

User Guide  
For  
**Survey Control**

Revised November 20, 2014



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## Welcome to Survey Control

The Survey Control Application is an interactive map to find information about Baltimore County geodetic benchmarks. The site enables users to search for locations by an address, street intersection, coordinate or by exact survey control, as well as view aerial photography, measure distances, and print maps, similar to the MyNeighborhood Application. Survey Control is built on the same framework as MyNeighborhood for a familiar consistent Baltimore County map service experience.

### Powered by Microsoft Silverlight

Survey Control requires a browser plugin called Silverlight, a product of Microsoft. Most modern browsers bundle Silverlight in, however a download may be required on some older browsers. See System Requirements for details.

### User Terms and Conditions Summary

As Survey Control opens, users will see a screen with the warranty and disclaimer regarding the data used in the application. After reading this information, users must click in the box next to “I read and agree with the full User Terms, Conditions and Disclaimer” and click on “Enter” to access the application.

**Baltimore County Maryland**

## Welcome to Survey Control

### User Terms and Conditions Summary

Baltimore County adopted the Maryland Coordinate System, North America Datum of 1983 (1991) and the North America Datum of 1988 as it's standard horizontal and vertical datum starting July 1, 1999. Prior to this date Baltimore County Metropolitan District grid system (horizontal) and Baltimore County Datum (vertical) were used for thousand of plats and surveys throughout Baltimore County.

Both systems of survey controls are being made available, from this site, to assist users with all surveys performed in Baltimore County. Users of this data must check the County code, policy and with appropriate agencies to verify the correct datum(s) to be used on current and future projects requiring Baltimore County approvals.

### Warranty & Disclaimer

The user or recipient of this data understands and acknowledges this data may be inaccurate or contain errors or omissions and the user or recipient assumes full responsibility for any risks or damages resulting from, arising from or in connection with any use of or reliance upon data displayed herein. Baltimore County, Maryland does not warrant the accuracy or reliability of the data displayed herein. Baltimore County, Maryland disclaims all warranties with regard to data displayed herein, including but not limited to, all warranties, express or implied, of merchantability and fitness for any particular purpose.

Baltimore County, Maryland additionally disclaims all obligation and liability for damages, including but not limited to, actual, special, indirect, and consequential damages, attorneys' and experts' fees, and court costs incurred as a result of, arising from or in connection with the use of or reliance upon the data displayed herein.

The user or recipient hereby waives the right to file suit or make demand and forever discharges and releases Baltimore County, Maryland, its agents, employees, successors and assigns from any and all loss, liability, damage, claim, cost or expense incurred as a result of, or arising out of or in connection with the use of data displayed herein or any reliance thereon, whether caused by the acts or omissions of Baltimore County, Maryland.

I read and agree with the full **User Terms, Conditions and Disclaimer.**

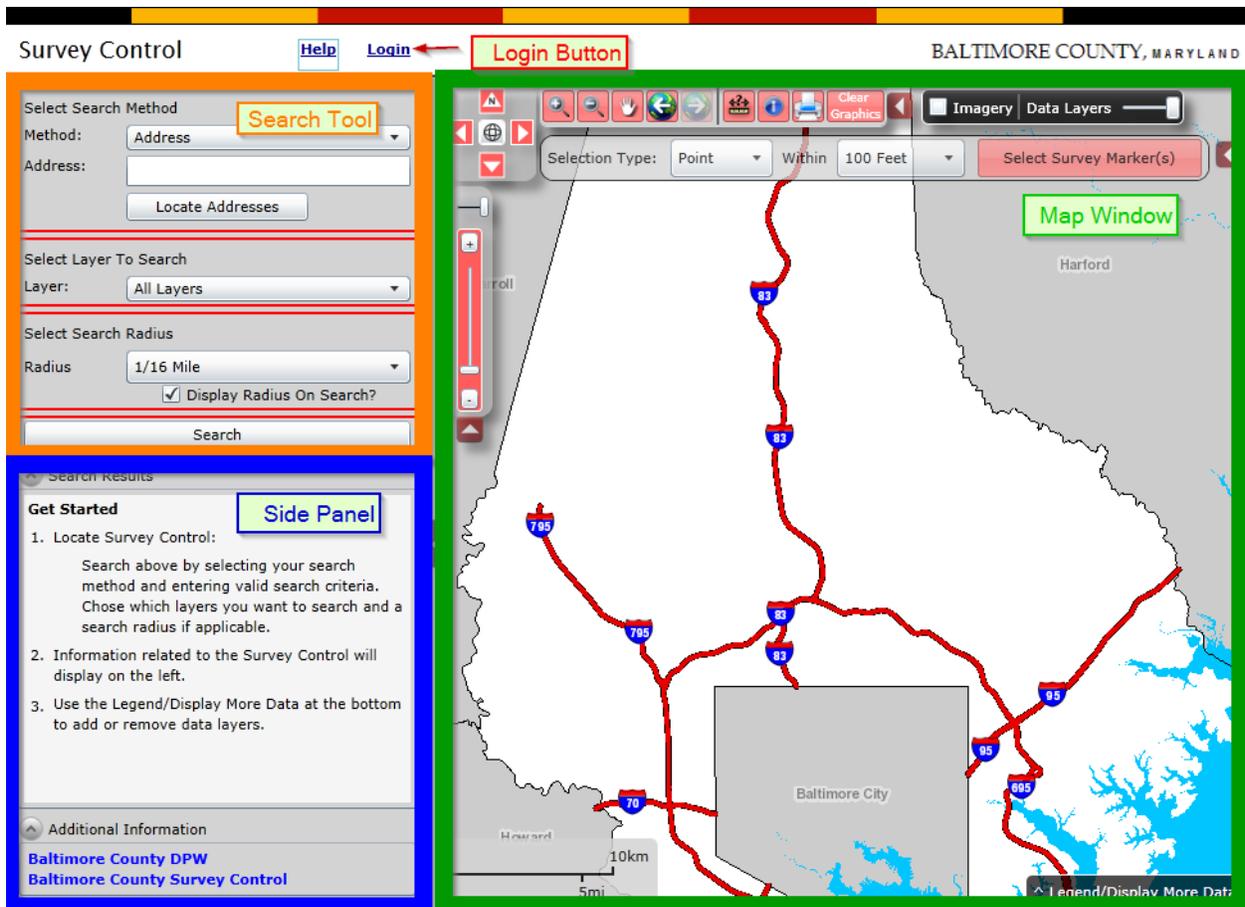
Enter

## System Requirements

- Survey Control requires the Microsoft Silverlight plug-in. An install link is provided for users on their first visit to the site or at <http://www.microsoft.com/silverlight/>.
- Pop-up blockers must be disabled for Survey Control to function properly. For best results, use a high-speed internet connection.
- Survey Control is best viewed using Internet Explorer 8.0 or Google Chrome. Other browsers may not function properly.

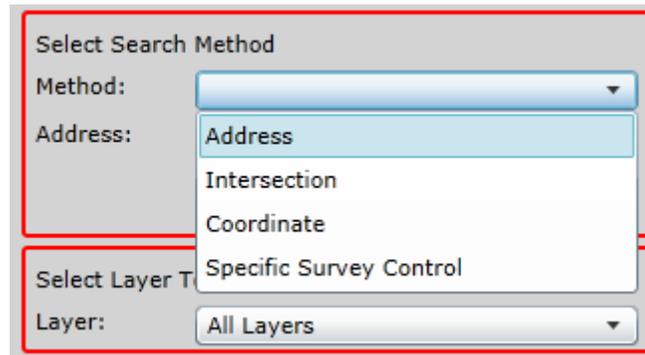
## Application Overview

The Survey Control application contains four main sections: Searches Tool, Side Panel, Map Window and Login.



## Search Tool

The Search Tool consists of three components to find a survey control. The *Address* and *Intersection* searches quickly orient the map around a known location, while the *Coordinate* search orients the map around a known coordinate. Once the map is oriented, the two other components of the search box display the desired survey control points in the side bar. There is also a *Specific Survey Control* to navigate to specific survey control from a drop-down list of all available survey control points.

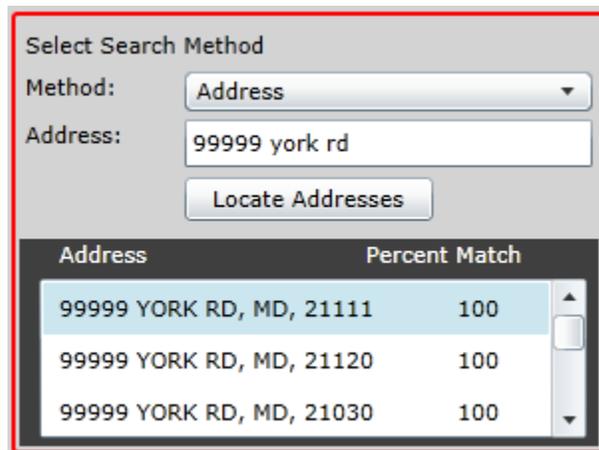


The screenshot shows a search tool interface with two main sections. The top section, titled "Select Search Method", contains a "Method:" dropdown menu with a list of options: "Address", "Intersection", "Coordinate", and "Specific Survey Control". The "Address" option is currently selected. The bottom section, titled "Select Layer T", contains a "Layer:" dropdown menu with the option "All Layers" selected.

## Part I: Orienting the map

### Address Search

Type an address into the search box and press Locate Address (or enter). A matching address will be returned and the map will pan and zoom to the location automatically. If there are multiple matching addresses, all matches will appear below in the results. Clicking one pans and zooms the map to that location.

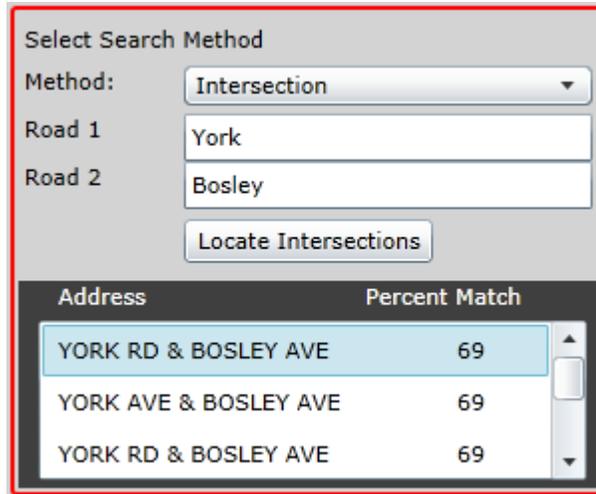


The screenshot shows the search tool interface with the "Method:" dropdown set to "Address" and the "Address:" text box containing "99999 york rd". A "Locate Addresses" button is visible below the text box. Below the button is a table with two columns: "Address" and "Percent Match". The table contains three rows of results, all with a 100% match.

Address	Percent Match
99999 YORK RD, MD, 21111	100
99999 YORK RD, MD, 21120	100
99999 YORK RD, MD, 21030	100

### Intersection Search

If an exact location address is unknown, an intersection of two streets can be searched for. Enter the street names of the intersecting streets in the *Road 1* and *Road 2* search boxes and click *Locate Intersections*.

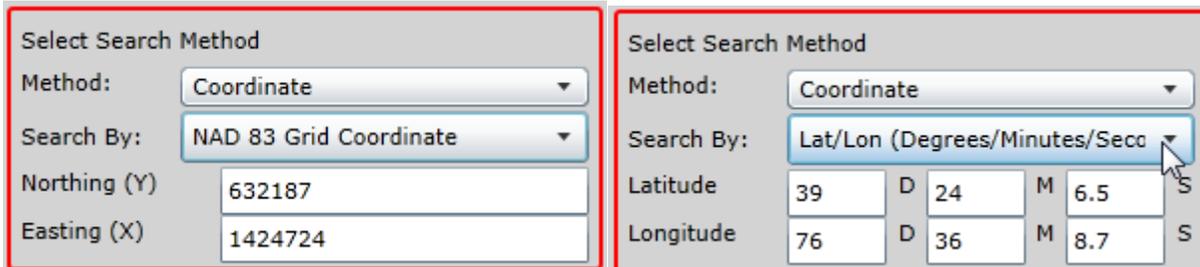


Address	Percent Match
YORK RD & BOSLEY AVE	69
YORK AVE & BOSLEY AVE	69
YORK RD & BOSLEY AVE	69

A full street name (including directional and suffix) is not required but more information will produced more precise results.

### Coordinate Search

Searching for an exact coordinate is also supported in Survey Control. A user can enter a NAD 83 Grid Coordinate, Decimal Lat/Long or DMS Lat/Long (the latter two in WGS 84).



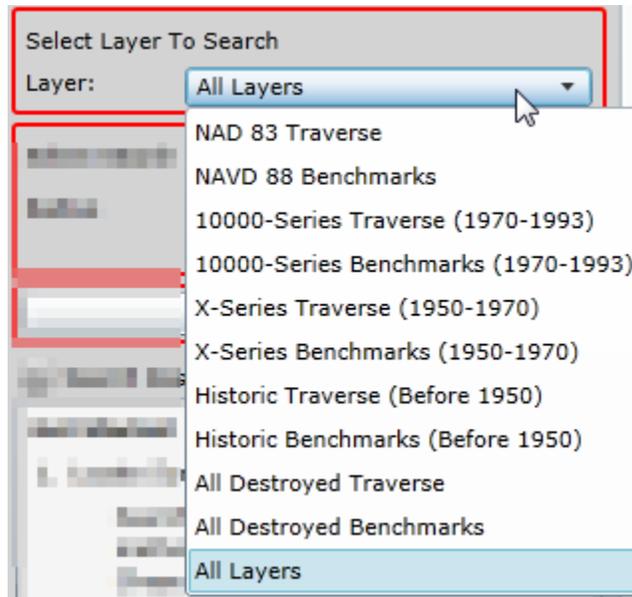
Select Search Method	
Method:	Coordinate
Search By:	NAD 83 Grid Coordinate
Northing (Y)	632187
Easting (X)	1424724

Select Search Method	
Method:	Coordinate
Search By:	Lat/Lon (Degrees/Minutes/Secs)
Latitude	39 D 24 M 6.5 S
Longitude	76 D 36 M 8.7 S

**Searching by coordinate requires selecting a layer and search radius**

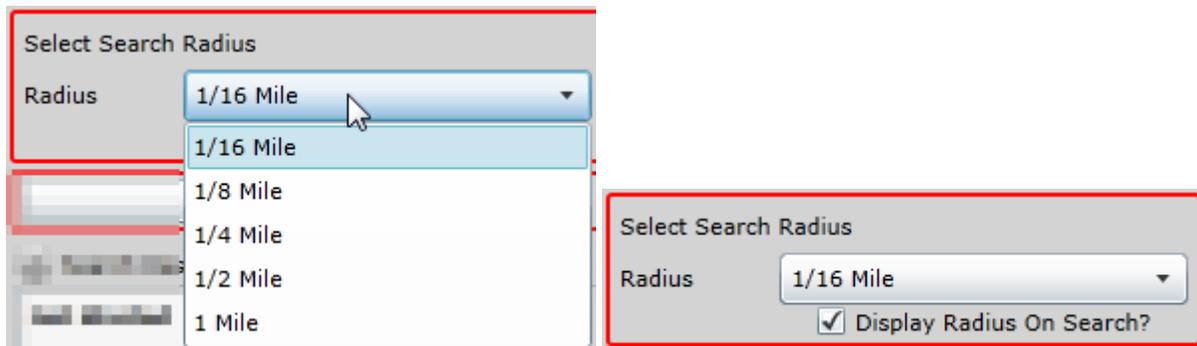
## Part II: Layers

The *Select Layer to Search* is the next part of the search process. In order to narrow down the survey control results, select a type of survey control from the drop down list.



## Part III: Radius

Finally choose a search radius in the *Select Search Radius* section by choosing a radius distance from the drop down.



This step specifies a distance to search around the address, intersection or coordinate inputted above. The *Display Radius On Search* checkbox will show or hide a circle showing the search area. Once all three search sections are complete, press the search button.

## Side Panel

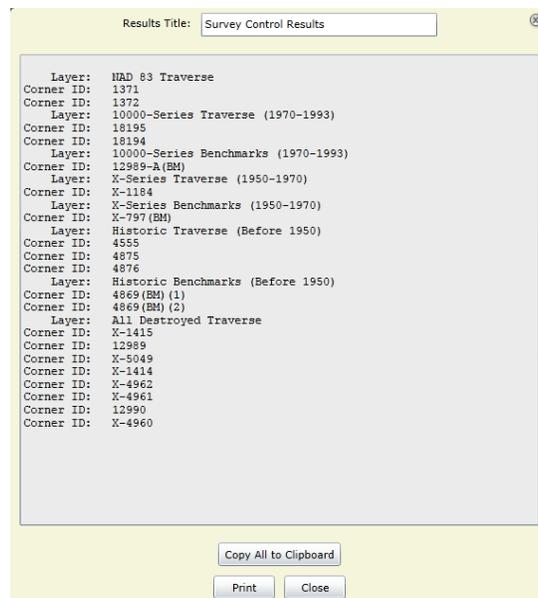
The Side Panel displays results of a Search Tool search or a manual selection performed by the *Select Survey Marker(s)* tool. See

Select Survey Markers for more details.

Survey Control		Print Results
Layer	<b>NAD 83 Traverse</b>	
Corner ID	1371	<a href="#">More &gt;</a>
Corner ID	1372	<a href="#">More &gt;</a>
Layer	<b>10000-Series Traverse (1970-1993)</b>	
Corner ID	18195	<a href="#">More &gt;</a>
Corner ID	18194	<a href="#">More &gt;</a>
Layer	<b>10000-Series Benchmarks (1970-1993)</b>	
Corner ID	12989-A(BM)	<a href="#">More &gt;</a>
Layer	<b>X-Series Traverse (1950-1970)</b>	
Corner ID	X-1184	<a href="#">More &gt;</a>

The Side Panel has three important functions, *Print Results*, *Layers* and *Corners*.

### Print Results



The Print Results option displays a pop up box for printing the list of recovered survey controls. It also allows for copying the results to the clipboard, for insertion in another document.

## Layer

In the side panel, the corners are organized by layer.

## Corner ID

Every resulting corner in the search area is shown in the Side Panel with its Corner ID, a unique identifier for the corner, and a *More >* button.

## More >

Clicking *More >* brings up three options:



## Zoom To

Zooms the

Map Window to that corner and flashes a red dot over the corner on the map.

### Control Card

Opens up a new browser window with the Corner Control Card, if available.

**Survey Control Report**  
**Station: 1371**

	Description: MAG Spike PID: N/A Status: Active	Date Set: 01/29/2009 Last Recovery: N/A Adjustment: 08/17/2010	
---	--	--	---

<b>MD State Plane Coordinate -</b> Northing (US Survey Feet): 632,351.82 Easting (US Survey Feet): 1,424,469.25	<b>Geographic Coordinate -</b> Latitude (North): 39 24 8.250253 Longitude (West): 76 36 11.452569
---	---

<b>Orthometric Height -</b> Elevation (US Survey Feet): 475.27 Determined By: GPS	<b>Mapping Information</b> Combined Factor: 0.99997438 Convergence: 0-14-56.6
---	---

<b>COMMENTS:</b>	<b>Superseded Values - State Plane Coordinate -</b> Northing (Meters): 192,741.226 Easting (Meters): 434,179.093 ADC Map Grid: 4579-D6 Previous Map Grid: 27-D6
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*No Images are Available*

*Top View Image Not Found*

[selection buttons for various views]:  
[Top View](#) [North View](#) [South View](#) [East View](#) [West View](#)

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*Condition Report*

Opens up a new browser window with a Condition Report for the record, if available.

**BALTIMORE COUNTY, MARYLAND**

**Baltimore County**  
**Control Recovery Condition Report**  
**[Control #: 1371](#)**

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**Recovery Information**

<u>Recovery #</u>	<u>Recovery Date</u>	<u>Condition Report Verified</u>	<u>Comments</u>	<u>Control Condition</u>	<u>Condition Verified Date</u>
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Sketch Image #1

No Recoveries Available

Sketch Image #2

No Recoveries Available

## Map Window

The Map Window enables the user to navigate, select corners, view aerial photography, and display additional data.

The screenshot displays the 'Survey Control' software interface for Baltimore County, Maryland. The interface is divided into several sections:

- Search Parameters (Left Panel):**
  - Select Search Method:** Method: Coordinate; Search By: NAD 83 Grid Coordinate; Northing (Y): 632187; Easting (X): 1424724.
  - Select Layer To Search:** Layer: All Layers.
  - Select Search Radius:** Radius: 1/16 Mile;  Display Radius On Search?.
  - Search:** A button to execute the search.
- Search Results (Left Panel):**
  - Survey Control:** Print Results button.
  - Layer: NAD 83 Traverse**
    - Corner ID: 1371 [More >](#)
    - Corner ID: 1372 [More >](#)
  - Layer: 10000-Series Traverse (1970-1993)**
    - Corner ID: 18195 [More >](#)
    - Corner ID: 18194 [More >](#)
  - Layer: 10000-Series Benchmarks (1970-1993)**
    - Corner ID: 12989-A(BM) [More >](#)
  - Layer: X-Series Traverse (1950-1970)**
    - Corner ID: X-1184 [More >](#)
- Map Window (Right Panel):**
  - Selection Type:** Point; **Within:** 100 Feet; **Select Survey Marker(s)** button.
  - Map:** Aerial photography of Baltimore County, Maryland, with a blue circular search radius centered on York Rd. Survey markers are visible, including red triangles (1371, 1372) and purple triangles.
  - Scale:** 40m and 100ft scale bars.
  - Legend/Display More Data:** A button at the bottom right.

## Navigation

### Zoom In/Zoom Out

Users can zoom to a location by using any or all of the following:

The Zoom In and Zoom Out buttons



## The Zoom Slider



Scrolling forward on the mouse wheel



Double-clicking on the left mouse button



## Zoom Slider Controls



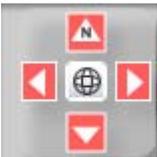
← The opacity of the Navigation and Advanced Map Tools can be changed with this slider.

← The arrow below the Zoom Slider can collapse and expand the Zoom Slider.

## Pan

Users can pan around the screen using:

The directional arrows



The hand symbol



## Extents

Users can go to different extents (Full, Previous, Next) within the Map Window

Full Extent



Previous and Next Extent



Advanced Tools

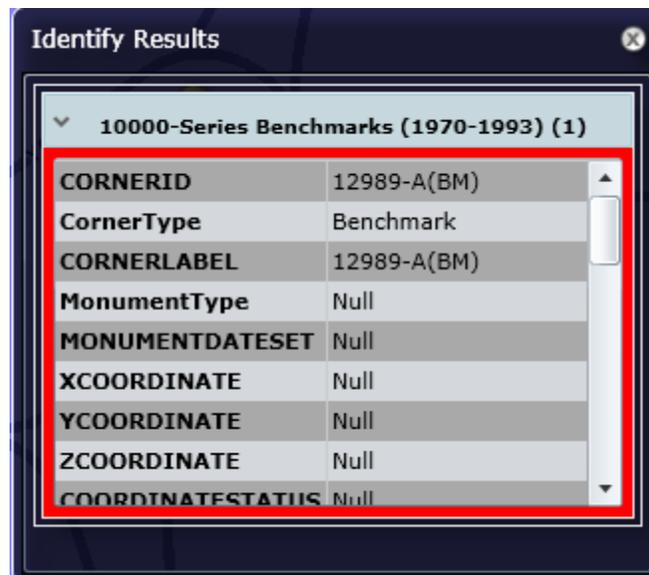
Measure

The measure tool  provides users with X,Y location for a point, the ability to measure lines and polygons, and unit conversions.



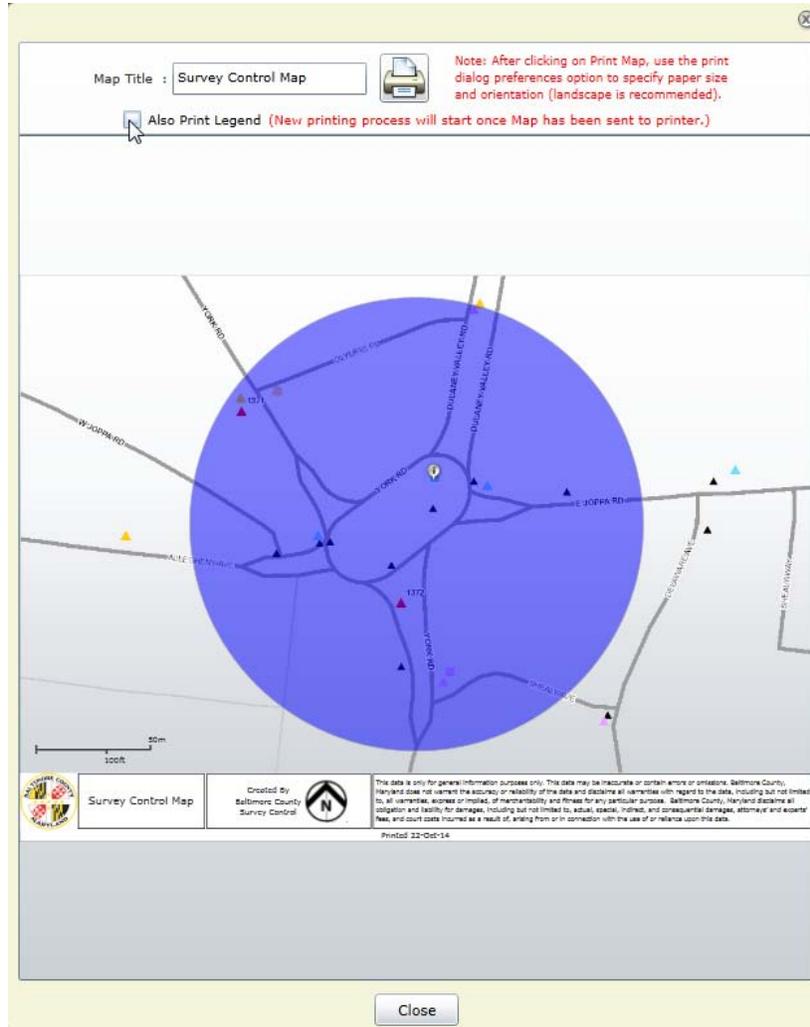
Identify

Users can obtain additional information and hyperlinks not found in the Side Pane by clicking on the Information button. 



### Print

Users can print a map with or without a legend



### Clear Graphics

Selected properties can be cleared with the Clear Graphics button



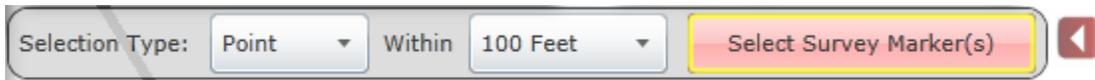
### Collapse the Advanced Map Tools

The arrow next to the Clear Graphics button will collapse the Advance Map Tools



## Select Survey Markers

The Select Survey Markers is a robust tool that allows a user to find survey control points within a radius of any place on the map, controlled by the mouse click.



To use the tool, click on the red *Select Survey Marker(s)* button. There are two selection modes, point and polygon.

### Point

Point is the default. Simply choose a radius from the drop down menu. Click anywhere on the map and the survey control points that are inside of the selected radius will appear in the Side Panel.

### Polygon

Select the Polygon option (under *Point*). The radius will disappear. Draw a polygon around an area and double click the mouse to finish. The survey control points that are inside of the selected radius will appear in the Side Panel.

### Imagery

Displays the latest aerial photo on the map, in addition to survey control corners. The slider changes the opacity of the other data.



### Login

The login button opens a new browser window where a user can log in, in order to administer recovery reports and other functions.