ORDNANCE SURVEY
OF NORTHERN IRELAND®
Spatial NI
Map Viewer
Guide

Document Version

Version	Purpose for Change	Date
1.0		

Ordnance Survey of Northern Ireland
Lanyon Plaza | 7 Lanyon Place | Belfast | BT1 3LP
https://www.spatialni.gov.uk

© Crown Copyright 2019

Contents

About this guide 5
Overview 5
On Screen Widgets 7
Zoom Slider 7
Home 8
My Location 8
Full Screen 9
Extent Navigate 10
Coordinates 10
Attribute Table 11
Overview Map 13
Search 14
Panel Widgets 16
Data 16
Basemap Gallery 16
Add Data 17
Layer List 19
Legend 20
Analysis 21
Bookmark 21
Draw & Measure 22
Go to XY 25
Select 26
Filter 28
Buffer 29
Print 31
Share 33
Information 34
Map Tour 34
About 34
Help 34
Spatial NI 35

Further help and support 35

About this guide

This guide has been written to assist you when using the Spatial NI Map Viewer.

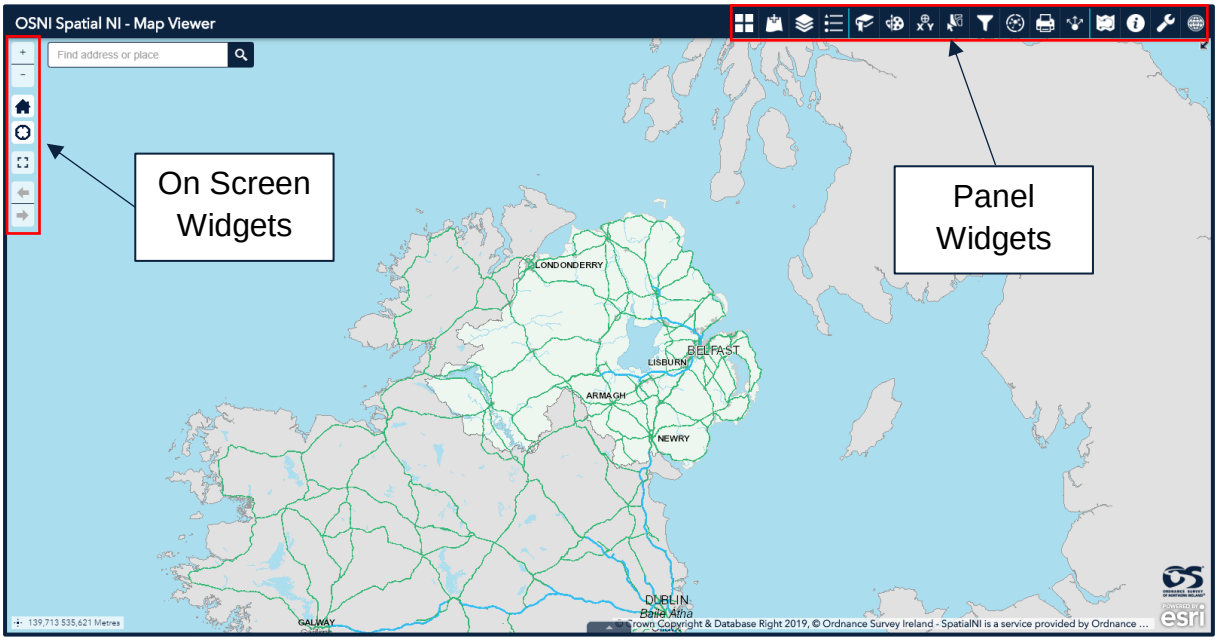
Text highlighted in **bold** are actions that you will need to complete.

Map Viewer Tip: Discover a handy tip for how to do something in the Spatial NI map viewer.

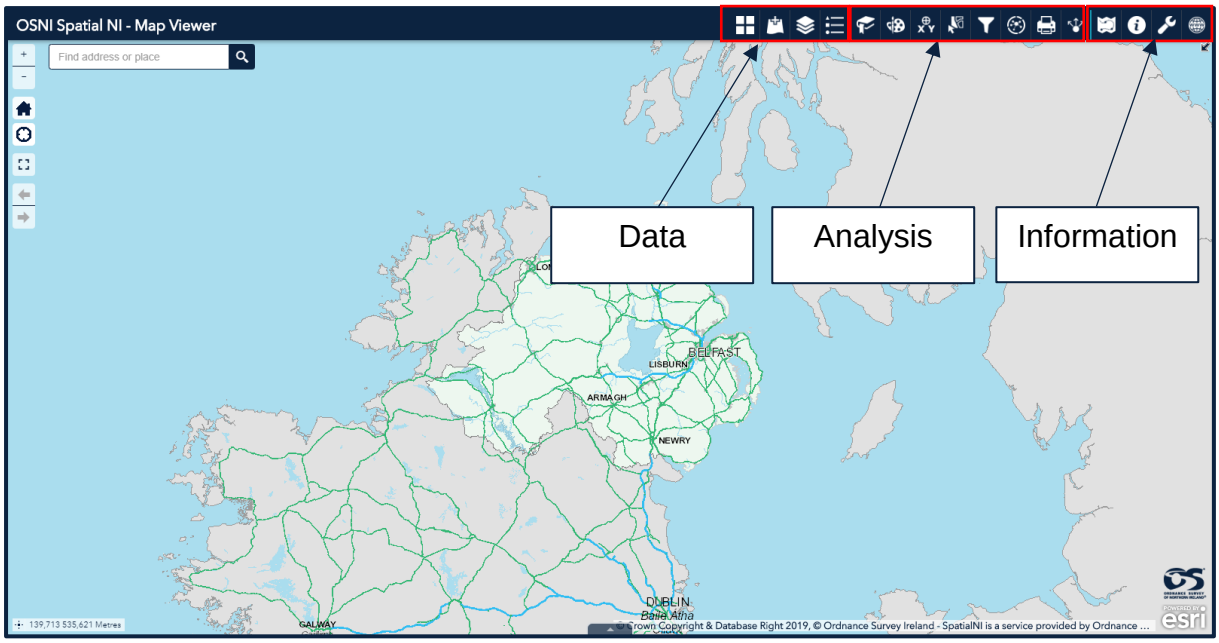
Overview

The Spatial NI map viewer is a free to use application allowing you to interrogate OSNI mapping and other geospatial information from multiple sources to provide a deeper understanding of the issues that impact our lives.

The functions you can use in the map viewer have been divided into 2 types:

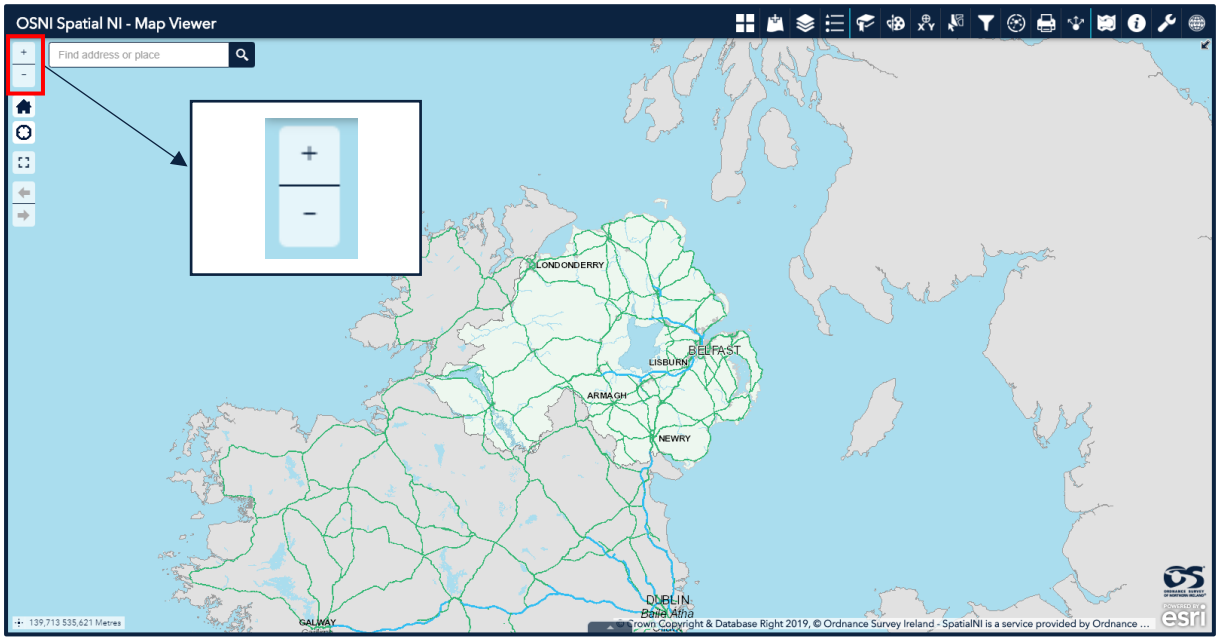


The panel widgets have been divided into 3 categories:



On Screen Widgets

Zoom Slider



Use the (+) and (-) buttons to either zoom in or out of an area shown on the map.

The more zoomed in you are, the more detail will be shown on the map. This is good for showing detail down to individual locations such as houses, farms or specific sites.

Advanced Map Navigation: use the + and – keys on your keyboard to zoom in and out on the map.

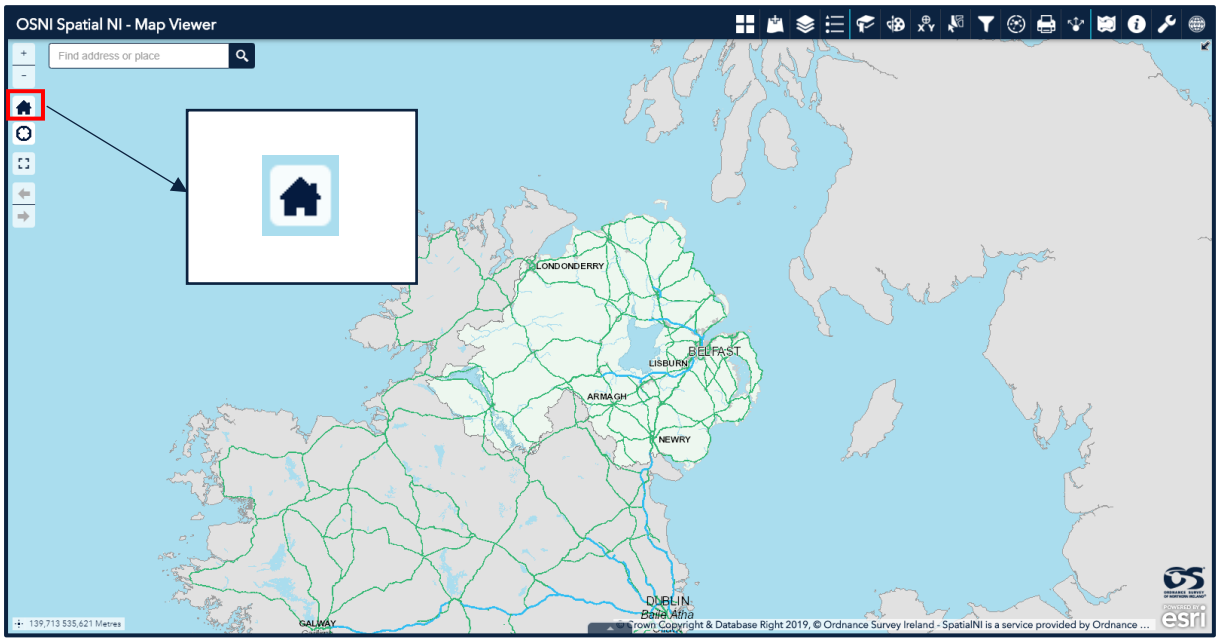
Double left click with your mouse to zoom in to that specific area.

Hold the shift key on your keyboard and use your left mouse button to draw an area to zoom to on the map.

Use the scroll wheel on your mouse to zoom in or out on the map.

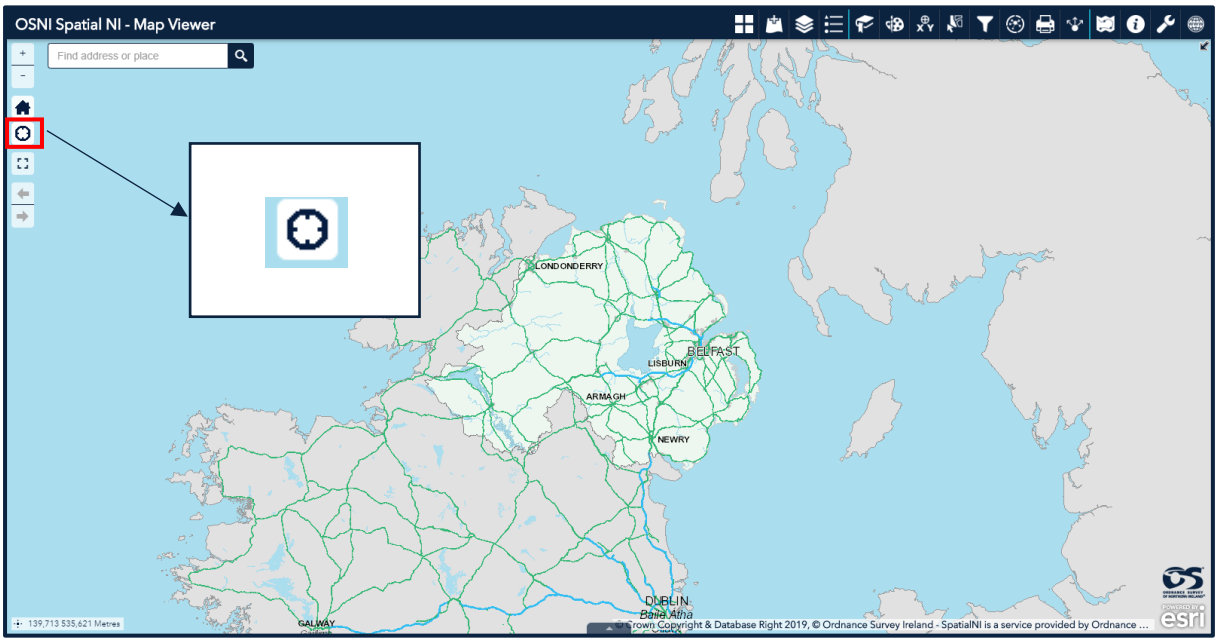
Left click and hold using your mouse to pan the map.

Home



Use this button to reset the map to its original extent.

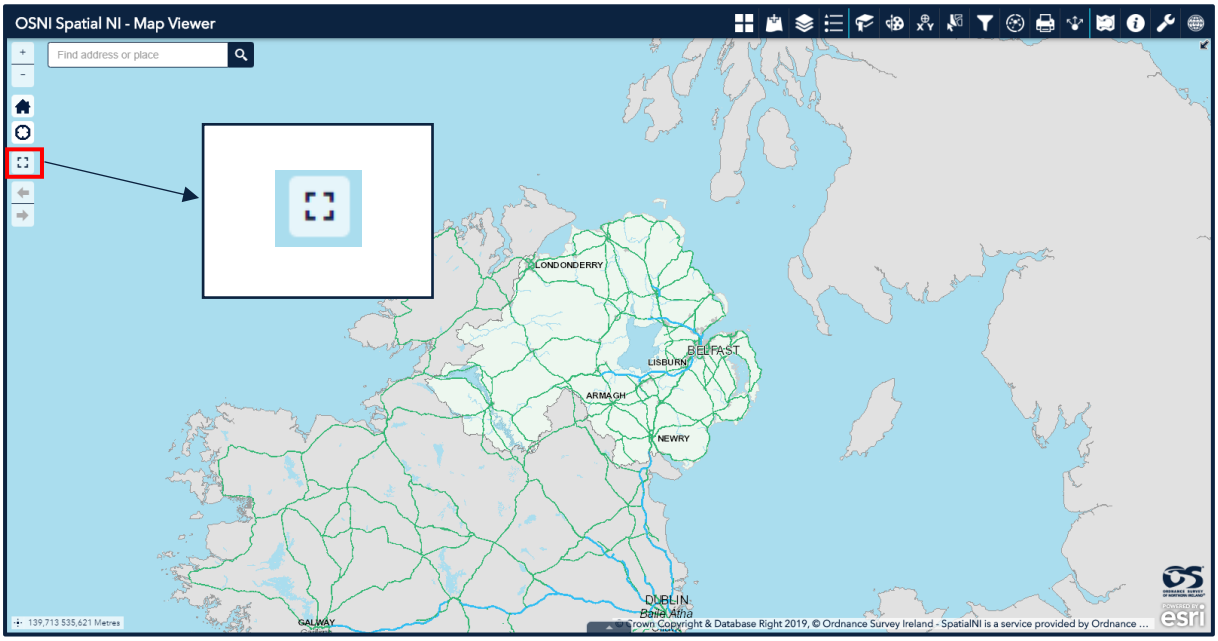
My Location



Select this function to navigate the map to your current location. Doing this changes the scale of the map to the most appropriate for the location.

Spatial NI recommend that you only use this function when on a mobile device and location services have been enabled.

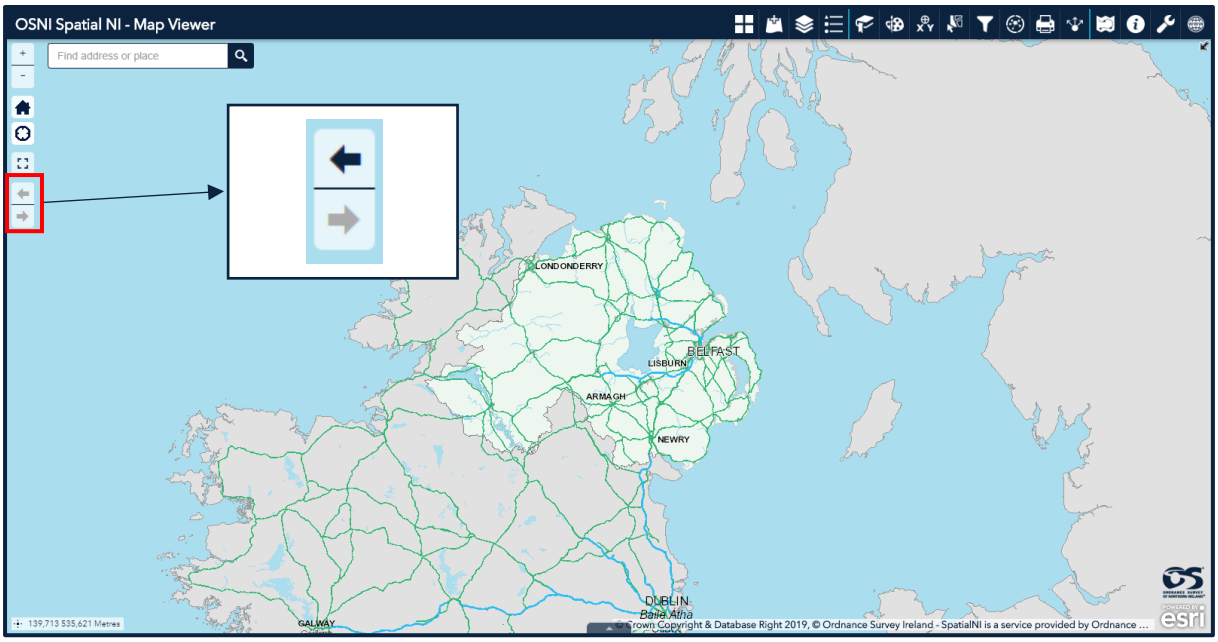
Full Screen



Use the full screen mode to expand the map viewer to the full extent of your monitor screen. This is particularly useful when using the map viewer for a presentation.

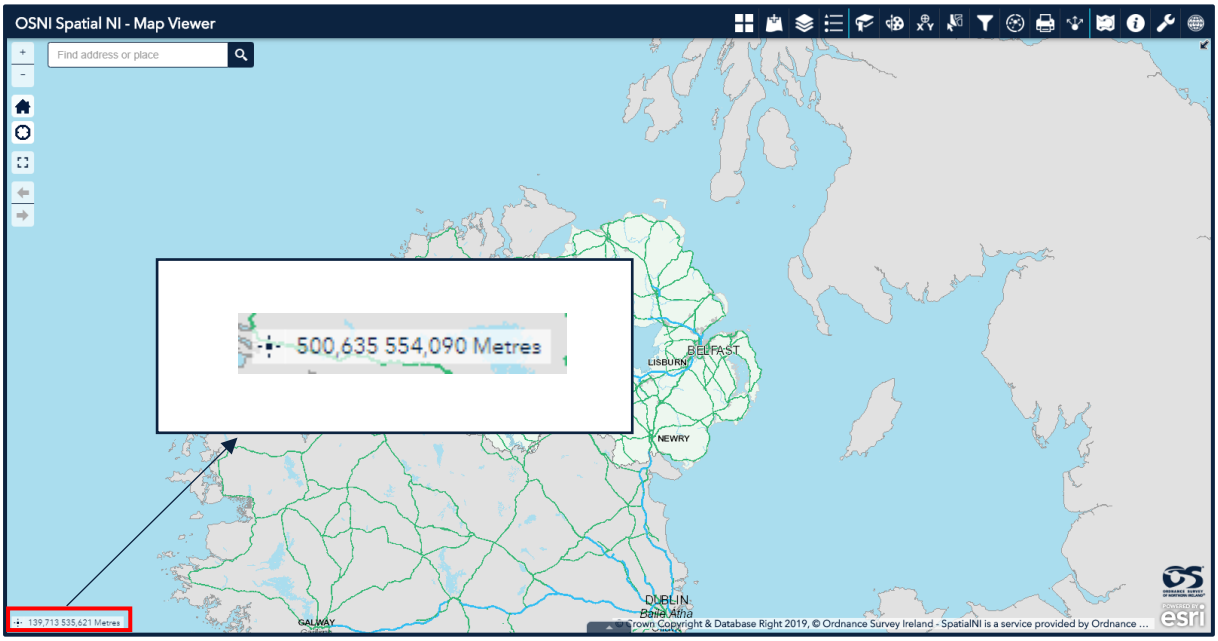
The full screen function is not supported on mobile devices.

Extent Navigate

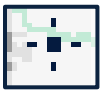


Click the arrows to navigate the map to its previous or next extent.

Coordinates

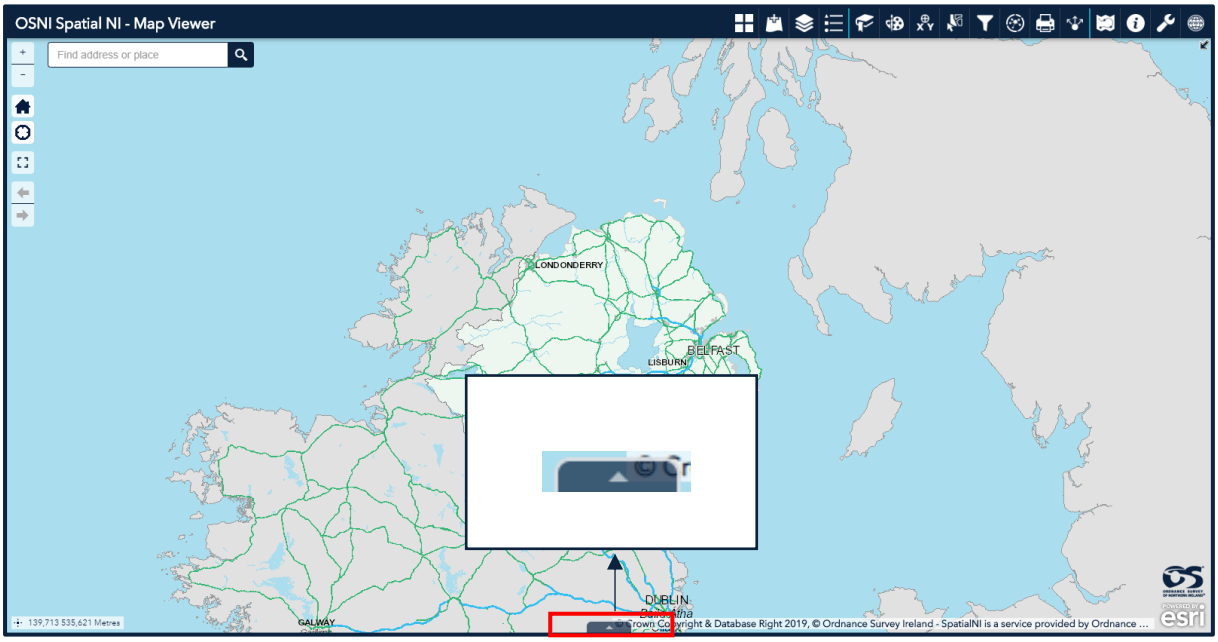


The coordinates are displayed at the bottom left of the map in Irish Grid Eastings and Northings. The coordinates will change depending on your curser location.



Selecting the '**Get Map Coordinates**' button allows you to find the exact location on the map. When you click on a location, a marker symbol will appear and the coordinates are fixed to this location. To remove the marker symbol, deselect the '**Get Map Coordinates**' button.

Attribute Table



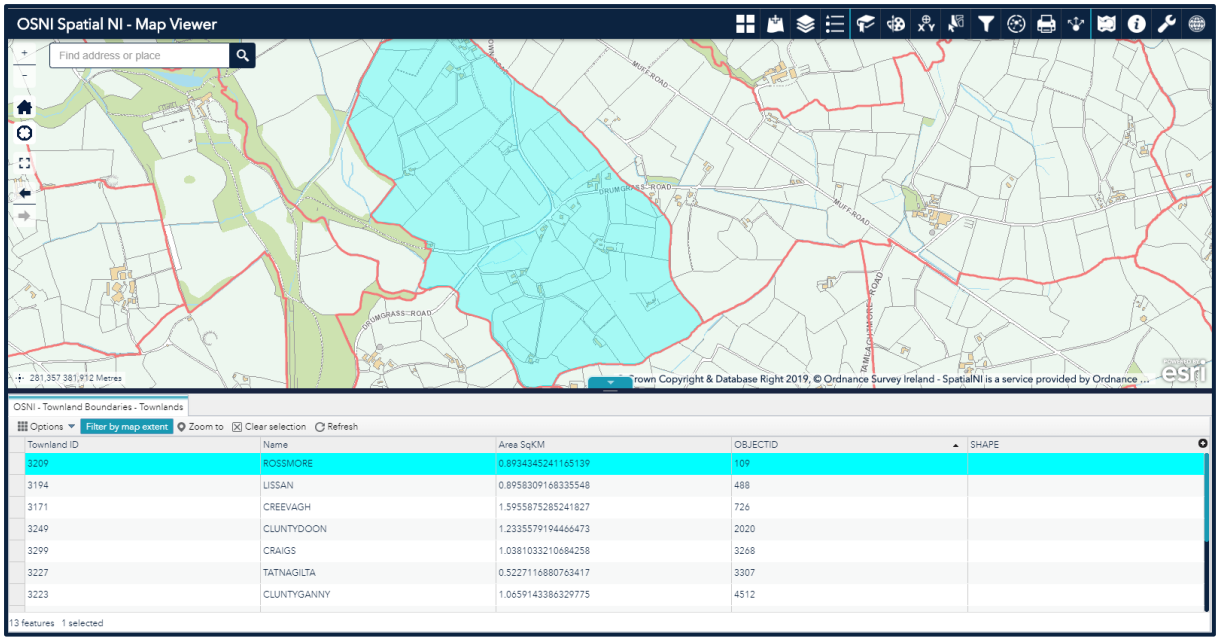
Open and close the attribute table by clicking on the tab at the bottom of the map.

A range of functions are available for you to explore the data on your map.

Select a record – Click a record in the table to select it and highlight the corresponding feature on the map. Press the Shift or Ctrl key on your keyboard and click using your left mouse button to select multiple records.

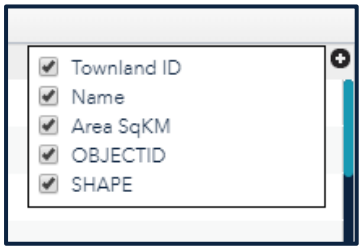
Clear selections – Click the Clear selection button to clear all selections.

Refresh – Click refresh to refresh the table.



Sort a field – Click a field heading to sort the records by this field.

Show or hide columns – Click the + button on the right side of the attribute table panel to open the field visibility window. Check or uncheck the fields to set their visibility in the table.



Number of selected records – shown at the lower left of the table.

Options -

Show Selected Records – displays the selected records in the table

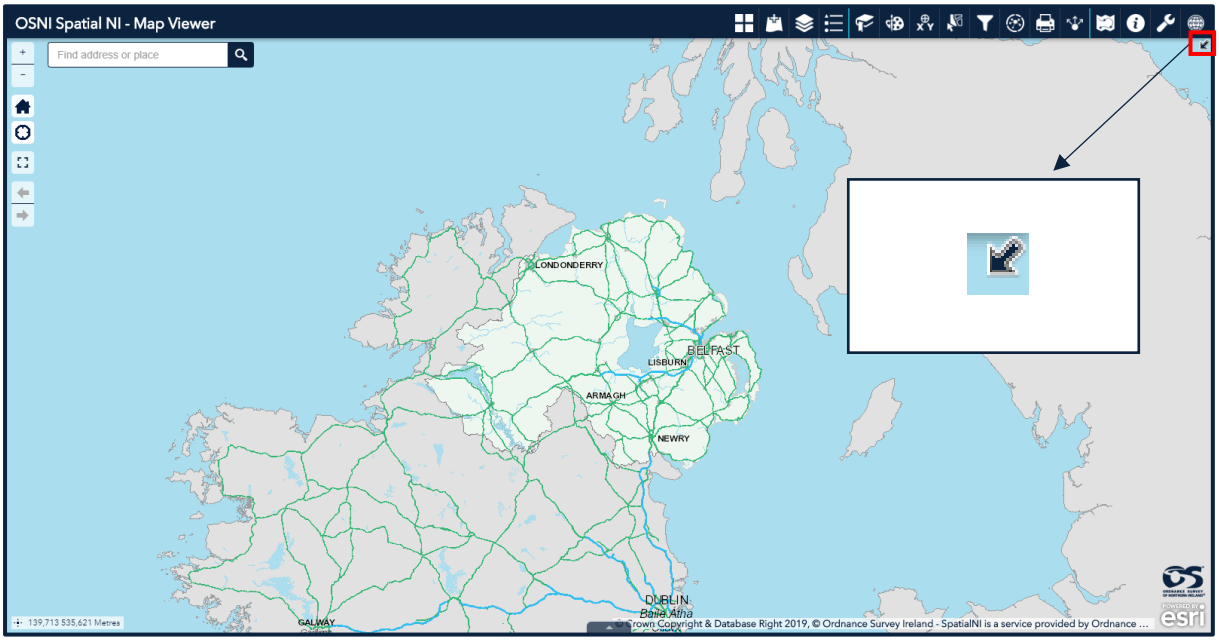
Show Related Records – displays related records if a selected record has a related table.

Filter – ability to filter records in the table by using a query.

Filter by Map Extent – Displays attributes for features within the current map extent.

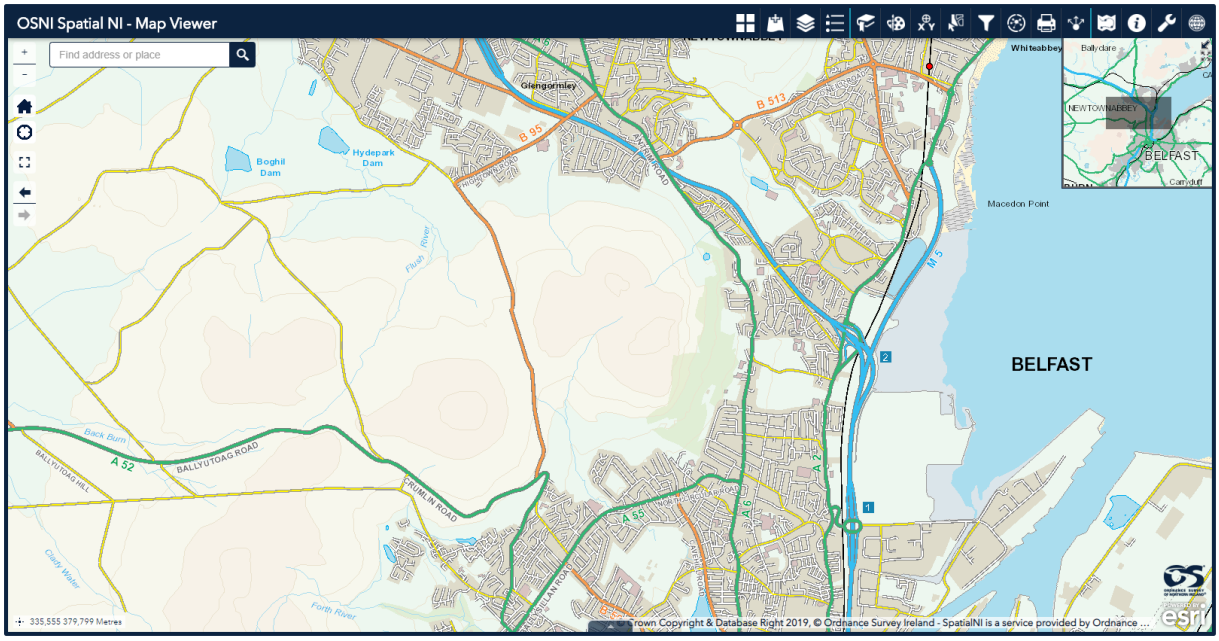
Expand the attribute table: expand the attribute table by clicking on and dragging the navy bar at the top of the table just below the tab to open and close the table.

Overview Map

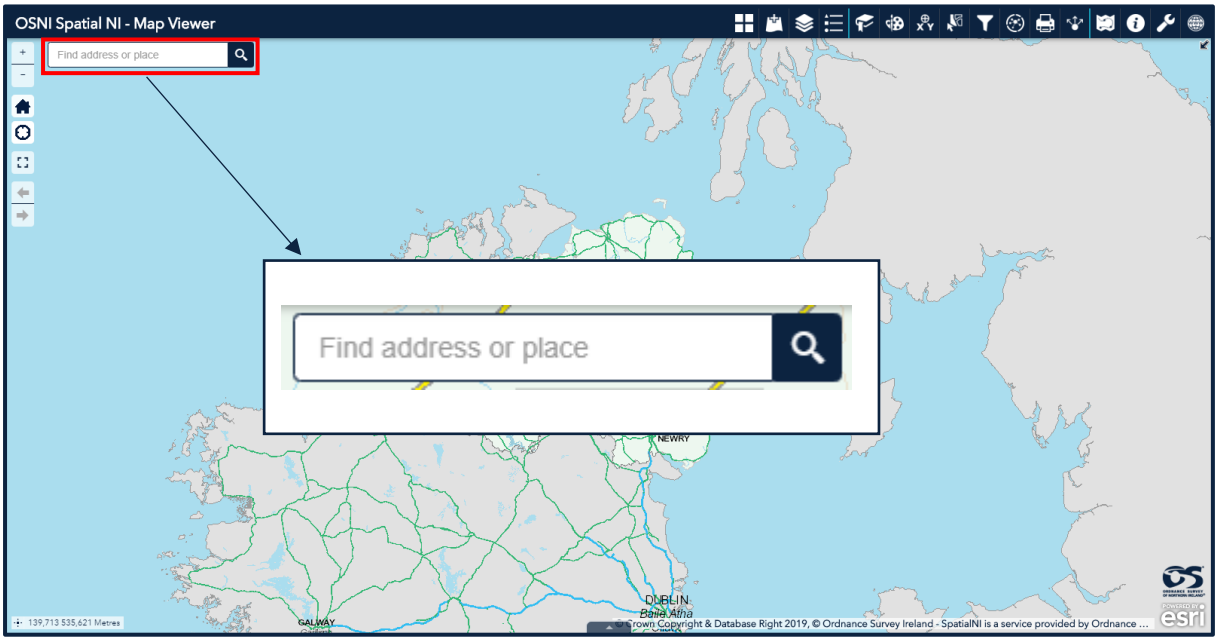


The overview map can be launched by clicking on the arrow on the top right of the map. This displays the current extent of the map within the content of a larger area and updates whenever the map changes.

The current map extent is represented by a grey rectangle on the overview map and can be dragged to modify the extent of the current view.



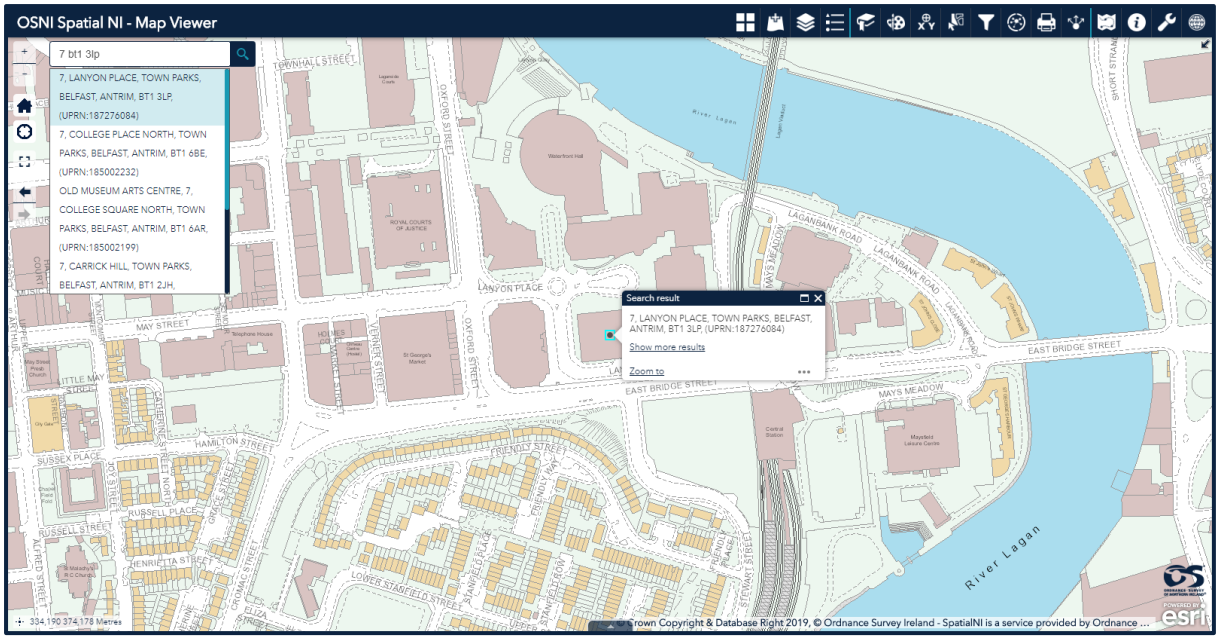
Search



Search for an address or place using the search bar located on the top left of the map.

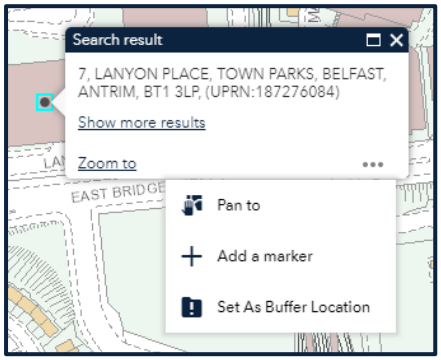
Type an address or postcode in the bar and click the search icon. The search is not case sensitive.

Depending on your search criteria, a list of suggestions will appear in a dropdown menu. Click on your desired address to locate the location on the map.



A popup will appear on the map showing the full address including the Unique Property Reference Number (UPRN).

From the popup: click on the 3 ellipses to get an additional menu. From here you can add a marker or set the location to be used in the buffer analysis tool.



The marker contains the Irish Grid coordinates for the location and a URL reference for the location.

Panel Widgets

Data

Basemap Gallery

Selecting the basemap gallery widget displays all the OSNI basemaps available for you to use in the map viewer. Clicking a basemap thumbnail sets it as the active basemap for your map.

A summary of the basemaps available is provided below:

Basemap Name	Description	Scale
(1:250,000) Colour	A coloured raster map of NI highlighting features such as: roads golf courses, settlements, and sites of interest.	1:550,000 - 1:120,000
(1:250,000) Outline	A black and white outline raster map of NI highlighting features such as: roads golf courses, settlements, and sites of interest.	1:550,000 - 1:120,000
1:10,000	A largescale derived raster map showing detailed information on features such as roads, fields, water and settlements.	1:20,000 - 1:5,000
Activity (1:25,000)	A series of raster maps tailored to outdoor leisure activities centred on six regions of NI (e.g. The Mournes).	1:30,000 - 1:10,000
Discoverer (1:50,000)	A mid-scale raster map giving full coverage of NI showing all roads, tourist information and relief.	1:60,000 - 1:20,000
Discoverer (1:50,000)(Grid)	A mid-scale raster map giving full coverage of NI showing all roads, tourist information and	1:60,000 - 1:20,000

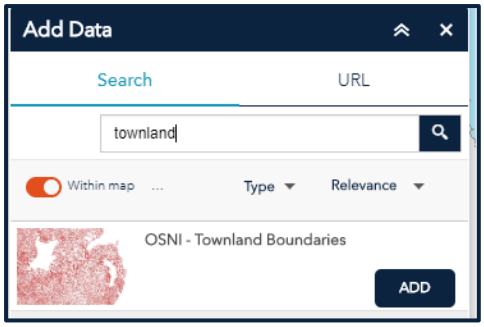
	relief. This includes the Irish grid reference lines.	
Fusion	A scalable basemap depicting detail from a NI scale to the most detailed (derived from OSNI Fusion). This includes data from Ordnance Survey Ireland.	1: 2,000,000 - 1:500
Fusion Light	A grayscale styling of the Fusion basemap.	1: 2,000,000 - 1:500
Orthophotography	High quality 3-band Ariel photography offering a detailed birds-eye view of the landscape.	1: 2,000,000 - 1:500
Streetmap	A detailed raster map showing clear street level information for towns and cities in NI.	1:20,000 - 1:5,000

Add Data

The add data widget enables you to search Spatial NI and add other content to your map.

Search Tab

The search tab lists all the data available for you to add to your map. You can either scroll through the list or search based on keywords.



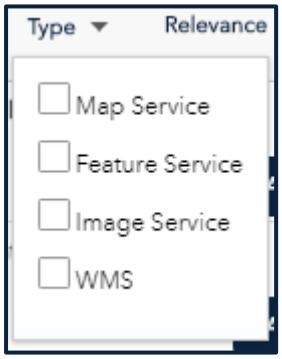
Use the pagination controls located at the bottom of the window to move between pages.

Click the **add** button to add the data to your map. To remove the data, select **remove**.

There are a number of options available to help you refine your search.

To search only layers within the map area, toggle the Within map button until it turns green. To search all layers, leave the toggle button red.

Click the **Type** dropdown list to search layers based on a specific type of web service:

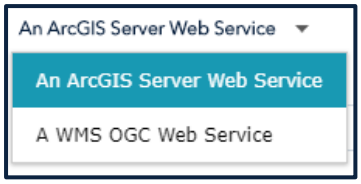


Click the **Relevance** dropdown list to sort the items based on relevance or title:

URL Tab

The URL tab gives you the option of adding data to your map from other sources. If you know the URL, paste it into the box and click **add**.

The following service options are accepted:



Click **sample URL(s)** to see the URL format for each type.

To see a list of all the services you have added, click the LAYERS option on the bar at the bottom:

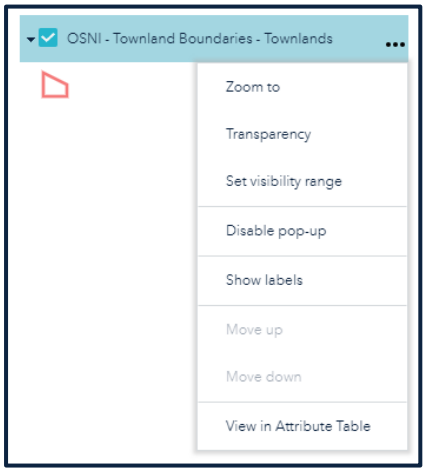
To remove a layer, hover over the item in the list and click the bin icon.

Layer List

The layer list widget provides a list of operational layers and their symbols. It allows you to turn individual layers on and off.

Use the check box to toggle the layer on and off:

Click the three ellipses to the right of the layer name to display the layer menu. This provides you with the following additional options:



Zoom To – sets the map extent to the extent of the layer

Transparency – sets the transparency for the layer

Set visibility range – sets the range at which the layer will draw on the map

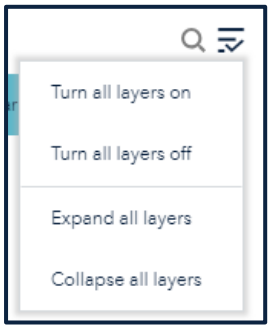
Enable/Disable Pop-Up – enables or disables the popup for the feature layer

Show/Hide Labels – turns on or off the labels for the feature layer

Move Up/Down – moves the selected layer up or down one level in the list

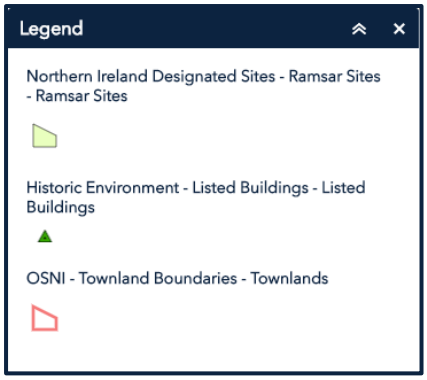
View in Attribute Table – opens the attribute table for the feature layer

Use the control all layers button to control the behaviour of the layers in the list.



Legend

The legend widget displays labels and symbols for layers on the map. The order in which layers appear in the legend corresponds to the layer order in the map.



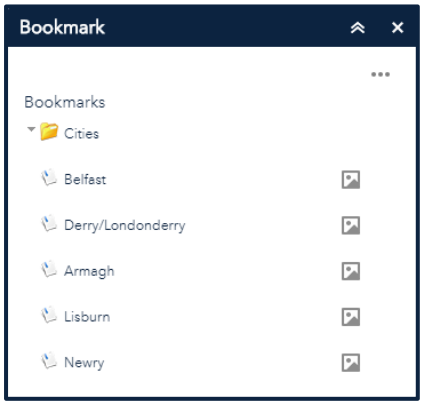
If you turn a layer off in the layer list widget, it will be removed from the legend.

Analysis

Bookmark

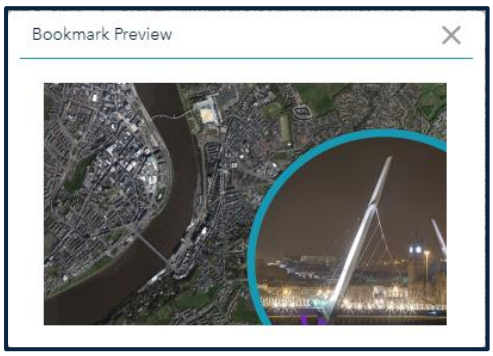
The bookmark widget stores a collection of map view extents (spatial bookmarks) displayed in the map viewer.

Open the widget to see a pre-defined list of bookmarks for the cities in Northern Ireland.

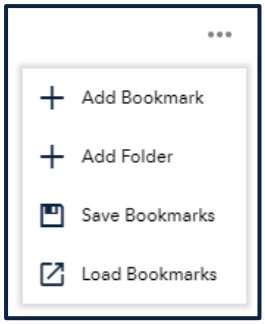


Click on a bookmark name to activate that bookmark. The map will zoom you to that location.

Click on the preview thumbnail to view an image of the bookmark location.



Click the three ellipses on the top right to open an additional action menu.



From this menu, you can:

Add a bookmark – locate your area of interest on the map, click **add bookmark** and give your bookmark a name.

Add a folder – create a new folder in which to store your bookmarks.

Save bookmarks – save your bookmarks as a json file on your own device.

Load bookmarks – load saved bookmarks back into the map viewer.

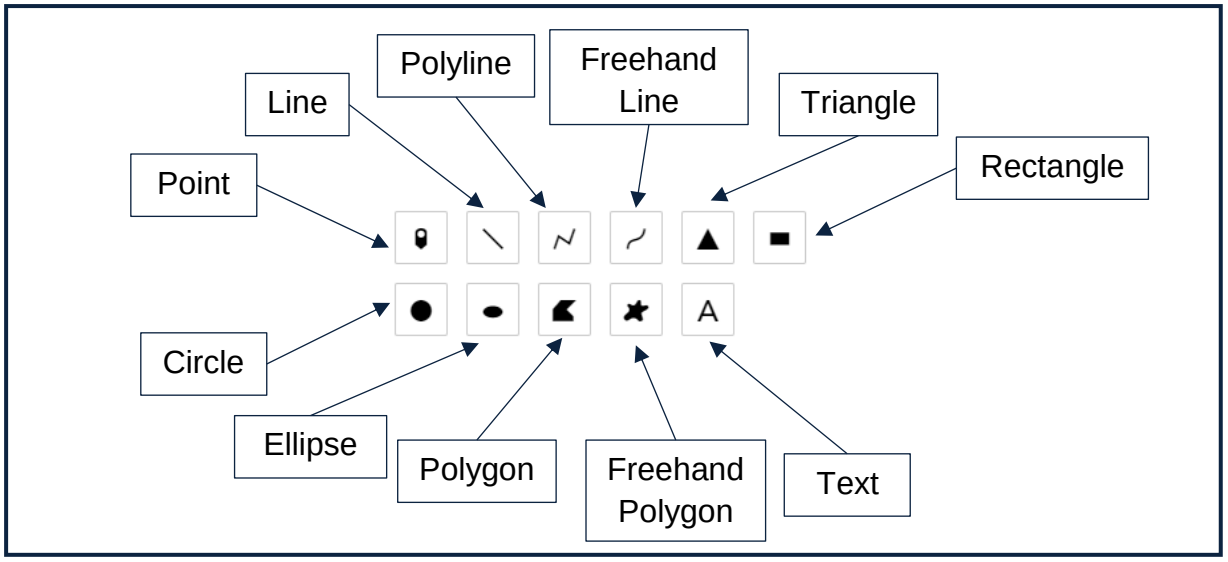
Select the X to remove any folders or bookmarks you have created.

Your bookmarks will not persist once you close the map viewer unless you save them.

Draw & Measure

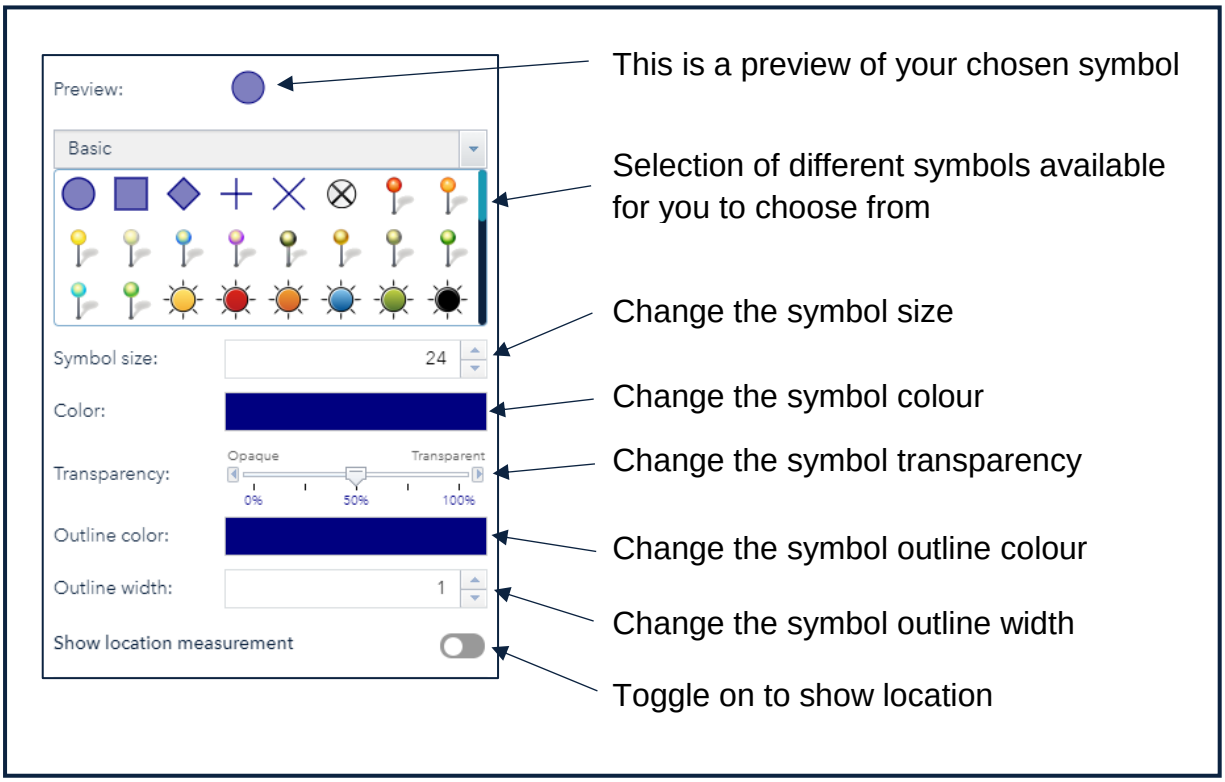
The draw and measure widget allows you to create simple graphics and text that display on the map. You can also use it to add line distance or polygon area to the feature as text.

When you open the widget, a dialog box appears that contains 11 feature draw tools:



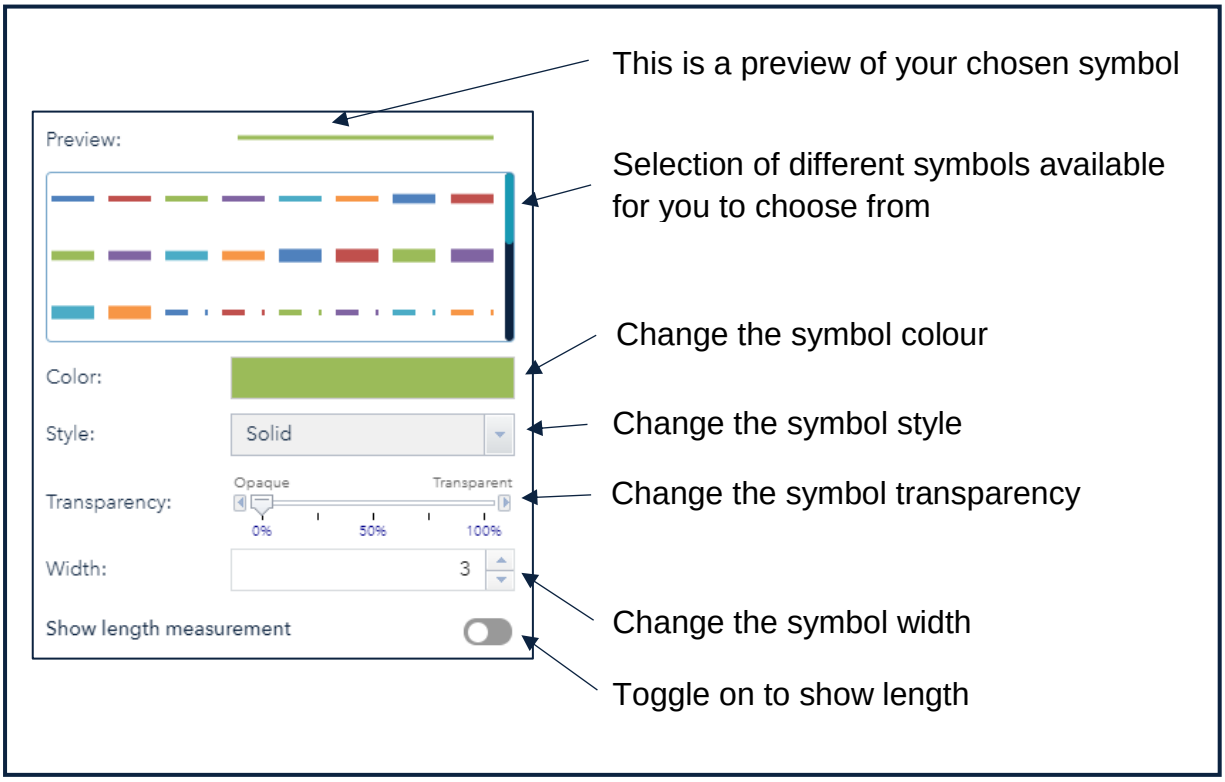
Click the symbol type to select the drawing mode. This opens a symbol specific menu from which you can change the symbol attributes.

For point symbols:



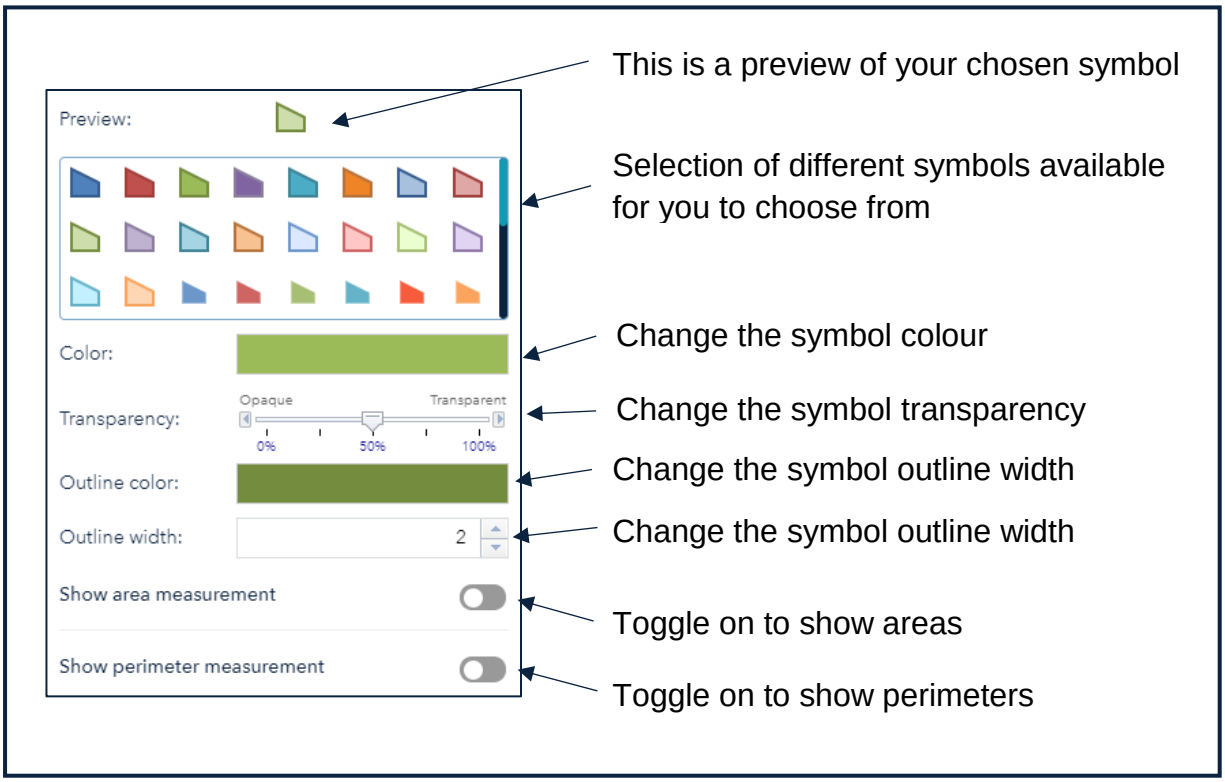
Show location measurement gives you the option to get coordinates in Degree or Degrees-Minute-Second format.

For line symbols:



The **show length measurement** gives you the option to show lengths in kilometres, miles, metres, feet, yards or nautical miles.

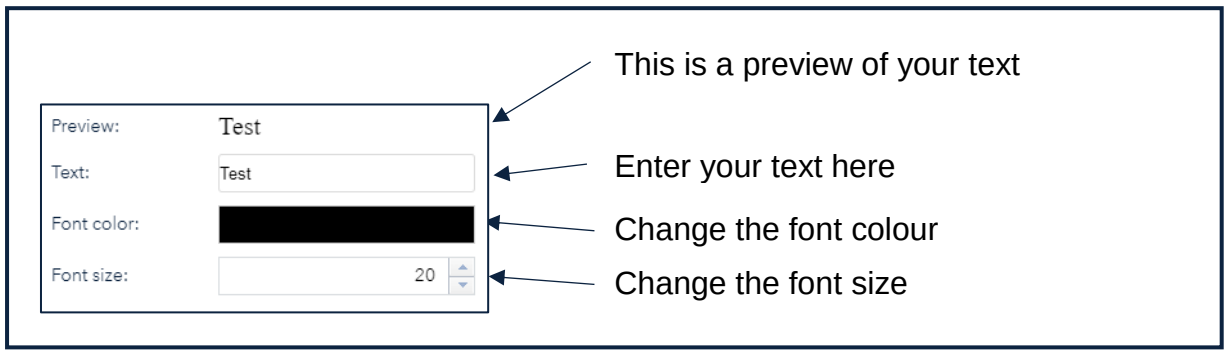
For polygon symbols:



The **show area measurement** gives you the option to show area in square kilometres, square miles, acres, hectares, square metres, square feet or square yards.

The **show perimeter measurement** gives you the option to show lengths in kilometres, miles, metres, feet, yards or nautical miles.

For text:

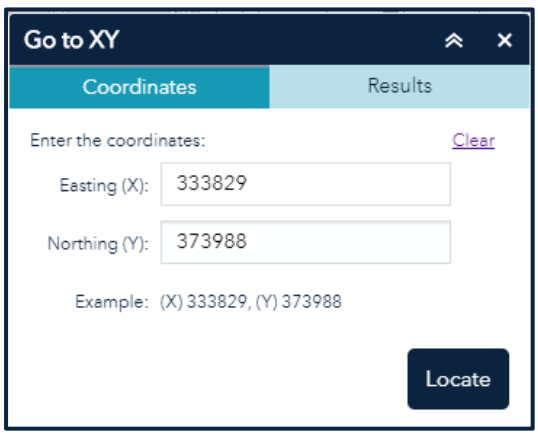


Click the **Undo** or **Redo** to undo or redo the drawing features, or click **Clear** to remove all of them.

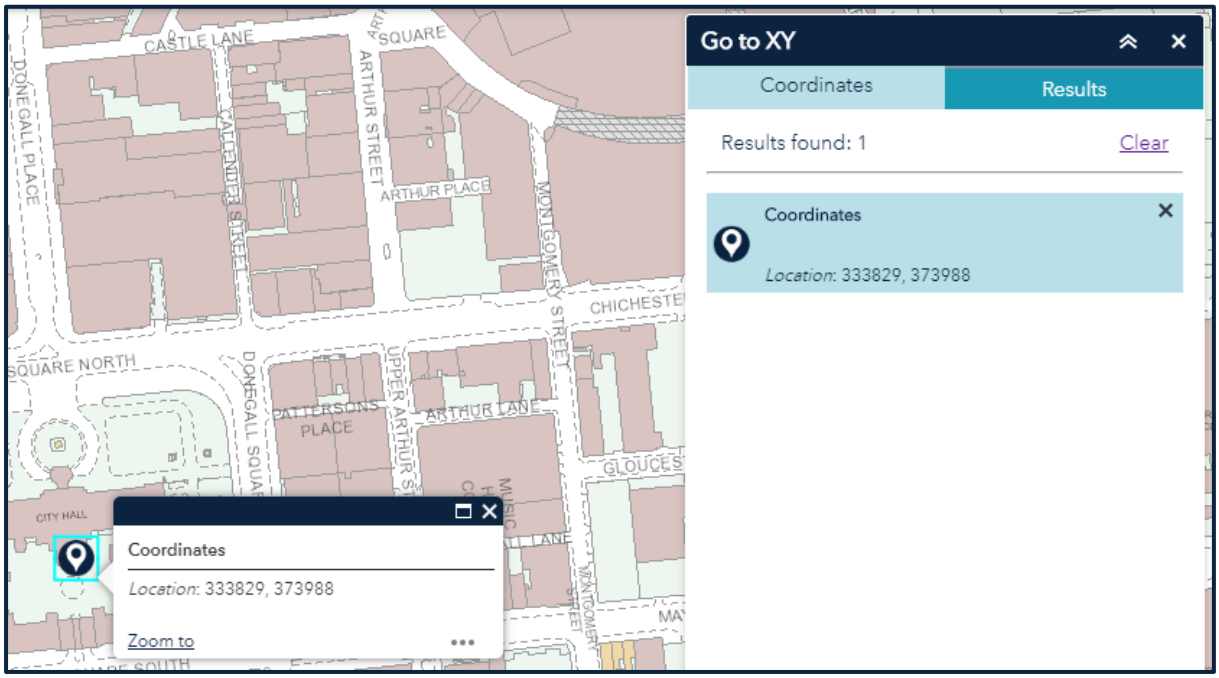
Go to XY

The Go to XY widget gives you the ability to enter Irish Grid Eastings and Northings and to zoom to that location on the map.

Enter your easting and northing and click **Locate**.



This will open the results tab where your coordinates are displayed in a list. A marker symbol is also added to the map.



Click the X to remove your search from the results.

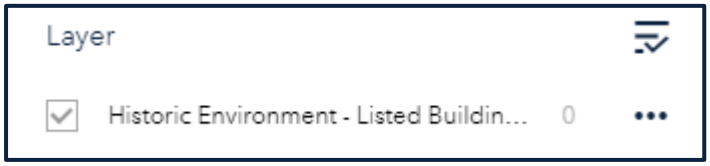
You can navigate back to the coordinates tab and continue to search for more locations.

Select

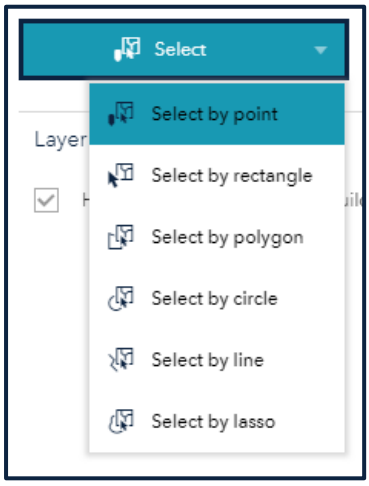
The select widget enables you to interactively select features on the map and take actions on the selected features.

Add data to your map using the add data widget.

In the select layer list, ensure your chosen layer is selected:

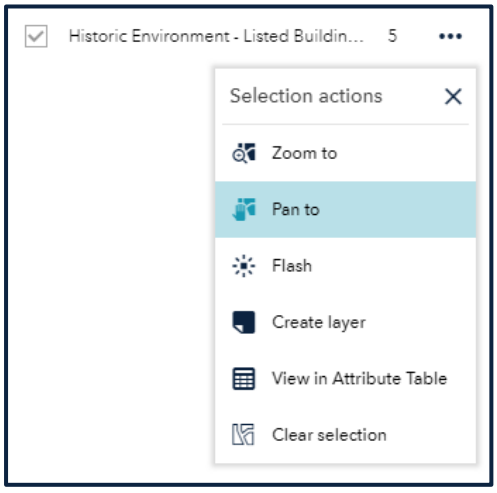


Click on **select** and chose an option from the list.



Draw around your chosen features on the map to select features. The number of selected features display next to the layer and are highlighted on the map.

Click the three ellipses beside the service name to open the Selection Actions dropdown menu.



The options are:

Zoom to – zoom to the features on the map

Pan to – pan to the features on the map

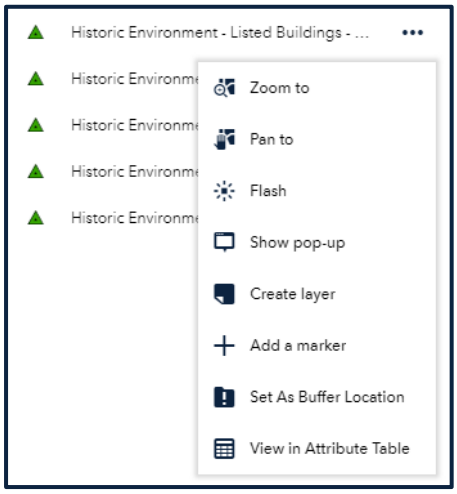
Flash – flash the features to make them visible

Create layer – create a layer from your selection and add it to your layer list

View in Attribute Table – view the selected records in the attribute table

Clear selection – clears the selection

Alternatively, click the **layer name** to display the list of features. Click the three ellipses to open the selection Actions dropdown menu.



The options are:

Zoom to – zoom to the features on the map

Pan to – pan to the features on the map

Flash – flash the features to make them visible

Show pop-up – show the features popup on the map

Create layer – create a layer from your selection and add it to your layer list

Add a marker – add a marker symbol at the location

Set as Buffer Location – use the location as the input for the buffer widget

View in Attribute Table – view the selected records in the attribute table

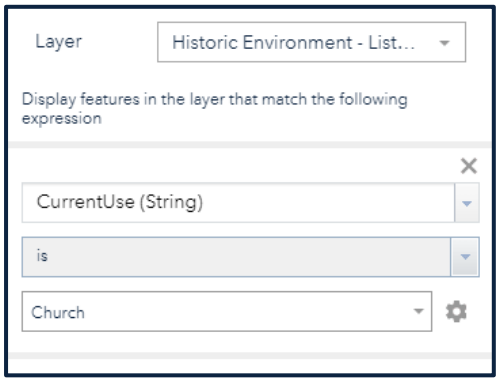
Filter

The filter widget allows you to limit the visibility of features in a layer. Only the features that meet the expression criteria will be visible on the map.

Add data to your map using the add data widget.

Click the **create custom filter** icon on the bottom right:

Select the layer you would like to filter and create your expression using the builder:

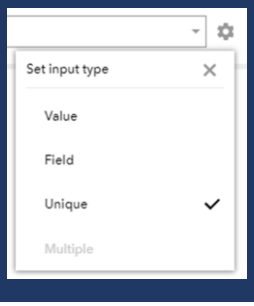


Move the toggle located at the top right to green to enable your filter.

You can add multiple filters to further refine your search by clicking the **Add expression** button located at the bottom of the panel.

Get unique values: Click the cog icon to reveal the set input type menu.

Change the option to **unique** to get a list of all the unique values in your selected layer.

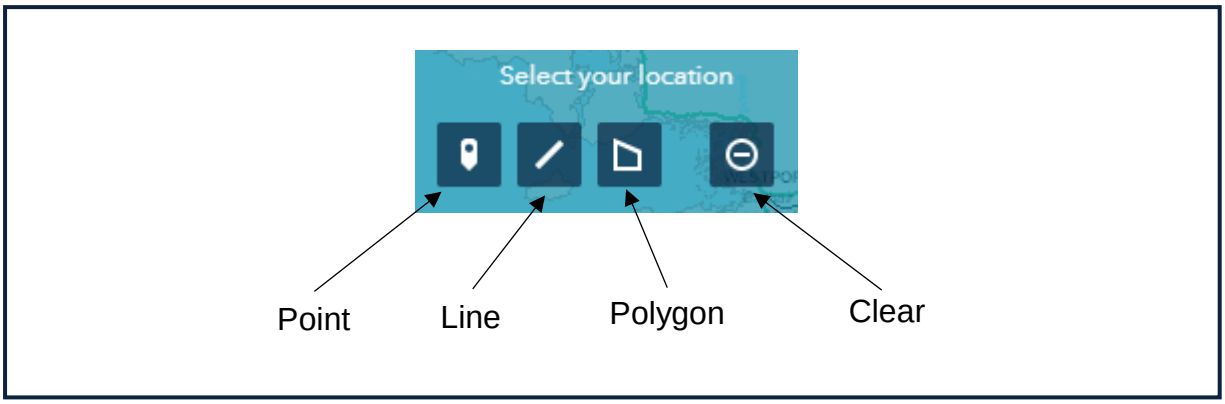


Buffer

The buffer widget gives you the ability to create a buffer around a feature.

You can either:

Manually select a location to buffer using the icons on the bottom left:

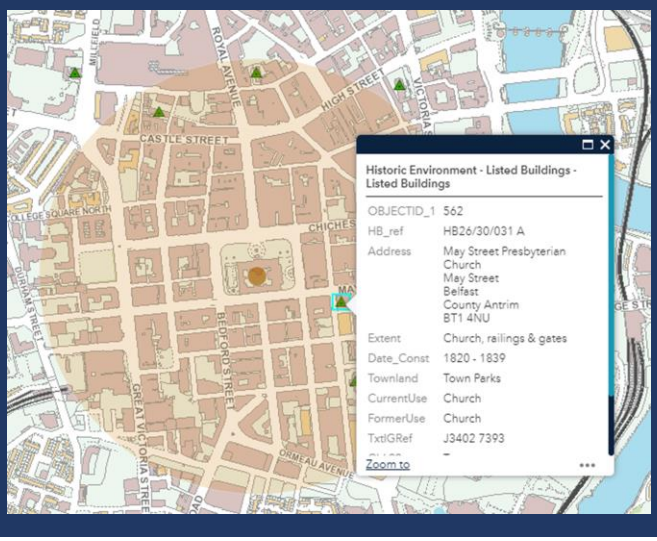


Or input a location as a result from another widget.

Set the buffer distance by either dragging the slider bar or entering a distance and pressing enter on your keyboard.

This will create a shaded buffer area on your map to meet the criteria you entered.

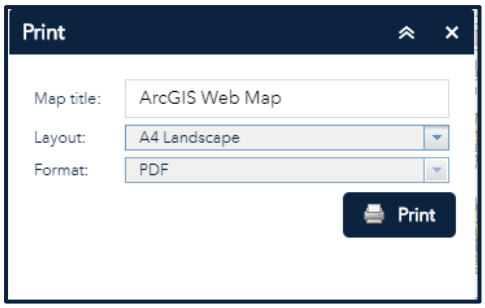
Advanced buffer use: By using operational data you have added to your map, you can click on the points that fall within your buffer area to obtain information on each location.



Print

The print widget provides the ability for you to create a print of your current map using one of our pre-defined Spatial NI templates.

Once the widget opens, you will be able to give you map a title and select a layout option.



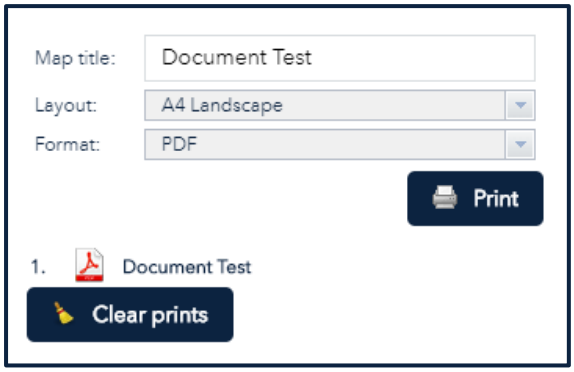
Layout options to choose from are:

- A4 Portrait
- A4 Landscape
- A3 Portrait
- A3 Landscape

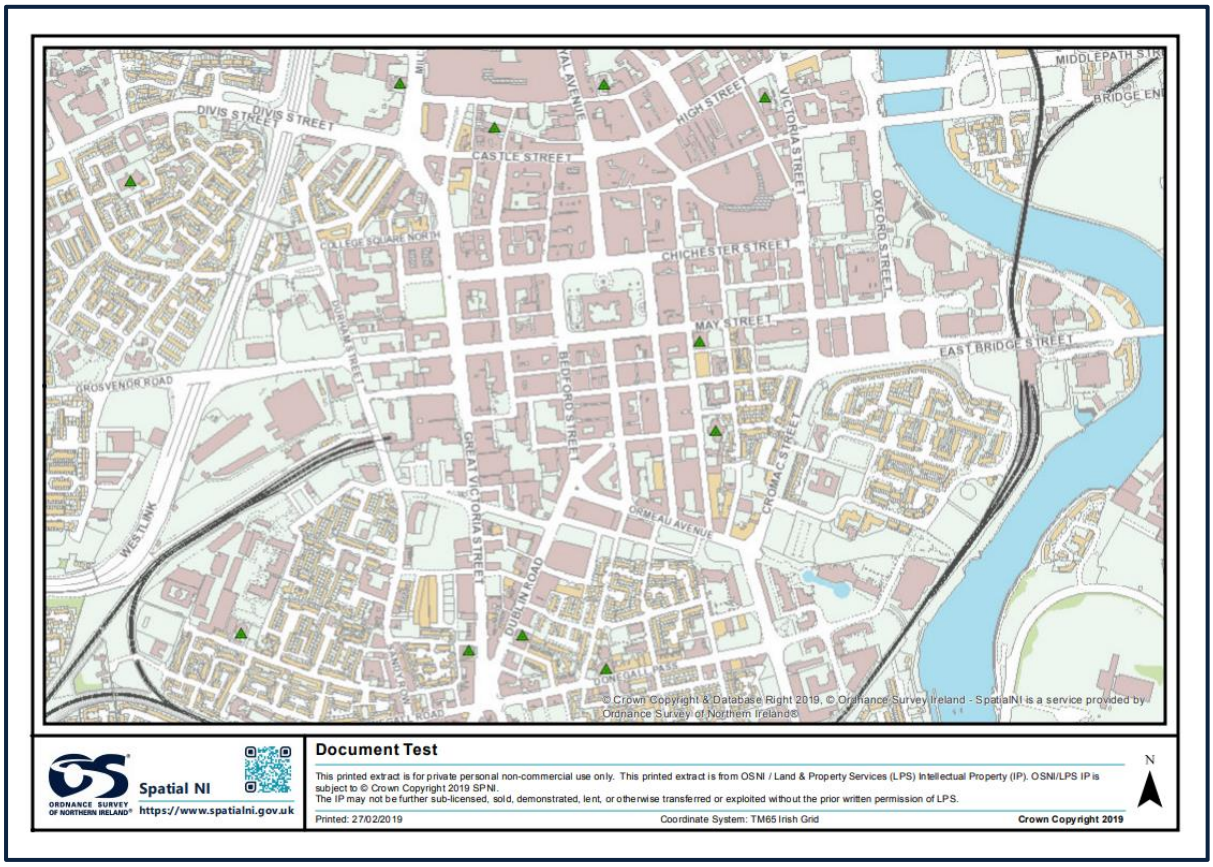
Click **Print**.

Spatial NI only provides the ability to print to a PDF document.

Your print will appear as a listing within the widget:



Click on the map title to open the PDF.

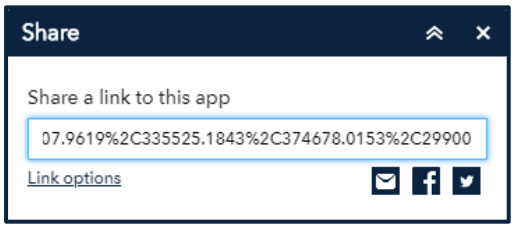


You can then save this file to your device or print your map.

Share

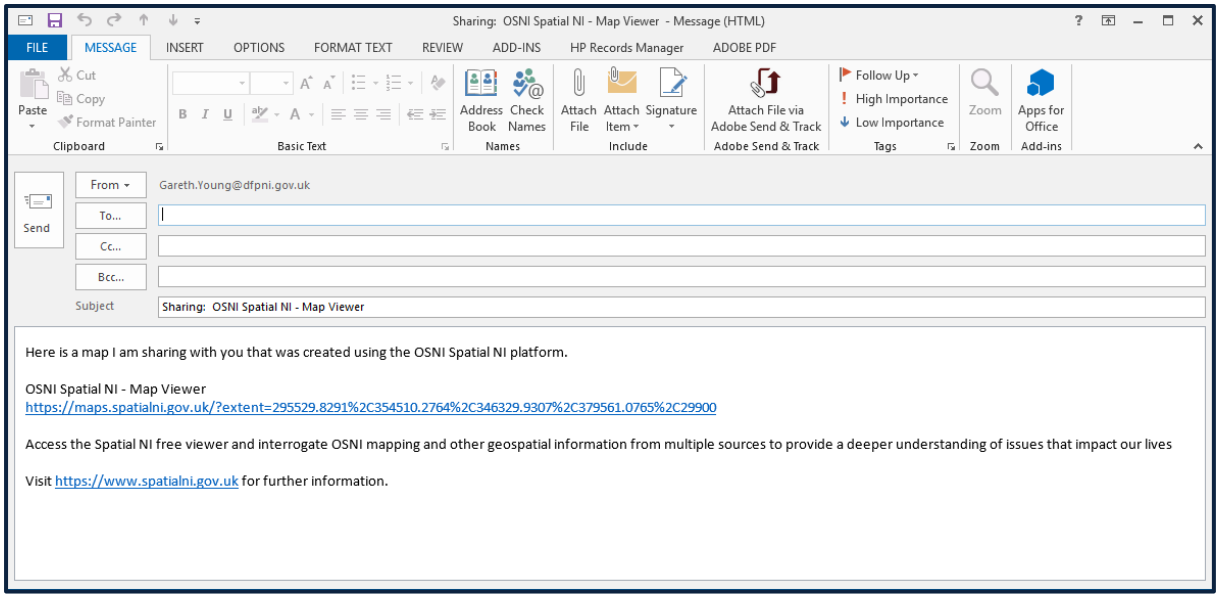
The share widget allows you to share your map by posting it to your social media account or by sending an email with a link.

Once the widget opens, you are given a URL for your map. Copy this URL and use it to share your map via instant message etc.



Click on the **facebook** or **twitter** icons to log into your social media account and share a link to your map.

Selecting the **email** icon generates an email template with a URL to your map which you can then share with others.



Optionally, click **Link Options** to easily define URL parameters included in the link. You can choose from the following options:

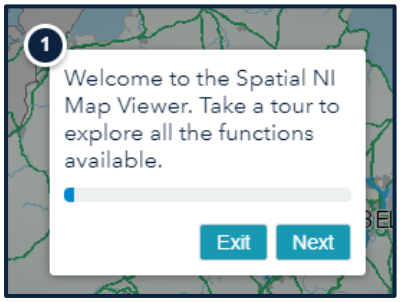
Current map extent – this is used by default

Add a marker on the map – click the point icon and click where you would like to add the marker on the map. Add a popup title and label.

Information

Map Tour

Take a tour of our map viewer and explore all the functions available by clicking on this widget.



Once launched, you will have the ability to step between each of the icons in the map viewer and discover what it can be used for.

About

Open the about widget to get some background information on the map viewer and to review our terms of use.

Help

Use the help widget to access this help document or to find out how to contact us should you need further advice or assistance.

Spatial NI

Click on this widget to get redirected to the Spatial NI website where you can easily get background information, browse our map gallery or get guidance on using our platform. (The website will open in a new browser tab).

Further help and support

Should you encounter an issue or need any further advice when using our map viewer, contact our support team.