

Placing Bore Logs in Plans with GEOPAK

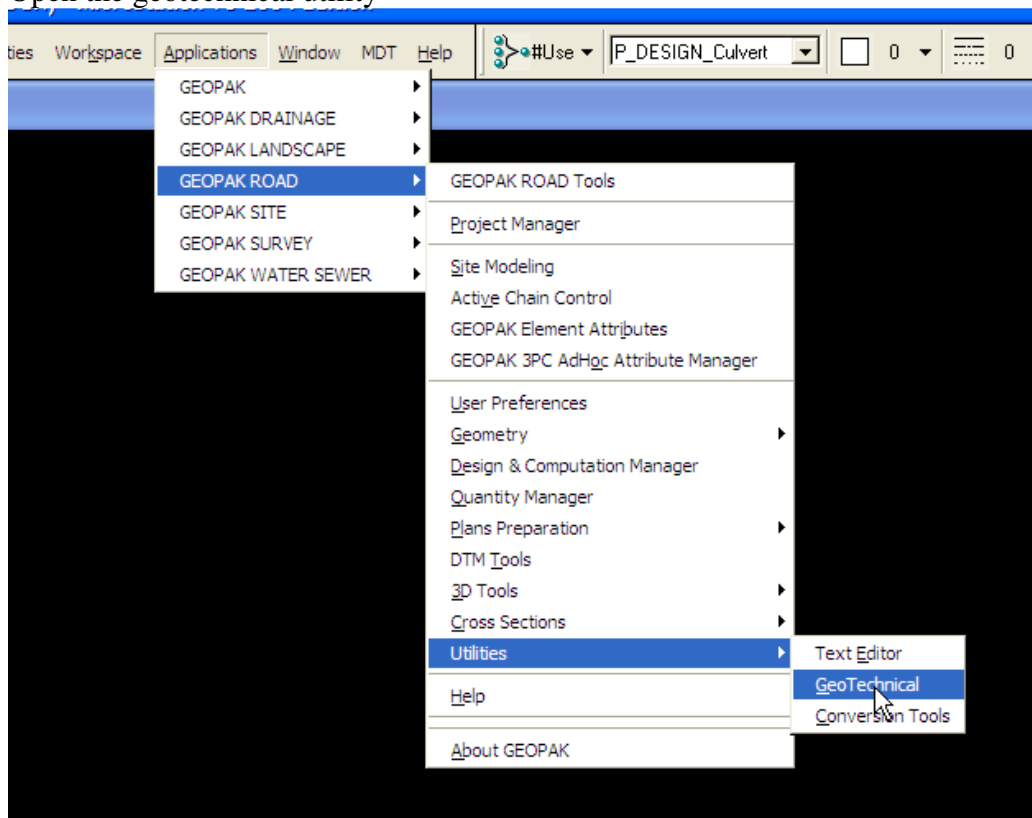
The Geotechnical Section can provide two different types of files to place logs on the plans. The first is with CSV files as is currently in practice. The second is creating the geopak borehole database directly (.GTD file).

I. Files needed

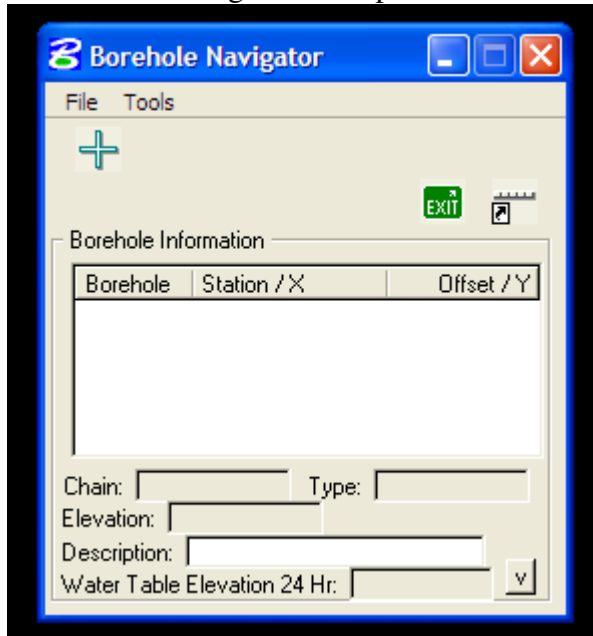
- a. Bore log location file, located on DMS in the GT directory, will be in csv format.
- b. Material file, also located on DMS in the GT directory, will be in csv format.
- c. Gpk file
- d. MAP file
- e. XSF file
- f. .GTD (if this file is provided skip to step II e).

II. Process

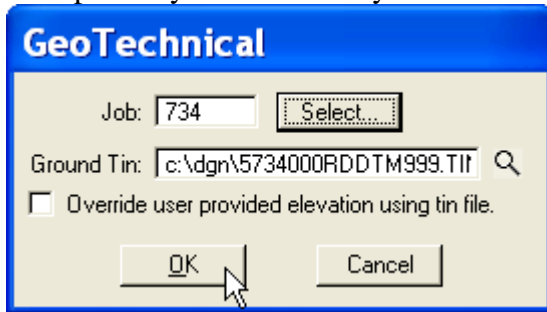
- a. Open the map file and start geopak, load project manager.
- b. Open the geotechnical utility



- c. The borehole navigator will open.



- d. Mouse over “file” and create a “new” .GTD; name according to standards, for example 1234000RDCOR001.gtd
e. Or “open” if you have already created the .GTD file.

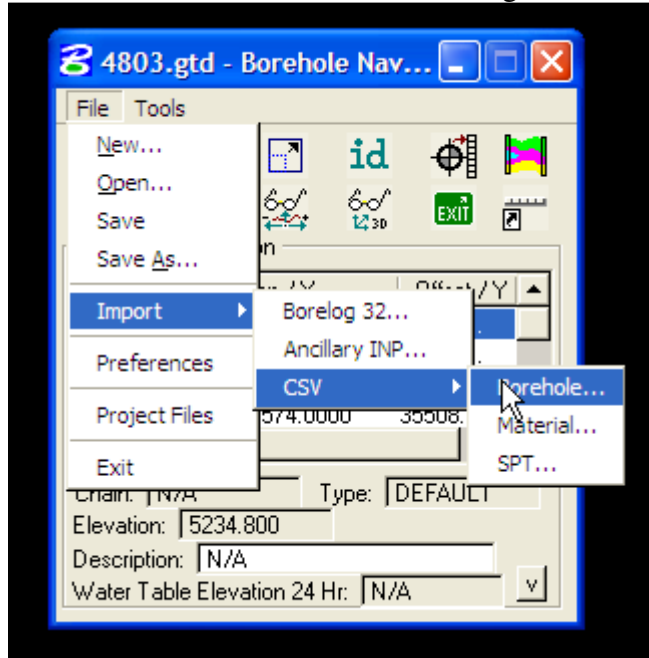


- f.

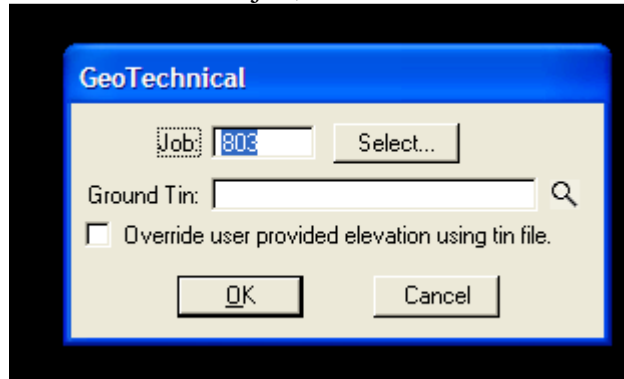
III. Importing Boring Log information

- Open the location .csv file
- If x and y coordinates are provided delete the station and offset columns completely.
- If x and y coordinates are not provided fill out the current chain name for plotting the locations of the logs.
- STATION & OFFSET CUT/PASTE TO X&Y COLUMNS – LEAVE HEADERS**
- Save and close** the location .csv file

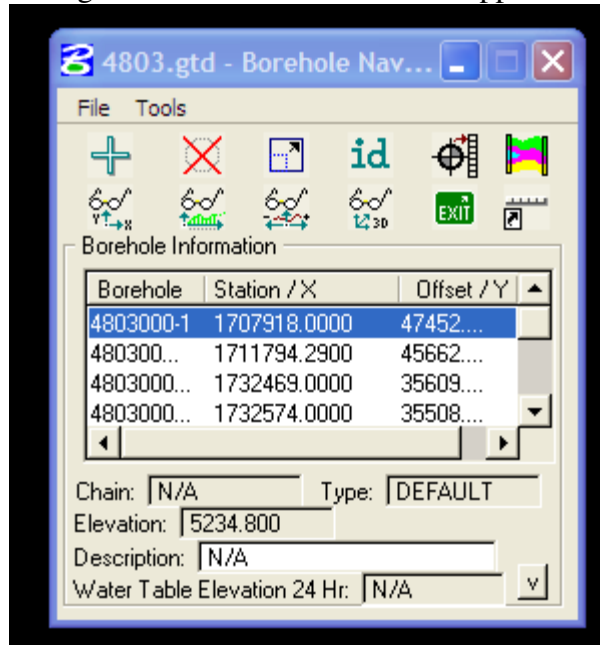
- f. Import the location and material CSV files
 - i. Mouse over “file” in the borehole navigator choose import, CSV, borehole



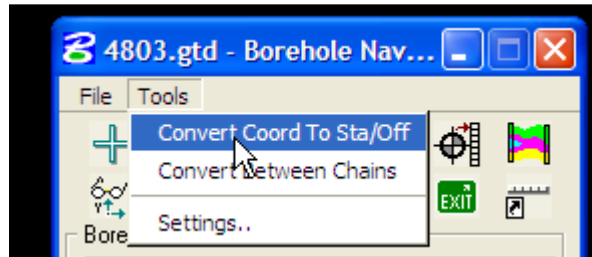
- ii. Choose the correct job, and “ok”



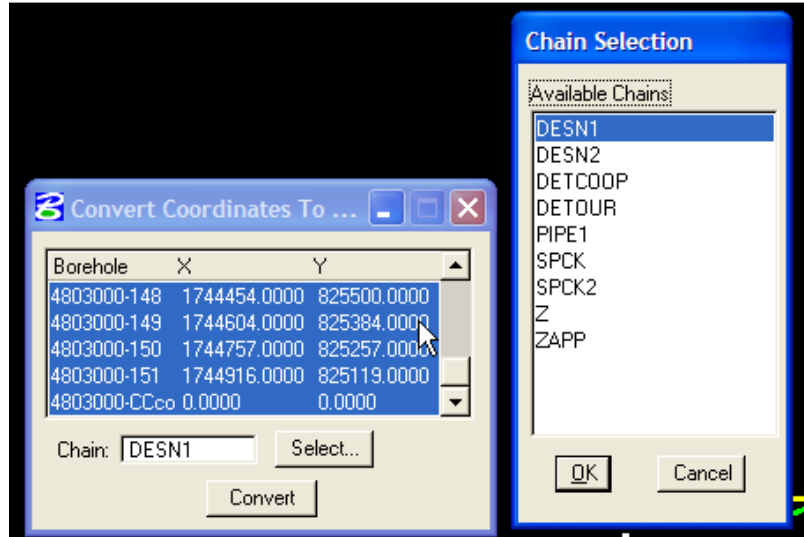
- iii. Boring location information should appear in the Borehole Navigator window



- iv. Again mouse over “file,” import, CSV, choose “material.”
- g. If the location file was imported using x and y coordinates following is how you convert the x and y to station and offset. If alignments change just re-import the original location and material files, and convert to the new alignment. However, if station and offsets were provided proceed to step g.
 - i. Mouse over “tools” and select “Convert Coord to Sta/Off



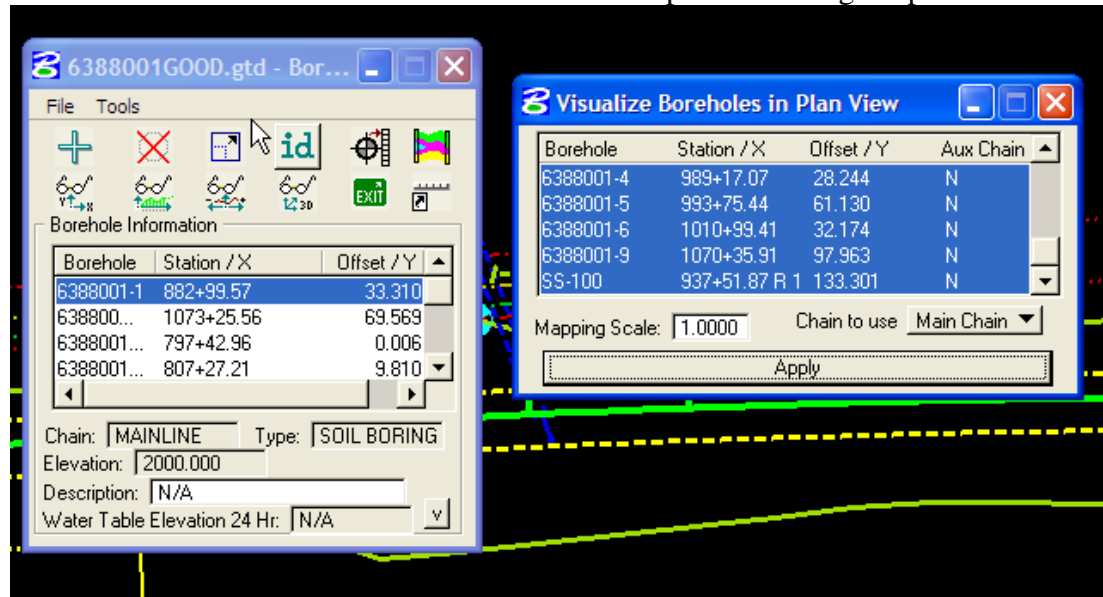
- ii. Highlight all borings to be converted, select the chain to convert to and click convert.



- iii. The station and offset data should now be in the borehole navigator.

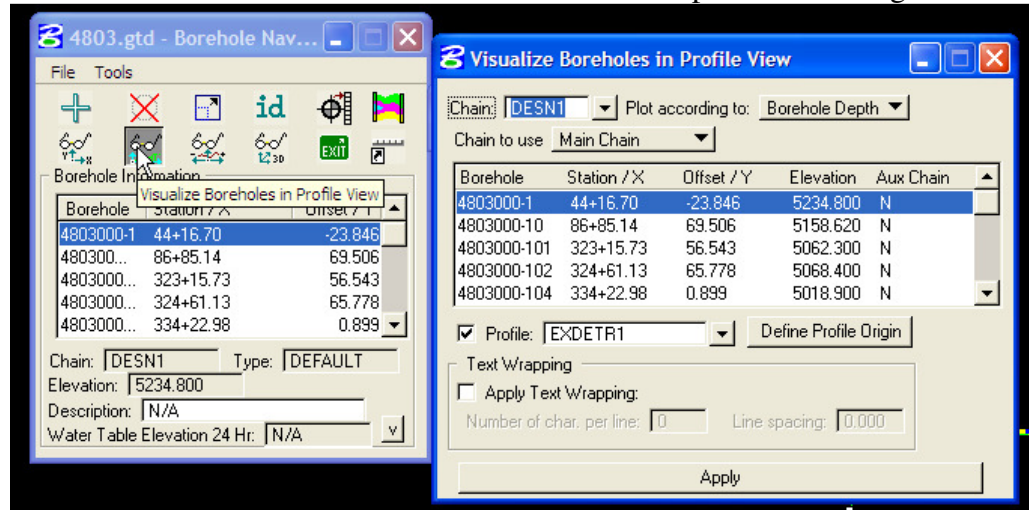
h. Placing soil boring data on plan view

- i. Mouse over “file” and select Preferences
- ii. Mouse over “file” and open MDT_BOREHOLE_ENG_RURAL.GTP or MDT_BOREHOLE_ENG_URBAN.GTP, depending on the scale the alignment and profile is plotted in.
- iii. Click “ok” to accept the preference file.
- iv. Mouse over ‘Visualize Boreholes in Plan View’ to plot the borings in plan view.



- v. Ensure Mapping Scale: is set to 1.00.
- vi. Highlight all logs to be plotted on the plan view and click “apply.”

- vii. All logs should be found on the following layers
 1. E_SoilData_Borehole
 2. E_SoilData_Borehole_Text
- i. Plotting stick logs in Profile view.
 - i. Mouse over 'Visualize Boreholes in Profile View' to plot the stick logs in Profile.



- ii. Choose the appropriate "chain"
- iii. Plot according to "Borehole Depth"
- iv. Always use the Main Chain
- v. Highlight all logs to be plotted in Profile
- vi. Choose the correct profile, and click "Define Profile Origin"

vii.

Define Profile Origin

EXDETR1

Beginning Station: 0+00.00 R 1

Ending Station: 12+68.10 R 1

Beginning Elevation: 5032.36

Ending Elevation: 5052.23

Maximum Elevation: 5053.70

Minimum Elevation: 5007.05

Horizontal Scale: 0.0000

Vertical Scale: 0.0000

Beginning Station: 0+00.00 R 1

Ending Station: 12+68.10 R 1

No Gap(s)

DP Station: 10+00.00 R 1

DP Elevation: 0.0000

DP X: 0.0000

DP Y: 0.0000

ID Cell

OK Cancel

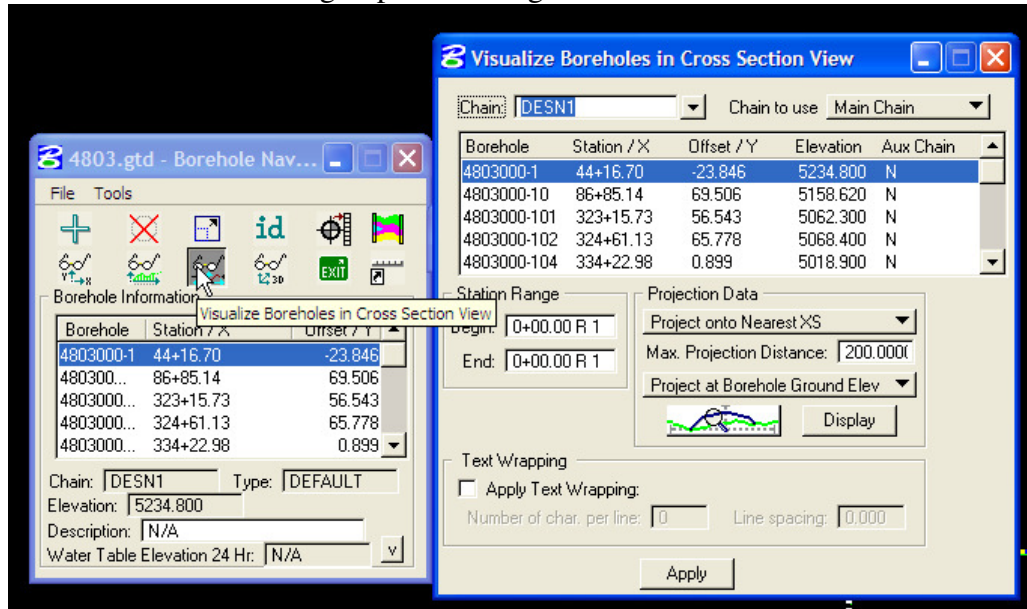
viii. ID the profile cell that you're using. Accept the information, then click apply in the Visualize dialog box. All stick logs that were highlighted should populate in the specified profile on the same levels as described above.

ix. **Insure DP Station matches Beginning station.**

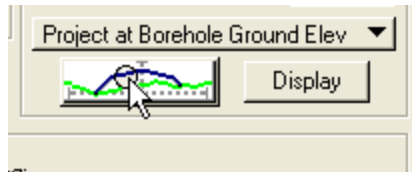
j. Plotting stick logs in x-sec view.

i. Open the XSF file, keeping geopak running, and the Borehole navigator open.

- ii. Mouse over the following to plot stick logs in cross section.



- iii. Choose the proper chain,
- iv. Always use the Main Chain
- v. Highlight the bore logs you want to plot in cross section
- vi. Station range should automatically populate.
- vii. Project onto Nearest XS
- viii. Max projection distance should be 100
- ix. Always project at Borehole Ground Elev.



- x. Mouse over [the image above] and match the existing ground cross section line.
- xi. Click “Apply” to plot the stick logs in cross section.