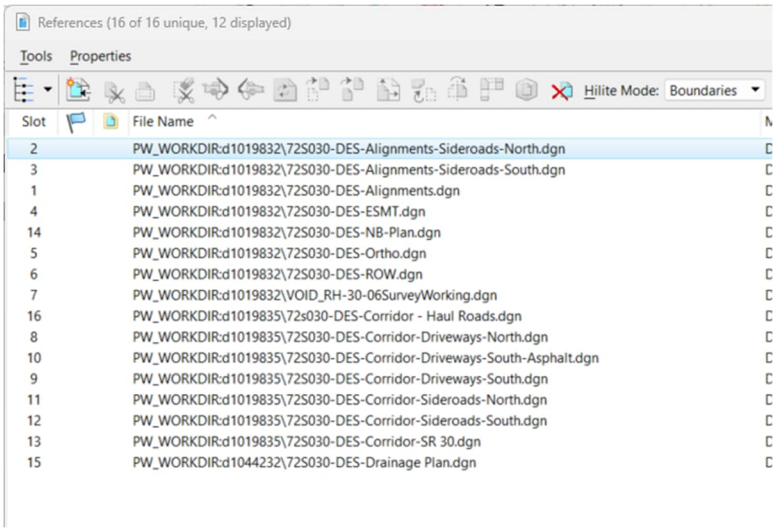
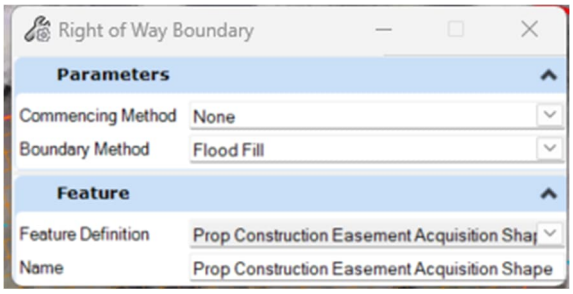
Quick Guide to Creating ROW Exhibits in ORD

Step 1: Acquisition Shapes

Once you have Proposed ROW and Easement lines developed, you can create your acquisition shapes. Create a new file (PRJ NAME-DES-ROW-Acquisition Shapes.dgn) and reference in your ROW and easement linework as well as Alignments and Corridors. Your references may include (but not be limited to) the following:



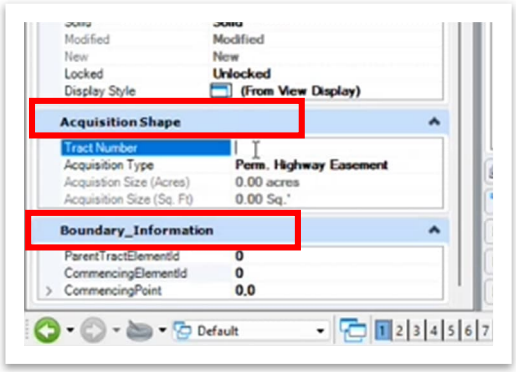
Use the **Parcel Builder** tool (**OpenRoads Modeling >> Geometry >> Common Tools**) to create the parcels. Set the “Commencing Method” to “None” and the “Boundary Method” to “Flood Fill”, then assign the correct feature definition (**Linear >> Right of Way >> Acquisition Shapes**).



Once you have selected the feature definition, follow the prompts to first indicate the desired point of beginning (POB) on the acquisition shape and clockwise direction (look for the purple arrows, similar to when you are creating a complex shape).

Note: The POB and the clockwise direction are important parameters because this determines the order of the default calls of the acquisition deed when Geodetics is later using the Deed Writer tool to create the deed descriptions.

Once you place a shape, notice in the properties there is a section for Acquisition Shapes properties.



The **Type**, **Size (Acres)** and **Size (Sq Ft)** fields are filled in automatically, but the **Tract** number must be filled in manually. This is how ORD knows to associate a certain acquisition shape with the corresponding tract in the ROW Acquisition Table.

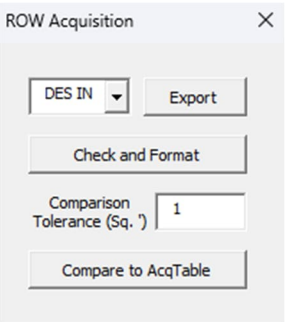
The item type "Boundary_Information" should be attached automatically when the parcel is created. Notice that this item type is also present in the properties of the parcel. Without it, Geodetics will not be able to use the Deed Writer tool.

Repeat this process for each acquisition shape. Using the Parcel Builder tool will ensure that the shapes are properly closed.

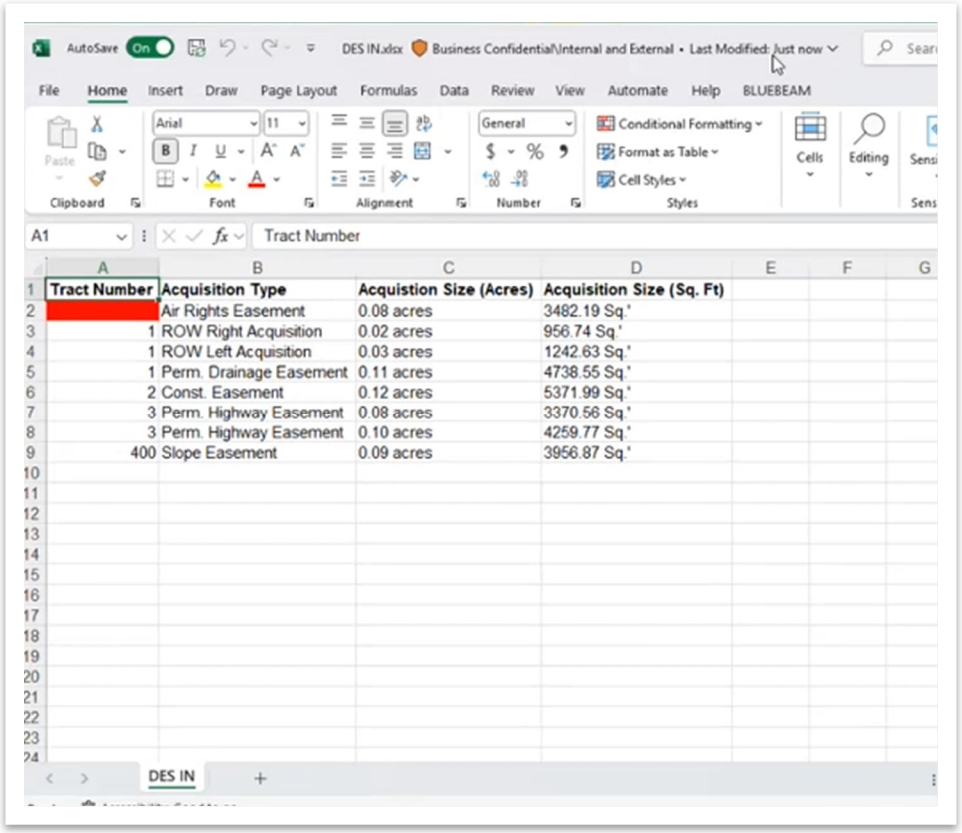
Step 2: ROW Acquisition Table

Note: *You must use the latest version of the ROW Acquisition Table (Rev. 10/30/2025 or later) in order for any tools that interact with the table to function correctly. If you have an older version of the ROW Acquisition Table, you can upgrade to the latest by copying the contents of the SUR IN and DES IN sheets to the new version of the file.*

Once all the parcels are created, use the **Acquisition Reports** tool (**OpenRoads Modeling >> TDOT >> ROW**) to export the details of the acquisition shapes to an excel file. Select "DES IN" in the dropdown and click **Export**, then navigate to where you want to save the DES IN report.



Next, within the same tool, click **Check and Format**. Navigate to the DES IN report you just created and select it. The VBA tool will examine the report's output and determine if there are any data points missing. For example, in the report below, the tract number is missing in the first row, so the tool highlighted the cell with the missing data.

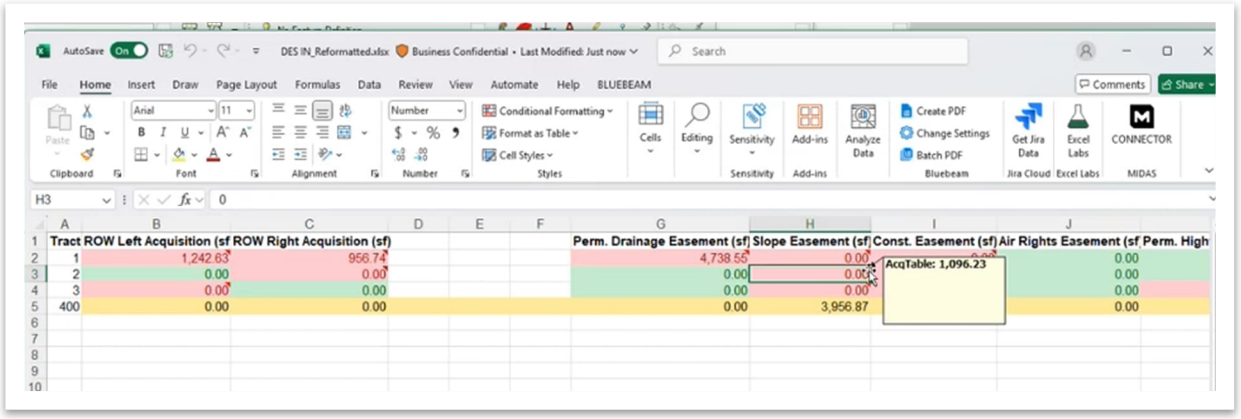


Tract Number	Acquisition Type	Acquistion Size (Acres)	Acquisition Size (Sq. Ft)
	Air Rights Easement	0.08 acres	3482.19 Sq.'
1	ROW Right Acquisition	0.02 acres	956.74 Sq.'
1	ROW Left Acquisition	0.03 acres	1242.63 Sq.'
1	Perm. Drainage Easement	0.11 acres	4738.55 Sq.'
2	Const. Easement	0.12 acres	5371.99 Sq.'
3	Perm. Highway Easement	0.08 acres	3370.56 Sq.'
3	Perm. Highway Easement	0.10 acres	4259.77 Sq.'
400	Slope Easement	0.09 acres	3956.87 Sq.'

Make any changes needed and re-run the tool if necessary. The tool also creates a tab with the data formatted to streamline copying and pasting to the ROW Acquisition Table.

The third button, **Compare**, will check the DES IN Report information against the ROW Acquisition Table. Discrepancies between the plans and the ROW Acquisition Table are a common cause of ROW revisions, so use this tool to ensure that you have captured all the information correctly before you move on to the next step. Also, use this comparison before a submittal to ensure that all updates have been recorded in the ROW Acquisition Table.

Click **Compare**, then navigate to the DES IN report and click on it, then select the ROW Acquisition Table. Any discrepancies will be highlighted in the DES IN report.



Green = DES IN data matches the ROW Acquisition Table

Yellow = DES IN data is not included in the ROW Acquisition Table

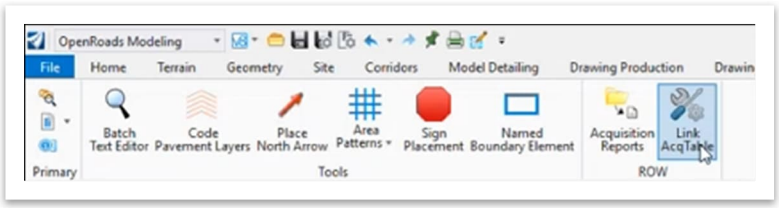
Red = DES IN data does not match the ROW Acquisition Table

Update the Table as needed.

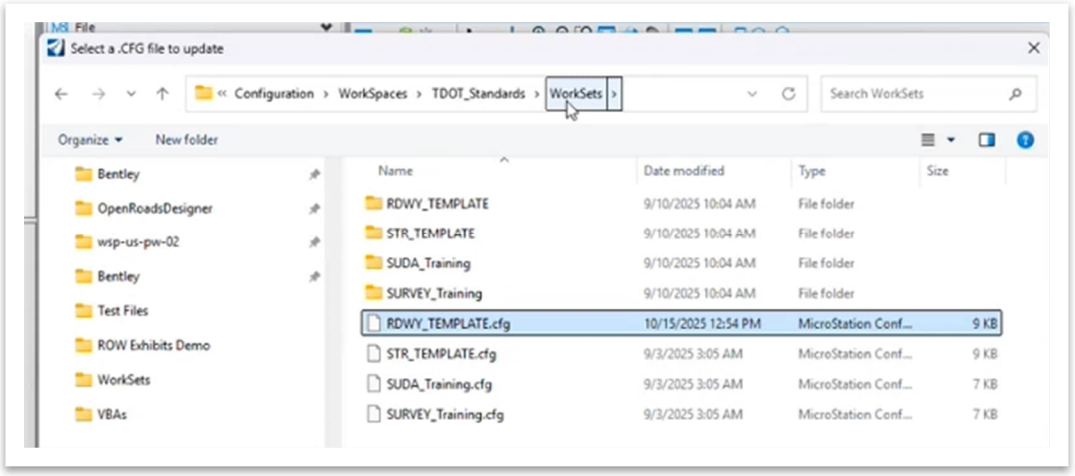
Step 3: Link ROW Acquisition Table to ORD

In order to allow the automation of the easement areas and other data, the ROW Acquisition Table must be linked to ORD. This only needs to be done once, as long as the file is not renamed or moved.

To link the ROW Acquisition Table, click on the **Link Acq Table** tool (**OpenRoads Modeling >> TDOT >> ROW**).



Navigate to the workset you are working in and select the *.cfg file associated with that workset.



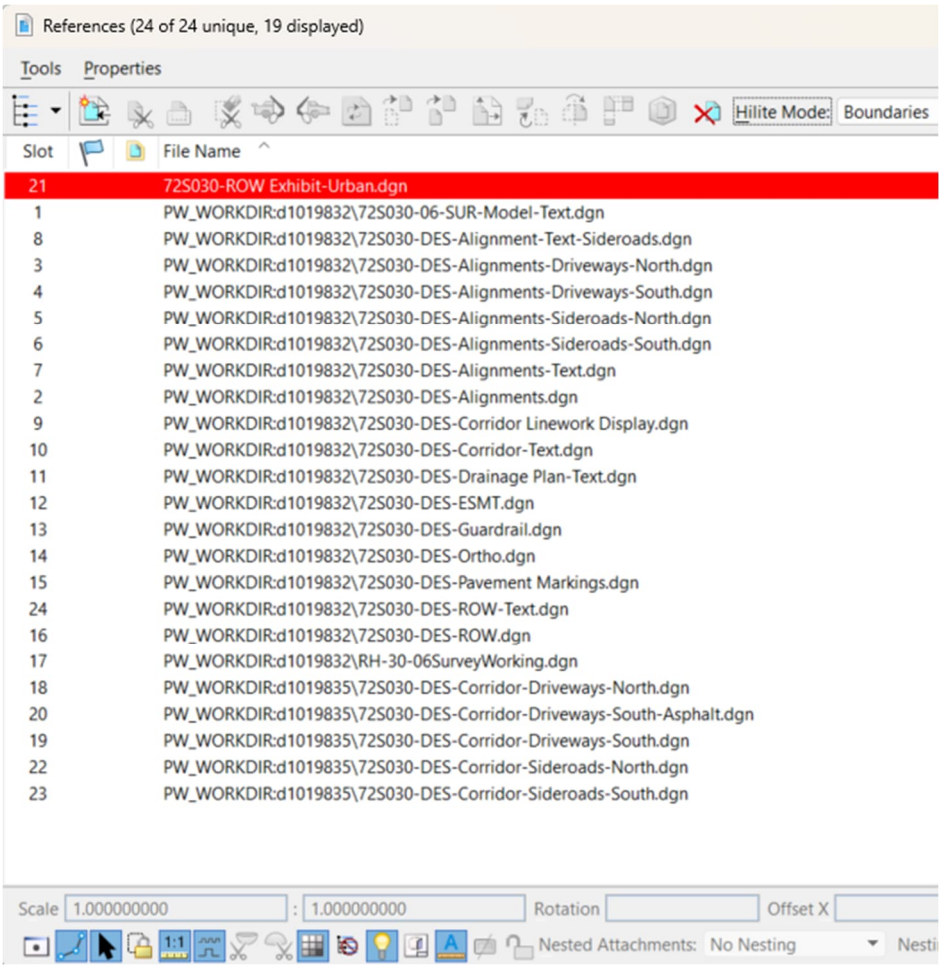
Next you will be prompted to select the ROW Acquisition Table.

Note: *If your ROW Acquisition Table is in ProjectWise, right-click on the spreadsheet and select "Refresh Local Copy" or open the file as Read-only to ensure the latest version gets downloaded to your local directory. If at a later stage the spreadsheet is updated on ProjectWise, you'll have to repeat this step to ensure the latest copy is used.*

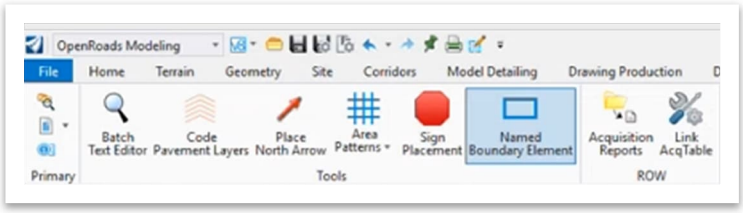
After linking the ROW Acquisition Table, you will need to restart ORD in order to access the ROW Acquisition Table data. Also, the ROW Acquisition Table must be closed in order for ORD to interact with it.

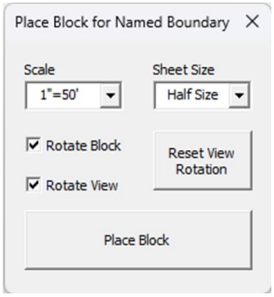
Step 4: Creating the ROW Exhibits

Now everything is in place to begin creating the ROW Exhibit sheets. Create a file to contain your ROW Exhibits (for example PRJ NAME-DES-ROW-Exhibit.dgn) and reference in everything you need to be displayed. This may vary depending on your project, but is likely to include the following:

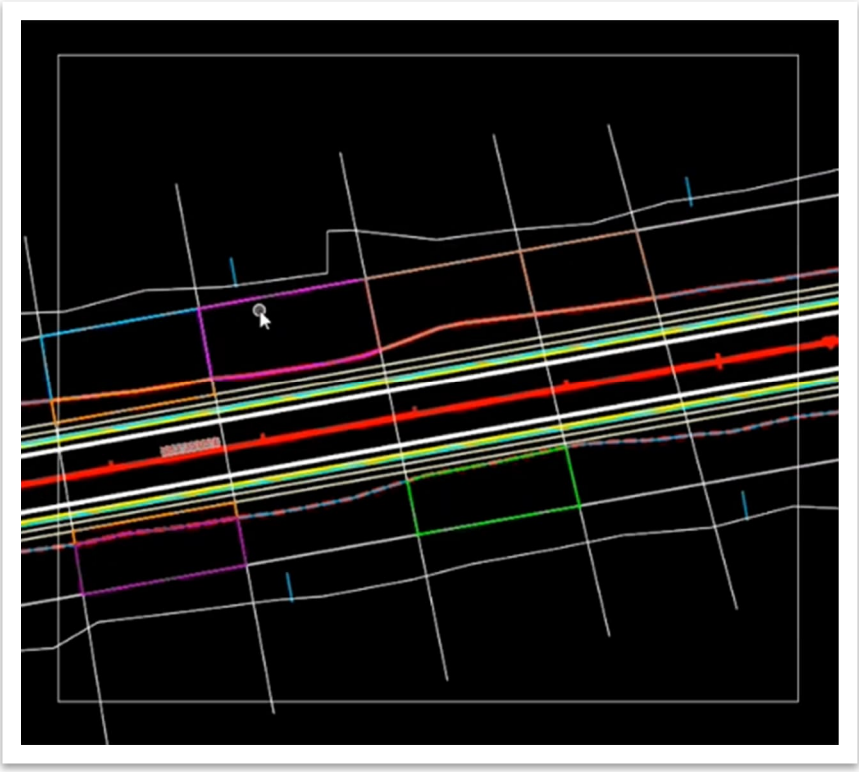


For each ROW Exhibit, first create the named boundary that will define the layout area to be displayed. Use the **Named Boundary Element** tool (**OpenRoads Modeling >> TDOT >> ROW**) to create a shape to define the named boundary.



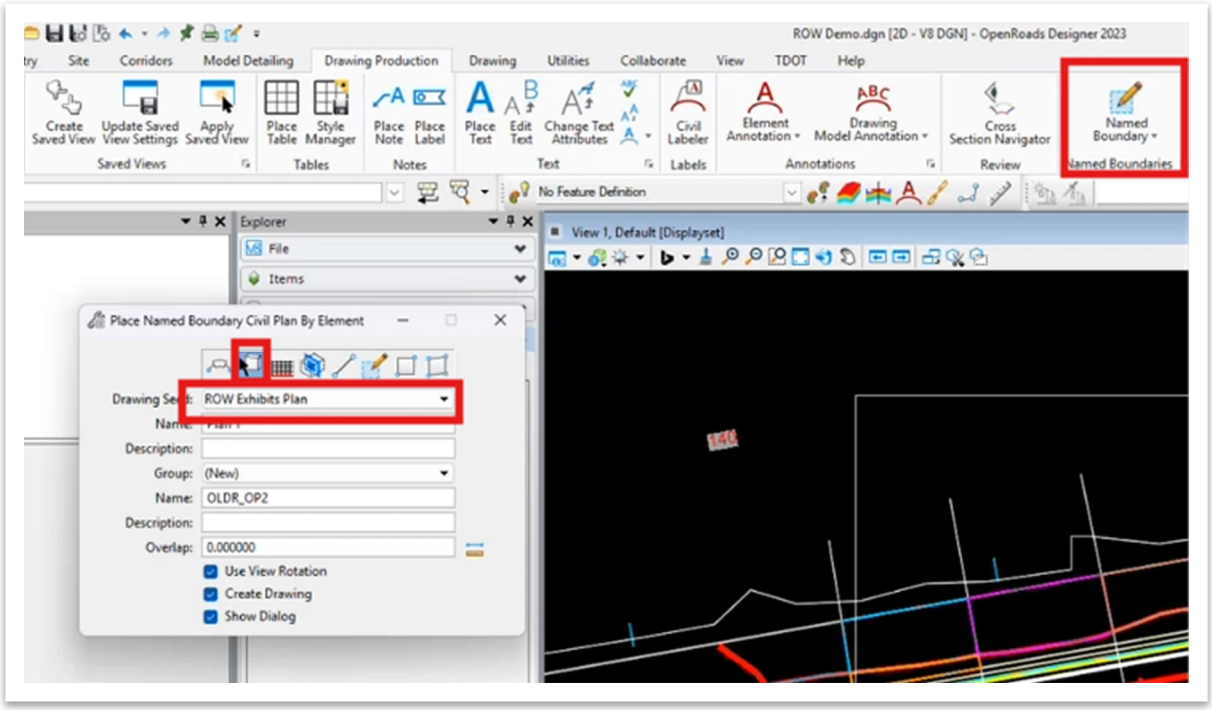


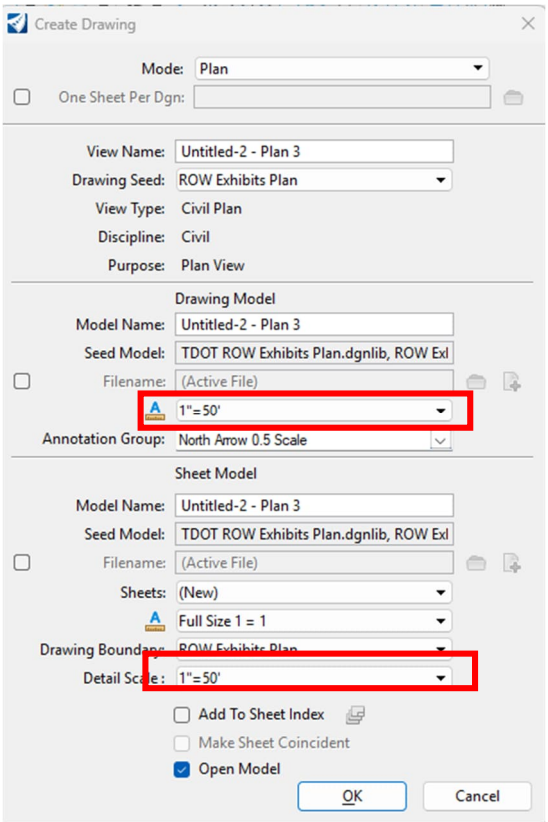
Select the desired scale and then zoom to the area you wish to display in this ROW Exhibit. After placing the shape, you can also rotate the view if desired.



Ensure your view rotation is aligned with the boundary shape and select **Use View Rotation**.

To use this element in creating a named boundary, open the **Named Boundary** tool, select the **Civil Plan By Element** option and the select the **ROW Exhibits Plan** drawing seed.

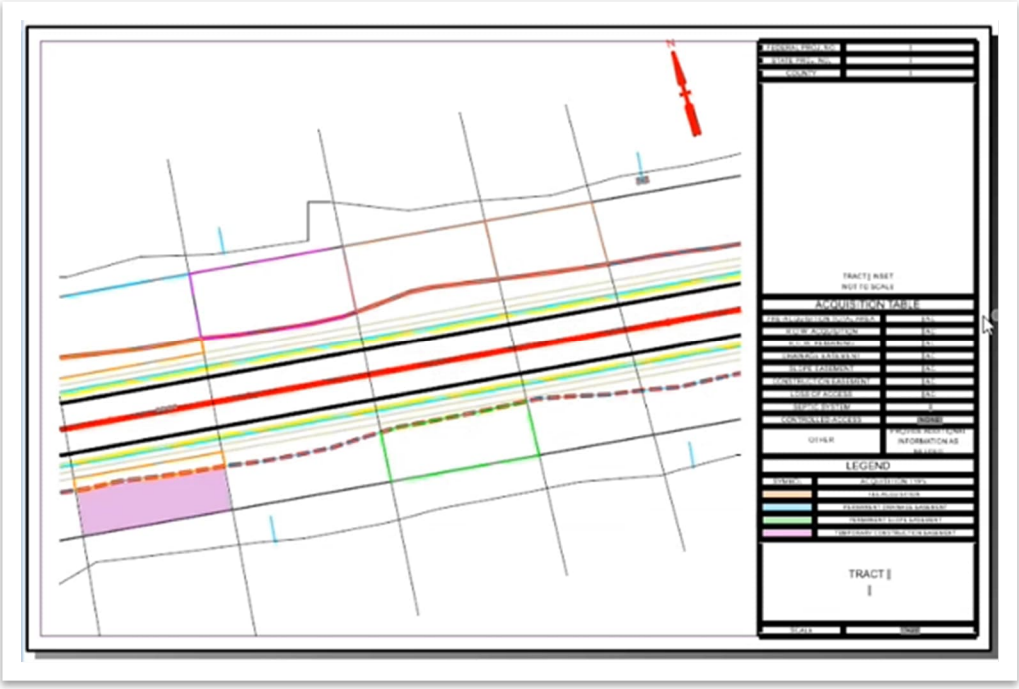




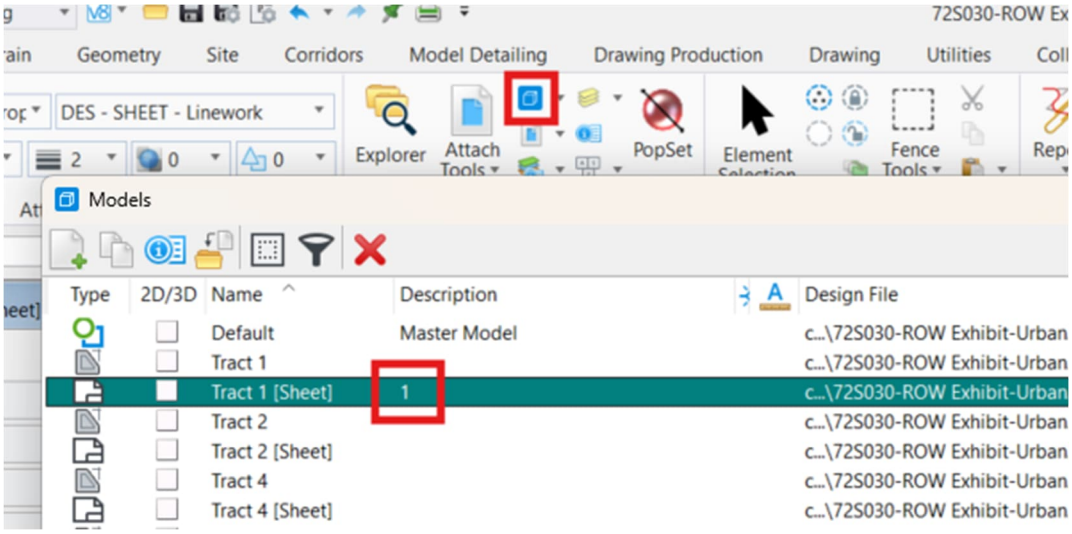
You will be prompted to select the path element – reset (**right** click) to skip. The next prompt will ask you to identify the boundary element. Click the boundary shape you created and then click in space to accept.

The **Create Drawing** menu will appear. You can edit the names as you wish but be sure to select the same drawing scale and annotation scale that you used when placing your named boundary element shape.

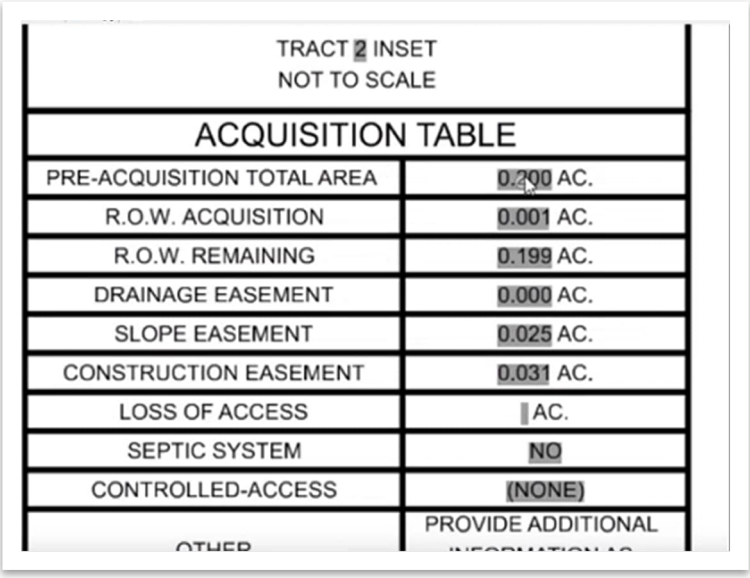
When the sheet is created, you may need to turn on the **DES - SHEET - Corner Text** level, and you may also need to switch to the **Drawing** model to move the north arrow.



To automate filling in the tract data, open the **Models** window and type the tract number into the **Description** for the sheet.



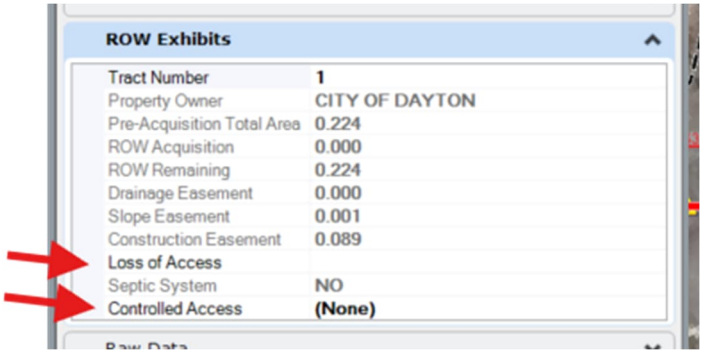
Notice that the tract information is now populated from the ROW Acquisition Table.



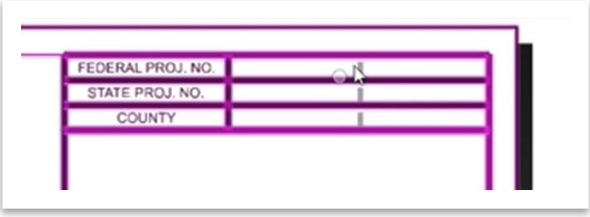
TRACT 2 INSET
NOT TO SCALE

ACQUISITION TABLE	
PRE-ACQUISITION TOTAL AREA	0.200 AC.
R.O.W. ACQUISITION	0.001 AC.
R.O.W. REMAINING	0.199 AC.
DRAINAGE EASEMENT	0.000 AC.
SLOPE EASEMENT	0.025 AC.
CONSTRUCTION EASEMENT	0.031 AC.
LOSS OF ACCESS	AC.
SEPTIC SYSTEM	NO
CONTROLLED-ACCESS	(NONE)
OTHER	PROVIDE ADDITIONAL

Note: ***Loss of Access*** *and* ***Controlled Access*** *are not in the ROW Acquisition Table and must be entered manually at this time. Use the ROW Exhibits properties to enter this information. (Open the Properties if not already docked, and then click on the sheet border to see the sheet border properties.)*



Note: *The data in the top right corner of the sheet border are sheet index properties and will be filled in when the sheet is added to the sheet index.*

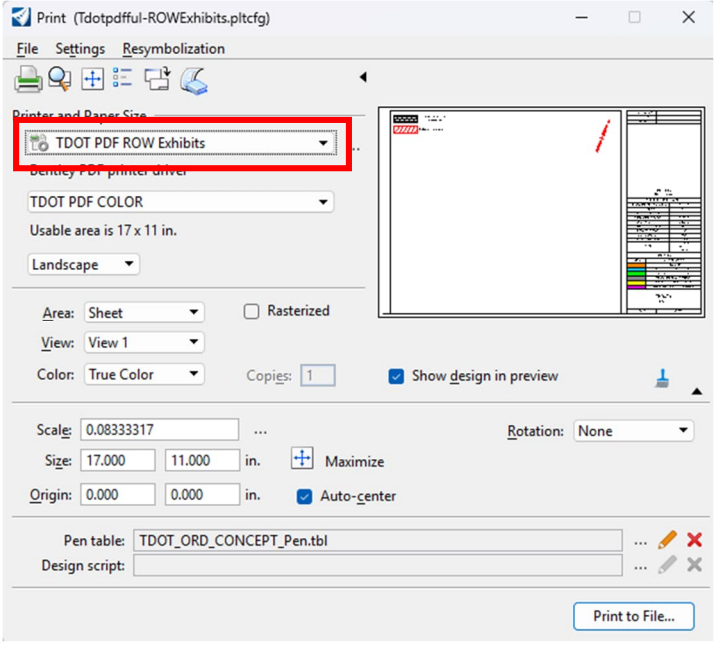


Notice that all acquisition shapes are filled with the correct color according to the legend in the sheet model. If you would also like the fill color to be displayed in the **Drawing** model, fill in the tract number in the **Description** field for the **Drawing** model as you did

for the sheet model. You may need to zoom in and out to refresh the display after making this change.

You may be able to use the annotation that you have already created for your plan set sheets, but you can also use the drawing model to re-annotate individual ROW Exhibit sheets, as needed.

Note: *When printing, select printer* ***TDOT PDF ROW Exhibits****.*



The preview does not reflect the 70% transparency that has been set for the fill color, but it will display correctly once printed to PDF.

Note: *For those with access to TDOT's ORD Users TEAMS site, a demonstration video can be accessed here. This demo was performed using an early version of the tools and workflow, so some of the details vary from this instructional guide.*