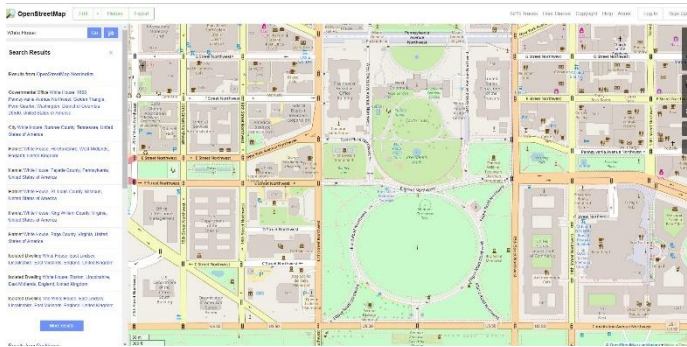


Producing Quick Orienteering Maps

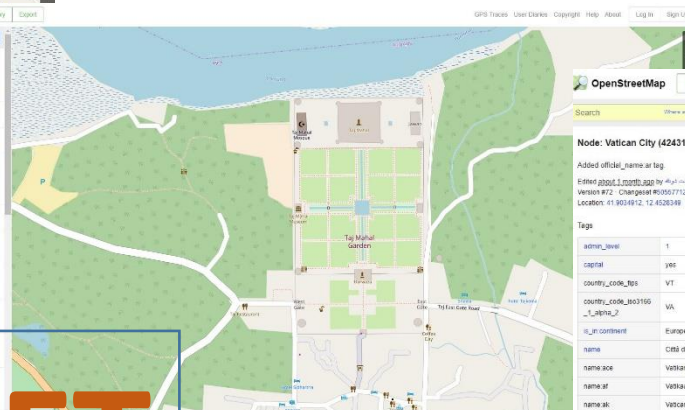
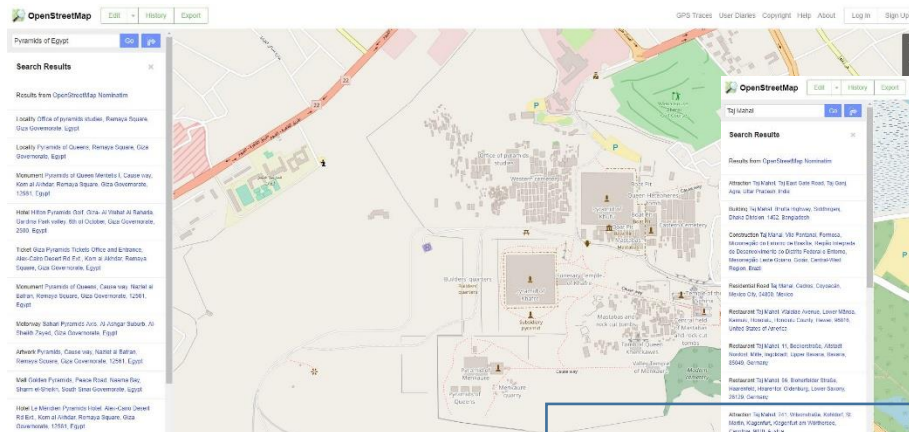
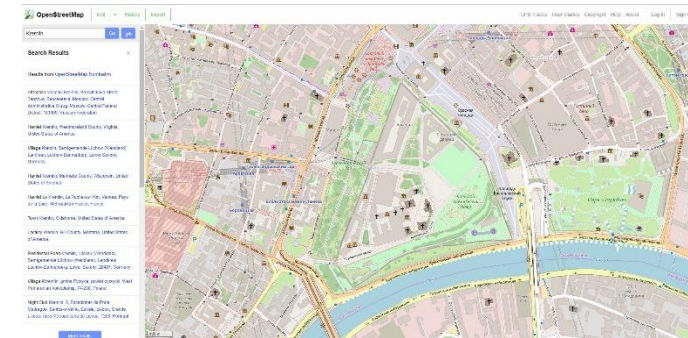
Step by Step from Open Street Map
To Open Orienteering Mapper
(and if you prefer)
To OCAD 8, 9, 10 and 11

DRAFT

Open Street Map is a free program on the Internet where you can find map information for pretty well anywhere in the world. . .



From the White House
to the Kremlin . . .

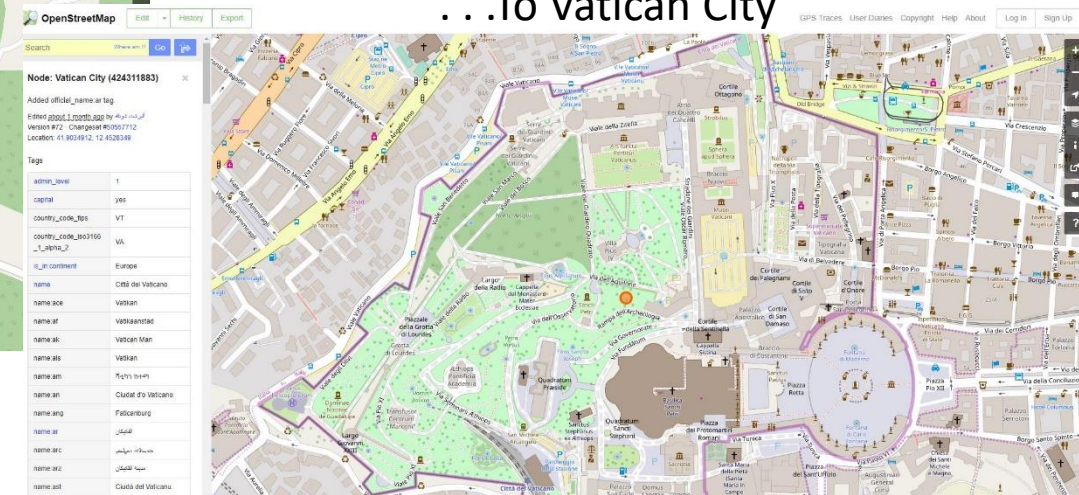


DRAFT

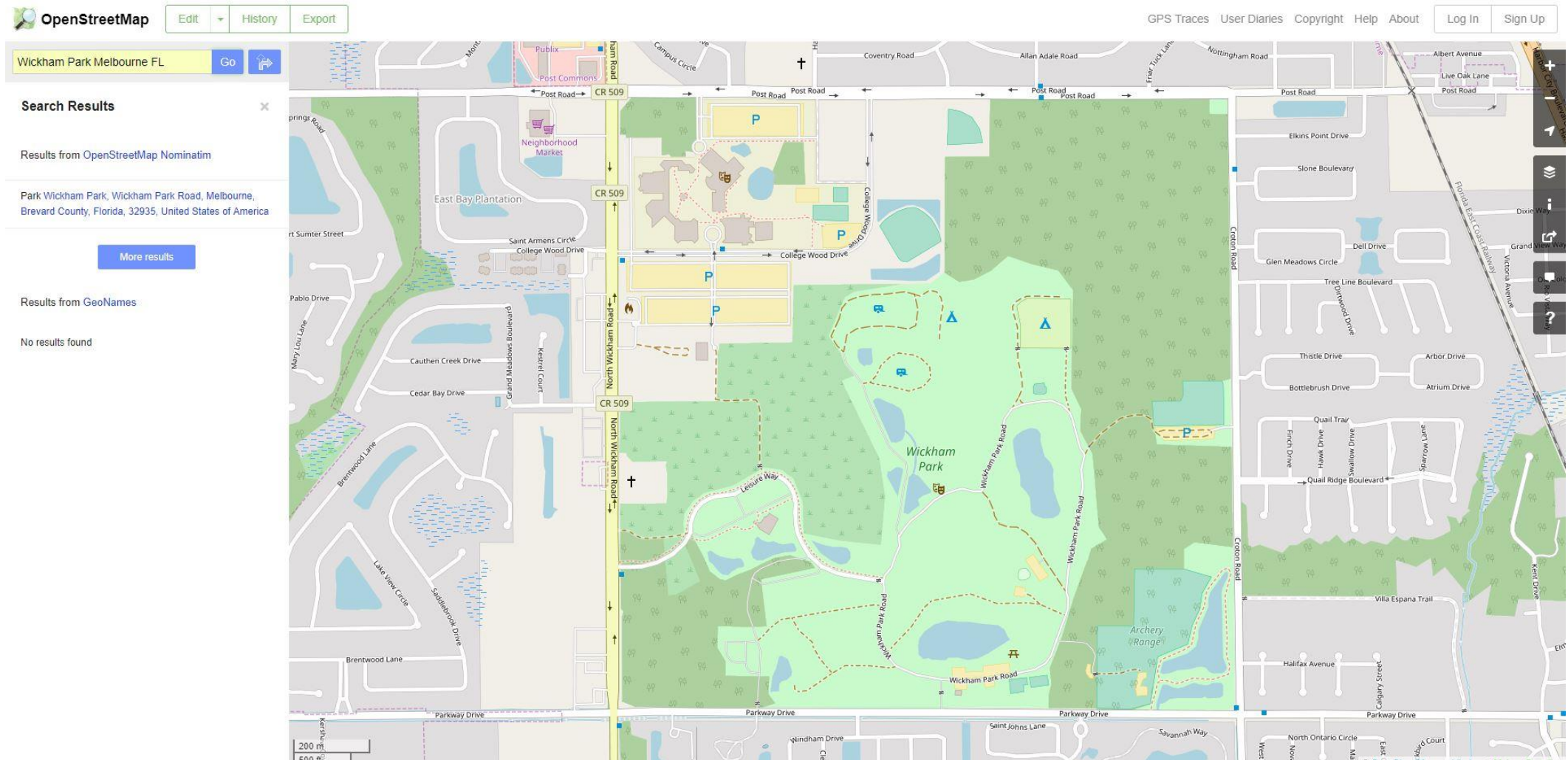
The Egyptian pyramid

. . . To India's Taj Mahal

. . . To Vatican City



To get started first search Open Street Map to find the area where you would like to make the map



DRAFT

DRAFT

If you would like to narrow down the area Open Street Map allows you to 'manually select' a smaller area than is shown on the screen

The screenshot displays the OpenStreetMap website interface. On the left, the 'Export' panel is visible, featuring a search bar with the text 'Where am I?' and a 'Go' button. Below the search bar, the 'Export' section includes a bounding box input area with the coordinates , , , and . The coordinate is circled in blue, with a blue arrow pointing to it from the text 'Manually select a different area'. Below the bounding box input, there is a 'Licence' section with the text 'OpenStreetMap data is licensed under the Open Data Commons Open Database License (ODbL)' and an 'Export' button. Further down, there is a section titled 'If the above export fails, please consider using one of the sources listed below:' with links to 'Overpass API', 'Planet OS', 'Geofabrik Downloads', 'Metro Extracts', and 'Other Sources'.

The main map area shows a detailed view of Wickham Park, including roads like North Wickham Road, Wickham Park Road, and Parkway Drive, and landmarks like Wickham Park and Archery Range. The map is overlaid with a grid of yellow lines representing the bounding box for the export area. The top right of the page contains navigation links: GPS Traces, User Diaries, Copyright, Help, About, Log In, and Sign Up.

A box will show up for you to move the edges to narrow down the area

DRAFT

OpenStreetMap

Edit

History

Export

Search

Where am I?

Go

Export

×

28.1724

-80.6722

-80.6552

28.1574

Licence

OpenStreetMap data is licensed under the [Open Data Commons Open Database License \(ODbL\)](#).

Export

If the above export fails, please consider using one of the sources listed below:

Overpass API

Download this bounding box from a mirror of the OpenStreetMap database

Planet OSM

Regularly-updated copies of the complete OpenStreetMap database

Geofabrik Downloads

Regularly-updated extracts of continents, countries, and selected cities

Metro Extracts

Extracts for major world cities and their surrounding areas

Other Sources

Additional sources listed on the [OpenStreetMap wiki](#)

GPS Traces

User Diaries

Copy

Help

About

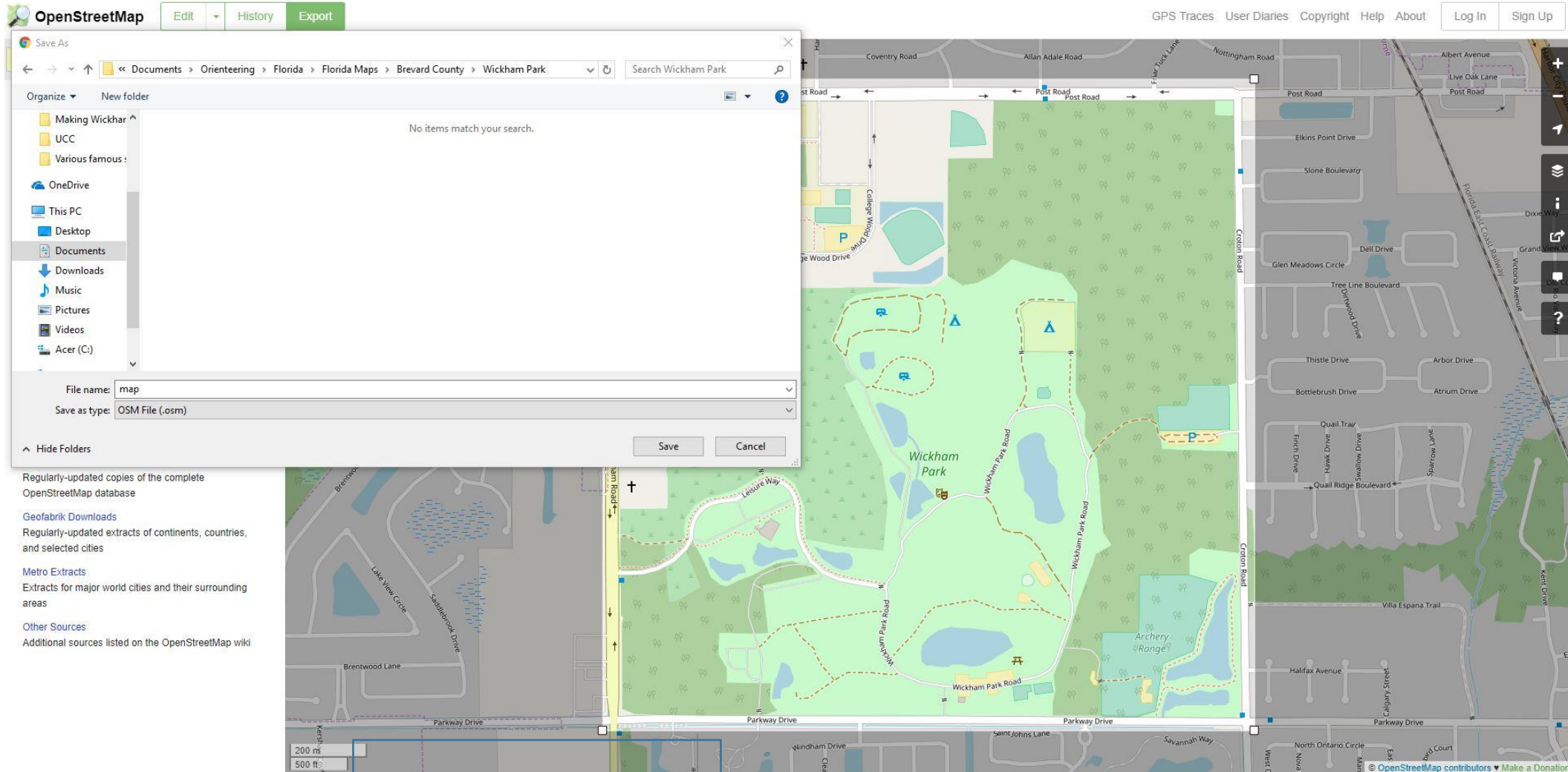
Log In

Sign Up

Map of Wickham Park area

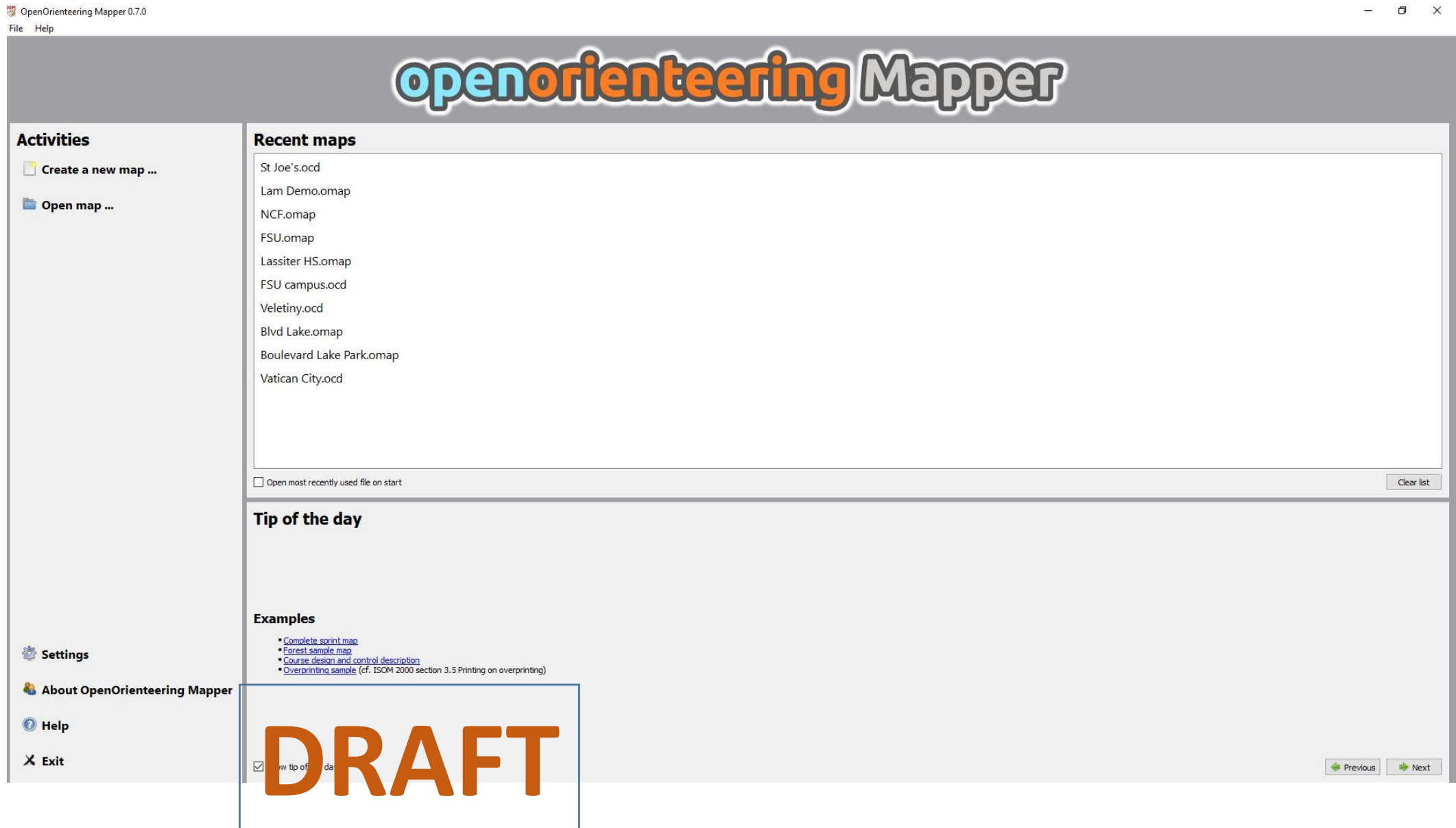
Map showing Wickham Park, Archery Range, and surrounding roads like Post Road, College Wood Drive, and North Wickham Road. The map includes a bounding box for export.

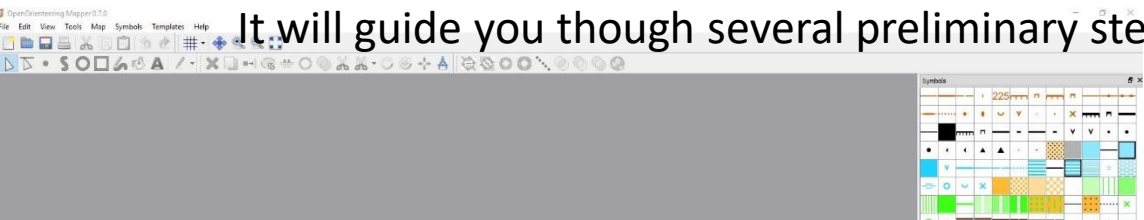
Pick a reliable place and name to save the file.
By default it will be saved as map in your Downloads folder.



DRAFT

Then the fun begins. Open the program Open Orienteering Mapper and select Create a new map.

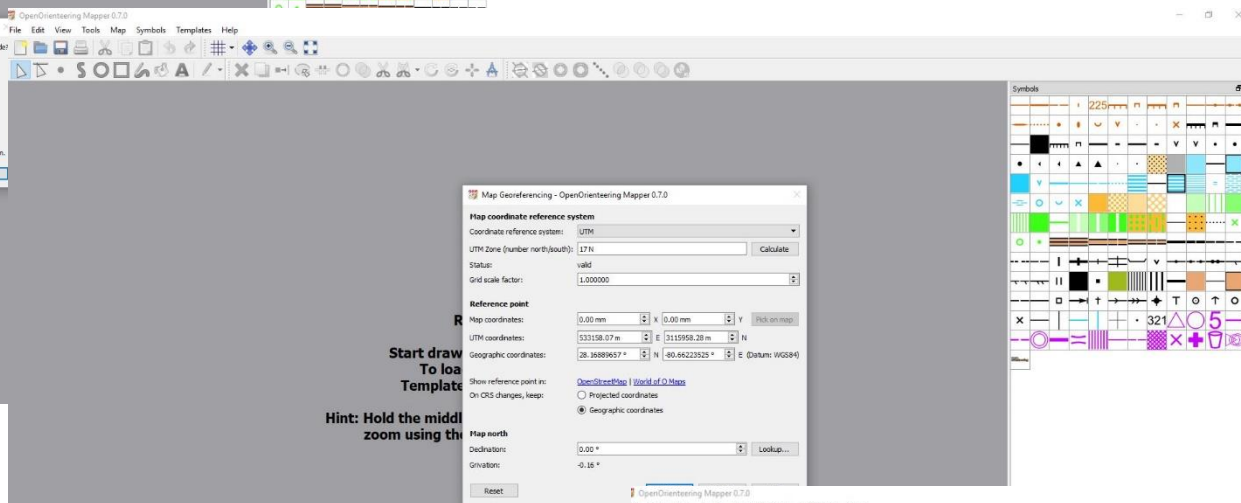




Ready to draw
Start drawing or load a template
To load a base map or template -> Open Templates -> Open template...

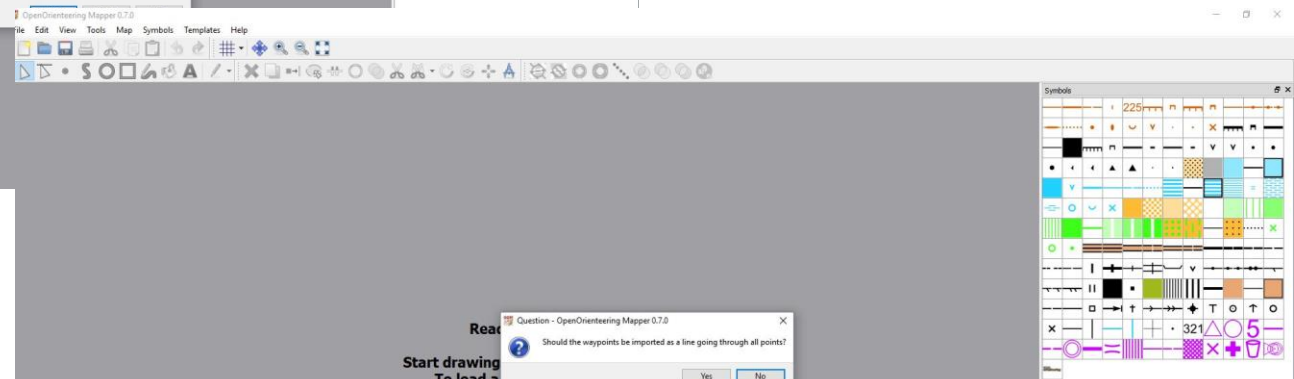
Hint: Hold the middle mouse button to drag the map, zoom using the mouse wheel, if available.

Selecting Geo-referencing to



Hint: Hold the middle mouse button to drag the map, zoom using the mouse wheel, if available.

Getting the correct UTM zone
(This is important) to



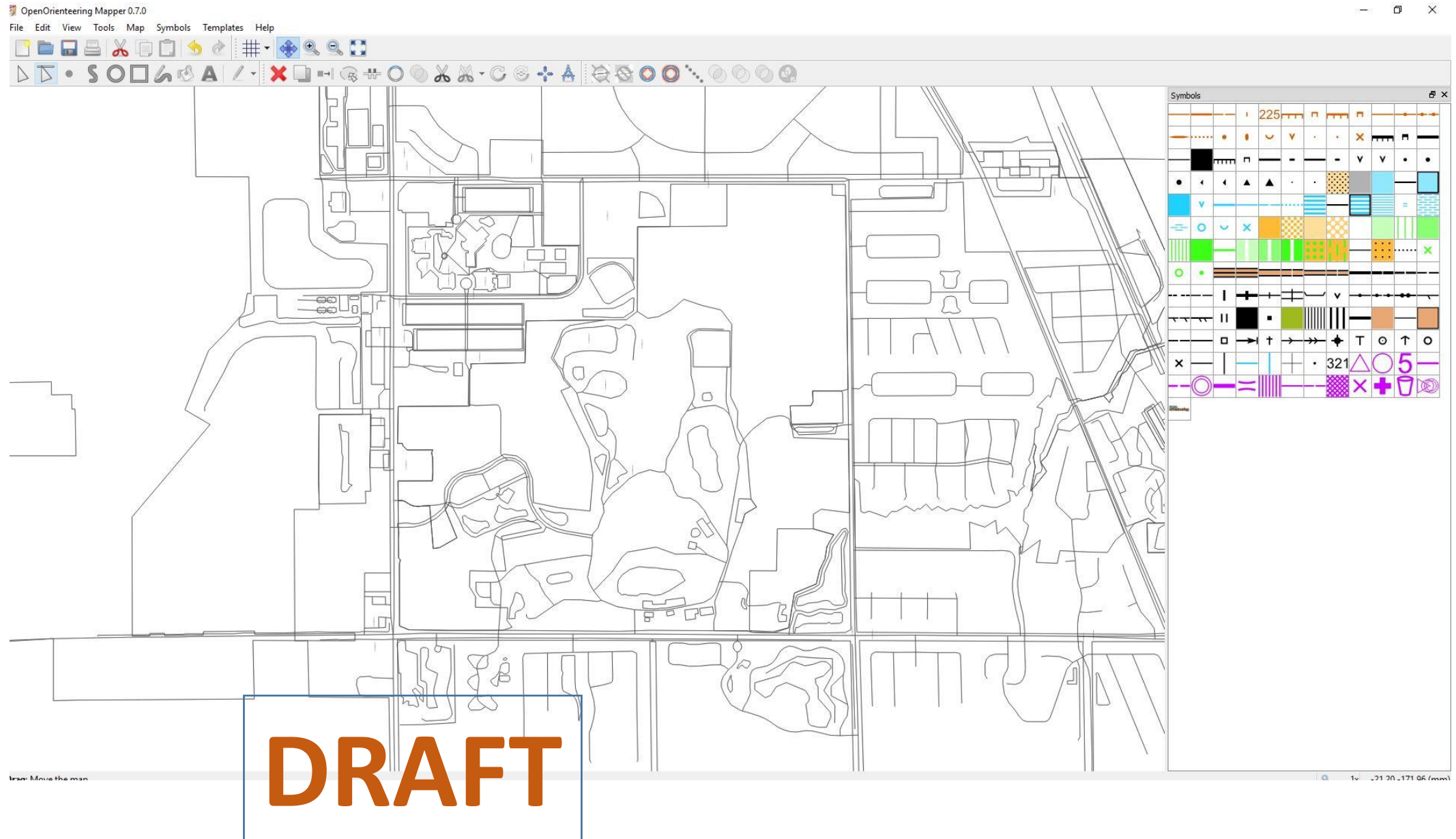
Hint: Hold the middle mouse button to drag the map, zoom using the mouse wheel, if available.

Asking about waypoints.
It is easiest to say 'No'

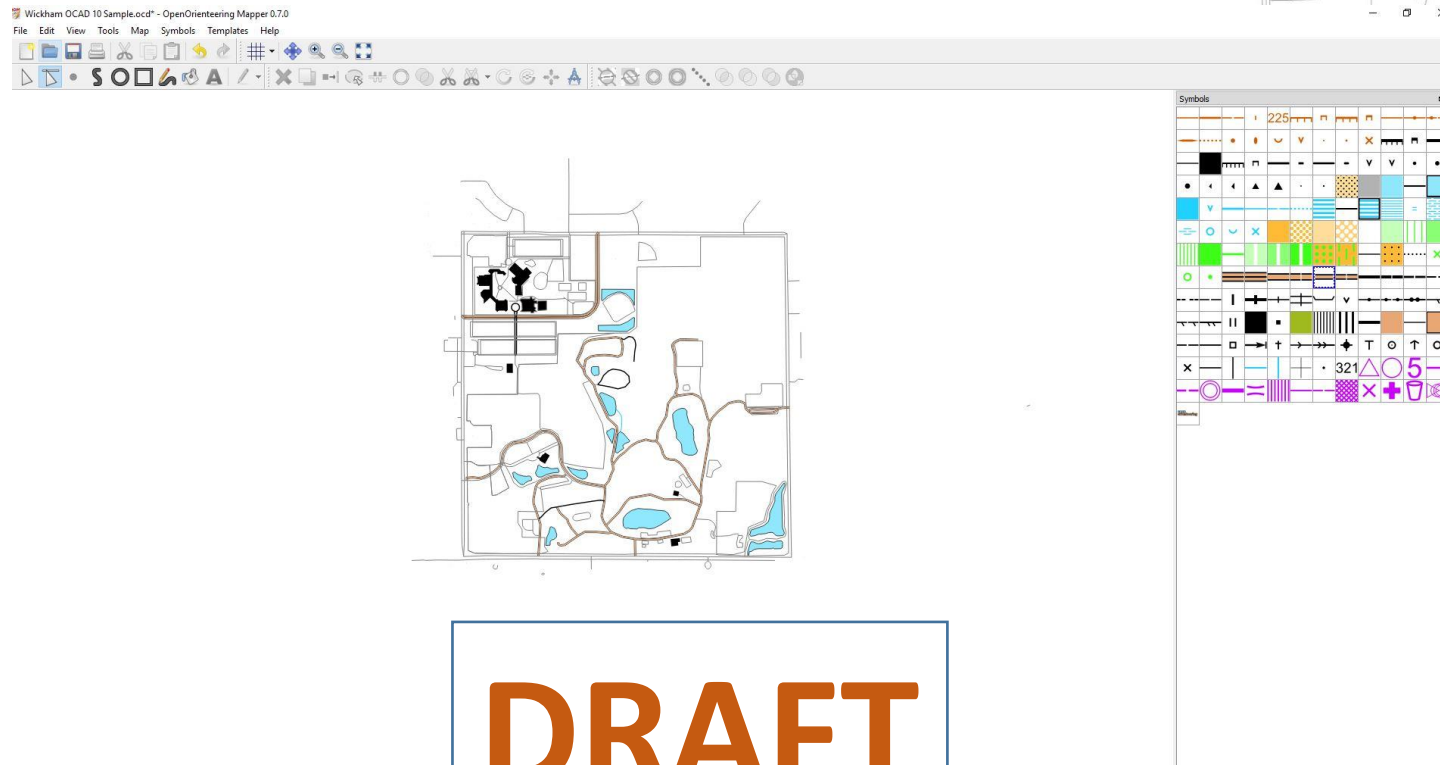
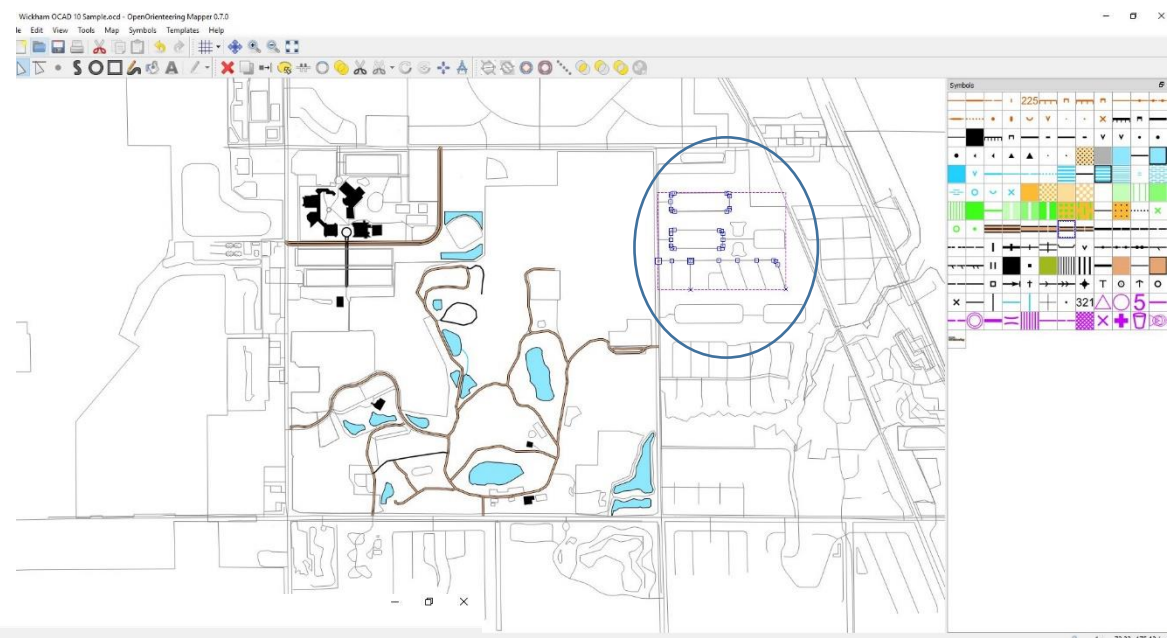
DRAFT

The map will open looking something like this.

We want the area in the middle but it gave us some extraneous details. No problem.



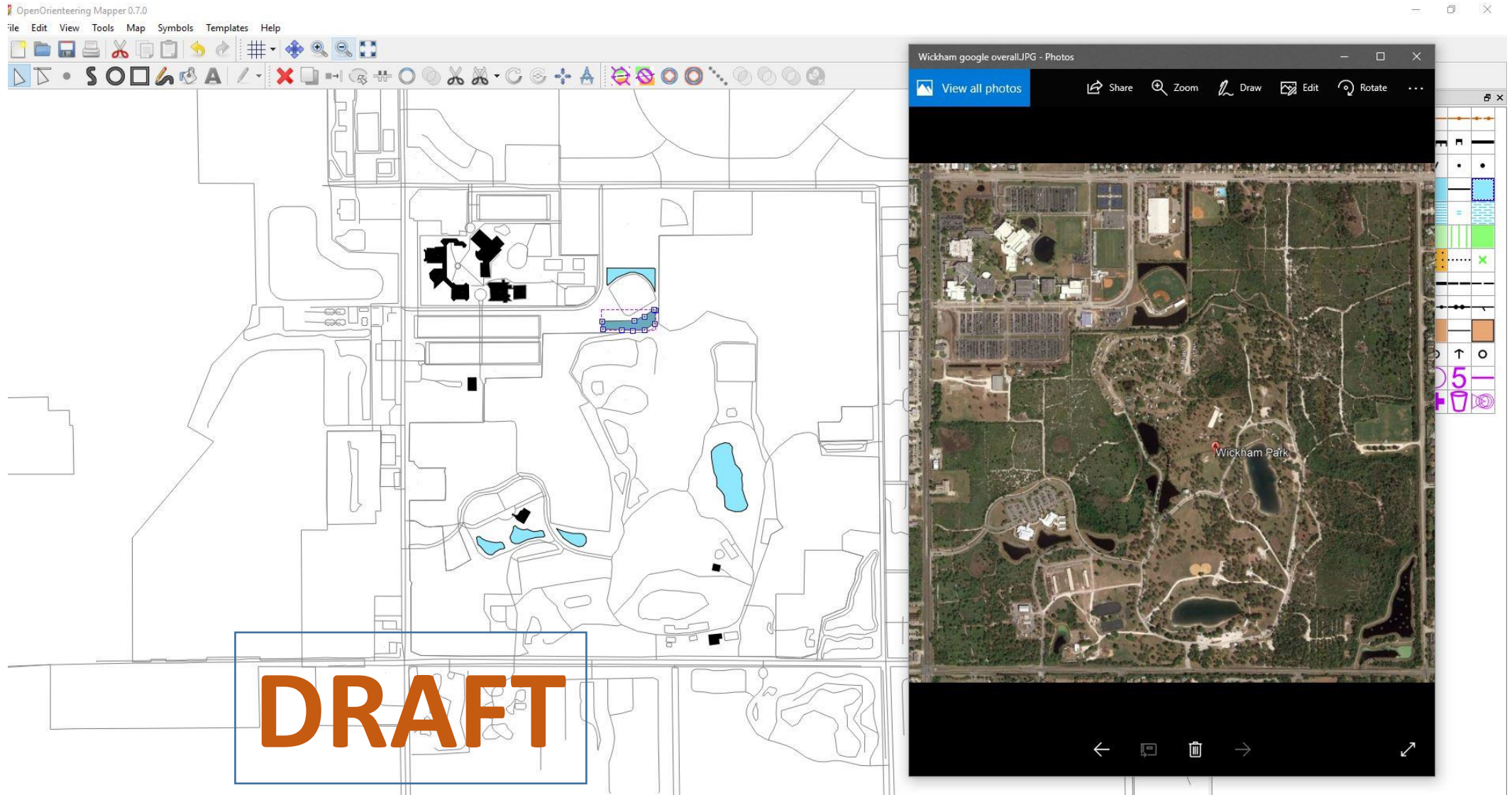
We can strip away the extraneous detail by highlighting and deleting bits or area at a time. . .



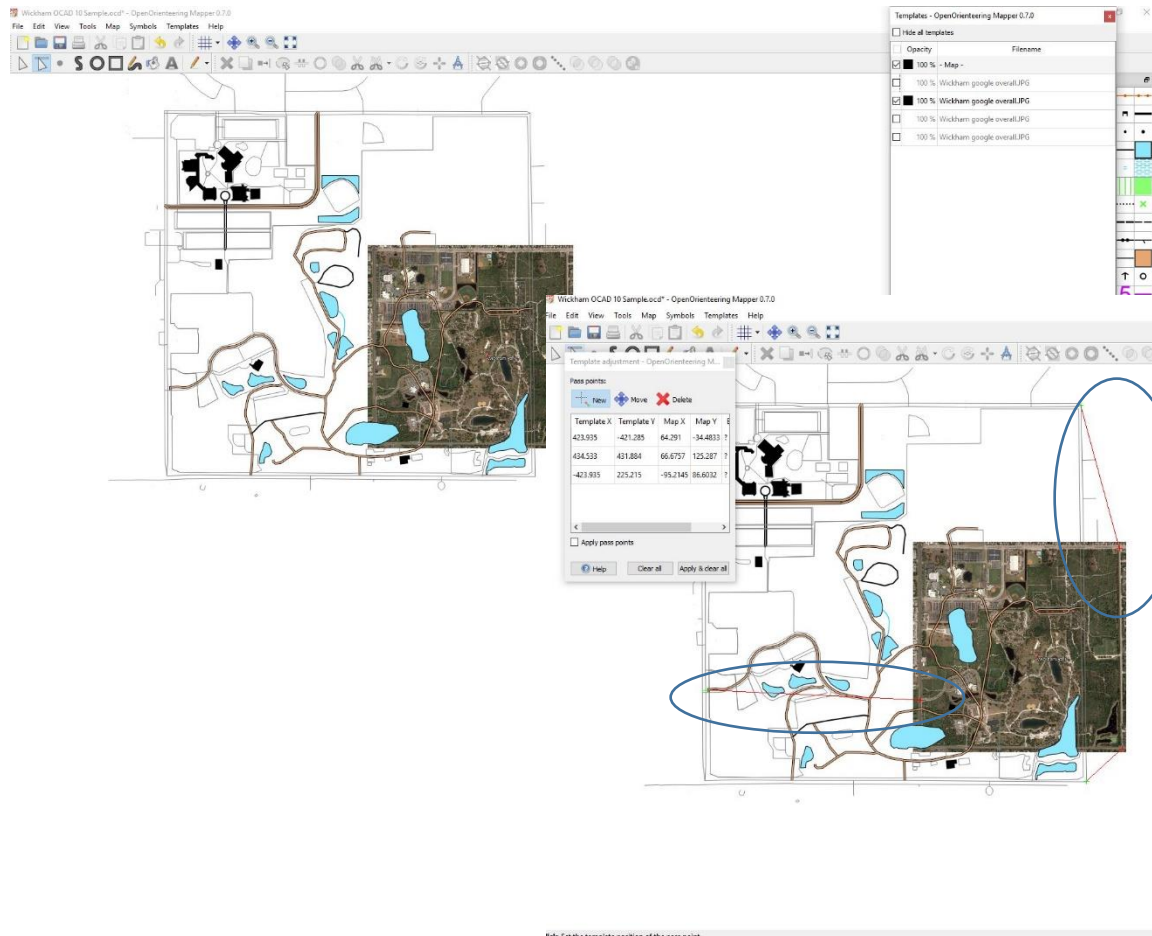
. . .until we are left with the map that we want.

DRAFT

The next step is to convert the open street map symbols to orienteering symbols by using the table of symbols on the side. It may help to have an aerial photo handy for reference.

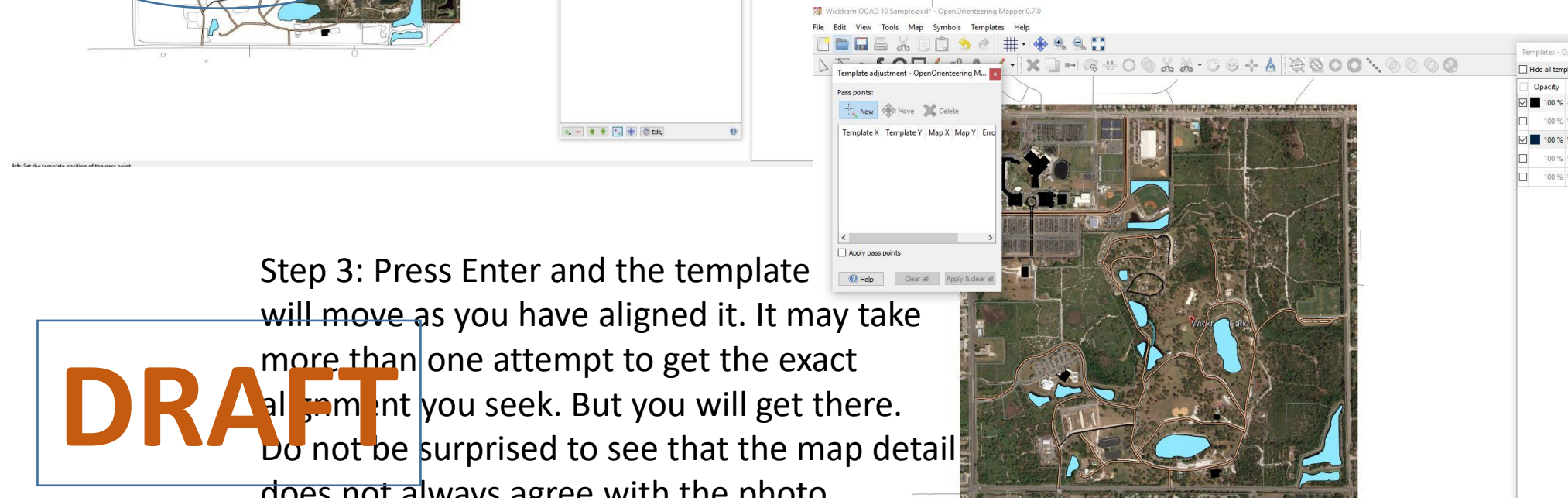


Once the conversion is done it is time to bring an aerial photo in to background to get more detail.



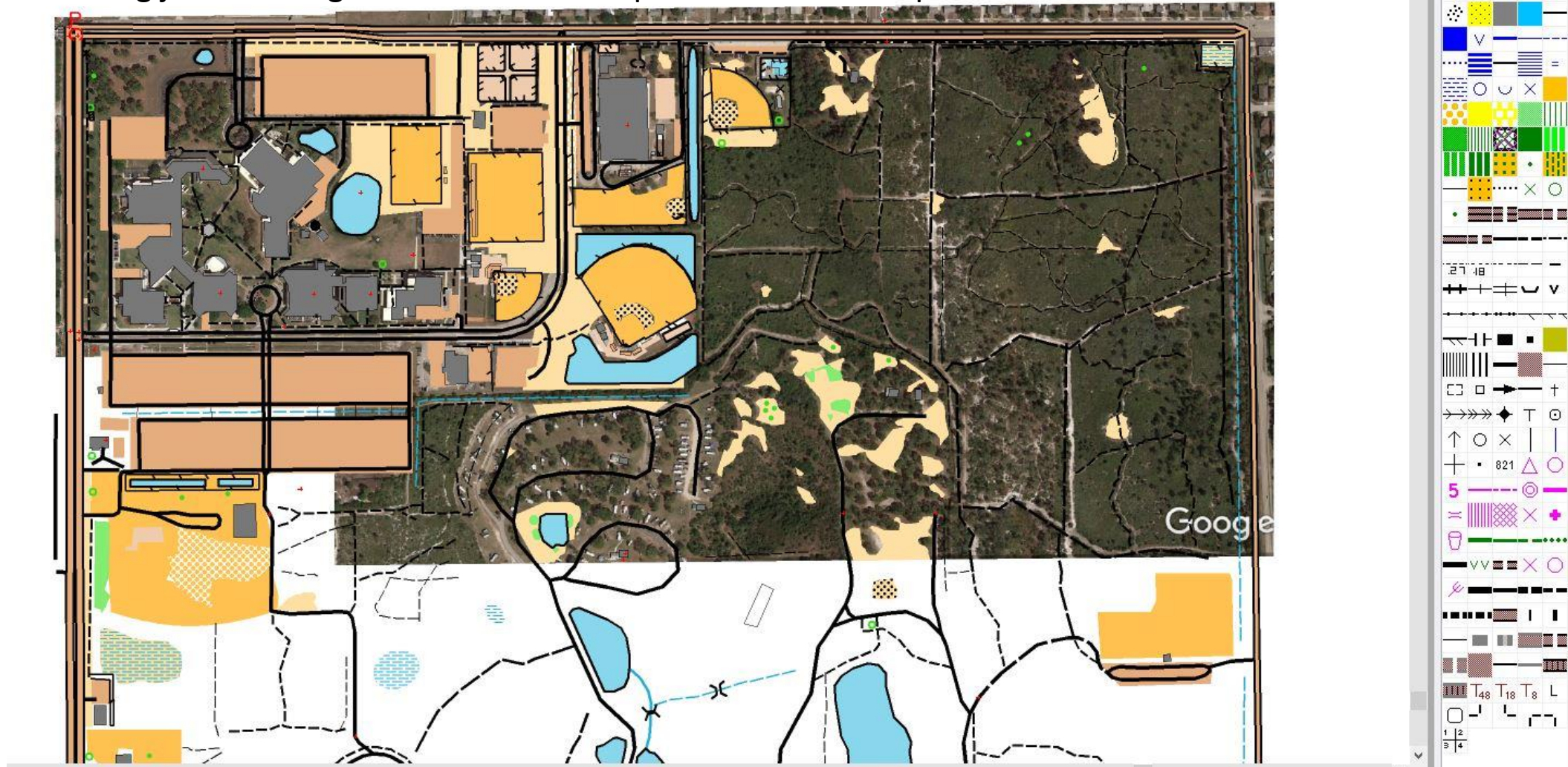
Step 1: Import the photo called a template in OOM

Step 2: Align points on the template with the same points on the map.



Step 3: Press Enter and the template will move as you have aligned it. It may take more than one attempt to get the exact alignment you seek. But you will get there. Do not be surprised to see that the map detail does not always agree with the photo

A big job is tracing the detail from the photo on to the map 'canvas'.



DRAFT

However once that is completed and you have rotated the map orientation to magnetic north you have a map ready for field work.

Getting Geo-referenced Orthophotos and Other Information County by County Across the USA

DRAFT

A good source for (free) information to help make quick orienteering maps is the Geospatial Data Gateway of the US Department of Agriculture.

USDA:NRCS:Geospatial

Secure | https://gdg.sc.egov.usda.gov

Apps Chrome New Tab Orienteering OpenStreetMap | Exp geoOttawa Bing Rogers Mail Hotmail Ottawa Citizen PGA.com | The Office Magnetic Declination Holiday Inn Hotels & G

USDA Natural Resources Conservation Service
United States Department of Agriculture

Home Login Check Order Status Maps News Data Policy FAQ Help NAIP Download Contact Us


You are here: Home / GDGHome.aspx

Geospatial Data Gateway

Welcome to GDG

System Status:
Welcome to GDG 6.0.4.7481. All products and services are running normally.

PLEASE NOTE: As of April 21, 2017 the NAIP datasets are only available through the "NAIP Download" option on the home page and are no longer be available through the Gateway ordering process. Also note, NAIP images are titled by county FIPS codes. FIPS codes may be referenced by clicking on the "county FIPS" link on the Direct Download page.



GEOSPATIAL DATA GATEWAY

the one stop source for environmental and natural resource data

The Geospatial Data Gateway (GDG) provides access to a map library of over 100 high resolution vector and raster layers in the Geospatial Data Warehouse. It is the One Stop Source for environmental and natural resources data, at any time, from anywhere, to anyone. It allows you to choose your area of interest, browse and select data, customize the format, then review and download.

This service is made available through a close partnership between the three Service Center Agencies ([SCA](#)); Natural Resources Conservation Service ([NRCS](#)), Farm Service Agency ([FSA](#)) and Rural Development ([RD](#)).

GET DATA

GEOSPATIAL DATA GATEWAY

Place a Data Order **GDG**


I Want To...

- o [NAIP Download](#)
- o [Direct Download](#)
- o [Order by County/Countries](#)
- o [Order by State](#)
- o [Order by Place](#)
- o [Order by entering Latitude/Longitude Bounding Rectangle](#)
- o [Order by Interactive Map using custom Area Of Interest](#)

DRAFT

NRCS | USDA | FOIA | Accessibility Statement | Privacy Policy | Non-Discrimination Statement | Info Quality | FirstGov | White House

Most often I am ordering ortho-photos and contour information that are delivered on a county-wide basis.



Natural
Resources
Conservation
Service

United States Department of Agriculture

GeoSpatialDataGateway

HomeStatus MapsHelpFAQContact UsA⁻A⁺AA =

1-WHERE

Order by County/Countries

Using the panel in the middle select the state for your order. A list of available counties for that state will then be displayed. Select one or more items from the **Available Counties**. The *shift* and *ctrl* keys are used for multiple selections. Once chosen, use the **>>** button to move those counties to the **Selected Counties** list. You may remove these items by using the **<<** button. Once you are satisfied with your selected counties list use the **Submit Selected Counties** button to move them to the **YOUR ORDER** panel on the far right.

2-WHAT

3-HOW

4-WHO

5-REVIEW

WHERE

If you wish to change the method for selecting the order area, click [HERE](#).

Order by County/Countries

Select State for order: Florida

Select County or Counties

Alachua
Baker
Bay
Bradford
Broward
Calhoun
Charlotte
Citrus
Clay
Collier
Columbia
DeSoto
Dixie
Duval
Escambia

Available Counties

<<>>

Brevard

Selected Counties

Submit Selected Counties

YOUR ORDER

Order Area (Where): None

Order Map Layers (What):

Order Format (How): None
Order Projection (How): None
Order Inclusion (How): None
Order Delivery Method (How): None

Order Recipient (Who):

DRAFT

There is a wealth of information available. It varies a bit county by county.

USDA

Natural
Resources
Conservation
Service

United States Department of Agriculture

GeoSpatialDataGateway

HomeStatus MapsHelpFAQContact UsA^ -^A +AA =

1-WHERE

2-WHAT

3-HOW

4-WHO

5-REVIEW

WHAT

Here are the available map layers for your selected area of interest.

Climate temperature

☐ 1971-2000 Annual Average Minimum Temperature by State, 1 map 1.604 MB

☐ 1971-2000 Annual Average Maximum Temperature by State, 1 map 1.256 MB

☐ 1981-2010 Annual Average Minimum Temperature by State, 1 map 1.836 MB

☐ 1981-2010 Annual Average Maximum Temperature by State, 1 map 1.415 MB

Easements

☐ NRCS Conservation Easement Areas by State, 1 map 0.22 MB

☐ NRCS Conservation Easement Points by State, 1 map 0.162 MB

Elevation

☒ National Elevation Dataset 3 Meter, 34 maps 1498.949 MB

☐ National Elevation Dataset 10 Meter, 38 maps 214.491 MB

☐ National Elevation Dataset 30 meter, 2 maps 50.57 MB

Geographic Names

☐ Geographic Names - Populated Places, 1 map 0.066 MB

☐ Geographic Names - Non-Populated Places, 1 map 0.421 MB

Geology

☐ National scale Geology by State, 1 map 26.872 MB

Government Units

☐ NRCS Counties by State, 1 map 6.948 MB

☐ NRCS States by State, 1 map 4.037 MB

☐ TIGER/NRCS Congressional Districts by State, 1 map 1.948 MB

☐ TIGER Urban Areas by State, 1 map 7.077 MB

☐ Federal, State, Tribal, etc. Protected Areas Land Ownership, 1 map 5.828 MB

CONTINUE

YOUR ORDER

Order Area (Where): Brevard County, Florida

Order Map Layers (What):

National Elevation Dataset 3 Meter

Digital Ortho Quad County Mosaic-Natural Color

3178.817 Megabytes, 35 Maps

Order Format (How): None

Order Projection (How): None

Order Inclusion (How): None

Order Delivery Method (How): None

Order Recipient (Who):

DRAFT

Select the information wanted

USDA Natural Resources Conservation Service GeoSpatialDataGateway

Home Status Maps Help FAQ Contact Us A+ AA

1-WHERE
2-WHAT
3-HOW
4-WHO
5-REVIEW

Please check over the details of your order. If you wish to change anything, use this left control panel to traverse the steps to make corrections. When you are ready press the button below to place your order.

Estimated time to complete your order: **5 Minutes**

Place your order with this button:
PLACE ORDER

REVIEW

Order Area(Where):	Brevard County, Florida
Order Map Layers(What):	<ul style="list-style-type: none">National Elevation Dataset 3 Meter, 34 maps 1498.949 MBDigital Ortho Quad County Mosaic-Natural Color, 1 map 1679.868 MB
Order Delivery Specifics(How):	Format: Native Projection: AutoUTM to county NAD83 Delivery: Download Inclusion: Standard
Final Order Size:	3178.817 megabytes
Order Recipient(Who):	gordhun@rogers.com

An order is generated

USDA Natural Resources Conservation Service GeoSpatialDataGateway

Home Status Maps Help FAQ Contact Us A+ AA

1-WHERE
2-WHAT
3-HOW
4-WHO
5-REVIEW
FINISHED

Your order has been placed. You may use this left navigation control to change any of the values of your last order to create a new one. Please note that you cannot place duplicate orders.

ORDER GENERATED

Thank You for using the Geospatial Data Gateway

Order #:3477237 has been generated. Please note this number, as it will be needed to reference your order. You will receive an e-mail notification that your order is complete in as little as: **5 Minutes**. This time is a minimum and is dependent on order volume and system maintenance. It is not exact. Using the **check order** function allows download of map layers completed before notification is sent for multi-item orders. As a matter of etiquette, please download this order **BEFORE** placing any more orders. **DO NOT** place several orders in sequence. This way, other users will have an opportunity to place and download orders.

Your order will be deleted **4 DAYS** after the confirmation email has been sent to the email address that was given with your order.

And an e-mail comes to your Inbox inviting you to download the order.

ROGERS | YAHOO! MAIL

Search All Gord Hunter, search your mailbox Search Mail Search Web

Compose Archive Move Delete Spam More

Inbox (1)
Drafts (1)

Today

Geospatial Data Gateway

DRAFT

Gateway Order 3477237 For Brevard, Florida

****PLEASE DO NOT REPLY TO THIS SOFTWARE GENERATED EMAIL.****

****Click [Dear GDG User,](https://gdg.sc.egov.usda.gov/GDGHome>Contact.aspx for additional assistance.****</p></div><div data-bbox=)

Your Gateway order 3477237 has been processed and is ready for download.

Area for Order:
Brevard, Florida

Vector Format: ESRI Shape
Vector Projection: State Plane NAD83 26900
Image Format: Native
Vector Extent: Standard
Compression: Zip

!!! Important Note !!!

If you have problems completing downloads, please see

Gateway FAQ # 2: https://gdg.sc.egov.usda.gov/GDGHome_FAQ.aspx

If you would like to check the status or download your order, please use

Check Order: https://gdg.sc.egov.usda.gov/GDGHome_CheckOrder.aspx

Ordered Items:

National Elevation Dataset 3 Meter

Size: 1,498.98 megabytes (140 files). Download compressed size: 1,499.23 megabytes (34 maps).

https://gdg.sc.egov.usda.gov/GDGDL/3477237/elevation_NED03M_f1009_3477237_01.zip

Digital Ortho Quad County Mosaic-Natural Color

Size: 1,679.87 megabytes (6 files). Download compressed size: 1,680.13 megabytes (1 map).

https://gdg.sc.egov.usda.gov/GDGDL/3477237/ortho_imagery_MDOQ1M_N_f1009_3477237_02.zip

Total data package size is 3,178.85 megabytes (3,179.36 megabytes compressed)

Click on the link(s) to download.

Ensure the link is the full path because some it may be on subsequent line(s).

These files will be removed from their systems in 4 days (9/8/2017 4:57:29 AM).

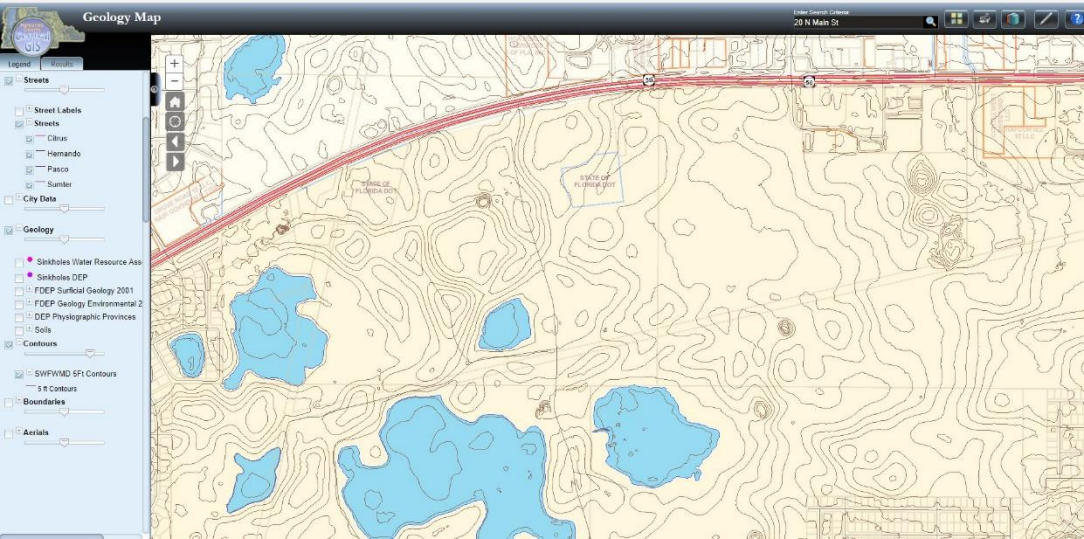
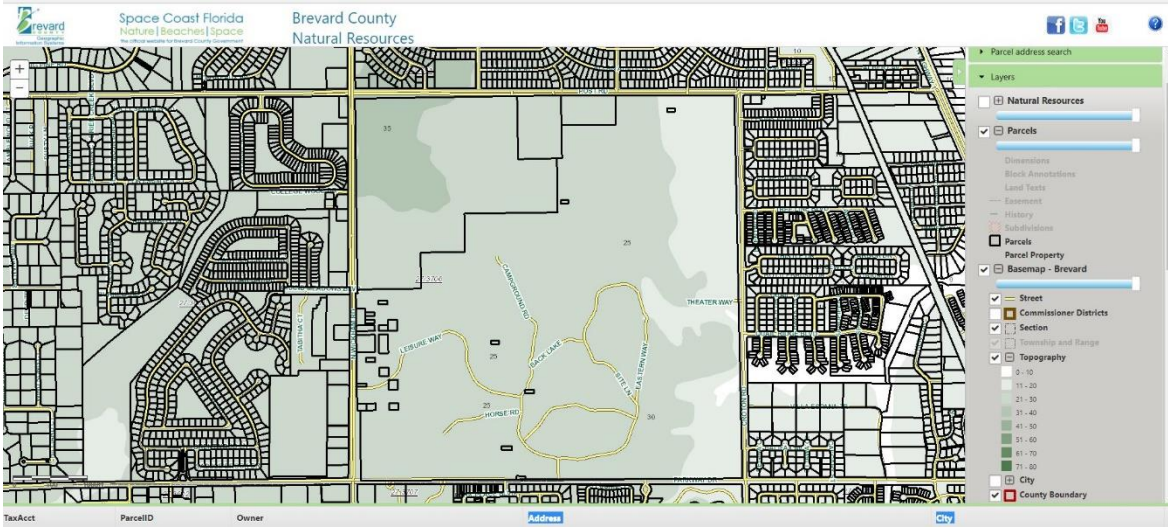
DRAFT

Regards,
The Geospatial Data Gateway Staff
<https://gdg.sc.egov.usda.gov>

In this case I had two orders to download. They are large files and each took some time (+/-15 minutes)

Check your county /city GIS web site for contour information. It is often hit and miss what they will provide and what they will provide for free. On the right is Brevard County FL for the sample map. Brevard is a flat county where contour detail is less important.

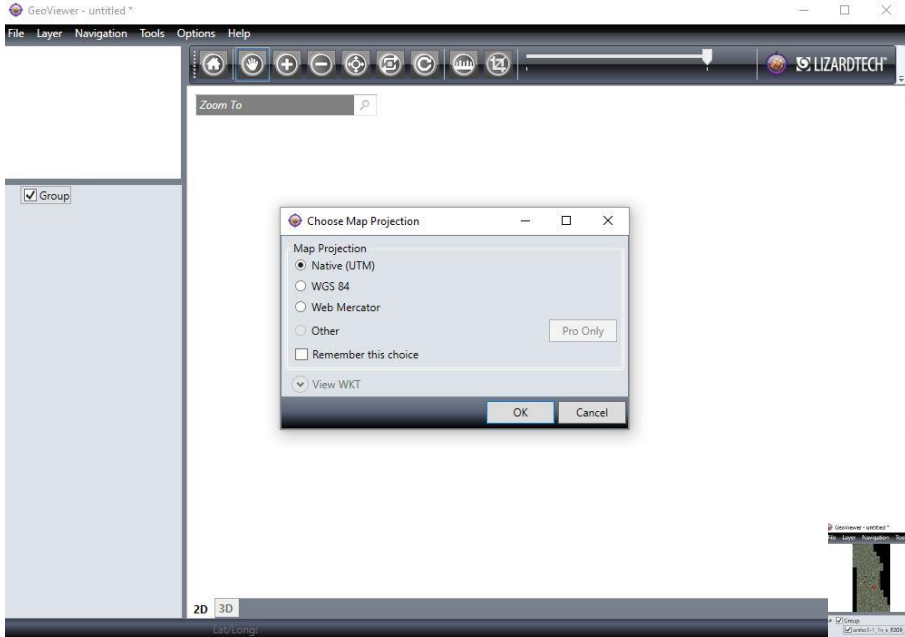
Below is Hernando County FL where the sand hills make a difference so they and the water management district have collaborated on contour mapping.



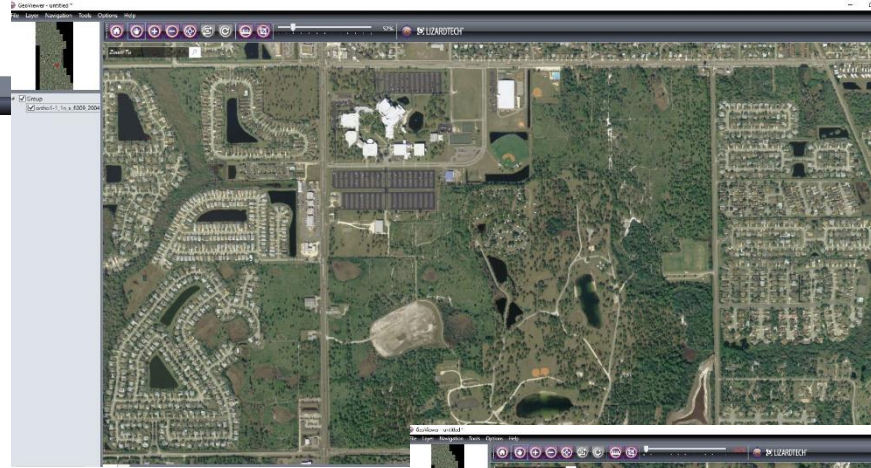
DRAFT

Hernando and many other counties provide these images for free which then can be captured using your computer’s snipping tool. The next step is to trace the contours on to your map. You can often acquire the GIS information from the county in a form which will allow direct import in to your mapping program.

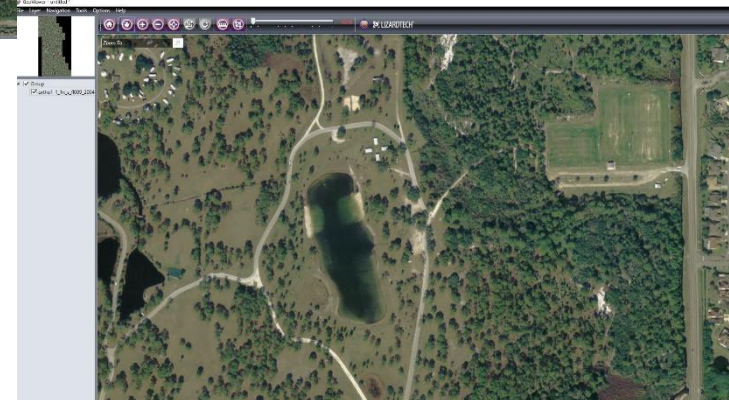
States and counties have differing policies on how they treat their GIS information – public domain or cost recovery. The only way to find out is to look and to ask.



County-wide image



Park image

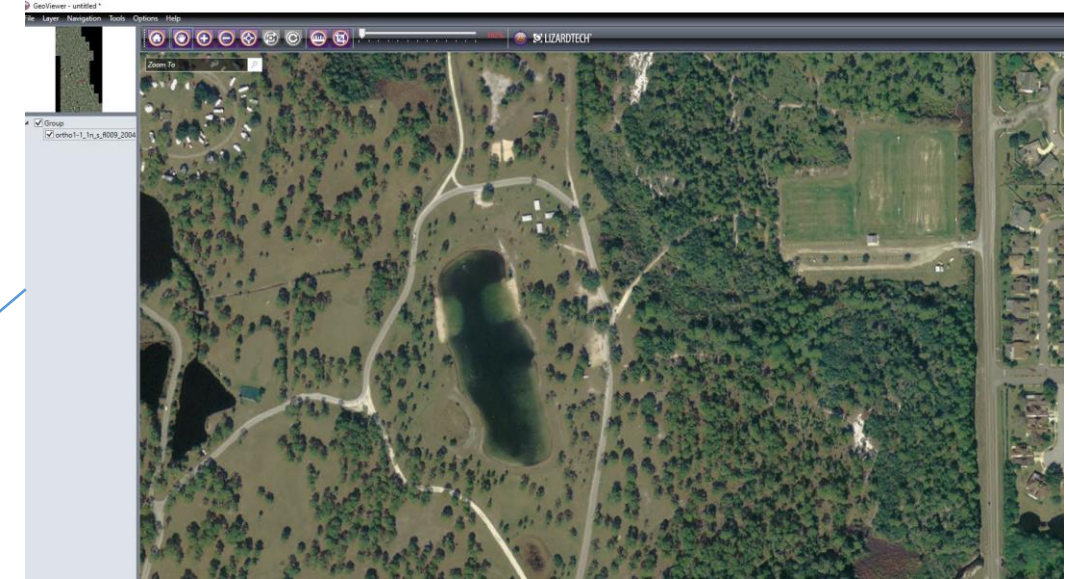
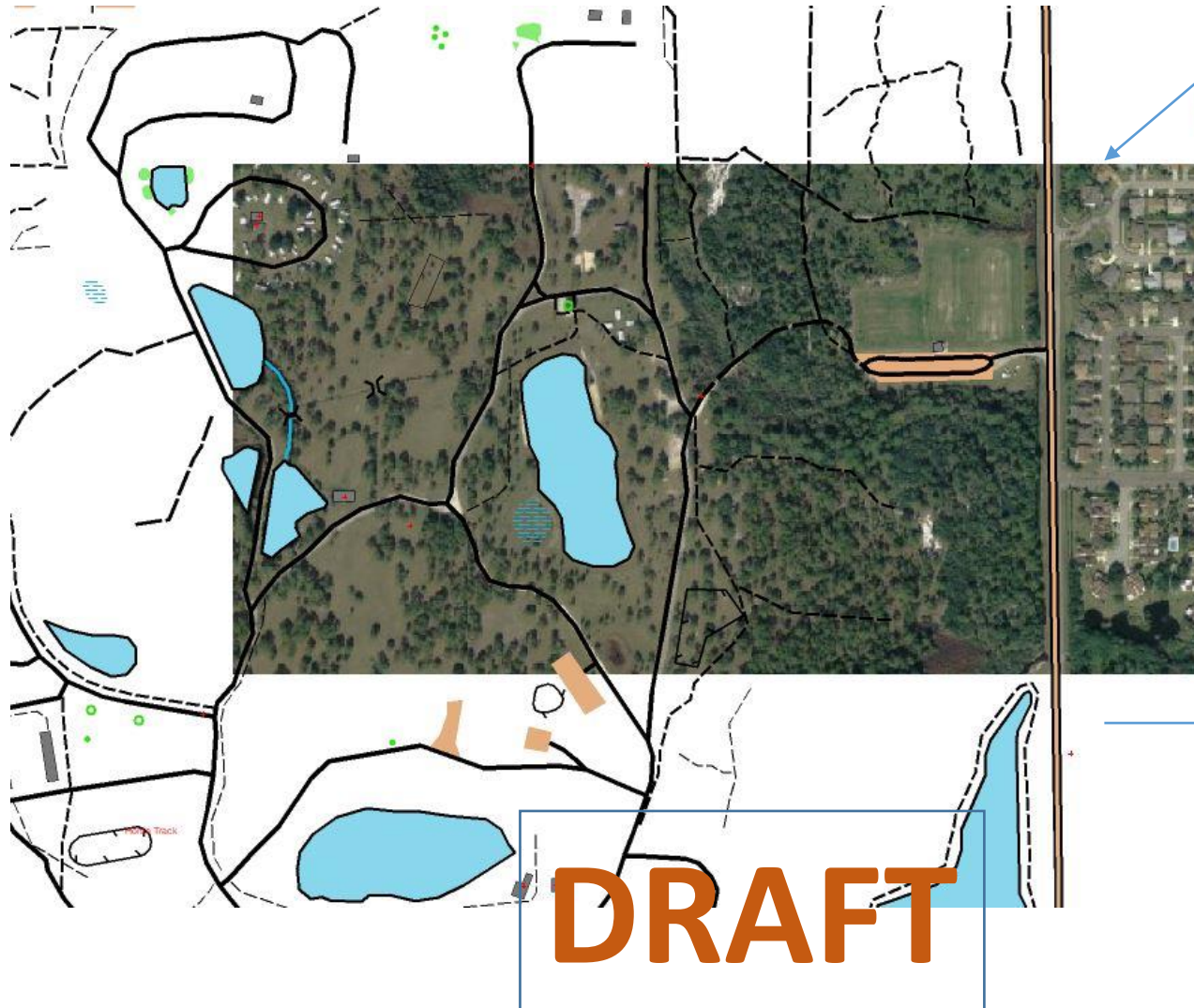


Partial park image

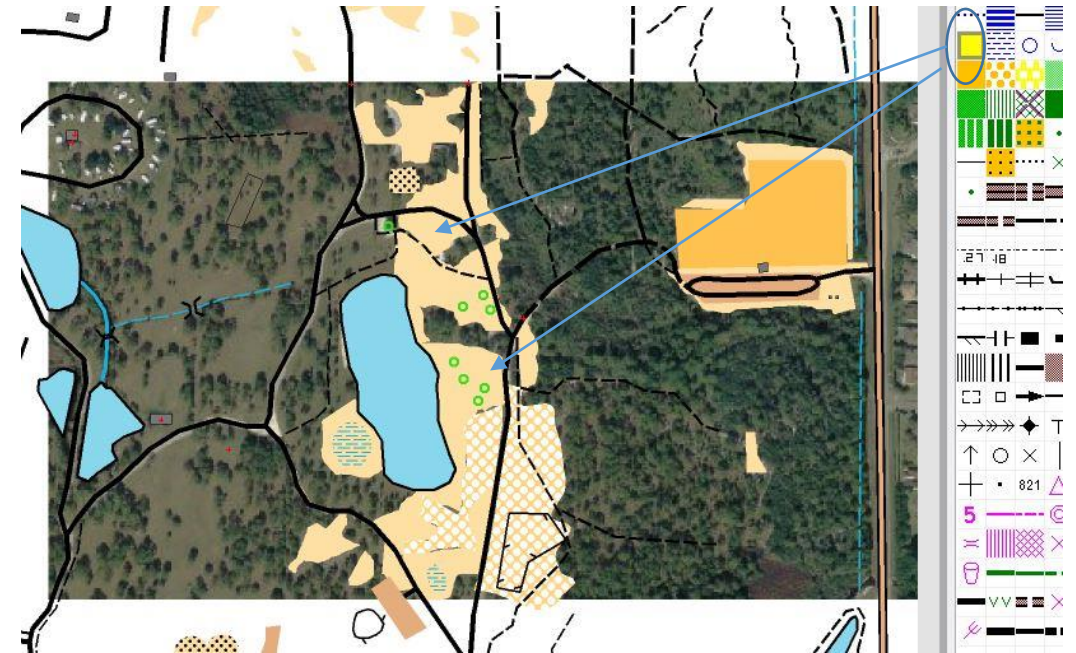
The orthophoto file comes as
A county-wide image which
can be enlarged to capture
only the image desired.

DRAFT

When imported as a template the orthophoto will sit exactly in place IF the map is properly geo-referenced.

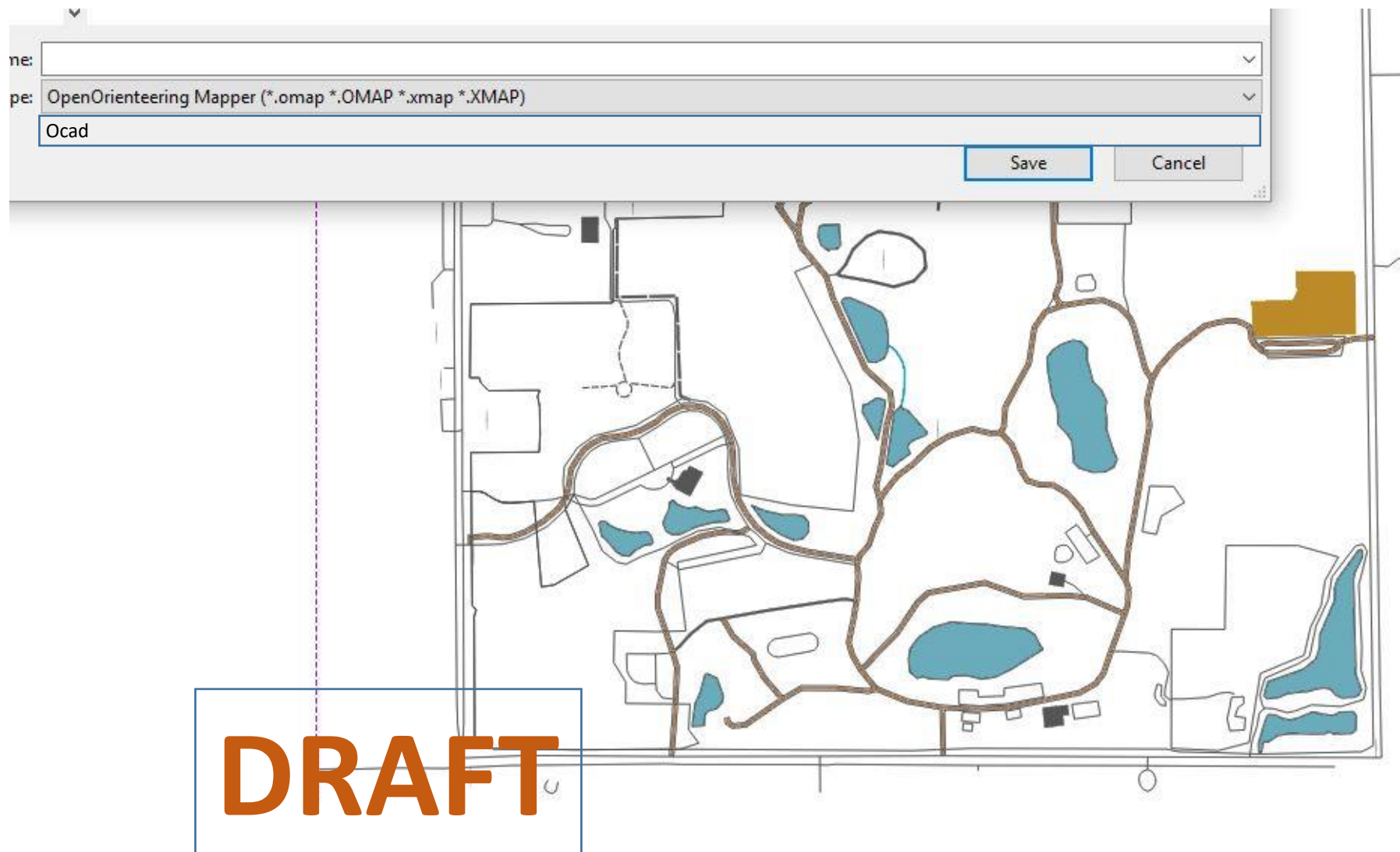


Add detail as found.



Your Open Orienteering Mapper file can be saved as an OCAD file at any time by using File- Save As and selecting Ocad.

It will save the file as OCAD 8 which your OCAD 9-12 can convert on demand.



Making an orienteering map from Open Street Map using OCAD 12

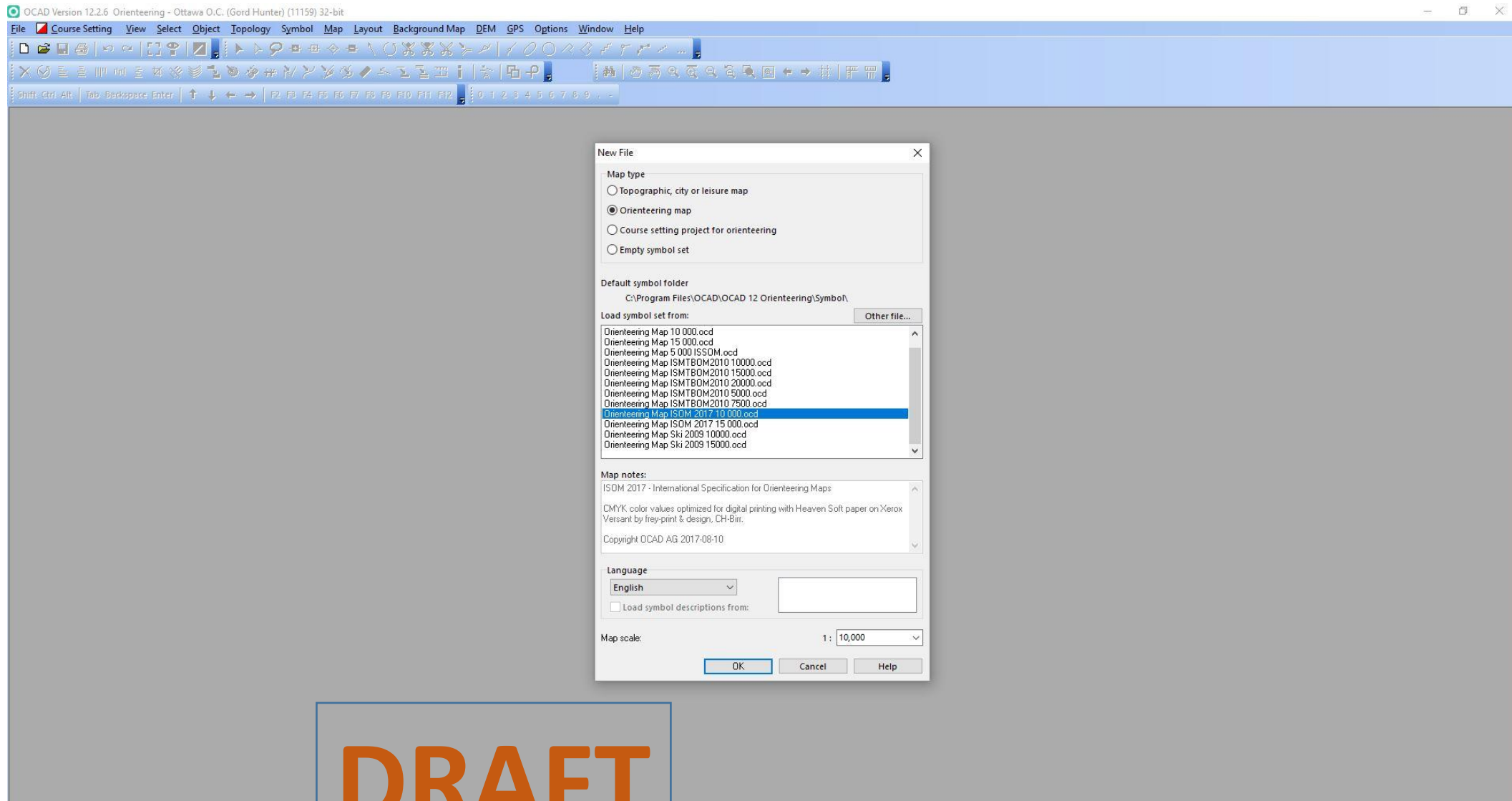
OCAD 12 introduces several time-saving features:

New map wizard

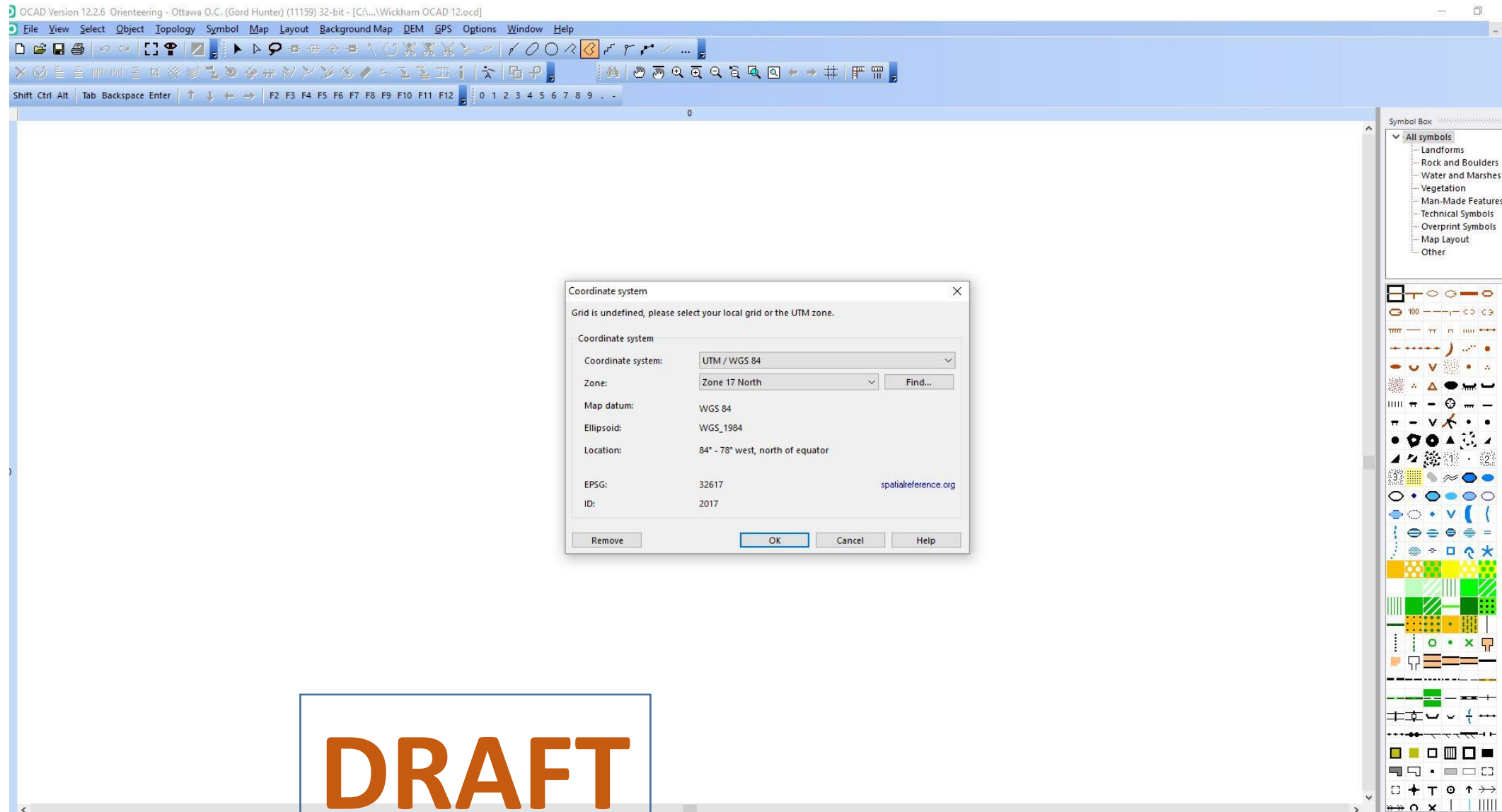
Batch conversion of symbols

DRAFT

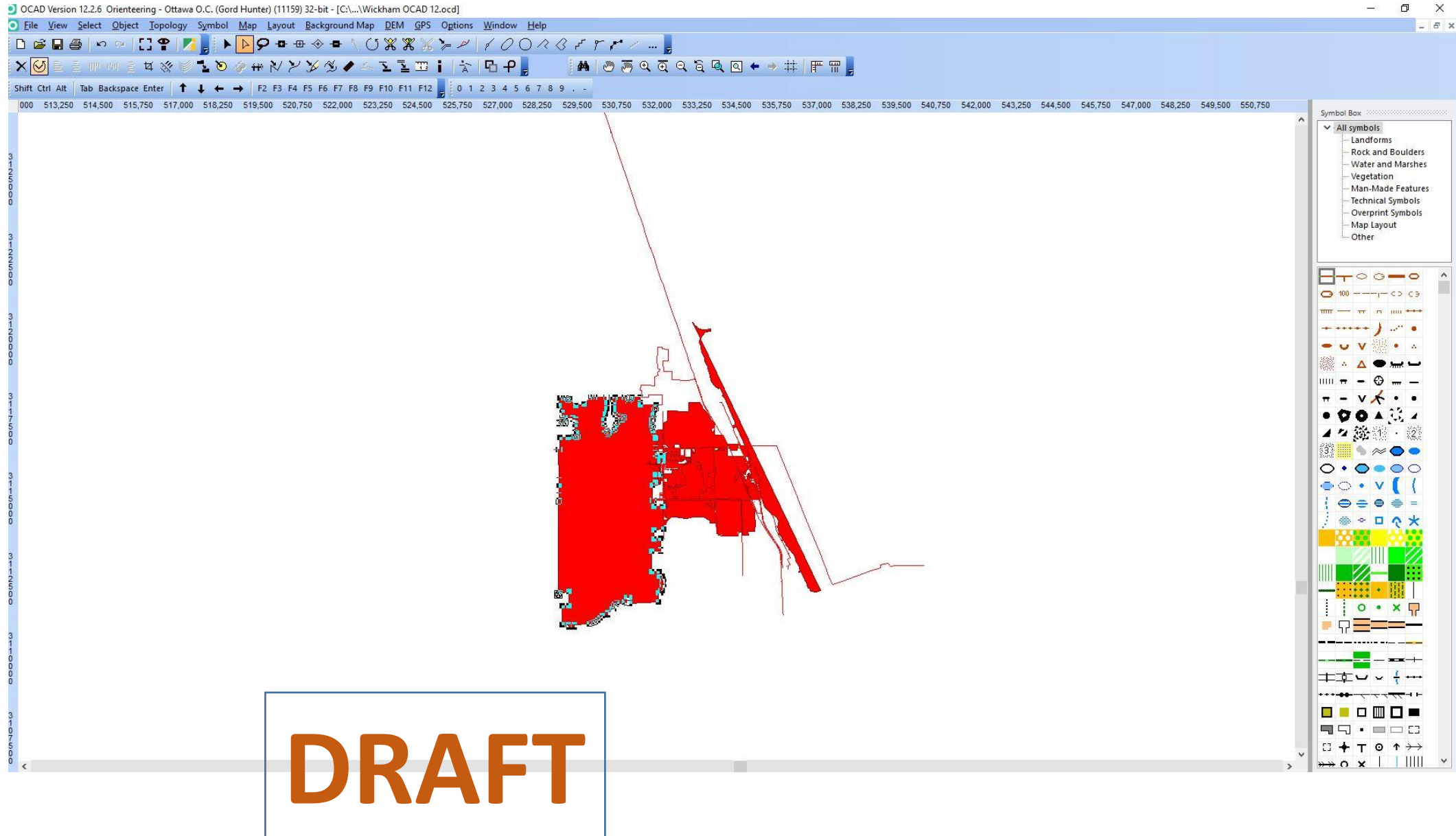
Step 1: Select the type of map you wish to make



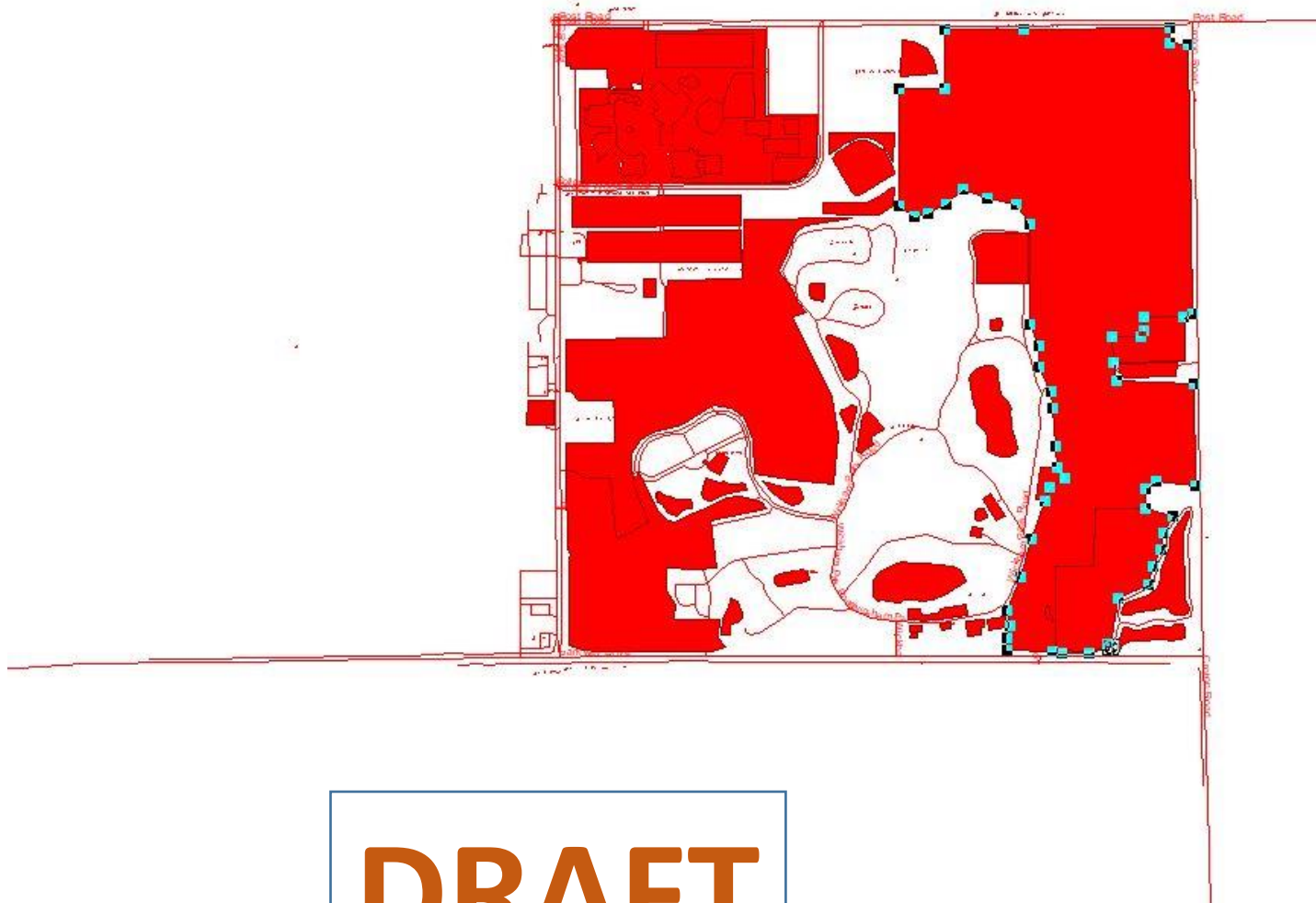
Step 2: It will ask you to confirm the correct UTM zone is selected.



The imported information will look considerably different than OOM.
Most prominent differences are the red color and the area overlays.



Strip away the excess parts of the map.



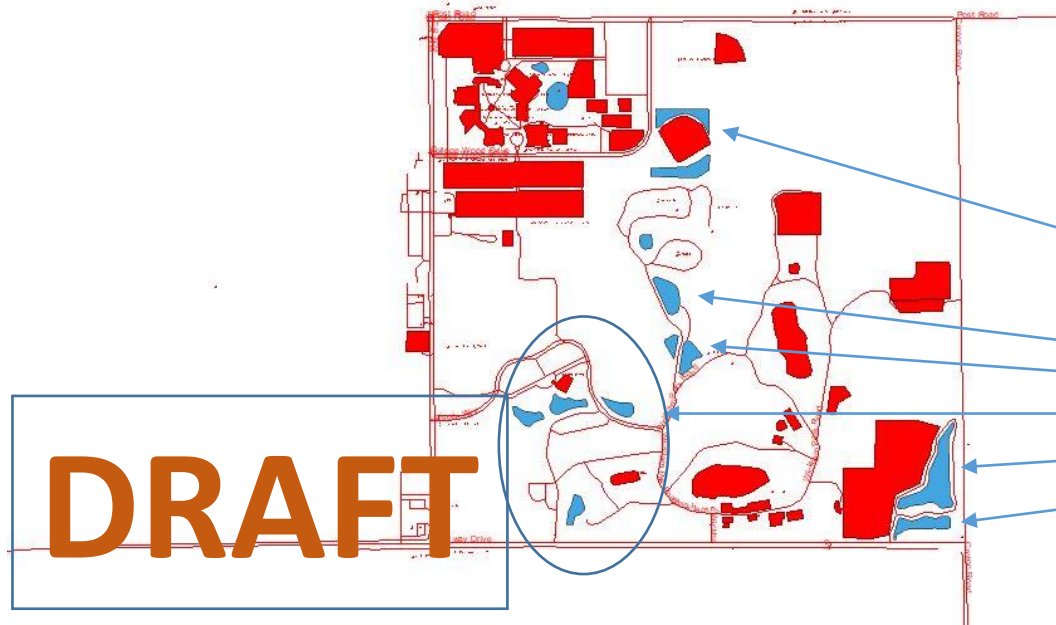
Batch Symbol Conversions:
Using ponds as an example
Highlight one of the symbol – it will be
identified in the lower left corner.
Select the OCAD symbol you want.
Then select Change All from the toolbar above.



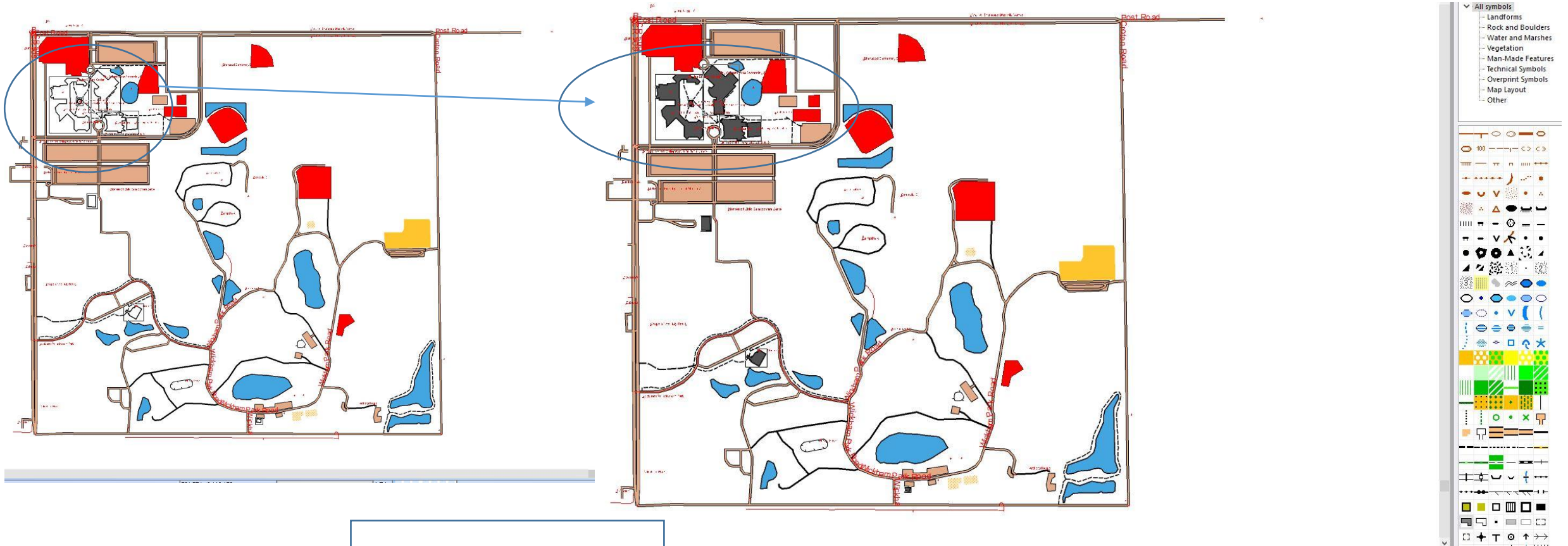
Water and Marshes
Vegetation
Man-Made Feature
Technical Symbols
Overprint Symbols
Map Layout
Other



Water and Marshes
Vegetation
Man-Made Feature
Technical Symbols
Overprint Symbols
Map Layout
Other



Another great time saver is the Select All function on the symbol drop down bar.
For instance by selecting all the building outlines we are then able to fill in all the buildings at once



DRAFT

Finally: Remember you started your map from some basic information from Open Street Map. No doubt you added to and perhaps corrected the Open Street Map information. You might want to consider paying it back or perhaps paying it forward by entering your information in the Open Street Map data base.

This **Beginners' Guide** will show you how to add data to OpenStreetMap:
http://wiki.openstreetmap.org/wiki/Beginners%27_guide

OpenStreetMap is *open data*: you are free to use it for any purpose as long as you credit OpenStreetMap and its contributors. If you alter or build upon the data in certain ways, you may distribute the result only under the same licence. See the [Copyright and License page](#) for details.

DRAFT