JOHNSON MAPPING SOFTWARE & PLOTTING SEMINARS

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NET Deed Plotter® - V5.xx (by Greenbrier Graphics) & All Topo Maps - V7.xx - (by iGage Mapping Co.)
"Computer Plotting of Legal Descriptions for the Layman ©" Seminar
"All Topo Maps - General Software Training ©" Seminar"

NET Deed Plotter V5.41 to ArcMap 10.1

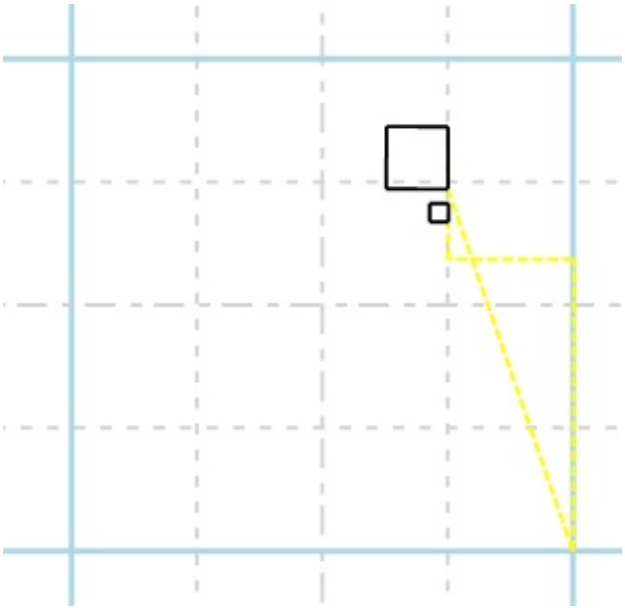
This document was written with the assumption that the user has a good working knowledge of BOTH the NET Deed Plotter (NDP) and ArcMap 10.1 or earlier. So mostly the specifics of what is needed in the NDP file will be detailed to be usable in the AM10.1 and a few other "ArcView" comments.

For this example, the legal descriptions for two electrical power sub stations, located just west of Lusk, WY., have been used. One deed written in 1954 and the other in 1964.

The following shows the inputs to the NDP for these "Metes and Bounds" descriptions, with some comments on what they mean.

/se,13,32n,64w	The "/" means SE Corner, Section 13, T32N, R64W.
/n0.12e 3129.2	These next three call of "offset calls" from the Public Land Survey
/s90w 1322.3	connection point, out to the "TRUE" Point of Beginning. The "/"
/n0.12e 400	lines hides them from drawing or being considered in closure.
n0.12e 200	These next four lines are the sides of the parcel being drawn.
n89.48w 200	
s0.12w 200	
s89.48e 200	
@0 1964 Deed	@0 in NDP means there is a new parcel starting at the same point. The "1964 Deed" is just text to remind you what these calls are for.
/se,13,32n,64w	Again, the Sectional Corner tie for this 2nd parcel.
/n18.44w 4099	Again an offset call from the corner to the TRUE POB.
n0.12e 670	Again the next four lines describe the actual parcel.
n89.48w 650	
s0.12w 670	
s89.48e 650	

With these two descriptions, here's what the NDP would draw, and I asked the program to show the "offset calls", which can be seen in yellow.



A comment about NDP and PLSS. The NDP assumes that the world is flat and square, so ALL N/S lines are 0° and ALL E/W lines are 90°. So, if you have to descriptions starting at different sectional corners, you MUST know the relativity of the two corners, or these parcel will NOT draw in the correct orientation

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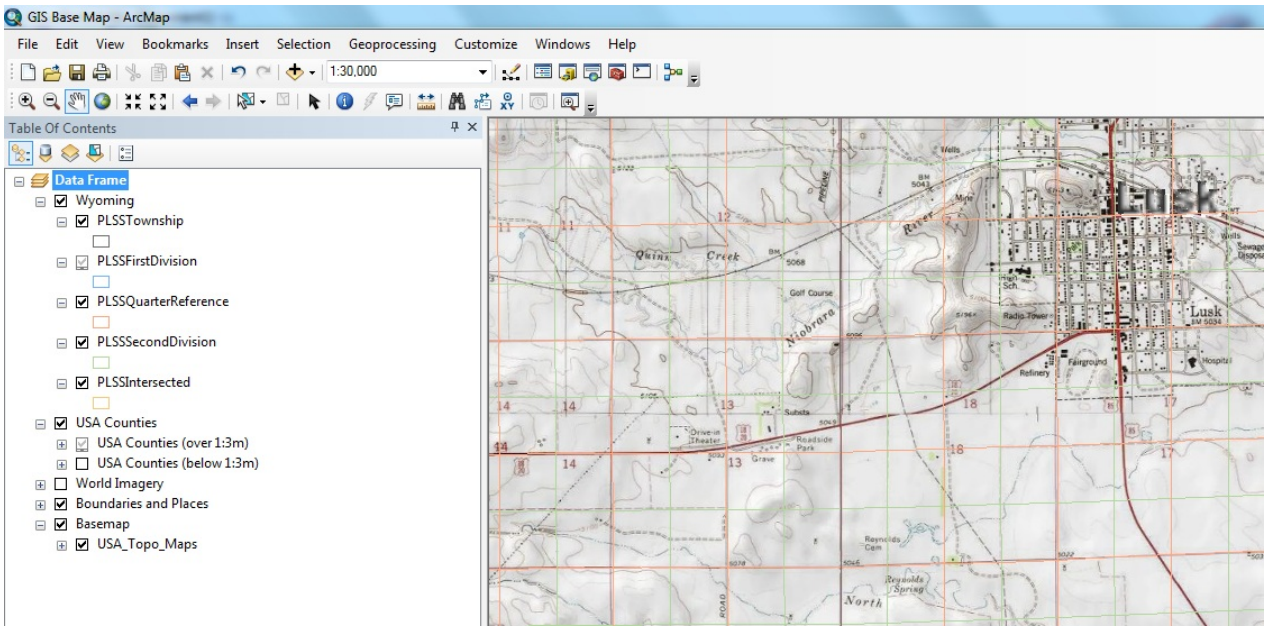
with each other. I use data found on Cadastral Survey plats as "offsets" from one corner to the other, so they can have a common starting point. Start with 1 corner and make an offset to the other corner.

Now having the NDP inputs in place, the appropriate UTM coordinates for that SE Corner of Section 13, T32N R64W. By default, NDP files are "Geo-Dumb", but it can accept coordinates, so when saved as a DXF file, it becomes "Geo-Smart".

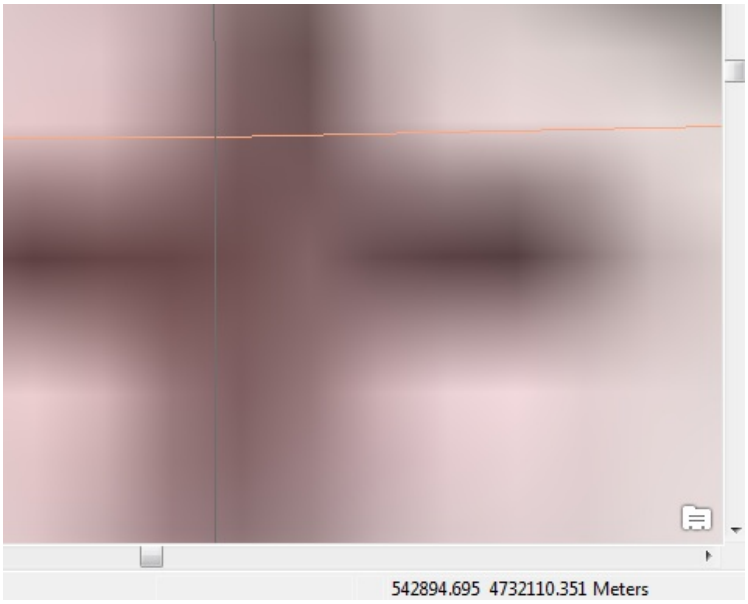
To find the needed UTM Coordinates, I opened ArcMap 10.1 to a new file and set that "Data Frame" file to a UTM Zone 13 North Projection, since Lusk is in Zone 13N.

Then "adding" various data sets for the PLSS and US Topo Maps, I "panned" see the area.



So, when I zoomed in on the SE Corner of the Section, I can read the coordinates for Easting to be 542,894.695, and the Northing to be 4,732,110.351 Meters.

(I don't know why, but my screen capture tool decided to NOT show the tip of the arrow on the crossed PLSS lines.)



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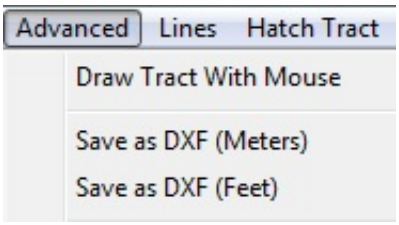
So, now armed with this data, we can edit the NDP file to add the UTM coordinates.

e542894.695m n4732110.351m
/n0.12e 3129.2
/s90w 1322.3
Etc.
@0 1964 Deed
e542894.695m n4732110.351m
/n18.44w 4099
Etc.

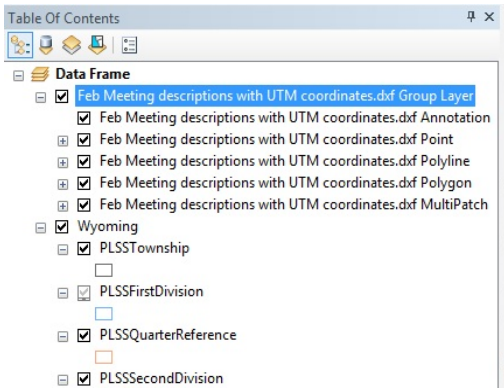
Just substitute the UTM coordinate for Section Corner reference, and Re-save this file in the Resident NDP format.



Since ArcMap does NOT recognize NDP formatting, it MUST be saved, in the DXF - **Meters** Option. (Not Feet, that's what is used to prepare the file to be used in All Topo Maps.)
So, redraw the map, Click Advanced, Click DXF Meters, Save.
This new DXF file will be saved in the same folder as the NDP file, with the same name but DXF extension, IF you have set the file path to go there.
Now go back to ArcMap, by "Adding" some data and browsing to the correct folder and selecting the CorrectFile.DXF, it will be "added" as shown.

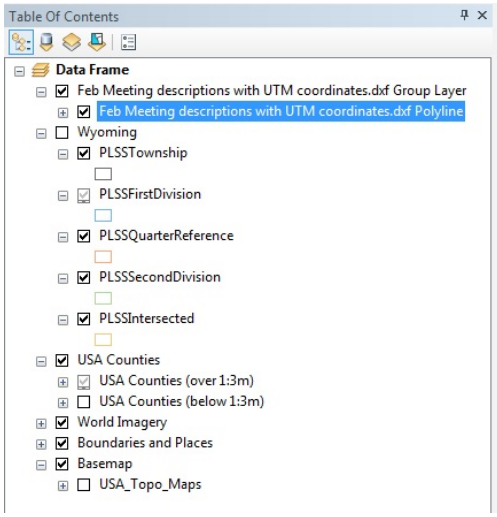
This DXF file "throws out" all five formats, but we really only want the Polyline.

So, by removing ALL but the Polyline option, using World Imagery and turning off the PLSS, we get this image.



And we're ready to create a shape file.

With the ".....Polyline" entry highlighted, RIGHT click, then select Data.



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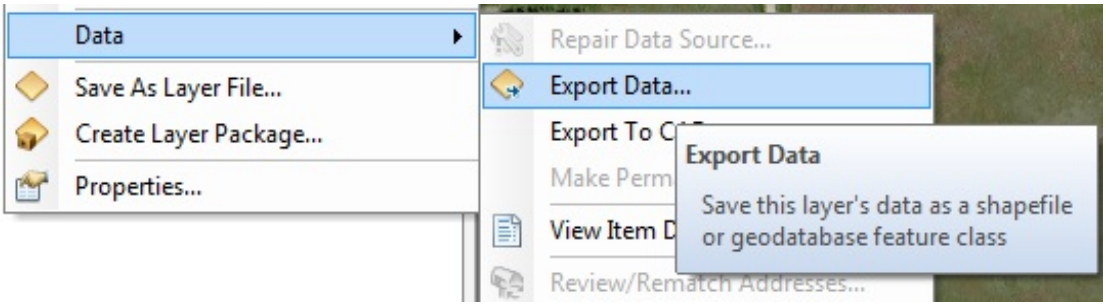
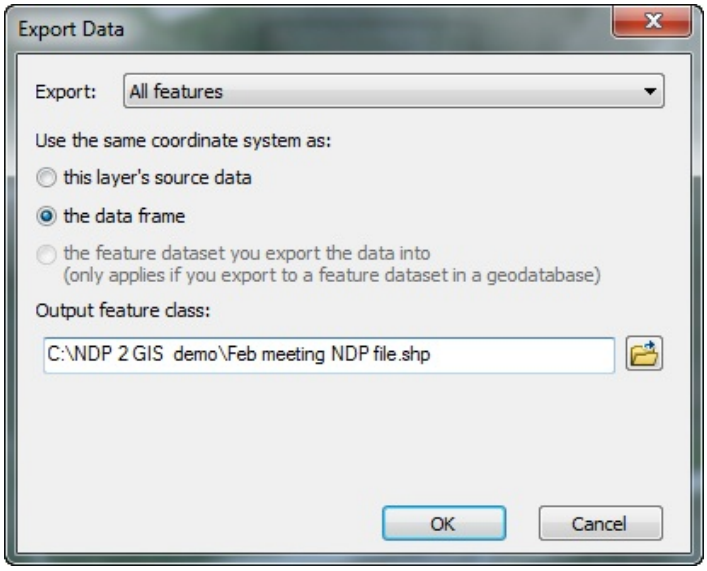


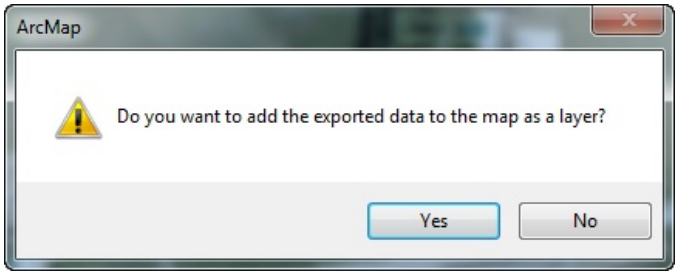
Select Export Data and this window opens.



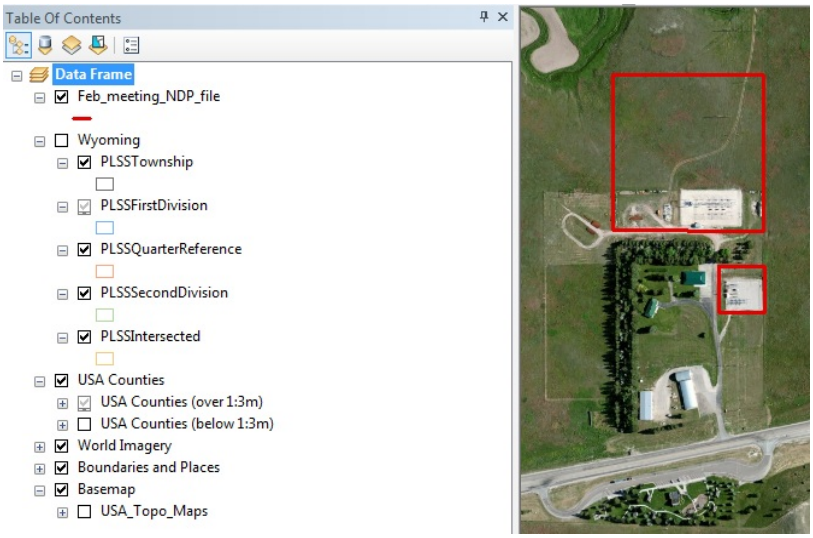
You MUST select "the data frame" option.

Use the BROWSE tool, it go to your desired folder, then, give it a name. I'm careful to be sure that the " .shp" shapefile extension remains.

Press OK.



If you want this shapefile to be available or active on the current open map, then YES.



So, it now appears as a shapefile, that I edited the line width and color.

I also Removed the "DXF" and "polyline" entries and we're left with "cleaner" Data Frame data sets.

The NDP via a DXF with coordinates is an easy way to get Metes and Bounds as a Shapefile into the ArcMap environment.

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