



City of Cape Town Map Viewer Quick Help Guide

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CITY OF CAPE TOWN
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Table of Contents

Introduction	3
1. User Interface	3
1.1 Map Area, Tools & Navigation Controls	3
1.2 Map/Layer Symbology and Labels	4
2. Free-text Search text-box	6
3. Identify Tool	7
4. Search Tools	9
4.1 Search	9
4.1.1 Property Search using Address	9
4.1.2 Property Search using Property (erf) / Farm Number	11
4.1.3 Search by Suburb	13
4.1.4 Ward Search by Ward Number	14
4.1.5 Search by Subcouncil	15
4.1.6 Spatial Search	16
4.1.7 Advanced Spatial Search Options	24
4.2 Map Coordinates Tool	26
4.3 Value Search	28
5. Tools Toolbox	29
5.1 Bookmark Tool	29
5.2 Directions Tool	30
5.3 Draw & Measure Tool	32
6. Print Tool	36
7. Overview Map Tool	38
8. Zoom-to-Scale Tool	39
9. Attribute Table Tool	40
10. About, Contact Information and Disclaimer	41

Introduction

This quick help guide was compiled to assist users in exploring spatial information about the City of Cape Town. The interactive map viewer includes several spatial layers grouped into Themes, which users can interact with. Users can view details of all properties and other spatial data within the City of Cape Town. More detailed layers will be dynamically activated and displayed as the map is zoomed in.

1. User Interface

1.1 Map Area, Tools & Navigation Controls

When launching the viewer, a view similar to that in Fig.1 appears. Below is a description of the basic functions and their usage.

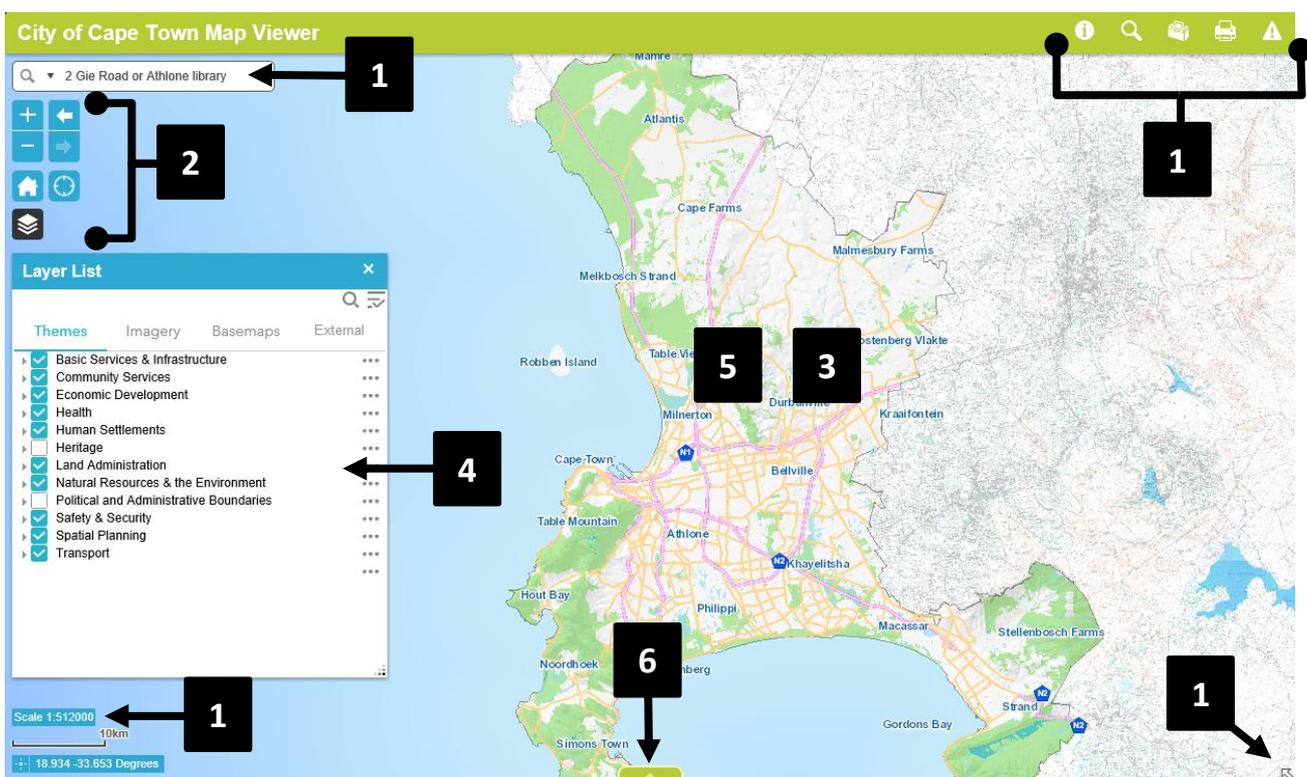


Fig.1 City of Cape Town Map Viewer

1. **Tools (Clockwise from top Left)** - Free-text Search text-box, Identify, Search Tools, Tools Toolbox, Print, About(Help), Overview Map, Zoom-to-Scale
2. **Navigation Controls** - Zoom in, Zoom out (Alternatively, scroll the computer mouse wheel to zoom in/out on the map), Previous extent, Next extent, Default/Full extent, My Location (Click to locate your current location in the map area using your internet IP-address), Layer List Tool
3. **Moving the map** - Left click in the map area and, while holding down the mouse button, move the mouse in the direction the map should be moved (**pan**)
4. **Layer List** – Choose the required Grouping tab (Themes, Imagery, Basemaps or External) Click on the little arrow on the left side of a theme to expand/collapse layers and Themes. Use the scroll bar to view all the layers.

To display a layer in the map area, click in the tick-box left of the layer name. To remove the layer from the map area, un-tick the tick-box left of the layer name.

P.S. The layers are linked to their Themes hierarchically, i.e. If the layer is ticked on, but the theme is ticked off, the layer will not be displayed in the map area)
Click on the ellipses (...) to the right of a Theme to see a menu of other available options.

5. **Map Area** - The layers displayed in the map area depend on which layers and themes are ticked on in the Layer List and the scale of the map. Some layers cannot be switched on/off and do not appear in the Layer List. These layers form what is called the Base Map.

For example: At Full extent only some of the larger roads are visible like freeways and main roads. Zooming in to a suburb will now display all of the roads and the property boundaries.

6. **Attribute Tab** - Click this arrow to open a window that lists all attribute data of the spatial datasets available on the viewer. Click the arrow again to close the window.

1.2 Map/Layer Symbology and Labels

The features of the base map are displayed and labelled using a variety of colours and become visible at pre-set scales. The Base Map symbology is as follows:

- Freeways/Highways - thick Pink lines with dark Pink outlines;
- Main roads - thin Orange lines;
- All other roads - thin White lines
- Property boundaries (Registered Properties) - thin Yellow outline;
- Property boundaries (SG-Approved Properties) - thin Light-Green outline;
- Protected Areas and Nature Reserves - Faded Light-Green shaded areas
- Dams and Waterbodies – Faded Light-Blue shaded areas (Dams have labels)

The labeling of the Base Map layers can be seen in Fig.2 and Fig.3 below.

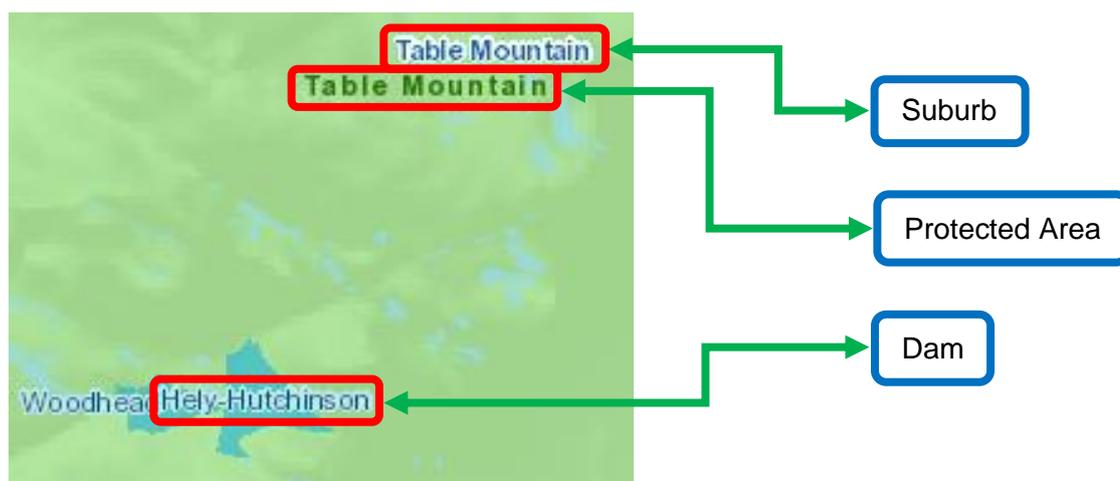


Fig.2 Labels for layers within the base map. (Large Extent)

NOTE: The Wards and Subcouncils layers do not draw by default anymore, but can be found under the “Political and Administrative Boundaries” theme in the Layer List.

Street names are labeled in black, street numbers in red, registered property numbers in dark-grey and SG-Approved property numbers in green, as can be seen in Fig.3



Fig.3 Labels for layers within the base map. (Large Extent)

2. Free-text Search text-box

The Free-text search textbox, as can be seen in Fig. 4 below, can be used to search for any location, address, place, etc. It functions similarly to an internet search engine.

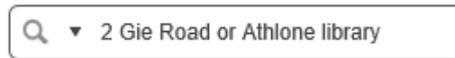


Fig.4 The Free-text Search text-box

Simply start typing in the textbox to see the results appear as in Fig. 5 below. The results keep updating as text is being entered. Choose the desired result to zoom to the feature.



Fig.5 Results update as text is being entered

To refine the returned results, click on the down-arrow next to the magnifying glass icon and choose the criteria of the search to be performed. The tick-mark indicates the current search criteria being used. See Fig. 6 below.

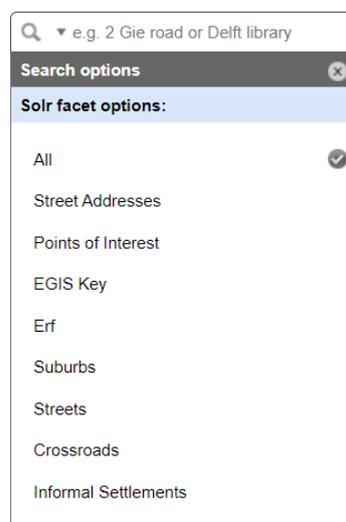


Fig. 6 Available search criteria

P.S. The Free-text search tool is optimized for searching for points of interest and street addresses. If the search does not return the desired results when searching using a specific erf/land parcel/property number, try using the **Search Tools** which are optimized for this purpose.

3. Identify Tool

The Identify tool is used to retrieve attribute information on a feature clicked in the map area. When the tool is selected, a new window opens with the “Identify” tab selected as can be seen in Fig. 7 below.

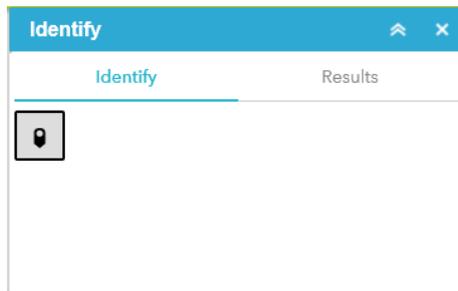


Fig.7 Identify tool

The mouse pointer will change when in the map area to indicate that the Identify tool is active. If necessary, click on the push-pin icon in the tool’s window. Click on a feature and the related spatial attribute data of the identified features will be listed in the “Results” tab of the Identify tool’s window. Click the plus sign to expand a specific result, See Fig. 8 below.

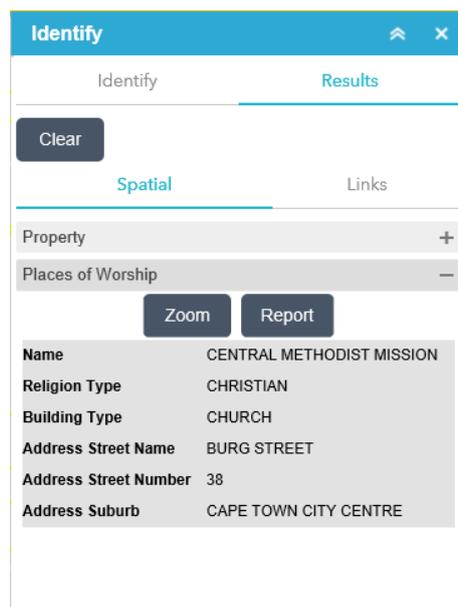


Fig.8 Identify tool – Results tab (Spatial)

Click “Zoom” to zoom the map area to the identified feature. Click “Report” to generate a printable PDF report with a basic map and the attribute information.

Additional documents or webpages linked to the identified feature, if applicable, can be viewed under the “Links” tab as can be seen in Fig.9 below.

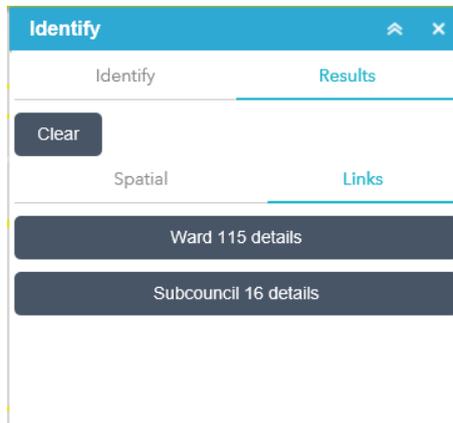


Fig. 9 Identify tool – Results tab (Links)

To open one of the links, simply click on the link result wanted. A new browser tab will open and load the linked data chosen. For example, see the result of clicking the “Ward 115 details” linked result in Fig. 10 below.

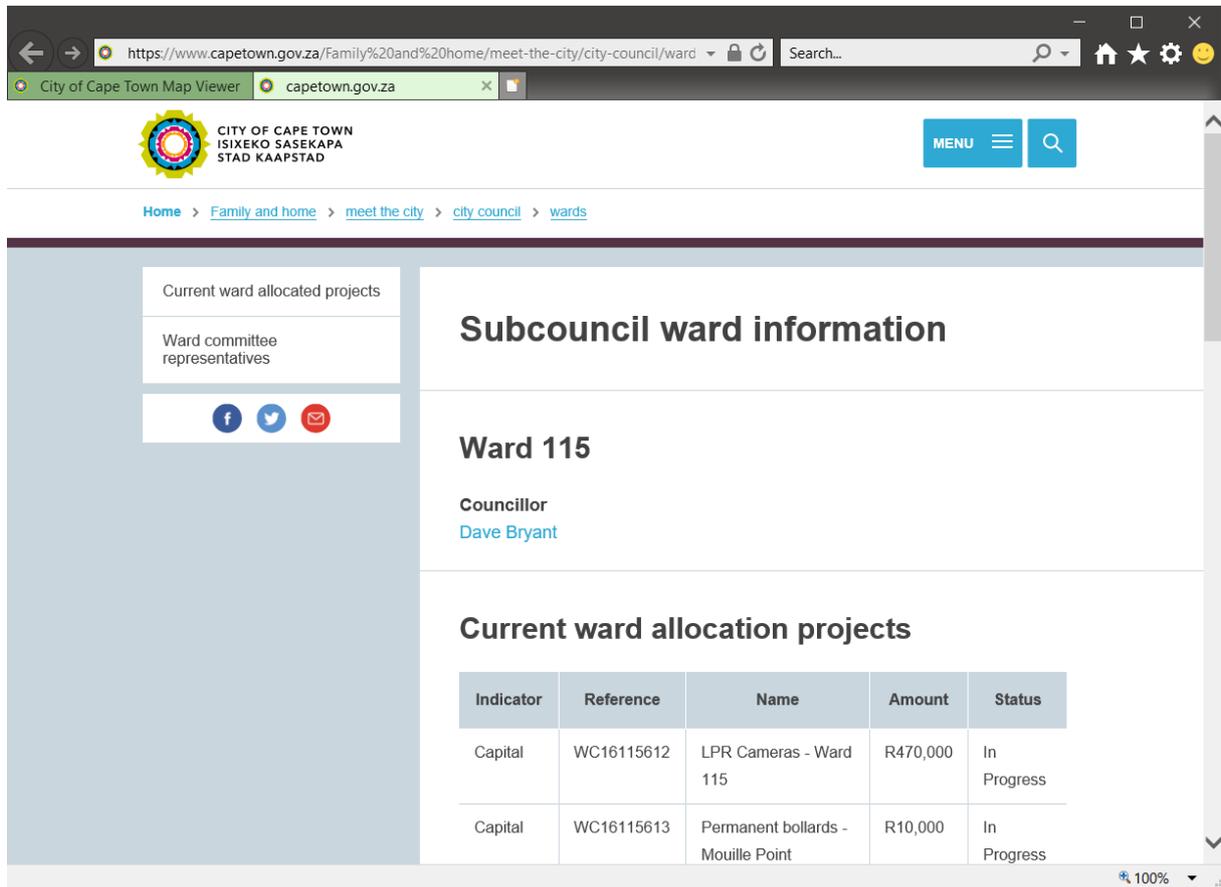


Fig. 10 Details of Ward 115 loaded into new browser tab

P.S. To clear the results and start a new identify task, click the “Clear” button in the Identify tool.

4. Search Tools

The Search Tools allow the user to search features in the map area or search on their attribute information. This tool's categories are named "Search", "Map Coordinates" and "Value Search". When the Search Tools icon is selected, a window appears as can be seen in Fig.11 below.

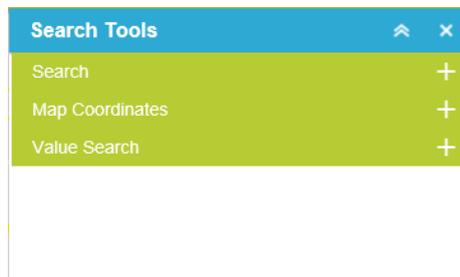


Fig.11 Search Tools

4.1 Search

The Search category enables searching on the following criteria: Street Address, Property (erf) / Farm number, Suburb, Ward, Subcouncil or by performing a Spatial Search.

4.1.1.a Search for a specific property using its Street Address

Under the Search category, click on "Address". In the new window, as can be seen in Fig.12 below, enter the street name in the "Street Name" textbox, and click on the "Find" button  to select the correct suburb in which the street resides. Enter the street number in the "Street No" textbox and click on "Apply" to search for the property at the specified address.

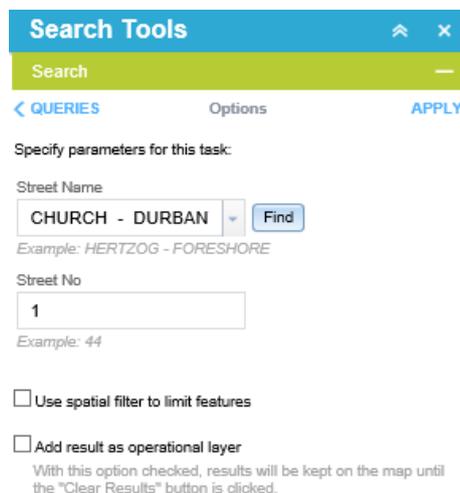


Fig.12 Search (Street Address)

A new window will display the results as can be seen in Fig.13 below. Click on the wanted result to zoom to the property. (The results are ordered by Suburb name)

If the search returned no results, check the street name or try the "locate all properties that share a given street name" below.

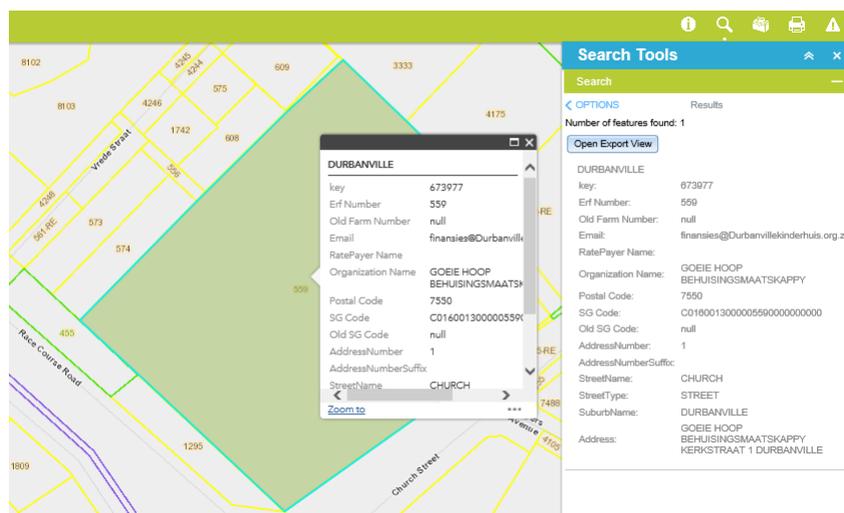


Fig.13 Search Results – Choose the property searched for

P.S. Click on “<OPTIONS” to return to the “Street Address” search tool and “<QUERIES” to return to the “Search” window. Click “Clear Results” to clear values.

4.1.1.b Locate all properties that share a given street name

Under the Search category, click on “Address”. In the new window, as can be seen in Fig.14 below, leave the “Address No” textbox empty, enter the street name in the “Street Name” textbox, and click on the “Find” button to select the correct suburb in which the street resides. Click on “Apply” to search for all properties that share the specified street name.

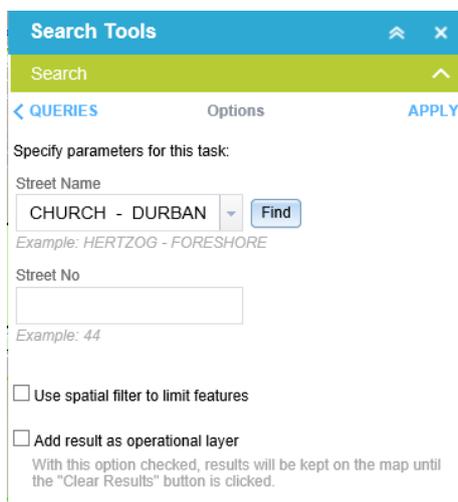


Fig.14 Search (Address) - Using only street name

A new window will display the results as can be seen in Fig.15 below. Click on the wanted result to zoom to the property. (The results are ordered by Suburb name)

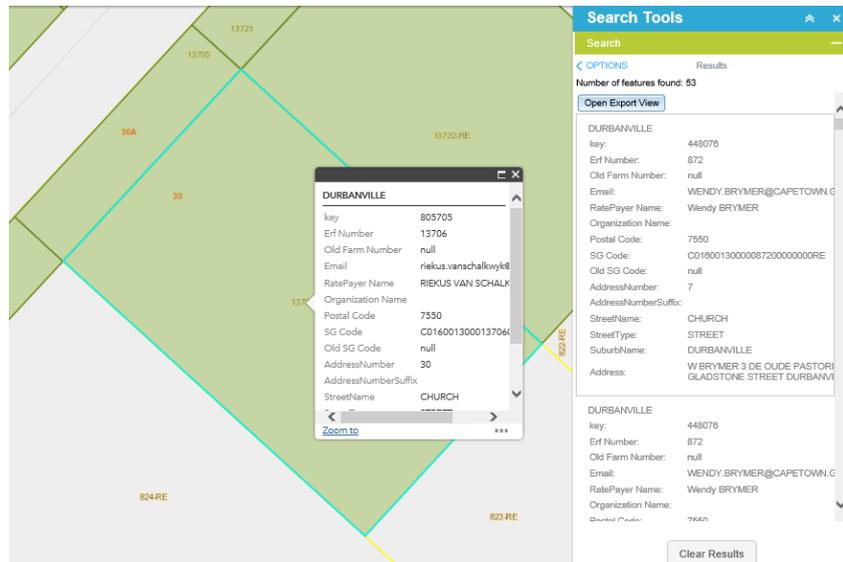


Fig.15 Search Results – Choose the property searched for

NOTE: If the search returned no results, check the address specified.

P.S. Click on “<OPTIONS” to return to the “Street Address” search tool and “<QUERIES” to return to the “Search” window. Click “Clear Results” to clear values.

4.1.2 Search for a specific property using its Erf/Farm number

Under the Search category, click on “Property (Erf)/Farm”. Click in the Allotment dropdown-box to specify the allotment the property is located in, as can be seen in Fig.16 below.

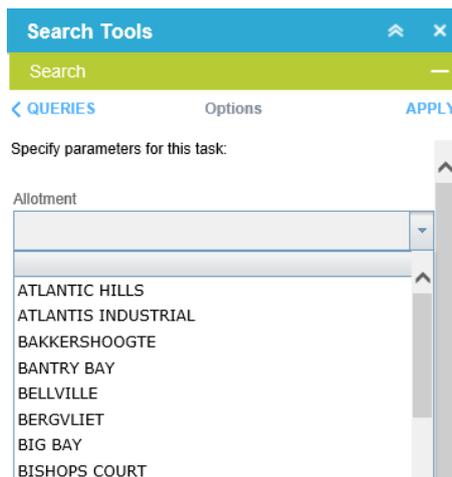


Fig.16 Search (Property (Erf)/Farm) - Allotments

Enter the property number or farm number in the “Erf” textbox and click on “Apply” to search for the property, see Fig.17 below.

Fig.17 Search (Property (Erf)/Farm) – Ready to run query

A new window will display the results, as can be seen in Fig.18 below. Click on the wanted result to zoom to the property. (The results are ordered by Suburb name)

Fig.18 Search Results – Choose the property searched for

NOTE: If the search returned no results, check the property number specified.

P.S. Click on “<OPTIONS” to return to the “Property (Erf)/Farm” tool and “<QUERIES” to return to the “Search” window. Click “Clear Results” to clear values.

The search tool can be used to locate a specific farm by using its erf number and portion (if applicable) as the search criteria, as can be seen in Fig.19 below.

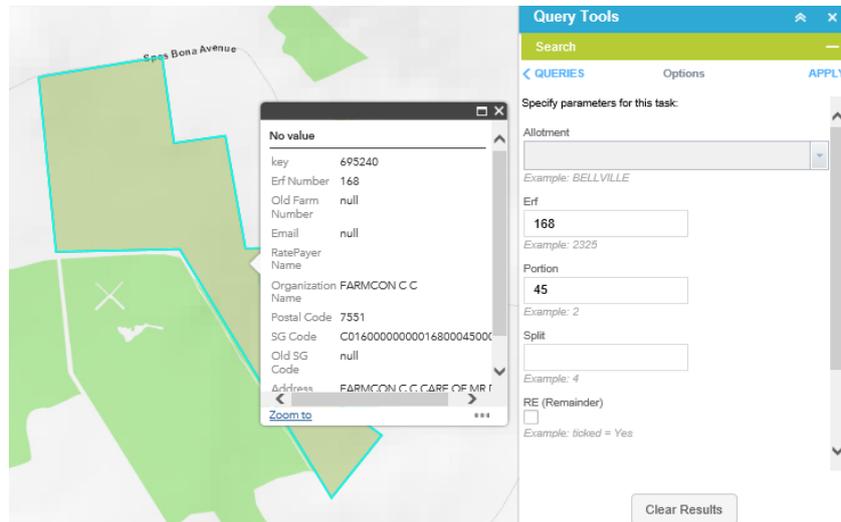


Fig.19 Search (Erf/Farm) using Farm Number

NOTE: If the search returned no results, check the farm number specified.

P.S. Click on “<OPTIONS” to return to the “Property (Erf)/Farm” tool and “<QUERIES” to return to the “Search” window. Click “Clear Results” to clear values.

4.1.3 Search by Suburb

Under the Search category, click on “Suburb” to locate a specific suburb spatially. In the new window, as can be seen in Fig.20 below, enter the suburb name in the “Suburb starts with” textbox and click on “Apply” to perform the search. You do not need to type the entire suburb name if you’re unsure of its spelling.

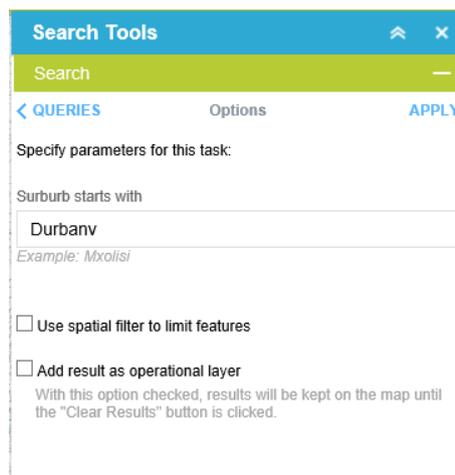


Fig.20 Search (Suburb)

A new window will display the results as can be seen in Fig.21 below. Click on the wanted result to zoom to the Suburb.

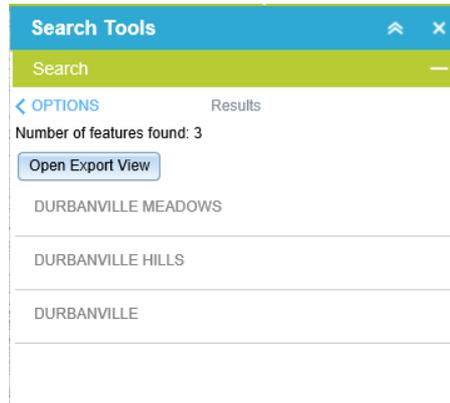


Fig.21 Search Results

NOTE: If the search returned no results, check the spelling.

P.S. Click on “<OPTIONS” to return to the “Search by Suburb” tool and “<QUERIES” to return to the “Search” window. Click “Clear Results” to clear values.

4.1.4 Search by Ward

Under the Search category, click on “Ward” to locate a specific Ward spatially. In the new window, as can be seen in Fig.22 below, enter the ward number in the “Ward Number is” textbox and click on “Apply” to perform the search.

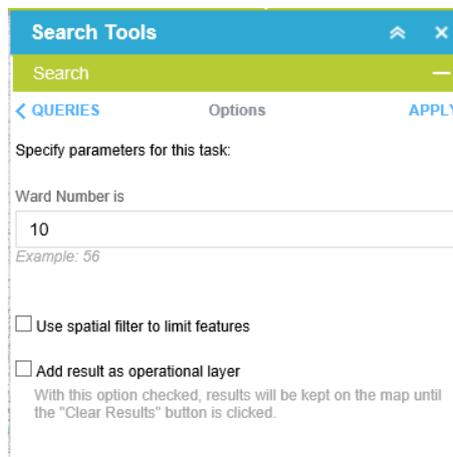


Fig.22 Search (Ward)

A new window will display the results as can be seen in Fig.23 below. Click on the wanted result to zoom to the Ward.

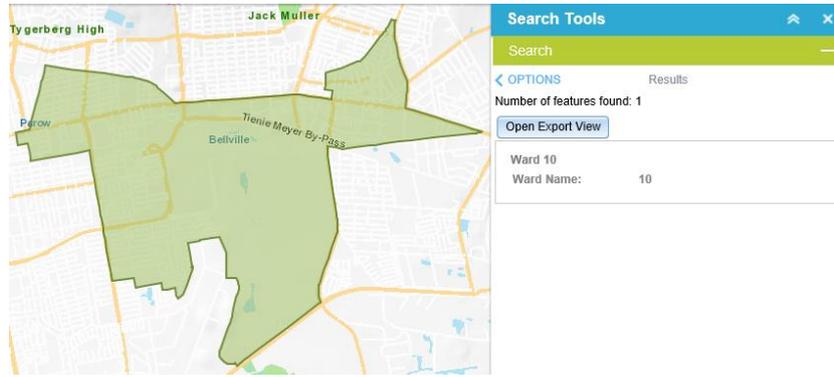


Fig.23 Search Results – Choose the Ward searched for

NOTE: If the search returned no results, check the Ward number specified.

P.S. Click on “<OPTIONS” to return to the “Ward Search” tool and “<QUERIES” to return to the “Search” window. Click “Clear Results” to clear values.

4.1.5 Search by Subcouncil

Under the Search category, click on “Subcouncil” to locate a specific Subcouncil spatially. In the new window, as can be seen in Fig.24 below, enter the Subcouncil number in the “Subcouncil Number is” textbox and click on “Apply” to perform the search.

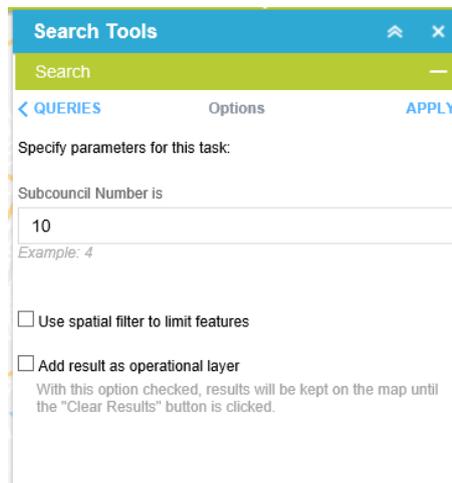


Fig.24 Search (Subcouncil)

A new window will display the results as can be seen in Fig.25 below. Click on the wanted result to zoom to the subcouncil.

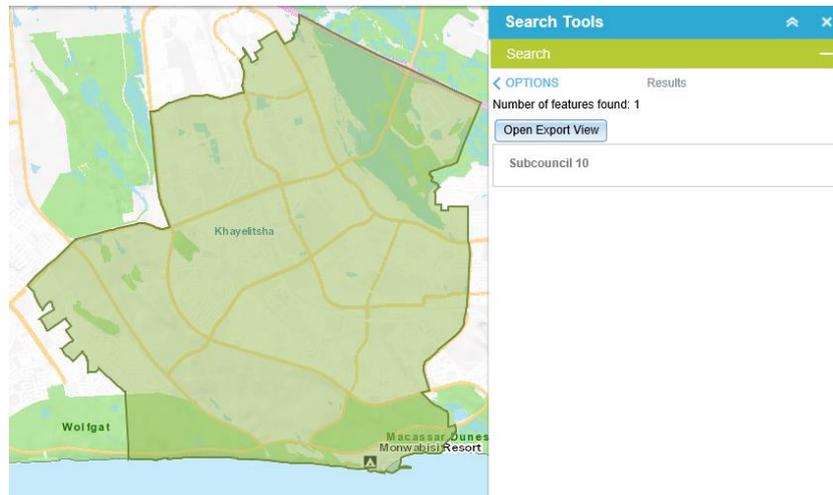


Fig.25 Search Results – Choose the Subcouncil searched for

NOTE: If the search returned no results, check the Subcouncil number specified.

P.S. Click on “<OPTIONS” to return to the “Subcouncil Search” tool and “<QUERIES” to return to the “Search” window. Click “Clear Results” to clear values.

4.1.6 Spatial Search

The Spatial Search tool is used to perform spatial queries on specific selected layers, by selecting it using a drawing tool. Before a Spatial search can be performed, the layer that should be searched needs to be defined. Select the layer that needs to be searched from the “Select layer” dropdown box. The selected layer will now be active as can be seen in Fig.26 below.

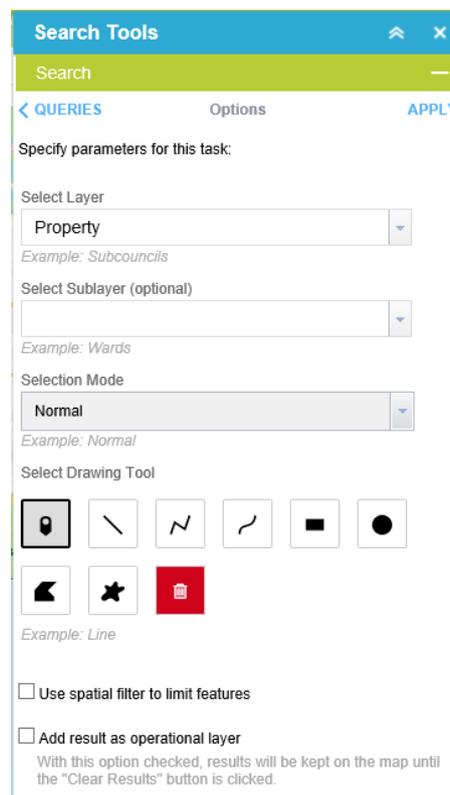


Fig.26 Search (Spatial Search)

There are 3 Selection Modes to choose from in the dropdown box:

- **Normal** – Creates a new selection on the chosen layer (Default option)
- **Add** – Add more features to already selected features from the chosen layer
- **Remove** – Remove some of the already selected features from the chosen layer

To use the Point Spatial Search, select the point tool from the “Select Drawing Tool” section and click on the map where features are to be queried. Click “Apply” and a new window will display the results as can be seen in Fig.27 below.

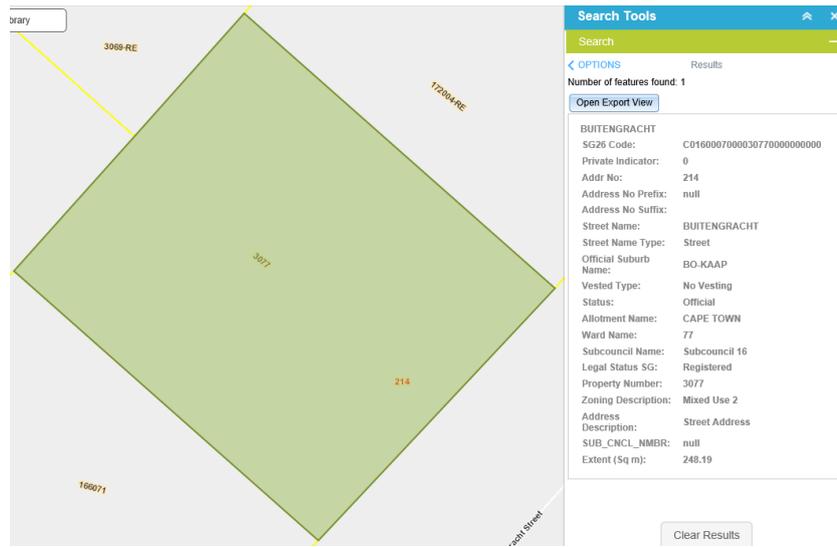


Fig.27 Search (Spatial Search) - Point drawing tool results

To use the Line Spatial Search, select the line tool from the “Select Drawing Tool” section, press down on the map to start, drag the mouse and let go to finish, as can be seen in Fig.28 below.

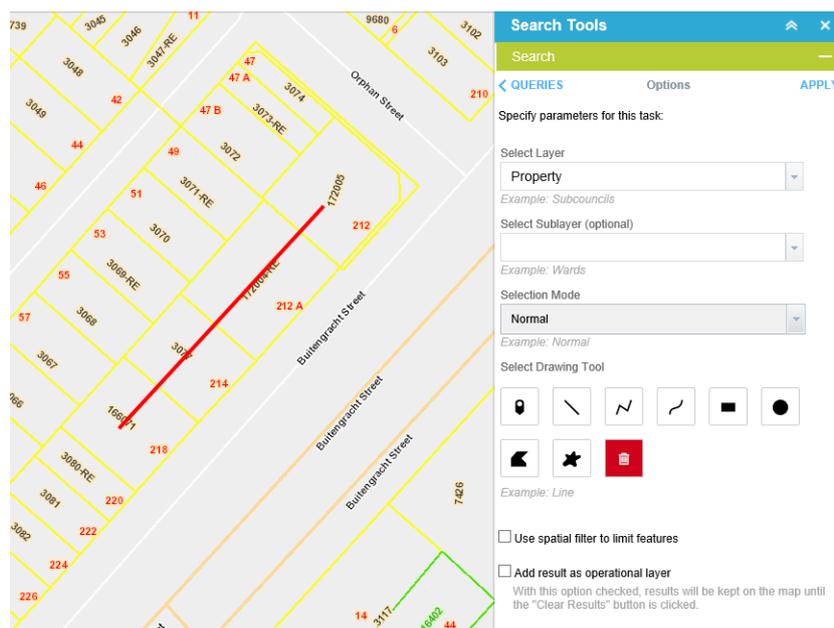


Fig.28 Search (Spatial Search) - Line drawing tool selection

Click “Apply” and a new window will display the results as can be seen in Fig.29 below.

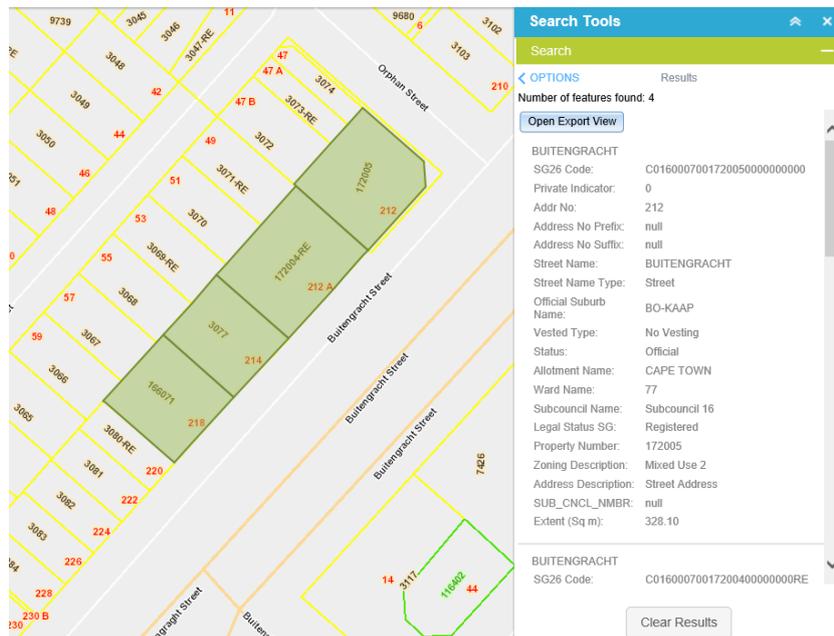


Fig.29 Search (Spatial Search) - Line drawing tool results.

To use the Polyline Spatial Search, select the polyline tool from the “Select Drawing Tool” section, click on the map to start drawing, click to continue drawing and double click to end drawing, as can be seen in Fig.30 below.

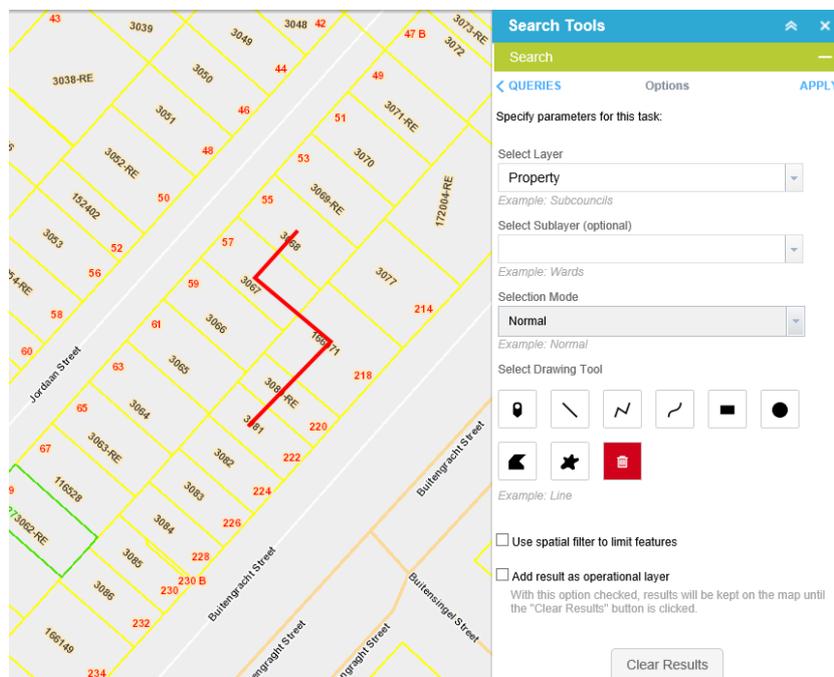


Fig.30 Search (Spatial Search) - Polyline drawing tool selection

Click “Apply” and a new window will display the results as can be seen in Fig.31 below.

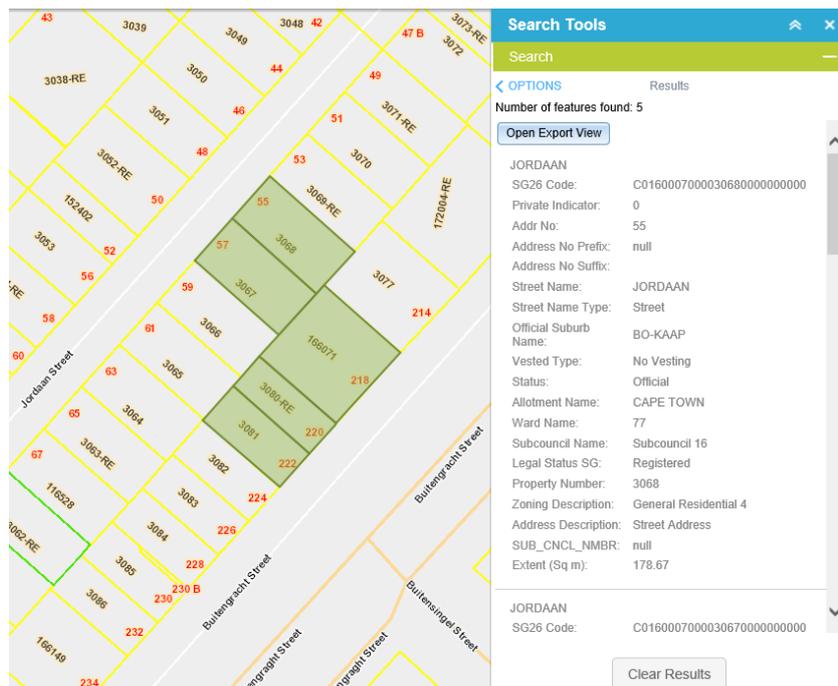


Fig.31 Search (Spatial Search) - Polyline drawing tool results

To use the Freehand Polyline Spatial Search, select the freehand polyline tool from the “Select Drawing Tool” section, hold down left-click to start, move the mouse and let go to finish, as can be seen in Fig.32 below.

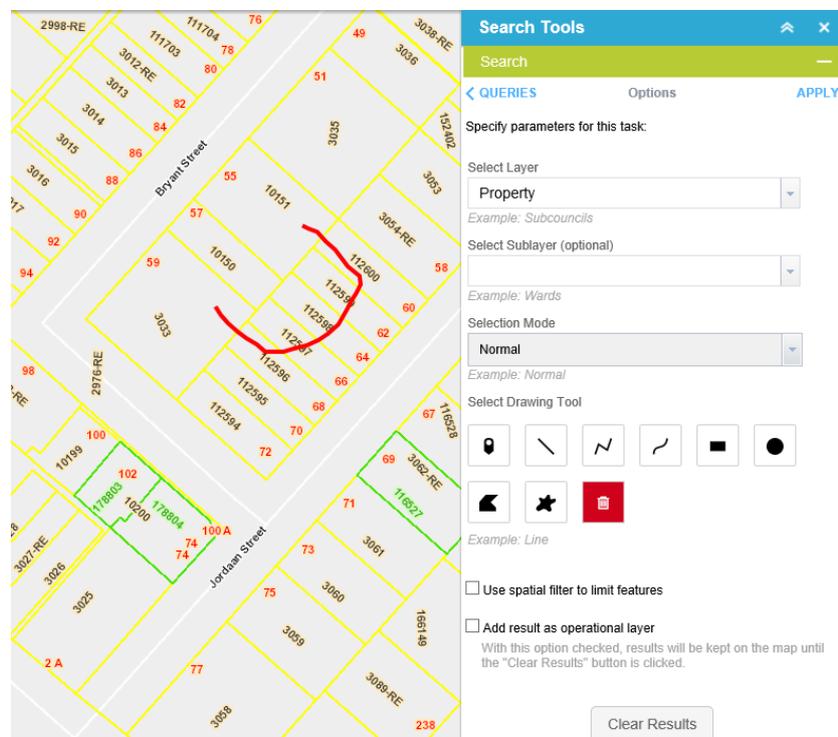


Fig.32 Search (Spatial Search) - Freehand Polyline drawing tool selection

Click “Apply” and a new window will display the results as can be seen in Fig.33 below.

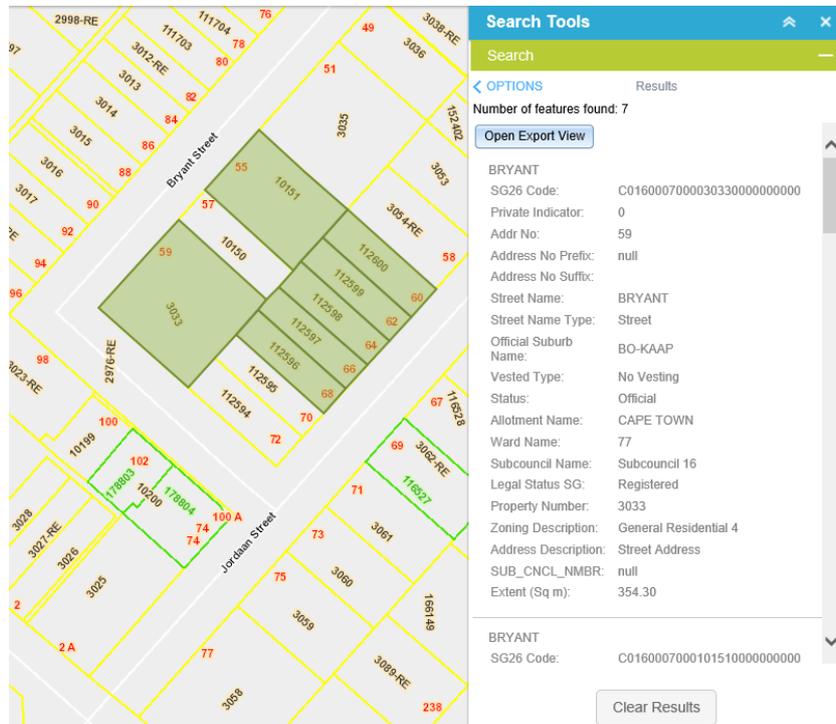


Fig.33 Search (Spatial Search) - Freehand Polyline drawing tool results

To use the Extent Spatial Search, select the extent tool from the “Select Drawing Tool” section, hold down left-click to start, move the mouse and let go to finish, as can be seen in Fig.34 below.

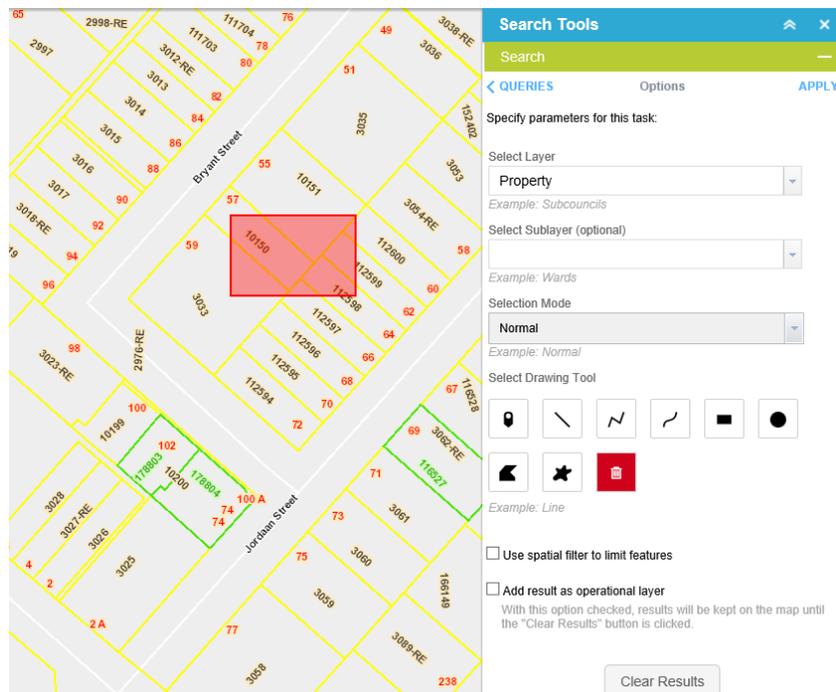


Fig.34 Search (Spatial Search) - Extent drawing tool selection

Click “Apply” and a new window will display the results as can be seen in Fig.35 below.

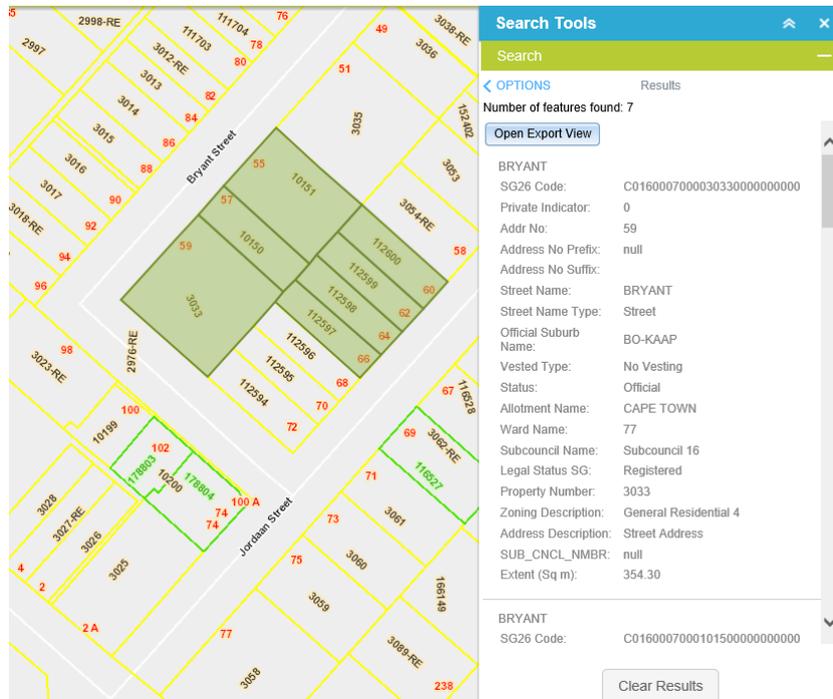


Fig.35 Search (Spatial Search) - Extent drawing tool results

To use the Circle Spatial Search, select the circle tool from the “Select Drawing Tool” section, hold down left-click to start, move the mouse and let go to finish, as can be seen in Fig.36 below.

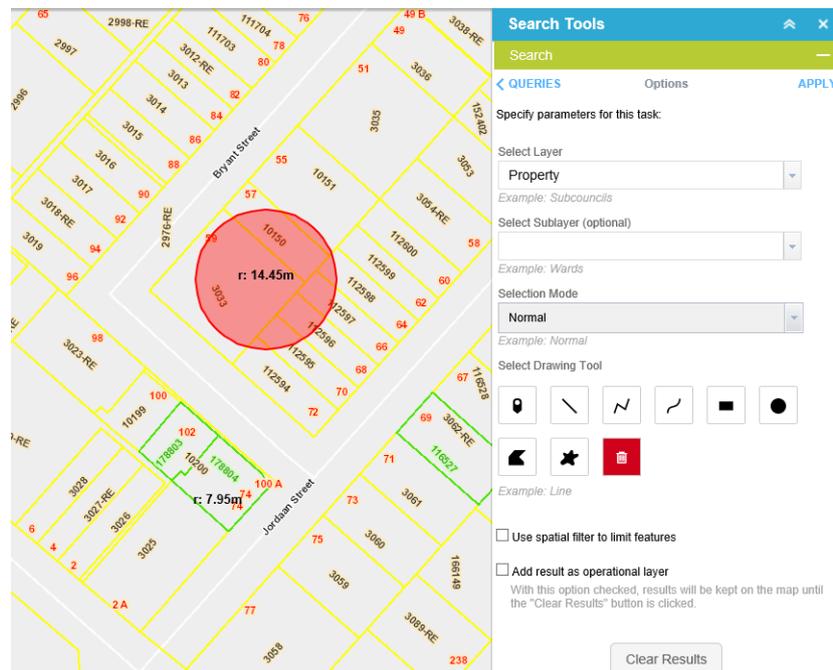


Fig.36 Search (Spatial Search) - Circle drawing tool selection

Click “Apply” and a new window will display the results as can be seen in Fig.37 below.

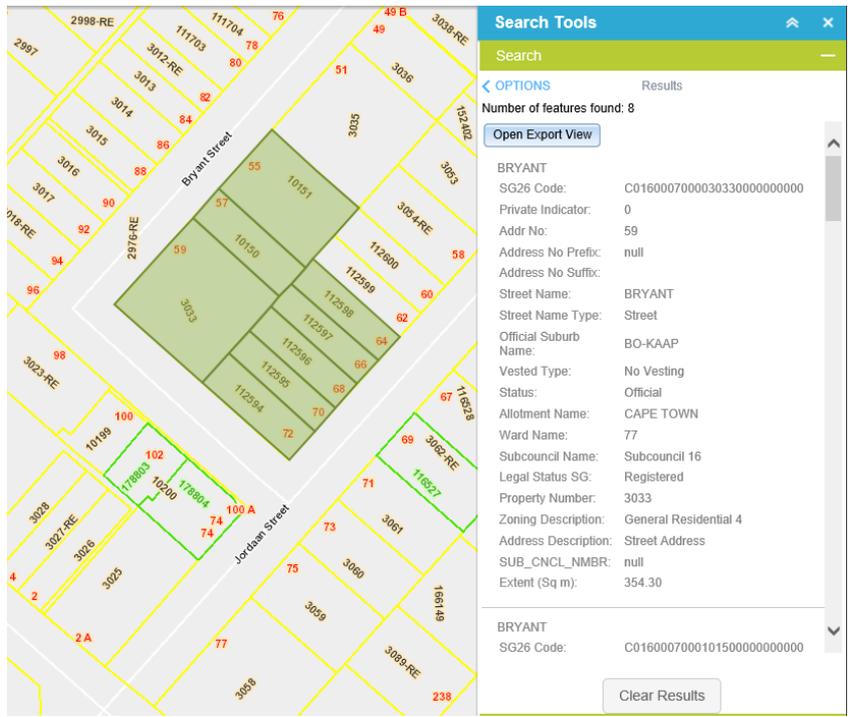


Fig.37 Search (Spatial Search) - Circle drawing tool results

To use the Polygon Spatial Search, select the polygon tool from the “Select Drawing Tool” section, click to start drawing, click to continue drawing, and double click to end drawing, as can be seen in Fig.38 below.

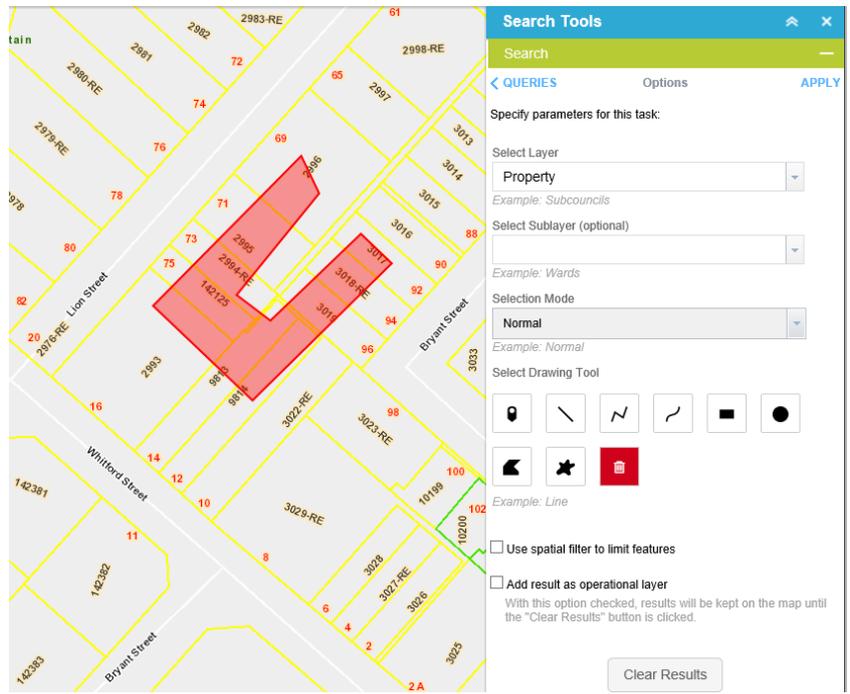


Fig.38 Search (Spatial Search) - Polygon drawing tool selection

Click “Apply” and a new window will display the results as can be seen in Fig.39 below.

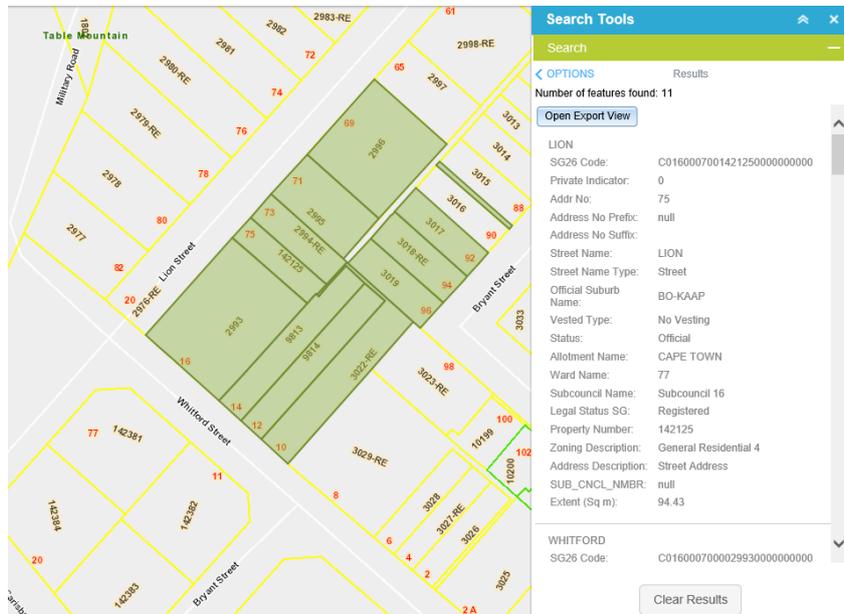


Fig.39 Search (Spatial Search) - Polygon drawing tool results

To use the Freehand Polygon Spatial Search, select the freehand polygon tool from the “Select Drawing Tool” section, hold down left-click to start, move the mouse and let go to finish as can be seen in Fig.40.

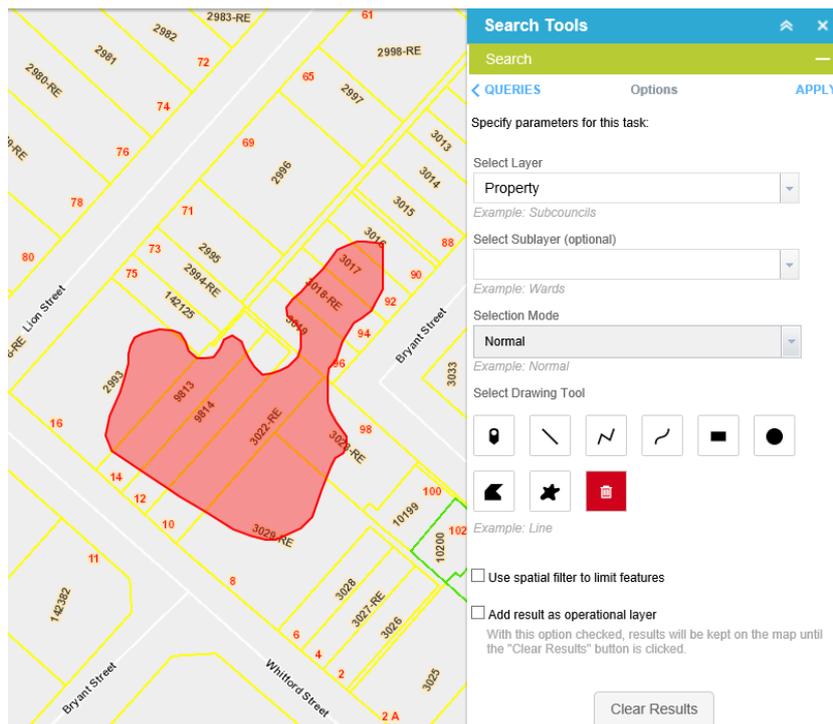


Fig.40 Search (Spatial Search) - Freehand Polygon drawing tool selection

Click “Apply” and a new window will display the results as can be seen in Fig.41 below.

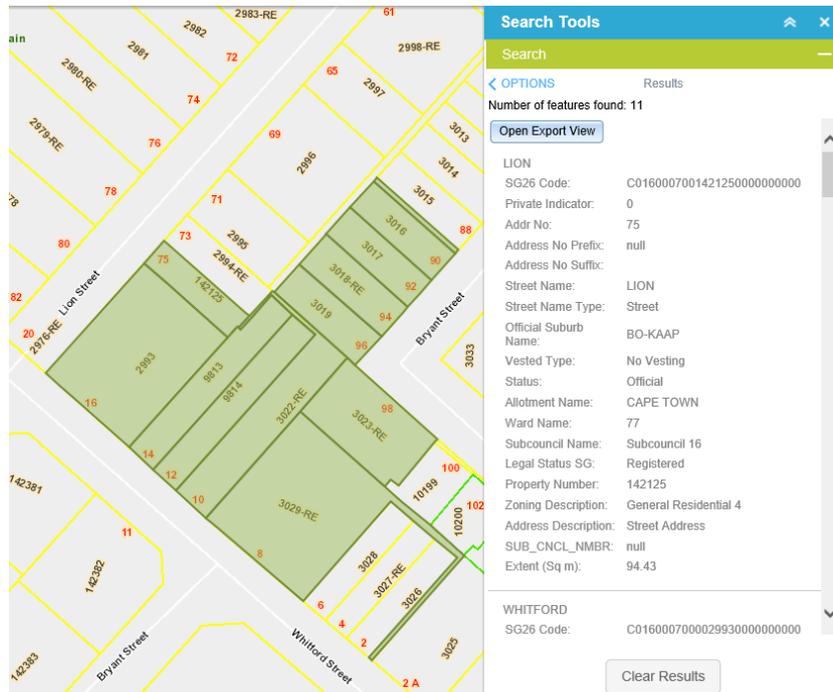


Fig.41 Search (Spatial Search) - Freehand Polygon drawing tool results

4.1.7 Advanced Spatial Search Options

All of the tools in the Search tool have advanced options to use a spatial filter and to add results of the search to the Layer List. See Fig.42 below.

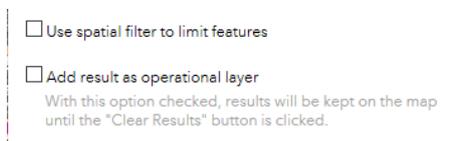


Fig.42 Search - Advanced options

4.1.7a Using a Spatial filter

Click on the “Use spatial filter to limit features” checkbox to activate this advanced option. Two new options appear: Filter the search results according to what can be seen in the map area and an option for the user to draw a shape in the map area to limit search results within. See Fig.43 below.

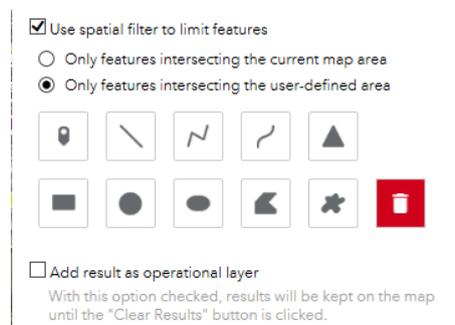


Fig.43 Using a spatial filter, user-defined area selected

When the “*Only features intersecting the user-defined area*” option is selected, the user is presented with a selection of tools to draw a shape in the map area to limit the search. (Hover the mouse-pointer over a tool button to see the tool description.)

Click on the chosen tool and click in the map area to start drawing the required shape, making sure the shape includes the area that needs to be searched. Follow the instructions given in the box that appears near the mouse-pointer in the map area. See Fig.44 below.

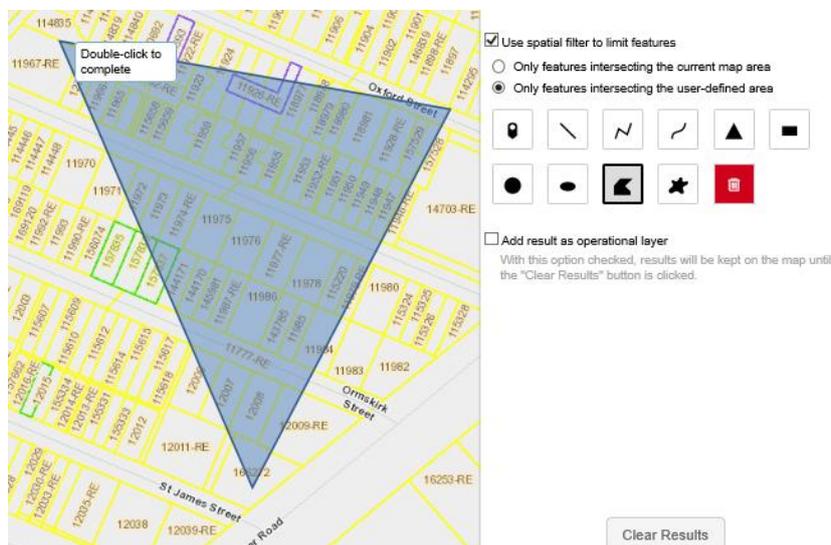


Fig.44 Drawing a shape using the “Polygon” tool to limit search area

To clear the drawing from the map area, click on the red bin icon called “clear”. Once the spatial filter shape has been drawn, fill out the rest of the tool options as per instructions above.

P.S. The search results will thus only include results that fall within the shape drawn by the user in the map area.

4.1.7.b Add search result as operational layer

When the “*Add result as operational layer*” option is selected, the result of the search as highlighted in the map area will be added as a layer in the “Layer List” of the viewer.

Here the user can switch the layer on or off as with any other layer.

Using this advanced option; search results from many searches can be added as layers to the “Layer List” of the viewer. These layers can be independently switched on or off in the “Layer List” of the viewer.

P.S. To clear the search results and remove the operational layers created by the Spatial Search tool, click the “Clear Results” button in the Spatial Search tool.

4.2 Map Coordinates Tool

Click on “Map Coordinates”, a new window will display with 2 dropdown boxes, “View” and “Plot” as can be seen in Fig.45 below. The View box opens by default.

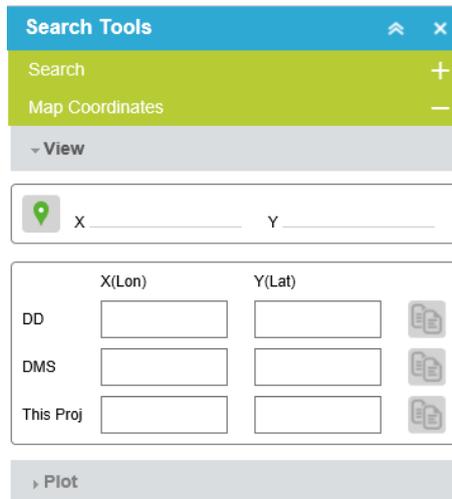


Fig.45 Map Coordinates Tool

Click the push-pin icon  to activate the tool. Hover the mouse cursor in the map area and the X and Y coordinates will show in the textbox. The coordinates will change as the cursor is moved across the map. Click the location on the map for which coordinates should be retrieved, the coordinates will appear in the textboxes, as can be seen in Fig.46 below.

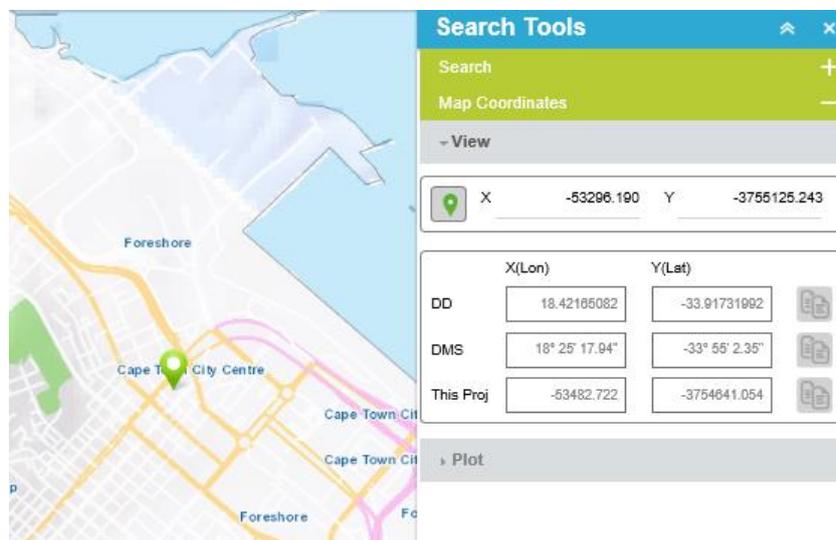


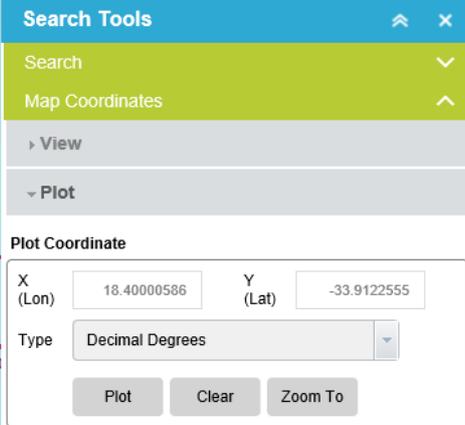
Fig.46 Map coordinates Tool - View results

The coordinates are provided in three different formats:

- DD (Decimal Degrees)
- DMS (Degrees, Minutes and Seconds)
- Current Projection (Default is Transverse Mercator: Meters)

By clicking on the  button next to the desired coordinate format, the coordinates are copied into the clipboard and can be pasted elsewhere, e.g. in notepad.

To plot a point in the map area, click on “Plot”, the Plot Coordinates box opens, type the coordinates into the textboxes provided, as can be seen in Fig.47 below, choose the format of the coordinates from the “Type” dropdown box and click “Plot” to plot the point. Click the “ZoomTo” button in order to zoom the map to the plotted point. Click the “Clear” button in order to remove any plotted points from the map.



The screenshot shows a 'Search Tools' panel with a 'Map Coordinates' section expanded. Below it is a 'Plot Coordinate' form. The form has two input fields: 'X (Lon)' with the value '18.40000586' and 'Y (Lat)' with the value '-33.9122555'. Below these is a 'Type' dropdown menu set to 'Decimal Degrees'. At the bottom of the form are three buttons: 'Plot', 'Clear', and 'Zoom To'.

Fig.47 Map Coordinates Tool - Plot results

4.3 Value Search

The Value Search tool can be used to search for records using attributes as the search criteria. See Fig.48 below for fields required to perform the search.

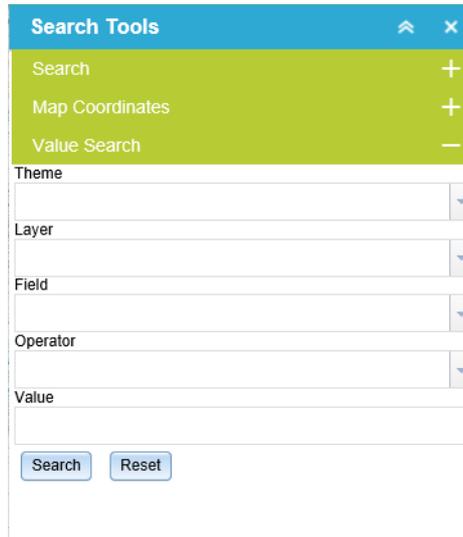


Fig.48 Value Search – Options

From the “Theme” drop-down box, choose the theme which the layer resides in. From the “Layer” drop-down box, choose the layer to be searched. From the “Field” drop-down box, choose the field to be searched. Finally, choose the type of match required (“Contains”, “Is Not Equal To”, “Equals”, “Is Greater Than” or “Is Less Than”) from the “Operator” drop-down box and type the search value into the “Value” textbox. Click “Search” to perform the query. The results can be seen in the Attribute Table tool that appears, as can be seen in Fig.49 below.

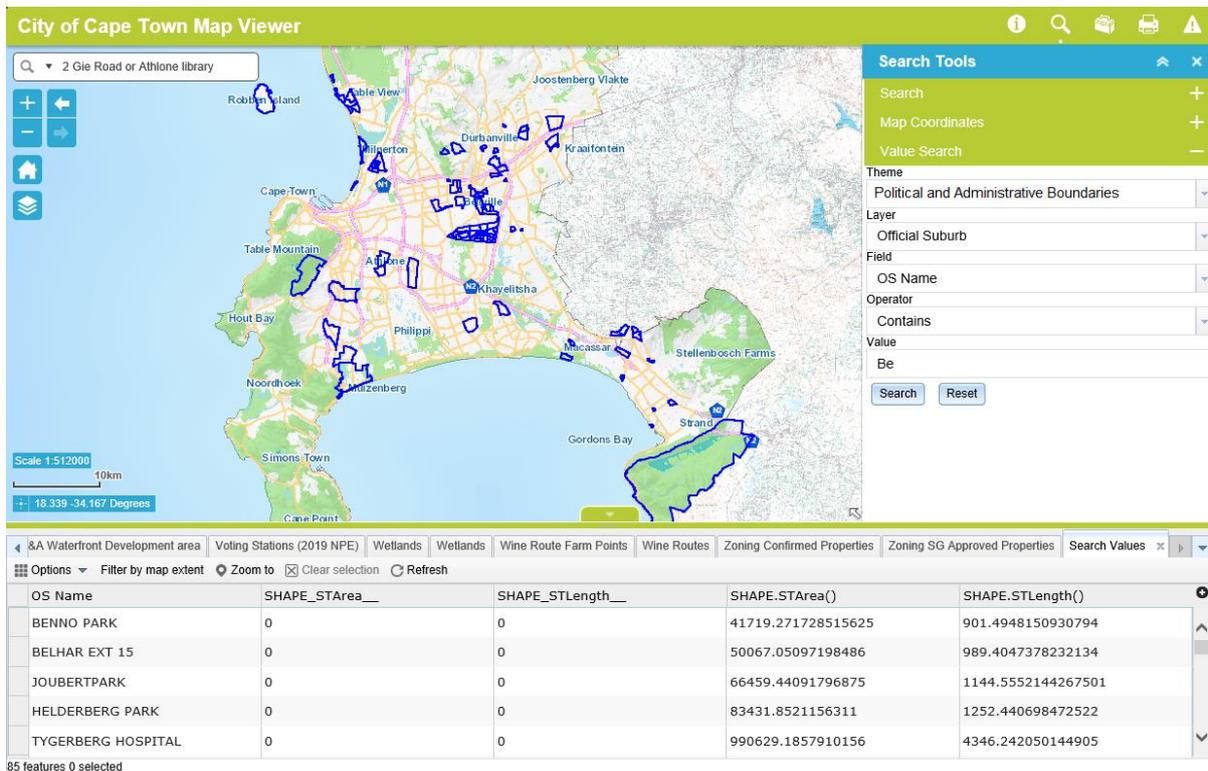


Fig.49 Value Search - Results

5. Tools Toolbox

5.1 Bookmark Tool

The Bookmark tool can store map view extents (Locations) that can be used to quickly zoom to a saved area. When the tool is selected, the Bookmark window is displayed.

To create a bookmark, click the “Add” button, type a name for the new bookmark and click in the whitespace of the tool. A new bookmark is added to the top left of the existing bookmarks with the name specified. See Fig.50 below.

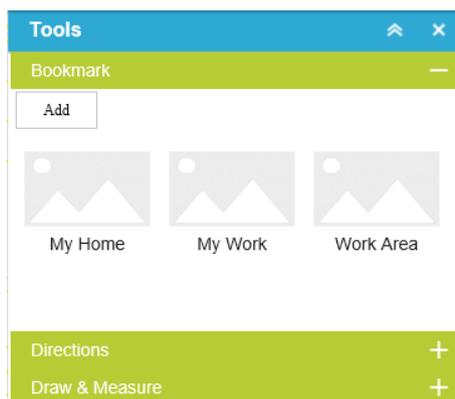


Fig.50 Bookmark Tool with three saved bookmarks

Click on a saved bookmark to automatically zoom and pan the map area to the saved extent. Bookmarks can be removed when they are no longer needed by hovering the mouse pointer over the bookmark, then clicking on the “X” button at the top right-hand corner of the bookmark.

5.2. Directions Tool

The directions tool allows the user to get a set of driving directions to an address or place. When the tool is selected, a window appears as can be seen in Fig. 51 below.

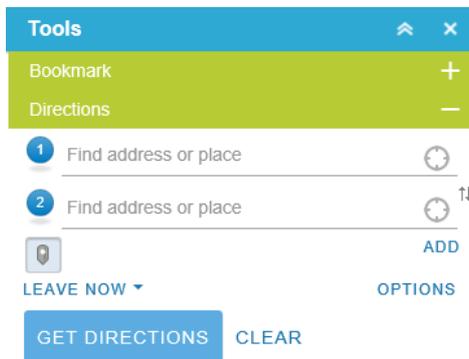


Fig.51 Directions tool

There are four ways of obtaining a location for this tool's origin **1** or destination **2** textboxes: An address, a place name, "your current location" or "select address from map".

5.2.1 Obtain locations using addresses or place names

Insert an origin address or place name in the first textbox next to the **1** icon. Insert the destination address or place in the textbox next to the **2** icon. If the results did not automatically appear in the tool window, click on "GET DIRECTIONS" to generate the route, distance and travel time.

5.2.2 Obtain locations automatically from map

Click the  icon to retrieve your current location for either the origin or destination textbox.

To select a location from the map, click the pushpin button  and click in the map area to retrieve the address at that location. Note that this button is a toggle switch, in other words it has a state of *ON* or *OFF*. While it is switched on, many destinations can be added in the sequence they should be visited. If the results did not automatically appear in the tool window, click on "GET DIRECTIONS" to generate the route, distance and travel time.

The result appears in the tool window as can be seen in Fig. 52 below.

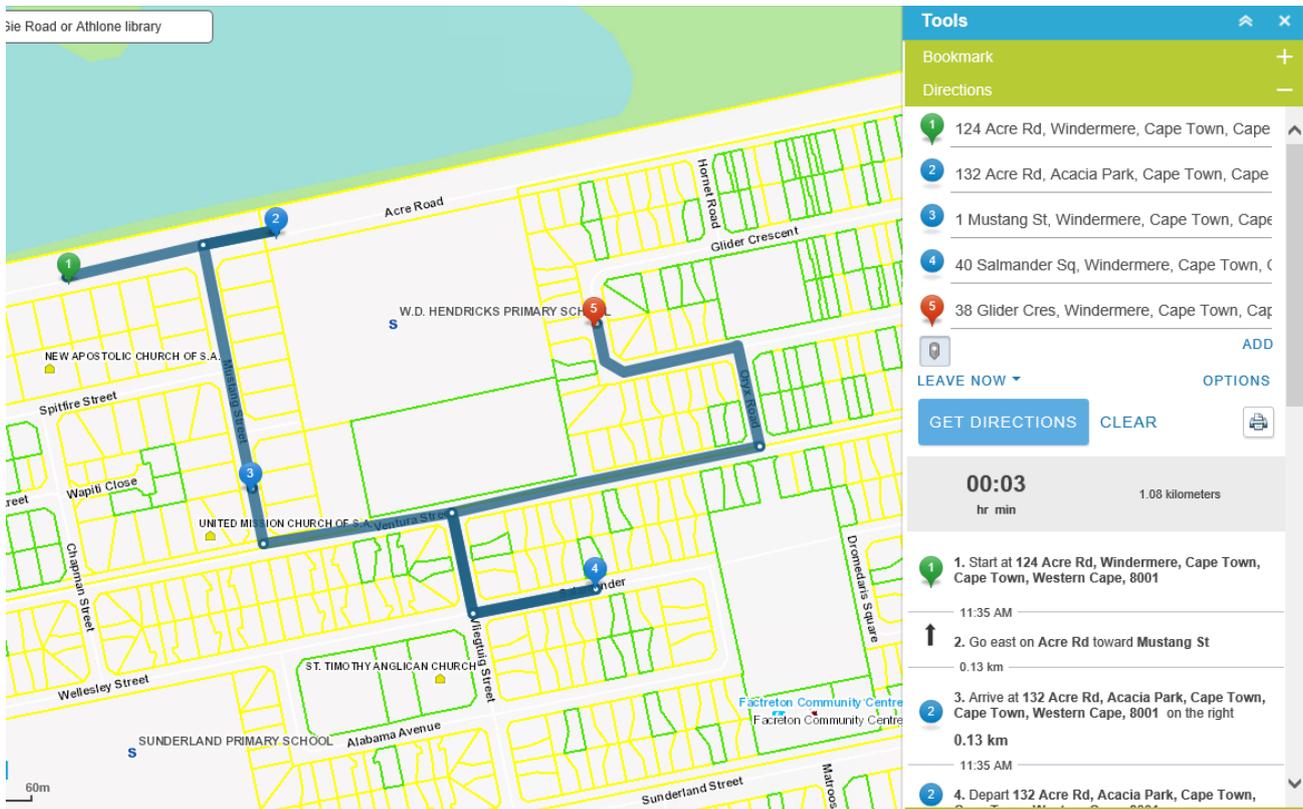


Fig. 52 Driving directions

P.S. Advanced options can be changed by clicking “OPTIONS” and the current results can be cleared by clicking on "CLEAR" in the tool window.

To print the directions, click the printer button in the tool window. A new browser window opens with the directions in a printable format. Click the “Print” button and select your desired printer and print settings.

5.3 Draw & Measure Tool

The Draw & Measure tool allows the user to draw shapes, lines, points and add labels (text) on the map area. The tool also allows adding length, area and bearing (direction) information to the drawings. These measurements are dynamically updated while the drawing is being made. When the tool is selected, a window appears as can be seen in Fig.53 below.

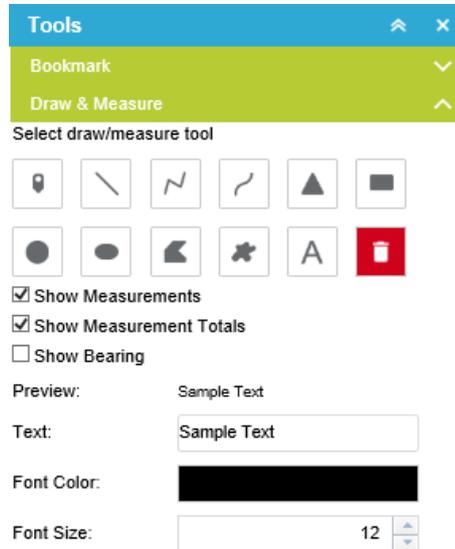


Fig.53 Draw & Measure Tool – View on first load

5.3.1 Drawing a point

Click the “Point” button to activate the tool. Set the applicable display parameters required for the point, as can be seen in Fig.54 below, and click in the map area to place the point.

NOTE: The Measurement/Bearing settings do not apply to drawing a point and may be ignored. To clear the map area of drawings, you can click the Clear button (Red “Trashcan” icon).

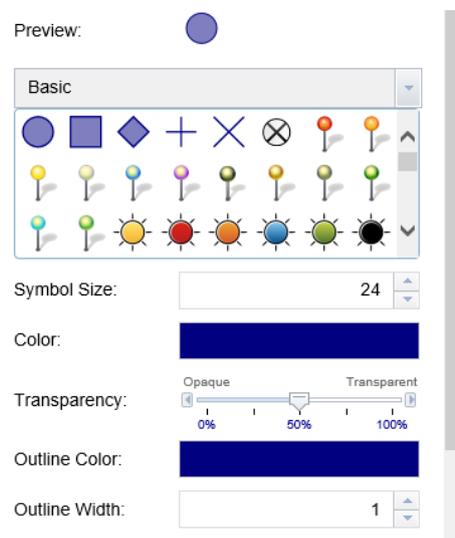


Fig.54 Draw & Measure Tool – Options for drawing a point

5.3.2 Drawing a line

Click either the “Line”, “Polyline” or “Freehand Polyline” button to activate the required line drawing tool. Set the applicable display parameters required for the line, see Fig.55 below for options available.

If measurements should be included on the drawing, make sure “Show Measurements” and “Show Measurement Totals” options are selected. “Show Measurement Totals” will print the total length of all segments once the drawing is completed. Select the “Show Bearing” option to include the bearing (Direction) of each segment in the drawing. See an example of a polyline drawing in Fig.56 below.

NOTE: To clear the map area of drawings, you can click the Clear button (Red “Trashcan” icon).

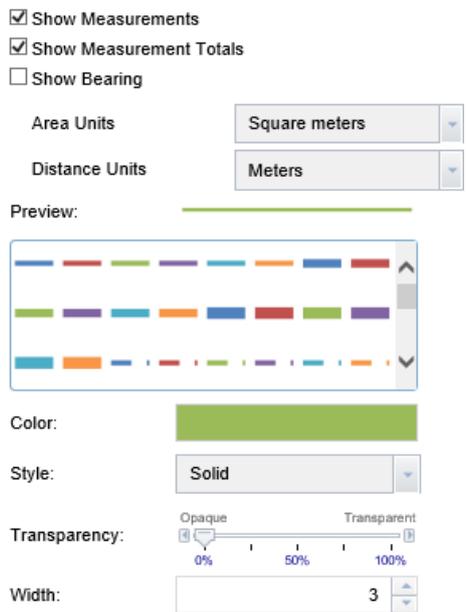


Fig.55 Draw & Measure Tool – Options for drawing a line

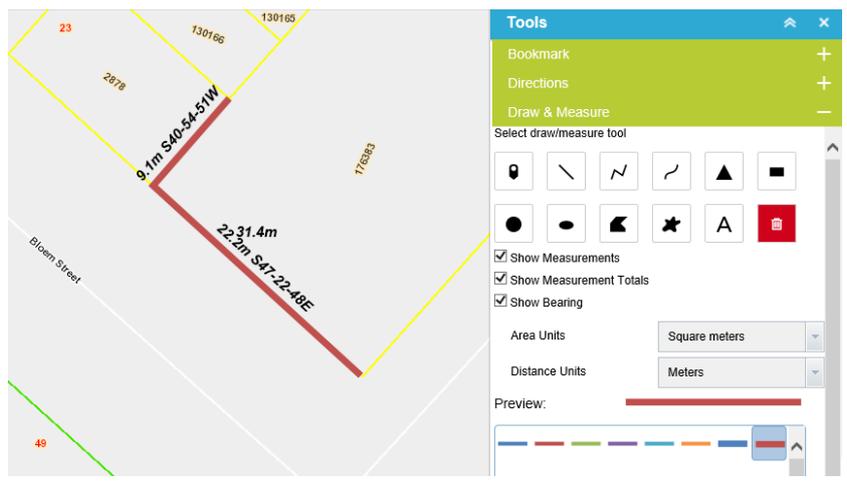


Fig.56 Draw & Measure Tool – Polyline drawing showing segment lengths, bearing and total length

5.3.2a Using the Line Tool

For the Line tool, left-click in the map area to start drawing the line and, while holding down the button, move the mouse to where the line should end and release the button.

5.3.2b Using the Polyline Tool

For the Polyline tool, left-click in the map area to start drawing the line, then move the mouse to where the next segment should start and click. Continue in this way and double click to complete the drawing.

5.3.2c Using the Freehand Polyline Tool

For the Freehand Polyline tool, left-click in the map area to start drawing the line and, while holding down the button, move the mouse and the line will be drawn as the mouse moves. Release the button to finish the drawing.

5.3.3 Drawing a shape

Click either the “Triangle”, “Extent”, “Circle”, “Ellipse”, “Polygon” or “Freehand Polygon” button to activate the required shape drawing tool. Set the display parameters required for the shape, see Fig.57 below for options available.

If measurements should be included on the drawing, make sure “Show Measurements” and “Show Measurement Totals” options are selected. “Show Measurement Totals” will print the total area of the shape once the drawing is completed. See an example of a polygon drawing in Fig.58 below.

NOTE: The “Show Bearing” option does not apply to drawing a shape and may be ignored. To clear the map area of drawings, you can click the Clear button (Red “Trashcan” icon).

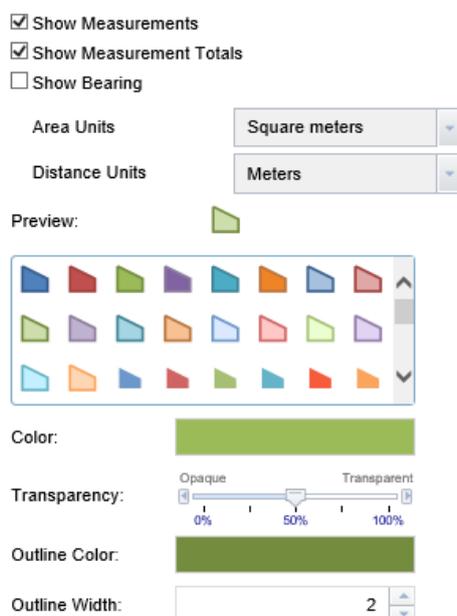


Fig.57 Draw & Measure Tool – Options for drawing a shape



Fig.58 Draw & Measure Tool – Polygon drawing showing sides' lengths, total length and Area

5.3.3a Using the Triangle, Extent, Circle or Ellipse Tool

Left-click in the map area to start drawing the shape and, while holding down the button, move the mouse to set the size of the shape. Release the button to complete the drawing.

5.3.3b Using the Polygon Tool

Click in the map area to start drawing the shape. Move the mouse to the next boundary and click. Continue in this way and double click to end the drawing.

5.3.3c Using the Freehand Polygon Tool

For the Freehand Polygon tool, left-click in the map area to start drawing the polygon's boundary line and, while holding down the button, move the mouse and the line will be drawn. Release the button to finish the drawing.

5.3.4 Adding Text

Click the "Text" button to activate the tool. Set the applicable display parameters required for the tool, as can be seen in Fig.59 below, and click in the map area to place the text drawing at the mouse pointer's location.

NOTE: The Measurement/Bearing/Area/Distance settings do not apply to text and may be ignored.

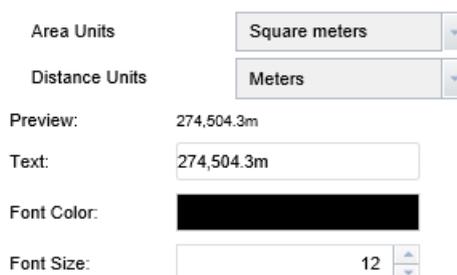


Fig.59 Draw & Measure Tool – Options for drawing Text

6. Print Tool

The Print tool can be used to create a PDF or PNG map of the spatial information seen in the map area. When the tool is selected, a window appears as can be seen in Fig.60 below.

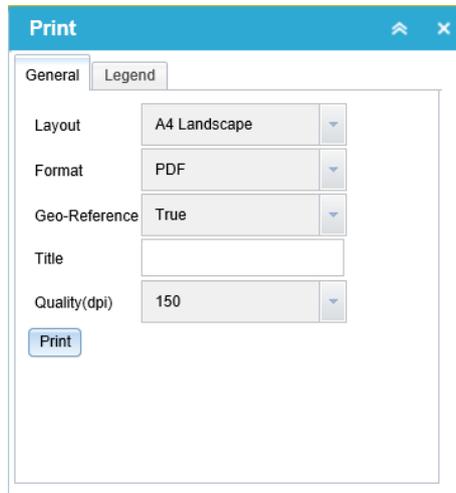


Fig.60 Print Tool – General Tab

Choose the print template required from the “Layout” dropdown-box and the file format from the “Format” dropdown-box. Choose if you want the map to be geo-referenced under the “Geo-reference” dropdown-box. Add a title for the map in the “Title” textbox and choose the quality required from the “Quality(dpi)” dropdown-box.

Click on the “Legend” tab to change which layers will appear in the printed map’s legend. Click the “Load” button to pull in all available layers into the list. Layers with their check-boxes checked will appear in the Legend. See Fig.61 below.

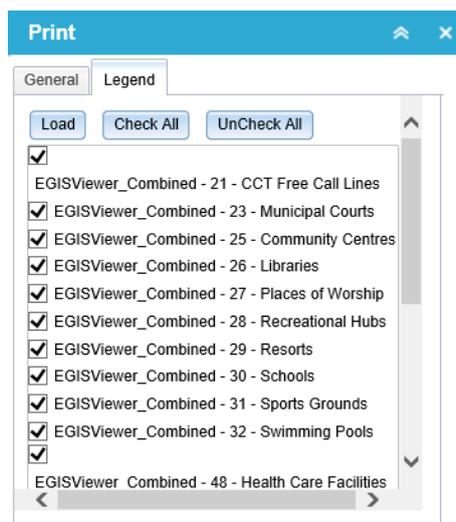


Fig.61 Print Tool – Legend Tab

7. Overview Map Tool

The overview map tool allows the user to view a secondary map of the location in the map area, but at a smaller extent (Zoomed out) to give context to the map area. This tool can be activated by clicking the small arrow in the bottom-right of the browser window as can be seen in Fig. 63 below.

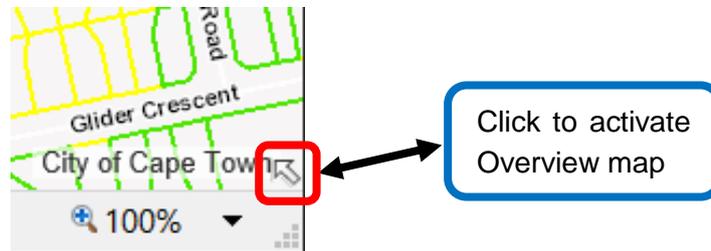


Fig.63 How to activate Overview Map Tool

The overview map tool can be closed by clicking the same arrow used to open the tool. There is another button available when the tool is open to make the overview map full screen. Click this button again to close the full screen view. See Fig. 64 below.

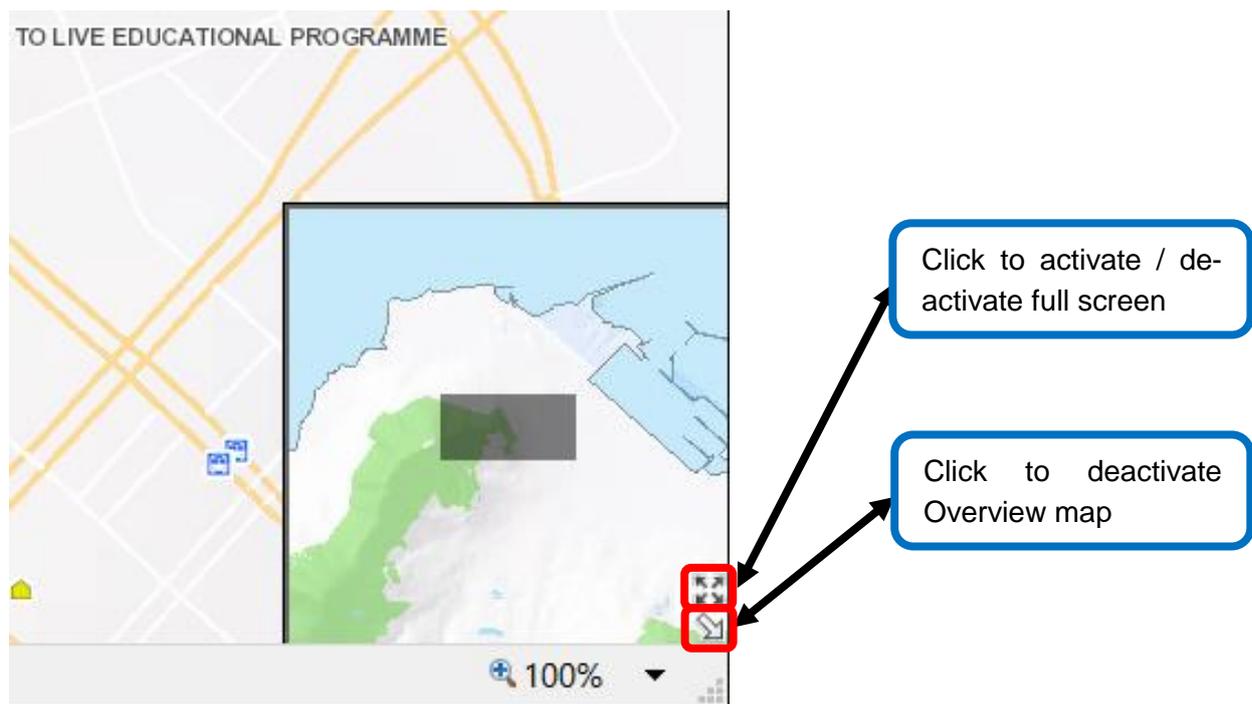


Fig.64 Overview Map usage

8. Zoom-to-Scale Tool

The zoom-to-scale tool can be activated by clicking on the scale text in the left-hand bottom of the viewer as can be seen highlighted in Fig.65 below.

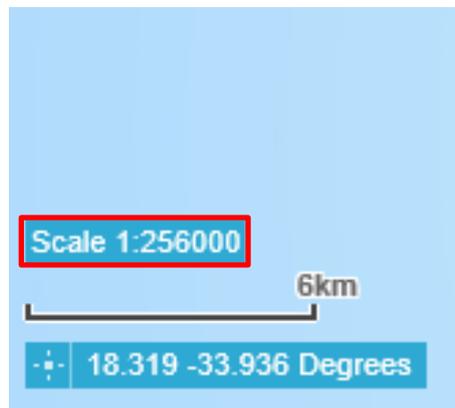


Fig.65 Location of Zoom-to-scale Tool showing current scale

Choose a predefined scale from the drop-down box and click "Submit". The map area will zoom to the new scale. See the available predefined scales in Fig.66 below.

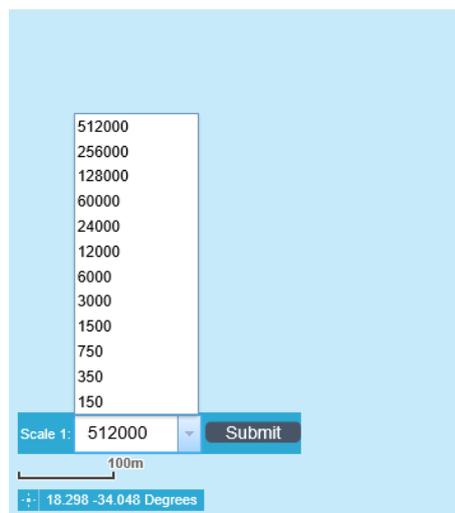
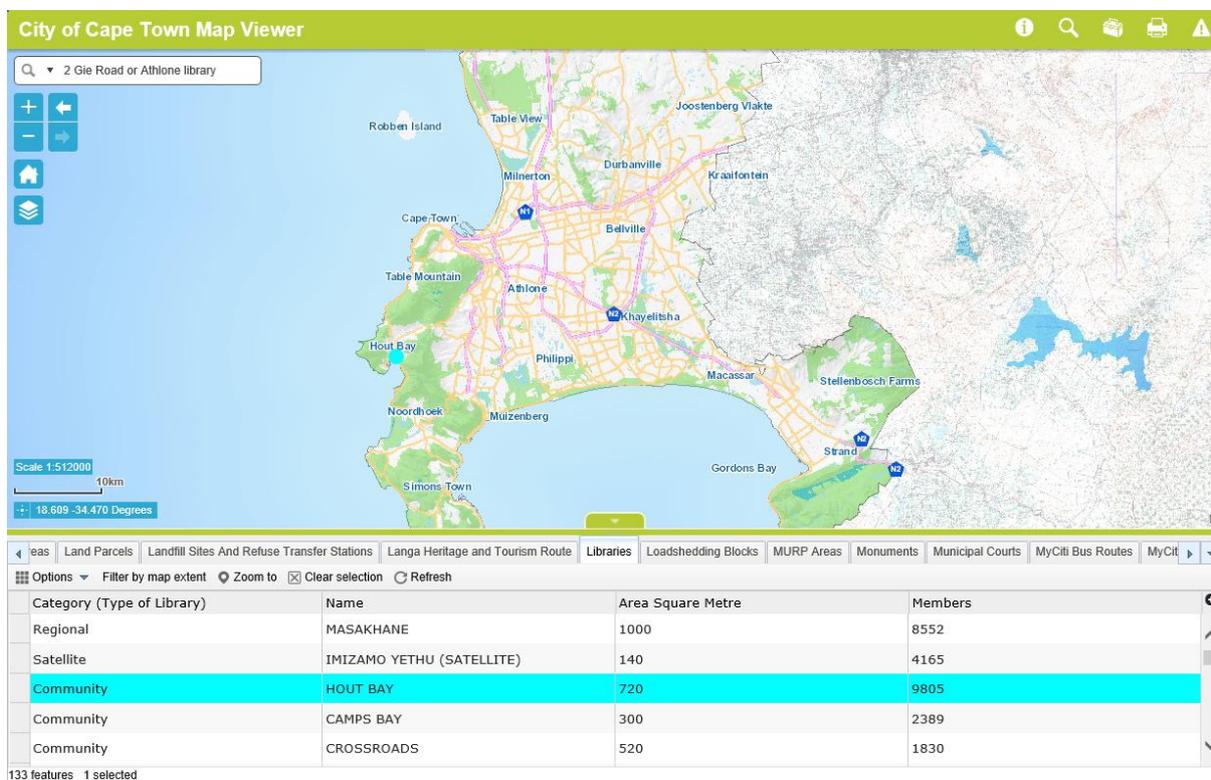


Fig.66 Available predefined scales

9. Attribute Table Tool

The green tab at the bottom of the City of Cape Town Map Viewer window opens the Attribute table. This tool allows the user to see the attribute tables of the datasets in the Layer List. See an example of the Libraries attribute table selected in Fig.67 below.



The screenshot shows the City of Cape Town Map Viewer interface. At the top, there is a search bar with the text "2 Gie Road or Athlone library". Below the search bar are navigation controls (zoom in, zoom out, home, layers) and a scale bar (Scale: 1:512000, 10km). The map displays various areas of Cape Town, including Robben Island, Table View, Joostenberg Vlakte, Durbanville, Kraalfontein, Milnerfontein, Cape Town, Table Mountain, Athlone, Khayelitsha, Philippi, Muizenberg, Macassar, Stellenbosch Farms, Hout Bay, Noordhoek, Simons Town, Gordons Bay, and Strand. At the bottom, there is a layer list with "Libraries" selected. Below the layer list is the attribute table for Libraries, which has columns for Category (Type of Library), Name, Area Square Metre, and Members. The "HOUT BAY" record is selected, highlighted in cyan. The table shows 133 features, with 1 selected.

Category (Type of Library)	Name	Area Square Metre	Members
Regional	MASAKHANE	1000	8552
Satellite	IMIZAMO YETHU (SATELLITE)	140	4165
Community	HOUT BAY	720	9805
Community	CAMPS BAY	300	2389
Community	CROSSROADS	520	1830

Fig.67 Attribute Table Tool – One record selected

A specific record can be selected by clicking in the grey square to the left of the record in the table. If more than one record needs to be selected, hold down the “Ctrl” or “Shift” button on the PC keyboard while selecting additional records. The selected records’ spatial components are highlighted in the map area, see example in Fig.67. To zoom the map area to the selected record(s), click the “Zoom to” button as seen in Fig.68 below. To clear the selected records from the attribute table, click the “Clear Selection” button.

Click the “Options” button to access advanced options. This dropdown menu allows the exporting of attribute data to a CSV file and some other advanced options. Click “Filter by Map Extent” to see all the records in the table and not limit the attributes to the features visible in the map area. (This is a toggle switch and is “On” by default, i.e. by default the attribute table only lists records for features visible in the map area) See Fig.68 below for Attribute Table Tool buttons.



The screenshot shows the Attribute Table Tool buttons. From left to right, there is an "Options" button with a dropdown arrow, a "Filter by Map Extent" button with a toggle switch, a "Zoom to" button with a location pin icon, a "Clear Selection" button with a square icon containing an 'X', and a "Refresh" button with a circular arrow icon.

Fig.68 Attribute Table Tool – Buttons

10. About, Contact Information and Disclaimer

Feedback: city.maps@capetown.gov.za

Open Data Portal: <https://odp-cctegis.opendata.arcgis.com/>

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