MONTANA
Department of Transportation

ENVIRONMENTAL DATA EXPORT MANUAL

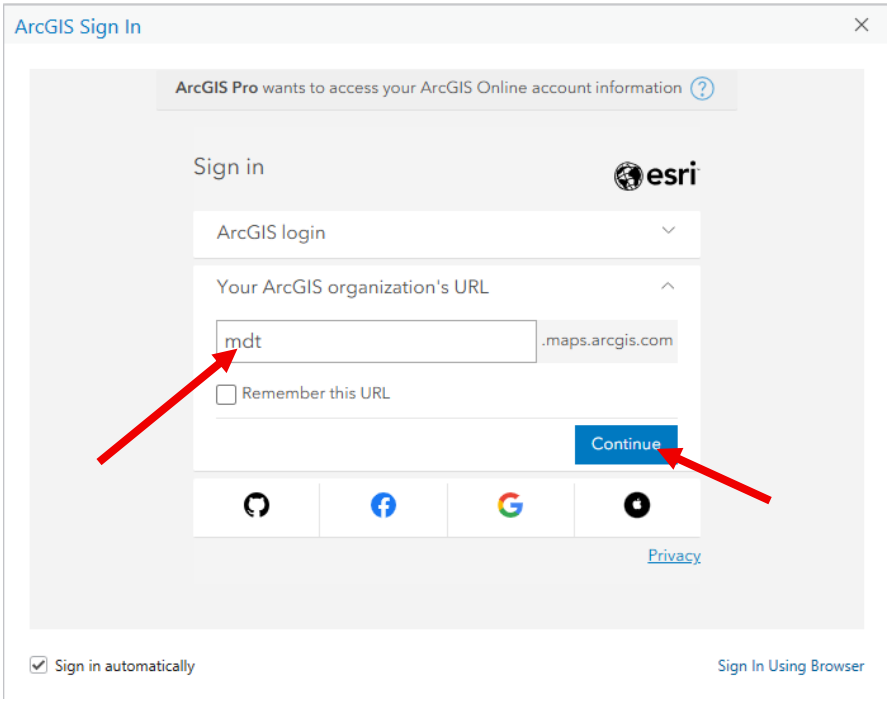
A MANUAL FOR DATA EXPORT AND EDITING USING ArcGIS Pro

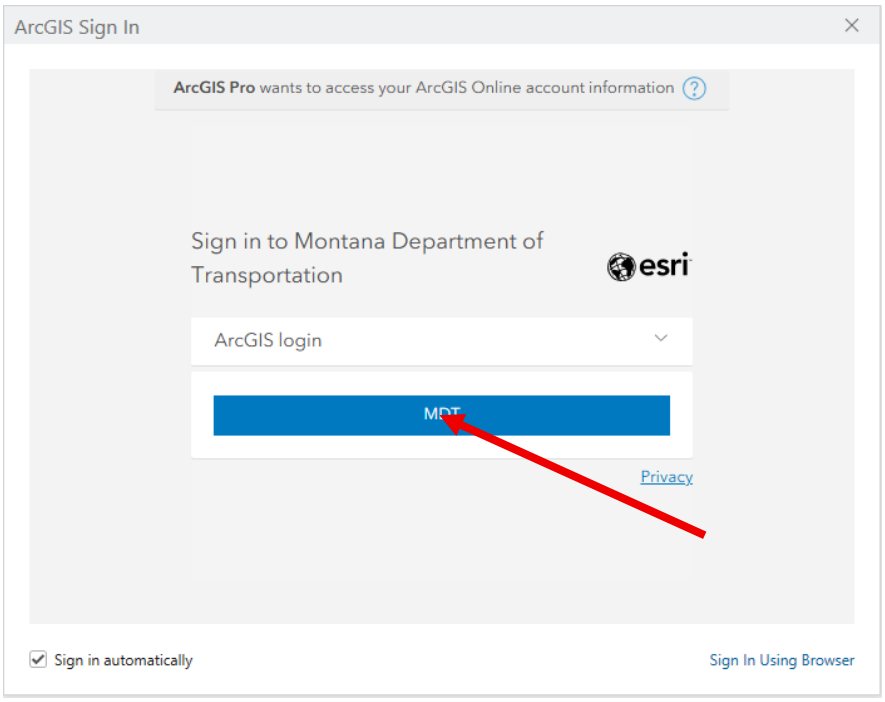
April 2026

View Your Collected Data and Export Data from the Delineation Map

1. Open the 'Delineation_Map_Pro' ArcGIS Pro project located on the GIS Share Drive: \\state\mdt\prd\AppData\MDTGisStd\MAPS\CUSTOM\ENVIRONMENTAL\DELINEATION\

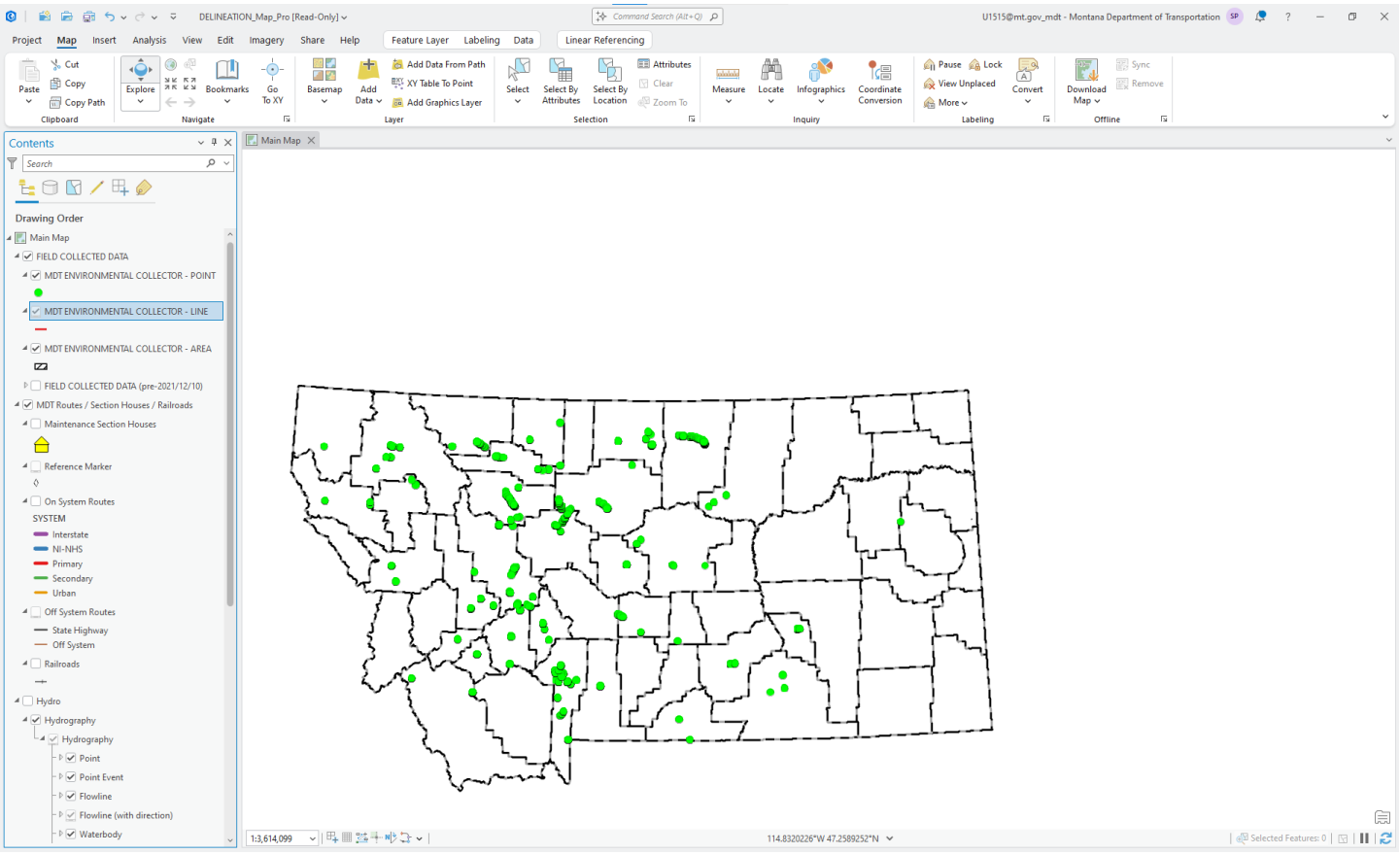
2. Follow the sign-in below:





3. This map contains the '**FIELD DATA - COLLECTOR FOR ARCGIS**' service that was used in the field on the iPads to collect your data. By default, when you open this map, you will see the data that everyone in the group has collected statewide.
    a. The map also contains other **resource layers** that may be helpful for your projects

b. This map's projection is '**NAD_1983_(2011)_StatePlane_Montana_FIPS_2500_Feet_Intl**'
    i. This will come in handy later when you are ready to export your data.



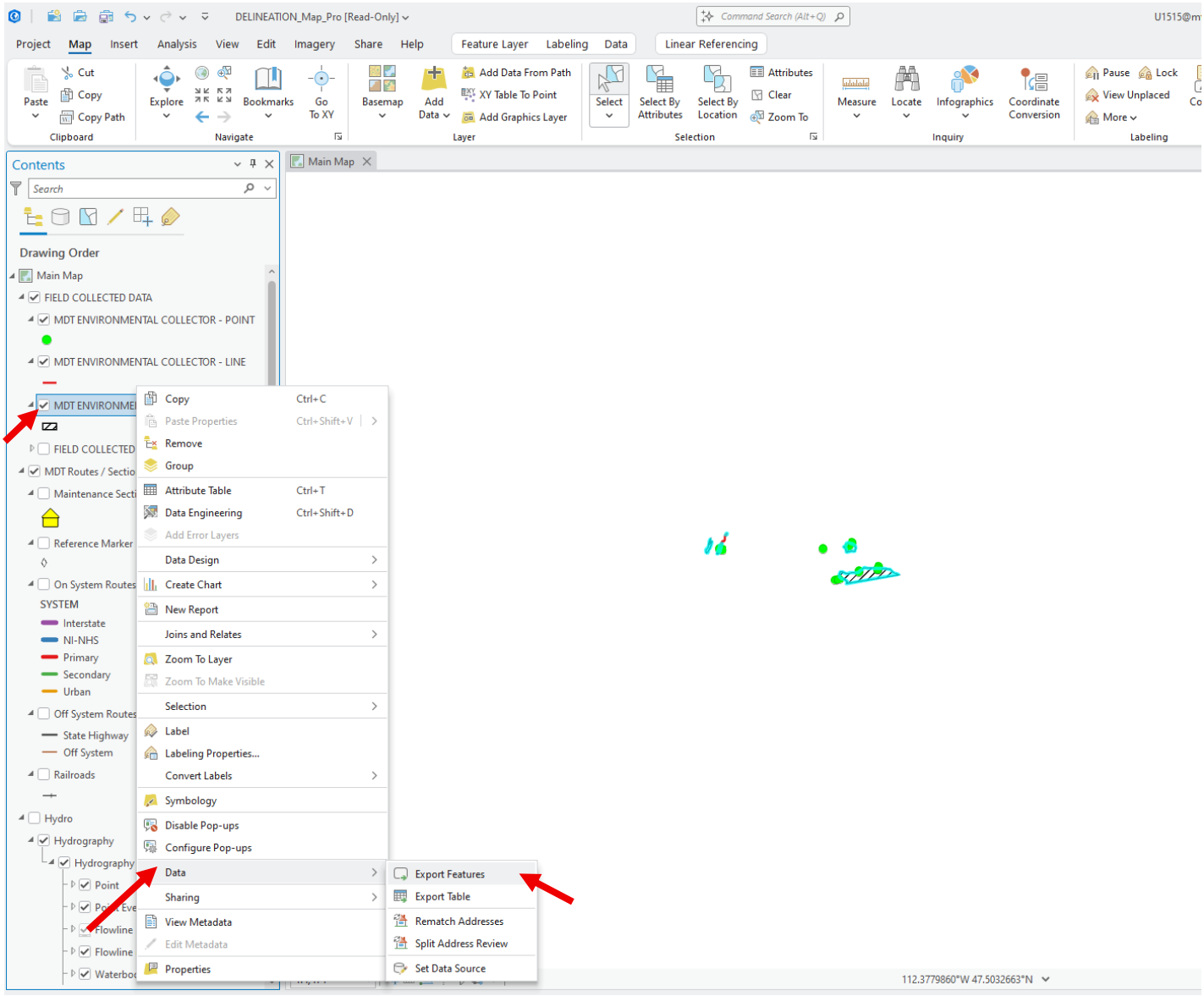
4. Next, to view your recently collected data in more detail, first, use the **mouse wheel** to zoom in/out to the area of your collection. Use the **Explore** 

tool to move around the map.

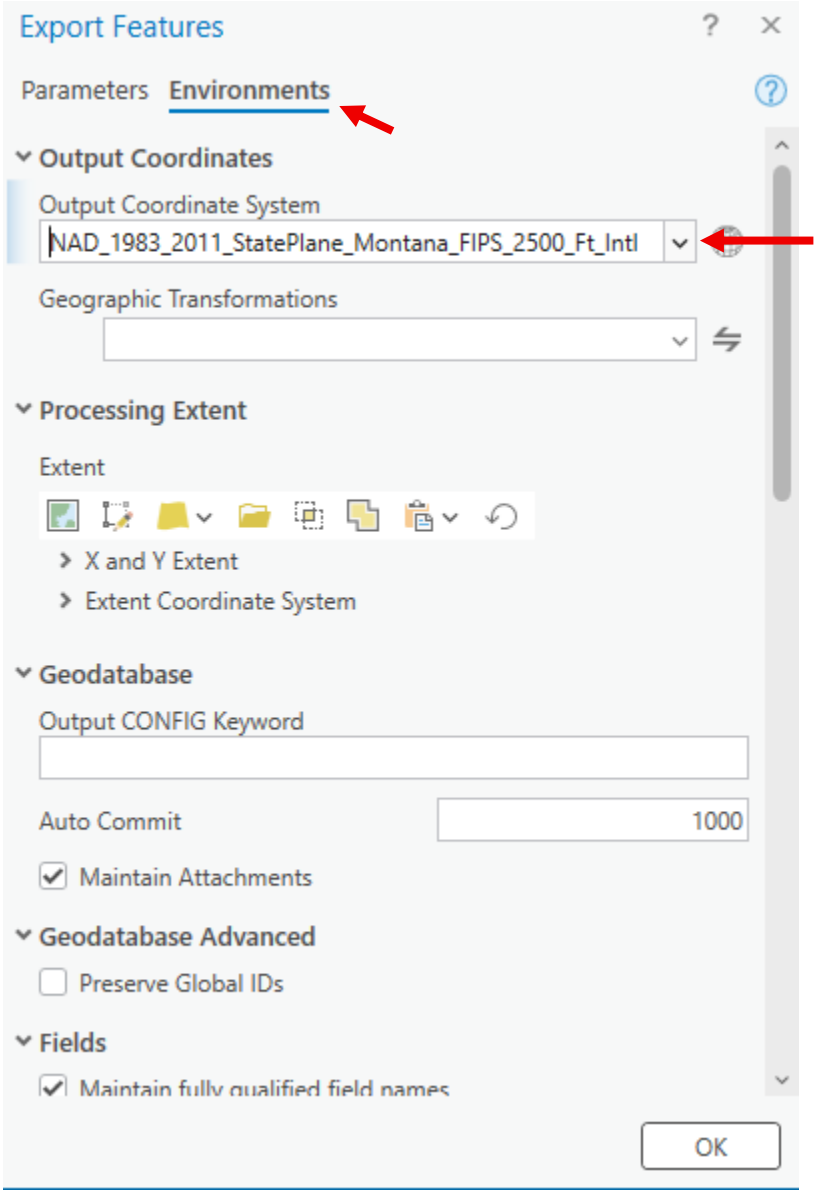
    a. This Delineation map also has any photos you may have taken in association with features while recording the features in the field. The photos are associated with the feature that you were collecting while you took the photo. To access the photos, select the feature, right click on the highlighted feature, select Attributes at the bottom of the pop-up box. This will open an Attributes window with any notes or names you may have noted in the field. Go to Attachments. You will have to open and then Save As for each photo to 'download' the photos you want to save.

5. Select the areas/lines/points you would like to export:
    a. To change the selectable layers, right click on the layer you would like to select from the map (e.g.MDT Environmental Collector - Point, Line, or Area), choose 'Selection', and then 'Make this the only selectable layer.'
    b. Select the feature(s) you would like to export, by using the  tool. Select all the area features for the project you are working on, then all the line features for the project, then all the point features for the project.

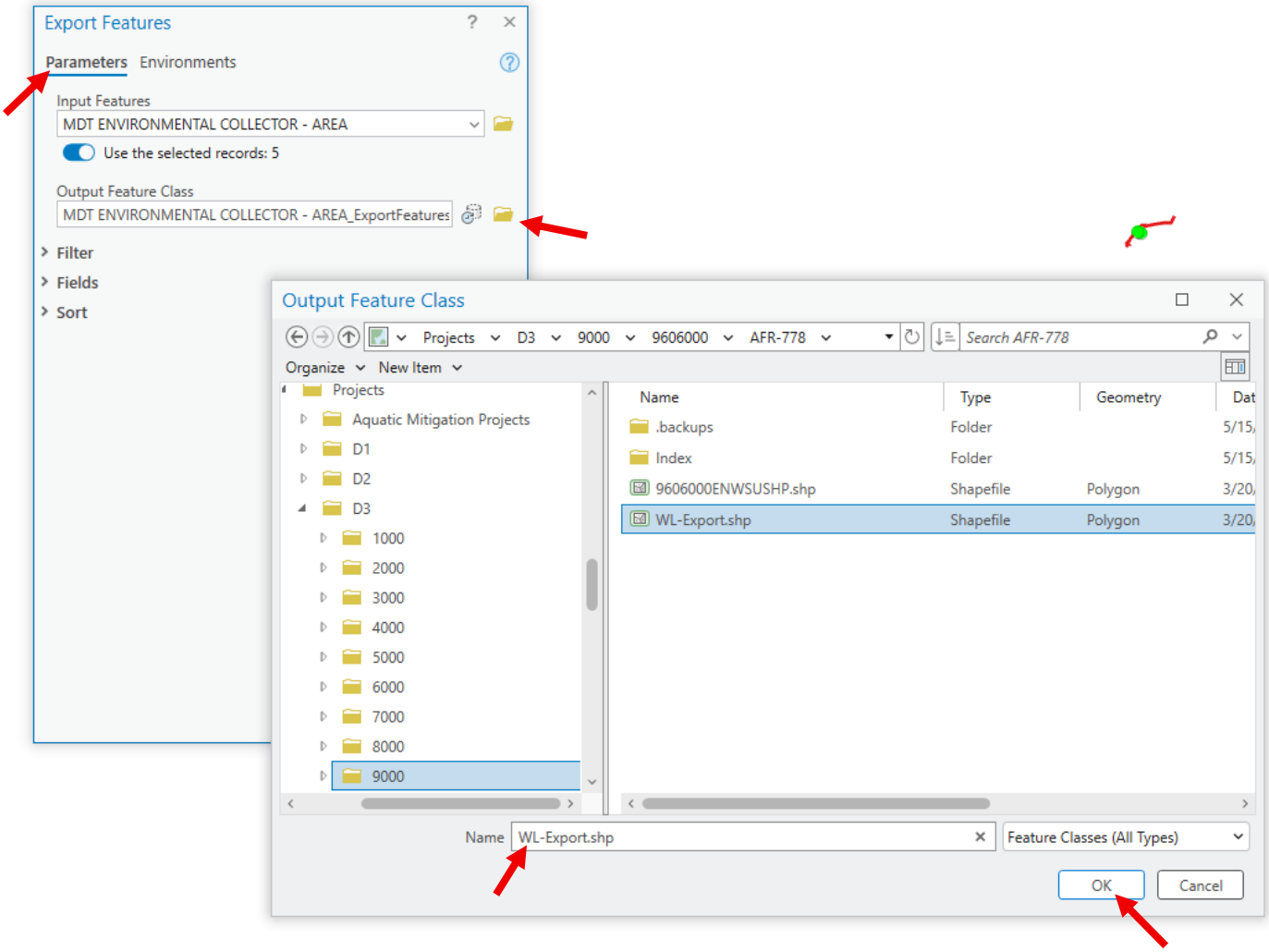
6. We are first going to export the data from the **Delineation Map** and then clean it up afterwards if we need to.
    a. Once your features are selected (selected features are highlighted in light blue on the map), **Right click** on the **layer** (MDT Environmental Collector-Area in this case) and select **Data**
    b. Select **Export Features**



7. This will bring up an **Export Features** dialog box for where and how to save the exported features:
    a. First go to the **Environments Tab.**
    b. In the Output Coordinates dropdown, select **Current Map [Main Map]**, which will make the output coordinates of the export features NAD_1983_(2011)_StatePlane_Montana_FIPS_2500_Feet_Intl, which is the correct coordinate system for projecting the features in ArcGIS Pro and in AutoCAD.



    c. Go back to the **Parameters Tab**. Select the **folder** next to the Output Feature Class to navigate to the project folder on the share drive and the 778-AFR tab of the project folder. Name the feature something to distinguish it as the "Areas" feature and that the data is raw/uncorrected. I typically use WLExport for areas, LineExport for lines, and PointExport for points. This naming convention will carry-over with the editing of the shapefile (before the 2nd export for CADD) since Pro edits the shapefile instead of saving a new one. The data is being saved under the project folder so you will know what project it is for when creating your project map. Hit OK.



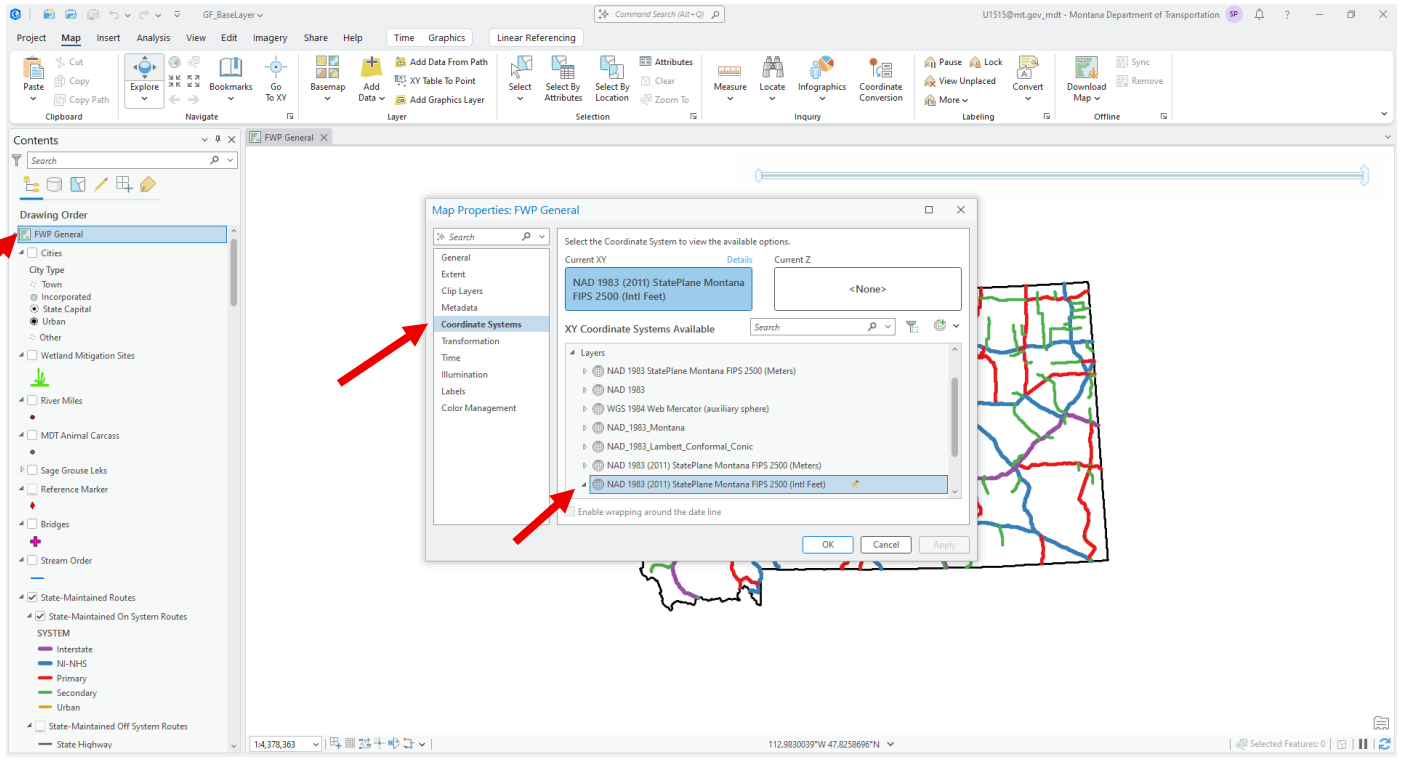
d. The Output Feature Class dialog box will close. The Export Feature dialog box will remain. Hit **OK.**

e. Do this for each feature type of the project you are working on, Areas, Lines, and Points.

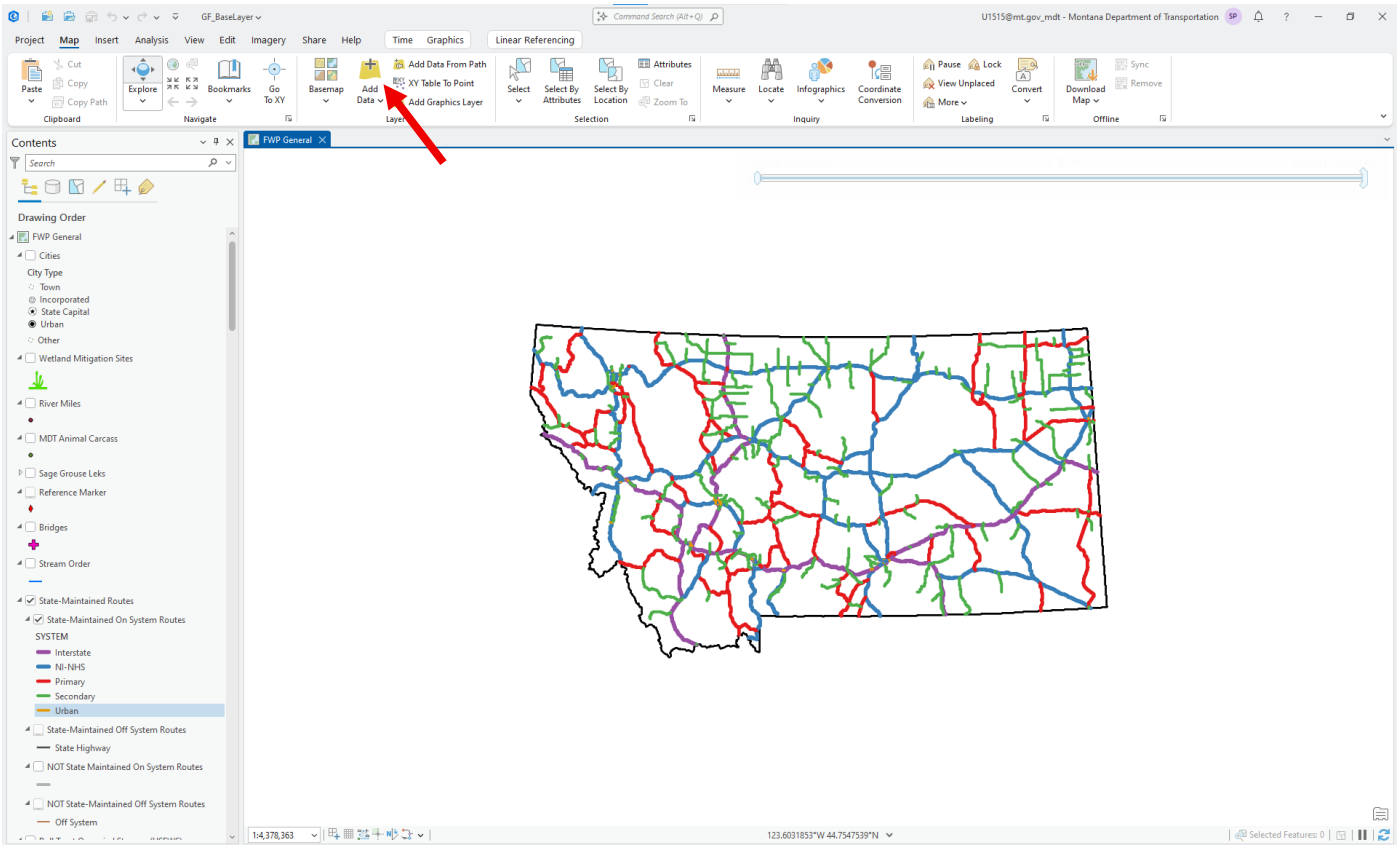
8. Close the Delineation Map. The delineation map is read only so click no when it asks to save the map. The raw data collected is always present and available on this map.

Project Map

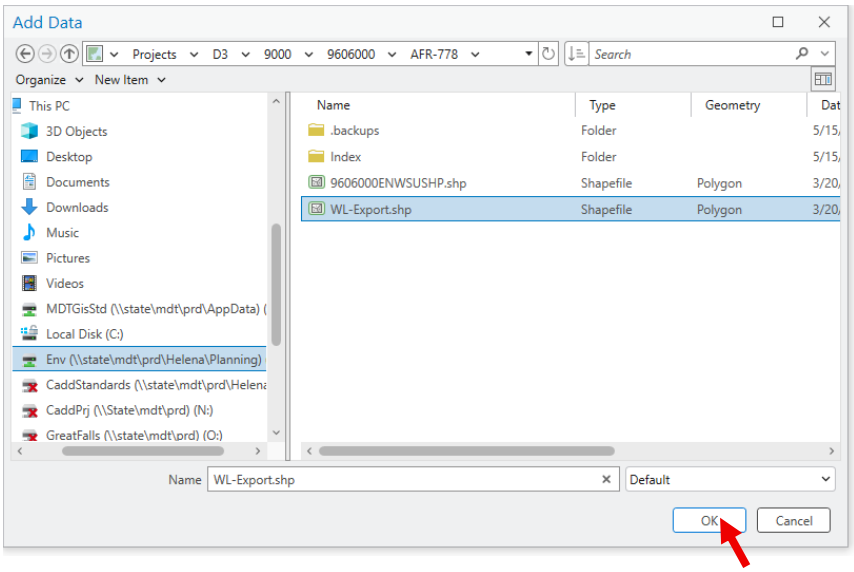
1. Open your base ArcGIS Pro Map. Make sure the Base Map you are using is using the NAD_1983_(2011)_StatePlane_Montana_FIPS_2500_Feet_Intl Coordinate System. To change your base map coordinate system right click on the **name of the map** (FWP General in this case) in the Contents. A drop-down list will appear (not shown below), click Properties at the bottom of the list. A Map Properties dialog box will appear. Click **Coordinates Systems** on the left side of the dialog box. Navigate to the correct coordinate system in the XY Coordinate Systems Available drop down. There is no Current Z system needed. Hit OK. Save your base map with this new coordinate system change and you will not have to do this again.



2. Click the **Add Data** tool  to add the features you saved above.

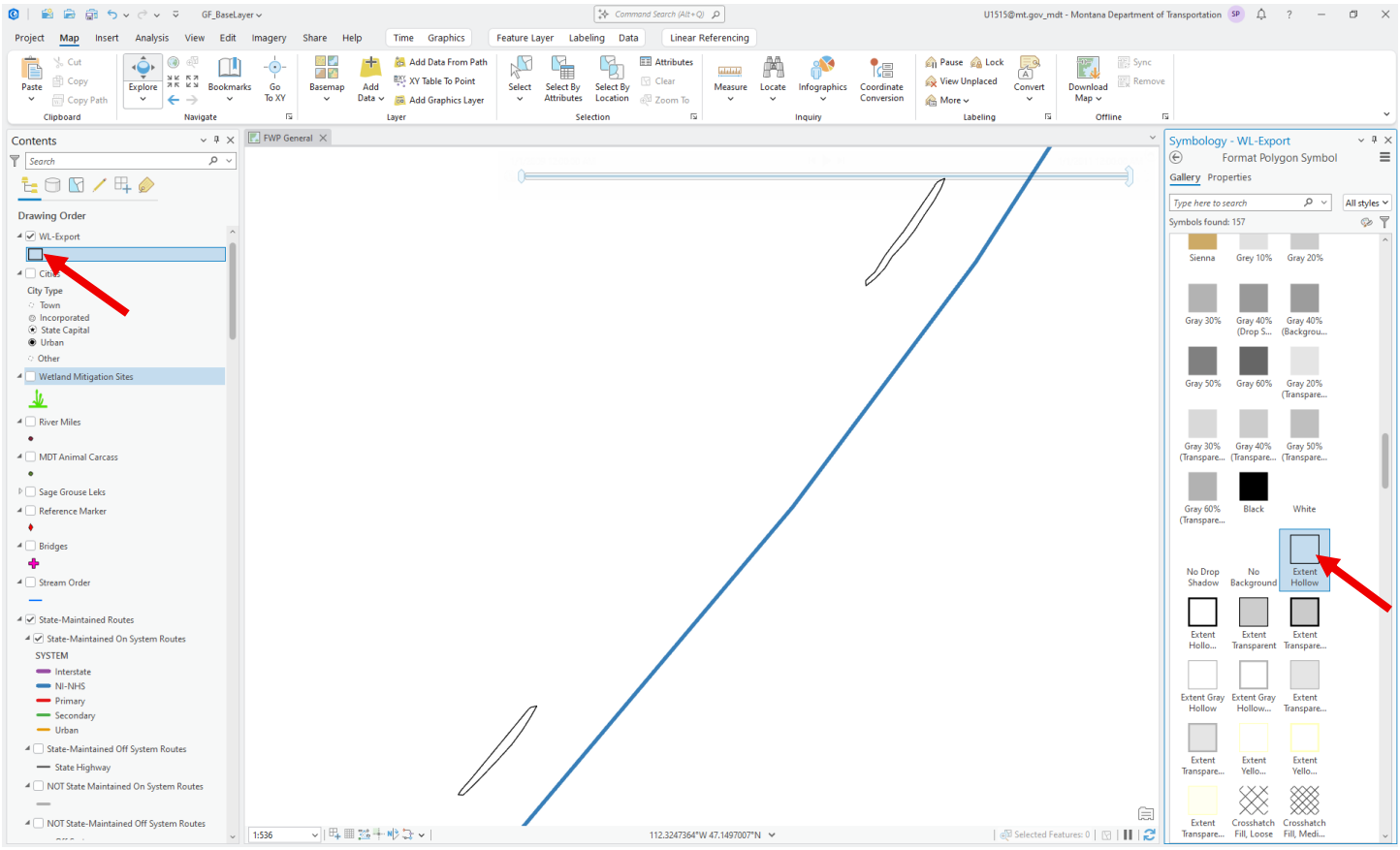


3. Navigate to the project folder where you saved the features exported above, select the desired feature and click **ok.**



4. The layer WL-Export will be added to the Contents of the map. Move the layer to the top of the Contents so it is easy to work with. Right click on the WL-Export layer and click Zoom to Layer in the drop down menu to zoom in and make sure all of the shapefiles are there and in the correct location on the map.
5. Double click on the **symbol** below the WL-Export layer in the Contents to bring up a Symbology box on the right. Click the **Extent Hollow** option to make the shapefiles hollow. This is important when you

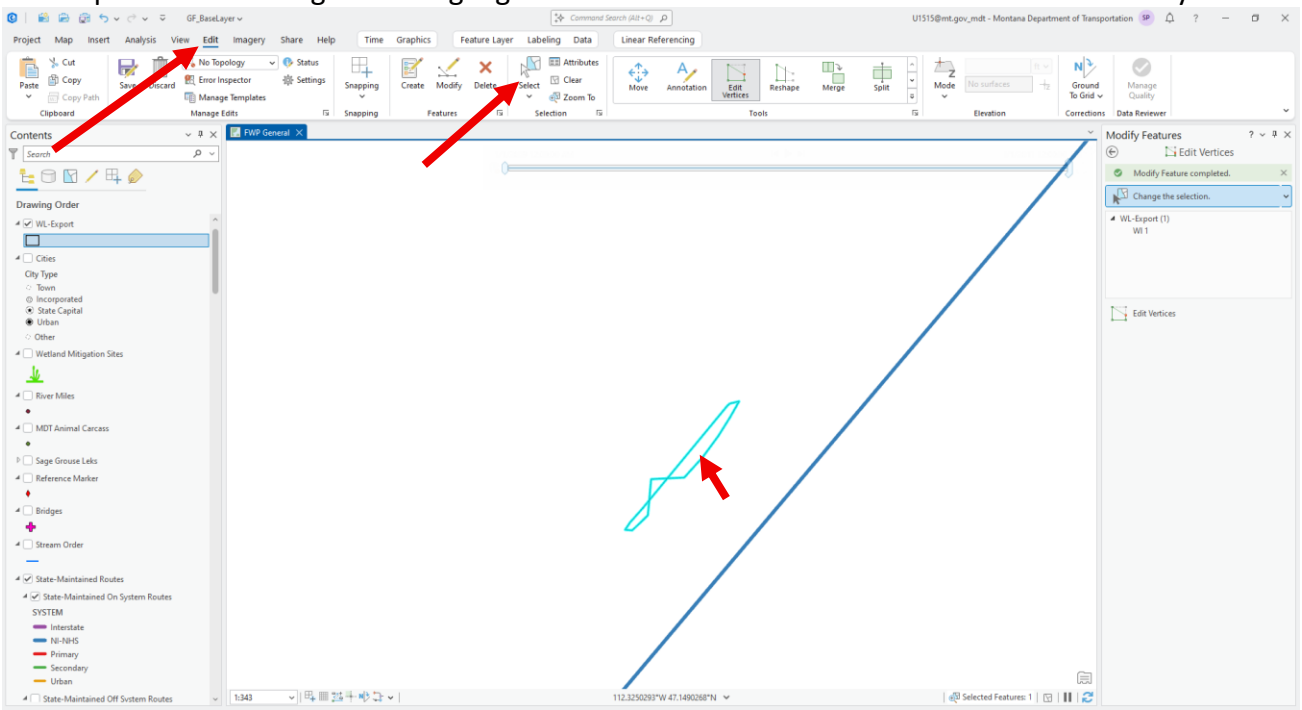
load the shapefile into AutoCAD. You can also then change the color and weight of the outline under the properties tab of the Symbology box.



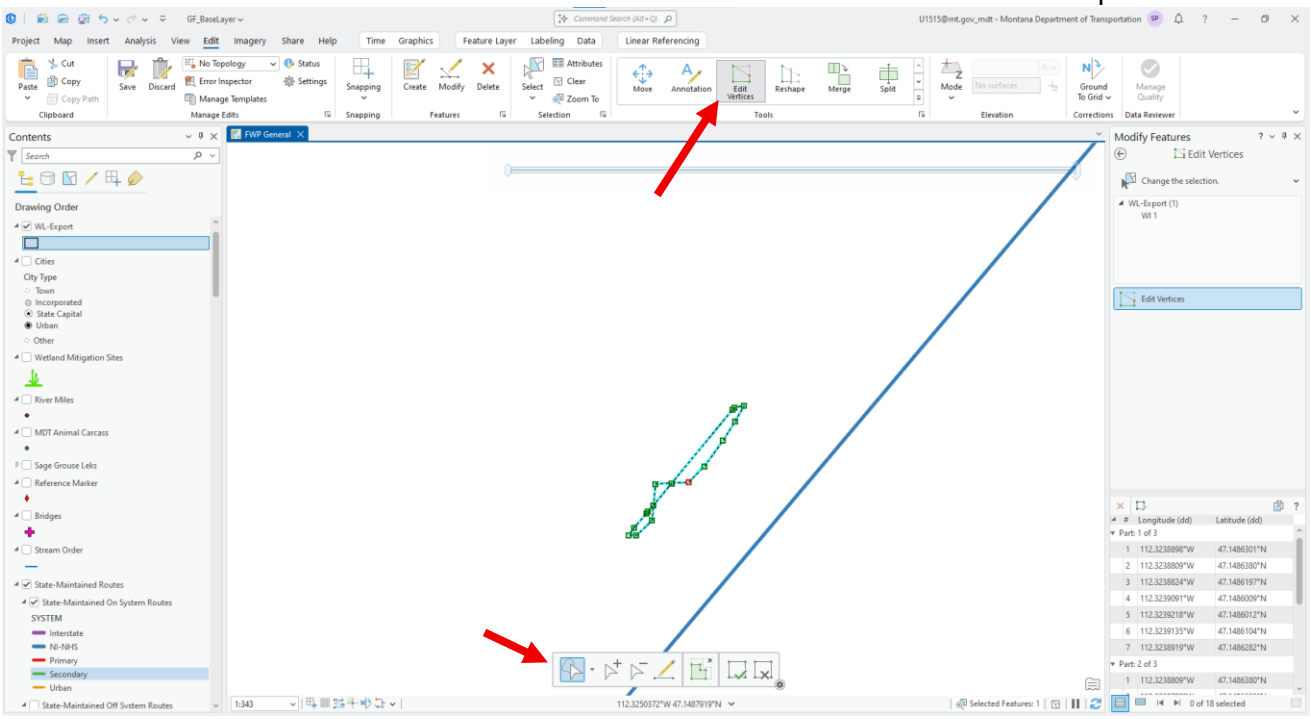
'Save as' the AcrGIS Pro Project to the project AFR-778 folder, typically project number and Wetland Map, something like 9606000_WL_MAP. I use this map to make the exhibits for my AFR with the data points, study area and wetlands on the maps. This way your base map remains "clean" for other uses and for the base of other wetland projects in the future.

Editing

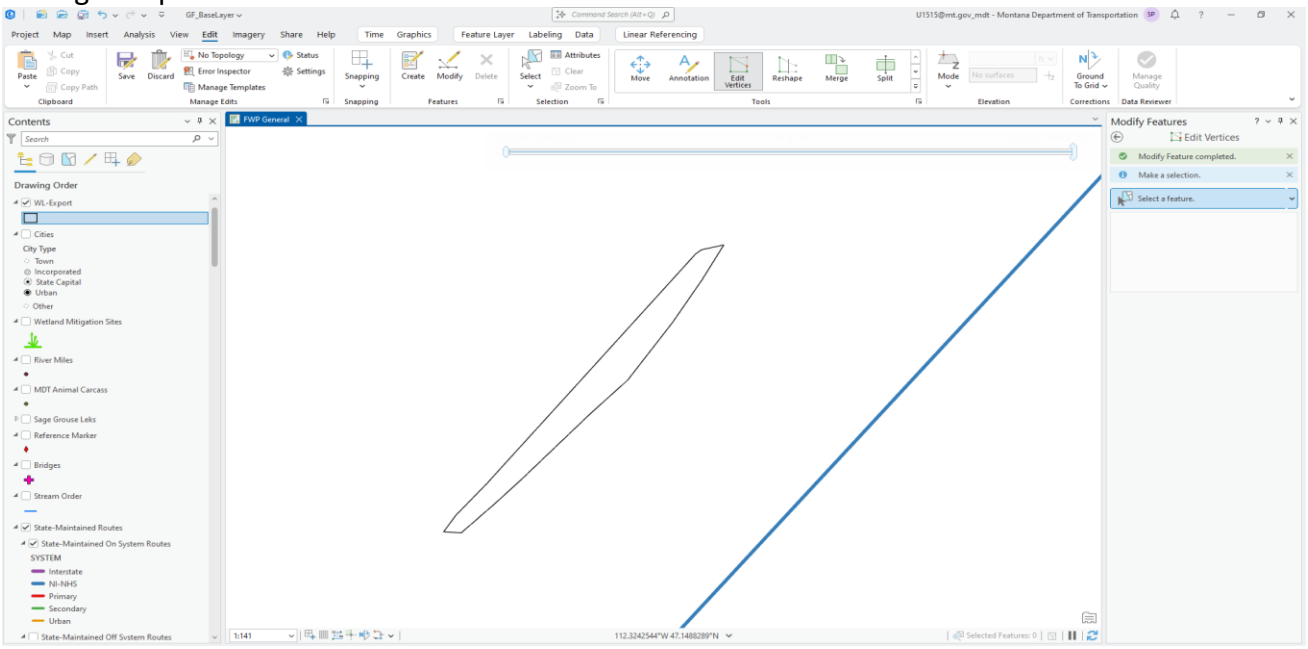
1. You can then use the editing tools to edit the shapes or lines in ArcPRO. Make sure that there are no overlapping/crossed lines in the areas or lines when completed. This causes issues when the shapefile is loaded into AutoCAD.
2. Click the **Edit** tab on the ribbon. Select the feature by clicking **Select** and then **selecting** the feature in the map. It will have a light blue highlighted outline once selected. Feature below is already selected.



3. Once the feature is selected you can use a number of tools to edit the feature. **Edit Vertices** is a good tool to move vertices around by simply grabbing the vertex and move it. Vertices are the little points (shown as small boxes on the feature below) that were collected in the field. The Edit Vertices **tool box** will pop up. This allows you to click on Add Vertex  and Delete Vertex  among other things. The tool highlighted below in the tool box allows you to select and move vertices. Click away from the feature to deselect the feature and see what the edited feature looks like after manipulation.



4. There are many ways to edit features. The best way is to start playing around with the tools. It is very user friendly and seems to know what you are trying to do (sometimes). Google and Help in ArcGIS Pro are also very useful for learning how to use editing tools. The most important thing is to make sure your features are hollow and there are no crossed lines along the border when finished. Save Edits throughout process.



5. Save Edits and Save Project when editing is complete. This will change your shapefile in the project folder to the edited version. Your raw data is always available on the Delineation_Pro_Map that stores the statewide data collection of the group.

Exporting For AutoCAD

1. Your edits to the shapefile (area or line) in the project folder will be saved in the steps above. I typically export the file again from the project map to make sure the shapefile is clean, is in the proper coordinate system, has the proper name, and is ready for use in AutoCAD. Export using the same steps in #7 and #8 of the 'View Your Collected Data and Export Data from the Delineation Map' section above.
2. Name your exported feature using the PCMS naming system for loading into the project folder in AutodeskDocs for use in AutoCAD.