Instructions for Placing Soil Fences on PennDOT Plans

Exporting Soil Fences to Microstation .dgn File

Note:

Use a standard PennDOT Roadway2D Microstation seed file (RoadwayUS2Dseed) to export soil fences to a MicroStation .dgn file. Please note that all Business Partners using CADD must register to use PennDOT's Standardized CADD resource files.

To register, please contact Denise Reis, CADD Manager:

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Engineering District 3-0
715 Jordan Avenue
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Phone: 570-368-4310
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Business Partners may obtain PennDOT's standard seed file from the CADD Resource Files download facility on PennDOT's web site.

PennDOT's CADD Resources are found on the PennDOT web site http://www.penndot.gov by clicking on "Projects and Programs" and then on "Road Design Cultural/Enviro Resources" , and on "CADD Resources" under the "Roadway Design Heading", or click on the following link:

http://www.penndot.gov/ProjectAndPrograms/ProjectRequirementsResources/Pages/CADD-Resources.aspx

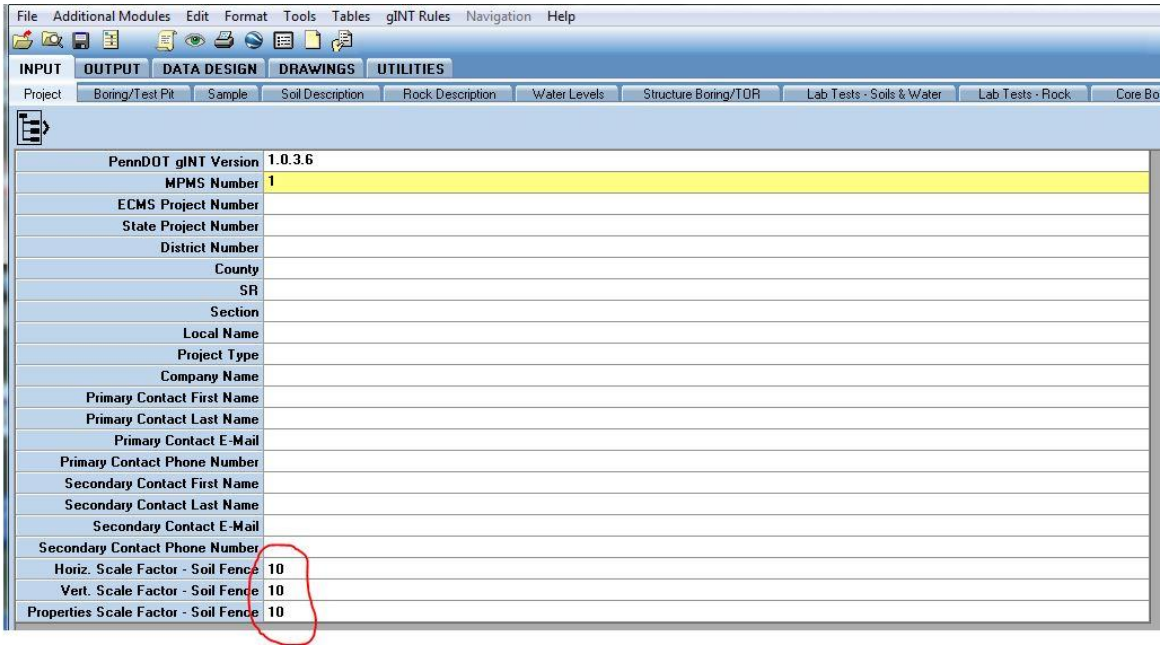
Working units are of 1000 Survey Foot per unit.

Input, Project Tab:

In the gINT Project File, on the Project Tab, set Horizontal, Vertical and Properties Scale Factor as needed.

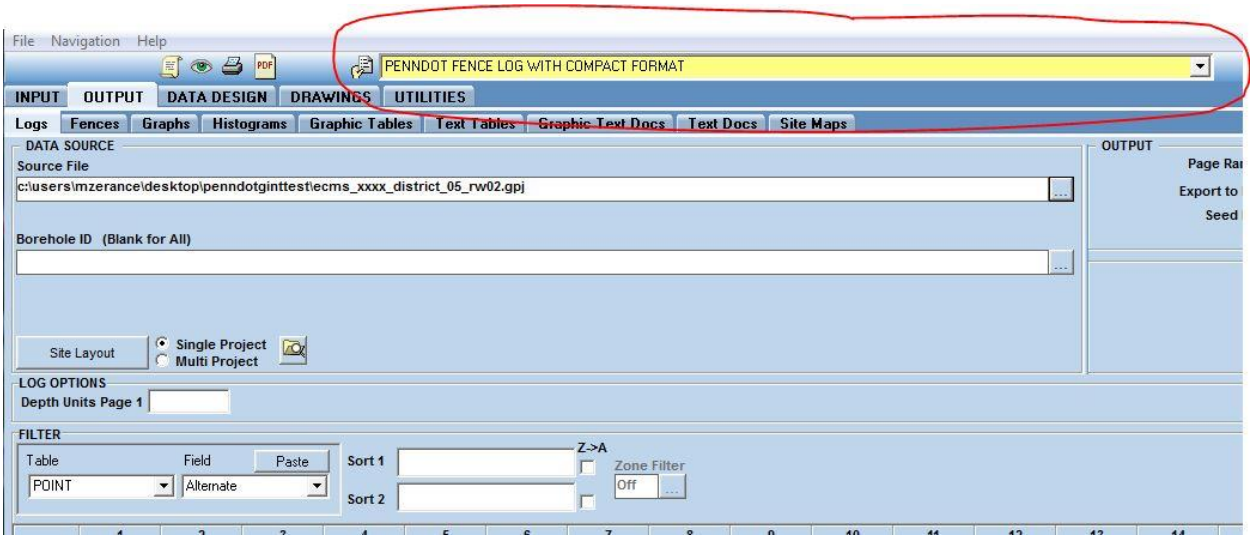
Note that depending on the scale used for the plans, the actual soil fence may be placed at the designated station/location on the soil profile plans, or the solid/hollow representation of the soil fence may be placed at the designated station/ location on the soil profile plans with the detailed soil fence referenced to the solid/hollow soil fence (similar to an “exploded view”).

Note that, in general, all property values will be same/identical for the image to report correctly. If, for example, the horizontal scale factor is less than the vertical scale, the stick log will appear wider than anticipated.



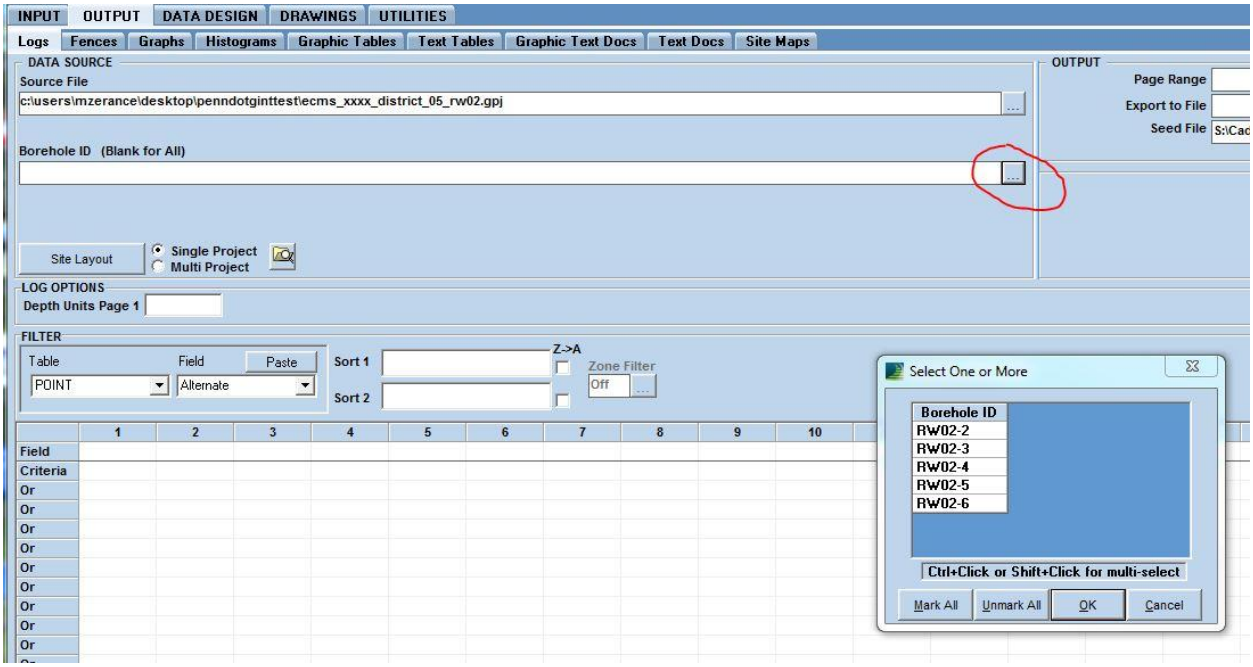
Output Tab:

On the Output, Logs Tab, select the “PENNDOT FENCE LOG WITH COMPACT FORMAT” log type:



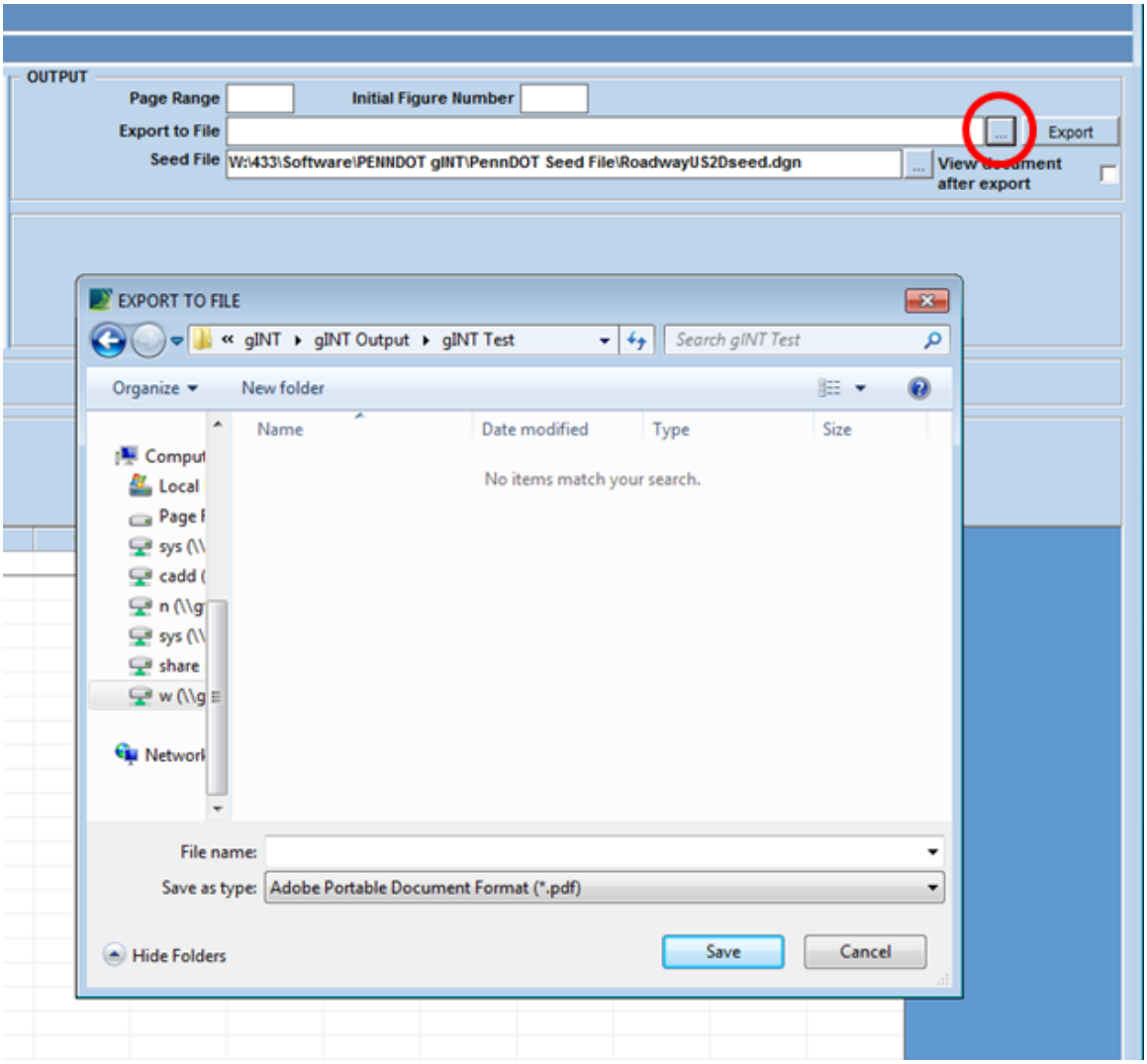
In the DATA SOURCE area:

Use the  to select the boring(s) you wish to output:

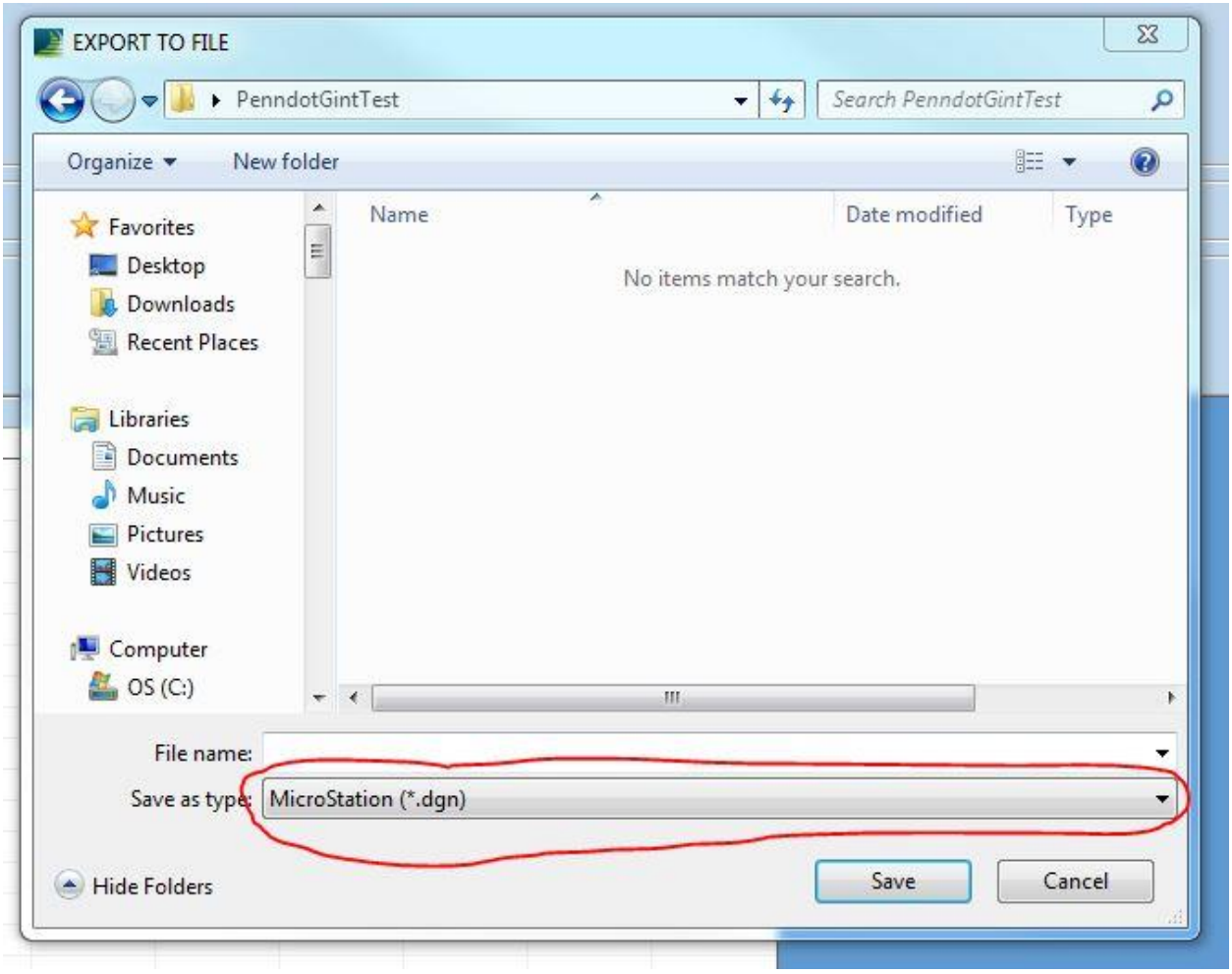


In the OUTPUT area:

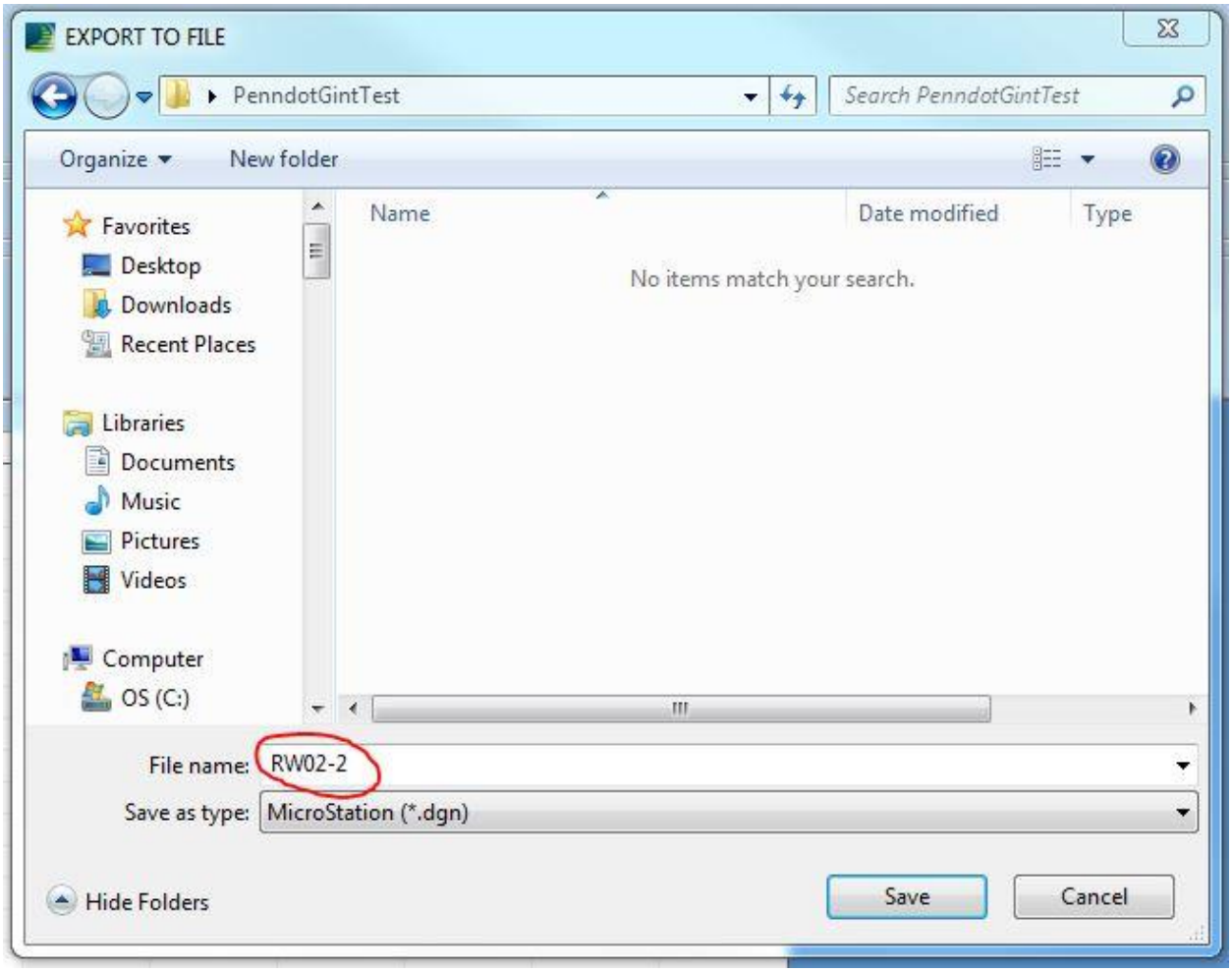
Use the  to select the location in which you want to place the output file:



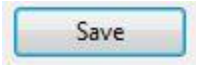
Select “MicroStation (*.dgn)” from the pull down menu:



Name your MicroStation export file:



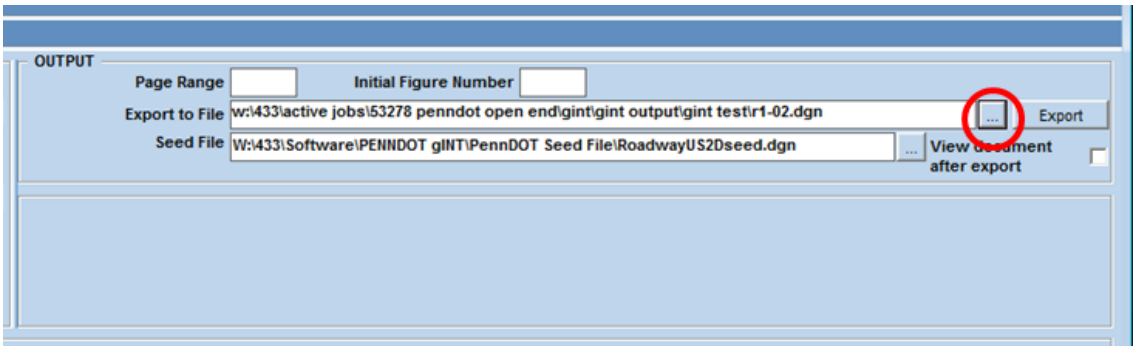
Click “SAVE:



This will populate the output area, and also allow you to select a MicroStation Seed File (PennDOT Roadway2D Microstation Seed File) to be used for file creation.

Use the standard PennDOT Roadway 2D MicroStation Seed file (available via the PennDOT web site, information provided at the beginning of instructions).

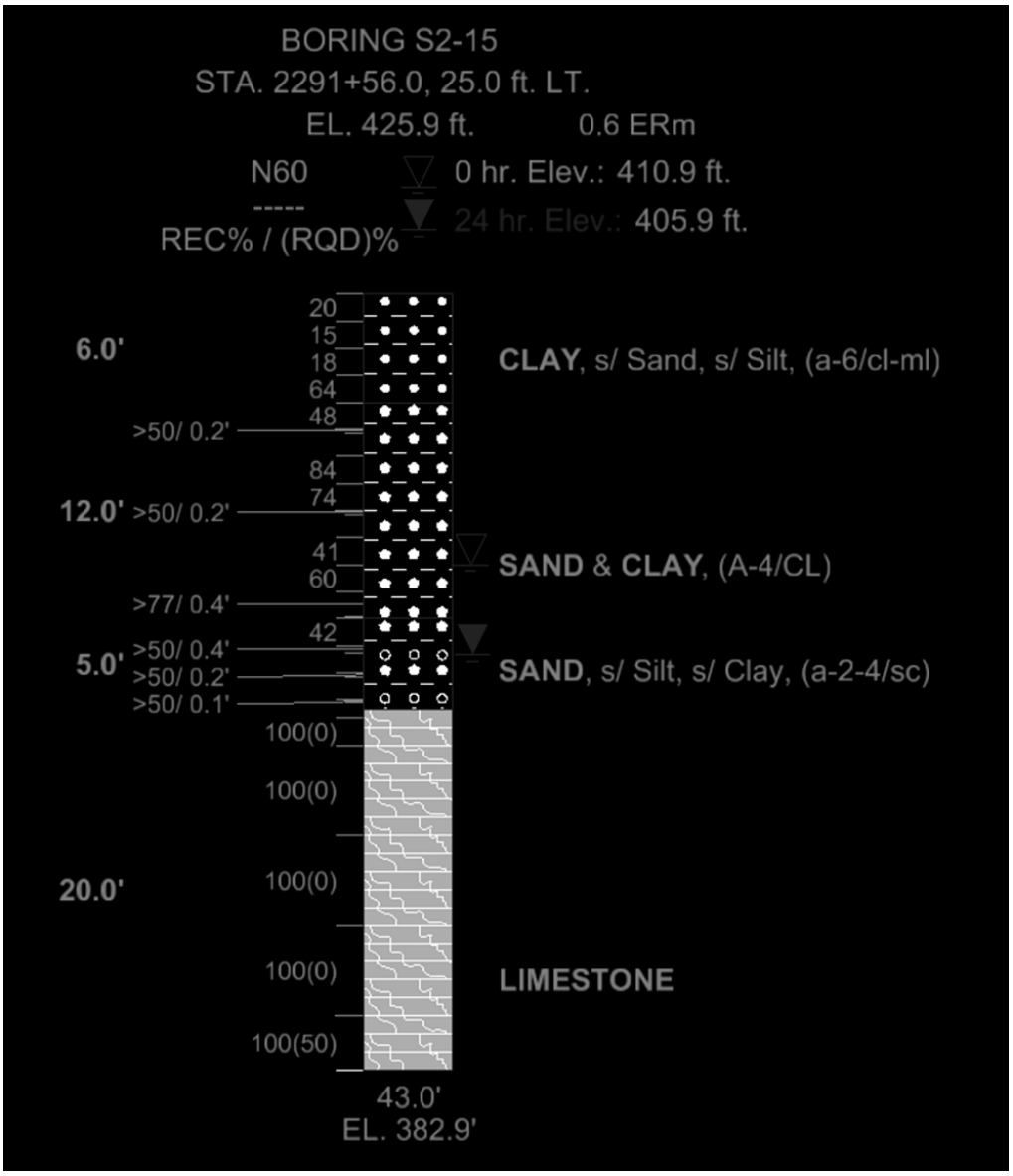
Select Export:



Your MicroStation .DGN file will now be created.

Editing Soil Fences in .dgn :

When you first open a gINT exported .dgn it will look similar to this:



Note that graphic symbols are shown, and that a grey background reports for most of the graphic symbols for rock.

The text is shown in a light grey color, not black. This was done because previewing the PDF with a white font color was not visible on a white background/white paper, and a black font color was not visible in Microstation.

To change existing text color from grey so that the font will print clearly in black, highlight the text and change the color to “white”. Select both title level and text level to capture the text designations for layer thickness, the blow counts, recovery, RQD, and materials descriptions accept with a right click of the mouse

The column lines/vertical lines and layer separator lines/horizontal lines bordering the graphic column for the soil fence appear as “black” in Microstation and as a result are difficult to view. The column lines and layer separator lines were left as a black color, as opposed to grey, above, in an effort to eliminate additional manipulations to change grey lines to black. If preferred, the column lines and layer separator lines can be changed in Microstation to facilitate viewing/checking.

After the text is updated, the updated figure will look like the following: