Updating GEOPAK Model Features – MDOT 02 Workspace

General Information

This document is intended to provide guidance for updating civil design model DGN features created using the MDOT_02 Workspace. This process is required on any DGN model file created prior to the March 16, 2016 workspace update when using Bentley Open Roads Edition products (this applies to Suite and Power products). The procedure updates design model feature symbology. This procedure can also be used to correct feature symbology appearance issues in design models after any workspace update. A working knowledge of CADD, GEOPAK, and design modeling are necessary to complete this process.

Common files to update include:

- Corridor Files

- Civil Cell Files

- Other DGN files containing Proposed Design Models

Update Procedure

1. Make note of any Civil Features not created by a corridor, civil cell or linear template in the DGN file. These features will need to have a feature definition reassigned once this procedure is completed.

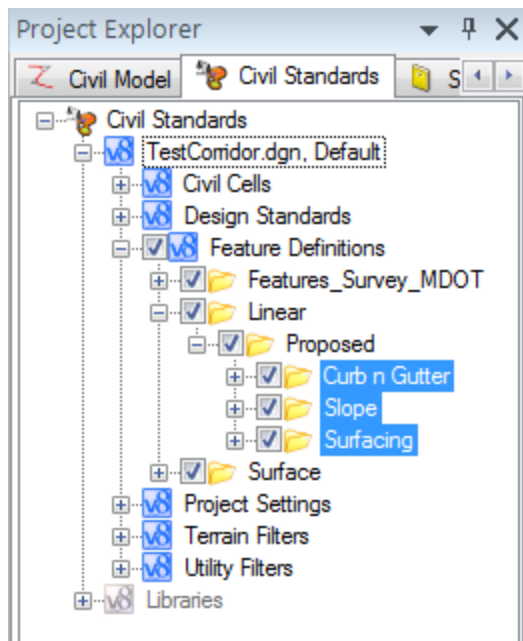   Typical features include but are not limited to:

    - Barriers

    - Edges of Pavement (manually drawn with civil geometry tools)

    - Ditches

    - Slope Tie Lines

    - Sidewalk

    NOTE: The feature name and level symbology will not be altered by this procedure, only the feature definition will need to be reassigned.
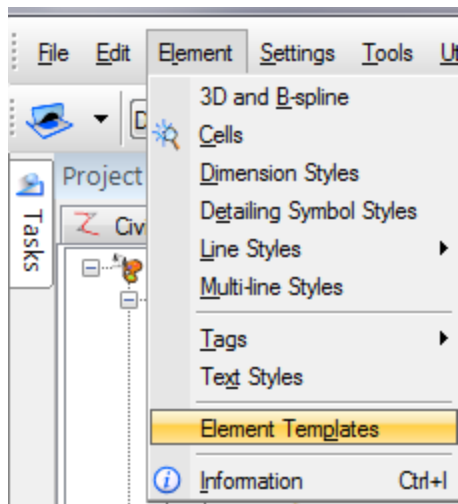
2. Using the Project Explorer dialog, navigate to the Civil Standards - (DGN file name)\Feature Definitions\Linear\Proposed folder. Delete all the sub-folders and features listed below the "Proposed" sub-folder.

NOTE: In the image shown, the highlighted folders and any features contained within the folders would need to be deleted.

Note: Civil Geometry and Existing features are not typically impacted by a workspace update. It is not usually necessary to delete the Geometry or Existing sub-folders under the "Linear" folder.
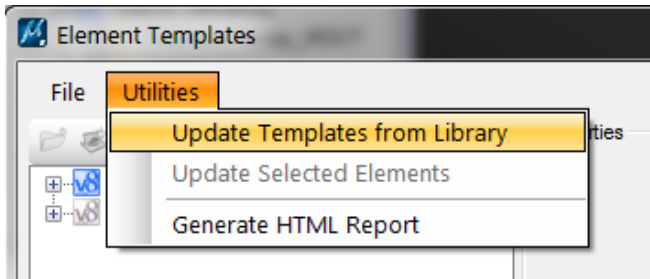
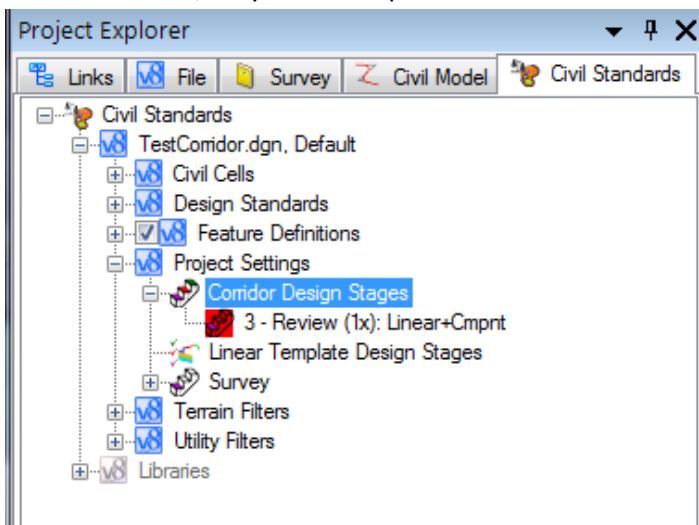3. Select Element on the MicroStation Dialog and then select Element Templates.

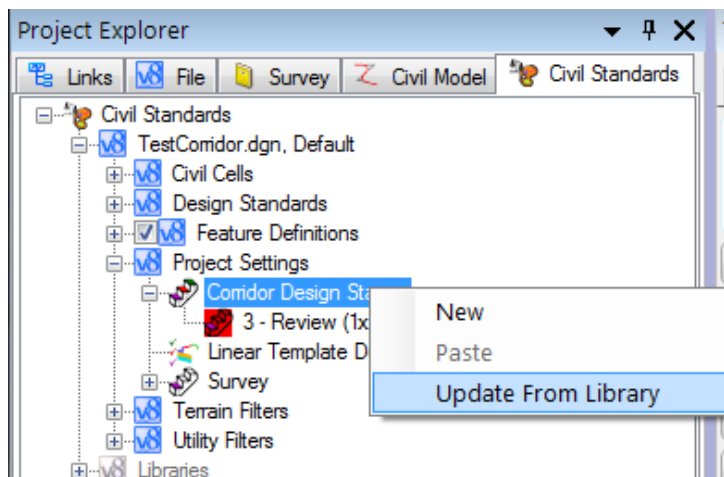4. On the Element Template dialog select Utilities\Update Element Templates from Library.

NOTE: This may take a while to process depending upon the size of the update.

5. After the process is completed, close the Element Template dialog.

6. Open the Project Explorer\Civil Standards\Project Settings and expand the Corridor Design Stages and Linear Template Design Stages folders. If the design stages are highlighted in "Red", as shown below, they must be updated.
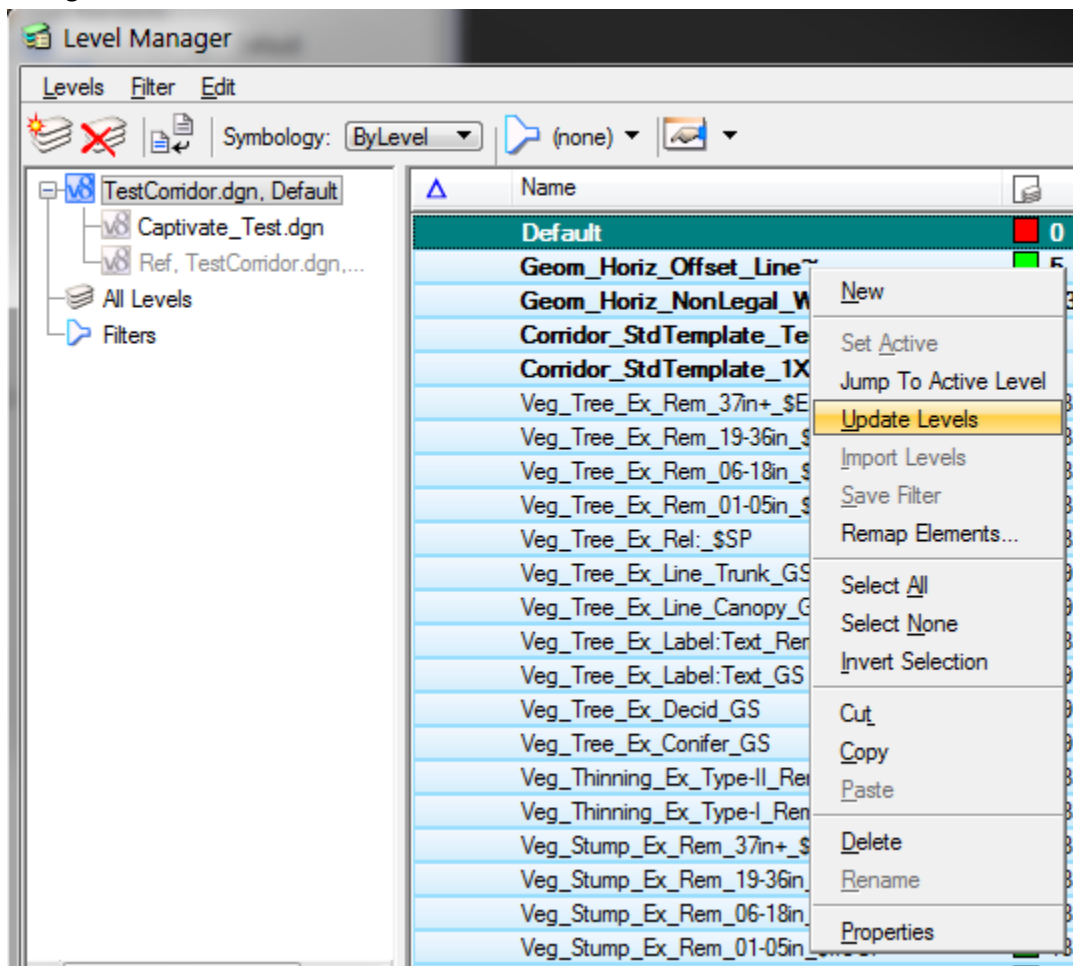

7. To Update Corridor or Linear Template Design Stages, right click on the heading and select update from Library.

NOTE: Updating the Linear Template Design Stages in a Civil Cell DGNLib file will cause the civil cells to no longer be valid for placement. Any cell which is intended for project use would need to be dropped and recreated before it will be available for placement on a project. This does not impact cells which have already been placed on a project.

8. Open the Level Manager dialog; select all the levels and Update Levels by right clicking in the dialog.

Note: The rows under the Modified column (blue triangle) should be empty as shown above.

9. One by one select any Civil Feature in the DGN file not created by a corridor, civil cell or linear template in the Default view (2D View) of the DGN file and reassign the lost feature definition.

NOTE: Use the level name of the feature as a clue to identify the previously assigned feature definition. The feature name and level symbology were not altered in the update; the feature definition will read "No Feature Definition" until one is reassigned. All features used by a corridor, civil cell, terrain or linear template need a feature definition to operate correctly.

10. Reprocess any corridors and linear templates in the DGN file or recreate any civil cells needed for project placement in a DGNLib file.

Note: The features used in the file have been recopied to the DGN file under the "Linear\Proposed" folder in the Project Explorer dialog.

11. All model DGN and Civil Cell DGNLib files used on the project must be updated prior to commencing with project work.

Technical Support

Please email any questions, issues or problems associated with this document to:

 MDOT-PowerGEOPAKSupport@michigan.gov

This link is also accessible through Microstation or Power GEOPAK while in the MDOT_02 Workspace through the "MDOT Tools\Help\MDOT Support Contacts" menu.