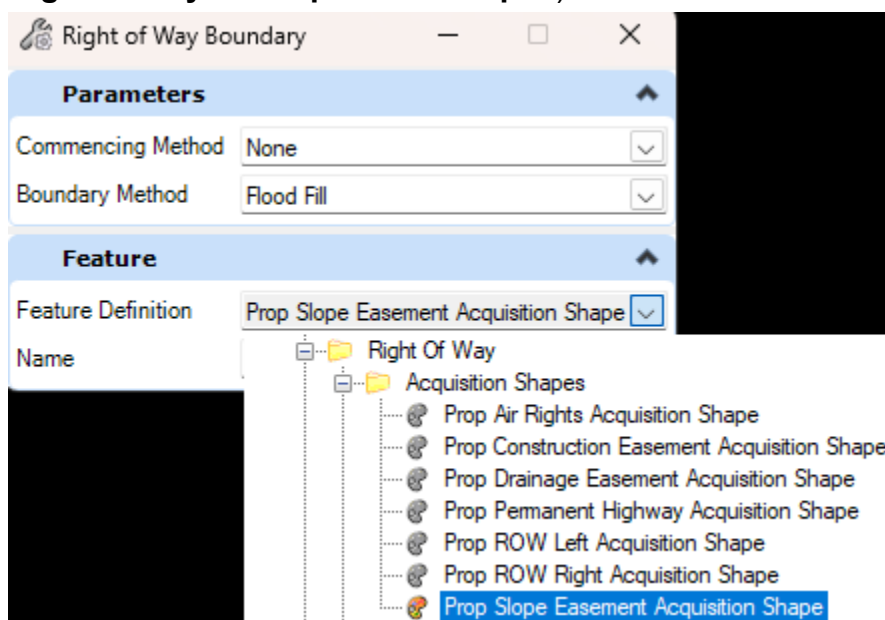


Quick Guide to Creating ROW Exhibits in ORD

Step 1: Creating Acquisition Shapes

Once the Proposed ROW and Easement lines have been developed, you can create your acquisition shapes.

1. Create a new file named **PRJ NAME-DES-ROW-Acquisition Shapes.dgn** and reference the required files which may include:
 - PRJ NAME-DES-Alignments
 - PRJ NAME-DES-Corridor-Road Name
 - PRJ NAME-DES-Corridor Linework Display
 - PRJ NAME-DES-ROW
 - PRJ NAME-DES-Easements
 - PRJ NAME-SUR-Alignment
2. Use the **Parcel Builder** tool (**OpenRoads Modeling >> Geometry >> Common Tools**) to create the parcels. Set the **Commencing Method** to **None** and select the desired **Boundary Method**. Then assign the feature definitions (**Linear >> Right of Way >> Acquisition Shapes**).

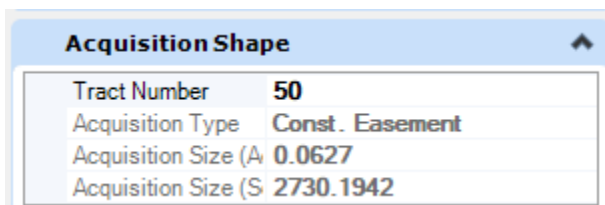


Place the shape by clicking the desired point of beginning (POB) on the parcel and setting the direction to clockwise as indicated by the arrows.

Note: *The POB and direction determine the order of the default calls in the acquisition deed when Geodetics later uses the **Deed Writer** tool to generate deed descriptions.*

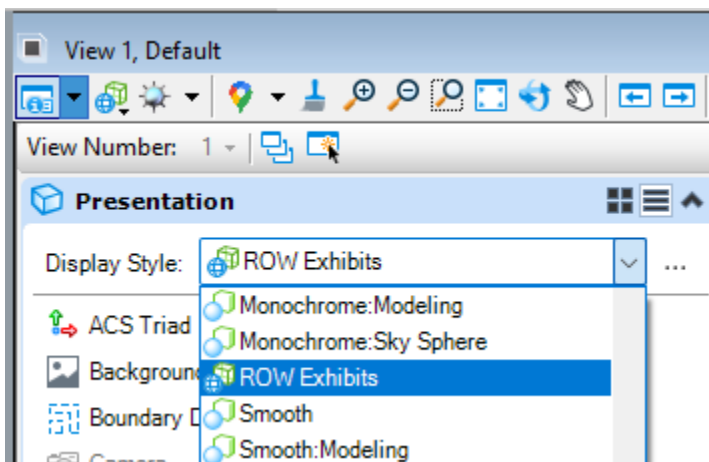
*In ORD 2023, you may encounter issues with the Parcel Builder tool not placing shapes as expected. You can instead use **Complex Geometry** lines, or the **Create Region** tool to create the shape then assign a feature definition using **Set Feature Definition**. If either of these methods are used, the **Boundary_Information** item type must be manually attached to the shape using the **Attach Item** tool. Without this item type, Geodetics will not be able to use the **Deed Writer** tool. If you use the **Create Region** method, you will also need to manually attach the **Acquisition Shape** item type.*

- Once a shape is placed, the **Acquisition Shape** item type should appear in the properties. The **Type**, **Size (Acres)** and **Size (Sq Ft)** fields are filled automatically, but the **Tract Number** must be entered manually. This is how ORD associates an acquisition shape with its corresponding tract in the ROW Acquisition Table.



Acquisition Shape	
Tract Number	50
Acquisition Type	Const. Easement
Acquisition Size (A)	0.0627
Acquisition Size (S)	2730.1942

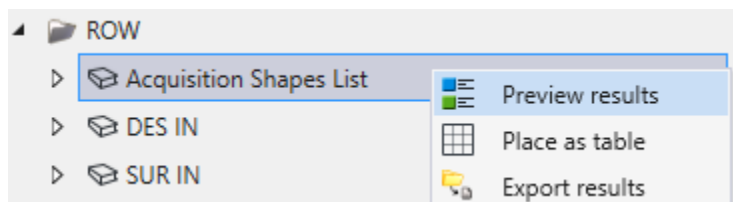
- Repeat the process for each remaining acquisition shape. To make the process quicker, turn off the level display for any levels not needed for creating the shapes, and use **Flood Fill** as the **Boundary Method** in **Parcel Builder**.
- In your design model, set the **Display Style** under **View Attributes** (Ctrl+B) to **ROW Exhibits**. This applies a fill to all closed acquisition shapes, allowing you to confirm that each shape is closed.



Step 2: Updating the ROW Acquisition Table

The latest version of the ROW Acquisition Table must be used (Rev. 07/31/2026 or later). 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.

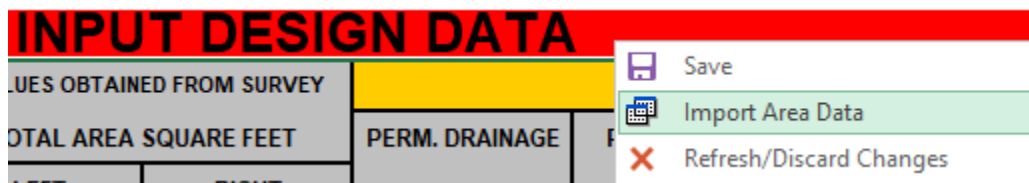
- Once all the parcels are created, navigate to the Acquisition Shapes List report (**OpenRoads Modeling >> Utilities >> Reports >> ROW**) and right-click to preview results.



Use this report to verify that all acquisition shapes have a **Tract Number** assigned and a value for the areas. Clicking on a row in the report selects the shape in the design model and allows you to easily zoom to it and edit the properties if needed.

Tract Number ▼	Acquisition Type ▼	Acquisition Size (Acres) ▼	Acquisition Size (Sq. Ft) ▼
1	Perm. Drainage Easement	0.2097	9135.5093
1	Const. Easement	0.1001	4358.4216
1	Const. Easement	0.2611	11372.5995
2	Slope Easement	0.1656	7213.9392
3	Perm. Highway Easement	0.2317	10090.9268
8	ROW Left Acquisition	0.1952	8502.1426
8	Const. Easement	0.1567	6827.4781

- After reviewing the results, right-click on the **DES IN** report and select **Export results**. Open the ROW Acquisition Table spreadsheet, navigate to the DES IN sheet, right-click the Input Design Data header, and select Import Area Data. Select the DES IN report you exported from ORD, and the data will be imported.



- A **Compare Reports (OpenRoads Modeling >> TDOT >> ROW)** tool is available for comparing an exported DES IN report with the ROW Acquisition Table. Run this comparison before a submittal to ensure the data in the ROW Acquisition Table is up to date with the design model. Set the report type to DES IN and enter the desired comparison tolerance, then click compare. You will be prompted to select the DES IN report and then the ROW Acquisition Table to compare against.

Compare to AcqTable

×

Open Reports Dialog

Report

DES IN

▼

Comparison Tolerance (Sq.')

0.005

Compare to ROW Acquisition Table

TDOT Version 2/20/2026

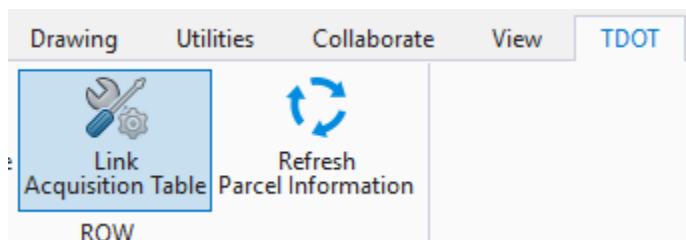
The tool will output a new .xslm file in the same location as your DES IN spreadsheet, containing a comparison table that flags any mismatches or missing data.

[illegible]

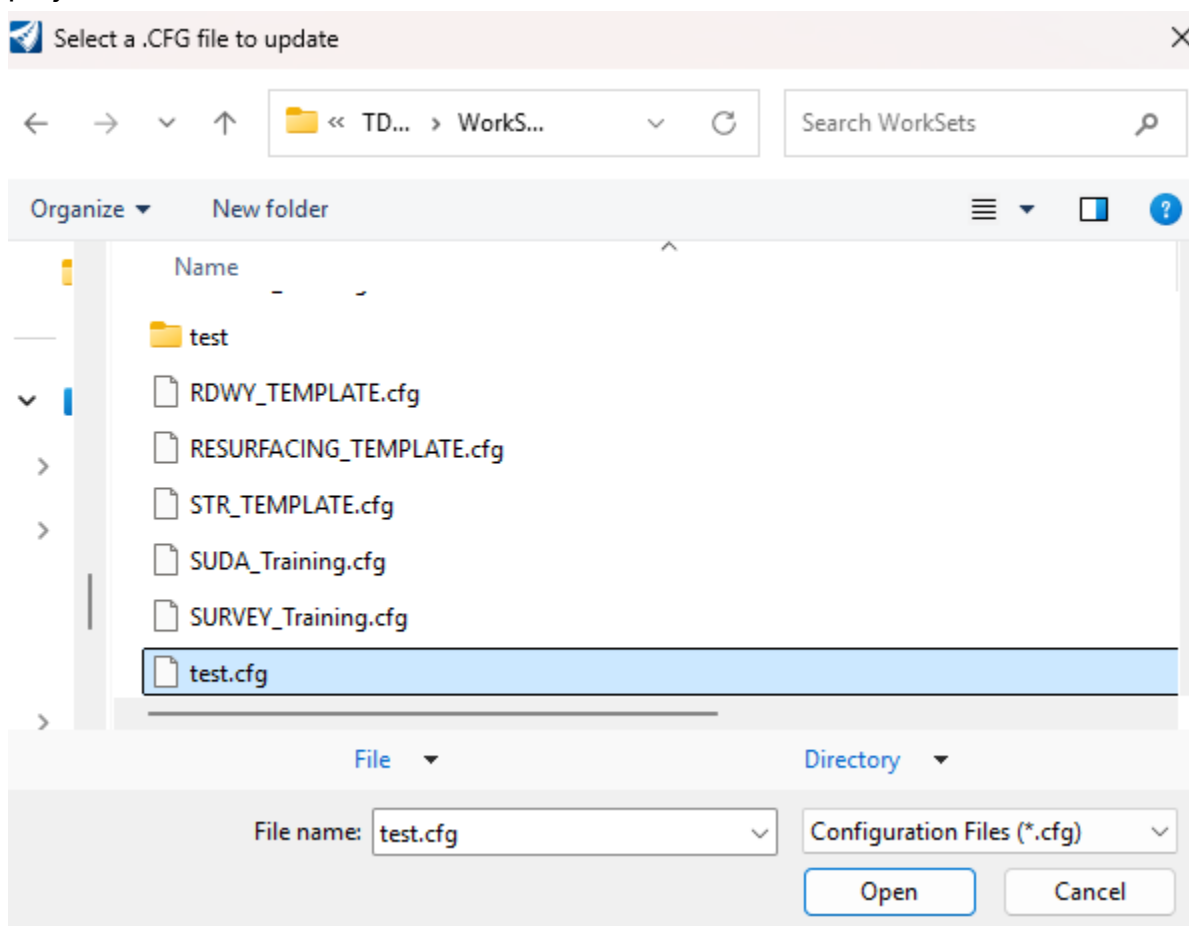
Step 3: Link ROW Acquisition Table to ORD

The ROW Acquisition Table must be linked to ORD to allow the acquisition areas to populate automatically on the sheets. This is done by adding the spreadsheet path to the WorkSet's .cfg file. This step only needs to be completed once per project, provided the spreadsheet is not renamed or moved.

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



2. Navigate to the WorkSet folder and select the *.cfg file associated with your project's WorkSet.



3. You will then be prompted to select the ROW Acquisition Table. If it's stored on ProjectWise, you may open it as read-only.

Document

Name
Enter text here

ROWAcqTable.xlsm

Address:

Description: ROWAcqTable.xlsm

File Name: ROWAcqTable.xlsm

Application: All Applications

Extension: *.xlsx;*.xlsm;*.xlsb;*.xls;*.csv

☒ Open document as read-only

Note: If your ROW Acquisition Table is stored in ProjectWise, right-click the spreadsheet and select **Refresh Local Copy** to download the latest version to your local directory. If you have not opened the file before, you will receive an error due to not having a local copy, and you'll need to click **Copy Out** instead. This step ensures that any updates to the ROW Acquisition Table that may have been made by other users are reflected in your SHT-ROW Exhibits.dgn.

Copy Out

Export...

Import

Create Renditions...

Start Studio Session...

Update Server Copy

Refresh Local Copy

Purge Local Copy

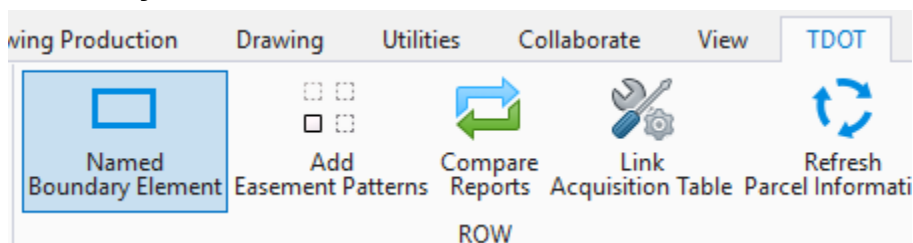
Purge WorkSpace

- After linking the ROW Acquisition Table, restart ORD to load it in. Ensure that the spreadsheet is closed while you're launching ORD or it won't be loaded.

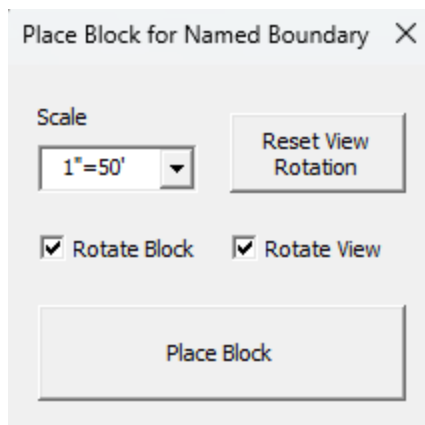
Step 4: Creating the ROW Exhibits

With everything in place, you can now begin creating the ROW Exhibit sheets.

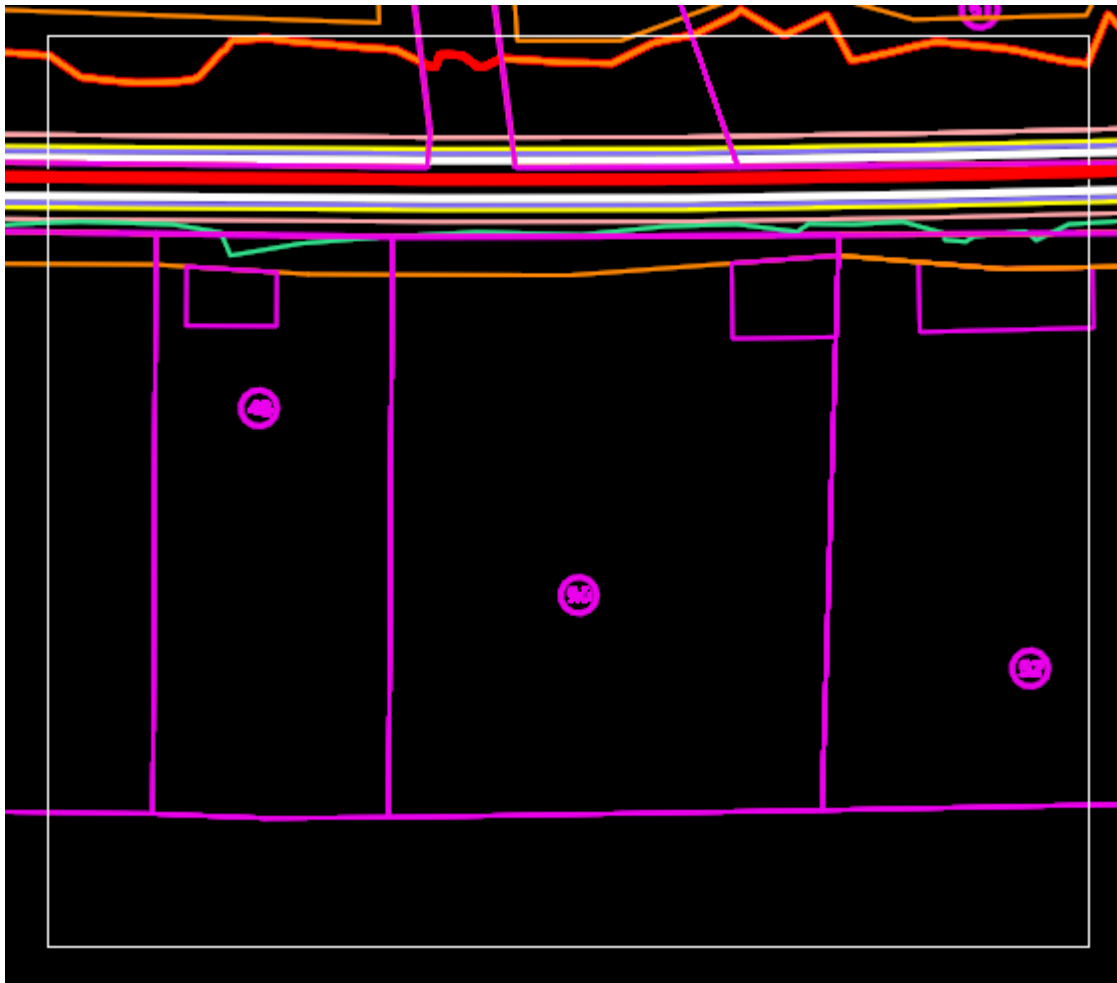
1. Create a file named **PRJ NAME-SHT-ROW Exhibits.dgn** and reference the required files which may include:
 - PRJ NAME-DES-Alignments
 - PRJ NAME-DES-Alignment-Text
 - PRJ NAME-DES-Corridor-Road Name
 - PRJ NAME-DES-Corridor Linework Display
 - PRJ NAME-DES-Corridor-Text
 - PRJ NAME-DES-Drainage Plan
 - PRJ NAME-DES-Drainage-Text
 - PRJ NAME-DES-ROW
 - PRJ NAME-DES-Easements
 - PRJ NAME-DES-ROW-Acquisition Shapes
 - PRJ NAME-DES-Guardrail
 - PRJ NAME-DES-Retaining Wall
 - PRJ NAME-DES-Utility
 - PRJ NAME-SUR-Alignment
2. A **Sheets - ROW Exhibits Level Filter** can be toggled on for the attached references from the **Level Display** menu. This is to be used as a starting point, as further changes to the level display may be needed for your project.
3. For each ROW Exhibit, start by creating the **Named Boundary** that will define the plan view layout to be displayed. Use the **Named Boundary Element** tool (**OpenRoads Modeling >> TDOT >> ROW**) to create a shape defining the **Named Boundary**.



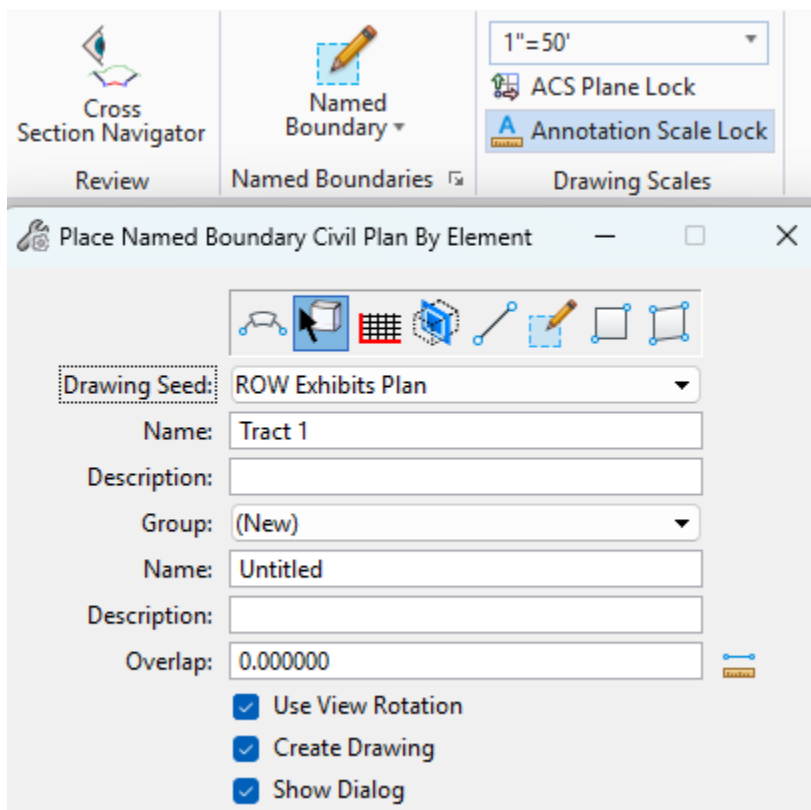
4. Select or type the desired **Scale**, then place the shape around the area to be displayed on the sheet. The tool allows you to rotate the shape during placement.



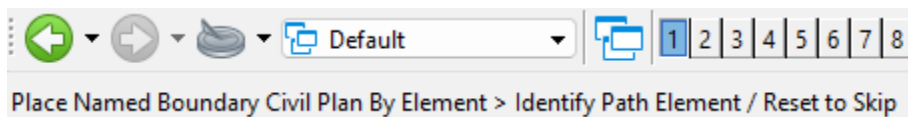
You can also move and rotate the shape after placement if needed, before you create the **Named Boundary**.



- To use the placed shape to create a named boundary, open the **Named Boundary** tool, select the **Civil Plan By Element** option and select the **ROW Exhibits Plan** drawing seed. Ensure your view rotation aligns with the boundary shape and that **Use View Rotation** is checked.



- You will initially be prompted to select the path element, **reset** (right-click) to skip. The following prompt will ask you to identify the boundary element. Click the boundary shape you created, then click in empty space to accept.



- The **Create Drawing** dialog will appear. Ensure the **Drawing Scale** and **Annotation Scale** match the scale used when placing the **Named Boundary Element** shape, as the scales will always default to 1"=50'.

Create Drawing

Mode: Plan

☐ One Sheet Per Dgn:

View Name: Tract 50

Drawing Seed: ROW Exhibits Plan

View Type: Civil Plan

Discipline: Civil

Purpose: Plan View

Drawing Model

Model Name: Tract 50

Seed Model: TDOT ROW Exhibits Plan.dgnlib, Plan 1

☐ Filename: (Active File)

1"=50'

Annotation Group: North Arrow 0.5 Scale

Sheet Model

Model Name: Tract 50

Seed Model: TDOT ROW Exhibits Plan.dgnlib, Plan 1

☐ Filename: (Active File)

Sheets: (New)

Full Size 1 = 1

Drawing Boundary: Plan 1

Detail Scale: 1"=50'

☐ Add To Sheet Index

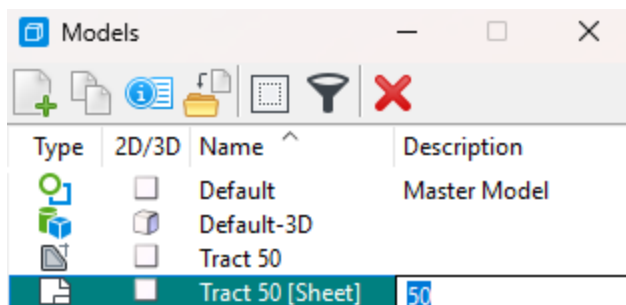
☐ Make Sheet Coincident

☒ Open Model

OK Cancel

Note: After the sheet is created, ensure that the **DES - SHEET - Corner Text** and **DES - SHEET - Linework** levels are enabled if the title block content appears to be missing.

- Open the **Models** window and type the tract number into the **Description** for the sheet.



This will automatically populate the tract data from the linked ROW Acquisition Table and will fill in the colors for the acquisition shapes.



Note: You can display the acquisition shape fill colors in the drawing model by entering the tract number in the **Description** field for the drawing model. However, this step is for display only and is not required.

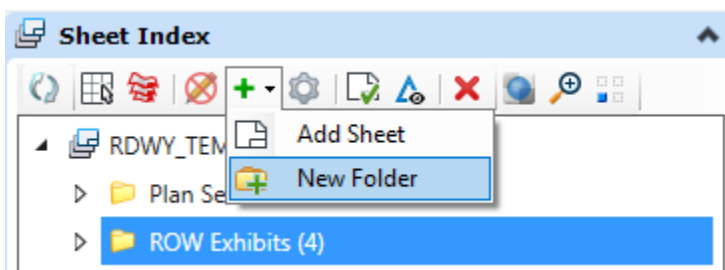
9. If needed, you can switch to the drawing model to reposition the north arrow.
10. **Loss of Access** and **Controlled Access** are not in the ROW Acquisition Table and must be entered manually. Use the ROW Exhibits properties on the sheet border cell to enter this information.

ROW Exhibits	
Tract Number	50
Property Owner	LUTHER REVIS (L.E) & M
Pre-Acquisition Total	0.00 S.F.
ROW Acquisition	0.113 AC.
ROW Remaining	0.00 S.F.
Drainage Easement	0.00 S.F.
Slope Easement	0.00 S.F.
Construction Easement	2730.19 S.F.
Loss of Access	0
Septic System	No
Controlled Access	(None)

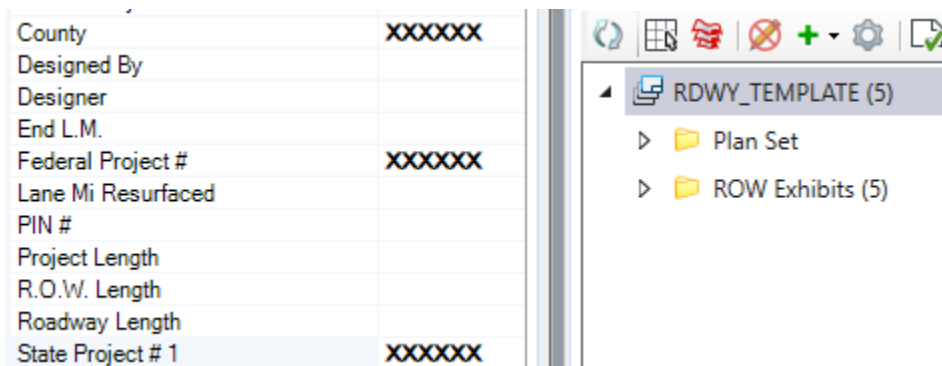
11. The following levels can be disabled per sheet to hide the legends if they aren't required:

- **DES - TRAN - Scarification Text**
- **DES - ROW - Loss of Access Text**
- **DES - ROW - Highway Easement Text**
- **DES - ROW - Air Rights Easement Text**

12. Create a new folder in your **Sheet Index** called **ROW Exhibits** for your sheet models to be added to.



13. Fill in the **County**, **Federal Project #**, and **State Project # 1** properties.

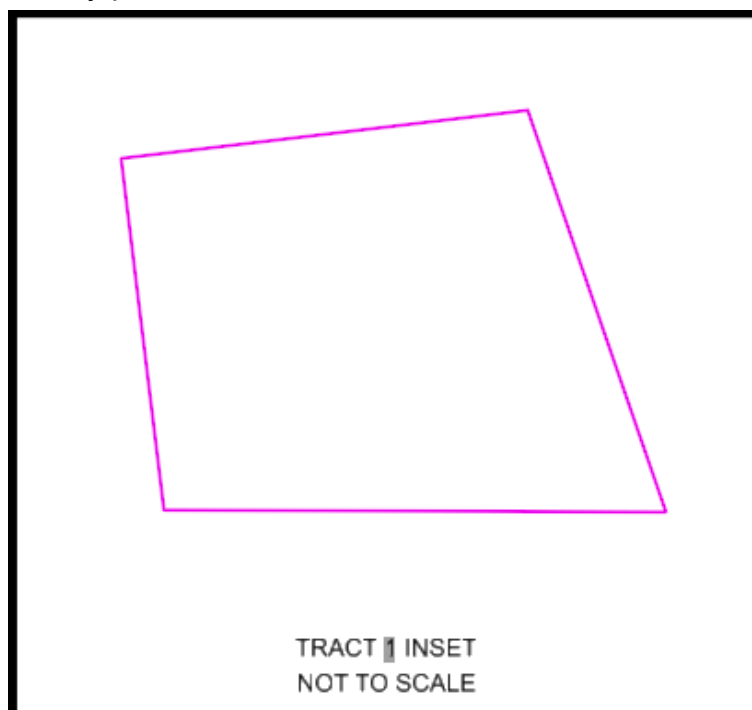


14. Now the properties on the top right corner of the sheet will be filled in automatically for sheets in the Sheet Index. The **CREATED/REVISED** date must be filled in by using the **Edit Text** tool.

FEDERAL PROJ. NO.	
STATE PROJ. NO.	
COUNTY	
CREATED/REVISED	XX-XX-XX

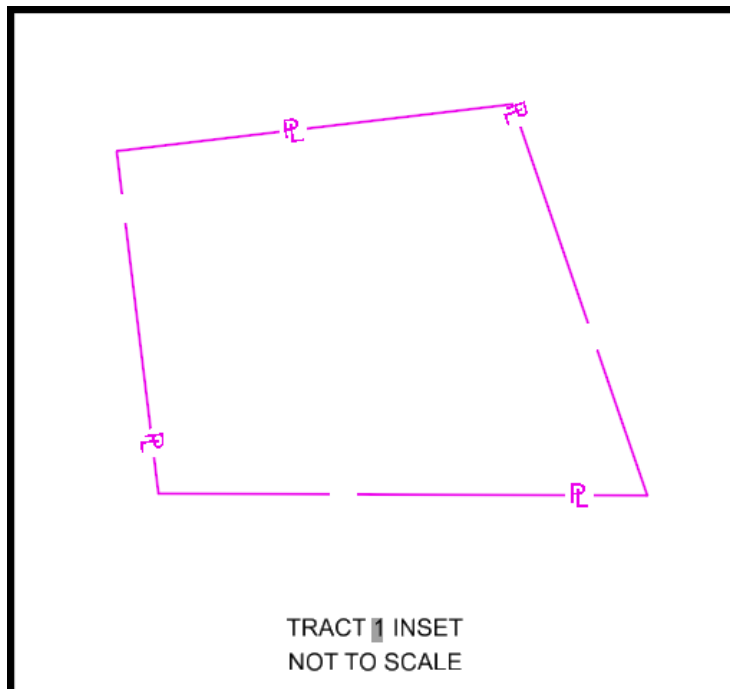
Note: If you encounter an error when dragging a model to the **Sheet Index**, you can also right-click on the folder and click **Add Sheet**.

15. A tract inset will need to be added to the sheet using the same orientation as the rest of the exhibit. In your sheet model, temporarily turn on the **SURVEY - PROPERTY - Parcels** level for the survey reference. Copy the parcel and paste it at a smaller scale that fits within the tract inset boundary. You can then turn off the survey parcel level.



Note: If the parcel does not appear when you paste, the level may be turned off in your sheet model.

16. Next, use the **Change Element Attributes** tool. Click the eyedropper icon to **Match Element Attributes**, then select a property line on your sheet. After that, click the pasted shape to apply the matched attributes.

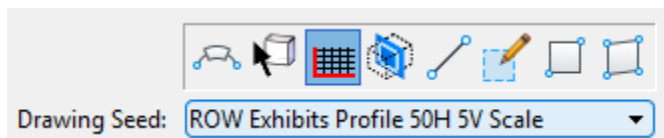


Note: The line style may still appear solid even after matching attributes. To fix this, temporarily select a different line style, then change it back to **ByLevel (Property)** for it to update correctly.

17. Navigate to the drawing model and use **Civil Labeler** to place the station/offset, bearing/distance and radius/length annotations for the tract. You may also be able to reuse annotations from your plan set sheets by attaching the annotations to your drawing model as a reference, turning off all levels except those containing the annotation text, then clipping the reference in the drawing model around the tract annotations.

Step 5: Driveway Profiles

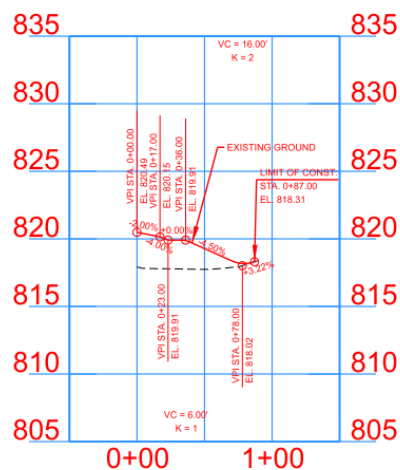
1. You may continue using the same ROW Exhibits sheet file for creating the driveway profile sheets, or create a new file.
2. Create a **Civil Profile Named Boundary** for the driveway using the **ROW Exhibits Profile 50H 5V** sheet seed.



Note: To extend the named boundary beyond the profile, enter a **Start Location** before the profile's start station, and an **End Location** after its end station.

3. Follow the same steps used earlier to populate the title block fields.
 - Add the tract number to the model **Description** to fill in the Tract Number and Property Owner from the ROW Acquisition Table.
 - Add the sheet to the **Sheet Index** under a new **ROW Exhibit Profiles** folder, and the county and project numbers will populate.
 - Use the **Edit Text** tool to type in the revision date.
4. Place any additional annotation labels that may be required in the drawing model. This includes **Limit of Construction** and **Existing Ground** labels.
5. Add a description that includes the driveway width, type, side, intersecting station, and required side drain.

FEDERAL PROJ. NO.	
STATE PROJ. NO.	
COUNTY	
CREATED/REVISED	XX-XX-XX



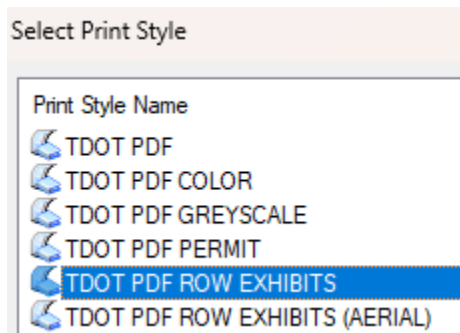
12' PVT DR. RT. 170+30.00
NO S.D. REQ'D.

TRACT 2 OWNER NAME	
SCALE	1"=50' HORZ. 1"=5' VERT.

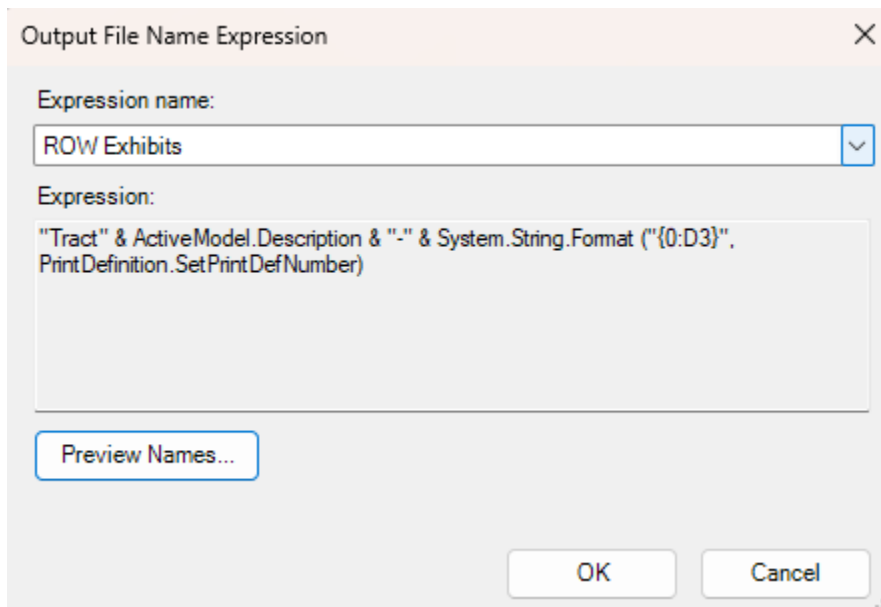
Step 6: Printing

The same sheets will be printed twice using two different **Pen Tables**. One prints the sheet with the aerial background and inverts black lines to white. The other hides the aerial raster and the aerial note when printing.

1. Before opening your SHT-ROW Exhibits.dgn file to print, ensure you have **Refreshed Local Copy** for the ROW Acquisition Table if it's saved on ProjectWise. You may also run the **Compare Reports** tool (TDOT >> ROW >> **Compare Reports**) to ensure the table is up to date with the model.
2. Select your ROW Exhibits folder in your **Sheet Index**, **Open Print Organizer** and select the **TDOT PDF ROW EXHIBITS Print Style**.



3. Set **Submit as** to **Separate print jobs**, and click on **Output File Names...**, then set the **Expression name** to **ROW Exhibits**.



4. Select the output **Destination** folder. The same location will be used for the Aerial and Driveway prints.
5. Print the same sheets again using the **TDOT ROW EXHIBITS (AERIAL) Print Style**, and **ROW Exhibits Aerial** as the **Output File Name Expression**.

6. Print the driveway profile sheets using the **TDOT ROW EXHIBITS Print Style**, and **ROW Exhibits Driveways** as the **Output File Name Expression**.
7. With all the sheets printed to the same location using the provided **Expression Names**, they will now be alphabetically sorted in the required order of ROW Exhibit, ROW Exhibit (Aerial), and ROW Exhibit Driveway Profile in ascending tract order.
8. Select all the sheets in Windows File Explorer and right-click, then select **Show more options**. Select **Combine in PDF-XChange Editor/Acrobat** if available or use an alternative method to combine the sheets alphabetically.

Note: *An alternative option for printing is to create and save a .pset with a separate folder for the aerial and non-aerial sheets, with the different print styles applied for each.*

Demo

For those with access to TDOT's ORD Users TEAMS site, a draft demonstration video can be accessed [here](#). Please note that this demo was performed before the final versions of these new tools.