

JOHNSON MAPPING SOFTWARE & PLOTTING SEMINARS

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Deed Plotter+for Windows (by Greenbrier Graphics)& the All Topo Maps (by iGage Mapping Co.)
"Computer Plotting of Legal Descriptions for the Layman" Seminar
"Real Estate Mapping Computer Tools" Seminar

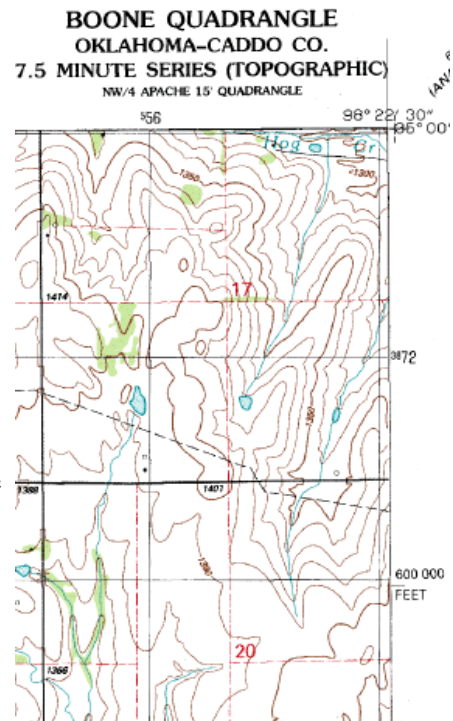
Summer, 2004

Deed Plotter and All Topo Maps Users:

Please print twice and give one to a friend. Here is an example of the Deed Plotter and All Topo Maps working together.

The following screen shots show how I progressed through this example. In a nut shell, I did not have an easement on Oklahoma, so I opened the Boone, OK - 1:24,000 (7.5 minute USGS) map and found a pipeline running through Sections 17 and 20, T.6 N. R.11 West, Indian P.M.

For easier referencing, I summarized and "lettered" the steps I went through just below. Then, I gave you some screen shots of each step. The first image shows parts of Sections 17 and 20 without any additional lines from the original single topo map. Note that these sections are in the corner of the printed topo map, but I show how easy it is to create a "Big Topo" that seams the parts of adjacent maps to create you a new map of exactly what you want, up to 77 miles on a side.



A1). I used the drawing tool to "snap" down the line to get some centerline data, but could have used a GPS tract file or a metes and bounds legal description from a deed, etc.

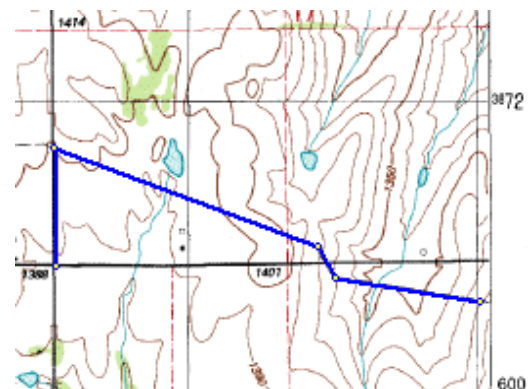
B1). Then, I had the All Topo Maps process these coordinate points into a metes and bounds description of the centerline.

C1). By using the Deed Plotter, I then with several steps. I processed this new centerline into an easement parcel and "save as" with a DXF format.

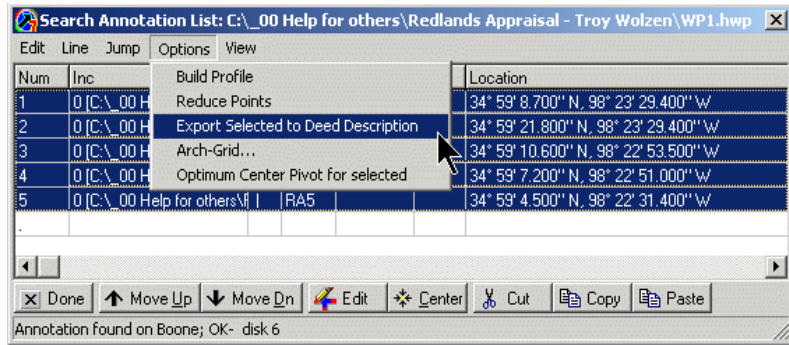
D1). Now, by importing this DXF file back into the All Topo Maps and attaching the description to the SW corner of Section 17, which is where I started "snapping" from, so that I had a findable tie point on the topo maps.

E1). For example purposes, I'll create a custom "Big Topo" map, that will seam together parts from the adjacent maps to make a larger map.

A2). Here is the map showing the route I "snapped" along, starting in the SW Corner.



B2). This screen shows that I clicked on the Edit Waypoints editor and highlighted all of the lines. Then I clicked on the Options and Export Selected to Deed Desc., which creates an ASCII.TXT file that you name and manage.

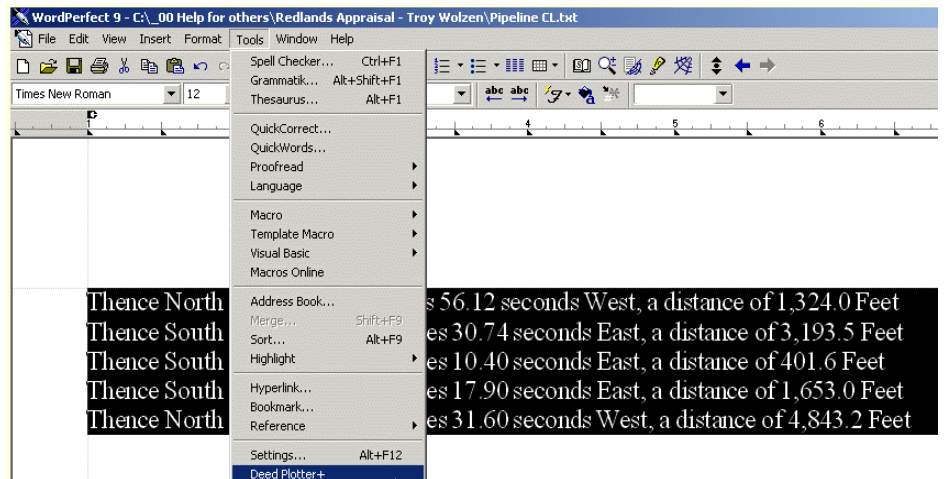


(WARNING! THIS DESCRIPTION IS NOT FROM A SURVEY! READ FULL DISCLOSURE AT END!)
 (Points computed using: UTM_0 projection)

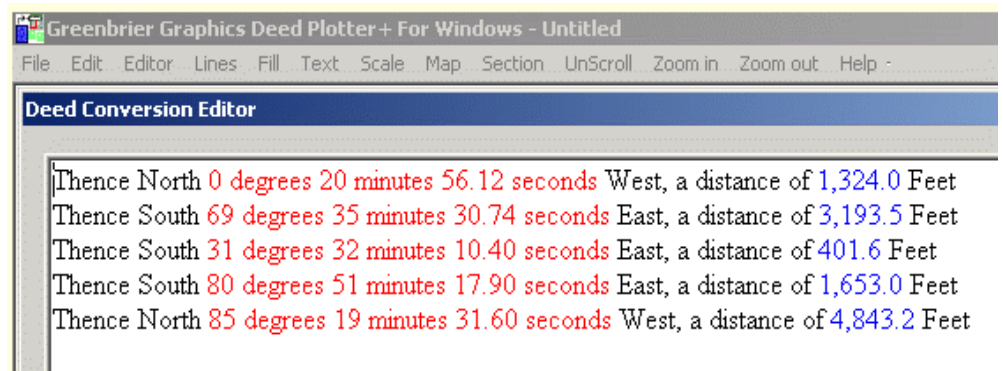
From a Point Of Beginning
 (34 59 8.7 N 98 23 29.4 W);
 Thence North 0 degrees 20 minutes 56.12 seconds West, a distance of 1,324.0 Feet to
 (34 59 21.8 N 98 23 29.4 W;
 555535.4 M E 3871837.9 M N Z14 ;
 4,161,843.8 Feet W 1,152,072.1 Feet S PAN);
 Thence South 69 degrees 35 minutes 30.74 seconds East, a distance of 3,193.5 Feet to
 (34 59 10.6 N 98 22 53.5 W;
 556447.7 M F 3871498.5 M N Z14 ;
 4,159,192.2 Feet W 1,153,888.4 Feet S PAN);
 Thence South 31 degrees 32 minutes 10.40 seconds East, a distance of 401.6 Feet to

C2). Shown is the TXT file opened. The All Topo Maps outputted the coordinate points in a Lat./Lon and UTM formats and a metes and bounds (bearing and distance call) between the points.

C3). This shot shows where I edited the file to show only the metes and bounds calls, then highlighted the block and clicked the Tools menu and the Deed Plotter icon that was installed there when the Deed Plotter was installed.



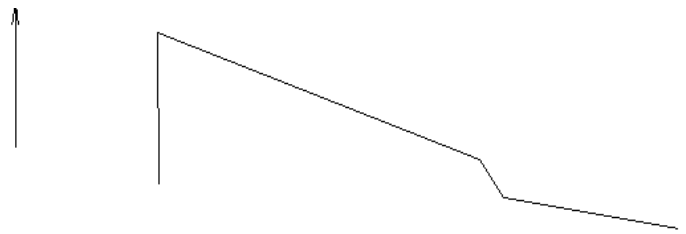
C4). This shows the result of being launched into the Deed Plotter, Deed Conversion Editor and "tested". The red and blue elements have been recognized for the next



conversion step.

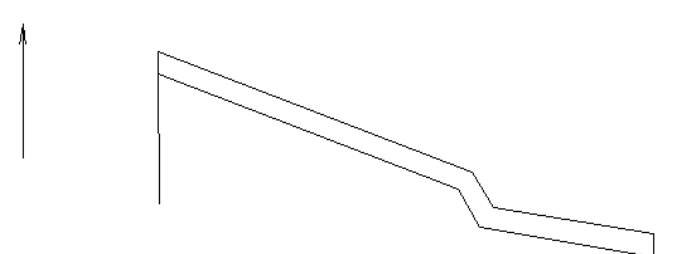
C5). Here are the converted calls and the drawing showing the centerline with the offset call to the section corner.

```
n0.2056w 1324.00  
s69.3531e 3193.50  
s31.3210e 401.60  
s80.5118e 1653.00
```



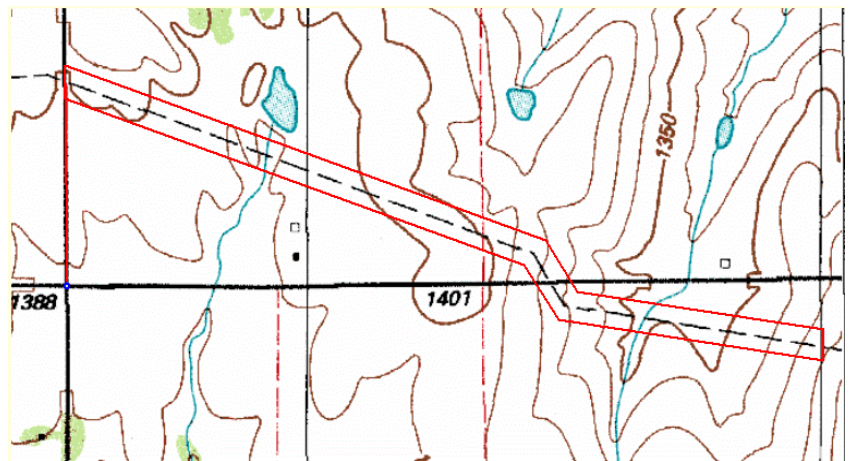
C6). You can see where I added the @2 which separated the offset call from the actual centerline. Then, I issued the "Return" command that told the program the bearing on both end of the

```
n0.2056w 1324.00  
@2  
s00.0000w 106.70  
s69.3531e 3121.81  
s31.3210e 413.02  
s80.5118e 1715.01  
n00.0000e 202.57  
n80.5118w 1590.99  
n31.3210w 390.18  
n69.3531w 3265.19  
s00.0000w 106.70
```



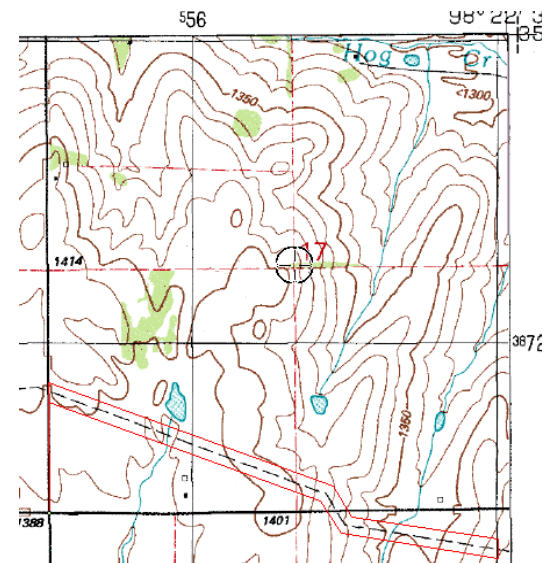
easement and 100 feet on both sides of the centerline. The program then process the centerline into the outside lines of the easement. Now, when "saved as" a DXF file, it can be used in CADD, GIS or All Topo Maps.

D1). Returning to the All Topo, the SW corner of the section was selected as the point to attached the Deed Plotter file.

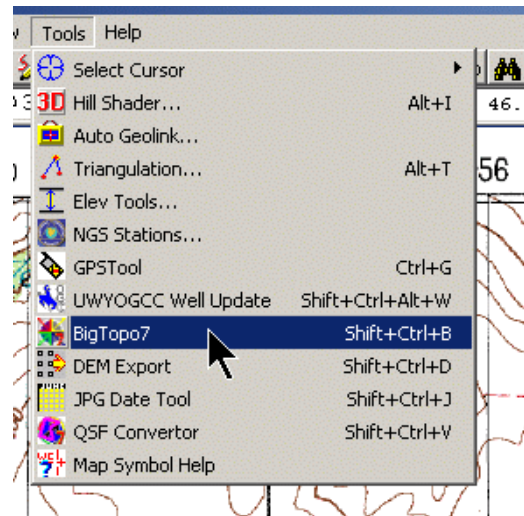


I did not show it here, but you can easily hide the offset call from the Section corner to the easement if you don't want to show it.

E2). This is beginning of the "Big Topo" feature, where I place the cursor in the middle of Section 17 and pressed the "Ctrl X" to capture the Lat./Lon. of that location.



E3). Now Click Tools and Select the Big Topo7 Tool.

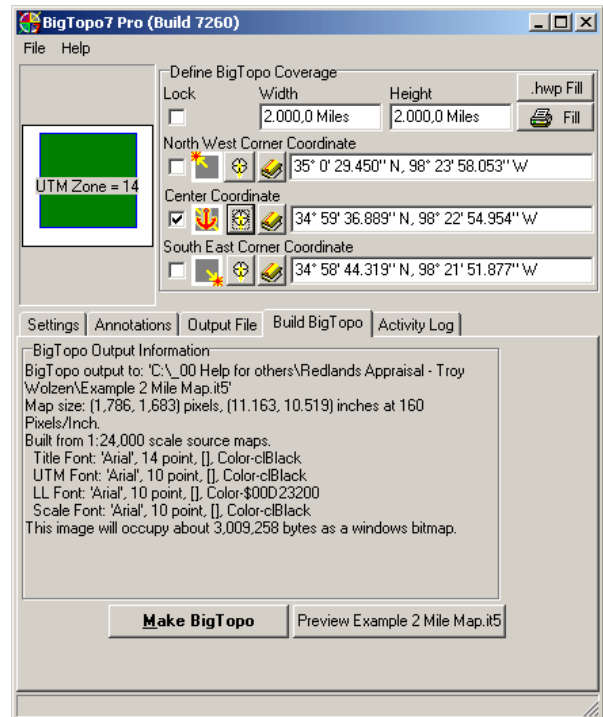


E4). By clicking in the box under the word Center Coordinate, the program knows that is the element you are giving it. Now click on the yellow colored bomb site to the right of the anchor and the Lat./Lon. coordinate that you captured in step E2 will be pasted in from the clipboard.

If we want to make a map that is 2 miles on a side, you would edit whatever was in the Width and Height windows to be what you want.

Now click on the "Output File" tab and input a name for your new map, e.i. Example 2 Mile Map.

Now click on the Build Big Topo tab and the Make Big Topo button becomes active. When you click the "Make" button it starts to work and you will see much data scroll in the Big Topo Output Information window. Finally, when it is done the "Preview....." button becomes active and you are ready to Preview the new map that has been created.

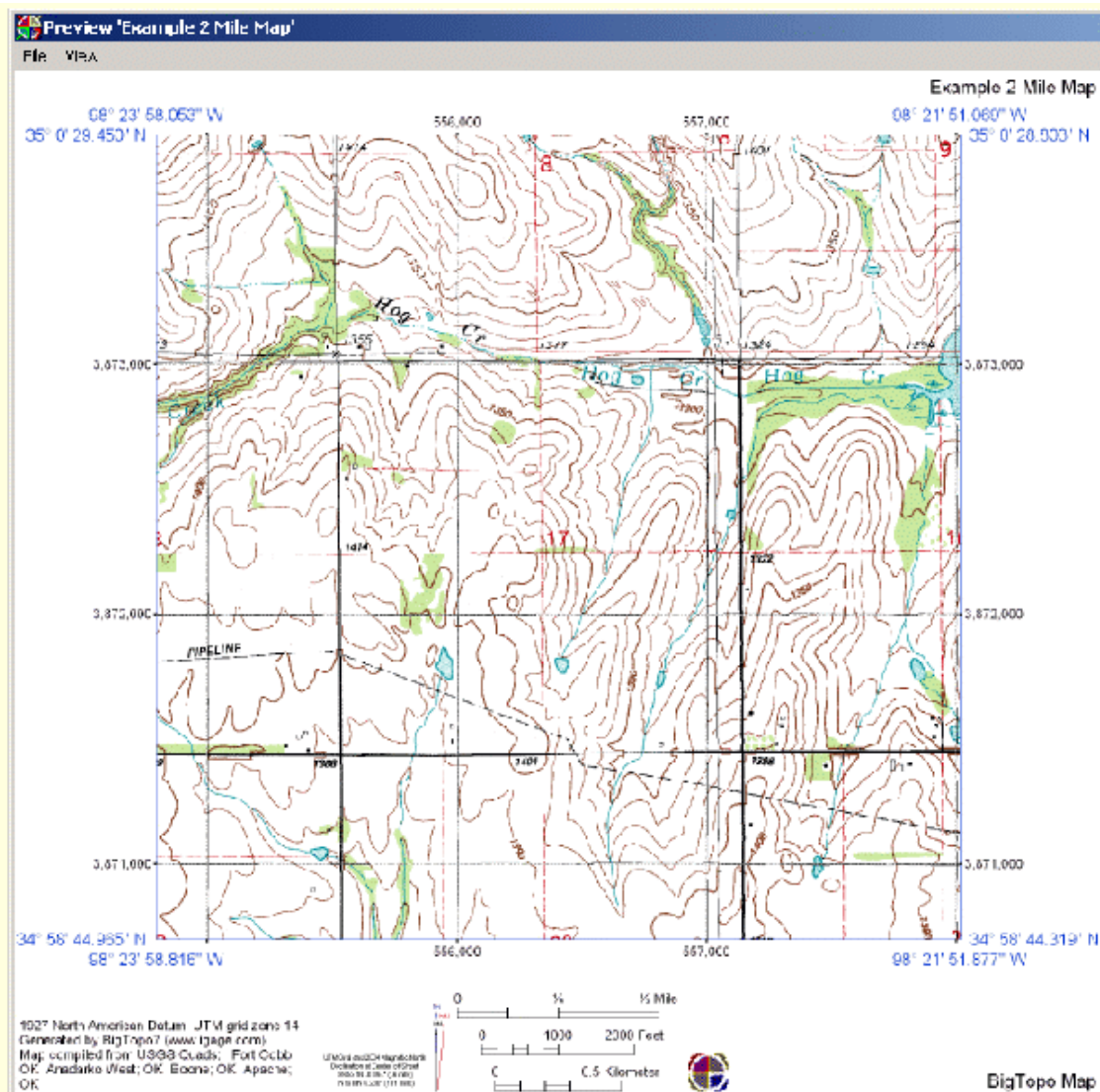


E5). Here is the Preview of the new map. Let's see what the program shows.

- 1). It "re-collars" the map with the corner Lat./Lons.
- 2). Shows the map name in the upper right.
- 3). In the lower left, it shows you the single sheet maps, it used to create this Big Topo.
- 4). Along the bottom is a bar scale to match the printed map scale.

Evidently the "Show UTM Grid" was defaulted on during the create Big Topo stage, as you can see those UTM readings on the edges.

You can see that just off the NE corner of Section 17, now there are parts of Sections 8, 9 and 16 have been added to create this map, being 2 miles high and 2 miles wide from the center of 17.



E6). Now to use the map, you close the Preview and Load this new “2 Mile” Big Topo Map. Below you can see where I added some text. (You select the font, color, size, rotation, etc.)

Also I drew some lines with the Point 2 Point (P2P) cursor, showing some of the line patterns and colors that are available including a 2 track road pattern.

You can also see that the NE1/4NE1/4 of Section 18 is outlined and hatched. That was done by virtue of the PLS (Public Land Survey) tool, that is an add-on to the basic All Topo Maps program. With the P2P selected and the PLS Magnet active, you can click around sectional Aliquot part parcels (ie NE1/4NE1/4). The PLS tool is using the underlying GCDB (Geographic Coordinate Data Base) that comes with the tool.

I did not see an error I made on this map until I got to this stage. Back in step A1, I “snapped” along the pipeline, but apparently quit too soon. I can see now that what I thought was a section line was really a UTM grid line. To correct, I would have to repeat all of the steps except for make the Bit Topo. (Printing this directly out of the program would smooth out the staggered lines, on the screen print example.)

