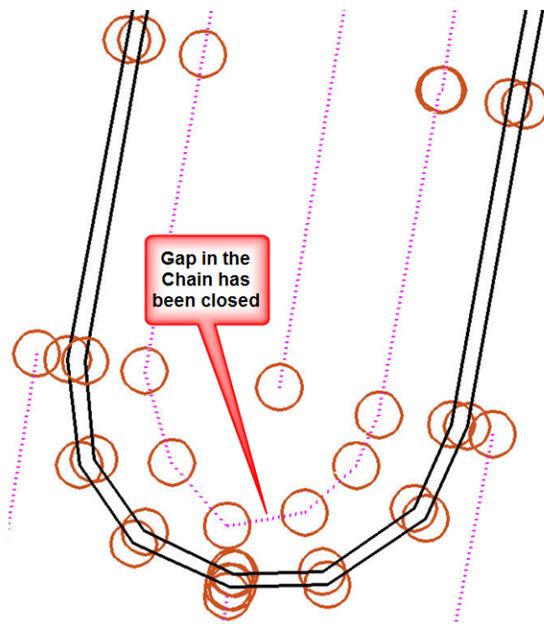
The modified BL survey chain is shown at the right. There is still a gap in the chain that must be repaired.



To repair (eliminate) the gap in the above shown chain, use the **Select Chain** and **Close Chain** tools, as shown at the right.

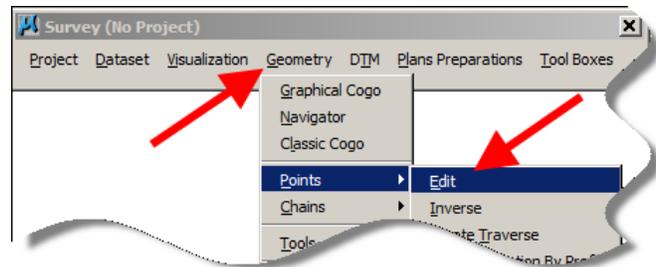


The repaired chain, with the closed gap, is shown at the right.

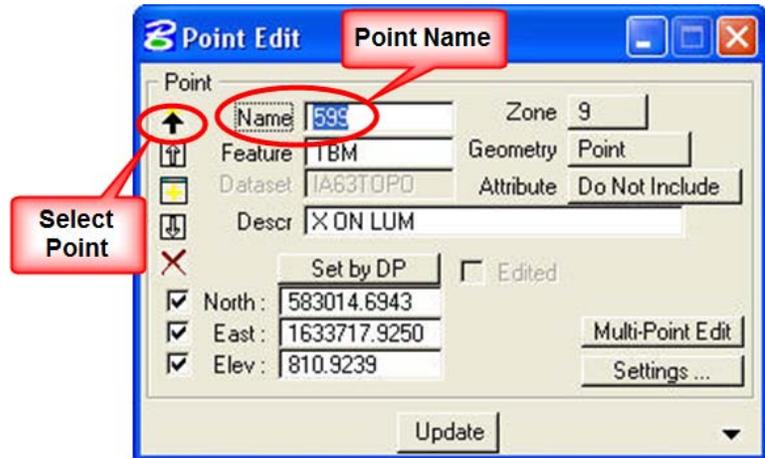


To edit a point:

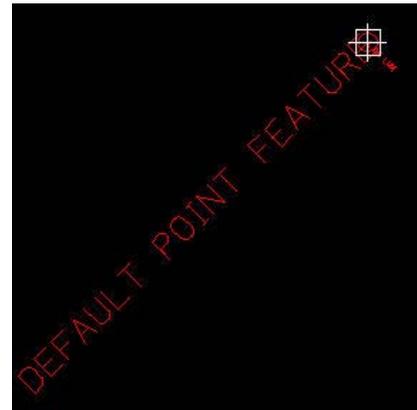
Select **Geometry > Points > Edit** from the Geopak **Survey** tool bar, as shown at the right.



On the **Point Edit** dialog, click the **Select Point** button to identify the point that is to be edited. Or, if the point **Name** is known, it could be entered by keying in the name into the **Name** area, (as shown at the right). When complete, use the keyboard **Enter** key to enter the information.

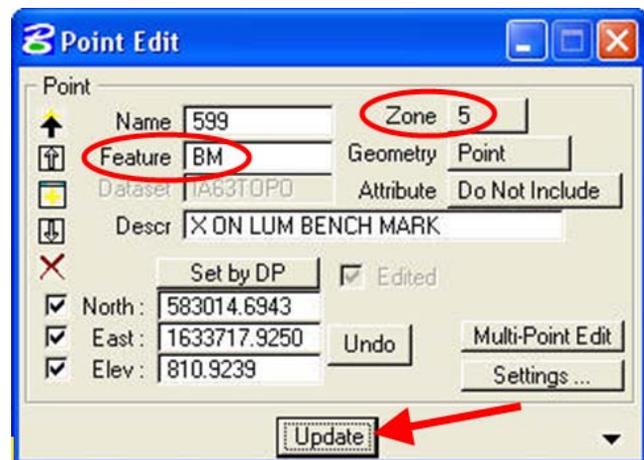


The “**TBM**” feature for the above listed point was entered in the **Feature** field of the **Point Edit** dialog, above. That feature name was not found in the “SMD” file so the point was plotted with the “**DEFAULT POINT FEATURE**”, as shown at the right.

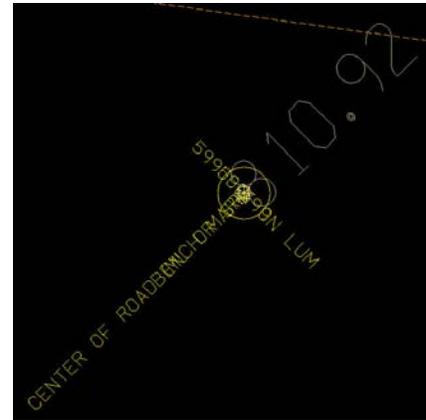


Using the **Point Edit** dialog again, the **Feature** of the point was then changed to **BM** and the **Zone** was changed to **5**.

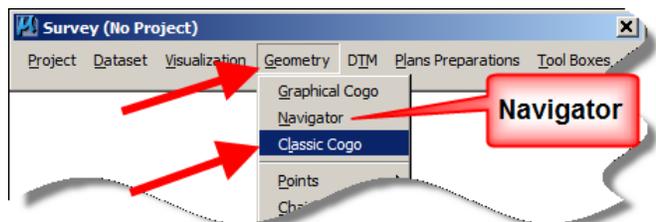
Click the **Update** button to activate the changes.



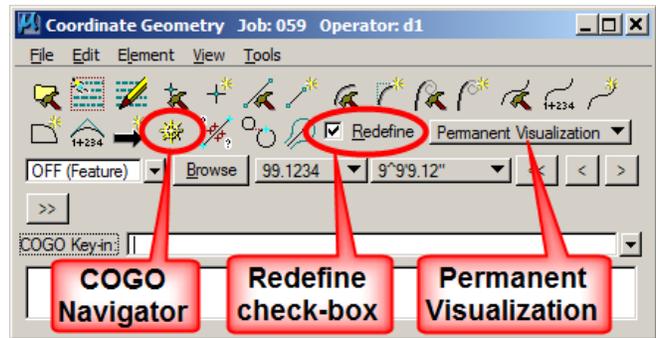
When the **Update** is activated the MicroStation and “gpk” files are both automatically updated and the point changes, as shown at the right.



Another way to modify points is through the **Coordinate Geometry (COGO) Navigator**. The **Navigator** dialog can be accessed directly from the **Survey > Geometry** drop-down menu, as shown at the right, or also from the **Coordinate Geometry** dialog, using the yellow “ship’s wheel” icon (  ), as shown below.

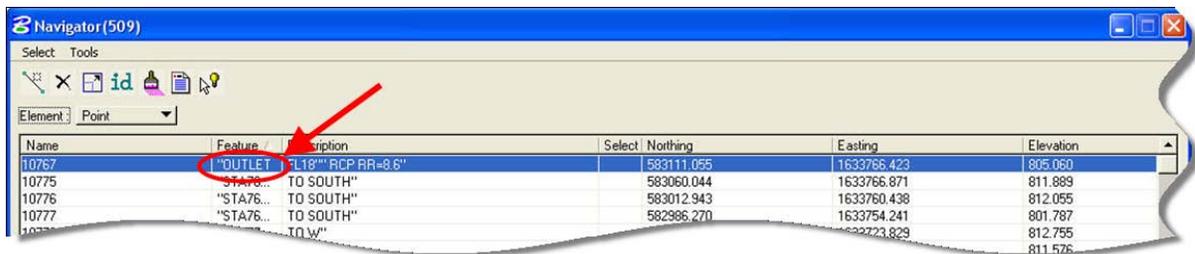


Before modifying points, a couple of settings must be made on the **Classic COGO - Coordinate Geometry** dialog. As stated above, the dialog can be accessed from the **Survey > Geometry > Classic Cogo** selection, and the resulting **Coordinate Geometry** dialog is shown at the right.

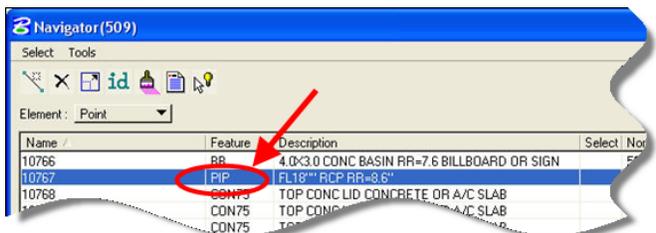


In the **Coordinate Geometry** dialog, the **Redefine** check-box must be *checked* (  ) and the visualization must be set to **Permanent Visualization**, as shown. After completing these two settings, access the **COGO Navigator** dialog.

The **Navigator** dialog is shown below. To modify a point, *select* (highlight) the point row then *click* on the specific item to be modified, such as the **Outlet Feature** shown below, then directly make the change.



The modification to the **Feature** is shown at the right. The point is automatically updated in the MicroStation file.



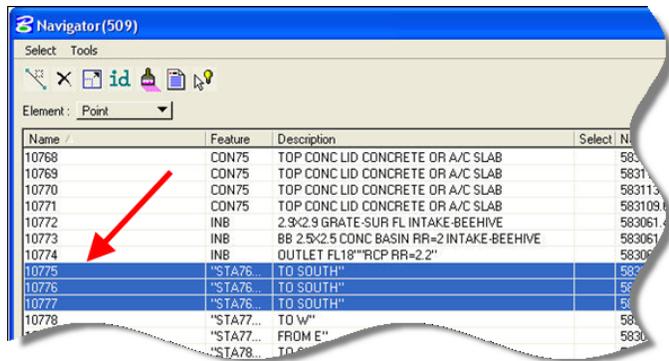
Several points can also be modified at the same time. *Click on (select) the first point to be modified.*

Then -

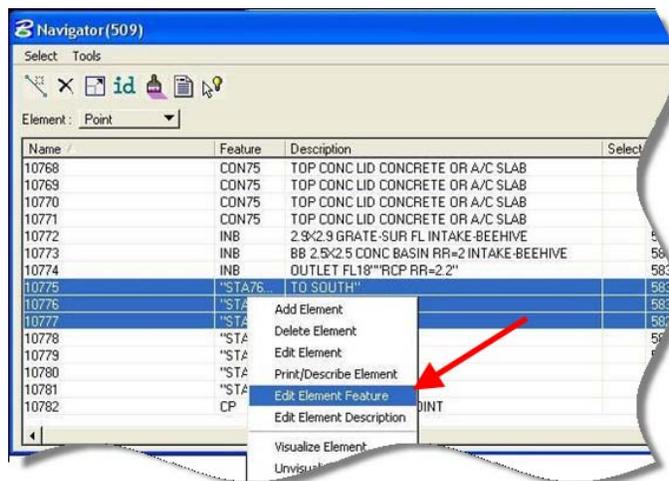
If all points to be modified are adjacent to each other in the **Navigator** dialog list, *hold down* the keyboard **Shift** key and *click (select)* the last point to be modified, which will cause all points in between to also be selected.

Or -

If the points are not adjacent to each other in the **Navigator** dialog list, *hold down* the keyboard **Ctrl** key and *click* each individual point (row) that is to be edited.



After all the points that are to be edited have been *selected*, (highlighted), *right-click* anywhere within the highlighted area and select the option in the *pop-up* menu that describes the action to be taken. In the example at the right, the **Edit Element Feature** option has been chosen for editing the three selected points.

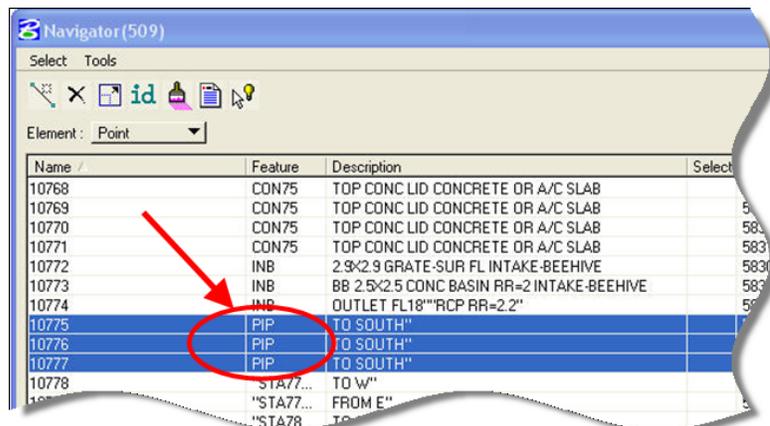


The **Edit Element Feature** dialog should now display. In this dialog use the keyboard to enter the **New Feature** name for the points to be edited, as shown.

*Click* the **Apply New Feature** button.



The points have now been modified, as shown at the right.



# Chronology of Changes to Design Manual Section:

## 040d-004 Editing Survey Data

9/30/2011	NEW
	New