

ArcGIS Pro

URBAN PLANNING

Updated in 2022 March



CONTENTS

This tutorial includes the following:

Off-campus Access:

- ArcGIS Pro Download (Windows Only)
- ArcGIS Online (Windows or Mac) - Nominated Courses or By Request
- FlexIT (Windows or Mac)

On-campus Access:

- Labs & Planning Studios (Extension Activation)

Basic Functions:

- Setup
- Layout
- Data Input
- Editing Symbolology
- Creating a Buffer
- Layout View
- Saving and Exporting

OFF-CAMPUS ACCESS: ArcGIS Pro Download (Windows Only)

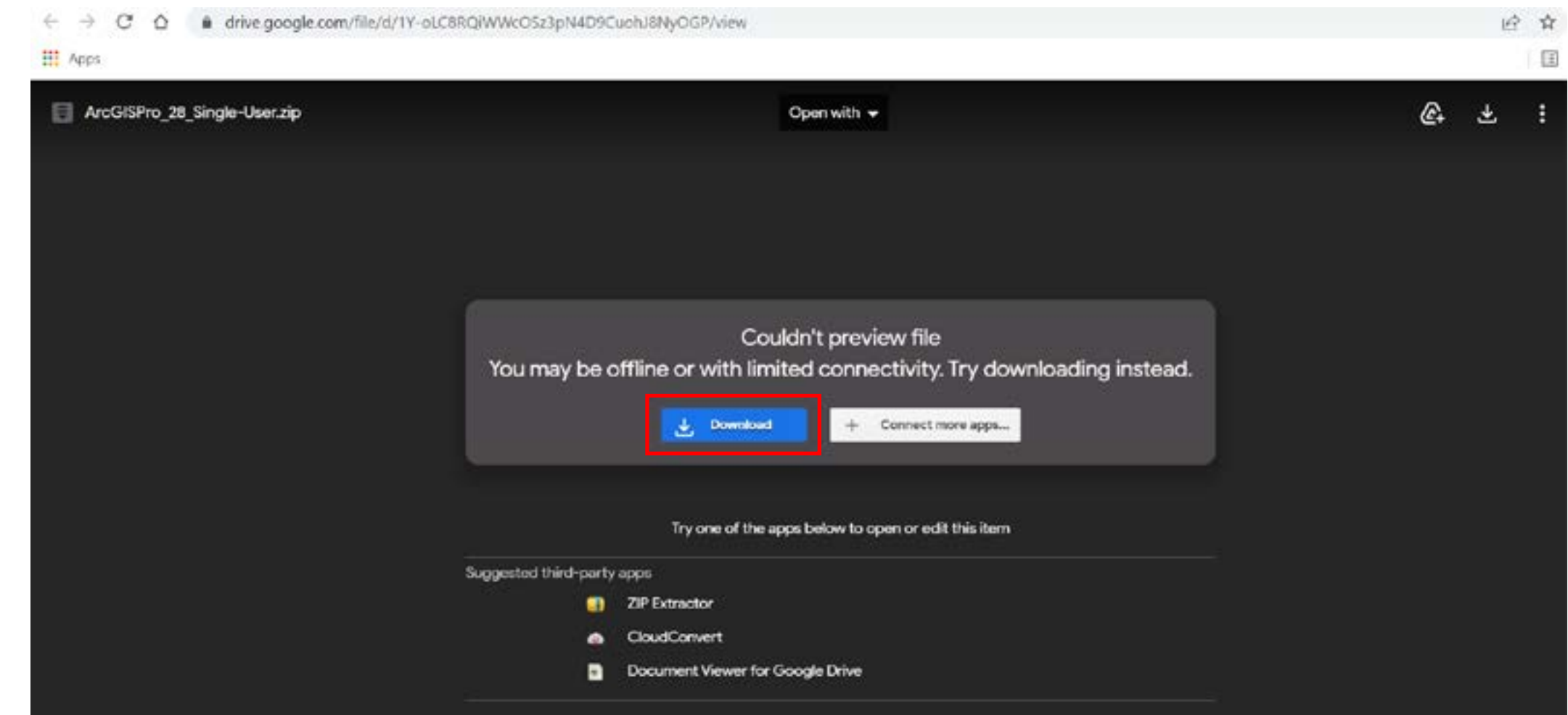
Download ArcGIS Pro:

- Copy the following link: <https://drive.google.com/file/d/1Y-oLC8RQiWWcOSz3pN4D9CuohJ8NyOGP/view>

Note: Ensure that you are logged into your Auckland Uni google account

- Download the zipped folder and extract to a folder of your choice.
- Detailed installation instructions can be found in: <https://www.drh.nz/2022/03/07/installing-arcgis-pro-on-your-p-c/>

Note: Instructions for basic functions for ArcGIS Pro can be found from Slide 10.



Installing ArcGIS Pro on your P.C

Mar 7, 2022 | ArcGIS, Software Tutorials

This tutorial includes:

- Updated installation process for ArcGIS Pro on your personal computer. Please ensure your University of Auckland Google account is used to perform the installation process

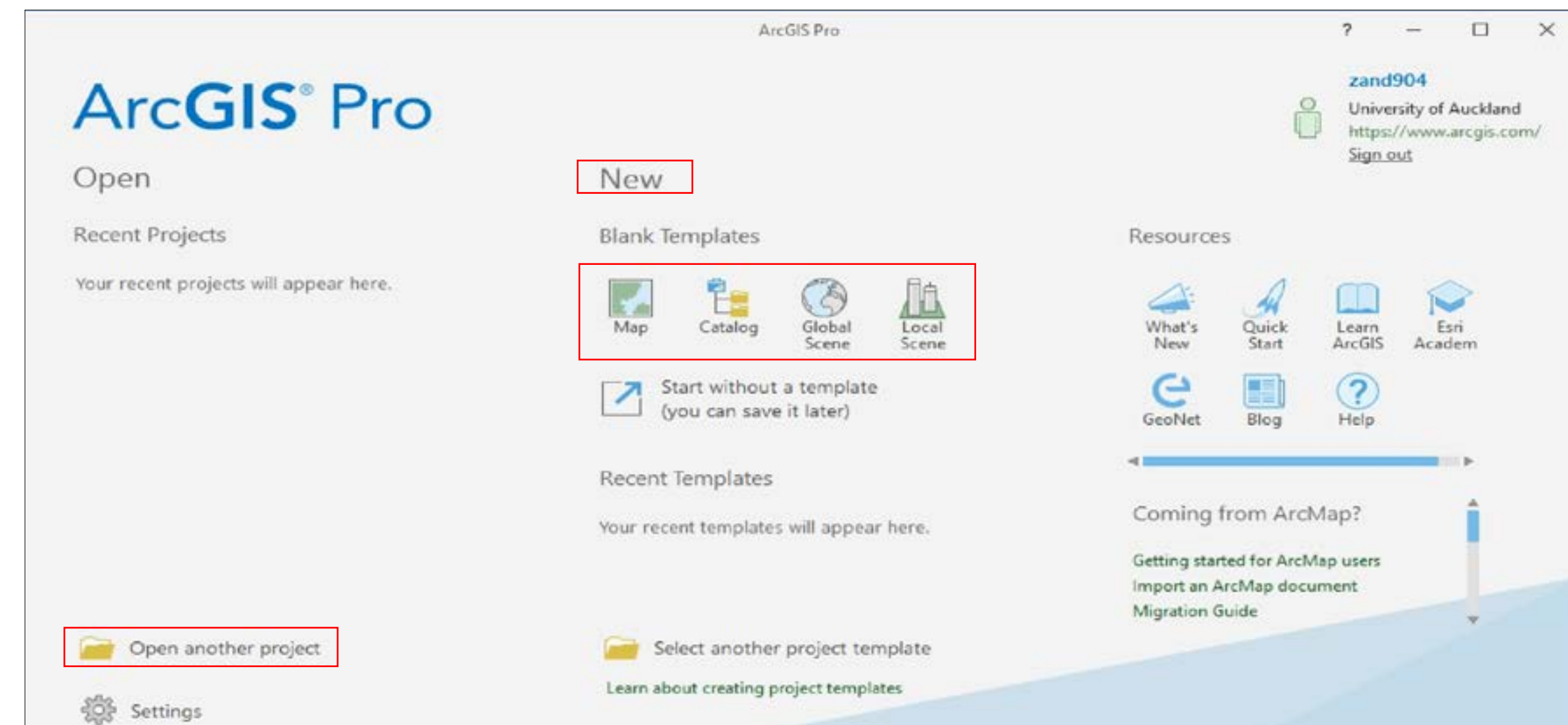
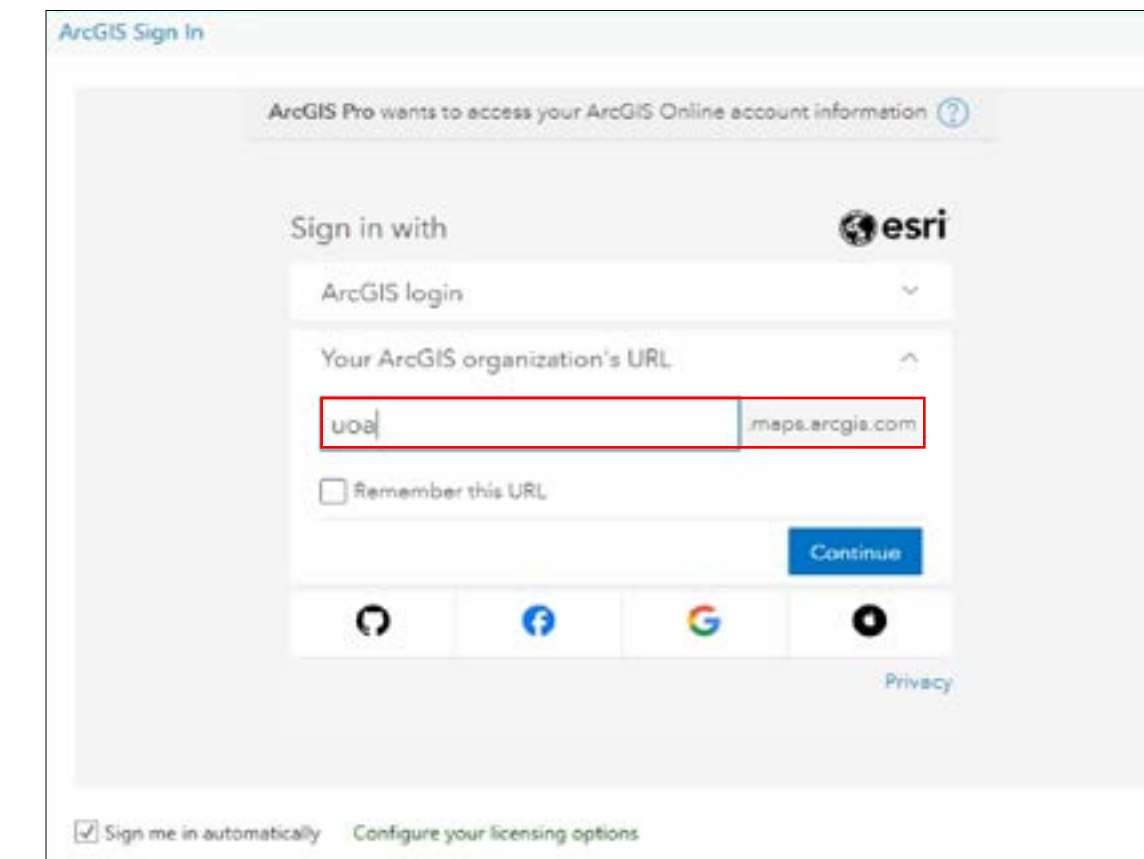
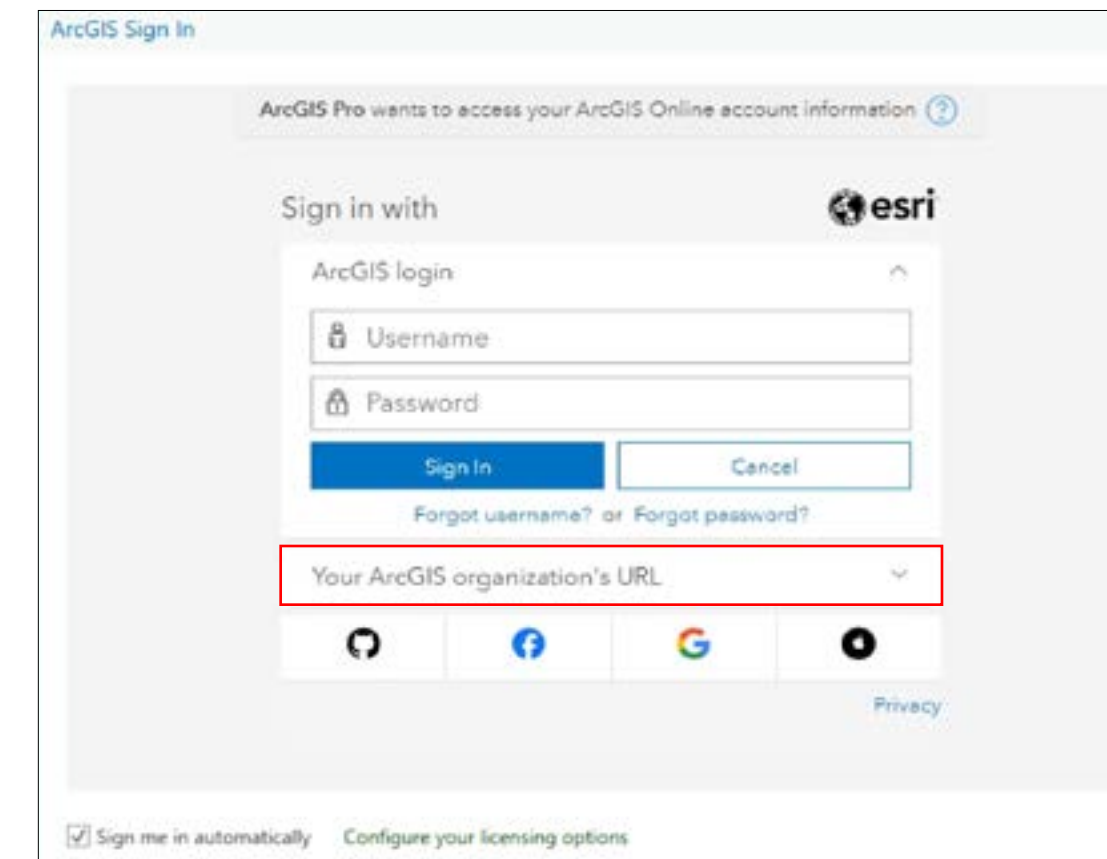
ArcGIS Pro Installation Tutorial PDF

OFF-CAMPUS ACCESS: Login ArcGIS Pro

ArcGIS Pro Login

Login to ArcGIS Pro:

- For both downloading & accessing ArcGIS Pro, you'll need to login using 'Your ArcGIS organisations's URL'
- The url is 'uoa'.
- Then login again, using your personal University credentials.
- ArcGIS Pro should open (as seen in the bottom image on the right).



OFF-CAMPUS ACCESS: ArcGIS Online (Windows or Mac)

ArcGIS Online

ArcGIS Online will be provided for nominated courses or by request. ArcGIS Online is Esri's web-based mapping software. This licence allows you to build maps, analyze data, view galleries from the University of Auckland and share maps within the organization. However, some advanced functions consume credits. Each account has allocated 200 credits.

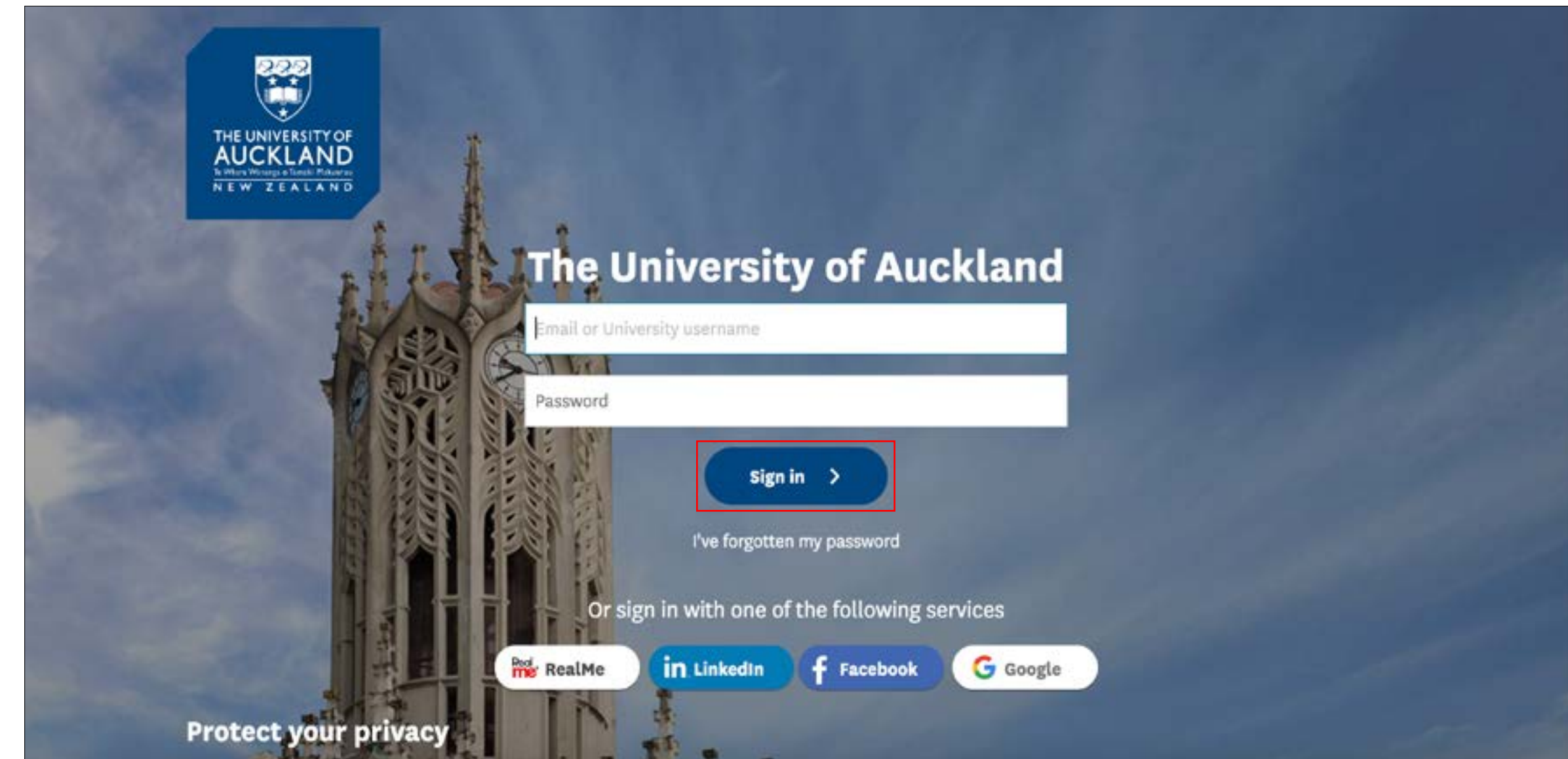
To use ArcGIS Online please follow the steps below.

Login to ArcGIS Online:

- Copy the following link: <http://uoa.maps.arcgis.com>
- Paste it into a browser on a University or a personal computer.
- Sign in using your personal University of Auckland login.
- You now have access to several ArcGIS Online tools.

Check Credit Balance:

- Click on your profile > My settings > Credits button on the left



OFF-CAMPUS ACCESS: FlexIT (Windows or Mac)

Use ArcGIS Pro through FlexIT

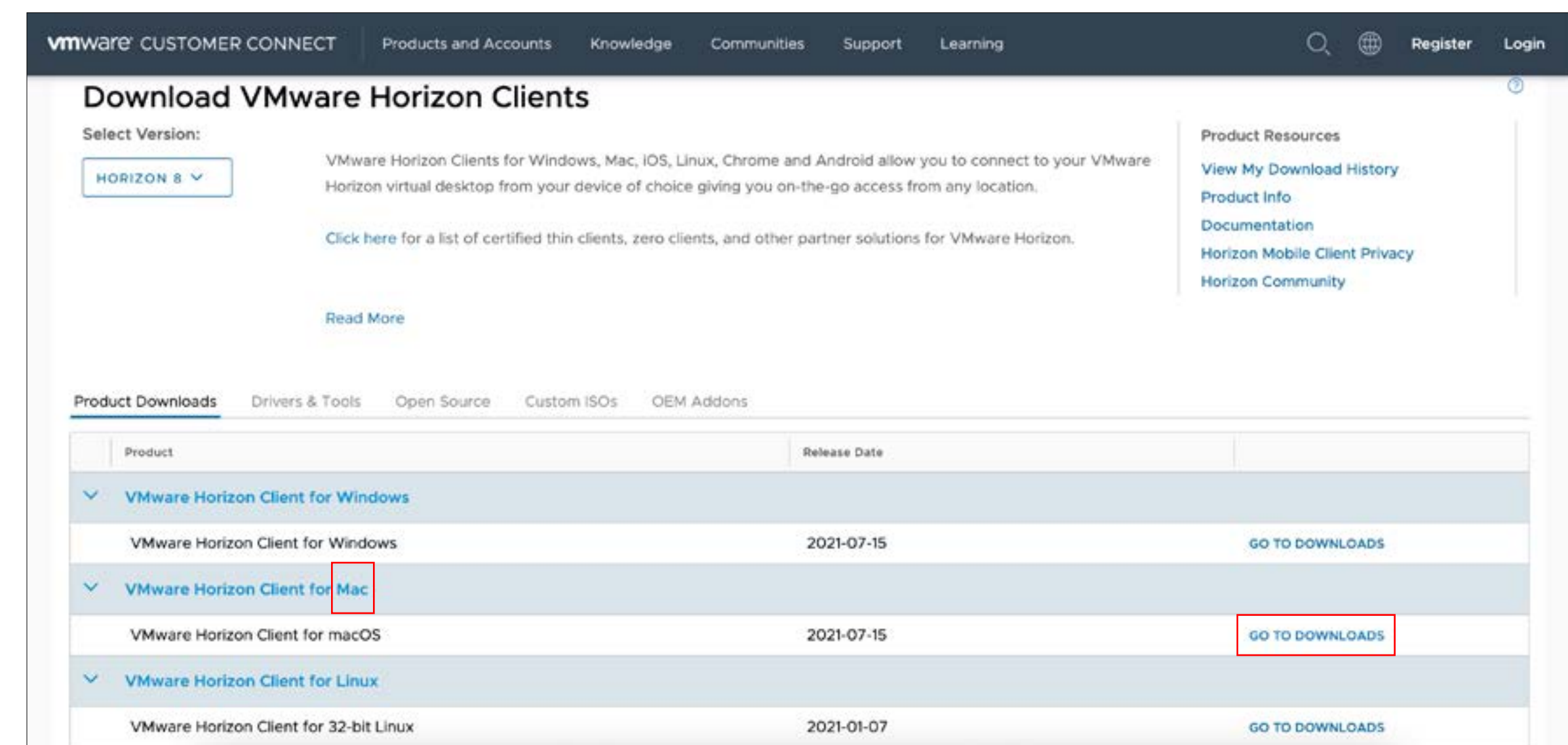
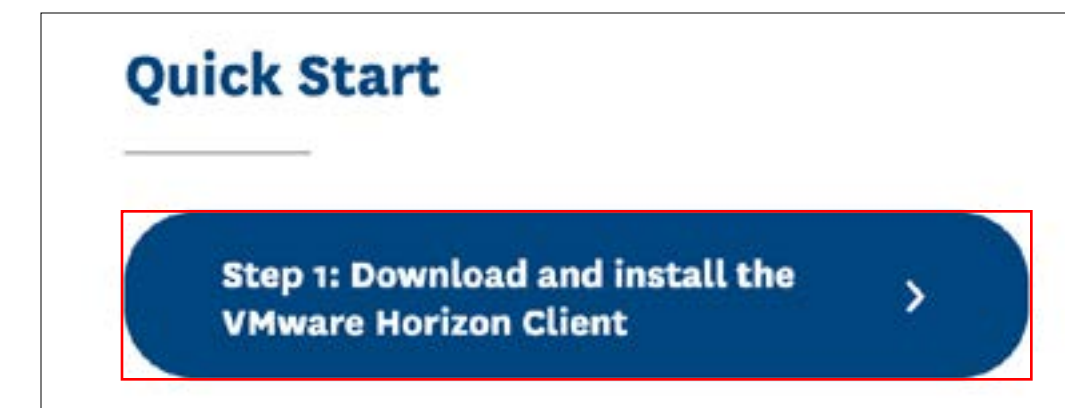
Students can also access ArcGIS Pro off-campus using FlexIT. This tool supports numerous softwares while minimising strain on the students personal device.

Note that FlexIT does NOT allow you to download ArcGIS Pro onto any personal device.

To use FlexIT for ArcGIS Pro, please follow the steps below.

1. Download & Install the VMware Horizon Client:

- Copy the following link: <https://www.auckland.ac.nz/en/students/my-tools/flex-it/flexit-guide.html>
- Paste the link into a browser on a personal computer for instructions and videos to support the following steps.
- Under 'Quick Start' select 'Step 1'.
- Download the required version of VMware for your device.
- Then, Install and close requests to enter a Connection Server.

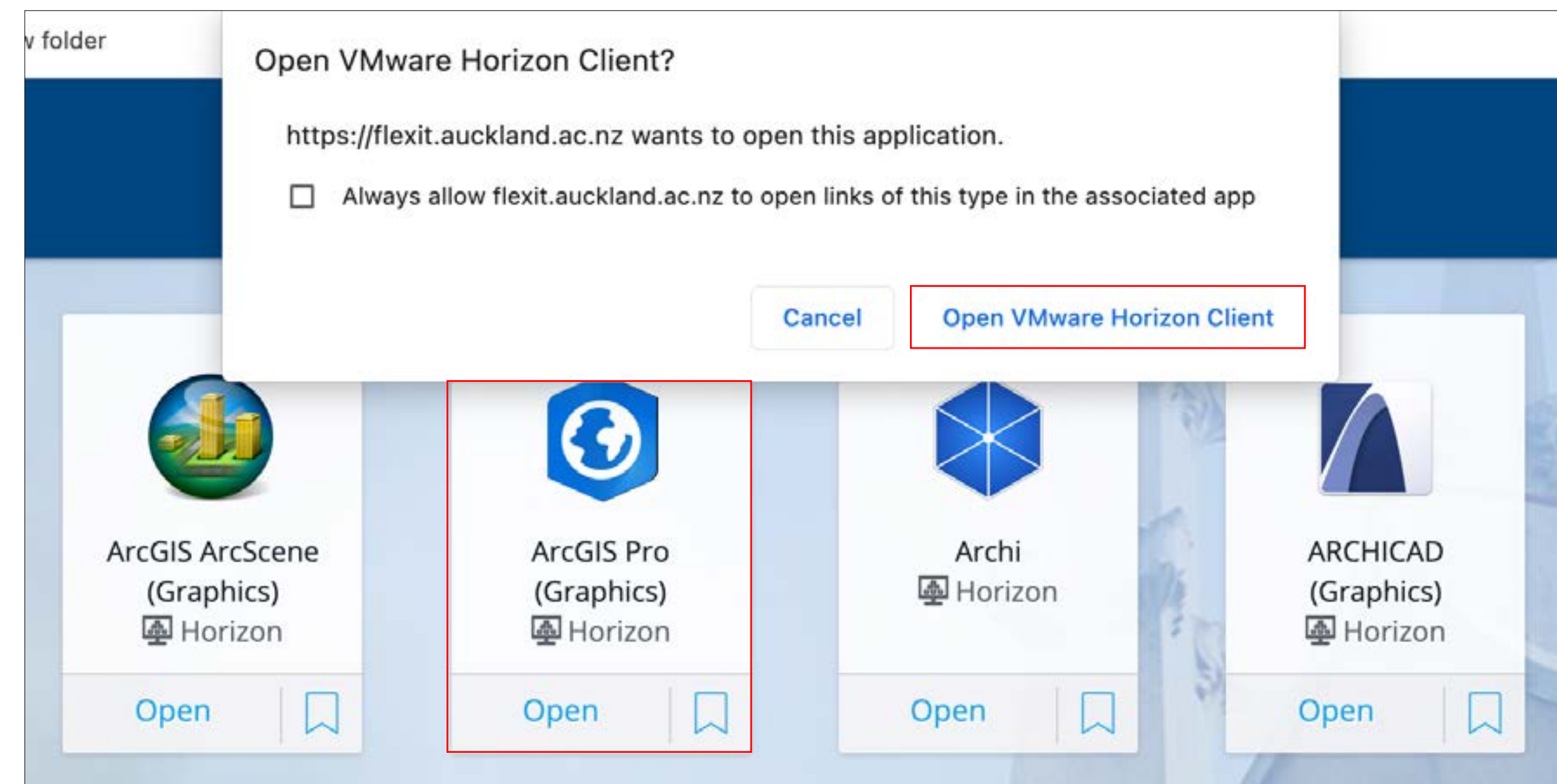
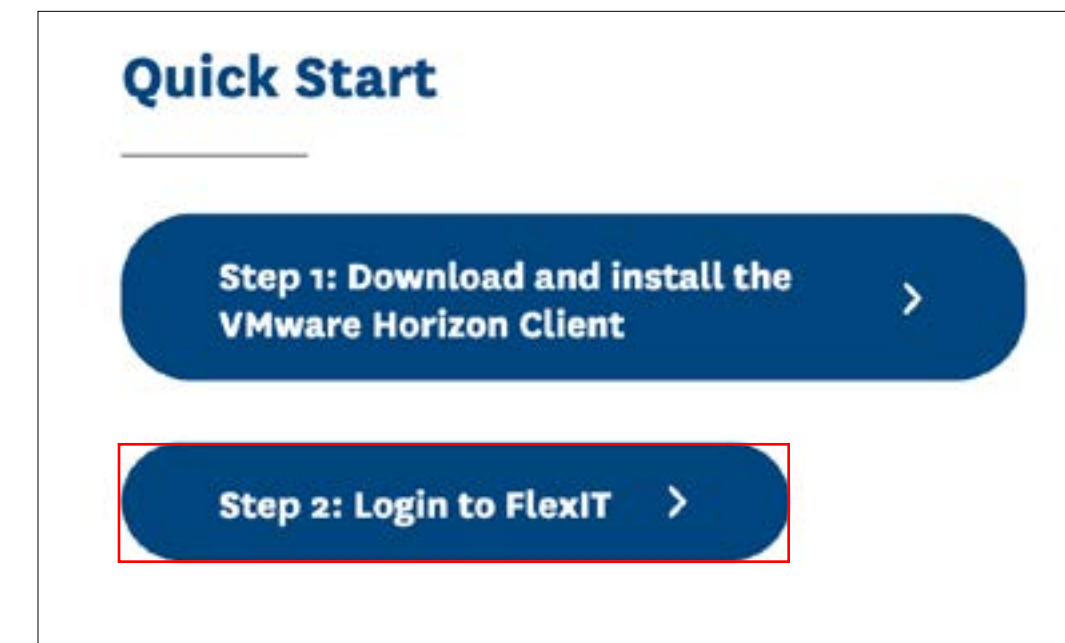


OFF-CAMPUS ACCESS: FlexIT (Windows or Mac)

2. Open ArcGIS Pro:

- Return to the University's FlexIT instruction page.
- Under 'Quick Start,' select 'Step 2'.
- Login using your usual University login.
- Once logged in, you can search or scroll to find ArcGIS Pro, or other ArcGIS softwares such as ArcMap.
- Select 'Open' on the desired software.
- Select 'Open VMware Horizon Client' in the pop-up.
- 'Allow' ArcGIS Pro access to your home folder and removable storage from the pop-up.

Note: Most ArcGIS softwares are incorporated into ArcGIS Pro.



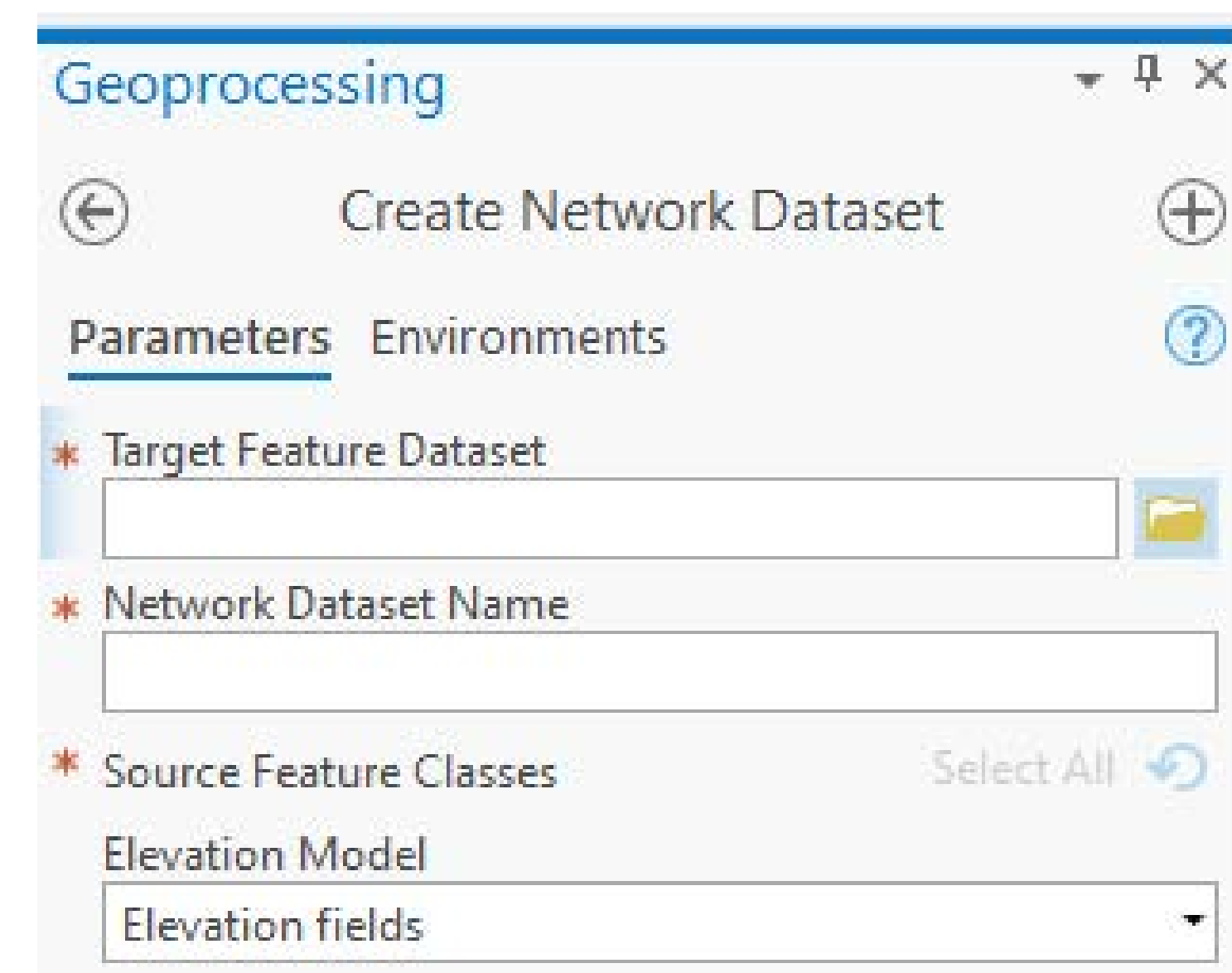
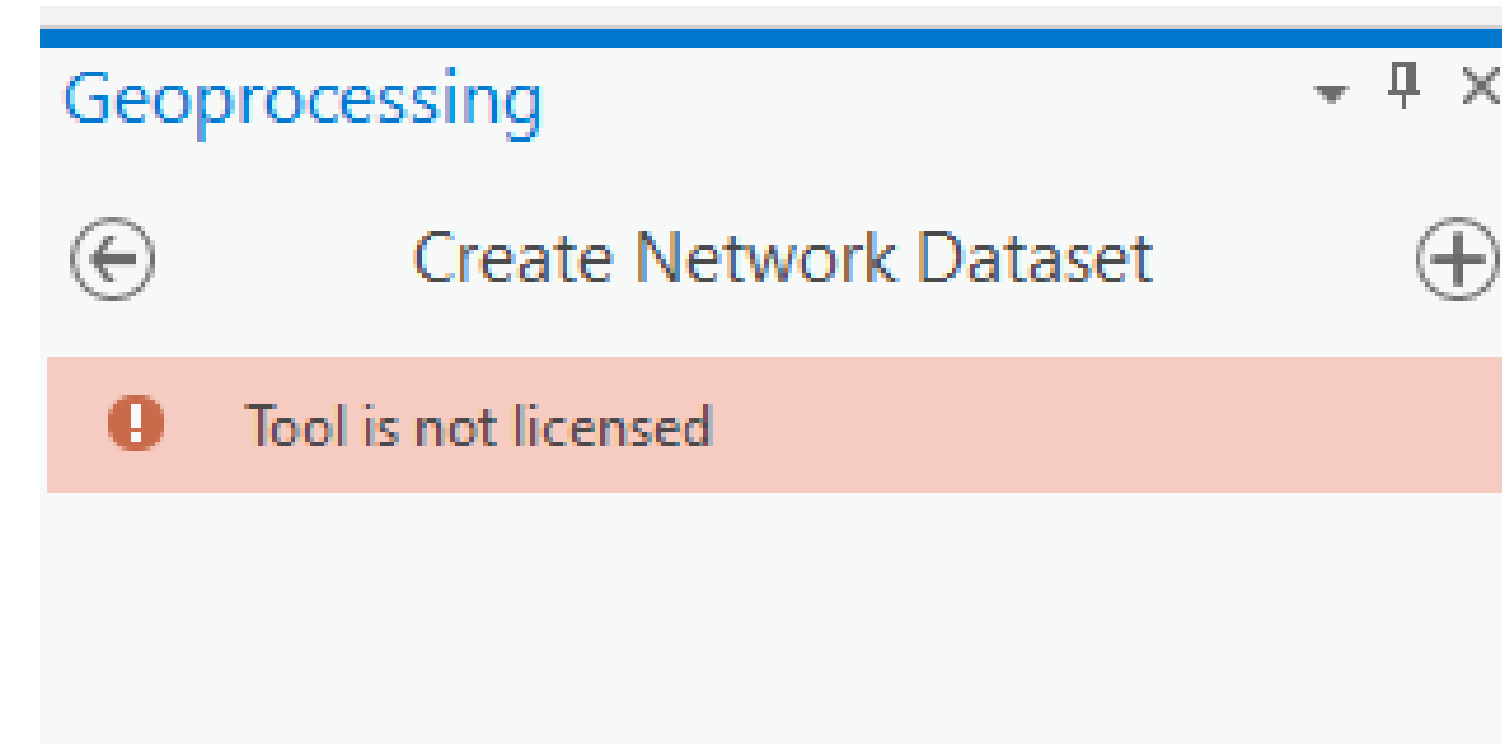
ON-CAMPUS ACCESS: Labs and Planning Studios

ArcGIS Pro is available in:

- Computer Labs: Building 421, Level 5 - Rooms 521, 523 and 526
- Planning Studios : 421E - 630 & 421E - 602

Some analysis tools on ArcGIS pro in computer labs may need activation. Slide 9 shows how to license Extensions in computer labs.

- Top right image shows when 'Network Dataset' tool is not licensed.
- Bottom right image shows when 'Network Dataset' tool is licensed.



ON-CAMPUS ACCESS: Extensions Activation

Extensions Activation:

- To License Extensions (Only in computer labs):
 - Click 'Project' on top left tab in ArcGIS Pro.
 - Select 'Licensing' > 'Configure your licensing options'.
 - Tick the extensions you want to use.
 - Click 'OK'.
 - Tools are now available.

New

Open

Save

Save As

Portals

Licensing

Options

Python

Add-In Manager

Help

About

Exit

Licensing

ArcGIS Pro Concurrent Use License

Name	Licensed	Expires
Basic	No	N/A
Standard	No	N/A
Advanced	Yes	30/06/2022

Active License Manager: arcgis-license.fos.auckland.ac.nz

Esri Extensions

Name	Licensed	Expires
3D Analyst	No	30/06/2022
Aviation Airports	No	30/06/2022
Aviation Charting	No	30/06/2022
Bathymetry	No	N/A
Business Analyst	No	N/A
Data Interoperability	No	30/06/2022
Data Reviewer	No	30/06/2022
Defense Mapping	No	30/06/2022
Geostatistical Analyst	No	30/06/2022

Settings

☐ Authorize ArcGIS Pro to work offline
 Number of days: 30

☒ Show license expiration warning messages.

Workstation Alias

ArcGISPro_33

Configure your licensing options

Manage your data licensing

Learn more about licensing

Licensing

Configure Authorization

Select your authorization type from the drop-down list below:

License Type

Concurrent Use License

Learn More

License Level

Select the Pro core product license level below:

Advanced

Standard

Basic

License Manager

arcgis-license.fos.auckland.ac.nz

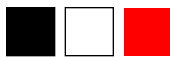
Add Backup

Name	Licensed	Available Seats	Expires
ArcGIS Pro Advanced	<input checked="" type="checkbox"/>	498	30/06/2022
3D Analyst	<input type="checkbox"/>	500	30/06/2022
Aviation Airports	<input type="checkbox"/>	500	30/06/2022
Aviation Charting	<input type="checkbox"/>	500	30/06/2022
Bathymetry	<input type="checkbox"/>	0	N/A
Business Analyst	<input type="checkbox"/>	0	N/A
Data Interoperability	<input type="checkbox"/>	499	30/06/2022
Data Reviewer	<input type="checkbox"/>	499	30/06/2022
Defense Mapping	<input type="checkbox"/>	500	30/06/2022
Geostatistical Analyst	<input type="checkbox"/>	499	30/06/2022
Image Analyst	<input type="checkbox"/>	500	30/06/2022
LocateXT	<input type="checkbox"/>	500	30/06/2022


Refresh

OK

Cancel



09

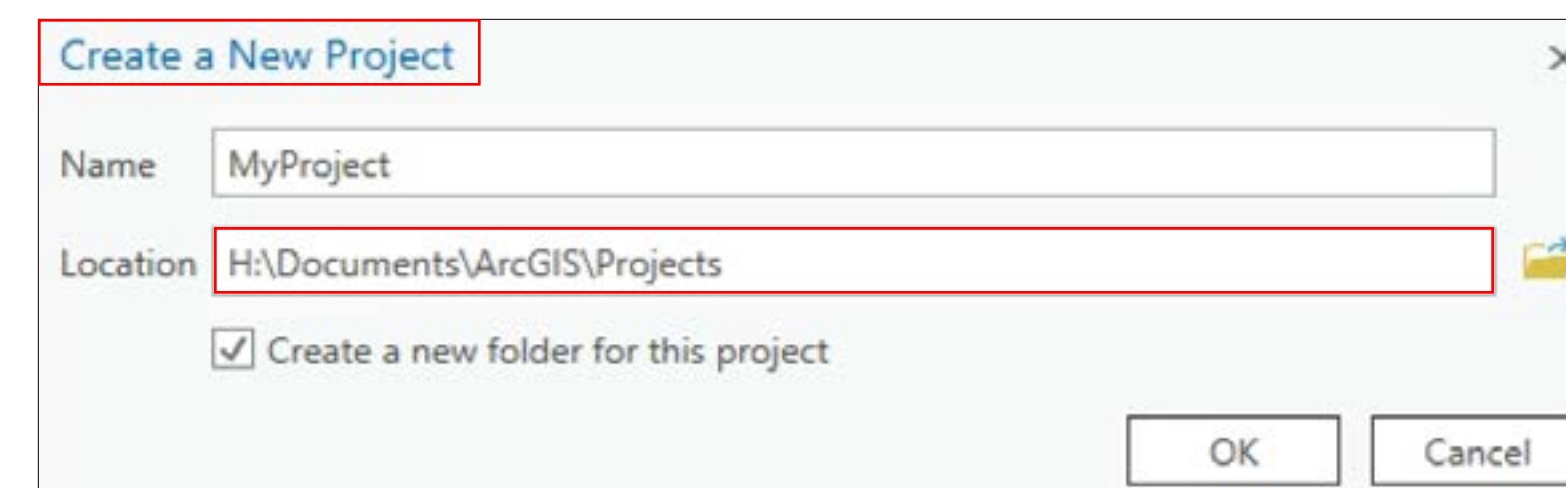
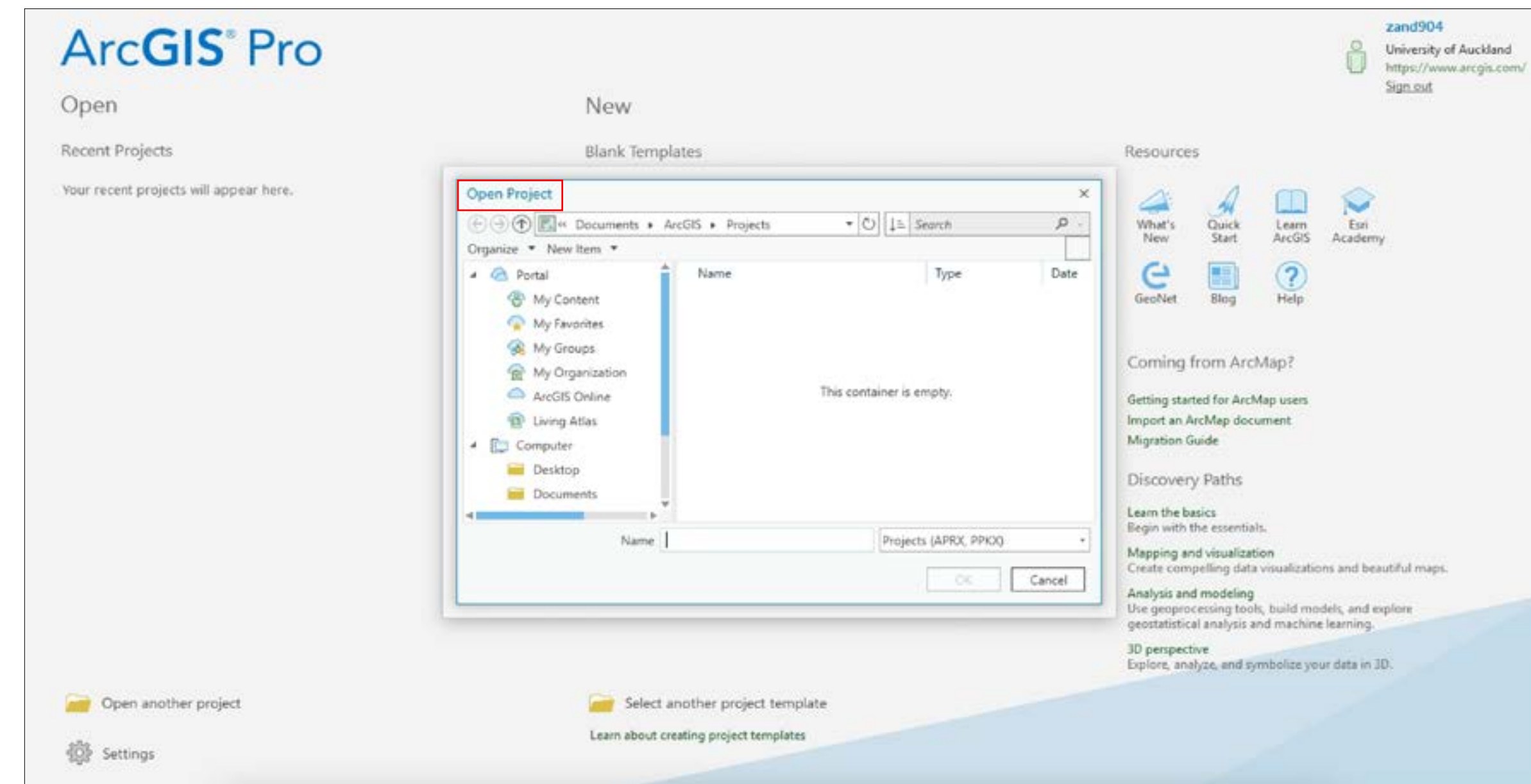


ARCGIS PRO: Basic Functions

ArcGIS Pro Functions

1. ArcGIS Pro Setup:

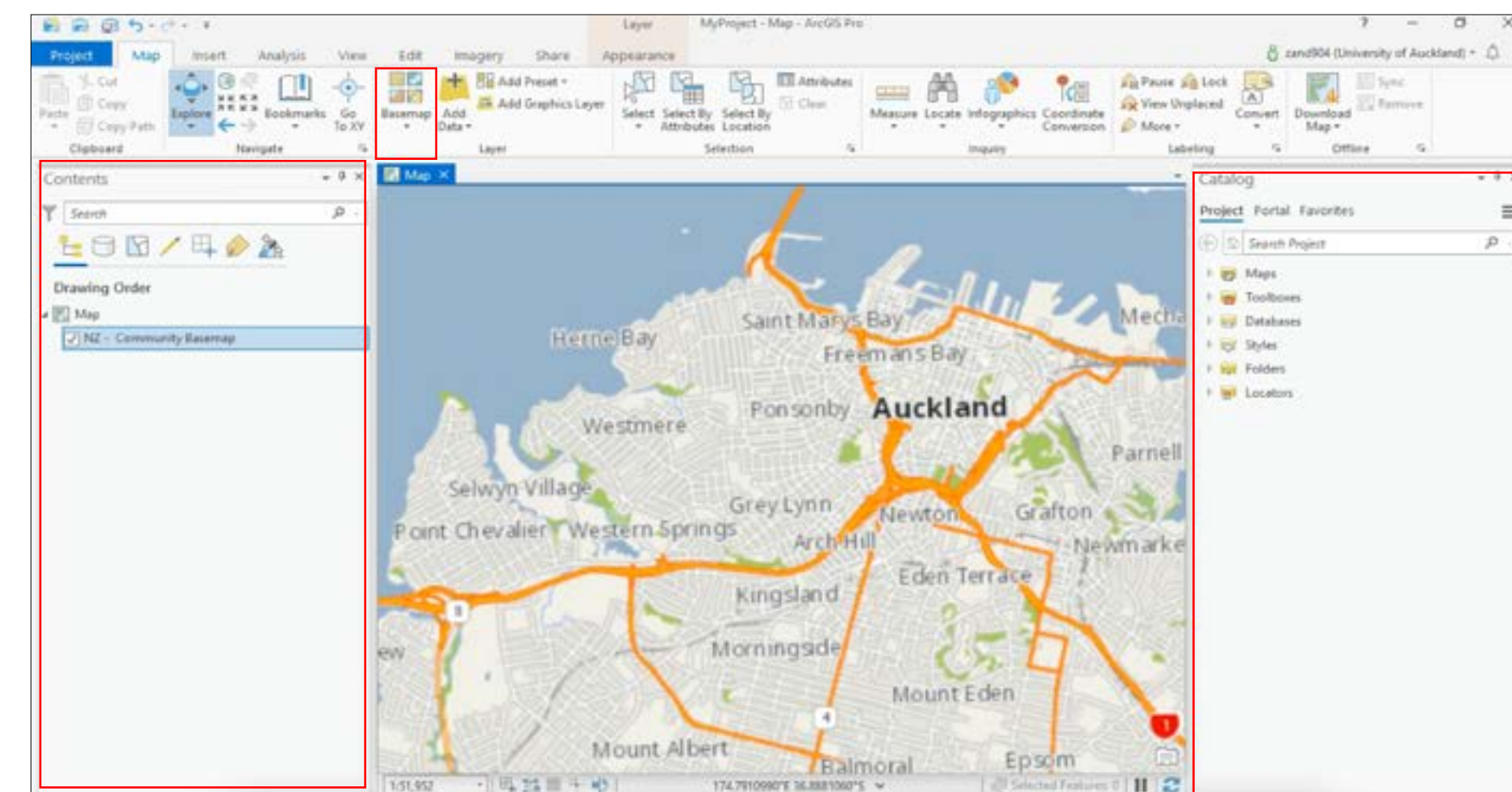
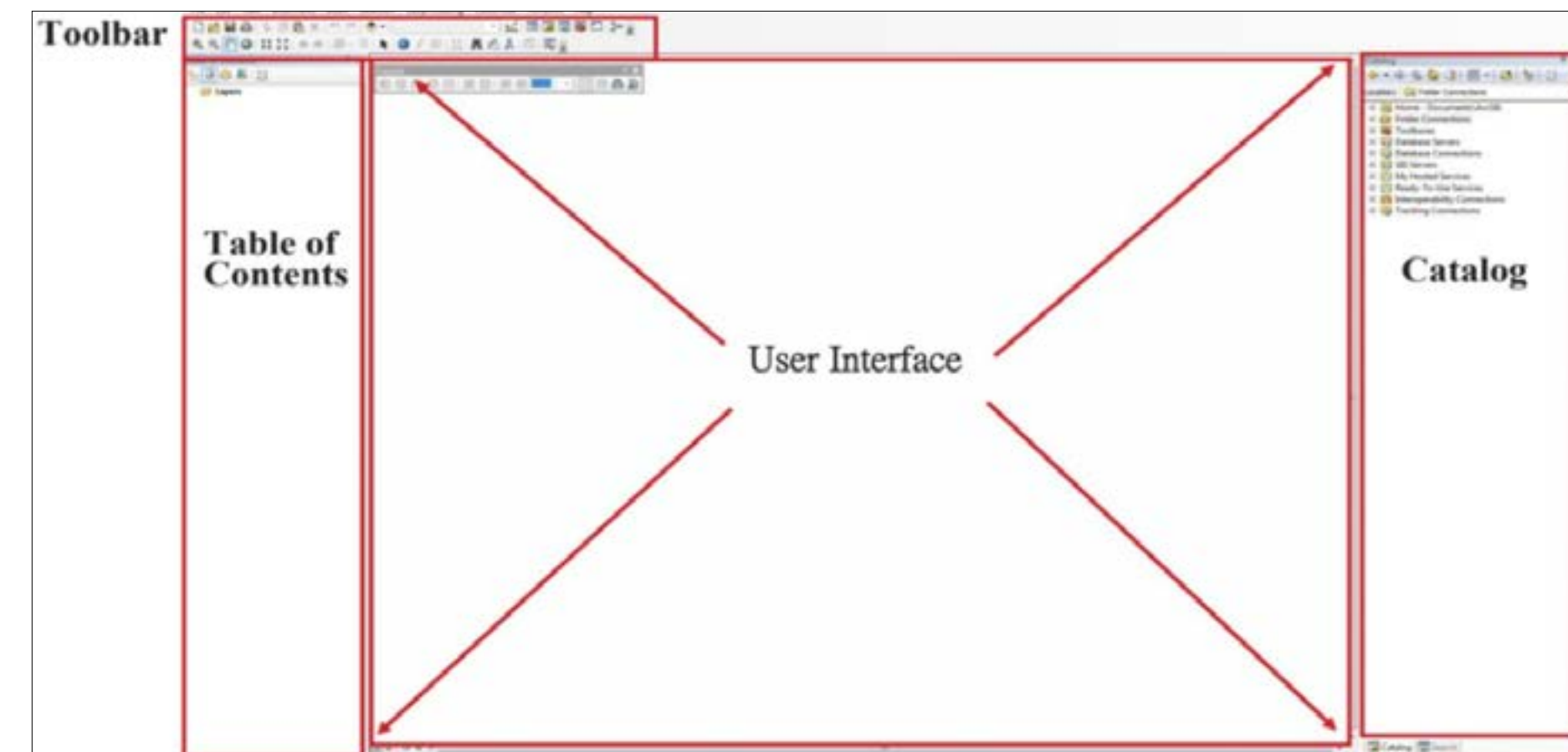
- To access existing/past ArcGIS Pro projects, select 'Open'.
- Then, navigate to the location of the file.
- To create a new document, select a blank template and a location to save it.
- Ideally, this should be on your own device or a USB.
- If not at the start, make sure you save a copy to your own device before you exit the application otherwise you are likely to lose your data.



ARCGIS PRO: Basic Functions

2. ArcGIS Pro Layout:

- The layout and functionality of ArcGIS Pro remains relatively similar to ArcMap on-campus (image on the top right).
- To the left is the Contents, where all your layers are visible. You can reorder layers on top/ below each other by clicking 'Sort by editing' (the pencil icon).
- To the right is the Catalogue, which allows you to make folder connections to more easily access the data you want to use.
- The example below shows a preset basemap 'NZ- Community Basemap' in ArcGIS Pro. You can change this by navigating to 'Map' > 'Basemap'.



ARCGIS PRO: Basic Functions

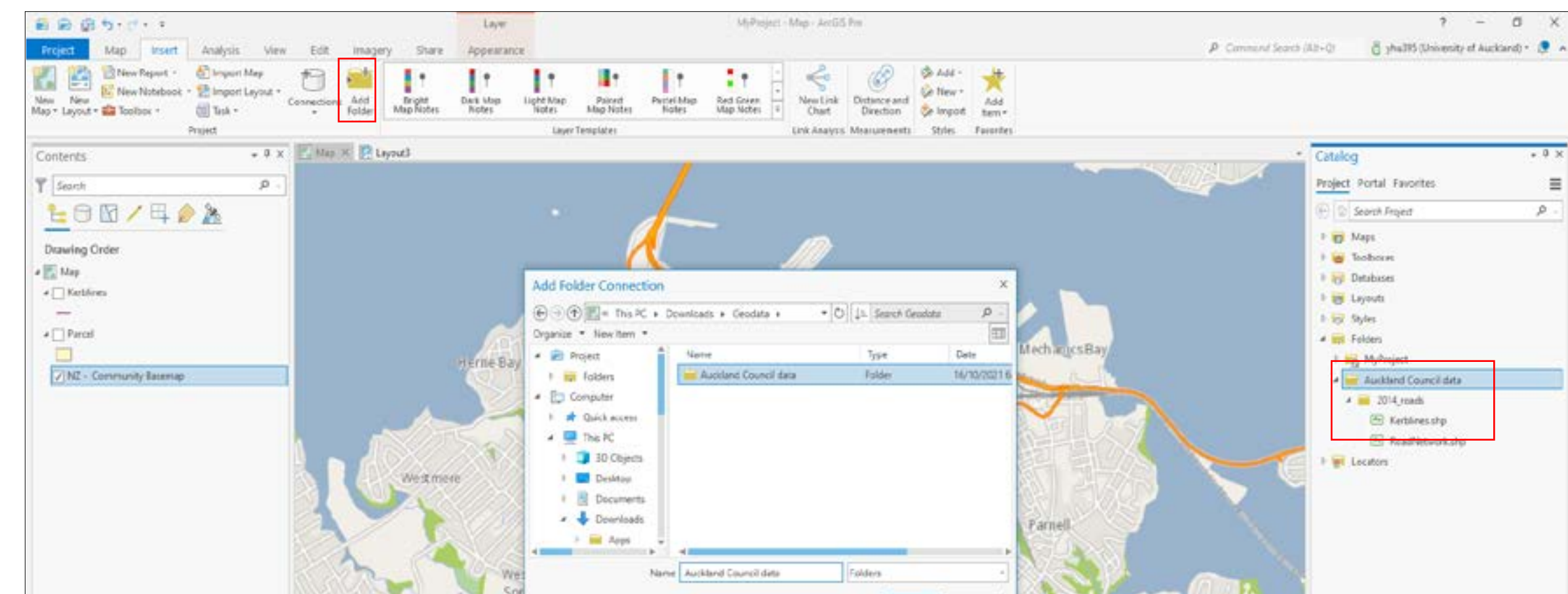
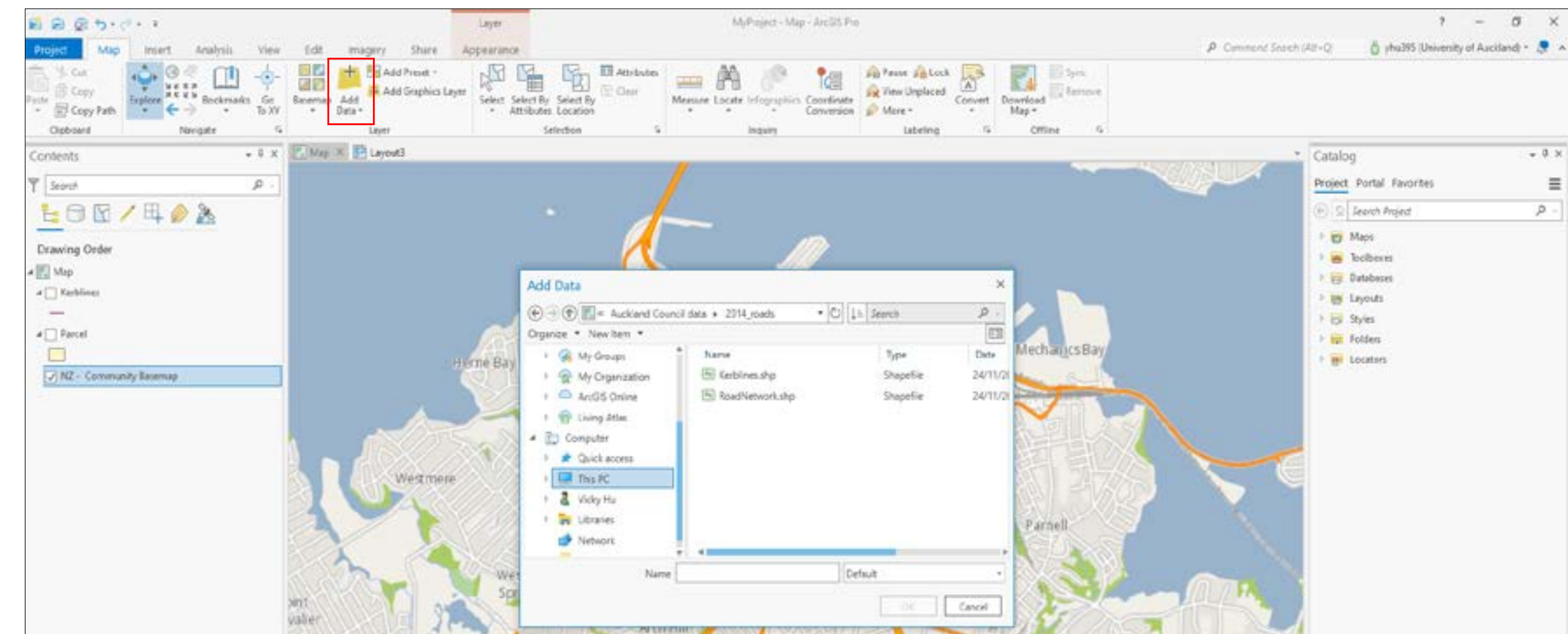
3. ArcGIS Pro Data Input:

- Data can also be added in the same way as ArcMap; by navigating to 'Map' > 'Add Data'.
- You can also make a folder connection so that you can access the files on your computer directly through the Catalogue on the right, and don't have to manually add data each time.
- Make a folder connection by navigating to 'Insert' > 'Add Folder', finding the folder you would like to connect to, and clicking 'OK'. The folder should pop up in the Catalogue on the right hand side.

Data Source Locations:

You can retrieve data for your map from a range of locations including:

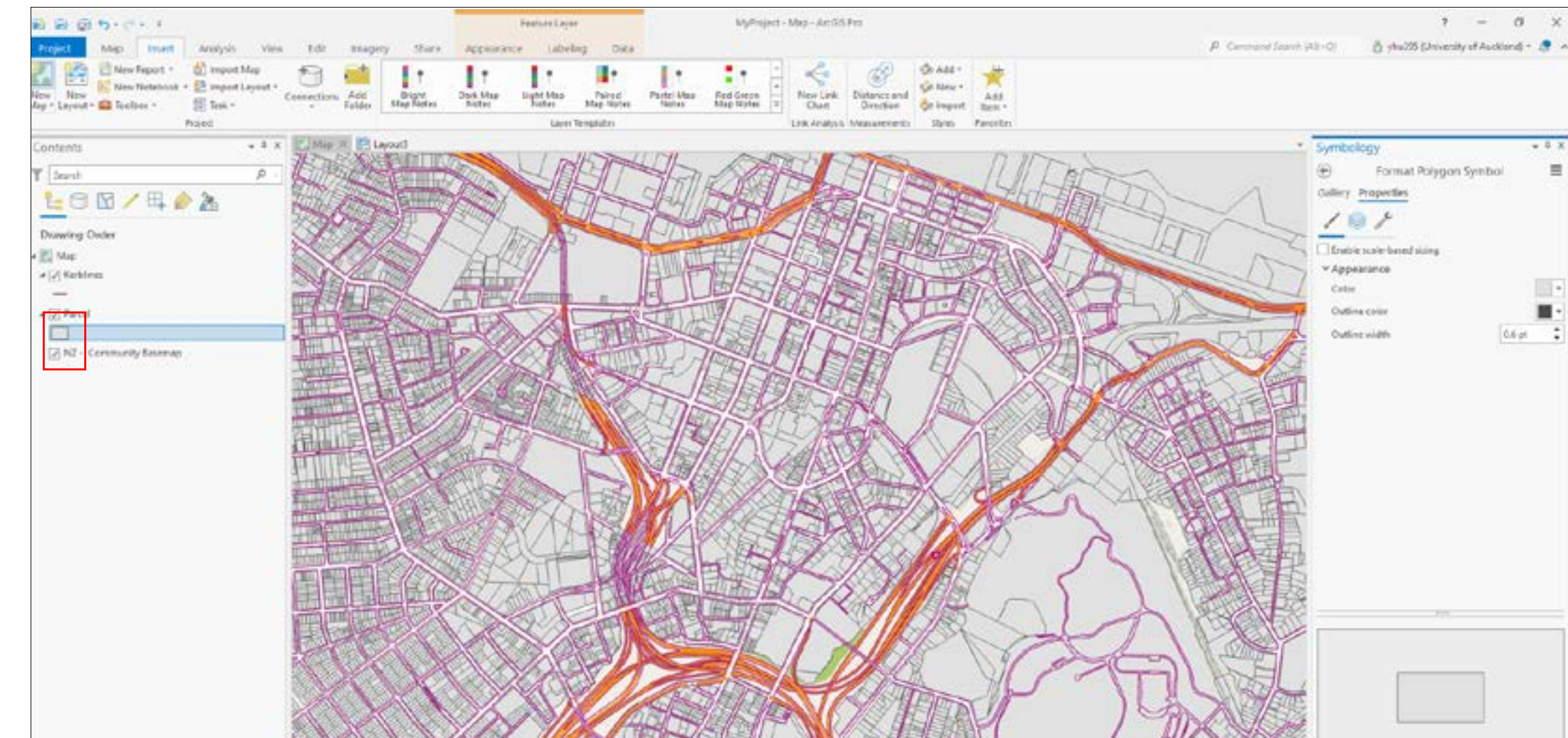
- Stats NZ (<https://www.stats.govt.nz/>)
- Auckland Council GeoMaps (<https://www.aucklandcouncil.govt.nz/geospatial/geomaps/Pages/default.aspx>)
- LINZ (<https://www.linz.govt.nz/>)
- NZTA (<https://opendata-nzta.opendata.arcgis.com/>)
- Koordinates (<https://koordinates.com/>)



ARCGIS PRO: Basic Functions

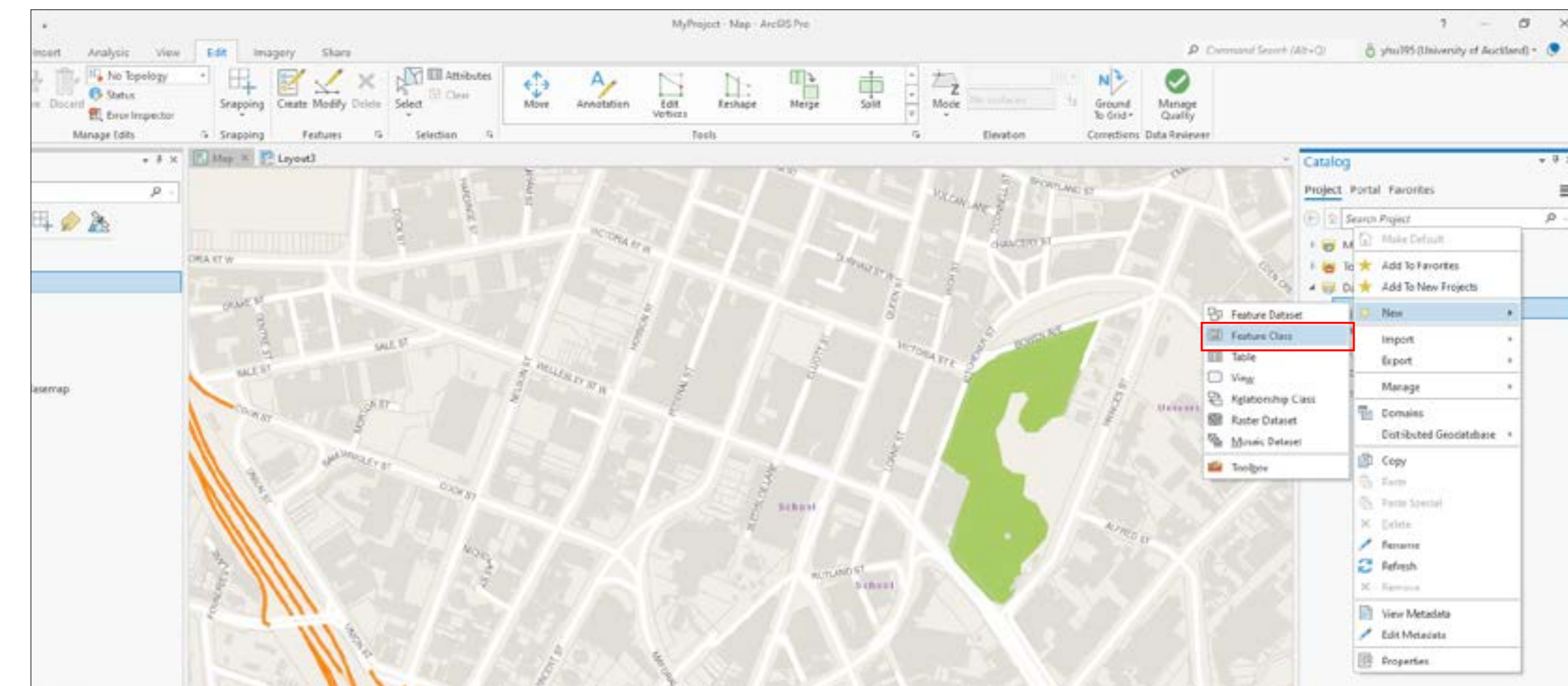
4. Editing Symbology:

- Once you have imported your data, you can easily edit the colours, line weights, and styles by clicking on the icon underneath the name of the layer. This will bring up the Symbology tab on the right hand side.
- Make sure to click 'Apply' to see the changes.



5. Creating a Buffer:

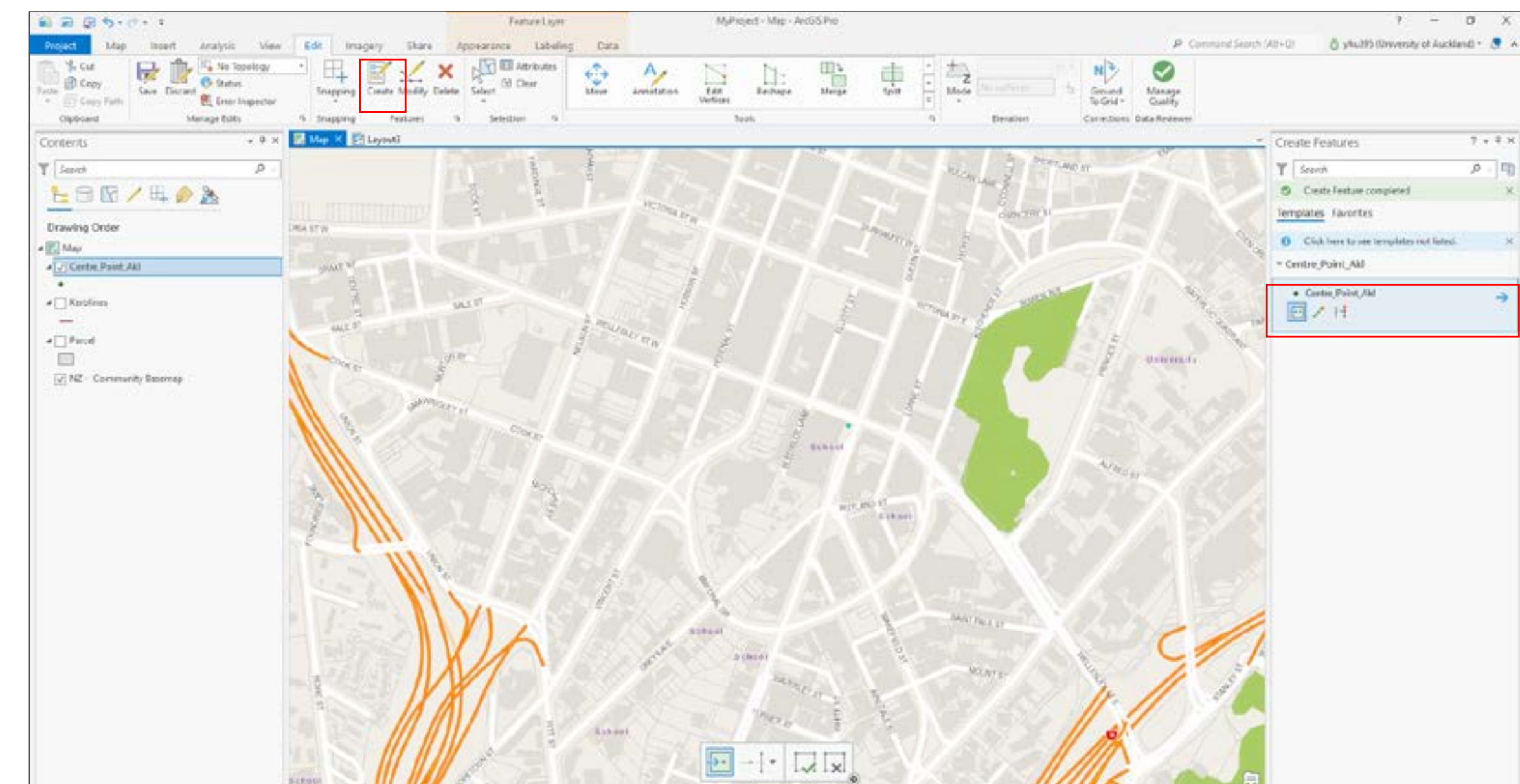
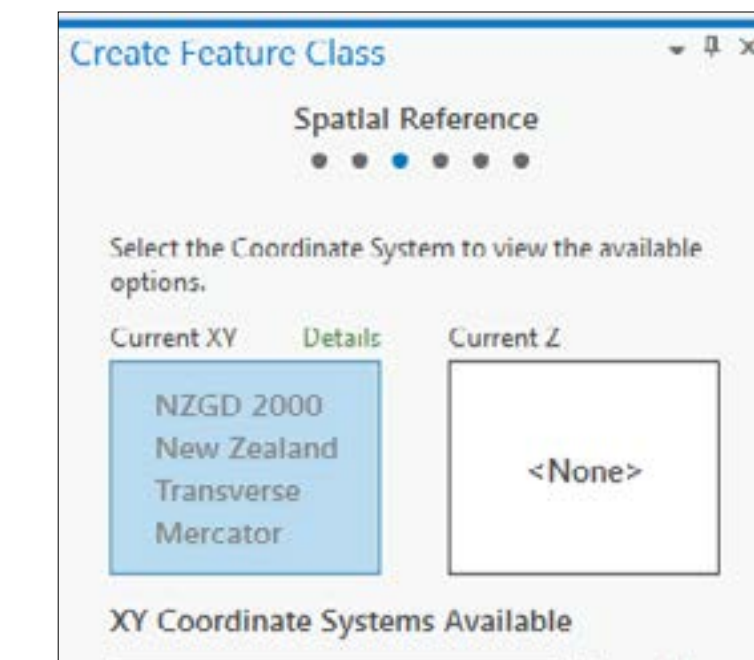
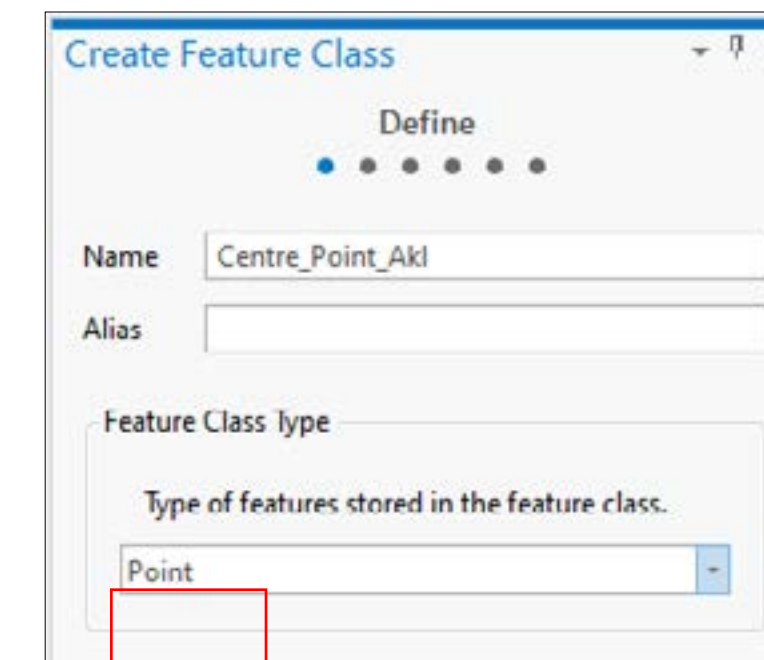
- Another handy skill is to create a pedestrian shed.
- First, you need to create a centre point.
- To do this, navigate to your file geodatabase in the Catalogue on the right. If you are using University campus computers, you might want to create a new file geodatabase so you can access it again later. Right click on it and go to 'New' > 'Feature Class'.



ARCGIS PRO: Basic Functions

5. Creating a Buffer (continued):

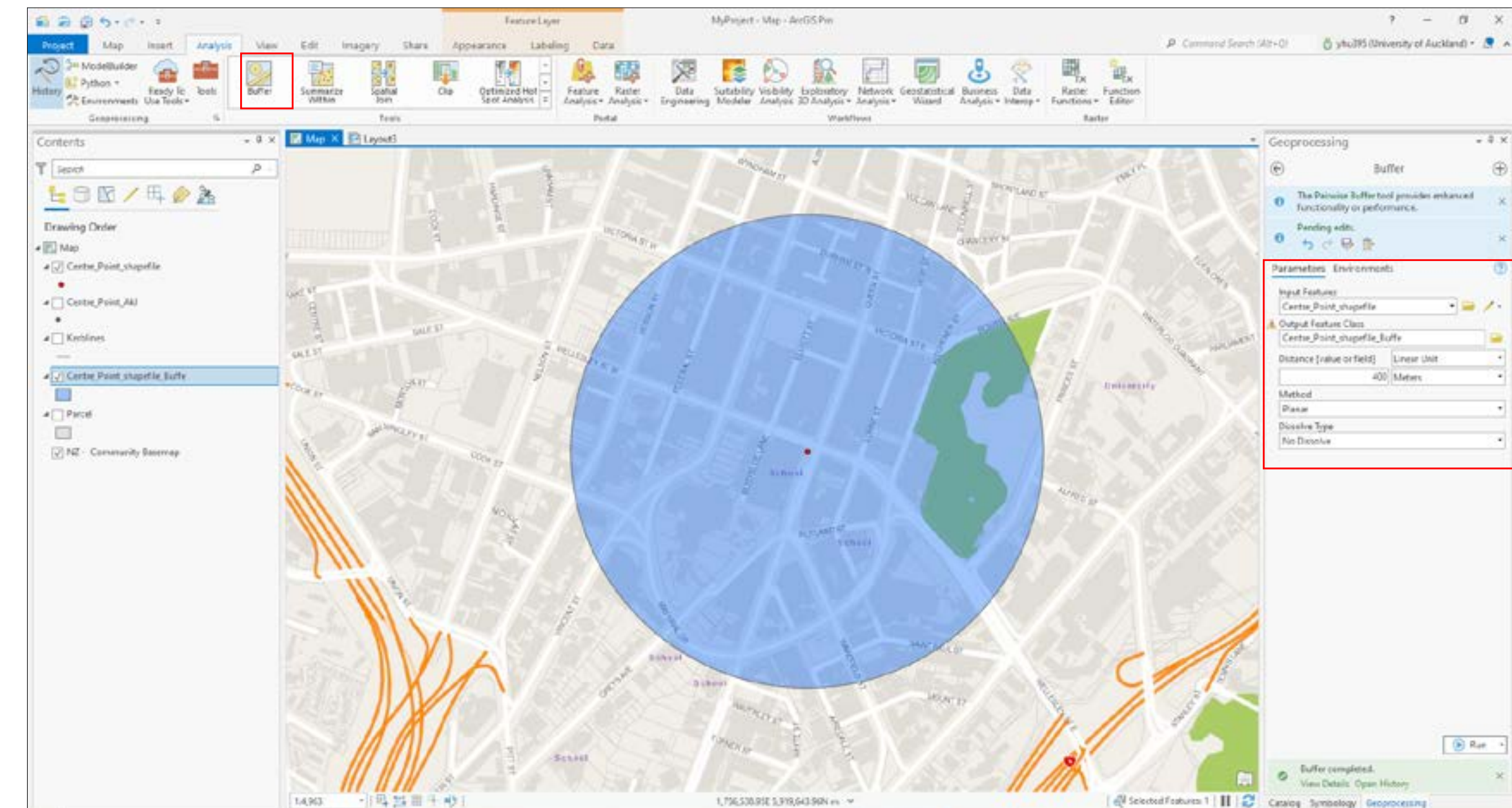
- Name your centre point and make sure it is set to the 'Point' feature class type. Also make sure the coordinates system is 'NZGD2000'.
- Once you click 'finish', a new feature class should appear in the Contents tab on the left.
- Next, navigate to 'Edit' > 'Create'. When the 'create' window appears on the right, select the centre point feature class you have just made.
- This will allow you to place a centre point anywhere on the map you would like. Once you are done, you can exit editing mode by closing the 'create' tab on the right.



ARCGIS PRO: Basic Functions

5. Creating a Buffer (continued):

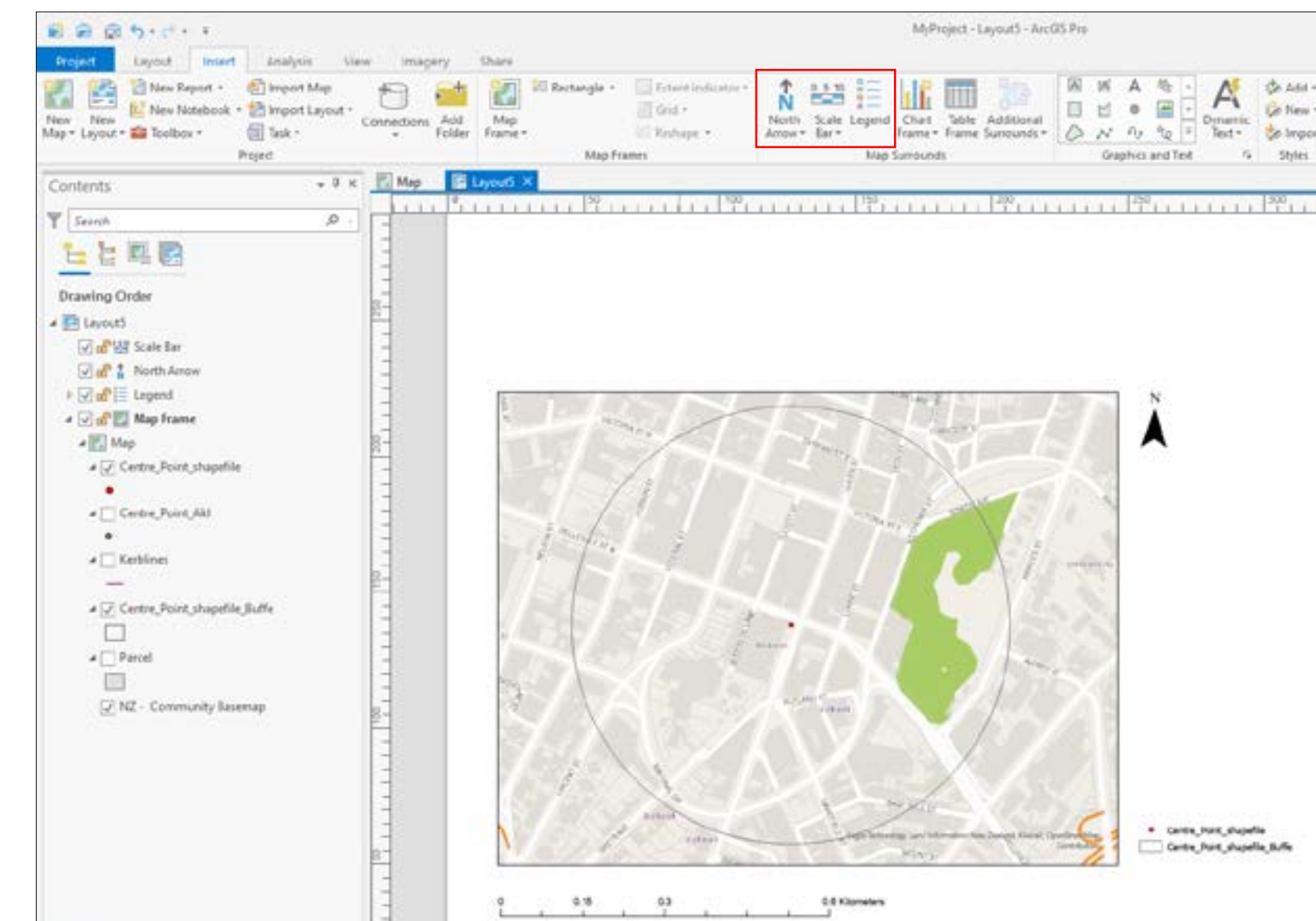
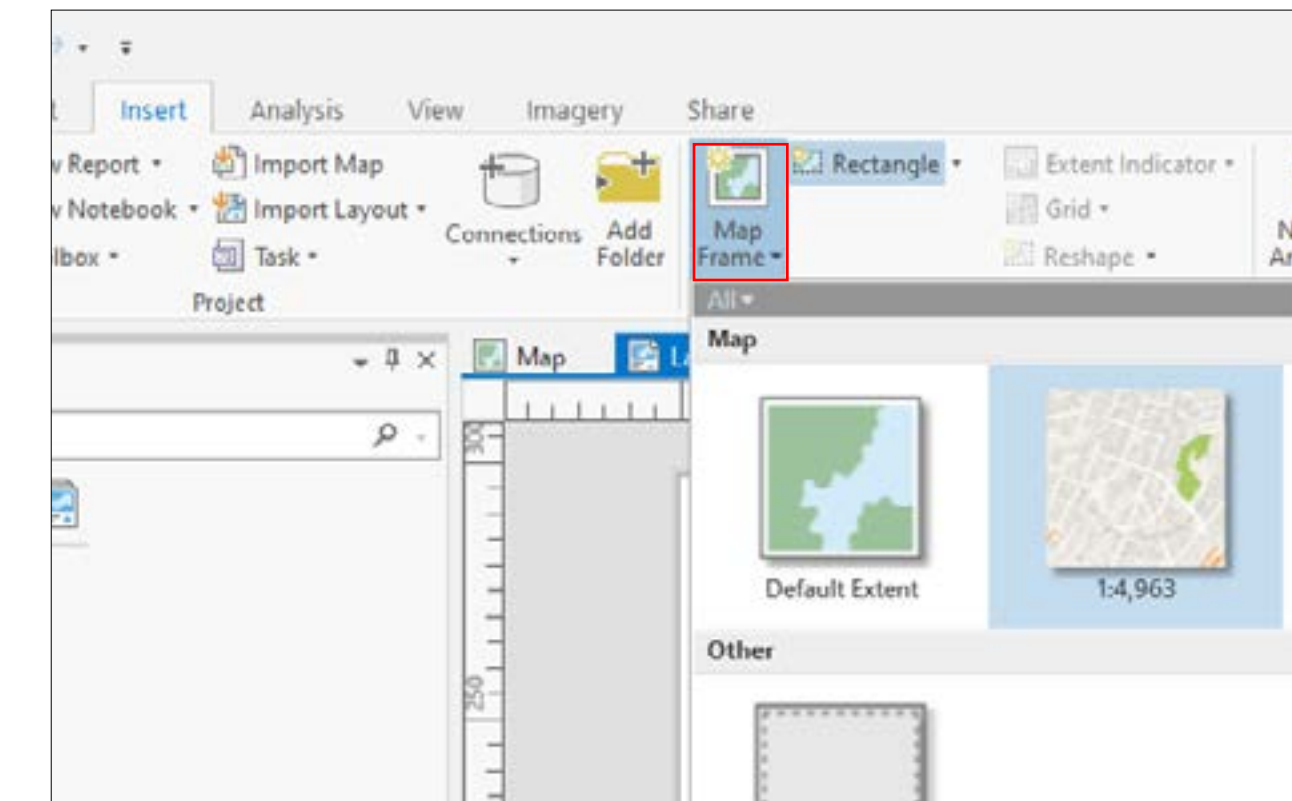
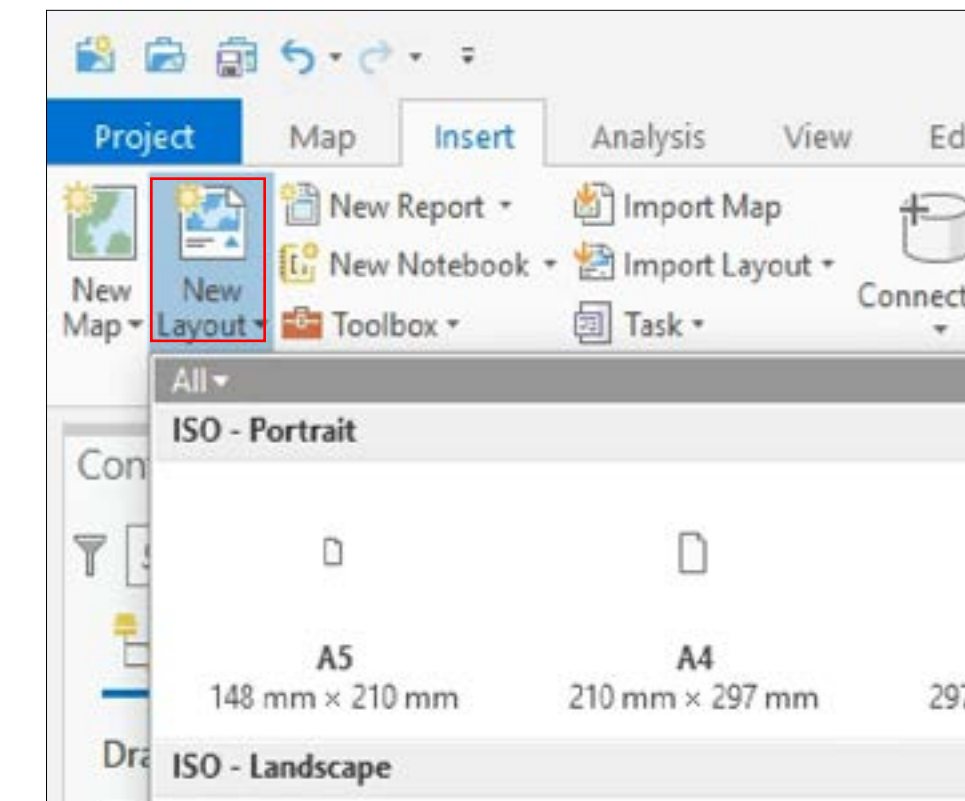
- Now that the centre point has been created, you can draw the pedshed (buffer) by clicking 'Analysis' > 'Buffer'.
- For 'Input Feature', select the centre point shapefile you just exported.
- For 'Output Feature', rename it appropriately and make sure it is saved in a file location that you can access again in the future.
- Specify your preferred radius distance, and the unit.
- Once you click 'Run', a pedshed should appear around your centre point.
- Remember you can edit the buffer— usually they will not have a colour fill.
- Done!



ARCGIS PRO: Basic Functions

6. ArcGIS Pro Layout View:

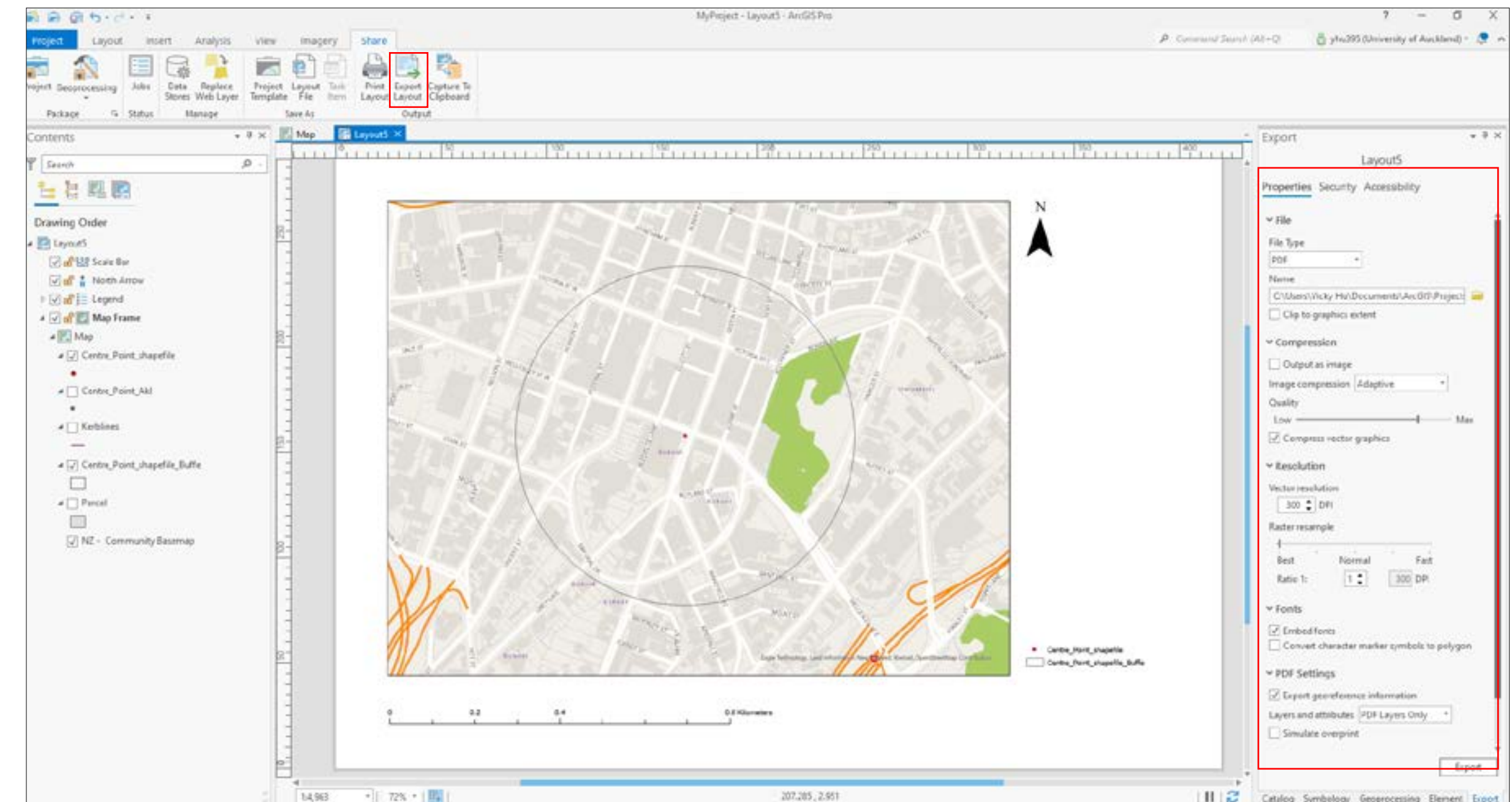
- To see what the map will look like when printed or exported as a PDF (for example), you have to add a layout.
- Under 'Insert', select 'New Layout'. Select the desired size (typically A3).
- Once the A3 page appears, navigate to 'Insert' > 'Map Frame', and select the map you want to add to this page.
- Click and drag to create a frame on the page within which your map will appear.
- You can also add elements such as north arrow, scale bar, and legend by going to 'Insert' > 'Map Surrounds', and click and drag a frame where you would like to place it on your page.



ARCGIS PRO: Basic Functions

7. Saving and exporting:

- Once your map is ready to export as a different file type such as a PDF, go to the 'Share' tab.
- Then select, 'Export Layout'.
- All done!



DIGITAL RESEARCH HUB

For more information on data sorting and/or examples of ArcMap functions please see:

<https://www.drh.nz/off-campus-resources-for-urban-design-planning-students-2/>

For further queries or tutorial requests please contact the Digital Research Hub at:

drh022@aucklanduni.ac.nz

