LAB 14 - Modifying Single Template Drops and Target Aliasing

This lab demonstrates the procedure for editing a single template drop and setting up a corridor for ***target aliasing***. Modifying single template drops is used for making minor corrections to the design prior to creating a surface. Target aliasing is used to specify alternate targets for end condition interception.

Chapter Objectives:

- Modify a single template drop by moving a point.
- Add a parallel corridor and use target aliasing to tie to the original corridor as needed.

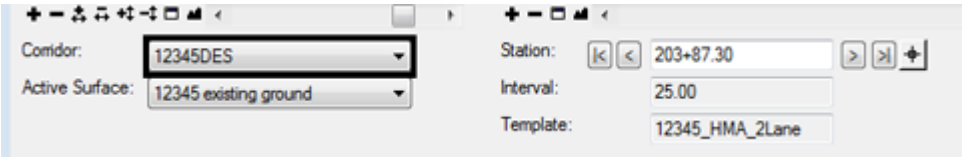
Before beginning this lab, verify that the following files are loaded:

- C:\Projects\12345\Design\Drawings\Reference_Files\12345DES_Model.dgn
- C:\Workspace\Workspace-CDOT_XM\Standards-Global\InRoads\Preferences\CDOT_Civil.xin
- C:\Projects\12345\Design\InRoads\12345DES_Geometry.alg
- C:\Projects\12345\Design\InRoads\12345 existing ground.dtm
- C:\Projects\12345\Design\InRoads\12345DES.ird
- C:\Projects\12345\Design\InRoads\DES12345_Templates.itl

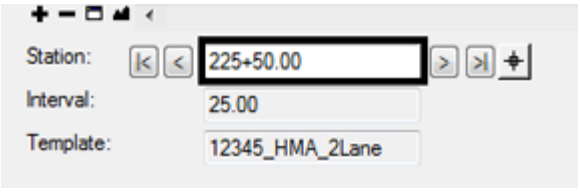
Lab 14.1 - Modifying a Single Template Drop

At station ***225+50.00*** the design toe falls inside a small rise in the natural ground creating an area that pools water. This station is edited to move the toe to the top of that rise.

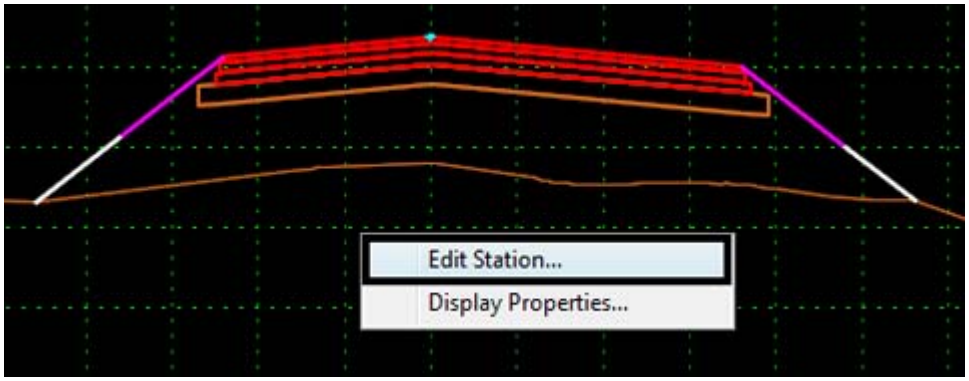
1. Select **Modeler > Roadway Designer** from the InRoads menu bar.
2. Select **12345DES** for the corridor (created in lab 4).



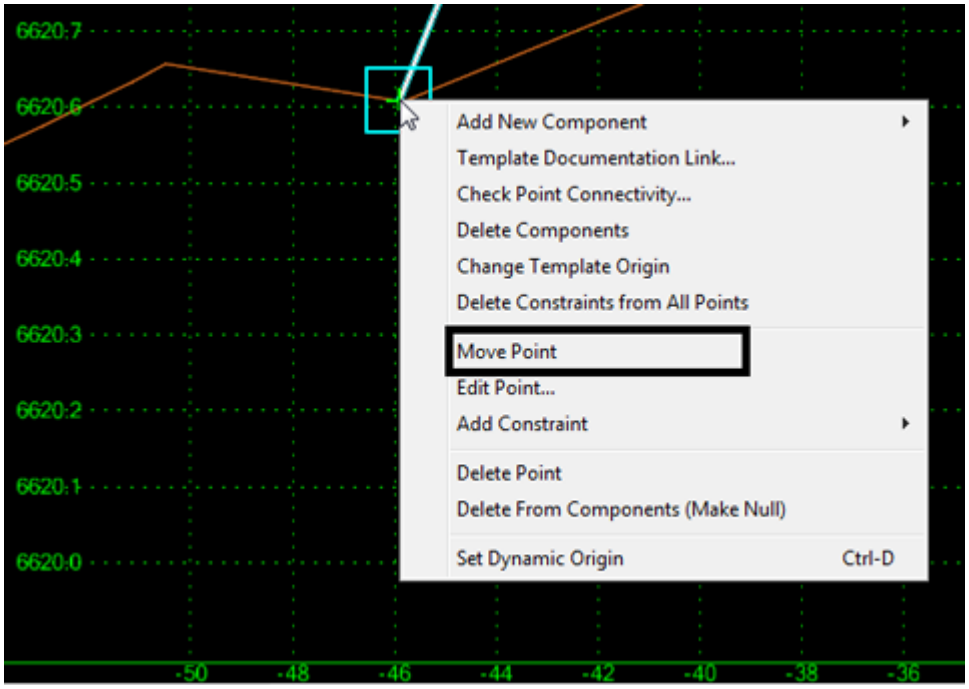
3. Key in **225+50.00** in the Station indicator and press the Tab key.



4. **<R>** in the template view and select **Edit Station** from the menu.



5. In the ***Editing Template at Station 225+50.00 Only*** dialog box, **<R>** on the **LT_Toe-of-Fill** point and select **Move Point**.



6. Move the pointer to the small rise approximately 50’ to the left of the centerline. The point snaps to the ground line. **<D>** at that location to complete the move.

7. **<D> OK** to dismiss the ***Editing Template at Station 225+50.00 Only*** dialog box.

8. Select **File > Save**.

This method of modifying template drops should be used sparingly. If there are more than a couple of locations that require editing, modifying the template should be considered over editing single template drops.

Lab 14.2 - Target Aliasing

Target aliasing is used to define multiple targets for an end condition. In this exercise two parallel corridors are constructed. The first corridor ties to the existing ground exclusively. The second corridor ties to the existing ground or the first corridor. This lab uses the ***12345DES*** corridor created in lab 4 in addition to a new corridor created in this lab.

First, the offset corridor is created.

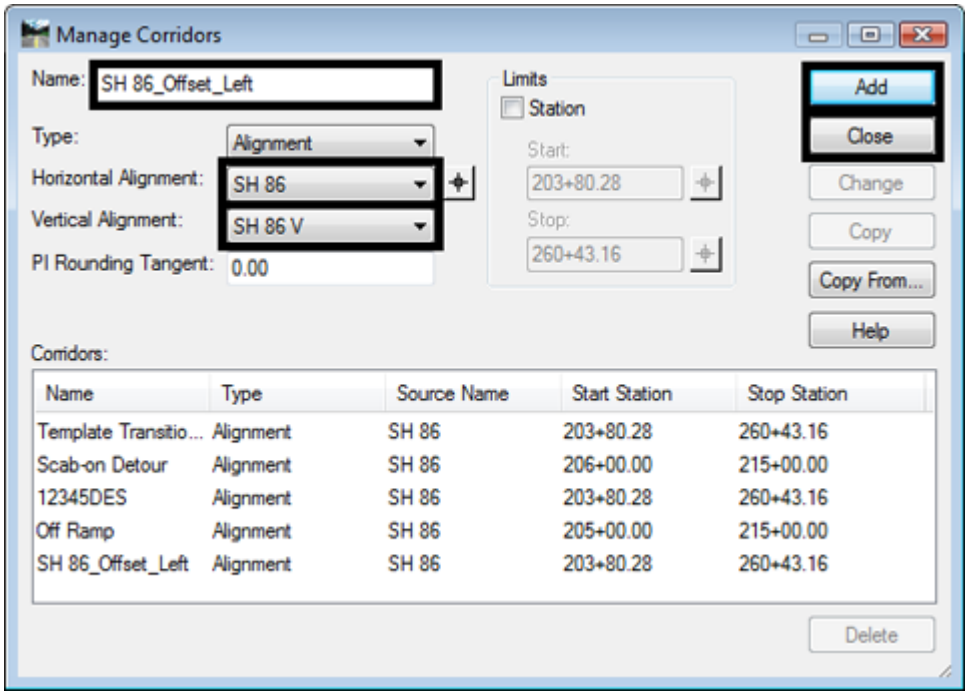
1. Select **Corridor > Corridor Management** from the Roadway Designer menu bar or **<D>** the Corridor Management button.

2. In the Manage Corridors dialog box, key in ***SH 86_Offset_Left*** for the ***Name***.

3. Verify that the ***Horizontal Alignment*** is ***SH 86*** and the ***Vertical Alignment*** is ***SH 86 V***.

4. **<D> Add**.

5. **<D> Close**.



A template drop is added to the offset corridor.

6. Select **Corridor > Template Drops** from the Roadway Designer menu bar or **<D>** the Template Drops button.

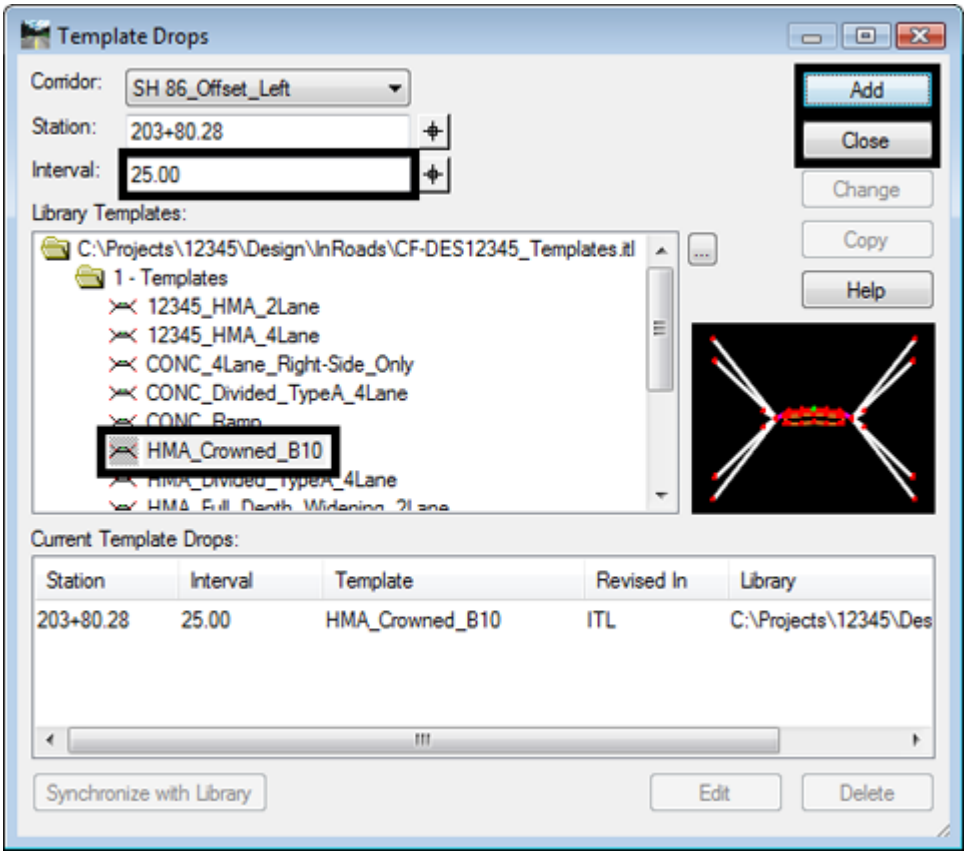
7. In the ***Template Drops*** dialog box, key in ***25*** for the ***Interval***.

8. Expand the ***1 – Templates*** folder.

9. Highlight the **HMA_Crowned_B10** template.

10. **<D> Add**.

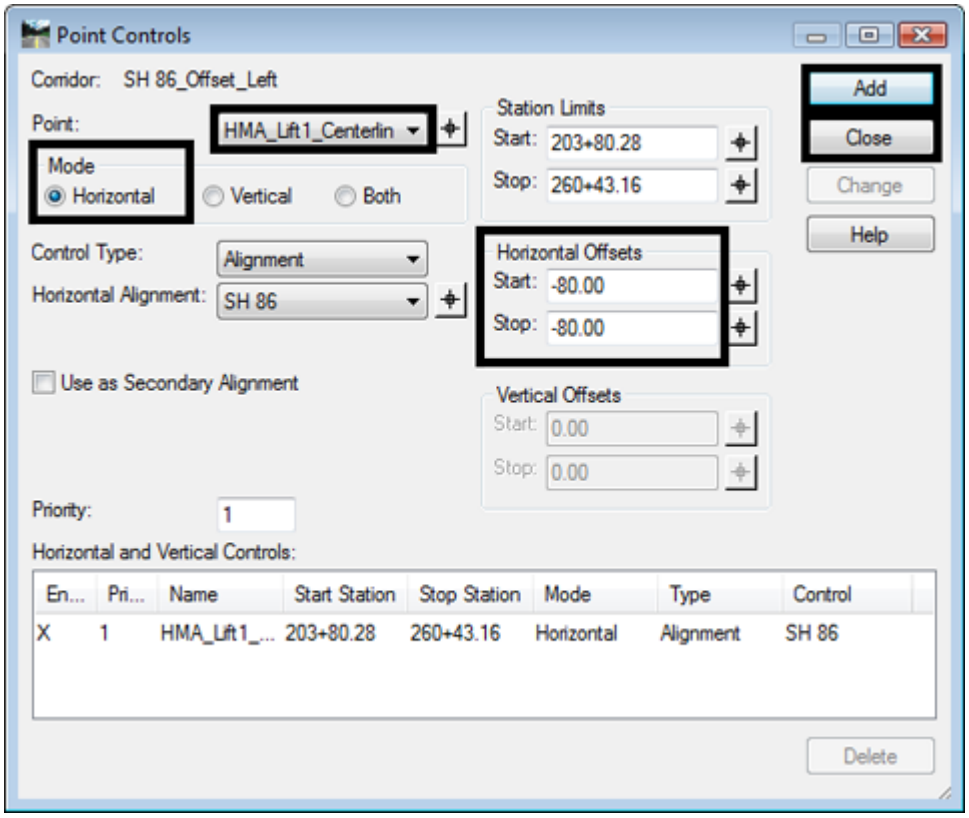
11. **<D> Close**.



The corridor is built on the same alignment as the 12345DES alignment. A point control is used to move ***SH 86_Offset_Left*** corridor 80' to the left.

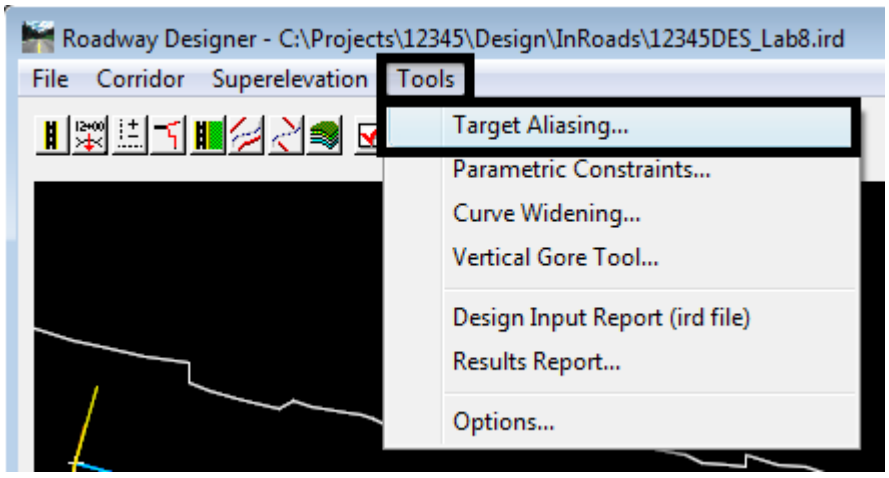
12. Select **Corridor > Point Controls** from the Roadway Designer menu bar or **<D>** the Point Controls button.
13. In the ***Point Controls*** dialog box, select **HMA_Lift1_Centerline-Top** for the ***Point***.
14. Toggle on **Horizontal** for the Mode.
15. In the ***Horizontal Offsets*** area, key in ***-80*** for both the ***Start*** and ***Stop*** offsets.
16. **<D> Add**.

17. **<D> Close**.



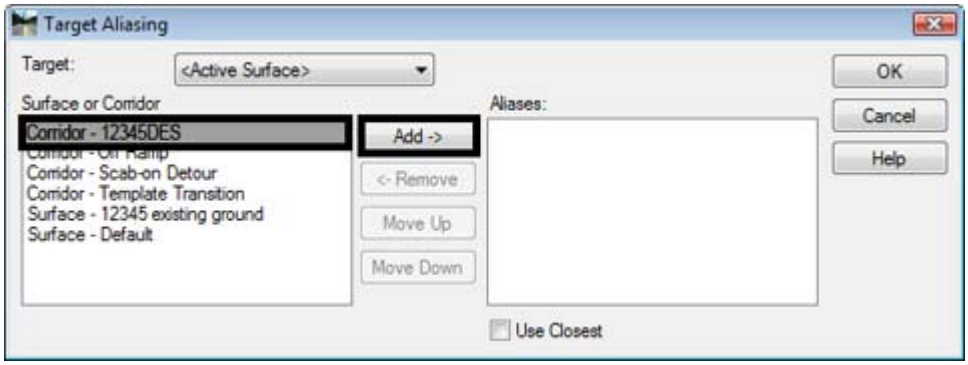
The final step is to add the target aliasing.

18. Select **Tools > Target Aliasing** from the Roadway Designer menu. The ***Target Aliasing*** dialog box is displayed.



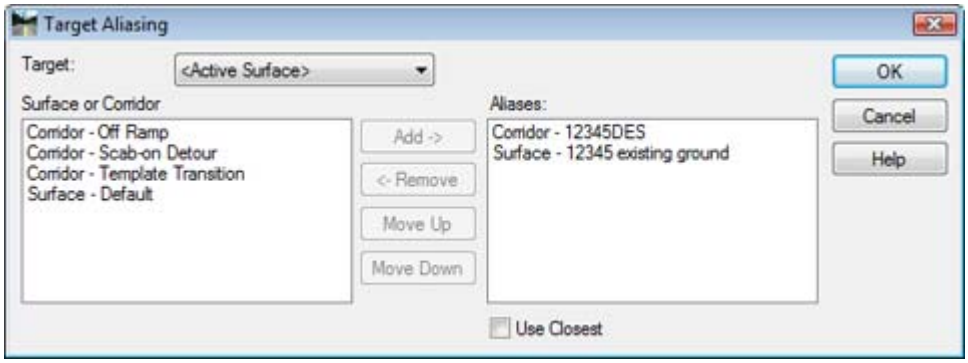
19. In the ***Target Aliasing*** dialog box, Highlight **Corridor – 12345DES** from the ***Surface or Corridor*** list.

20. **<D> Add**. The highlighted entry is moved to the Aliases list.



21. Highlight **Surface – 12345 Existing Ground** from the ***Surface or Corridor*** list.

22. **<D> Add**.



23. **<D> Cancel** to dismiss the ***Target Aliasing*** dialog box.

The order that aliases are listed is important because it determines the testing order. In this exercise, the end condition tests against the ***Corridor – 12345DES*** first. If it cannot tie to the corridor it tests against the ***Surface – 12345 Existing Ground***.

24. Scroll through the stations and notice how the right end condition behaves.

25. Select **File > Save** from the Roadway Designer menu bar.

26. **<D> Close** to dismiss the Roadway Designer dialog box.

Chapter Summary:

- In *Lab 14.1 -Modifying a Single Template Drop* a single template drop was modified by moving a point.
- In*Lab 14.2 -Target Aliasing* target aliasing was used to tie one corridor to another. This method also allowed the corridor to tie to the existing ground as needed.