

# Polygon and Grid Maintenance Basic Training Guide



#### Introduction

The Polygon and Grid Maintenance (guide) can be used by those learners who learn best by reading and following written instruction. The guide allows the user to take the course at their own pace and time schedule and can also be used along with the video and / or instructor-led assistance.

The guide is designed to walk the user through the steps to accurately process basic polygon and grid maintenance.

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# **Polygon and Grid Maintenance Basic Training Guide**

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#### POLYGON MAINTENANCE Header ₩ TWW258 in ROANOKE CITY [51770] - Grid Selection Editor Left Panel State: VA Botetour County: ROANOKE CITY Place: Street Swap Cross Street | Inter | Dates | Jump | Reports | Flags | Ortho | Search: Street Cross Salem Cit Мар Frankli County Grids Hide Polygons Hide F Hide Modify Move Print Image Grids ▼ Delete Remark Hide Expired Toolbar Undo Copy Measure DateView

#### **HEADER**

Lists the Member Code, County, and Current Access status (View or Editor) within Grid Maintenance Program

#### LEFT PANEL

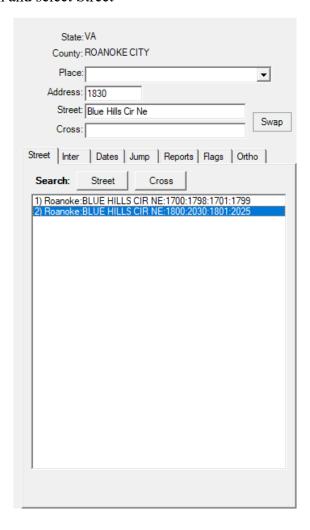


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#### STREET

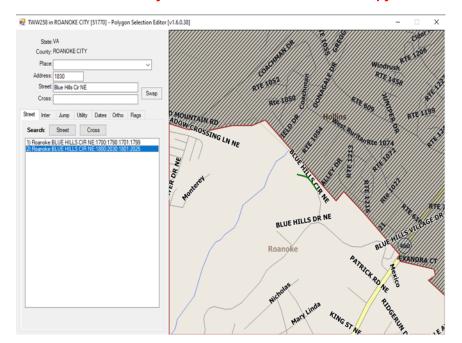
Ability to search by Place, Address, Street, and/or Cross Street

1. Enter the information and select Street



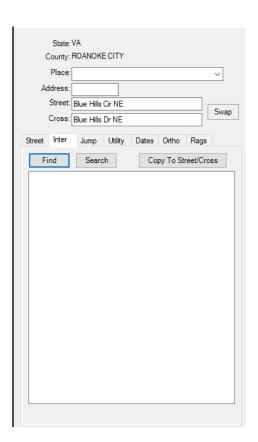
2. Click on a result that was returned to zoom to that location, corresponding street centerline will flash and then remain green in color.

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#### INTER

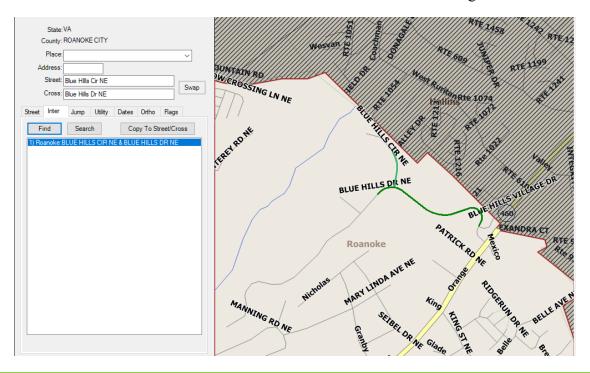
Ability to search by Intersection



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1. Selecting Find will identify the intersection and zoom the map to show the intersection. The intersection will flash and then both Street and Cross Street will remain green in color.

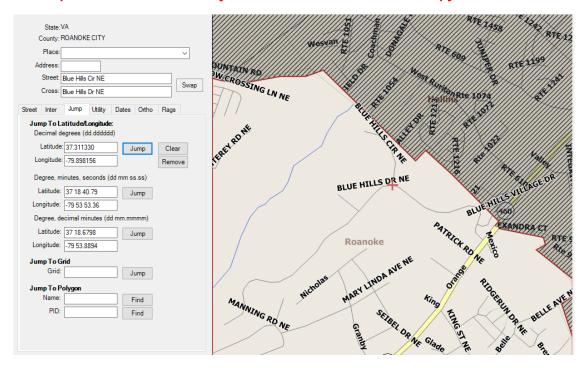


#### JUMP

Tools used to quickly navigate to a desired location on the map.

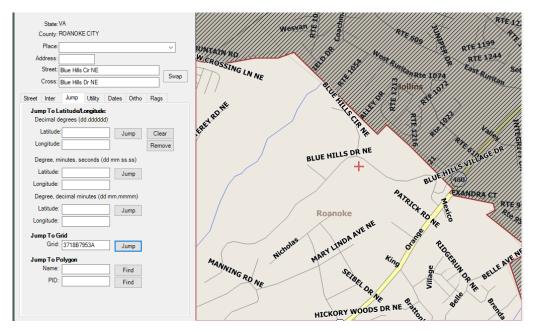
1. Jump To Latitude/Longitude – enter coordinates in desired format and select the corresponding Jump tool. Notice that remaining coordinate fields are filled out accordingly. The map zooms to the intersection and places a red + at the corresponding lat/long point.

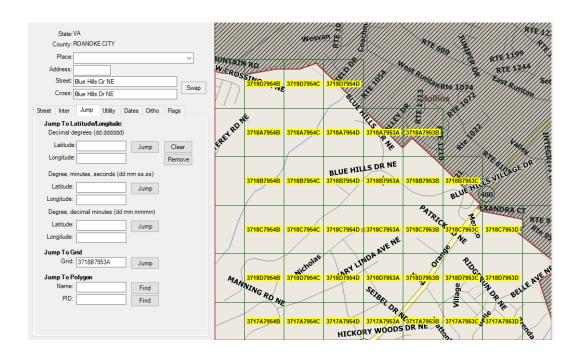
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2. Jump to Grid – requires a Miss Utility Grid name to be entered into the Grid field and select Jump. The map zooms to the area of the grid and places a red + on the map. To verify you are in the correct grid, from the toolbar click in the box next to Show Names and in the box next to County Grids. This will display the county's grids and their name highlighted in yellow

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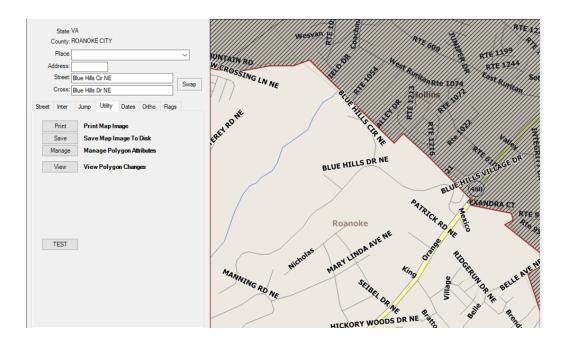




#### UTILITY

This is an advanced functionality that will not be covered in this document. Please reach out for one-on-one assistance.

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#### DATE

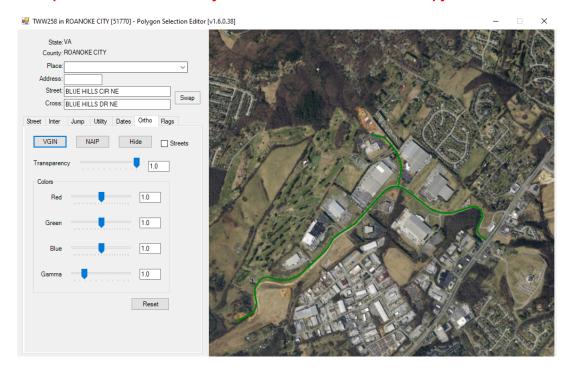
You can modify the activation and expiration of polygons. This is an advanced functionality that will not be covered in this document. Please reach out for one-on-one assistance.

#### ORTHO

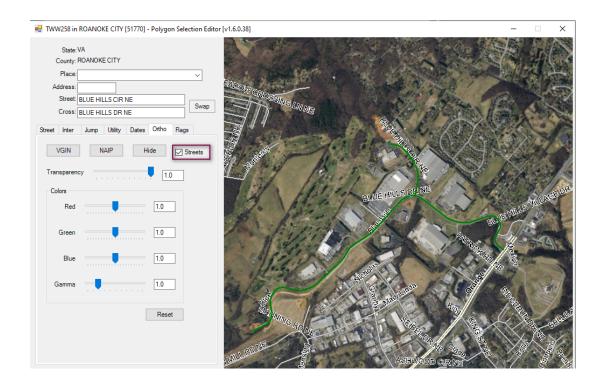
Two options are available for aerial images. After choosing VGIN or NAIP, a pop-up text box will appear explaining, "Orthophotography images displayed should be used as a guide with assisting with mapping. VA811 is not liable for any damages related to using this data." You are able to turn off imagery by selecting the Hide button.

- 1.VGIN Virginia Geographical Information Network.
- 2. NAIP National Agricultural Imagery Program.

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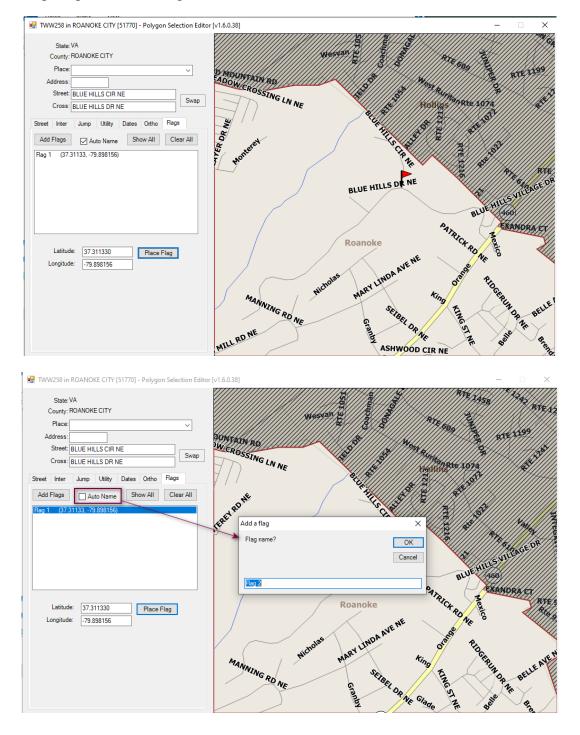
To make the streets more visible with the imagery check the box next to Streets



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#### FLAG

Allows flags to be placed on the map, representing the latitude/longitude coordinate that has been entered. This allows you to plan out where to draw your polyline or polygon based on referenced coordinates. Auto name when selected will name the Flags in numerical order, unselecting the option will initiate a prompt where the flag can be named.



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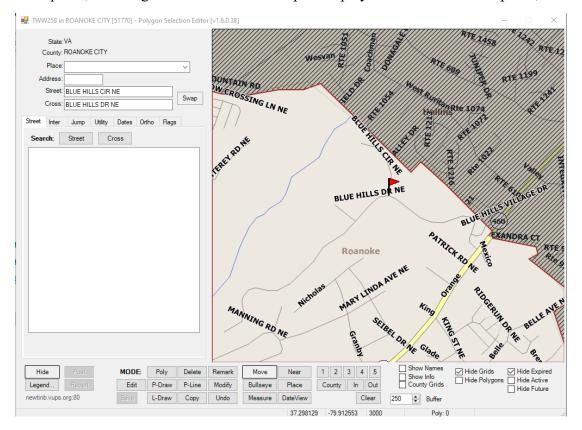
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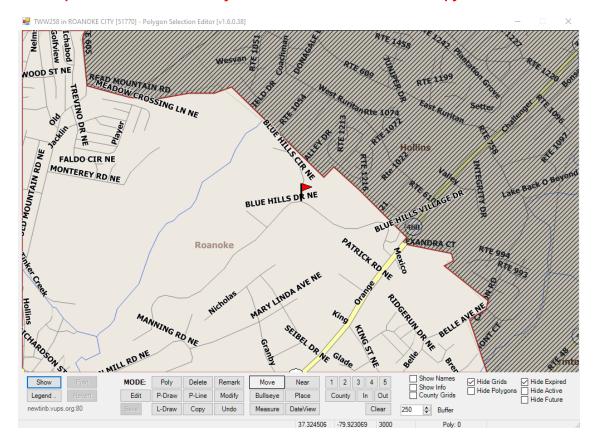
#### **TOOLBAR** Show Names ✓ Hide Grids ✓ Hide Expired MODE: Show Info County Grids Hide Polygons Hide Active Edit P-Draw Modify Bullseye newtinb.vups.org:80 L-Draw Сору Undo Measure DateView Clear Buffer Poly: 0 37.324725 -79.912343 3000

#### HIDE

Closes the left panel, allowing more room for the map to display. To activate the left panel, select Show.



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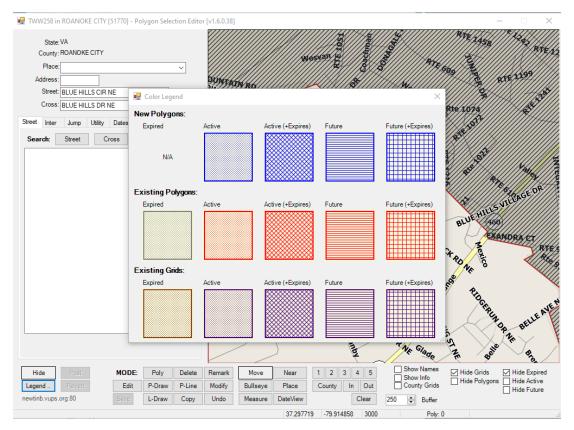


### LEGEND

When selected, a screen appears detailing the colors and fill types for both grids and polygons and their various stages.

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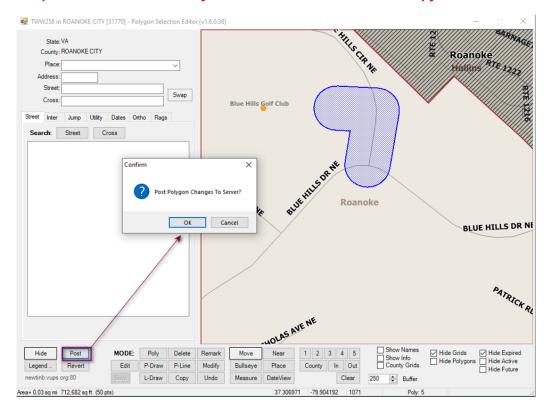




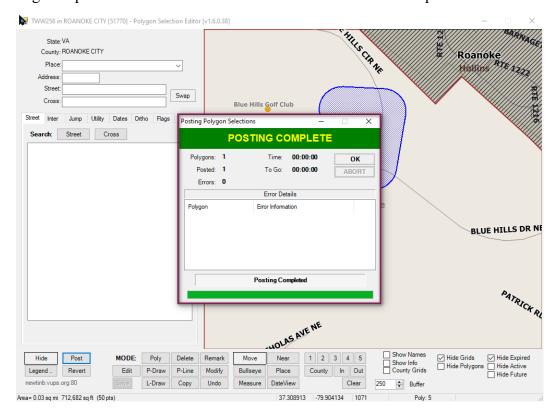
#### POST

[Post Polygon Changes to Server] - Post button will be enabled when any modifications have occurred during the current session. To commit the modifications, click on Post. A dialog box will apply with OK or Cancel to *Post Polygon Changes to Server*? Selecting OK will post the changes. Cancel will return you to the map.

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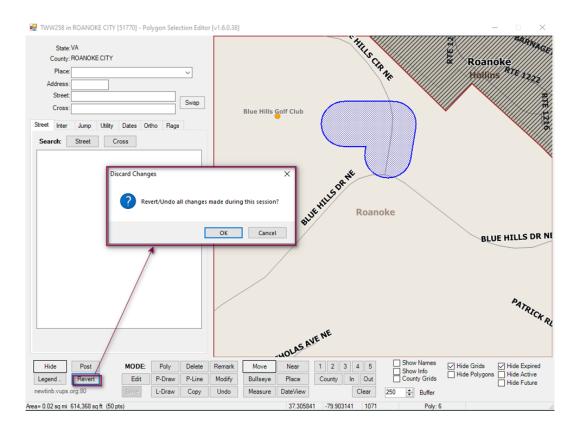
• Posting Complete confirms that modifications have been made and posted to the server.



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#### REVERT

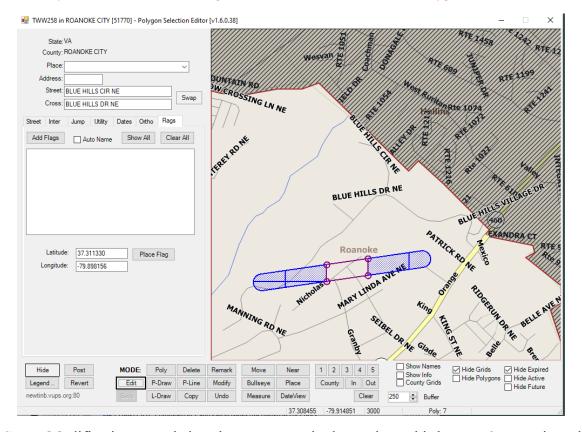
[Revert/Undo All Changes for this Session] Revert button will be enabled when any modifications have occurred during the current session. To discard any modification made within this session, prior to Posting, click on revert. A dialog box will apply with OK or Cancel to discard all changes. Selecting OK will remove the modifications from the map. Cancel will return you to the map.



#### MODE

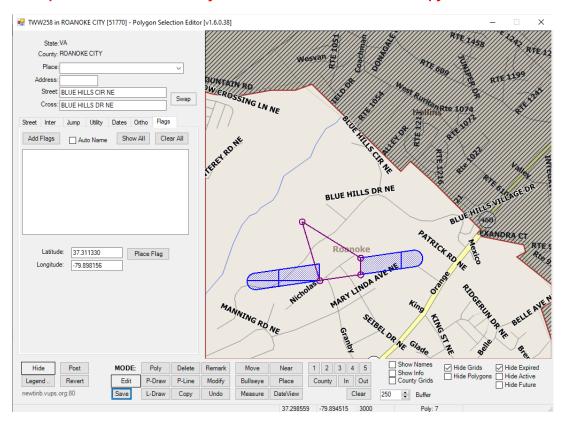
1. Edit [Edit Polygon] – Using this tool and selecting an existing shape will allow you to modify the vertices. To move the vertices, left click and hold down on the vertice needing to be adjusted, move the mouse to the desired new location and release. To add additional vertices, hold down CTRL and left click where you want the vertice added.

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2. Save - Modifications to existing shapes are required to activate this button. Once activated, select Save to all modifications made. This only saves the changes during the current map session, to apply the changes to the Live Server, select Post.

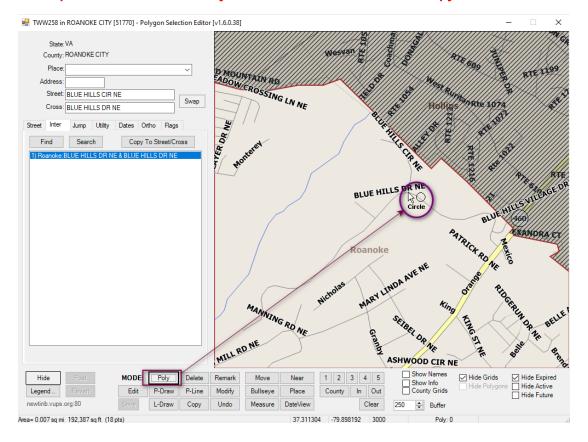
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#### POLY

[Add New Polygon (Using Vertices)] – to create polygons select the Poly button. The cursor will display an arrow along with the word circle and a circle shape.

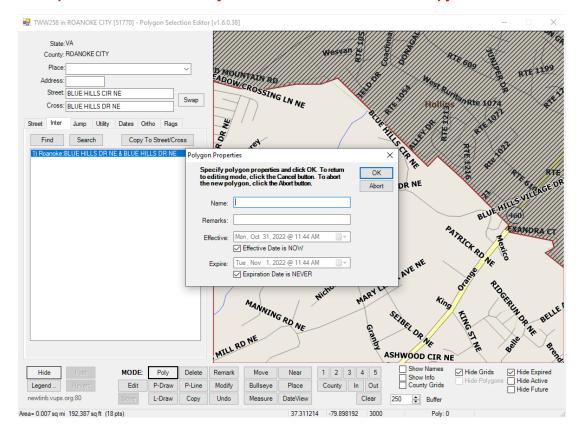
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- 1. Move the arrow to the desired location on the map and double click to create a polygon.
- 2. Default buffer is 250ft however it can be decreased to 150ft.
- 3. This tool is ideal for mapping intersections and large areas.

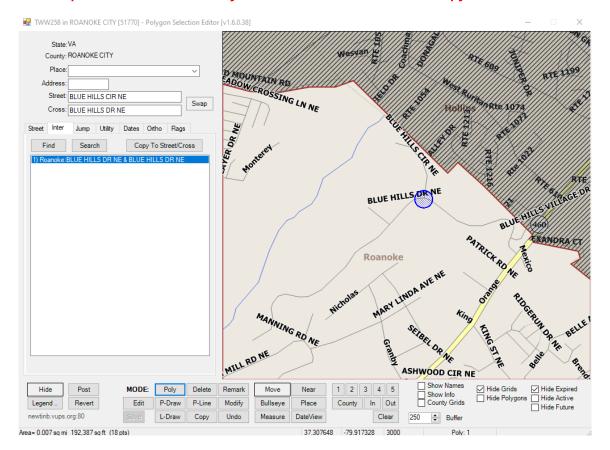
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- 4. A window will populate containing the Polygon Properties
  - 1.1.1 You can add a Name or Remarks as part of the attributes to the polygon, but both are optional.
  - 1.1.2 Effective date defaults to NOW which is the current date/time of the polygon creation. This can be altered for a future date/time.
  - 1.1.3 Expiration date defaults to NEVER. This can be altered to schedule a future expiration of the selected polygon.
  - 1.1.4 To cancel the polygon creation, select Abort
  - 1.1.5 Selecting OK will display the newly created polygon

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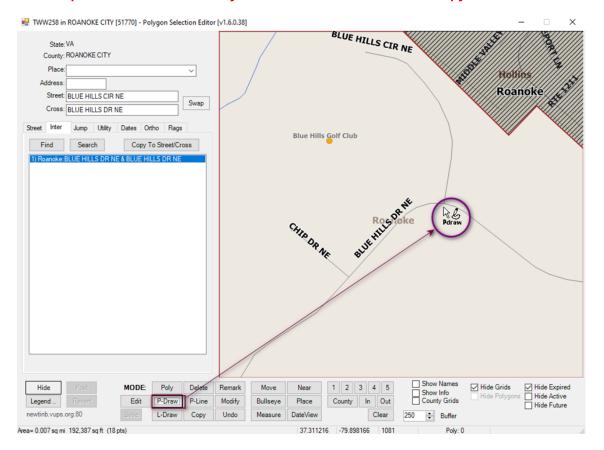


#### P-DRAW

[Add New Polygon (Freehand Polygon)] – to create a polygon by drawing a continuous line. The cursor will display an arrow along with the word Pdraw, a pencil and a polygon shape.

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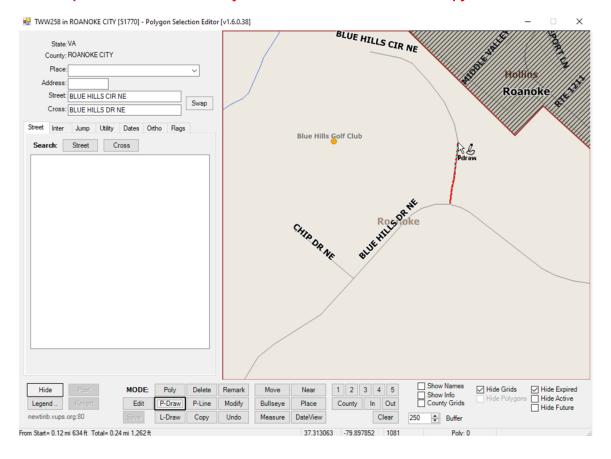
- 1. Move the arrow to the desired location on the map, left click and continue holding it down while moving the mouse to the desired end point and then release
- 2. Default buffer is 250ft however it can be decreased to 150ft.
- 3. This tool is ideal for mapping large areas and those within a defined boundary

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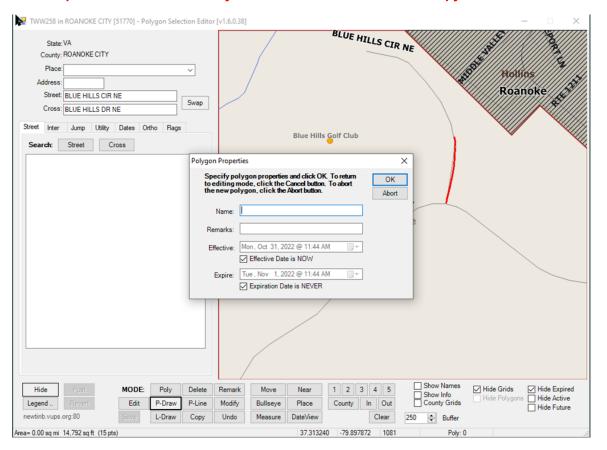


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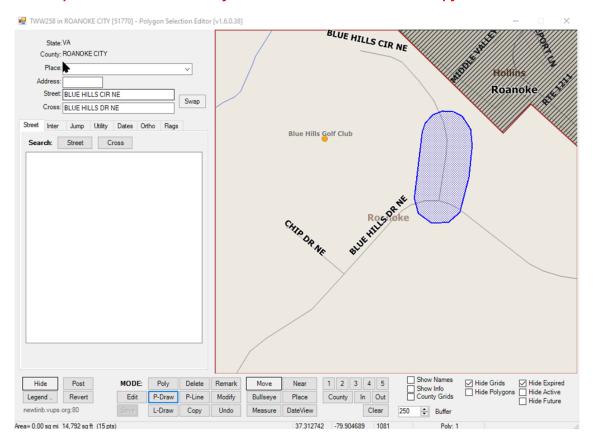
Printed copies are for reference only. Please refer to the electronic copy for the latest version.



- 4. A window will populate containing the Polygon Properties
  - 1.1.1 You can add a Name or Remarks as part of the attributes to the polygon, but both are optional.
  - 1.1.2 Effective date defaults to NOW which is the current date/time of the polygon creation. This can be altered for a future date/time.
  - 1.1.3 Expiration date defaults to NEVER. This can be altered to schedule a future expiration of the selected polygon.
  - 1.1.4 To cancel the polygon creation, select Abort
  - 1.1.5 Selecting OK will display the newly created polygon

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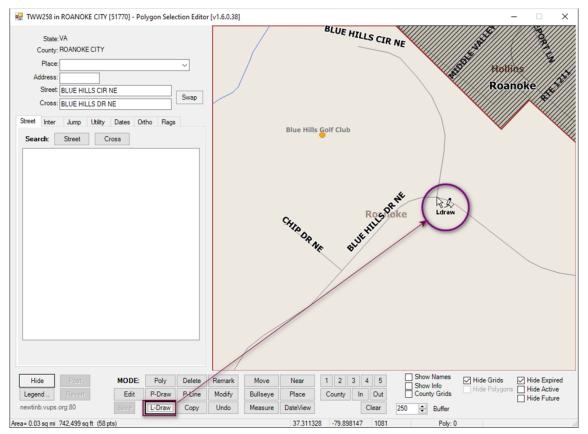


#### L-DRAW

[Add New Polygon (Buffered Freehand Lines)] – to create a polygon by drawing a continuous line. The cursor will display an arrow along with the word Ldraw, a pencil and a polygon shape.

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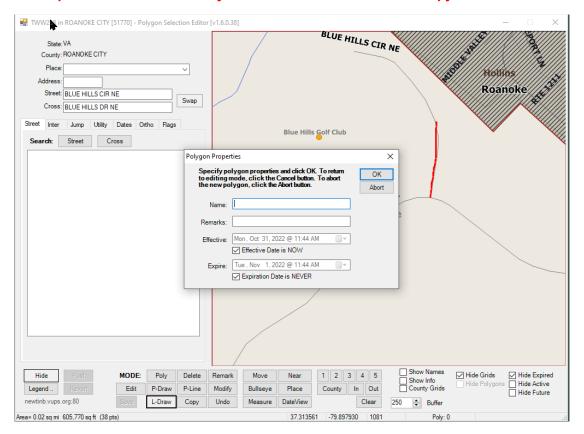
- 1. Move the arrow to the desired location on the map, left click and continue holding it down while moving the mouse to the desired end point and then release
- 2. Default buffer is 250ft however it can be decreased to 150ft.
- 3. This tool is ideal for mapping large areas and those within a defined boundary, it has a smoother, finished look compared to P-Draw

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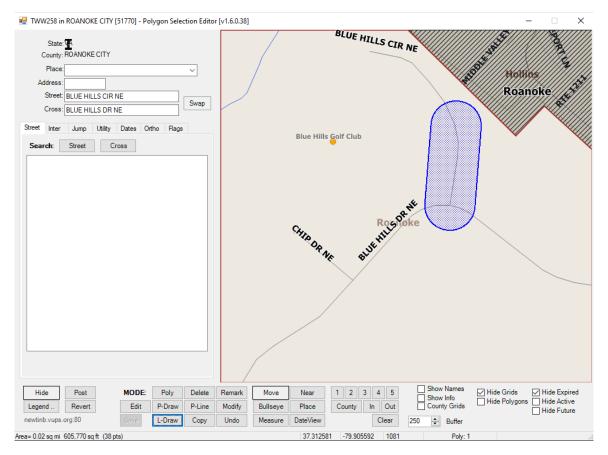
Printed copies are for reference only. Please refer to the electronic copy for the latest version.



- 1. A window will populate containing the Polygon Properties
  - 1.1.1 You can add a Name or Remarks as part of the attributes to the polygon, but both are optional.
  - 1.1.2 Effective date defaults to NOW which is the current date/time of the polygon creation. This can be altered for a future date/time.
  - 1.1.3 Expiration date defaults to NEVER. This can be altered to schedule a future expiration of the selected polygon.
  - 1.1.4 To cancel the polygon creation, select Abort
  - 1.1.5 Selecting OK will display the newly created polygon

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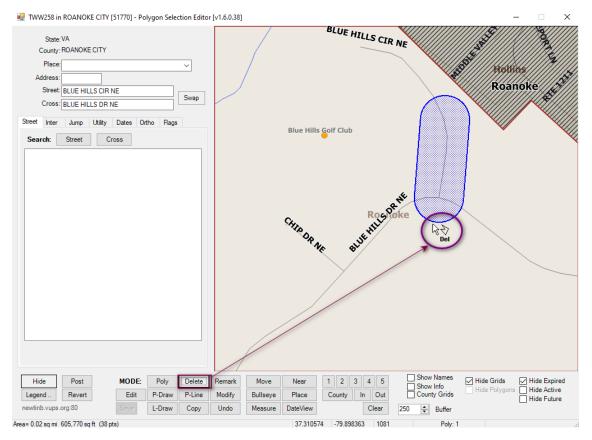




#### DELETE

[Delete or Expire Polygons from Selection] – to delete selected Polygons created in the current session, prior to Posting, by first selecting Delete and then clicking on the desire polygon. The cursor will display an arrow along with the word Del and a polygon shape.

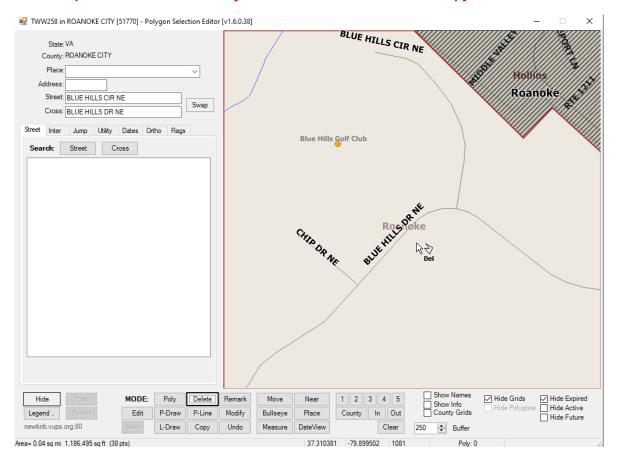
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1. Move the arrow to the desired location on the map, left click on the polygon to be deleted and continue holding it down while moving the mouse to the desired end point and then release

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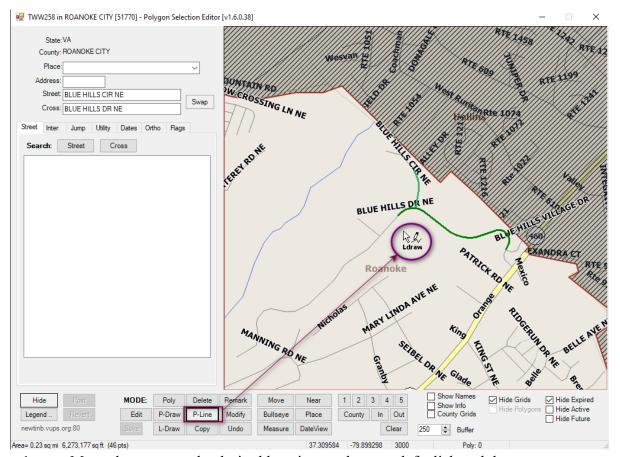
2. The polygon has been deleted. Notice that no windows populate when deleting polygons.

#### P-LINE

[Add New Polygon (Buffered Lines)] – to create a polyline by creating a single segment or by creating multiple segments, that is then buffered. The cursor will display an arrow along with the word Ldraw, a pencil and a line shape.

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- 1. Move the arrow to the desired location on the map, left click and then move cursor to last desired location, double click to end line segment. Line is then buffered, creating a polygon.
- 2. Default buffer is 250ft however it can be decreased to 150ft.
- 3. This tool is ideal for mapping from one intersection to another and along a road or highway.

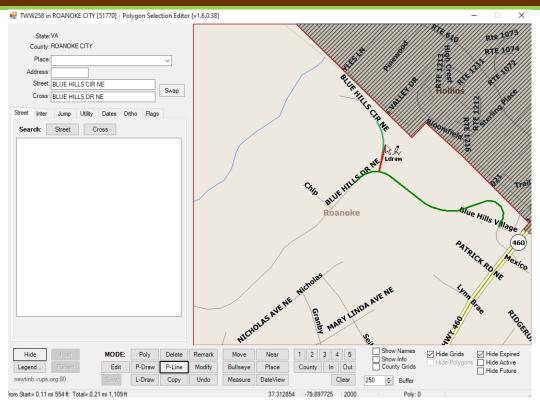
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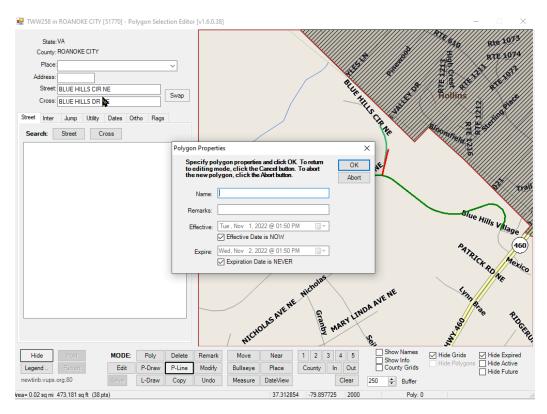


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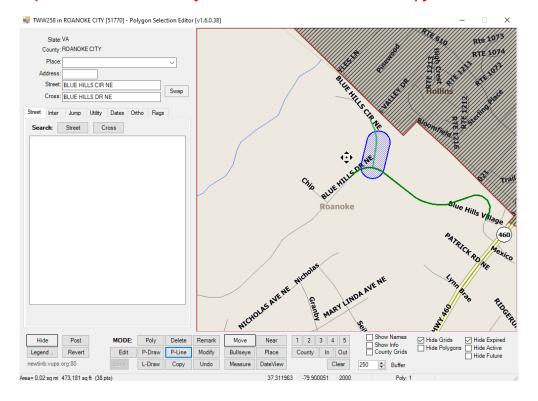
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#### SINGLE LINE SEGMENT

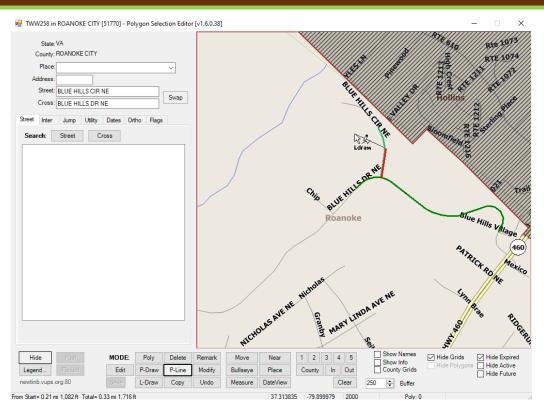




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#### MULTIPLE SEGMENT

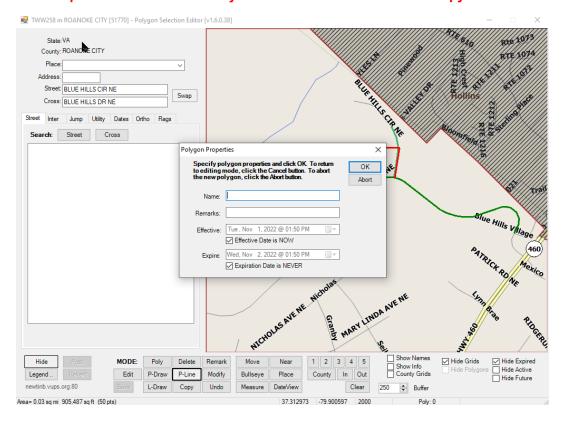


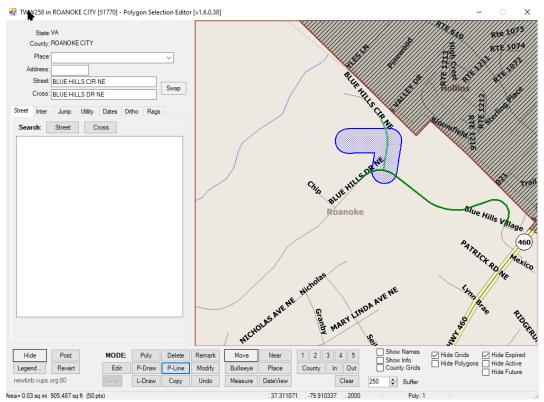
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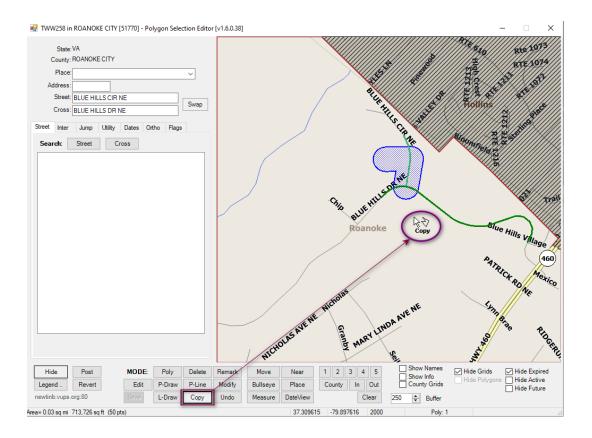
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- 1. A window will populate containing the Polygon Properties
  - 1.1.1 You can add a Name or Remarks as part of the attributes to the polygon, but both are optional.
  - 1.1.2 Effective date defaults to NOW which is the current date/time of the polygon creation. This can be altered for a future date/time.
  - 1.1.3 Expiration date defaults to NEVER. This can be altered to schedule a future expiration of the selected polygon.
  - 1.1.4 To cancel the polygon creation, select Abort
  - 1.1.5 Selecting OK will display the newly created polygon

#### COPY

[Copy Polygon Properties (Effective/Expires/Remarks)] – to copy an existing polygon's associated attributes and apply to a new, drawn polyline or polygon. The cursor will display an arrow along with the word Copy and a polygon shape.



1. Move the arrow to the desired polygon whose attributes to be copied, click on it, and then select a drawing tool to create a new polygon. After completing the shape, the Polygon Properties dialog box will appear prefilled with the copied attributes.

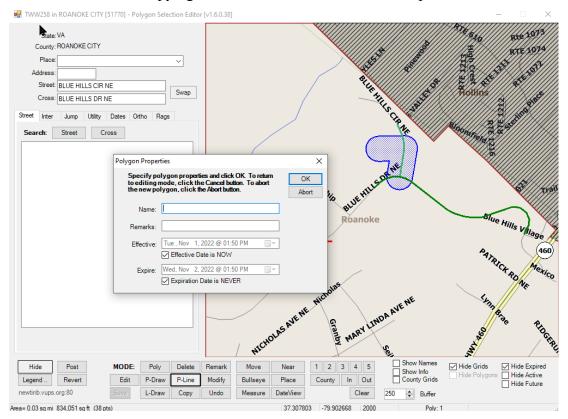
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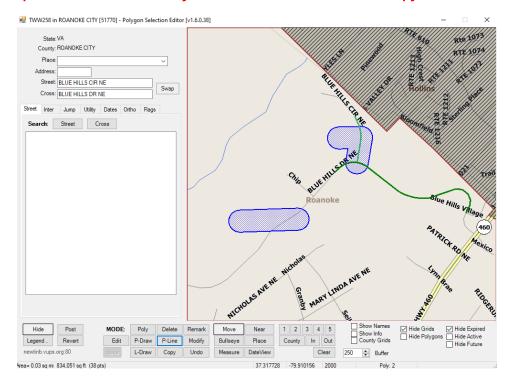
#### Printed copies are for reference only. Please refer to the electronic copy for the latest version.

- 2. Default buffer is 250ft however it can be decreased to 150ft.
- 3. This tool is ideal for copying attribute information from one shape to another



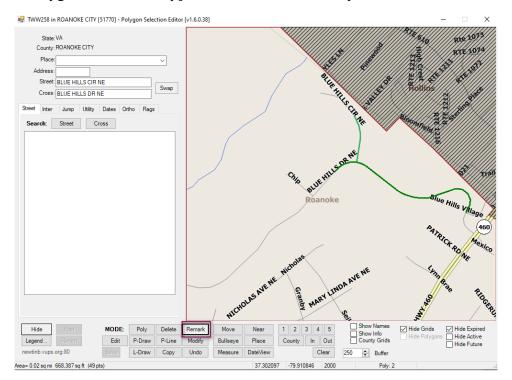
- 4. A window will populate containing the Polygon Properties
  - o The same attributes from the previously select polygon will be auto filled.
  - o The attributes can be modified if necessary
  - o To cancel the polygon creation, select Abort
  - o Selecting OK will display the newly created polygon

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## REMARK

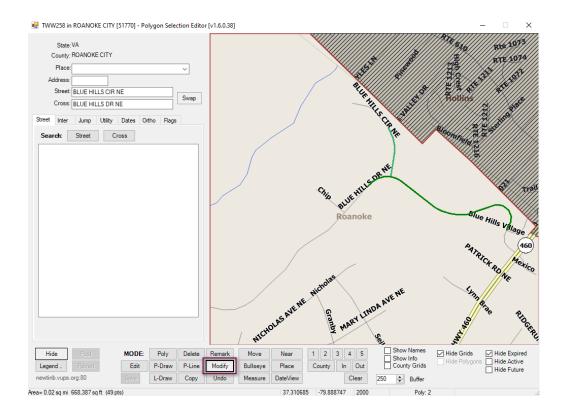
#### [Modify/Update Polygon Remarks Only] – tool has no functionality



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#### MODIFY

[Modify Polygon Properties (Effective/Expires, Remarks Optional)] - tool has no functionality

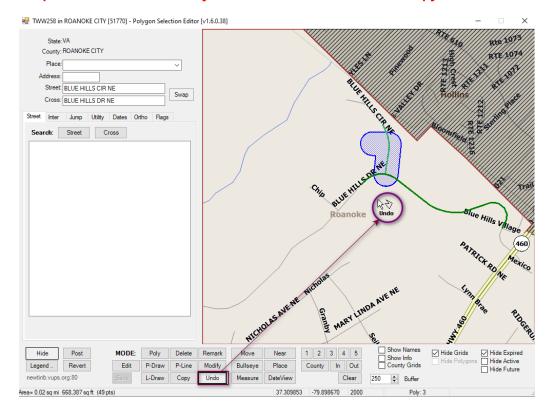


## UNDO

[Undo/Revert Changes to Modified Polygons] – to undo/remove a newly created polygon. Polygons that have been posted will not be affected. The cursor will display an arrow along with the word Undo and a polygon shape.

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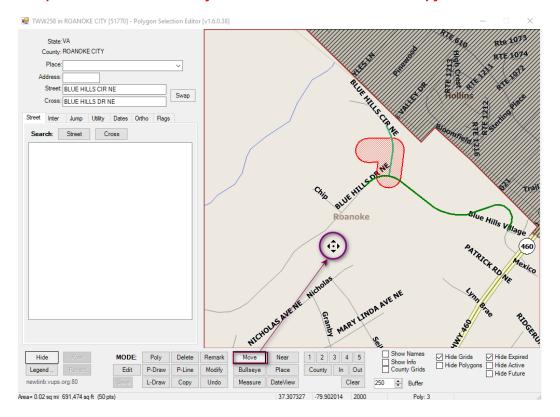
1. Move the arrow to the desired polygon you want to remove and click on it. The polygon is removed. \* *Only valid with newly created polygons not yet posted.* 

#### MOVE

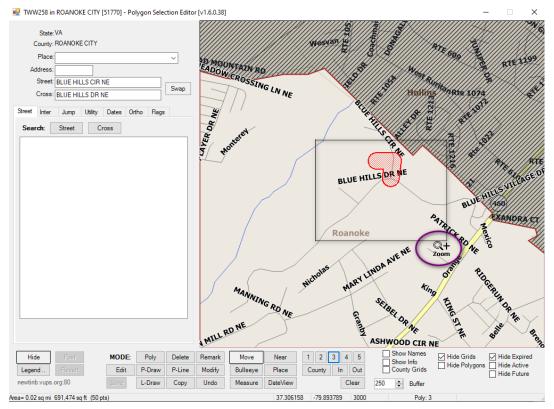
[Map Zoom/Pan Mode] - to move around, pan within the map. The cursor will appear as a



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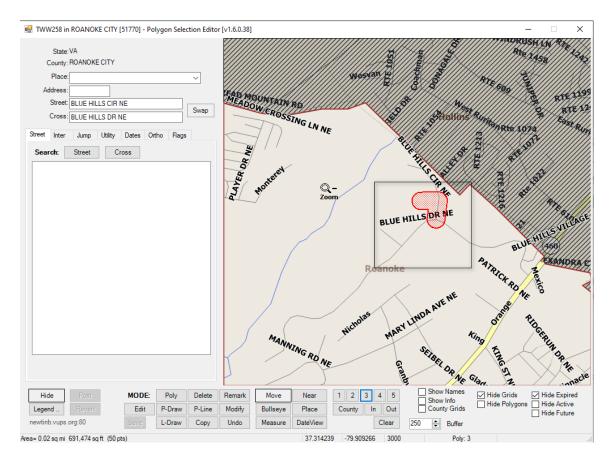
1. Left click and pull upwards or downwards, drawing a square to **Zoom In** 



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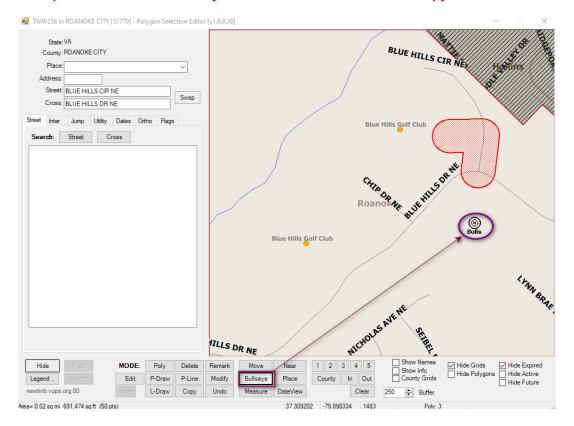
- 2. Right click and pull upwards or downwards, drawing a square to **Zoom Out**
- 3. Left click at any point within the map to pan to, the map will recenter at that location

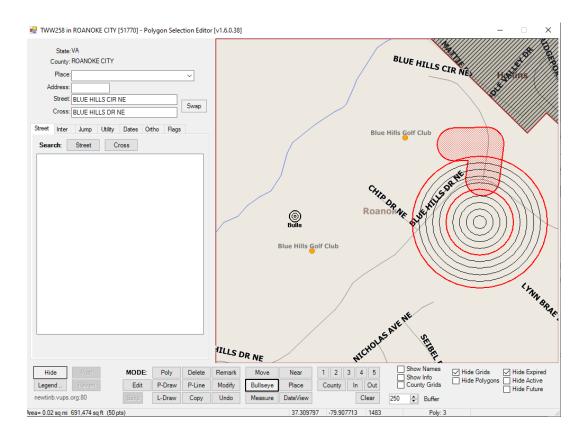


#### BULLSEYE

[Draw Bullseye at Point(s)] – Click Bullseye and left click on map to place Bullseye. The cursor will display as a bullseye and with the word Bulls. Cursor will continue to place Bullseyes were indicated on the map when left clicking. To turn off Bullseye, click on a different tool such as Move.

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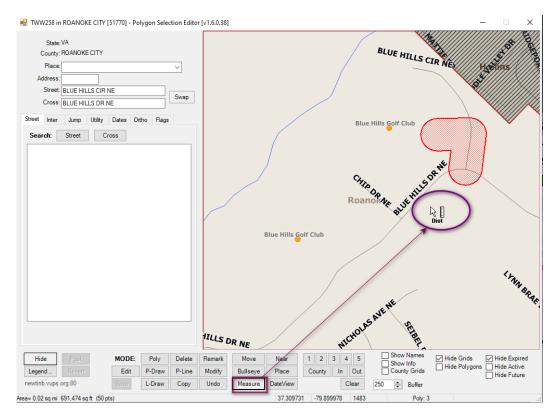




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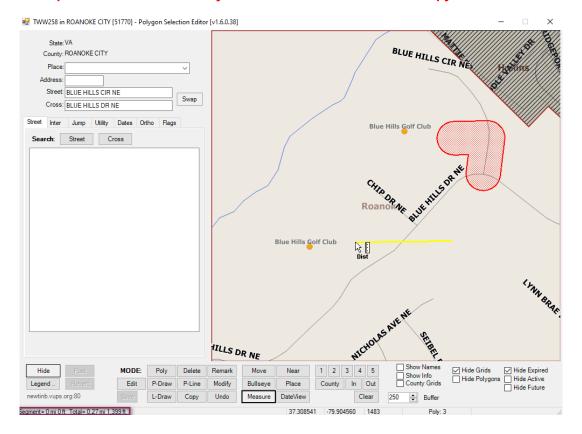
#### **MEASURE**

[Measure Distance] – to measure distance. Area size and distance is displayed in bottom left-hand corner when creating polylines polygons or using the Measure tool. Both segment measurements and when completed with drawing, total area are displayed. To turn off Measure, click on a different tool such as Move.



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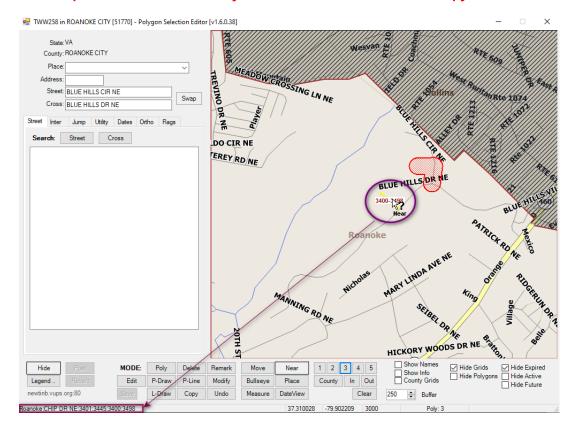


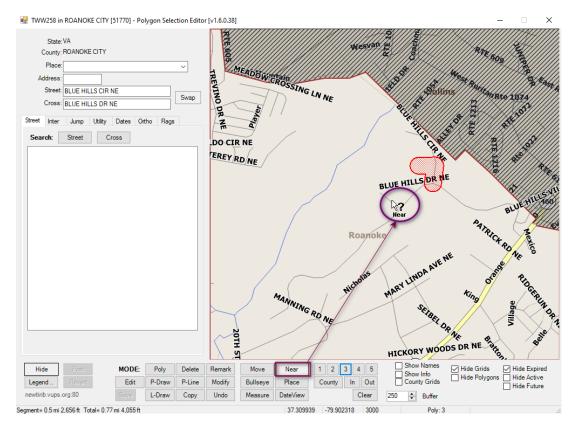


#### NEAR

[Identify Streets] – to identify a street if label is not visible. To identify a street, select the Near button, left click on the street. The cursor will display with an arrow, the word Near and a question mark. The address range will display along the street and the Place (area) and, road name and address range will appear in bottom left-hand corner.

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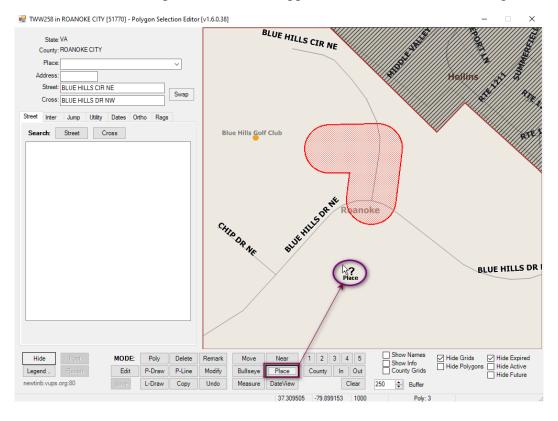




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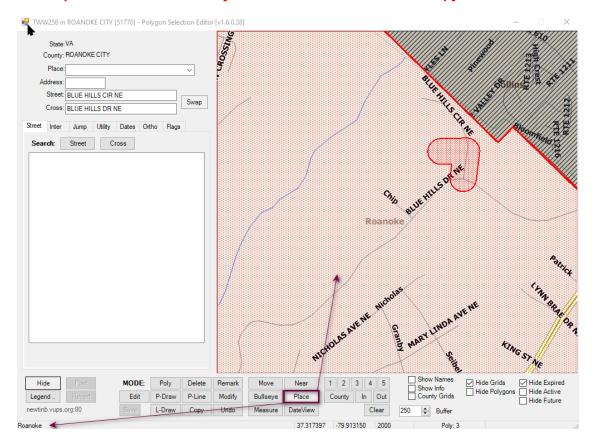
## **PLACE**

[Identify Place] – to identify place within the city/county. To identify the place, select the Place button, click in desired location on the map. The cursor will appear with the word Place and a question mark.



- 1. Place will be overlaid with red pattern with red border and Place name will display in bottom left corner of toolbar
- 2. To turn off Place, click on a different tool such as Move.

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#### DATEVIEW

[View Active Grid and Polygon Selections for Specified Date] – to view the mapping as it was or as is, on a specified date. Hint – be sure to be zoomed in a reasonable distance.

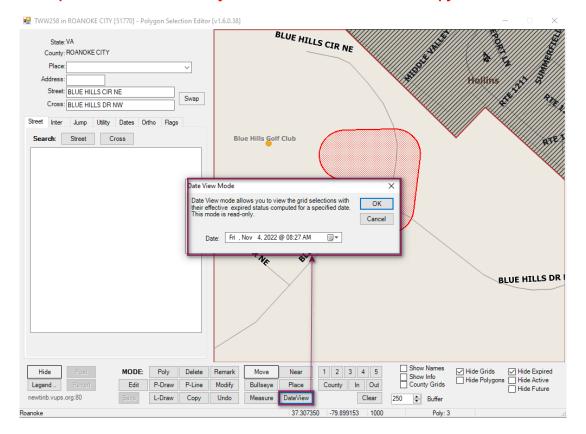
1. Click on Date View, a dynamic message box appears defaulting the current date/time. Select the drop down to alter the date.

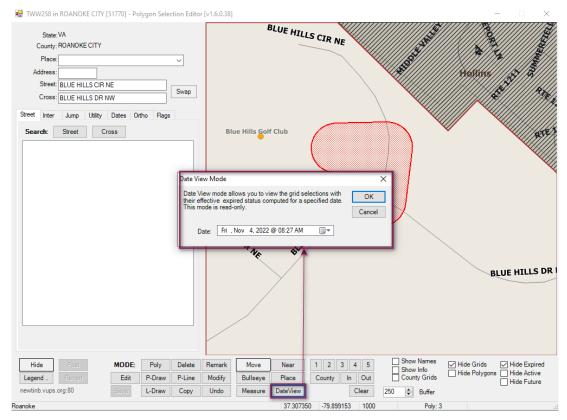
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# Polygon and Grid Maintenance Basic Training Guide

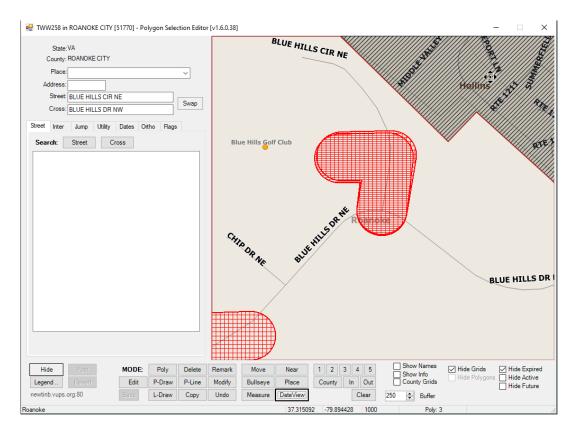
Printed copies are for reference only. Please refer to the electronic copy for the latest version.





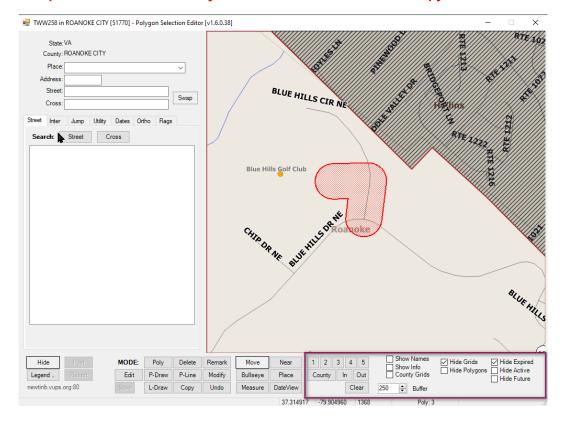
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1. Polygons will appear, corresponding to their status as of the date/time selected – see Legend if any questions on polygon status color/patterns.



2. To turn off Date View, click on a different tool such as Move.

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1: [Zoom Level 1] – to zoom map in/out to 1,000ft

2: [Zoom Level 2] – to zoom map in/out to 2,000ft

3: [Zoom Level 3]— to zoom map in/out to 3,000ft

4: [Zoom Level 4] – to zoom map in/out to 4,000ft

5: [Zoom Level 5] – to zoom map in/out to 5,000ft

**COUNTY:** [Zoom to Full County]

**IN:** [Zoom in at 1000ft increment]

**OUT:** [Zoom out at 1000ft increment]

**CLEAR:** [Clear Map Display of Drawn Elements (does not affect polygons)]

**BUFFER:** [Buffer Distance (In Feet) For Polygon Circle and Lines [Max1500]] – to adjust buffer size, use up or down selections, or type distance into the field, system default is 250ft but can be decreased to 150ft.

**SHOW NAMES:** Display Grid/Polygon Names [Zoom 5 and Lower]

**SHOW INFO:** [Display Grid/Polygon Effective/Expire Dates [Zoom 3 and Lower]]

**COUNTY GRIDS:** [Display County Grids]

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**HIDE GRIDS:** [Hide All Grids from Map Display]

**HIDE POLYGONS:** [Hide All Polygons from Map Display]

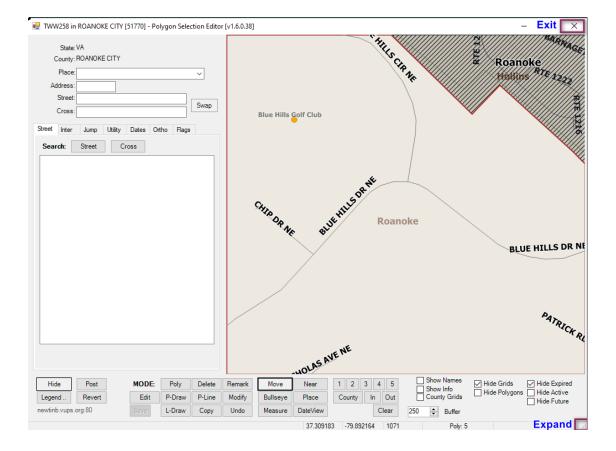
**HIDE EXPIRED:** [Hides Expired Grids/Polys from Map Display]

**HIDE ACTIVE:** [Hides Active Grids/Polys from Map Display]

**HIDE FUTURE:** [Hides Future Grids/Polys from Map Display]

1 87.308575 **2**-79.898695 1368 **3** Poly: 3 **4** 

- 1. Informational field (1) [information based on applicable tool selected displays here]
- 2. Displays Lat/long based on cursor placement (2)
- 3. Current zoom level (3)
- 4. Number of Polygons (Active and Expired) (4)



**EXIT:** click on the X to exit map

**EXPAND:** placing the cursor in this corner will change the cursor to a double arrow, allowing the page size to be enlarged

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