



Introducing the PRD Border Model

January 23, 2020

Introduction

MDOT SHA has introduced a new border model that will appear in all new projects automatically when required but must be manually added to any existing project. The border is intended for use with Erosion & Sediment Control Sheets and for Stormwater Management Sheets. These print sheets previously used the Drainage border model which must now be updated to use the PRD border model.

The modifications needed on existing projects are two-fold. First, the Project Border must be updated to add the new model to it. Second, any E&S or SWM print sheet files must be updated to exchange the existing attached Drainage model for the new PRD model.

To assist users in accomplishing these steps, MDOT SHA has created a special VBA project and modified certain barmenu menus. The new menu items were added in order to make it easy for users to activate these macros manually if necessary. Other modifications to the workspace include methods that should activate these macros automatically. In the event these fail to give an acceptable result, the new menu items allow users to manually activate process, if needed.

Workflow to Update Existing Projects

Launch ProjectWise, login and browse to the location where the existing project border is stored. Open that file for edit. The VBA macro should automatically load and run. When the macro is finished processing, the new PRD model will have been added to the project border file and should be the active model and it should be visible in any open view. (Figure 1 - next page.)

If you have not started using sheet models on your project, you may be startled by the PRD model's appearance. Additionally, depending upon the age of your project, there is a possibility that the new PRD model does not align properly with all other models. This is because MDOT SHA's original seed files used shifted global origins. Because Bentley now has a number of tools that create sheets which require an unshifted global origin you may need to take a few extra steps to align the PRD model to its Title Block reference file. See topic Fixing a Mis-Aligned Border, later in this document.

Another difference that should also be readily apparent is that, by default, sheet models use a white background and display a sheet layout. This sheet layout is the rectangle with a shadow that is aligned with the border. This is intended to be used to automatically define the plot area (no fence or shape element, level name required) and can be linked to the project border reference file so that moving one or the other moves both.

If you do not like the white background, the best way to change that is in the preferences dialog box, under View Options. When overridden here, it applies to any sheet model you open without it changing how it looks to other users.

If you have any problems after this step, SHA personnel should submit a service ticket while external users should submit an email to ids@mdot.maryland.gov. You should also be able to use Undo to reverse the actions of the VBA macro, if so desired. It may take more than one Undo to revert the file completely.

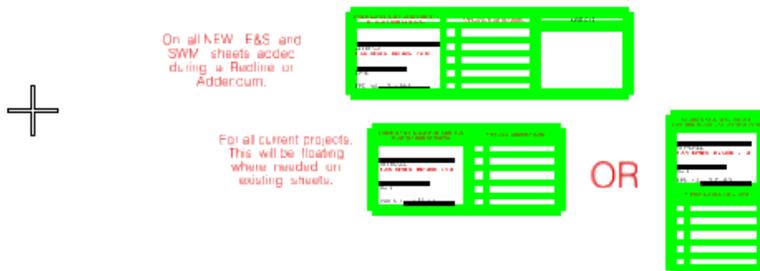
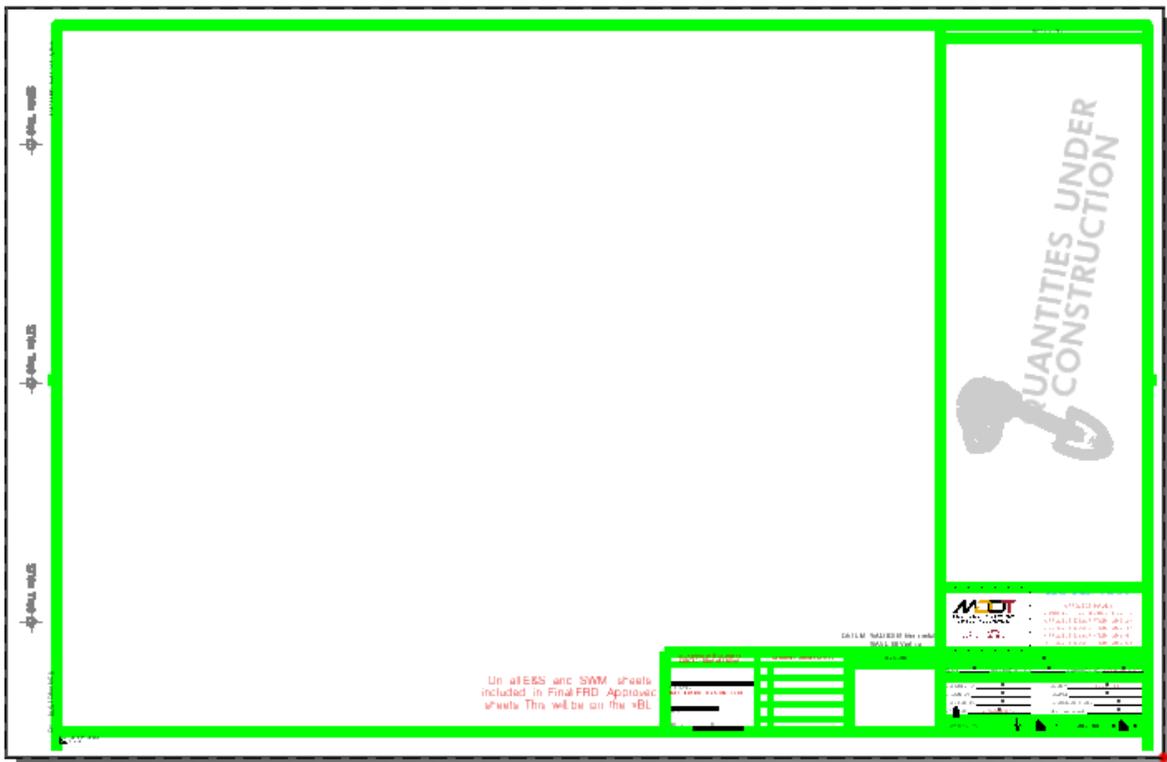


Figure 1

Assuming this step performed as intended, you will need to check to see if any sheet information requires updating. Otherwise, it's time to move on to the next step(s) – updating the print sheet files that currently use the Drainage border and need to use the new PRD border.

However, if your PRD model does not appear as it does in Figure 1, you need to fix the alignment of the PRD model and its Title Block model reference file. Go to the topic Fixing a Mis-Aligned Border for the steps necessary to correct this issue before moving on to the next topic.

Updating Print Sheet Models to Use the PRD Border Model

The number of print sheet files that will need modification will vary by project. To complete this part of the project update, open any and all E&S Detail Sheets, E&S Plan Sheets, SWM Plan Sheets and SWM Detail Sheets for edit. As each sheet is opened, be sure to check in the previous sheet to ProjectWise. Allow the workspace to reload if prompted.

As each print sheet file is opened, the border should automatically update to the new PRD sheet border model. Some of the notes seen in the screen captures do not plot, as seen in the bottom image, plot preview. While the File Naming Wizard has not been updated to automatically use the PRD model for its project border, the same macros that update any existing print sheet files will update any new files as they open. It may be necessary to move some existing graphics to accommodate the new signature blocks.

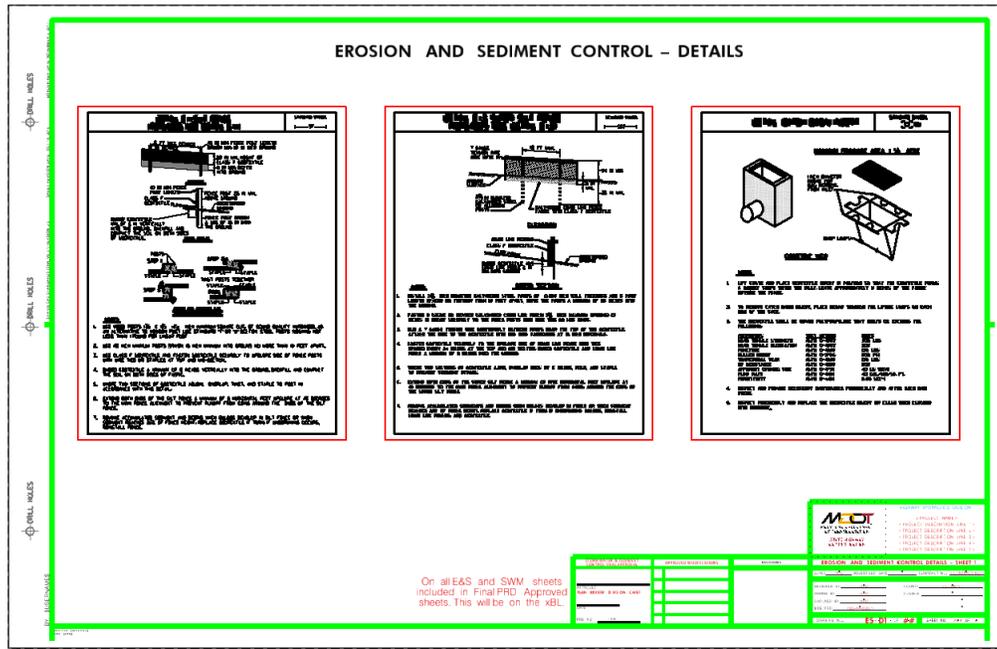


Figure 3

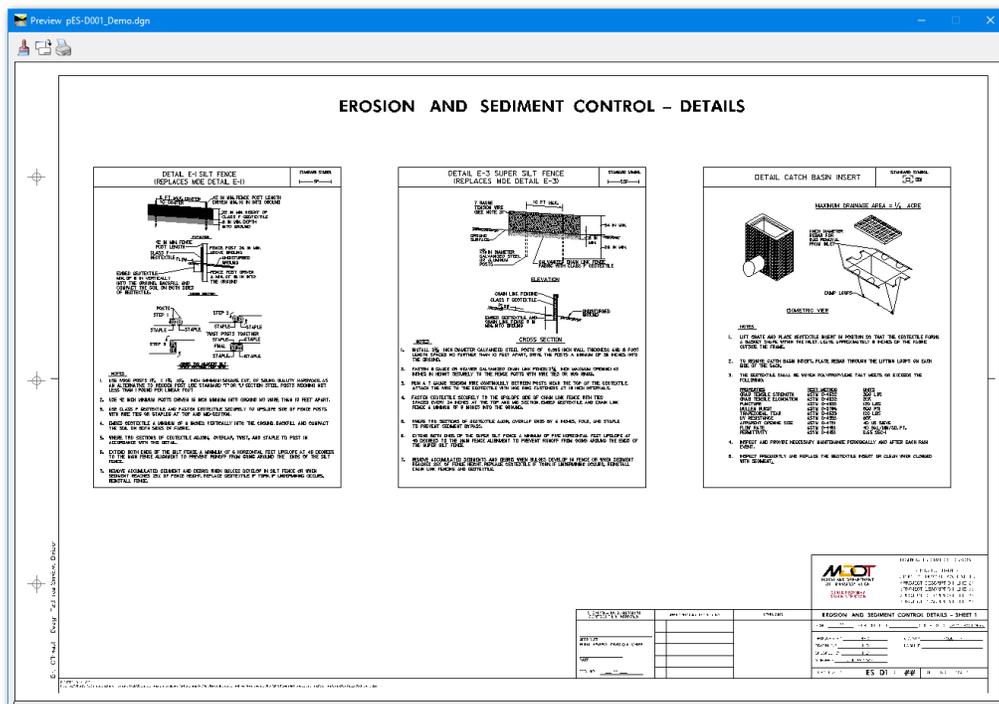


Figure 3

Fixing a Mis-Aligned Border

If your PRD model looks like Figure 4, it will be necessary to make a few additional modifications.

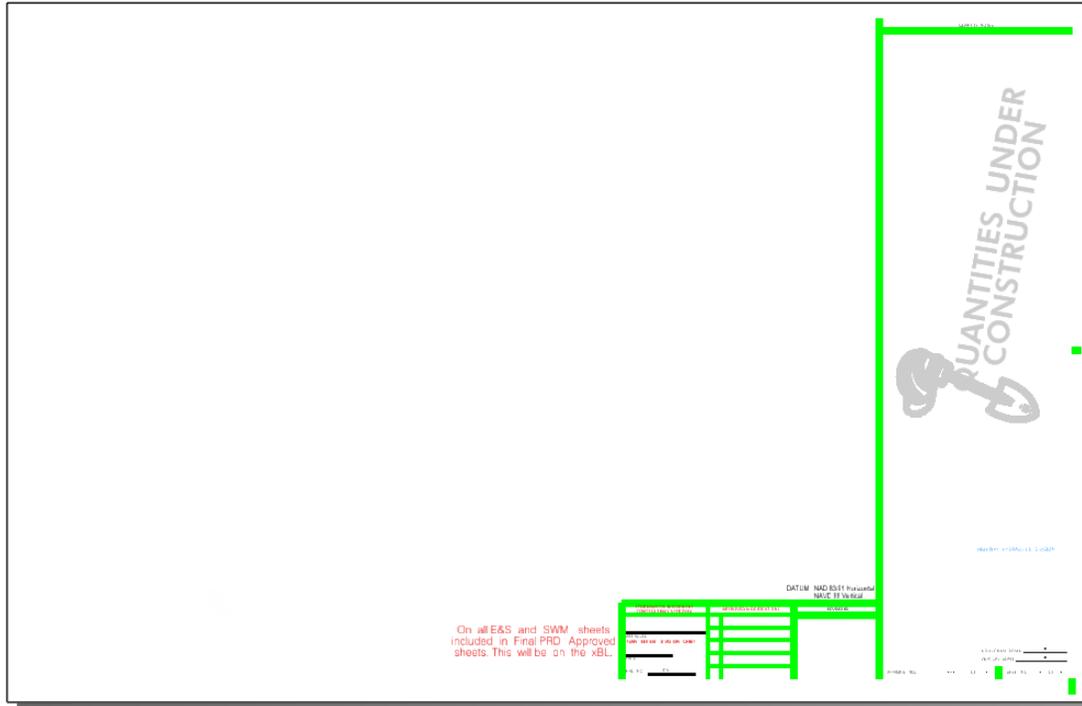


Figure 4

1. Open the Models dialog box (Primary Tools, 1st button from left) - Figure 6.

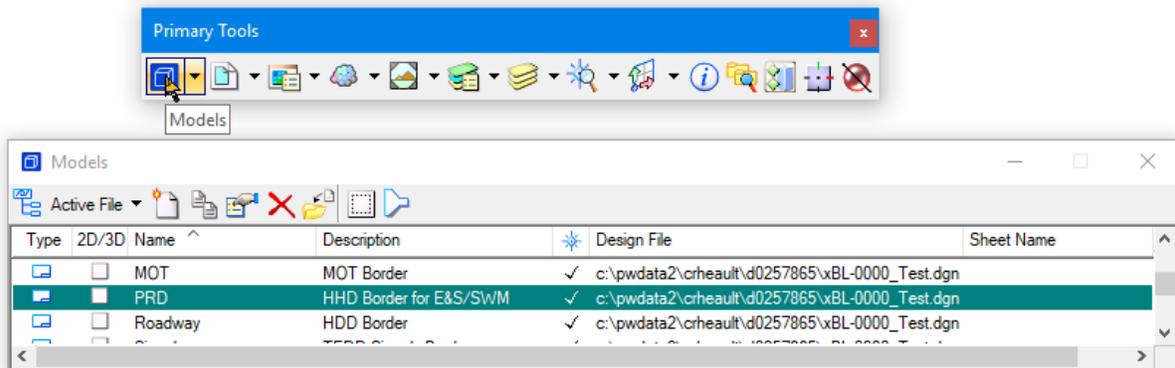


Figure 6

2. With the PRD model active, select the Properties icon from its built-in toolbox. (Figure 5)
3. When the Model Properties dialog box (Figure 7) opens, select the Border Attachment menu and change it from (none) to the Title Block model. (Figure 7 shows the reference file that was attached

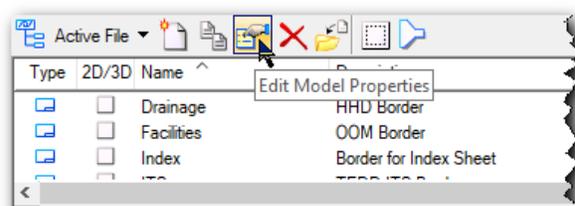


Figure 5

when preparing this document. It will be different for every project border, but the model name should always be Title Block.) It should also be the only choice, in this instance.

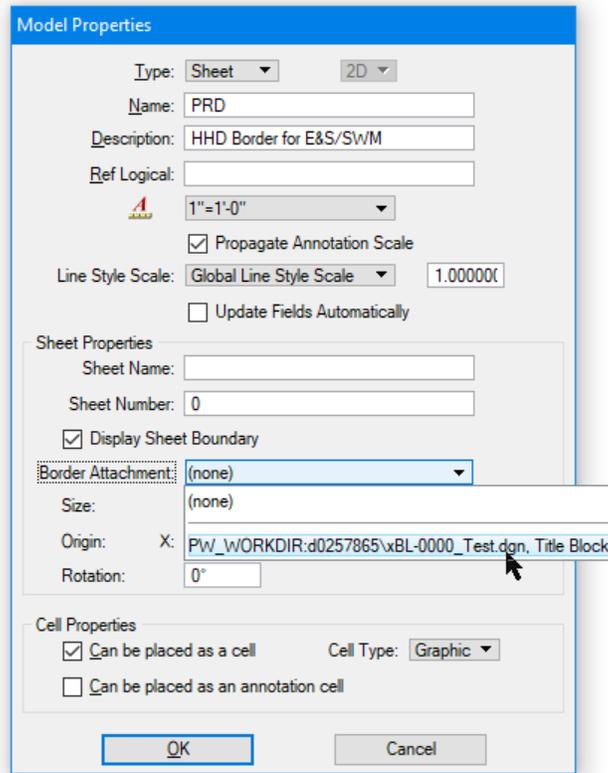


Figure 7

4. Press the OK button to accept the change. At this point, the sheet layout graphic (border shape with shadow) will disappear. The next steps will bring it back.
5. Open the Reference File dialog box. Locate the Orientation column header. It may be blank or it may display Coincident or Coincident – World. If the column is missing, right click on any column headers and select Orientation on the pops up menu to turn its display on.
6. Click below the Orientation header, on the same row as the border reference file (Model: Title Block). On the menu as seen in Figure 8, select Coincident – World. Title Block model reference file will reappear with the sheet border layout.

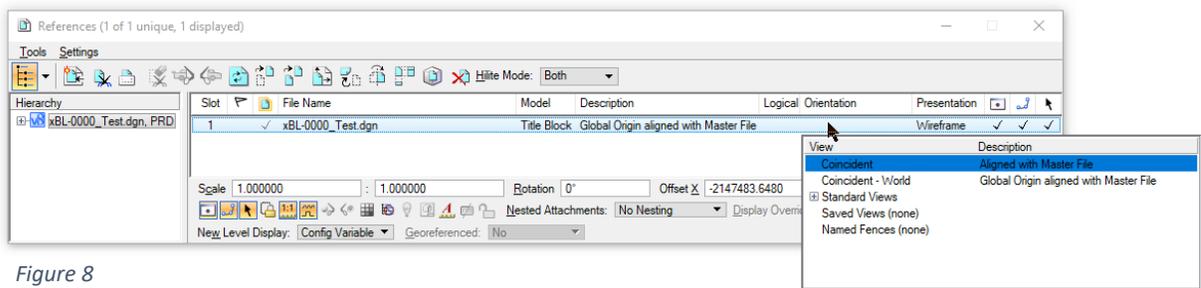


Figure 8

Note: In some instances, the Orientation column may not be blank or may even be already set to Coincident – World. However, if the Title Block border and sheet border layout are still not visible, repeat Step 6, changing it to Coincident and then back to Coincident – World. This should result in the file displaying as seen in Figure 1.