Exporting Shapefile Elevation Data to AutoCAD in ArcGIS 10.2.2

Florida - ASPRS
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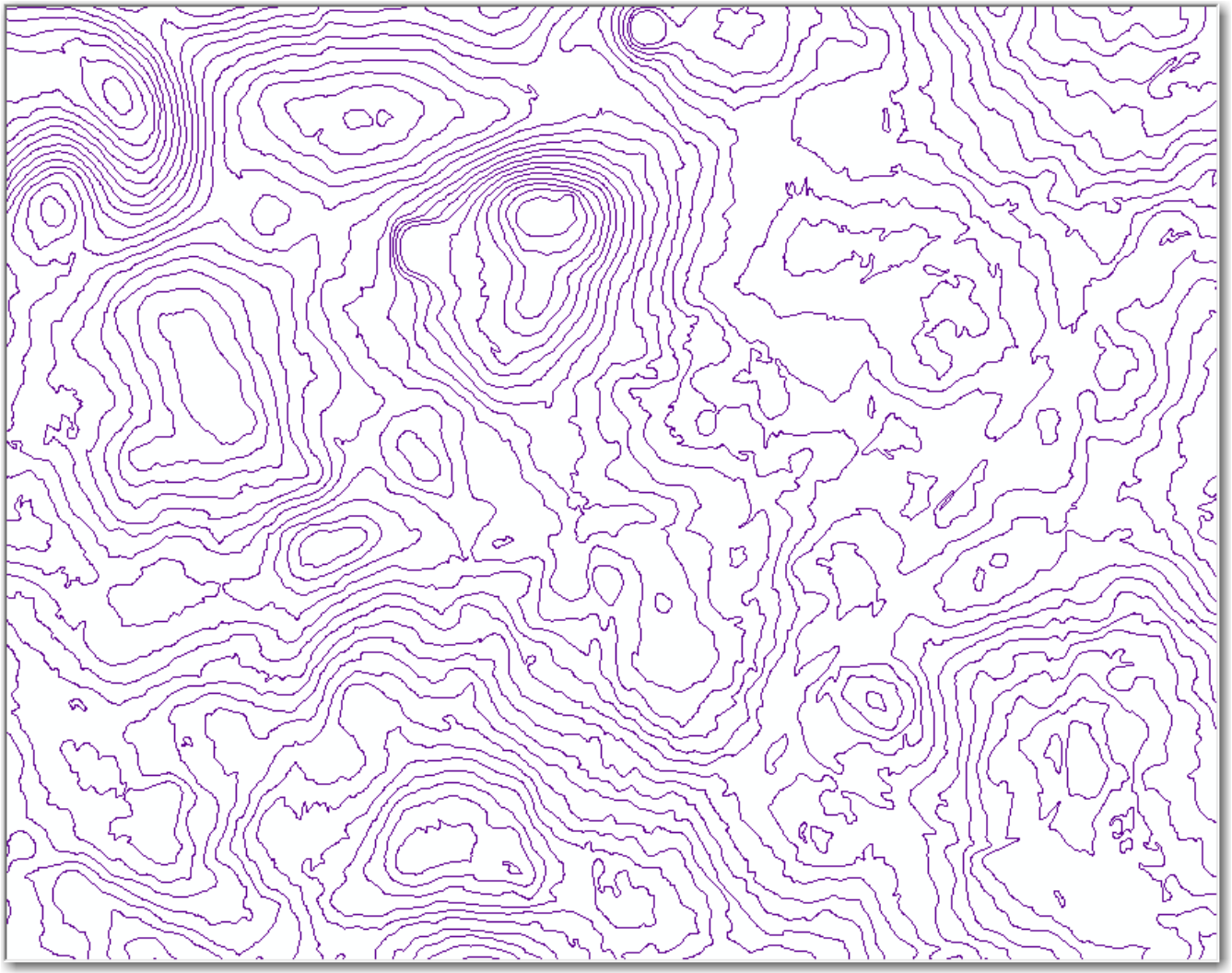
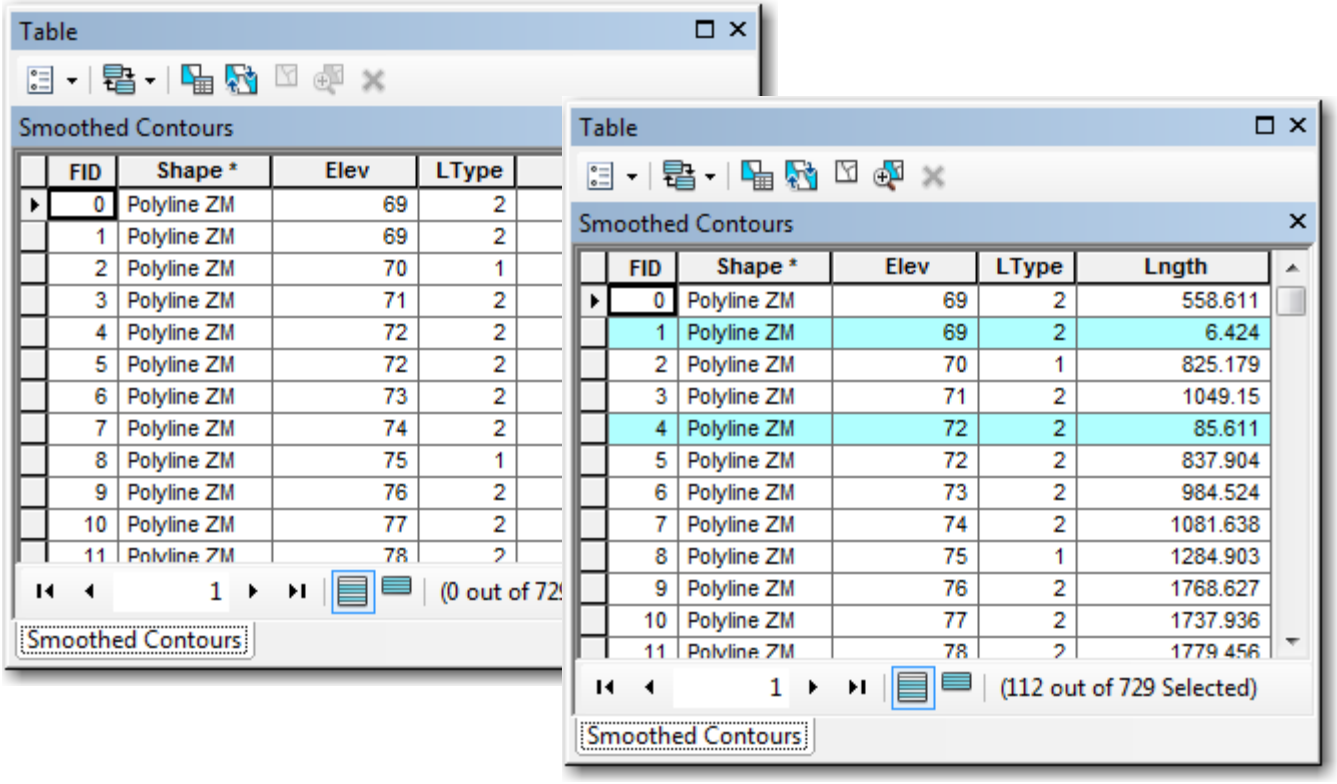
As with all Geographic Information System workflows, multiple workflows may be used to accomplish similar results. The workflows presented in these Webinars represent the most common workflow used at the SWFWMD.

The District strongly recommends that all contour representations of surfaces be used for cartographic purposes and not for measurements, engineering design, or Hydrological/Hydraulic Modeling.

Step 1 – Make and Smooth Contours



Step 2 – Check Attribute Table

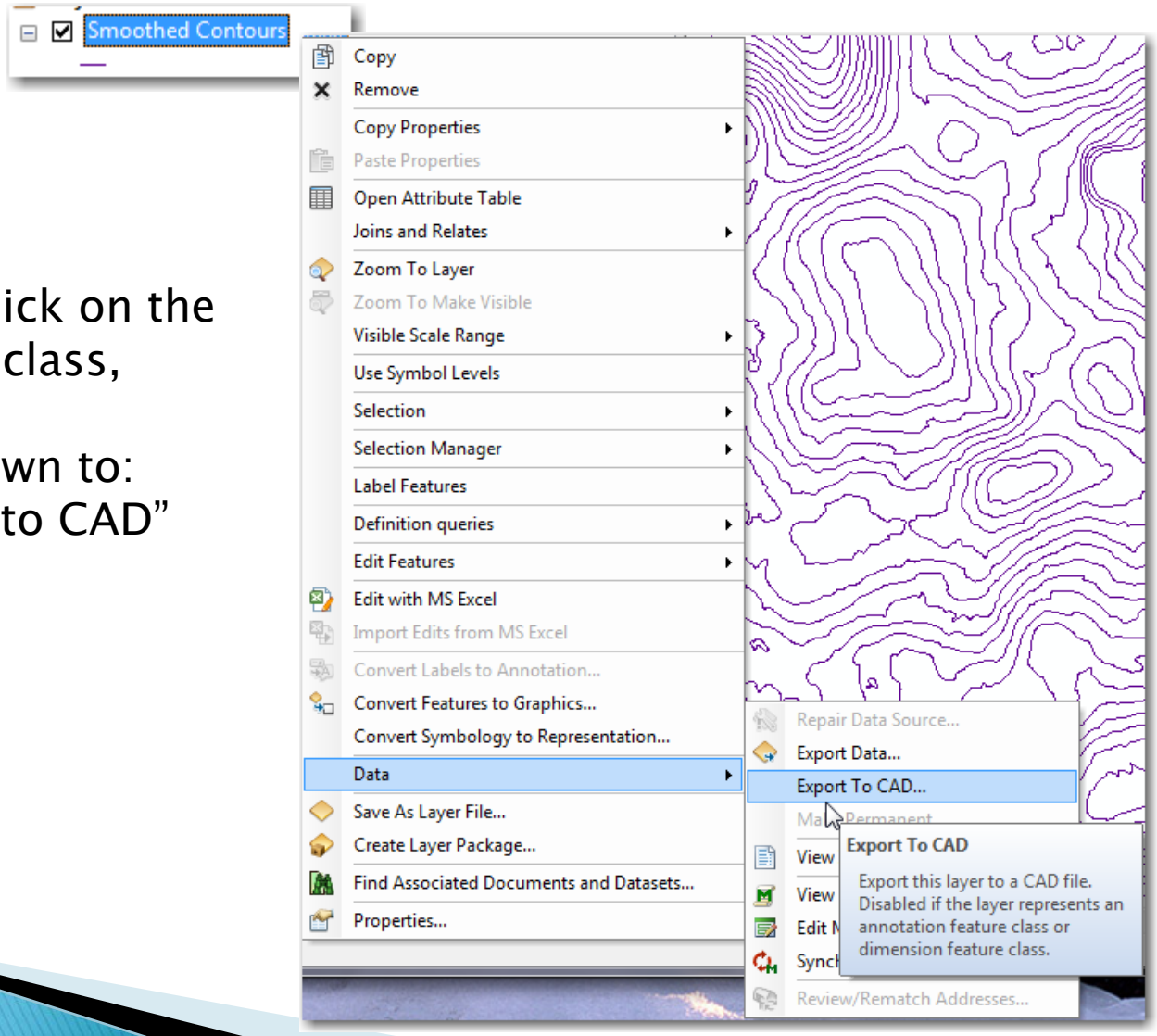


Make sure that Elevation Field is present (and populated), Select and Remove Contours < 150’

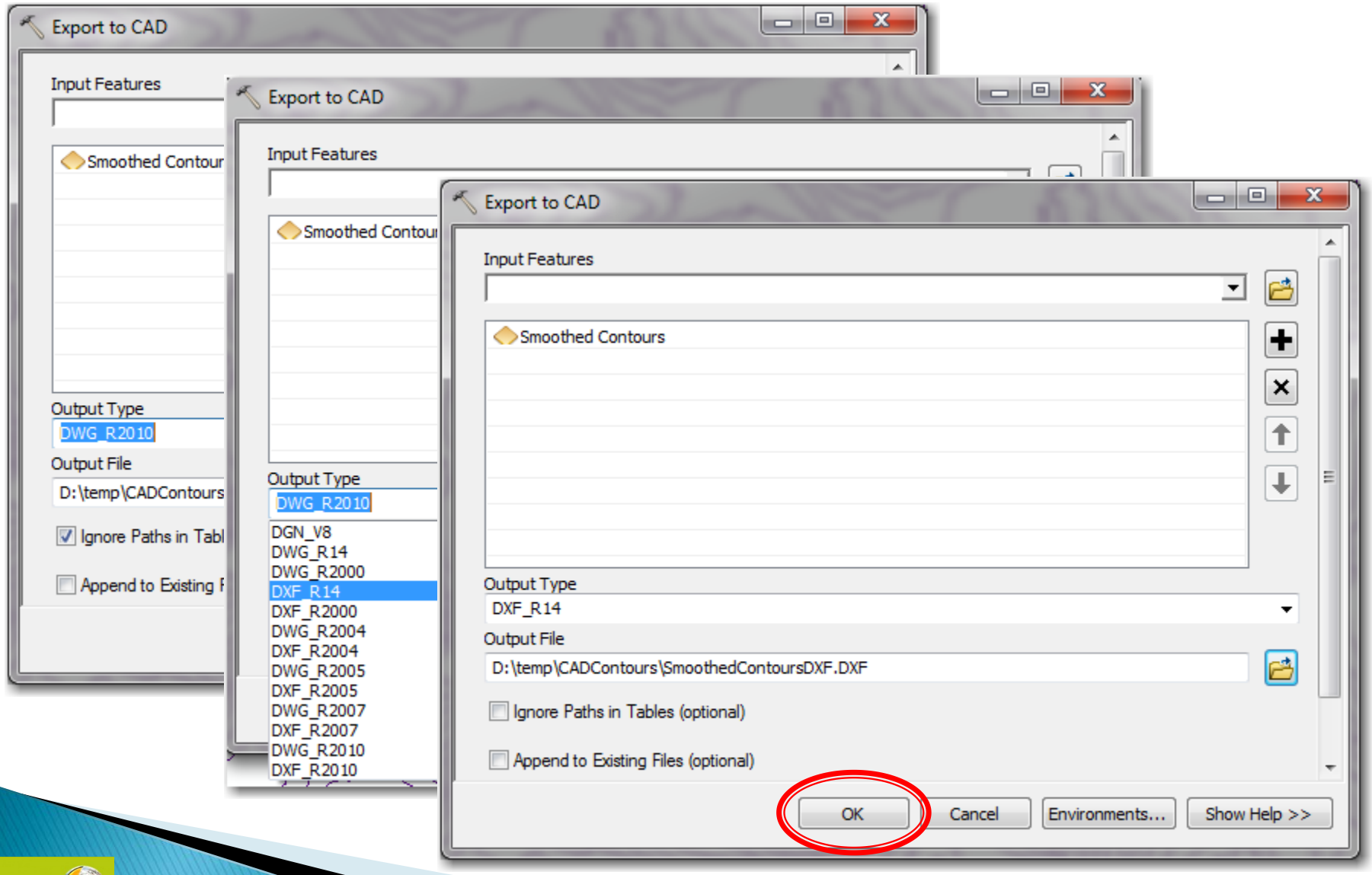
Step 3 – Export to DXF

Right-click on the Feature class,

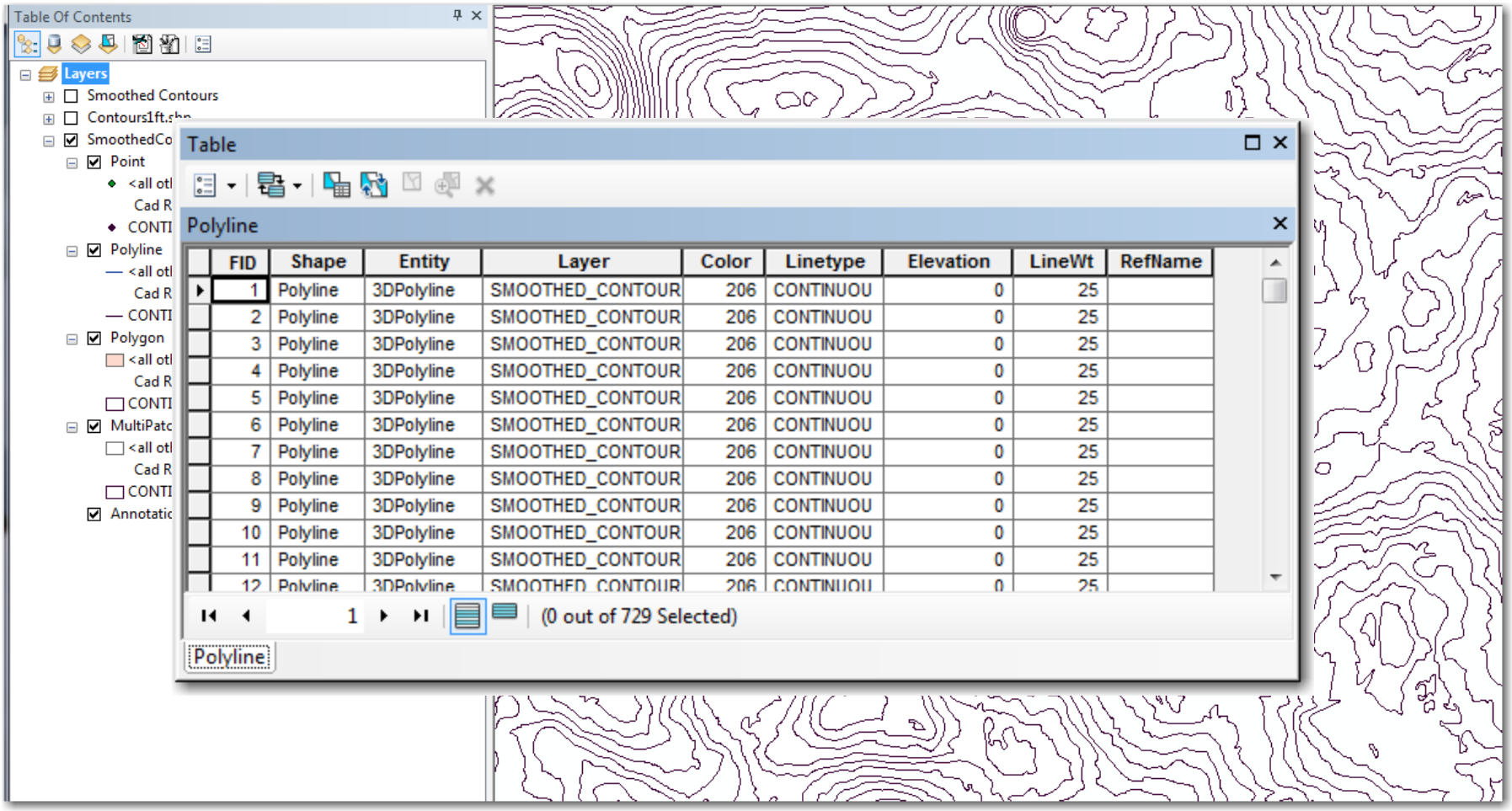
Drag down to:
“Export to CAD”



Step 3 – Export to DXF, con't.

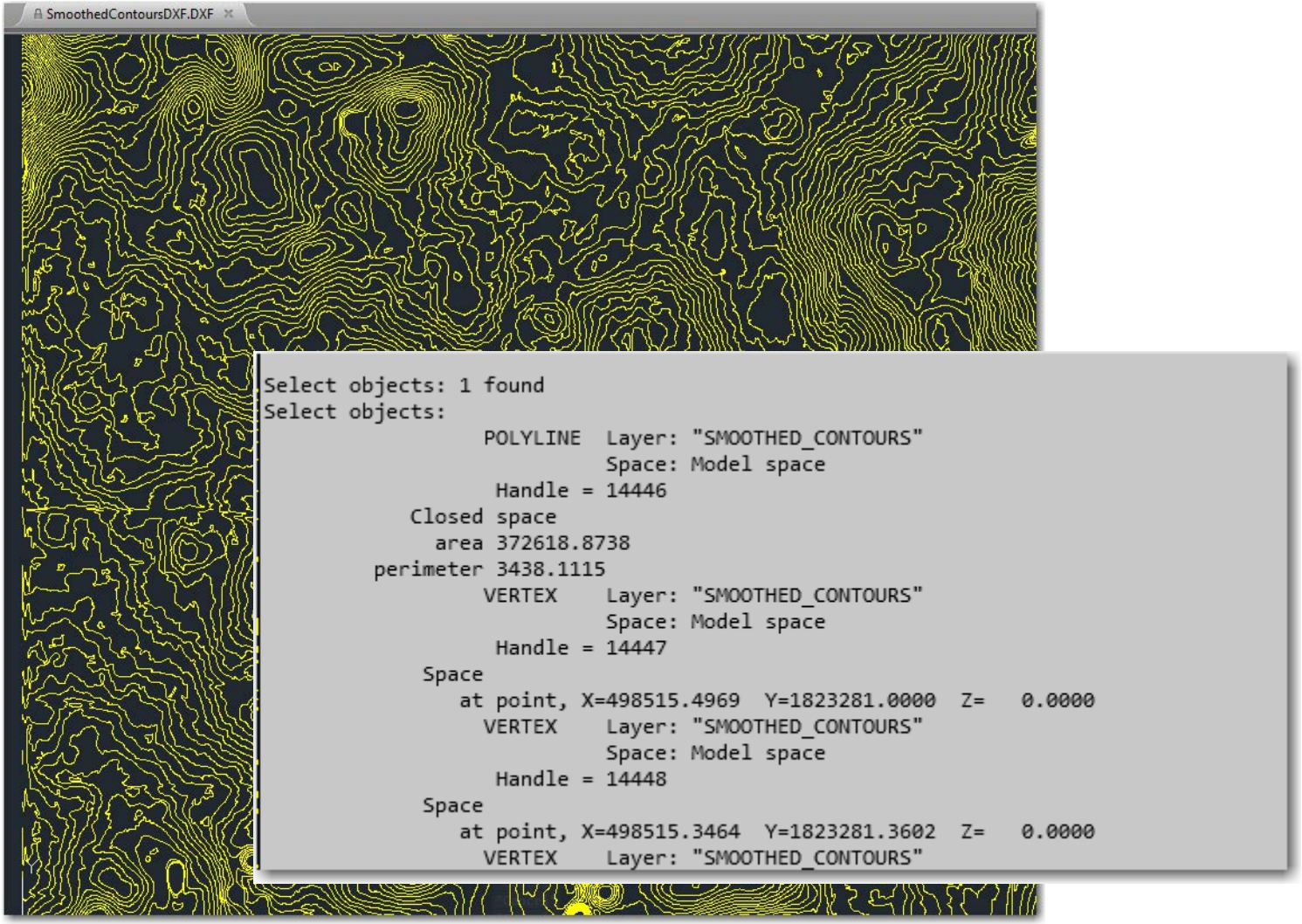


Step 4 – Examine Results



Oops… no “elevation” field in the CAD table!

Step 4 – Examine Results – AutoCAD

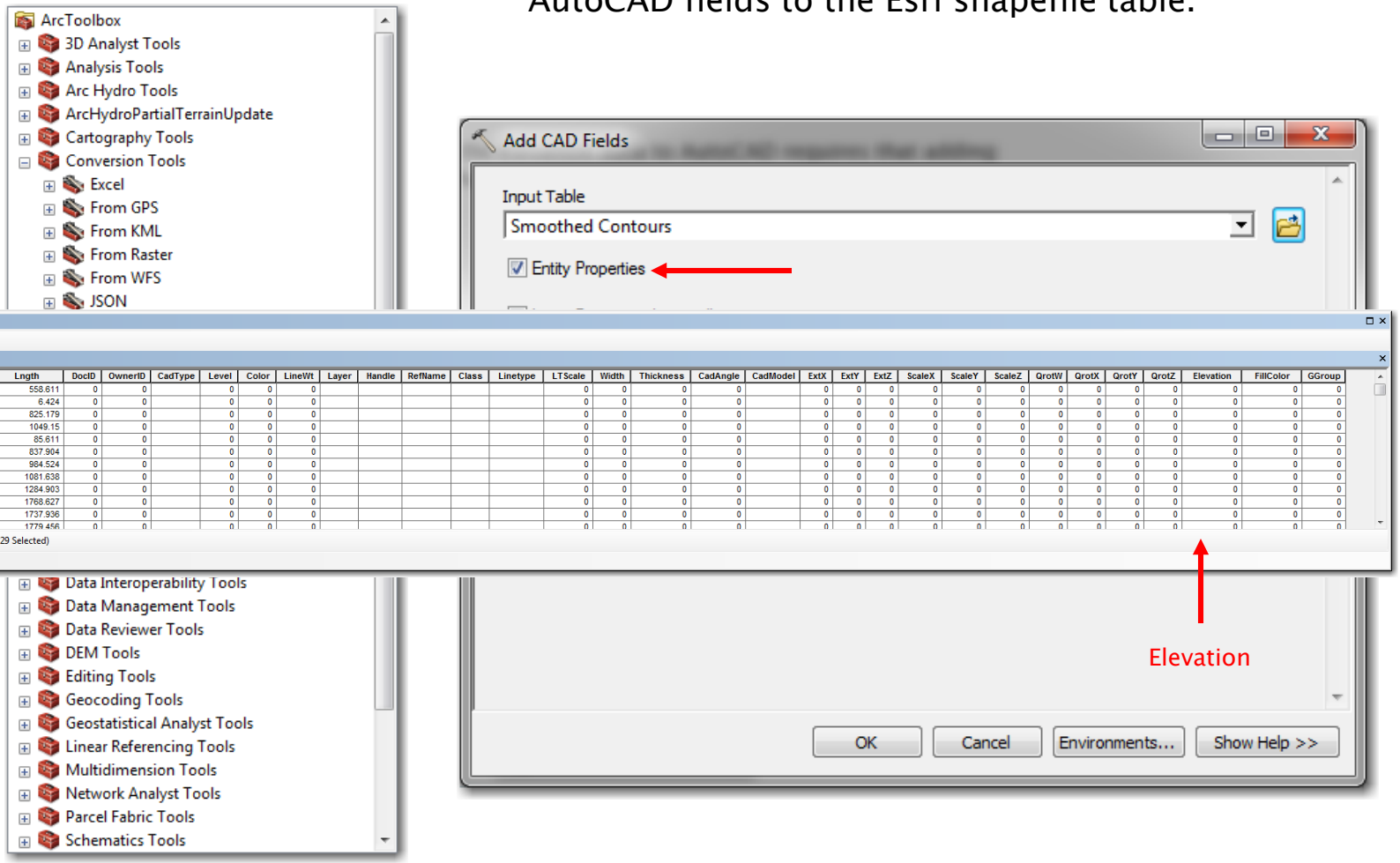


No Elevation Data, Again!

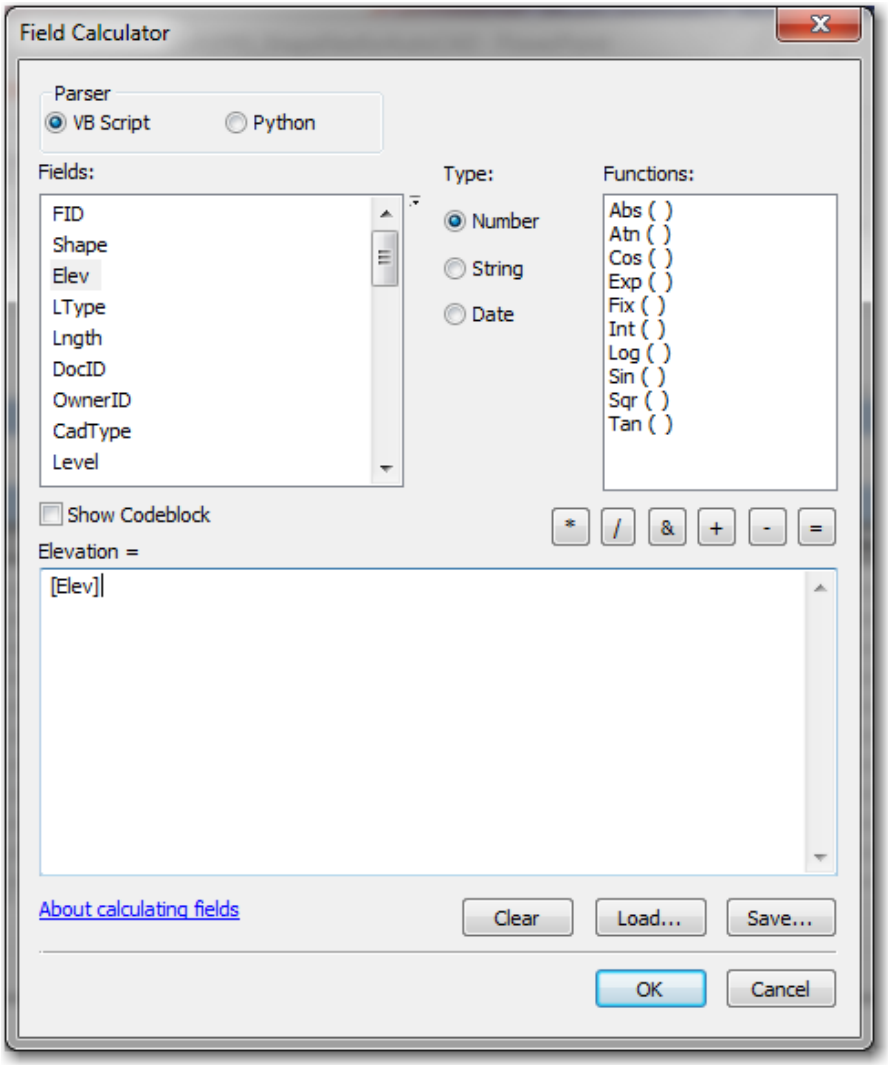
So… The EASY way does not seem to work.

Step 5 – Add AutoCAD Fields to the Esri Feature Class

To Export the elevation data to AutoCAD requires adding AutoCAD fields to the Esri shapefile table.



Step 6 – Calculate the AutoCAD “Elevation Field” to equal the Esri “Elev” Field



Option: Delete all non-essential fields from the Esri Feature Class

Step 7 – Export to CAD (as in Step 3) but now …

Table

Polyline

FID	Shape	Entity	Layer	Color	Linetype	Elevation	LineWt	RefName
1	Polyline Z	3DPolyline	0	7	Continuous	69	0	
2	Polyline Z	3DPolyline	0	7	Continuous	69	0	
3	Polyline Z	3DPolyline	0	7	Continuous	70	0	
4	Polyline Z	3DPolyline	0	7	Continuous	71	0	
5	Polyline Z	3DPolyline	0	7	Continuous	72	0	
6	Polyline Z	3DPolyline	0	7	Continuous	72	0	
7	Polyline Z	3DPolyline	0	7	Continuous	73	0	
8	Polyline Z	3DPolyline	0	7	Continuous	74	0	
9	Polyline Z	3DPolyline	0	7	Continuous	75	0	
10	Polyline Z	3DPolyline	0	7	Continuous	76	0	
11	Polyline Z	3DPolyline	0	7	Continuous	77	0	

1 (0 out of 729 Selected)

Polyline

Data in the AutoCAD “Elevation” Field

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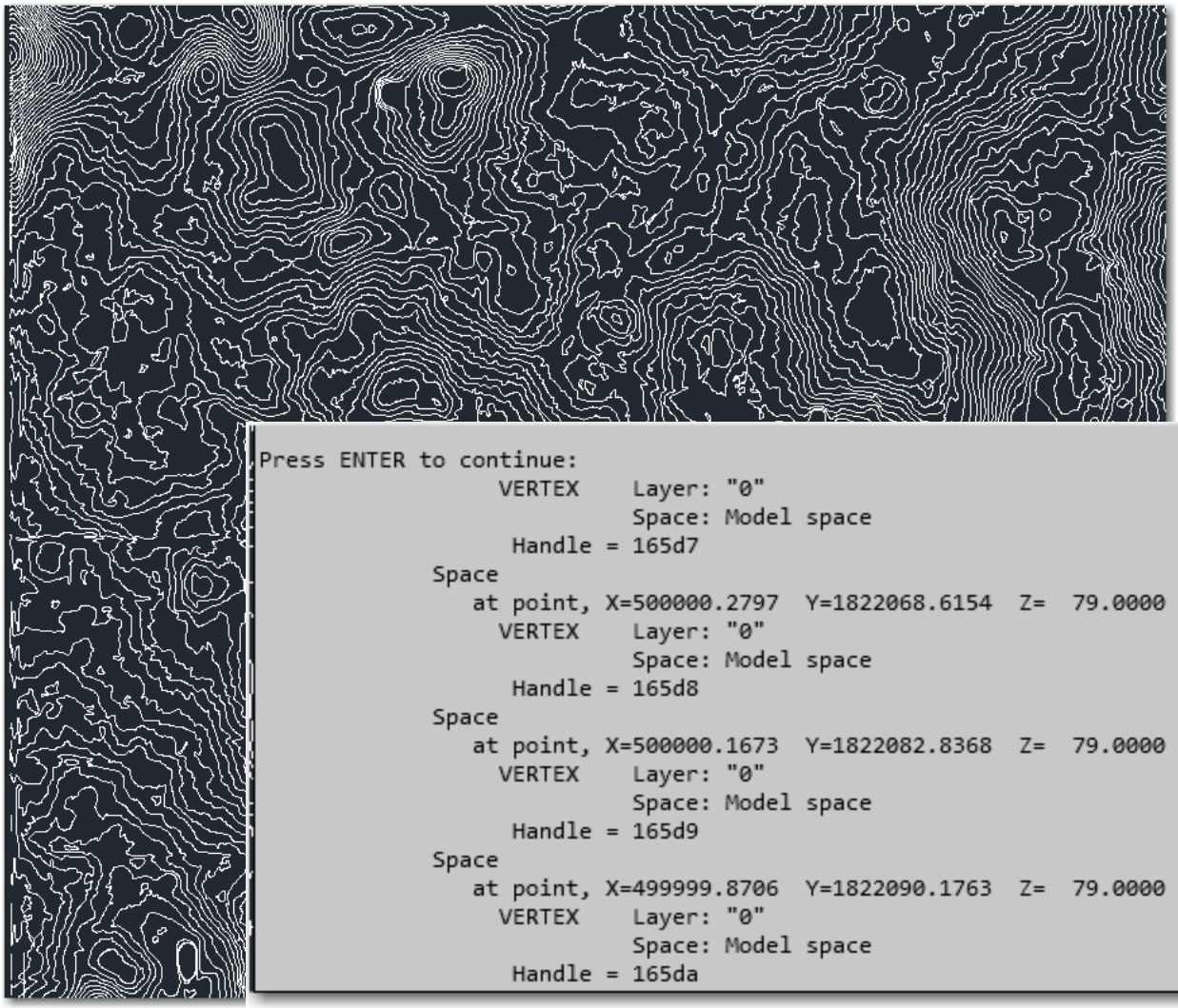
And in AutoCAD …



```
Press ENTER to continue:
                  VERTEX    Layer: "0"
                            Space: Model space
                   Handle = 165d7
               Space
                  at point, X=500000.2797  Y=1822068.6154  Z=  79.0000
                  VERTEX    Layer: "0"
                            Space: Model space
                   Handle = 165d8
               Space
                  at point, X=500000.1673  Y=1822082.8368  Z=  79.0000
                  VERTEX    Layer: "0"
                            Space: Model space
                   Handle = 165d9
               Space
                  at point, X=499999.8706  Y=1822090.1763  Z=  79.0000
                  VERTEX    Layer: "0"
                            Space: Model space
                   Handle = 165da
```

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