

Newtin Member Polygon and Grid Maintenance



Users Manual

Updated: May 23, 2019

Table of Contents



Introduction	3
Overview of Databases	4
Sending Shapefiles	5-7
Submitting Line Segments	8-9
Logging Into Newtin	10
Download Procedures	11
Troubleshooting	12
Database Menu	13
Member Polygons	14
Polygon Selection Editor Street	15-27 17
Intersection	
	18
Jump To	19
Dates/ Remarks	20
Orthos	21
Flags	22
Modes	23-27
Member Grids	28
Grid Selection Editor	29-42
Streets	31
Intersections	32
Dates	33-34
Jump To	35-34 35
Reports	
Bottom Toolbar	36-39
Bottom roolbar	40-42
Gridding	42.40
Posting	43-46
Posting	47-48
her County/Place Notifications	49-52

Introduction



The North Carolina 811, Inc.'s Member Services Department is pleased to provide our members with new Member Polygon and Grid Maintenance programs. We hope it will make your database process much easier and enjoyable.

Our Vision

To be recognized by our members as the most efficient, productive and innovative database operation.

Our Mission

To provide our members with unsurpassed database service by utilizing the most advanced technology available.

If you need assistance at any time, please contact the Member Services Department directly at 336-854-8597 and dial the extension of your Member Services Facilitator.

Member Services Manager
Lesley Brouillard
Extension 504
lesley@nc811.org

Member Services Facilitators

Dana Stamey Extension 521 dstamey@nc811.org

Jennifer Penland Extension 509 jpenland@nc811.org

DIRT Specialist

Chuck Hager Extension 528 chager@nc811.org Donna Jones Extension 501 donna@nc811.org

Marshall Dean Extension 506 marshall@nc811.org

Overview of the Databases



Polygons

If a utility only serves a portion of a county/city, polygons allow them to choose specific areas, which reduce over notification. Polygons are multisided geometric shapes representing a buffered area surrounding the service lines of the member utility. Member Polygon Maintenance is an executable program that is downloaded to a computer from the Internet. It allows the member to draw polygons on a digital map on a computer screen. The member draws the polygons to correspond with where their facilities lie.

Grids/Gridlets

If a utility only serves a portion of a county/city, the grids/gridlets allow them to choose specific areas, which reduce over notification. Member Grid Maintenance is an executable program that is downloaded to a computer from the Internet. It allows the member to choose grids/gridlets from a digital map on the computer screen. The member chooses the grids/gridlets that correspond to where their facilities lie. Grids are 1/4 minute square and gridlets are smaller grids inside the larger grids. There are 25 gridlets in a grid and they are 264 feet by 264 feet square.

County/Place (Optional)

The optional backup place database is simply a list of places found in each North Carolina county where you select each place that you have service in or near. It is used for those rare instances when North Carolina 811 is unable to determine the dig site due to insufficient/incorrect information from an excavator.

How to Send in Shapefiles



The Polygon Database type available for use in the North Carolina 811, Inc. (NC811) Newtin System is based on geographically placed polygons representing the general area of a utility member's facilities. Members using a Geographic Information System (GIS) to maintain a database of their facilities may submit a shapefile of polygons to NC811. Members may also submit a polyline shapefile and NC811 can process the file to create the polygons. When a location request is done, a dig site polygon is drawn on the map around the excavation area. If the dig site polygon intersects a member's polygon the member is notified. Because polygons can have many sides lying in any direction, they more accurately represent a member's service area than the older grid/gridlet database, which uses rectangles.

When submitting a polygon file, it should be in shapefile format and in the GCS_North_American_1983 (NAD 1983) projection. In most cases, the polygon will represent a buffer of the centerline and/or centroid of the member facility, but for members with very small service areas, it could just be one or more small polygons covering a particular area. There is no standard buffer size that should be used; it is at the member's discretion as to how large their buffer should be. The buffer should extend out from the facility centerline/centroid for as many feet as the member feels comfortable with to adequately protect their facilities based on the accuracy of current geographical information. The question the member may wish to ask is, "How many feet from my facilities do I want an excavator to be before I am notified?"

When sending a polyline file that represents the member's facility centerlines and/or centroids, the member must provide NC811 with the buffer size in feet (minimum of 30ft to a maximum of 2500ft) that is to be used on either side of the facility centerline/centroid. The buffer size must be provided in an email to your Member Services Facilitator or the Member Services Manager.

The polygon database was developed to more accurately notify members based on the closest representation of their facilities as possible by buffering the individual facility lines. The data contained in the shapefile should only include facility data for which the member wishes to be notified. Therefore, non-essential and overhead facility features should **not** be included so as to reduce unnecessary notification in areas not having underground member facilities. Large solid polygons should also be avoided - sending an entire

How to Send in Shapefiles



city or county polygon will cause over notification unless the member has facilities in every square foot of a city/county. These large solid polygons override the benefits of the individualized facility buffers.

NC811 has no knowledge of where owner/operator service area or facilities may lie and cannot determine whether or not a shapefile is accurate. Therefore, NC811 will **not** be able to inform the member about incorrect or missing data in a shapefile submission.

All facilities for which notification is desired, should be in one file. For example, if the member wants to be notified for main transmission lines, service lines, and meters, they should all be in **one** shapefile. In a GIS, NC811 recognizes that different feature types (lines, polygons, points) cannot always be merged into one file. In this case, the member must buffer the different feature type layers individually with the desired buffer size and merge the buffer (polygon) files into one file.

If the member has more than one member code for separate notification of different territories, each member code must have its own individual shapefile. The member should name the shapefile according to which member code each shapefile should be assigned.

After a member has created a polygon database, it should be updated periodically as the member's facility footprint changes to help insure accurate notification. The member may send an entire replacement file, only areas that should be added, or only areas that should be removed. The member must inform NC811 as to which of these three options should be used when loading the update file so that the correct database is maintained.

Shapefiles are loaded into the member's database based on the counties served by the member. When the member expands into additional counties, switches counties between member codes, or discontinues service in a county, it is **vitally important** that the member inform NC811 of any county changes. Otherwise, the shapefile may not be loaded into the correct counties served by the member, which could cause the member not to be notified in all service areas.

Submitting Polygon Shapefiles



Members wishing to submit shapefiles will be provided with a member folder on the secure NC811 FTP site where the shapefiles can be uploaded. After the member informs NC811 of their intent to submit a shapefile, NC811 will provide the FTP address and log in credentials to the person providing data for the member. Should the member have technical problems uploading the shapefile to the NC811 FTP site and the file is under 10 megabytes, it may be emailed to the Member Services Manager, Lesley Brouillard at lesley@nc811.org. However, if a compressed (zip) file is to be sent, the .zip extension must be renamed for the file(s) to pass through NC811's email security.

Please remember to include the following files when submitting your shapefiles as NC811 will be unable to process the shapefile without all four of these files:

Shape (.SHP)
Attributes (.DBF)
Index (.SHX)
Projection (.PRJ)

If the member does not provide the shapefile in the required NAD 1983 projection, NC811 may be able to re-project it when the .prj flle is included.

Submitting Line Segments



When submitting line segment files to North Carolina 811, Inc., you must provide the beginning and ending latitude and longitude coordinates for each segment of the line. If you have more than one member code, you must supply a separate file for each code. The following is the format that the ACSII text file must be in for the Newtin Shapefile Importer program to be able to read it.

The first line is the header line and must contain the word "Segment" followed by the "Member Code" and the "Buffer Size" you want to use in feet. These three character strings must be separated by a comma. Thus, if your member code were to be MBR01 and you wanted a 500 foot buffer around your line segments your header would look like this:

SEGMENT, MBR01, 500

After the header line the next line should have the word, "Begin" followed by a space and a unique name for the data group that follows. The unique name may contain only letters, numbers, spaces, and the characters "-" and "_". Names must be no more than 40 characters in length. Thus, if the unique name you choose is MBR01 Segment, the line after the header would look like this:

MBR01_SEGMENT

Following the "Begin" line, each segment is listed on a single line. Segments are specified by providing two latitude / longitude points, one each for the beginning and ending coordinates. The latitude / longitude points **must** be in decimal format and be calculated to the sixth decimal place. Each coordinate is separated by a comma. Thus a line segment may look like this:

;Comment for MBR01 line segment file

On the next page is an example of what a line segment text file looks like.

Submitting Line Segments



;File created 01/01/01 ;Example of a line segment file ;Member Utility using code MBR01 with a 500 foot buffer

SEGMENT, MBR01, 500

BEGIN MBR01_SEGMENTS 35.404895,-83.114101,35.405126,-83.113995 35.417174,-83.097329,35.417202,-83.097253 35.417202,-83.097253,35.417564,-83.097036 35.417564,-83.097036,35.417757,-83.096765 35.412180,-83.095261,35.412222,-83.095348 35.412568,-83.094633,35.412404,-83.094725 35.412404,-83.094725,35.412269,-83.094896 35.412269,-83.094896,35.412217,-83.095094 35.412217,-83.095094,35.412180,-83.095261 35.410686,-83.109910,35.410445,-83.110399 35.412346,-83.108822,35.412655,-83.109061 35.411853,-83.092305,35.411565,-83.092307 35.412180,-83.095261,35.412167,-83.095382 END

Once you have prepared the files you may send them to North Carolina 811, Inc. via email to lesley@nc811.org or upload them to the NC811 FTP server.

Logging into Newtin



In the "Address" field of your internet browser, type the following address: www.nc811.org and press Enter. Select 'Resources' from the menu bar, then select "Member Services".



Once on the Member Services page click on the Newtin Login button.



You will be asked to enter your user name and password to gain access to the Newtin web page.

Download Procedures



Both Maintenance programs are executable and must be downloaded to a specific folder on the computer.

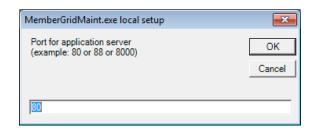
Download Procedures

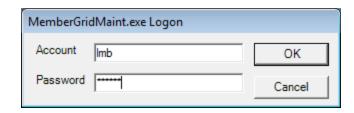
Right click on the program link (either Member Polygons or Member Grids) and select "Save Target As" or "Save Link As" and navigate to your C drive, click on the Users folder, click on the Public folder, and you will need to create a New folder called Newtin. To create this folder, right click in the white space of the Public folder and select New and then Folder. Before clicking Save you will need to add the file extension of ".exe" to the end of the file name, if it is not already there.

Once saved to C:\Users\Public\Newtin, you can right click on the executable file and select Send To: Desktop (create shortcut) to place a shortcut on your desktop.

The very first time you run the program it will ask you for the path to the application server. Refer to screenshots below. Enter (without the quotes) "http://newtina.ncocc.org/newtinweb" and click "OK". And the port (which is asked next) will be 80 and will already be filled in, so you can click "OK". Then enter your account and password provided to you by your assigned Member Services Facilitator.







Troubleshooting



If the program does not run please check the following:

- If you saved the program to a folder, that the folder is located in "C:\Users\Public\Newtin". Due to security restrictions in Windows, running the program from other locations may not work. Also be sure that you have read/write privileges to this folder.
- The saved file ends with ".exe". Again, for security reasons, Windows may strip the ".exe" from the name when doing "Save Target As" and you will need to add the ".exe" back in.
- The information you entered for the application server path and port are correct. These will be located in the folder where you saved the program in a file that ends with ".ini". This is a text file that you can view/edit by clicking on it or you can just delete the ".ini" file and start the program again and re-enter the information as indicated in the previous steps.
- The time zone and time are set correctly. If the time zone or time is incorrect you may not be able to run the software. Also, be sure that your date/time format is set to the Windows default of "mm/dd/yy" and "hh:mm:ss tt".
- The connection to the internet is not blocked. Some users are located behind firewalls that limit connectivity to the internet. The firewall can do this by blocking connections to certain locations/ports or by filtering data content. In either case you may need to change firewall/security settings on the local computer or at the local network firewall to allow the program to communicate.
- The account and password are correct. Account names are not case sensitive but passwords are case sensitive.

Database Menu



Newtin - NCOCC A - Database Page				
Tickets	Maintenance	Reports	System	
.Net Setup	Contact Maint Request Member Grids Member Polygons Member County/Place Notification	<u>Notification</u>	Log Out	
	Message Center My Messages			

Link Descriptions:

Tickets

• .Net Setup: contains instructions for downloading executable programs.

Maintenance

- **Contact Maint Request**: opens the member's contact information and allows the member to request changes to be made.
- **Member Grids**: executable program that has to be downloaded and allows the member to select grids/gridlets to identify where their facilities lie.
- **Member Polygons**: executable program that has to be download and allows the member to manually draw polygons or verify shapefiles that have been loaded.
- **Member County/Place Notification**: a webpage that allows the member to view/ select or edit places for their optional backup place database.

Reports

• Notifications: provides the member with a text listing of their database.

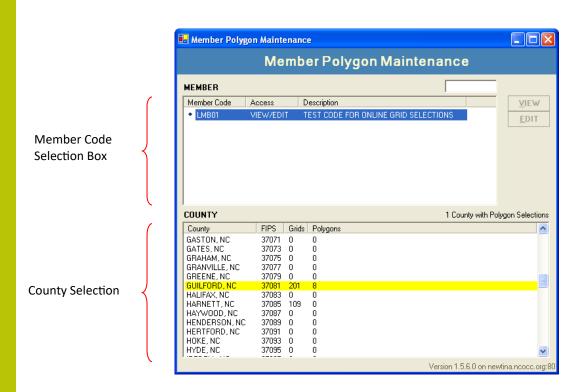
System

• Log Out: allows the member to log out of the database page completely.

Member Polygons



Member Polygon Maintenance is used to verify polygons that have been uploaded from a shapefile or to manually draw polygons indicating where your facilities lie.



Member Polygon Maintenance allows the user to either select the member code, if they have more than one, that they would like to work with in the top box or manually input the member code in the box at the top right corner of the member selection box.

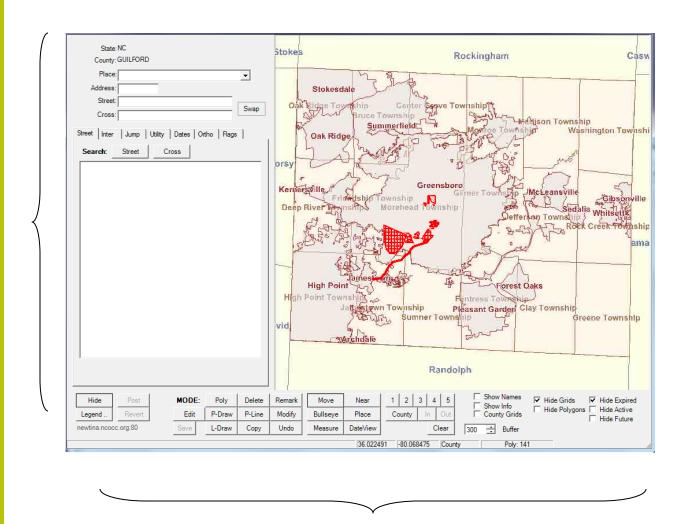
The bottom box is the County Selection box, which displays all 100 counties within North Carolina. The counties that are currently within the database for the member code selected will be highlighted in yellow. Once you have selected the county you wish to work in, click on the Edit button.

View: this will give a read-only version of the map - no changes can be made

Edit: provides full access to the map - allows the user to view and make changes

Polygon Selection Editor

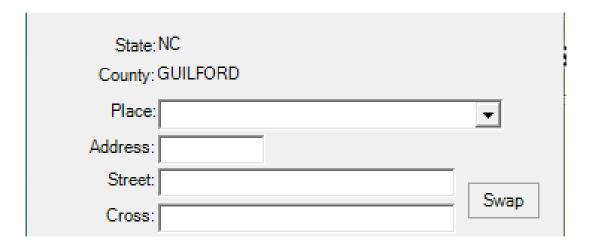




Polygon Selection Editor Toolbars

Once you have selected the member and county and clicked on the Edit button the above "Polygon Selection Editor" page will be displayed. The Polygon Selection Editor allows the member to see an overview of their polygon selections in the county that they have selected. The member can perform many different functions from this page. Each individual section of the Polygon Selection Editor Toolbar will be discussed in detail on the following pages.





The Polygon Selection Editor Toolbar has many features in the form of tabs, buttons, and check boxes. In the space provided in the upper left hand corner of the mapping interface information may be entered in the provided fields, which may be used to find and display a specific location on the map.

Place: Enter the place that you want to work with or click the arrow for a drop down list of places within the county.

Address: This is where you will enter the numeric number for the house or business.

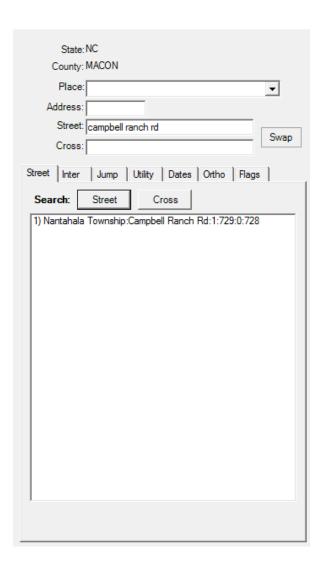
Street: Enter the street name that you wish to find.

Cross: Enter the name of the nearest intersecting street to the street name entered in the Street field.

Swap: This button will move the information from the street field to the cross street field and move the information from the cross street field to the street field.



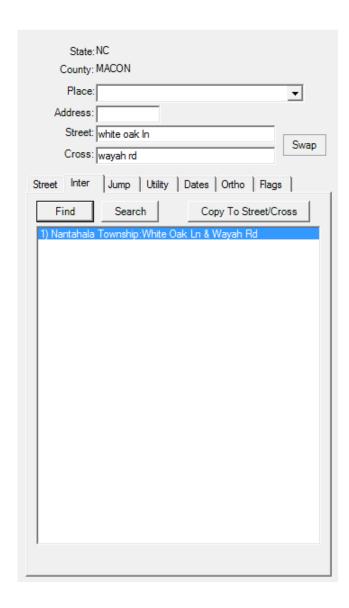
Street Tab



This tab allows you to search for the street name and/or the cross street name. To search for the name of the Street listed in the Street Field click on the Street button. To search for the name of the Cross street listed in the Cross field click on the Cross button. If more than one match is found a list of possible names and address ranges will be displayed. Simply click on the street and/or address range that you wish to pull up and the street will be highlighted on the map in red.



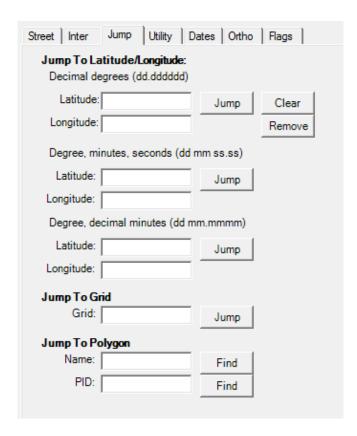
Intersection Tab



This tab allows you to find or search for the intersecting streets that you have listed in the Street and Cross Fields. There is also a button that lets you copy the intersecting streets to the street and cross street fields.



Jump Tab



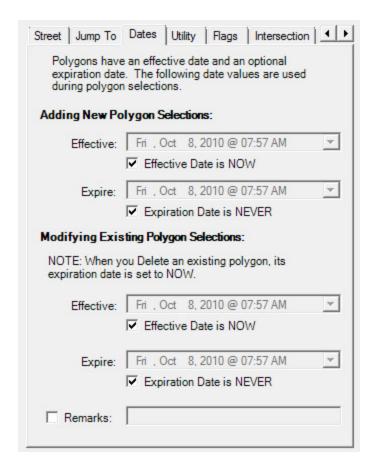
Jump To Latitude/Longitude: This allows you to enter the latitude and longitude coordinates in decimal degrees; degree, minutes, seconds; or degree, decimal minutes. Click the Jump button to go to those specific coordinates, which will be indicated by a red plus (+) sign. The Clear button will remove the red plus (+) sign from the map. The Remove button will remove the latitude and longitude coordinates that you had in the latitude and longitude fields.

Jump To Grid: This allows you to enter a specific grid number and click the Jump To button to go to that specific grid, which will be indicated by a red plus (+) sign.

Jump To Polygon: This allows you to enter the name of a polygon or the PID (Polygon ID) and click on the Find button to go to that specific polygon. If you have not named any polygons you will not be able to use the Jump To Polygon function.



Dates / Remarks Tab



By default any new or modified polygon selections are set with the effective date of NOW and the expiration date of NEVER.

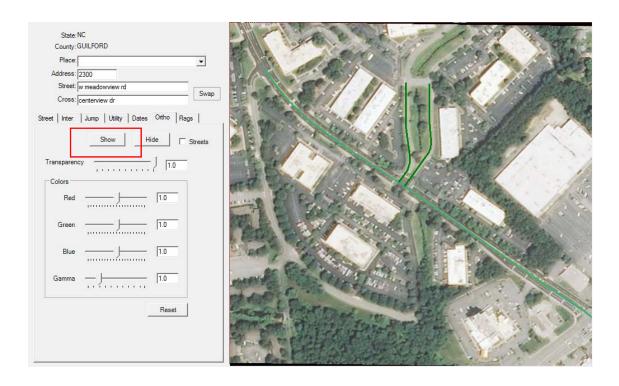
The member can change the effective date of the new polygons by unchecking the box beside of Effective Date is NOW and selecting a new date from the drop down calendar. The expiration date can be changed by unchecking the box beside of Expiration Date is NEVER and selecting a new date from the drop down calendar.

The member can also change the effective and expiration dates when modifying existing grid selections the same way.

Polygon Selection Editor Toolbar



Orthos Tab

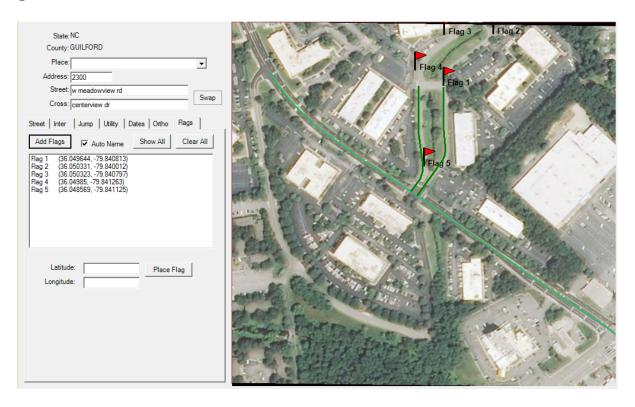


This tab allows you to see the imagery of an area. First you will need to zoom to the area that you wish to see and from the Orthos tab, click on the Show button and the imagery will be displayed along with the roads. You can also label the roads by checking the Street box shown above by the Hide button.

You can change the transparency of the Orthos by sliding the transparency bar to the left or right to reduce or enhance the transparency. In addition, you can reduce or enhance the colors within the map by sliding the bar beside of each corresponding color.



Flags Tab

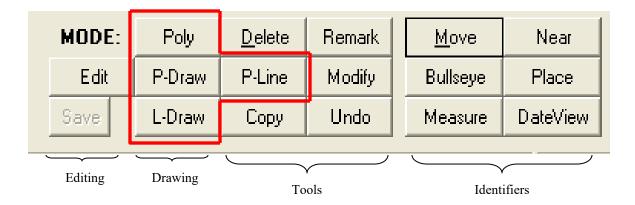


This tab allows you to place flags on the map to show your route. It provides a list of the latitude and longitude points for each flag placed on the map. The flags can be most helpful on cross country lines to help determine where you need to place polygons.

Polygon Selection Editor Toolbar



Polygon Maintenance provides a wide range of tools and identifiers called "Modes"



There are four modes that you can use to draw polygons:

Poly - is a three phase tool designed to draw a circle, line, or polygon.

- 1. Select "**Poly**" then double click in the map without moving cursor to create a polygon covering a radius of at least 300ft.
- 2. Select "**Poly**" then click once on the map, drag the cursor, and double click to create a linear polygon with a minimum 250ft buffer added to the exterior sides of the line drawn.
- 3. Select "**Poly**" then click once on the map, drag the cursor, click and drag the mouse in another direction and double click to create a polygon covering the area drawn.

Note: The Polygon Maintenance system is set to a 300ft buffer size by default. The member can change the size of the buffer manually to anything in between 50ft and 1500ft but always remember to create enough of a buffer that ensures all facilities are covered.

- **P-Draw** is a freehand drawing tool giving complete control over polygonal boundaries to manage service areas.
 - * Select "P-Draw" then click and drag the mouse, a red line tracing the path drawn will display. As soon as the click is released, the system will convert your drawing into a polygon.

Polygon Selection Editor Toolbar



L-Draw - is a freehand line drawing tool providing control over the path a polygon will cover.

* Select "L-Draw" then left click and drag the mouse, a red line tracing the path drawn will display. As soon as the click is released, the system will convert your drawing into a polygon.

P-Line - is a tool that allows you to add a new polygon with buffered lines.

* Select "P-Line" then left click and hold at the starting point of your line, then drag the mouse along the line that you wish to create. If you have a curve in the road you can click once on the beginning of the curve and now a red line will be shown tracing the area that you have covered. At the end point of your line you will need to double click and the system will convert the drawing into a polygon.

Edit - this button enables selected polygons to be modified or deleted.

- * In "Edit" individual vertices, or vertex control points can be manipulated by left clicking and holding in the center of the vertex point and dragging the mouse to the desired location. Once left click is released the polygon redraws with new boundaries.
- * Vertex points can be added by holding the "Ctrl" key and clicking along the border of the selected polygon.
- * Vertex points can be removed by holding the "Ctrl" key and clicking in the center of the vertex point to be deleted.
- * **Note**: Removing vertex points will cause the polygon to create a straight line between the next two nearest vertices.

Save - this button stores any additions, deletions, and modifications made to the polygons.

* "Save" provides an option to name the polygon, view and set effective and

expiration dates, and add remarks.



Polygon Selection Editor Toolbar



- **Delete** is a tool that allows entire polygons to be marked for deletion from a notification area in the database. Once the polygon has been deleted it will turn grey, but note, the actual deletion will not be complete until the changes have been posted to the server.
- **Copy** this button allows attribute information from one polygon to be copied to another polygon. Attribute information is the name of the polygon and the effective and expiration dates.
- **Remark** this button allows the polygon remarks to be modified or updated.
- **Modify** this button allows attributes, or properties, such as the name and effective and expiration dates of selected polygons to be changed. There are two ways that you can modify the attributes of a polygon.
 - 1. Click the "Copy" button and click on a polygon, which will copy the effective and expiration dates. The system will automatically put you in the "Modify" mode.
 - 2. Manually set the effective and expiration dates on the "Dates" tab and then click the "Modify" button to go into modify mode and when you click on any polygon it will modify the effective and expiration dates.
- Undo this button removes the last change made in the polygon maintenance screen. "Undo" does not work on an edit that has already been posted to the server. Once this button has been clicked you can now click on the last polygon on the screen and it will delete or undo the polygon you drew.
- **Move**: This allows the user to pan in the map and also to zoom in on the map by clicking and dragging a box in the area you wish to zoom in to.
- **Bullseye**: This button allows the user to draw a bullseye at specific points, such as, at an intersection. It will display in 100ft increments with 500ft and 1,000ft being highlighted in red.

Polygon Selection Editor Toolbar



Measure: This button allows the user to measure distances. Simply click on the button and the cursor will display a ruler. Click once to begin measuring and twice to end the measure. The distance will be displayed in the bottom left hand corner as you measure.

Near: Use this button to identify the nearest street to where you have clicked on the map.

Place: This button allows the user to identify places. Once you have clicked on the Place button simply click on any part of the map and the boundaries of the place will display in red and the name of the place will be displayed in the bottom left hand corner of the map screen.

DateView: This allows the user to view the active grid and polygon selections with their effective expired status computed for a specified date. This mode is read only.

Zoom: The user can zoom in on the map by clicking on the buttons 1-5. The County button allows the user to display the entire county view. The In and Out buttons will not become available to you until after you have clicked on any of the numbers 1-5. You may also zoom by clicking and dragging a box in the area of the map that you wish to zoom in on.

Clear: This button will clear the map display of all drawn elements.

Polygon Selection Editor Toolbar



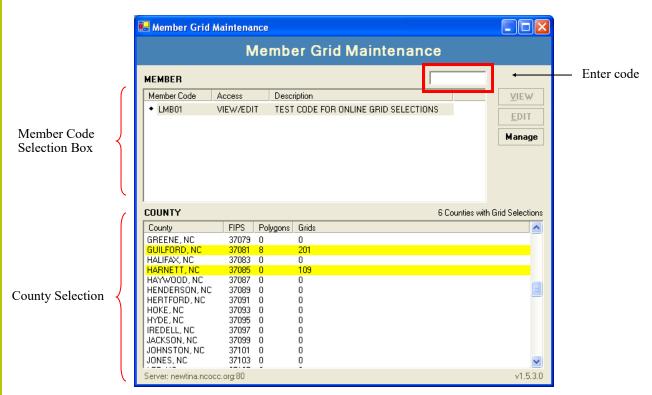
The user has several check boxes beside the zoom features that will display the polygon names, display effective and expiration dates, hide or show grids and gridlets, and hide or show county grids that were not selected as well as hiding the polygon information.

Show Names	County Grids
Show Info	✓ <u>H</u> ide Grids
Hide <u>P</u> olygon	✓ <u>H</u> ide Expired
250 Buffer	

Under these checkboxes is where the drop down box is to change the default buffer size. As a reminder, the default buffer is 300ft, but the member can change the size of the buffer to any where in between 50ft and 1500ft. It is best to change the buffer size before drawing your buffer.

Member Grids





Member Grid Maintenance allows the user to either select the member code, if they have more than one, that they would like to work with in the top box or manually input the member code in the box at the top right corner of the member selection box.

The bottom box is the County Selection box, which displays all 100 counties within North Carolina. The counties that are currently within the database for the member code selected will be highlighted in yellow. Once you have selected the county you wish to work in, click on the Edit button.

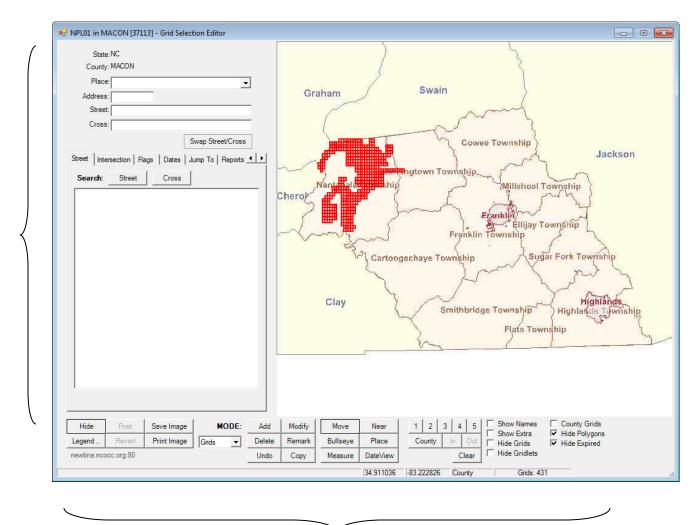
View: this will give a read-only version of the map - no changes can be made

Edit: provides full access to the map - allows the user to view and make changes

Manage: allows the member to import/export their county grid file(s)

Grid Selection Editor

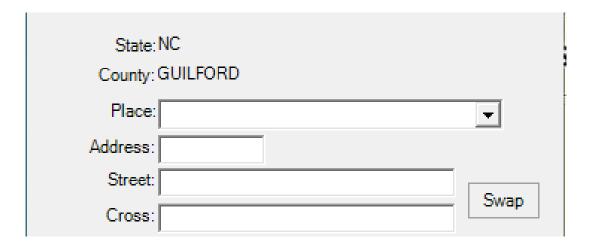




Grid Selection Editor Toolbars

Once you have selected the member and county and clicked on the Edit button the above "Grid Selection Editor" page will be displayed. The Grid Selection Editor allows the member to see an overview of their grid selections in the county that they selected. The member can perform many different functions from this page. Individual sections of the Grid Selection Editor Toolbar will be discussed in detail on the following pages.





The Grid Selection Editor Toolbar has many features in the form of tabs, buttons, and check boxes. In the space provided in the upper left hand corner of the mapping interface information may be entered in the provided fields, which may be used to find and display a specific location on the map.

Place: Enter the place that you want to work with or click the arrow for a drop down list of places within the county.

Address: This is where you will enter the numeric number for the house or business.

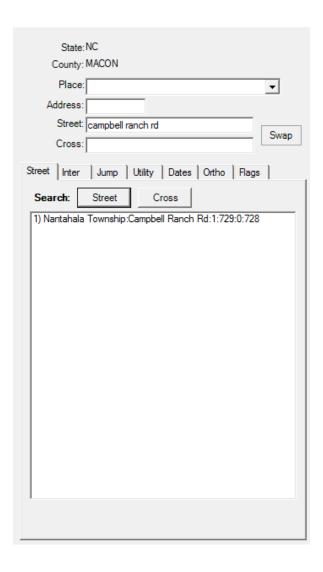
Street: Enter the street name that you wish to find.

Cross: Enter the name of the nearest intersecting street to the street name entered in the Street field.

Swap: This button will move the information from the street field to the cross street field and move the information from the cross street field to the street field.



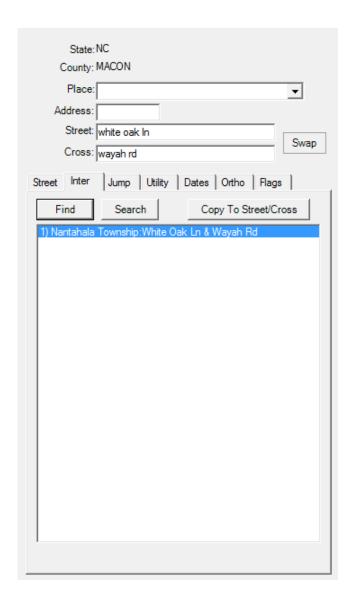
Street Tab



This tab allows you to search for the street name and/or the cross street name. To search for the name of the Street listed in the Street Field click on the Street button. To search for the name of the Cross street listed in the Cross field click on the Cross button. If more than one match is found a list of possible names and address ranges will be displayed. Simply click on the street and/or address range that you wish to pull up and the street will be highlighted on the map in red.



Intersection Tab



This tab allows you to find or search for the intersecting streets that you have listed in the Street and Cross Fields. There is also a button that lets you copy the intersecting streets to the street and cross street fields.



Dates Tab



By default any new or modified grid selections are set with the effective date of NOW and the expiration date of NEVER.

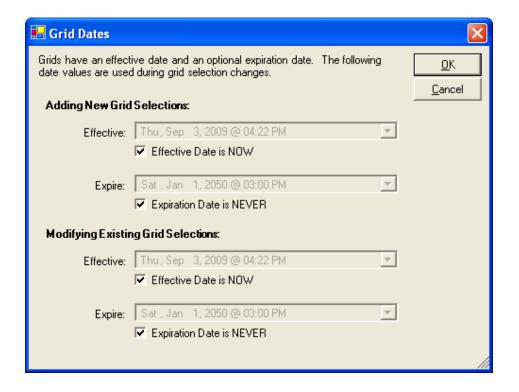
The member can change the effective date and the expiration date of new grids or gridlets that are being added in or they can modify existing grids or gridlets that they already have in place.

This tool can be helpful if your company will be taking over new territory on a specific date. Once you receive the information on where the new territory is you may go ahead and add it into your database and set the effective date to the date of your choosing and the system will automatically make those grids/gridlets active on that date. You can even specify a time when you want them to go active.

Modifying the existing grids/gridlets is helpful when you will be retiring service from a particular territory on a set date. You can go ahead and set this up in the system and the grids/gridlets will automatically be made inactive on the date at the time specified.



Modify Date / Time Values



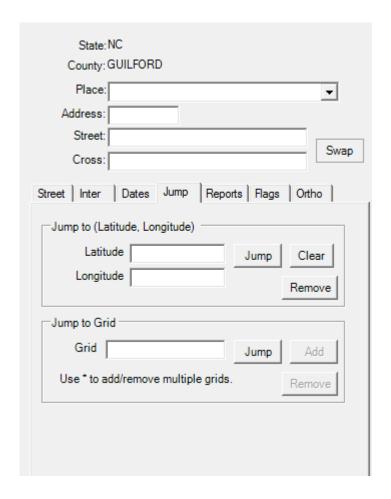
The member can change the effective date by unchecking the box beside of Effective Date is NOW and selecting a new date from the drop down calendar. The expiration date can be changed by unchecking the box beside of Expiration Date is NEVER and selecting a new date from the drop down calendar.

The time that the change happens can also be chosen by clicking in the Effective or Expire box and changing the hour and minutes, as well as whether the change is AM or PM.

The member can also change the effective and expiration dates when modifying existing polygon selections the same way.



Jump To Tab

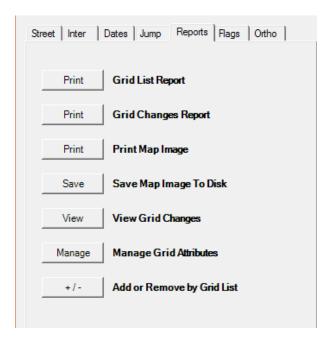


This tab allows you to enter latitude and longitude coordinates and click the Jump To button to go to those specific coordinates which will be indicated by a red plus (+) sign. The **Clear** button will remove the red plus (+) sign from the map. The **Remove** button will remove the latitude and longitude coordinates that you had in the latitude and longitude fields.

From this tab you can also Jump To a specific grid number which will be indicated by a red plus (+) sign. If you need to add or remove the specified grid from your database simply click the Add or Remove button and then Post the changes to the server.



Reports Tab



Grid List Report: This allows the user to print a list of all grid/gridlet numbers and include the effective/expire dates, times and the expired grids. The list can be sorted by Grid Name, Effective Date, or Expires Date.

Grid Changes Report: This allows the member to print all grid changes that were completed.

Print Map Image: This allows the member to print the current map image that is displayed.

Save Map Image to Disk: This allows the member to save the current map image to a disk as a JPEG file.

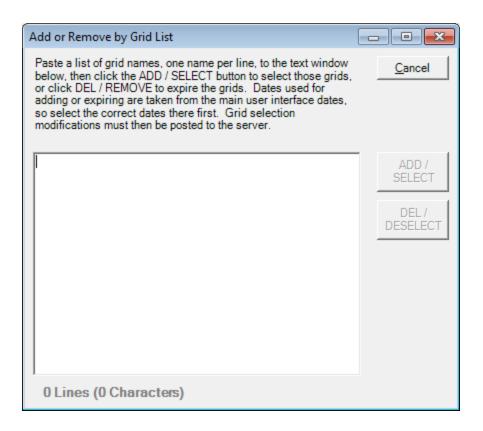
View Grid Changes: This allows the member to view all unchanged grid changes which includes new and modified grids.

Manage Grid Attributes: This allows the member to select and modify their grids by effective and expiration date.



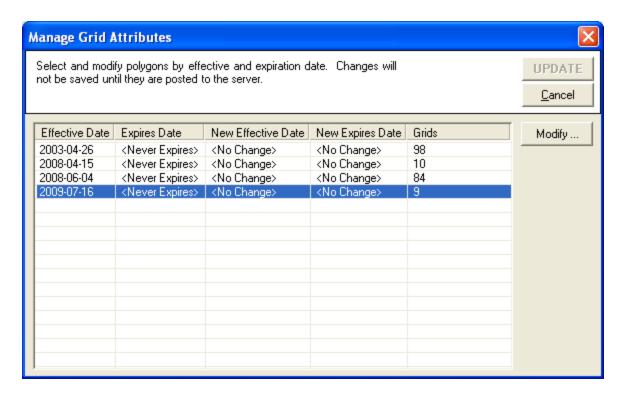
Reports Tab

Add or Remove by Grid List: This allows the member to paste a list of grid names and then add or delete those grids. The member must be careful to first select the correct dates from the Dates tab using the drop down calendar for Adding New Grid Selections or Modifying Existing Grid Selections before pasting the list of grid numbers to the window shown below. Once this process is complete you will need to post your changes to the server. (Instructions for posting can be found starting on page 47.)



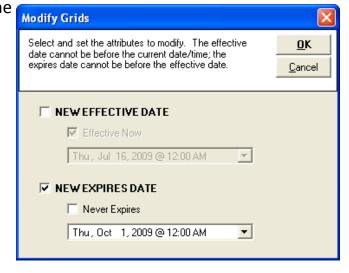


Managing Grid Attributes



Select the line that contains the grids that you wish to change or modify the date for and then click on the Modify button. Check the box beside of which date you want to modify as shown in the box below. You will need to uncheck the Never Expires box and then

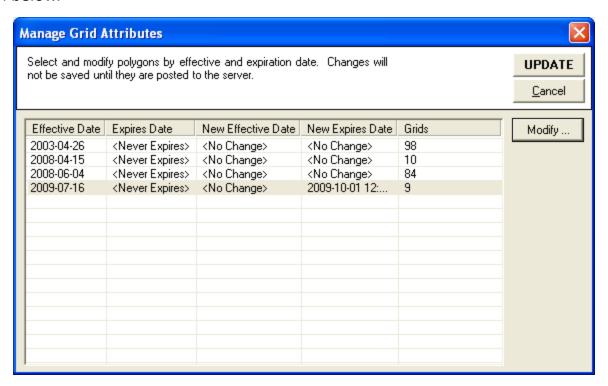
select the new date and time from the drop down calendar box. Then click OK.



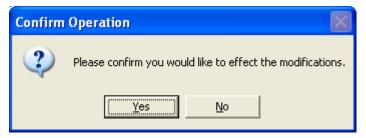
Grid Selection Editor Toolbar



Once you have clicked OK, you will be directed back to the original manage grid attributes box and will be able to see the changes that you made in the New Expires Date column as shown below.



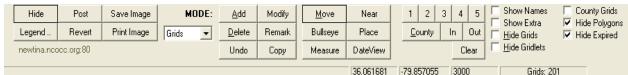
Click the Update button and click Yes when the Confirm Operation dialog box opens.



You will then see a Changes Made dialog box stating the changes. When done with all changes, click on Post to ensure the changes are posted to the live server.







Hide: This allows the user to toggle the panel showing all tabs and street information on and off in order to show a bigger map.

Legend: This button will display a color legend for the map grids. For example, a new grid with an effective date of NOW will be highlighted by a blue polka dotted square or an expired grid will be highlighted by a grey polka dotted square.

Post: This allows the user to post any grid changes to the server that they have made. The Current Grid Changes box will display a list of New Grid Selections and/or a list of Modified Grid Selections and prompt the user to Accept or Cancel the changes.

Revert: This allows the user to revert, or undo, all changes made during the session. You will be prompted by a Discard Changes dialog box to first click OK or Cancel your changes.

Save Image: This allows the user to save the current map image to disk as a JPEG file.

Print Image: This allows the user to print the current map image.

Mode: There is a drop down box which allows the user to choose between grids and gridlets.

Add: This button allows the user to add new grids/gridlets to selection.

Delete: This button allows the user to delete grids/gridlets from selection.

Undo: This button allows the user to undo, or revert changes, to modified grids/gridlets.

Modify: This button allows the user to modify/update grid selections.



Remark: This allows the user to modify/update the grid/gridlet remarks only.

Copy: This allows the user to copy grid/gridlet properties to default.

Move: This allows the user to pan in the map, and to zoom in on the map by clicking and dragging a box around the area you wish to zoom in on.

Bullseye: This button allows the user to draw a bullseye at specific points, such as, at an intersection. It will display in 100 foot increments with 500 ft and 1,000 ft being highlighted in red.

Measure: This button allows the user to measure distances. Simply click on the button and the cursor will display a ruler. Click once to begin measuring and then click twice to end the measure. The distance will be displayed in the bottom left hand corner as you measure.

Near: Use this button to identify the nearest street to where you have clicked on the map.

Place: This button allows the user to identify places. Once you have clicked on the Place button simply click on any part of the map and the boundaries of the place will display in red and the name of the place will be displayed in the bottom left hand corner of the map screen.

DateView: This allows the user to view the grid selections with their effective expired status computed for a specified date. This mode is read-only.

Zoom: The user can zoom in on the map by clicking on the buttons 1-5. The County button allows the user to display the entire county view. The In and Out buttons will not become available to you until after you have clicked on any of the numbers 1-5. You may also zoom by clicking and dragging a box in the area of the map that you wish to zoom in on.

Clear: This button will clear the map display of all drawn elements.

Grid Selection Editor Toolbar



The user has several check boxes beside the zoom features that will display the grid names, display grid effective/expiration dates, hide/show grids and gridlets, and hide/show county grids that were not selected as well as hiding the polygon information and the expired grids/gridlets.

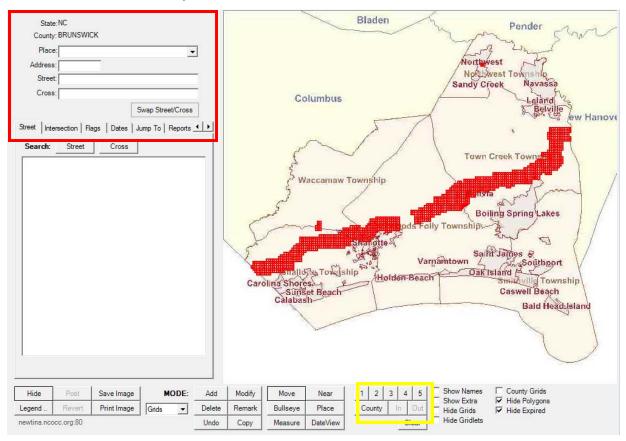
Show Names	County Grids
Show Extra	✓ Hide Polygons
☐ <u>H</u> ide Grids	✓ Hide Expired
<u>H</u> ide Gridlets	

Gridding



This section will show in detail how to grid / gridlet your service territory. There are several different ways that a member can proceed from this point.

From the County Overview, you have three different ways that you can zoom to a particular area of the map.



The quickest and easiest way to zoom in is to pick an area on the map, then left click and drag a box around the area.

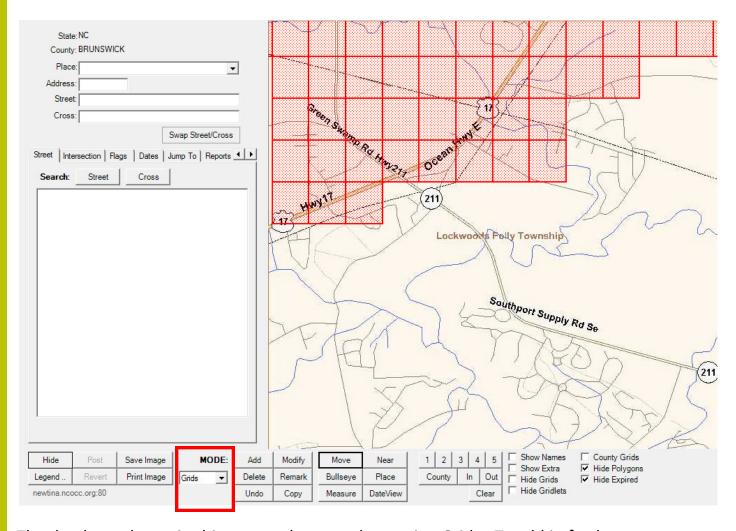
If you know the street name that you are looking for then you can enter the data into the address / street field that is indicated by the red box in the picture above. For complete instructions on this toolbar refer to pages 30-31.

To zoom in on the map to no particular area, you can use the zoom layer buttons 1-5 that are indicated by the yellow box. The County button will zoom you back out to the County Overview.

Gridding



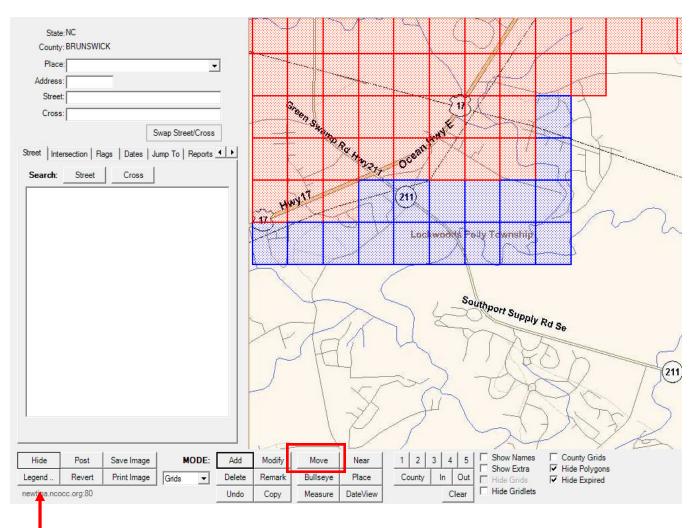
Once you have zoomed into the specific area where you wish to add to or edit your database, you will need to select what mode you want to use. In the **MODE** section you have the option to select grids or gridlets from the drop down box.

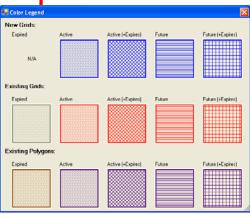


The database shown in this screen shot was done using Grids. To add in further areas to include new territory, click on the **Add** button and then left click on the map where you would like to add in a new grid. If you need to add several grids at one time, then you can left click and drag to add more than one grid.

Gridding



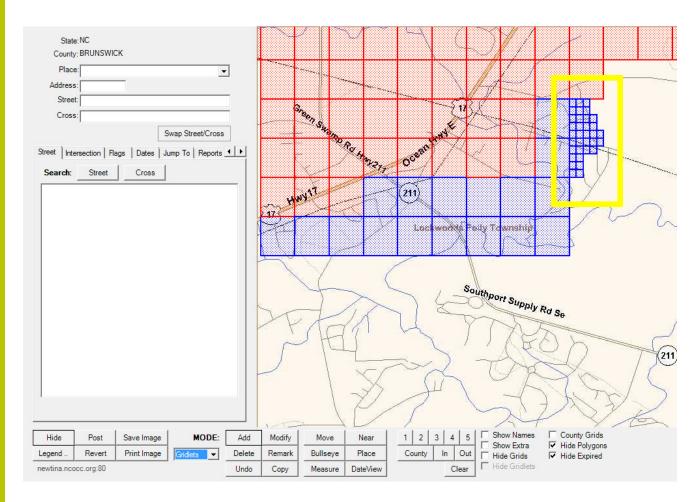




Notice that the new grids that have been added in appear in **blue** and the existing grids appear in **red**. Remember, if you are uncertain of whether grids are active or not, you can click on the Legend button for a display of all colors and patterns. If you need to move or pan in the map at this point, you will need to click on the **Move** button and then left click on the map in the direction that you wish to pan.

Gridding





If you need to add a little bit more area to your territory, but feel that a grid would provide too many notifications for the area, you can switch your **MODE** over to gridlets and continue to add coverage to your territory.

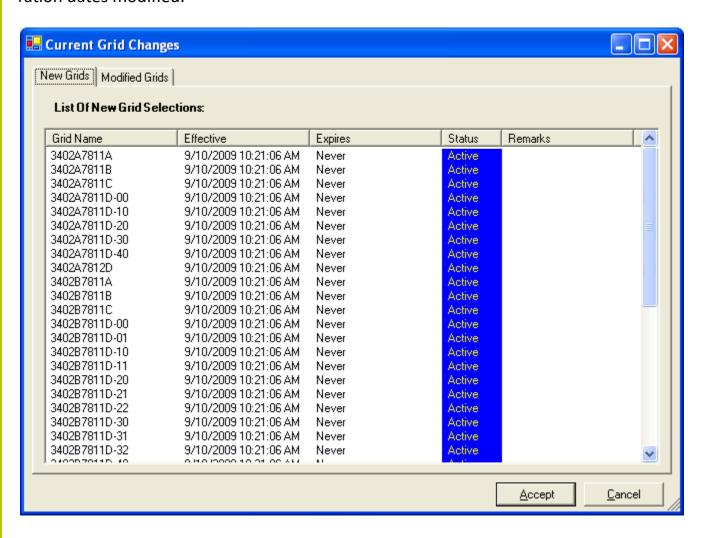
In the event you added more grids / gridlets than you needed, simply click on the **Delete** button and then left click or left click and drag the grids / gridlets that you wish to remove.

You will need to post your changes in order for them to show on the live server. To do this, click on the **Post** button, which is located in the bottom left corner of the **Grid Selection Editor** window.

Posting Grids



The **Current Grid Changes** window will appear. This window contains two tabs. The first tab is for **New Grids** and will list all of the grids and/or gridlets that you selected. In addition, the following columns are displayed: the effective date and time, expires, status, and remarks. The second tab is for **Modified Grids**. It has the same columns as the New Grids tab and provides a list of grids and/or gridlets that have had their effective or expiration dates modified.

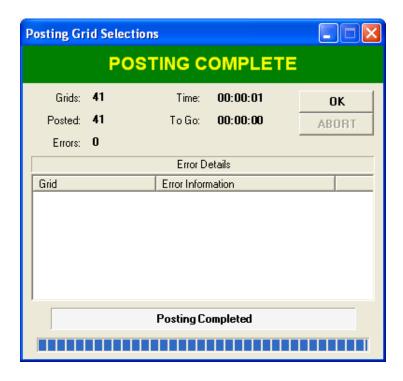


You have one last chance to Accept or Cancel your grid changes. If you accept the changes that you have made, you will see the **Posting Grid Selections** box. If you select Cancel, you will be directed back to the mapping window of the **Grid Selection Editor** box and you will be able to continue making selections or modifications.

Posting Grids

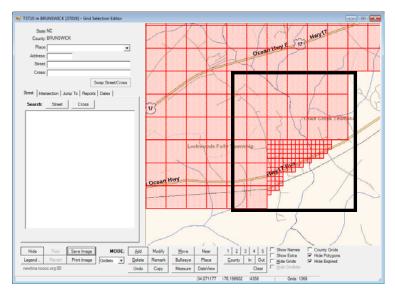


If you clicked on Accept the following box will appear:



The **Posting Grid Selections** window shows the number of grids to post, the time, the number of actual grids posted, how many seconds, minutes, or hours left to post, and the number of errors it found. When the posting has completed, click OK to close the Posting Grid Selections window. The new grids / gridlets that you entered will now be red in col-

or.



Member County/Place Notification



North Carolina 811, Inc. offers a place database to be used as a backup database in combination with the members grids or polygons. Almost 99.4% of the locate requests that the Center sends out each month have a dig site polygon which identifies the location of the dig site or work area. In the small percentage of locate tickets that are sent out without any dig site polygon to identify the work area, the place database is used to determined which members to send the locate ticket.

Each member is provided a place report that lists the place names that the Newtin System will accept in each county that the member has facilities in. The member can elect to identify on the place report which places they would like to use as a backup database or the member can select the places online using the Member County/Place Maintenance link on the Newtin Database page.

This online feature lets the member make changes to their place database at any time of the year simply by adding or deleting the place names in their database.

To add a place to your database:

Select the Member County/Place Notification link and then enter your member code and click the Submit button.



Once submitted the screen will display two sections: one for the Member County Notifications and one for the Member Place Notifications. If you have already selected any grids or polygons then the Member County Notifications section will display what counties you currently have a database in. There should be a green "X" under the "Level" column. The County Notifications should always be Level. The Member Place Notifications should indicate "No Place Notifications to Display", because you haven't input any place names into your database yet as shown on the screen shot on the following page.

Member County/Place Notification





To begin selecting place names, you first have to select the County that you wish to add places to by clicking the down arrow in the County box under the caption "Member Place Notifications for XXX01".



Next click the Get Places button and then you will have a place drop down list so that you can choose the place that you wish to add.



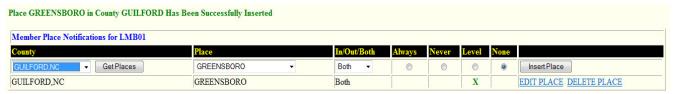
After selecting your place name, select the radio button for Level and then click the Insert Place button.



Note: Always means you always wish to be notified when this place is on a ticket, Level means you wish to be notified on this ticket only if there are no grids or polygons on the ticket.

Member County/Place Notification



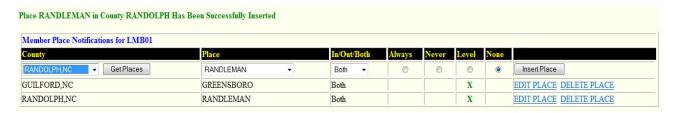


Once the place has been inserted, you will see confirmation of success as shown above. To continue adding places within this same county, simply select the next place name from the place drop down list, select the Level radio button, and click the Insert Place button.

If you need to select places from a different county, click the Get County button, as shown, then select your new county, click the Get Places button, then select the place name from the drop down list, select the Level radio button, and click Insert Place button.



You will be given a confirmation screen like below showing that your new place has been inserted successfully.



Since places have been added to a new county that previously had no database, the Newtin System will automatically create a County Notification Entry for you, as shown below.

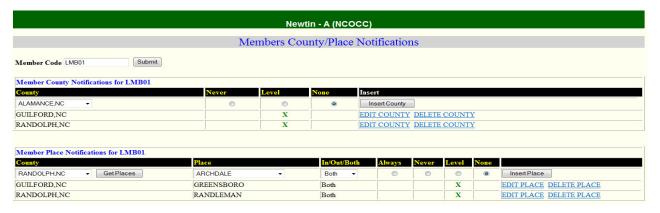


Member County/Place Notification

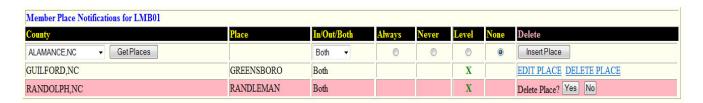


To delete a place from your place database, follow this procedure:

- Select the Member County/Place Notification link
- Enter your member code and click Submit to see your complete place listing as shown below.



- In the Member Place Notification section (bottom section) click on the Delete Place link beside of the place name that you wish to delete.
- The system will highlight the entire line in pink and provide a Yes or No button and ask
 you to confirm that you would like to delete this place from your database.



- A confirmation of successful deletion will display.
- Repeat these steps to delete any additional places from your database.

