### **URBPLAN 710 Tutorial**

- Export maps from Geomaps
- Scaling maps in Autocad
- Editing maps in illustrator (lines)
- Editing in photoshop (images and colours)

#### Geomaps

https://geomapspublic.aucklandcouncil.govt.nz/viewer/index.html

- Geomaps is Auckland Council's own GIS map system; if your project is in Auckland this is the easiest way of collecting the site and property data
- Accept the disclaimer
- Type in your site in the search bar at the top (you can also find using other parameters, e.g. road intersections etc)
- Check your site is correct and zoom to a suitable scale where the whole site shows
- Outline the area you want to select- it will be highlighted in red
- You can adjust the boundary after selection
- There is a limit to the size of the area extracted- 6km<sup>2</sup>; if any larger than that you may need to extract in sections and combine in CAD software
- Select the appropriate information you want to extract- will come in separated layers so you can turn on/off in CAD
- Extract as DWG: output format ---> features ---> Autocad DWG
- Give email and click extract; the DWG map will be emailed to you after a few minutes- speed does depend on how big the area extracted is
- Tip: good to extract Aerials as well, comes as a jpg/ png image you can import into CAD or photoshop to refer to where buildings/ trees etc are



Site is usually highlighted in blue- in this case, it is not exactly the correct site



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## Autocad

- Geomap data is exported at 1:1000 when imported in CAD software
- Open Autocad and drop the downloaded file in
- You can open the layers tab in the toolbar: home ---> layer properties



• Draw a rectangle box the size of your paper- A3= 420x297 mm

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• Scale the DWG to appropriate size to fit onto the paper: Select the cad data ---> type 'scale' in command bar ---> select a point on the DWG ---> type in the scale (½ in this case to reduce the drawing to 1:5000)



- Move the page rectangle so the DWG sits nicely on the page
- Change the units of the model so the annotations are to scale (adjust according to how you input the page size mm/cm)
- Type 'units' ---> insertion scale ---> mm (or cm)

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- Add annotations by typing 'tp' (tool palette) ---> annotate ---> scroll down to metric
- Select drawing title ---> double click to edit ---> type in appropriate title and scale ---> ok ---> move to appropriate position (you can always re-edit in illustrator)

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• Add a scale bar by going back into the annotation tab ---> graphic scale (metric) ---> place the scale ---> click the blue arrow ---> change to correct scale (1:5000)



• Export file as DWG: select drawing ---> type 'export' ---> name file and choose location---> choose 'block (\*.dwg)' file type---> save ---> select edge of page box

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# Illustrator

• Open exported DWG in illustrator (free for all ARCHPLAN students): right click file ----> open with ---> adobe illustrator ---> original size ---> scale (1 unit = 1 mm) ---> ok

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- All the layers and applied colours you had in Autocad should be preserved and imported into illustrator
- You can check/ change the artboard size by going file---> document setups ---> edit artboards ---> double click page ---> you can edit the presets ---> ok ---> esc
- ctrl-A to select all and change the lineweight so we can see the drawings better
- ctrl-A ---> properties ---> stroke (0.1 or 0.2)
- If you don't have the properties bar, go to window ---> properties

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Add/ delete layer

- Edit the scale bar on the bottom: double click to isolate the correct numbers ---> drag away ---> double click to exit isolation mode ---> delete unnecessary numbers ---> drag back into place
- Change colour by selecting the lines ---> selecting the stroke colour box on the left ---> choose appropriate colour ---> ok



• Change to dotted line by selecting line ---> properties ---> stroke ---> dashed line



 You can add shapes/ freehand drawings in illustrator; editing colour and stroke are the same as above

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Colour dropper- picks up and matches colours

Pen- to draw straight lines

Shapes- right click to expand list

Type- add text; expand for vertical text etc

• To add arrows: right click the shapes to drop expanded list and choose line segment ---> draw line ---> stroke ---> arrowheads





Add zigzag lines by drawing a line segment ---> effect ---> distort and transform ---> zigzag



# Photoshop

- Open Photoshop, log in with uni email if first time on the device- Adobe suite is free for all ARCHPLAN students
- Set file size (A3) ---> landscape orientation ---> 300 DPI ---> RGB colour mode ---> white background



- To retain the layers from illustrator, you will need to copy each layer one by one
- Select all objects on the layer ---> ctrl-c ---> go into photoshop ---> ctrl-v ---> paste as 'smart object' ---> add to current library
- This way, the lines will stay crisp no matter how you manipulate them, and any changes you make in illustrator (you must save the illustrator file first) will automatically change in photoshop but it will take a lot longer to load in
- Check that everything is in the correct position
- Drag the jpg aerial image extracted from Geomaps as a referential basemap and scale/ position it
- Drag the aerial to the bottom of the layers panel and turn down the opacity so the lines are more visible- you can lock and turn it off so it doesn't move or affect you
- You can colour in areas by using the magic wand tool ---> select appropriate layer ---> click area(s) to colour in ---> fill in using paint bucket
- It's good to keep each colour on a separate layer
- If the colour is too bright etc you can reduce the opacity/ fill etc
- You can readjust the order of the layers (i.e. what layer sits on top) by dragging in the layers panel



- To add trees you can download a png or vector drawing from the internet and paste it in place according to the basemap
- Or use the 'object select tool' (right click the magic wand icon to drop list) select an area on the basemap ---> right click ---> layer via copy
- You can group or merge layers to reduce the file size
- Save as photoshop to allow for later editing
- Right click on a layer in layers panel ---> flatten image prior to exporting to reduce file size- this means you will lose all layers and be unable to edit, so remember to keep a full photoshop file before this step; or if your file isn't too big you can skip this
- If you choose to save as pdf (always save as psd first) and keep layers you can open the pdf in photoshop and retain editable layers- your file size will be a bit larger

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