Carlson Survey 2022 Import .SHP files

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1   INTRODUCTION

The **Import** function allows one or more SHP to import at once. The **Select File**(s) can select more than one file. This command converts ESRI SHP files into Carlson drawing entities and can also optionally write the available attribute data to an external data source which was defined in GIS Database settings.

2   Settings

Under the **SETTINGS** tab, go to **Drawing Setup** and make sure the following settings are set.

- Set to **Metric 1m=?m**
- **Horizontal Scale** to 1000.0
- **Angle Mode** to Azimuth
- **Projection, Zone, Lat/Lon Datum** set to the area the project is working in.
- **Project Scale Factor** set to the scale from the .prj file
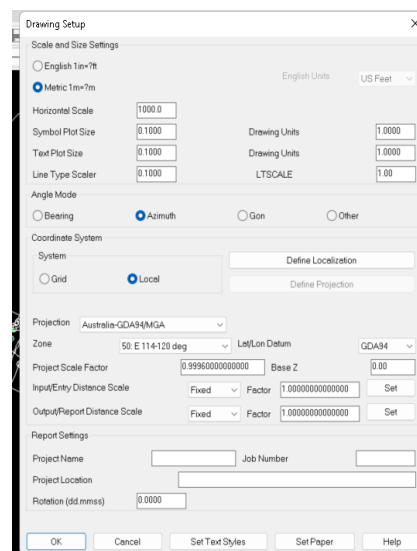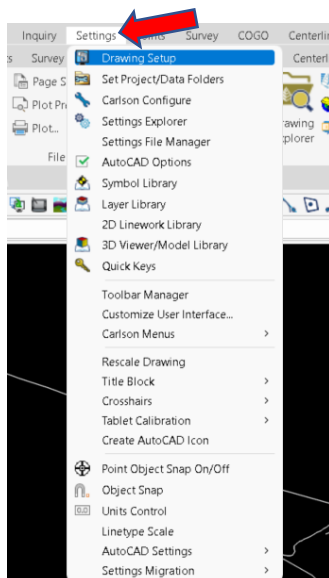
3 Importing Esri SHP File

Under the **GIS** tab there is an **Import Esri SHP File** or alternatively type import_shp into the command line. There are two import Options, Geometry with GIS Data or Geometry only. If the Geometry with GIS Data is selected, then the GIS Data will be imported.   Otherwise, if Geometry only is selected, then only the entities will be drawn.
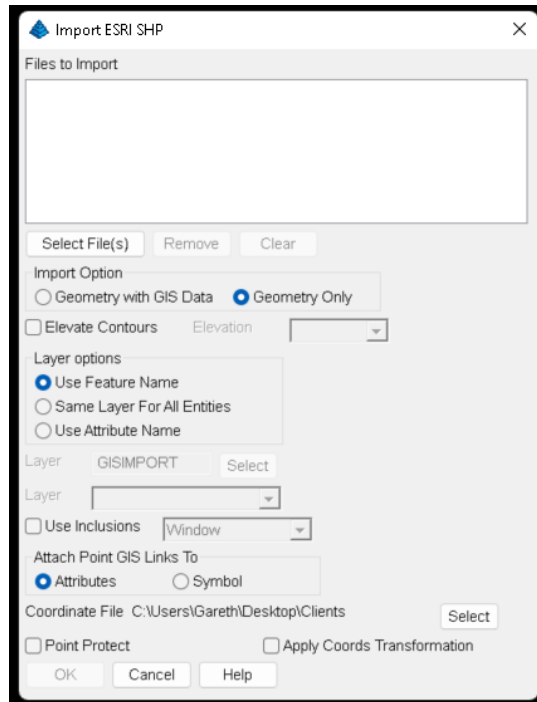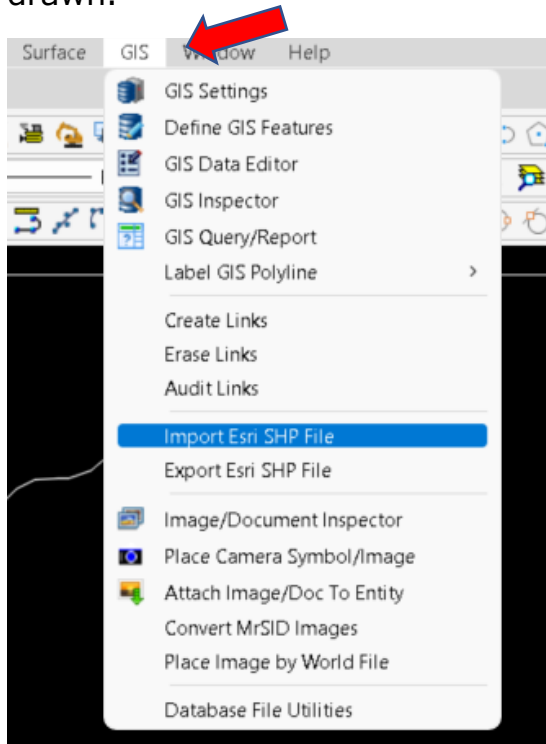
3.1 Layer Options

 It is required to specify layer name which the entities will be created. There are three options for the layer name, **Use Feature Name**, **Same Layer for All Entities**, and **Use Attribute Name**. If the **Same Layer for All Entities** is selected, then it is required to enter the Layer Name. If the **Use Attribute Name** is selected, then it is required to pick an attribute name from the feature's attribute list. This option is only available if there is only one Shapefile selected.
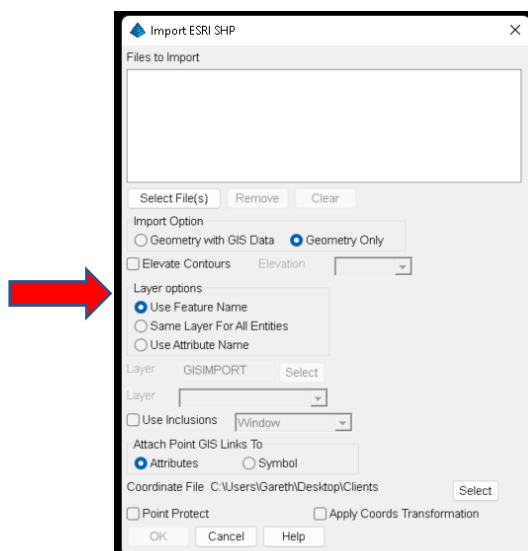
3.2   Select SHP Files to Import-(shp)
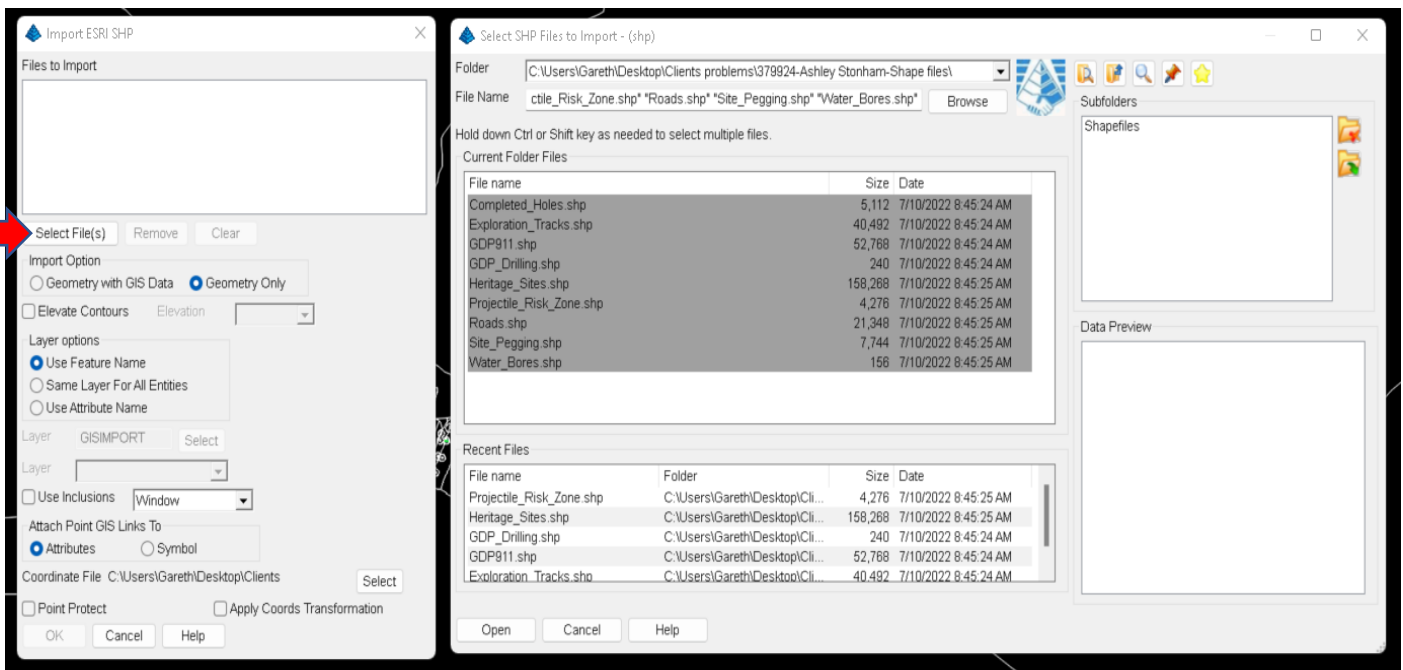
3.3   Primarily types of ERSI SHP files

There are primarily three types of ESRI SHP files: Points, Arcs and Polygons. Each will provide different options on Import.

If there is a points SHP in the file list, then there is the option to setup **Attach Point GIS Links** to either Attributes or Symbol. Also, there is an option to select **Point Protect**. Point SHP files are imported in a three-step process. The first step uses the Import SHP File command to create a coordinate file (.crd/.crdb) for the points in the SHP file and a corresponding table in the points database. The second is to use **Draw Locate Points** to draw the points from the CRD/CRDB file into the drawing. The third step uses **Create Links** to select the points in the drawing and link the database to these plotted points.   Currently, Carlson, only allow to **Configure Attributes for Coordinate file** if there is only a 'Single File' needs to be imported.

3.4   PRJ files

If more than one SHP file is being imported then it is important that they have the same .PRJ data. The .PRJ file can be open via Notepad. Below is an example.

PROJCS["GDA_1994_MGA_Zone_50",GEOGCS["GCS_GDA_1994",DATUM["D_GDA_1994",SPHEROID["GRS_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Transverse_Mercator"],PARAMETER["False_Easting",500000.0],PARAMETER["False_Northing",10000000.0],PARAMETER["Central_Meridian",117.0],PARAMETER["Scale_Factor",0.9996],PARAMETER["Latitude_Of_Origin",0.0],UNIT["Meter",1.0]]