

Modifying Plan Sheets Lab

Open the file **plan_modifying_lab.dgn** under your User folder.

Add a 50 scale border to the drawing to fit around the geometry. Under the **Drawing Workflow** select the **View Ribbon** tab, then select the Named Boundary Tool.

Set the Option to From Drawing Boundary 

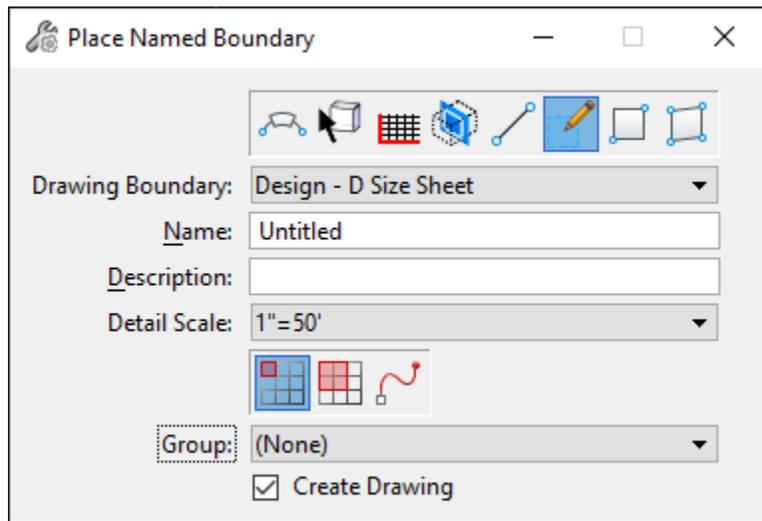
Change the Drawing Boundary to **Design – D Size Sheet**

Change the Detail Scale to **1"=50'**

Select Place a Single Named Boundary 

You Can leave Group set to **None**

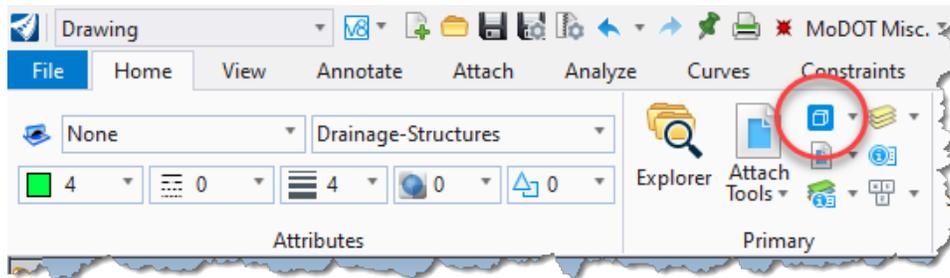
Check the box for Create Drawing Create Drawing



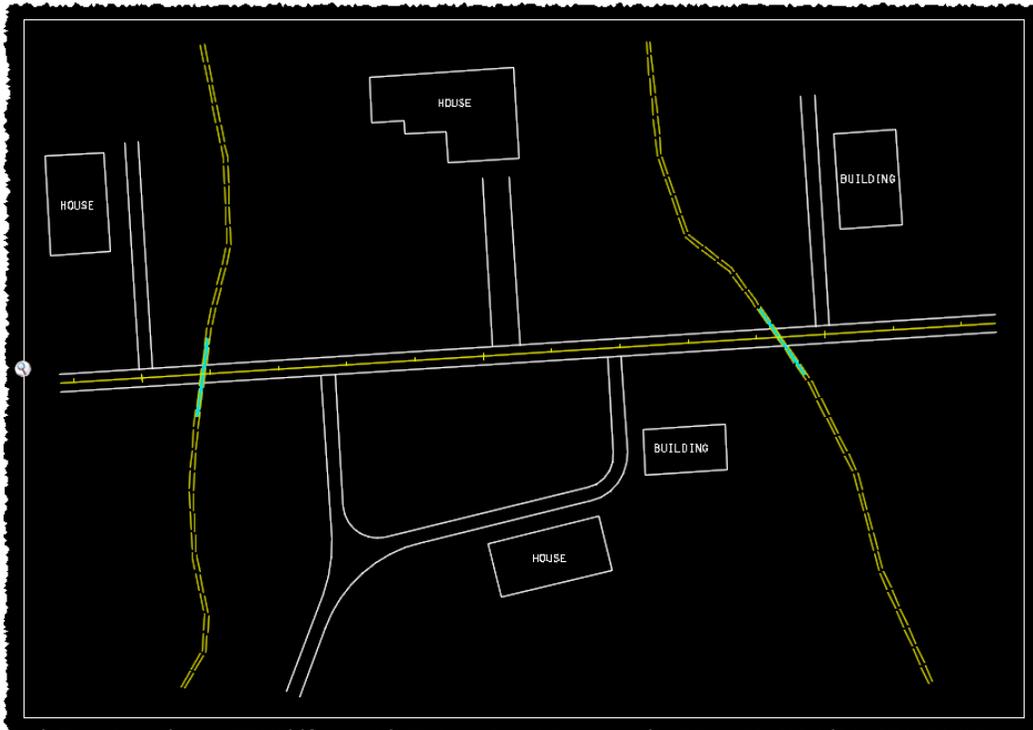
You will see the outline of the border. Move the border to the desired location and **left click** to accept it.

Once you place it, it will open a Create Drawing Dialog box. You can just leave it set to the defaults and select **OK**.

After the Sheet Model is created we need to switch back to the Default Model to continue modifying our drawing. To switch back select the Home Ribbon and select the Models tool.



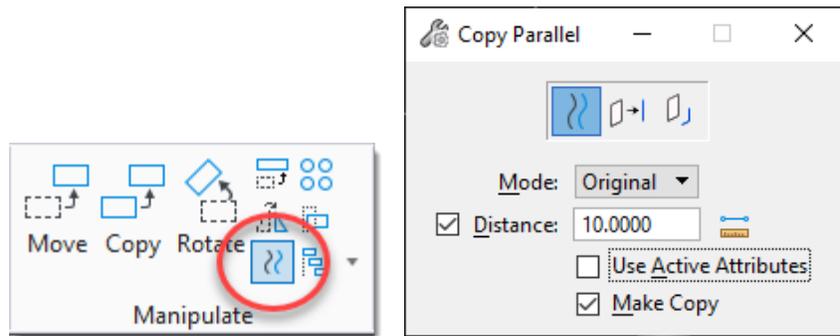
Once the Models Dialog box is open just double left-click on Default to back to the Master Model. Your drawing should now look similar to the image below.



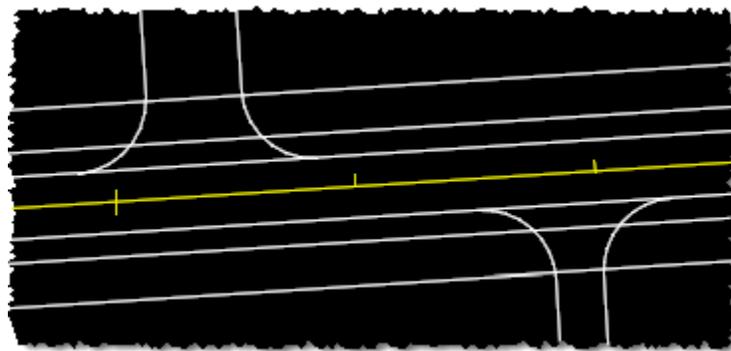
Change the **Annotation Scale** to **1"=50'**. This will insure the cells, text, dimensions, etc. that are placed from the MoDOT Design CADD Standards are the correct size and it will display custom linestyles correctly.



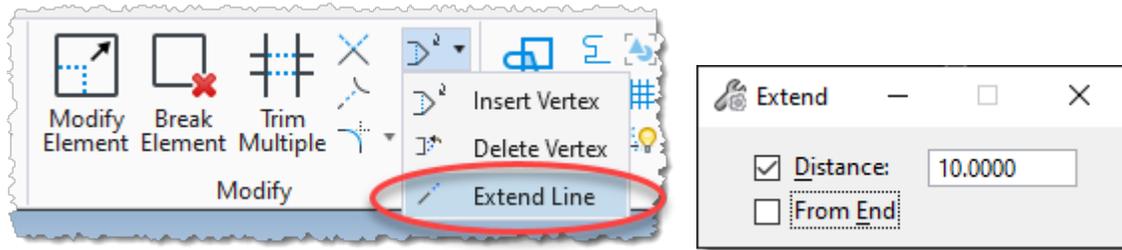
Now we need to add 10' shoulders and 40' R/W lines to the drawing. Using the **Move Parallel** tool, offset the edge of pavement on both sides of the road 10' for the shoulders and 28' for the R/W lines (edge of pavement lines are 12' off of the centerline). Make sure **Make Copy** is checked on because we want to keep the edge of pavement lines.



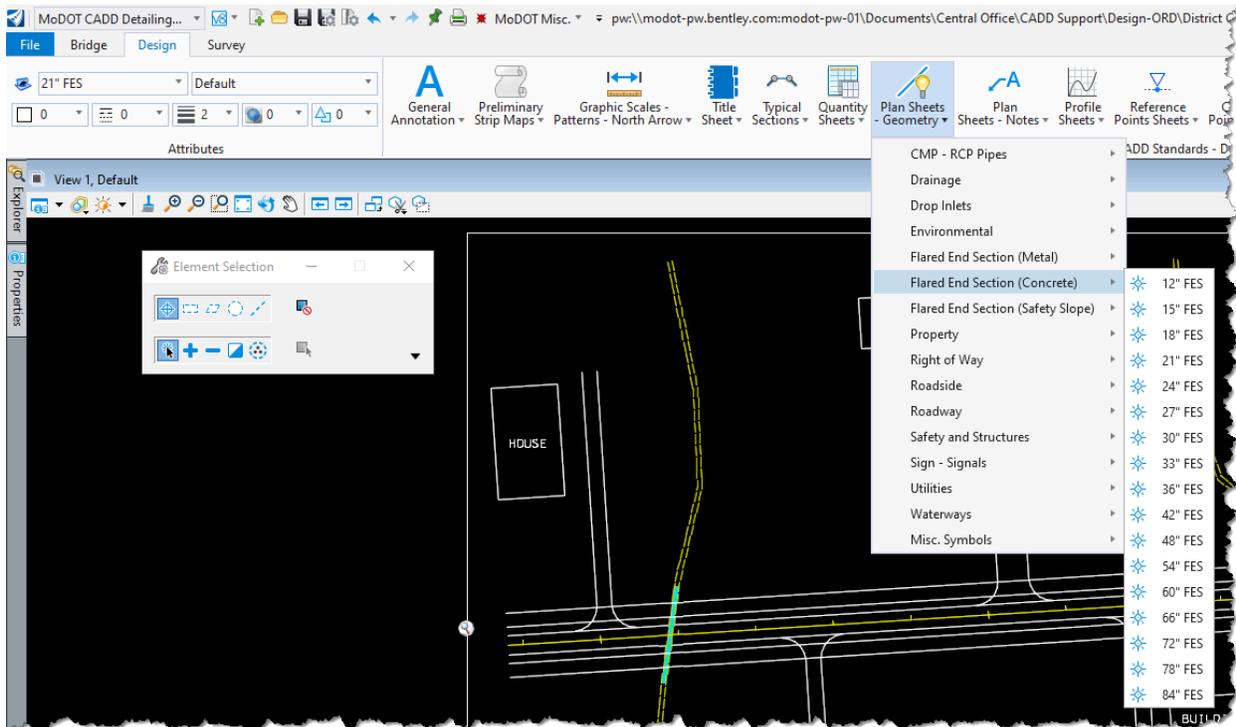
Now add 30' radius to both sides of each entrance that tie to the edge of roadway. Make sure you have the **Truncate** option set to **First** so all you have to do is click the entrance line and then the edge of pavement line so only the entrance line will trim off.



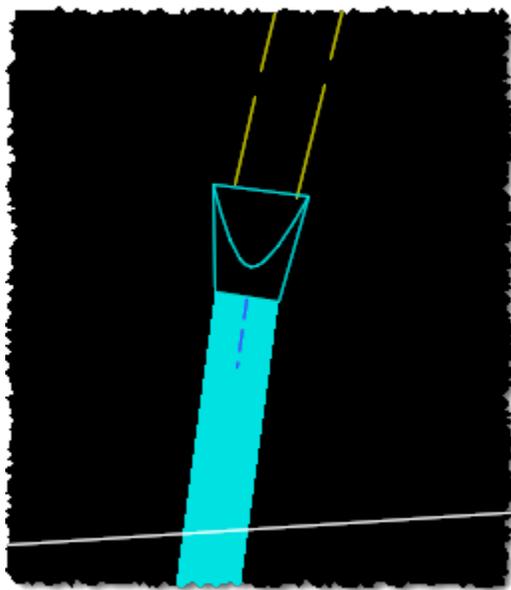
Using the **Extend** tool, extend both ends, of both pipes 10'.



Go to the **MoDOT CADD Detailing Standards** workflow, select the **Design** Ribbon and navigate through to the **Plan Sheets – Geometry > Flared End Section (Concrete)** group. Add the flared end sections to the ends of the pipes. The left pipe is a 72" pipe and the right pipe is a 60" pipe.



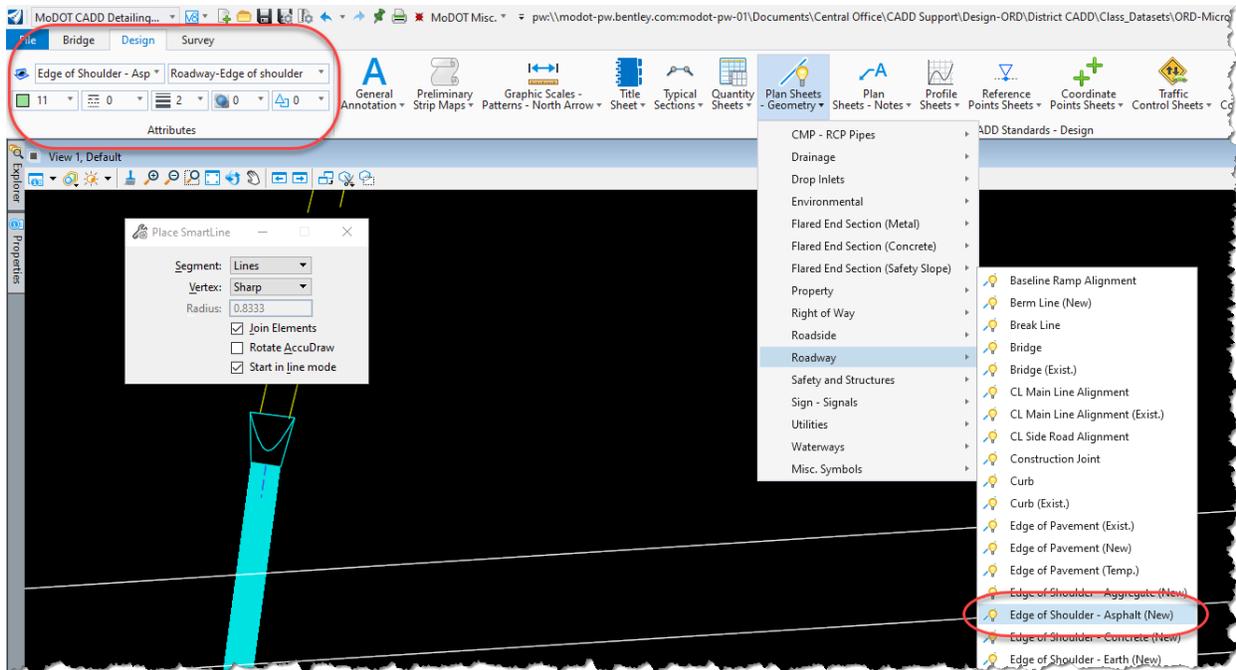
Now we need to trim off the ditches that are extended through the pipe area. In order to do this, use the **Trim Multiple** tool under the Modify toolbar and set the Mode to **Trim**. To trim the ditches, first accept the end of the flared end section and then create a line going across the ditch that needs to be trimmed off. Do this to both ditches on each end of the pipes. It should look like this once the trimming action has been done.



We now have to change the linework to be with MoDOT Standards. To accomplish this, we first need to load up the correct attributes from the MoDOT CADD Standards to modify the lines in the drawing (I will do the edge of shoulder for this demonstration and you will do the rest!!)

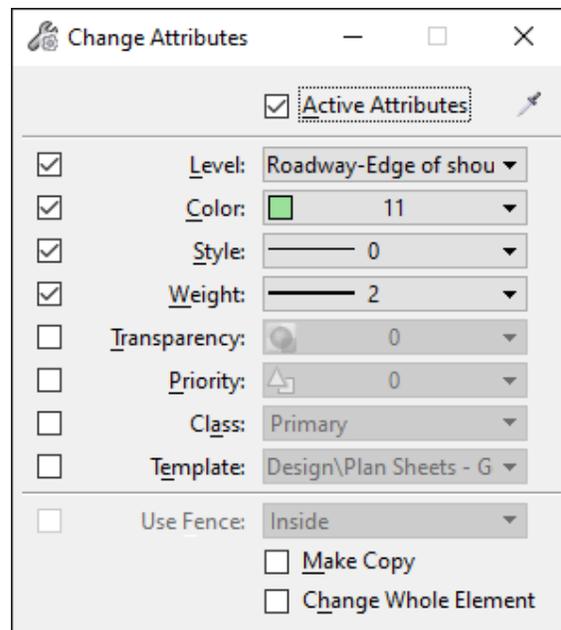
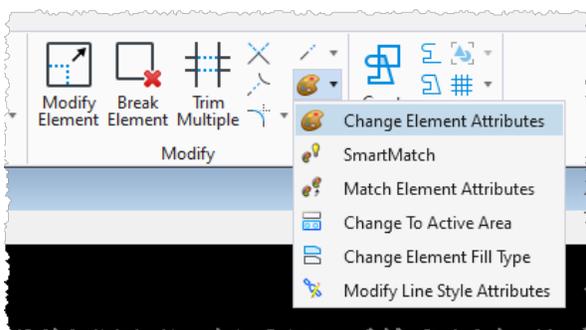
Select the **MoDOT CADD Detailing Standards** workflow. Select the Design Ribbon and navigate through to the Edge of Shoulder components (**Plan Sheets – Geometry > Roadway**).

Click on the **Edge of Shoulder – Asphalt (New)** component. After clicking that shoulder component, the attributes for shoulder will load up in your Attributes dialog box.



Now all we need to do is to change the elements using the **Change Attributes** tool. After clicking on this tool, it will bring up another dialog box. Make sure the **Level, Color, Style, and Weight** is checked on so it changes all the attributes properties.

Since we loaded up the attributes for the shoulder in the step before, all we need is to check on **Use Active Attributes** in the dialog box. Now just left click on the shoulder lines and they will change to the correct attributes.

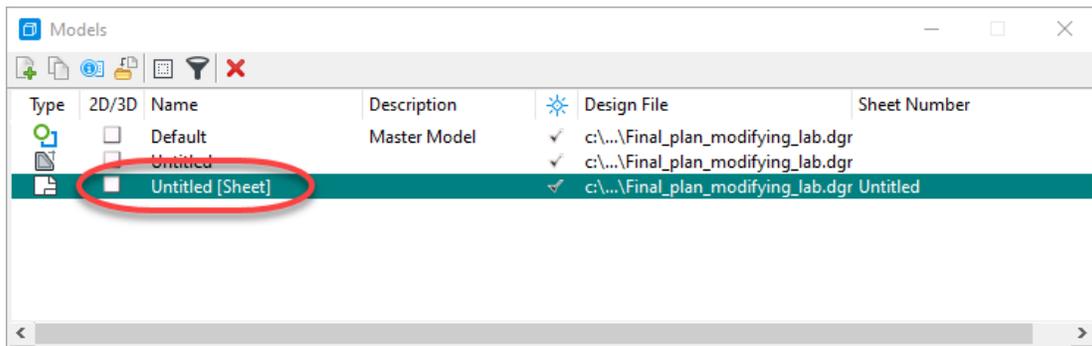


Go ahead and repeat steps 9 and 10 and change the rest of the following elements to be with MoDOT Standards. They will all be under the following tasks location.

MoDOT CADD Detailing Standards Workflow > Design Ribbon > Plan Sheets - Geometry

| <i>MicroStation Element</i> | <i>Group</i> | <i>Component</i> |
|-----------------------------|--------------|-----------------------------|
| Edge of Pavement lines | Roadway | Edge of Pavement (New) |
| R/W lines | Right of Way | R/W Controlled Access (New) |
| Radius and Entrance lines | Roadway | Entrance |
| Houses | Property | House |
| Buildings | Property | Building |

Last we need to place the proper text into the title block area. To do this you will need to switch back to the Sheet Model. To switch back select the Home Ribbon and select the Models tool.



Then go back to the MoDOT CADD Detailing Standards, select the Design Ribbon and under the **General Annotation** group, select the proper text for the title block information. Then using the **Place Text** tool, place the text for the title block information as shown on the next page.

| | |
|--|-----------------|
| <p style="text-align: center;">"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."</p> | |
| <p style="text-align: center;">DATE PREPARED \$DATE\$</p> | |
| ROUTE 24 | STATE MO |
| DISTRICT CD | SHEET NO. 25 |
| <p style="text-align: center;">COUNTY MILLER</p> | |
| <p style="text-align: center;">JOB NO. J5P0222</p> | |
| <p style="text-align: center;">CONTRACT ID. .</p> | |
| <p style="text-align: center;">PROJECT NO. .</p> | |
| <p style="text-align: center;">BRIDGE NO. .</p> | |
| <p style="text-align: center;">.</p> | |

ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MoDOT Misc. pw:\mod

General Annotation Preliminary Strip Maps Graphic Scales Patterns - North Arre

- MoDOT Note - Extra Small
- MoDOT Note - Small
- MoDOT Note - Medium
- MoDOT Note - Large
- MoDOT Note - Extra Large
- MoDOT Text - Extra Small
- MoDOT Text - Small
- MoDOT Text - Medium
- MoDOT Text - Large
- MoDOT Text - Extra Large
- General Note
- Addendum Date
- Addendum Description
- District, Route, Sheet No**
- County, Job No, Bridge No, Contract ID
- Standard Sheet Label
- Dimension - Small - Decimal
- Dimension - Medium - Decimal
- Dimension - Large - Decimal
- Dimension - Small - Fraction
- Dimension - Medium - Fraction
- Dimension - Large - Fraction
- Excel to OpenRoads Designer