

Legal Descriptions

There is a major difference in the tools that GEOPAK offers for creating legal descriptions. If all you need is a quick working legal description for a stored parcel, the COGO command option will do just that. However, if you need a description that will serve as the basis for a deed, the more versatile Legal Description Editor is the best choice.

6.1 Make Legal COGO Command (Key-in)

Make Legal creates a legal description by metes and bounds. It generates a legal description as an ASCII text-file including the parent tract, takings, and easements based on the stored elements. By default, the wording used is stored in a file named MKLEGAL.INP, which can be redefined by the user and stored under a different file name. The command line syntax is displayed below.

MAKE LEGAL (FOR) PARCEL name (IN) text_file (USING user-defined)

Where **name** is the 1-9 character name of the parcel; **text_file** is the name of the ASCII file to which the legal description is to be written; and the optional **user-defined** is the name of the file that supersedes the default wording (MAKLEGAL.INP) and uses the file redefined by the user.

Examples:

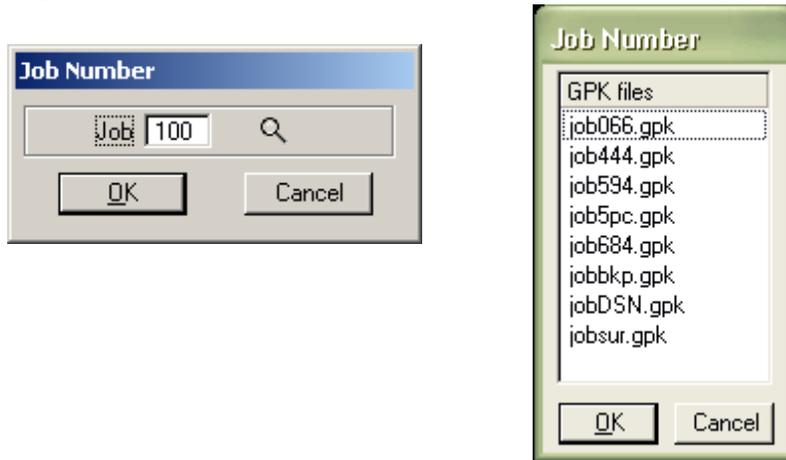
6.2 Legal Description Editor

The Legal Description Editor can be accessed using the icon shown to the right. It is the last icon in the Horizontal & Vertical Geometry toolbox depicted below.

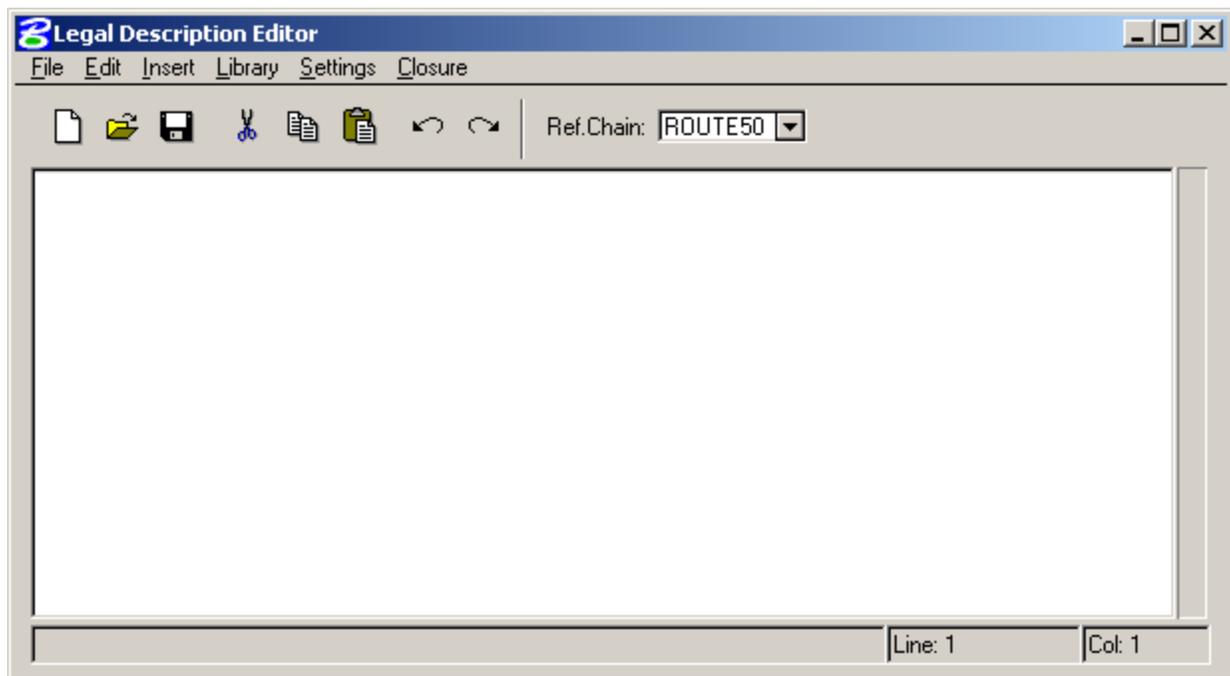
The MicroStation pull down path is **Applications > GEOPAK Road > Geometry > Legal Description** or under the **Geometry > Tools > Legal Descriptions** on the survey menu bar.



When the tool is invoked, the first dialog asks for the Job Number as shown below. Use the browser  to path out to the correct GPK number then select **OK**.



This will bring up the **Legal Description Editor** dialog box as shown below. The actual descriptions are generated in this dialog by manual typing, the usual Windows tools, or by using information stored in the Legal Description Library.



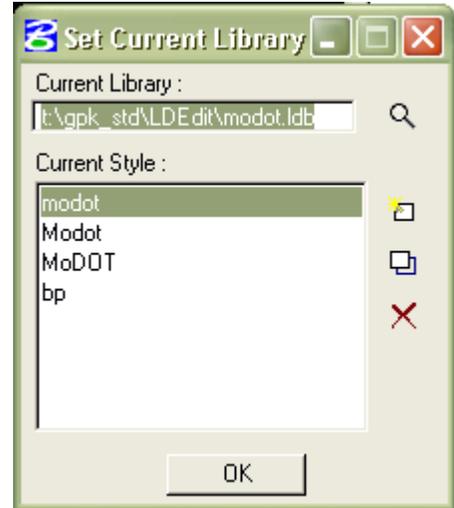
Key parts of the dialog are presented in the following subsections.

6.3 Library

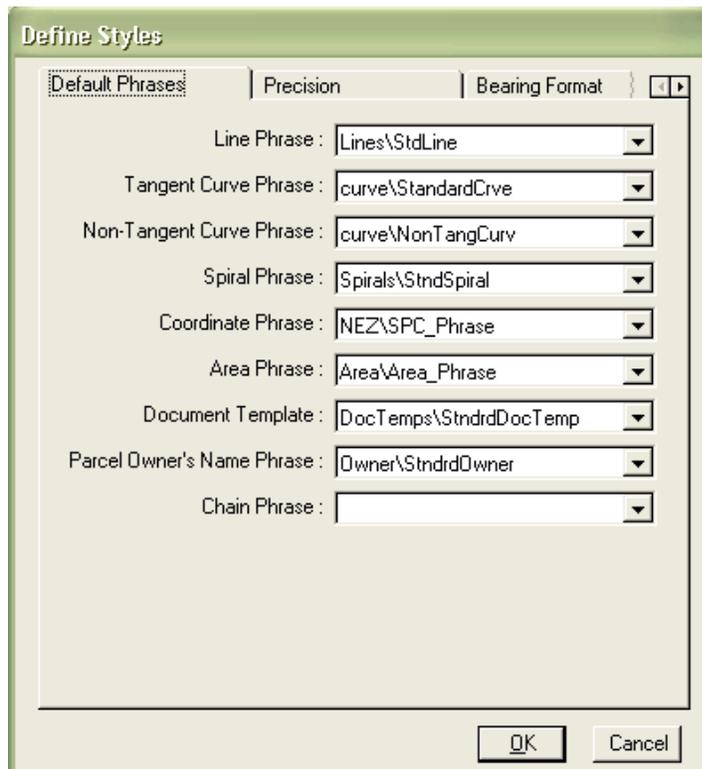
The Legal Description Editor uses a library containing certain pre-defined parameters, which allow the user to select pre-defined default phrases and settings to write a metes and bound legal description.

To set the current library go to **Library > Set Current Library/Style**, which will display the **Set Current Library** dialog depicted below. CADD Support has created a legal description library and it's located on the server. To use the standard library select the **modot.ldb** by clicking on the **File** button and navigating to **t:\Gpk_Std\LDEdit\modot.ldb**. **It is highly recommended that you copy out the standard library to the surv-proj or the de-proj folder on your T:drive. This will allow you to make edits to the library that may be district pacific.**

After selecting a library, select on the add  button to enter the Style Name. Enter the Style Name **MoDOT** if not already there and click **OK**.



If a current style is already set up for “**MoDOT**”, simply select the style and click on the modify icon. This will bring up the **Define Styles** dialog below. This time click **OK**.



6.4 Settings

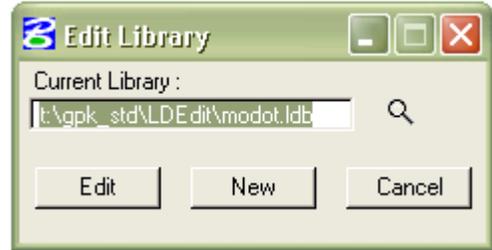
The **Settings > Define Global Settings** dialog may be used to set various settings as listed below.

- **CL Alignment**, selected from the listing of all chains within the specified coordinate geometry database, is utilized for all station / offset requirements. The alignment can also be set in the main dialog box using the list box shown to the right.
- **Sequencing** is set in the next part of the dialog. Two fields identify what the initial number or letter is utilized when sequencing. For example, if the number is set to 1000, numeric sequencing would be 1000, 1001, 1002, etc.
- **Dist. Units** specifies distance units, i.e., feet or meters. The **Feet** option includes both the U.S. and International Foot. The foot options are utilized when converting coordinates from Metric to English or English to Metric. MoDOT uses the **US Survey** foot for conversions.
- **Area Computations** can be calculated using either full double precision or a rounded value that reflects the rounded bearings and distances as inserted to the legal description. Use **Full Precision** unless you are checking a less accurate program.
- **Tolerances** determines whether the line / curve combination is tangent or non-tangent. If the difference in bearing of the line going into the curve and the PC-PI line of the curve is less than the specified tolerance, GEOPAK utilizes tangent syntax. If the difference is greater than the specified tolerance, then non-tangent syntax is utilized.

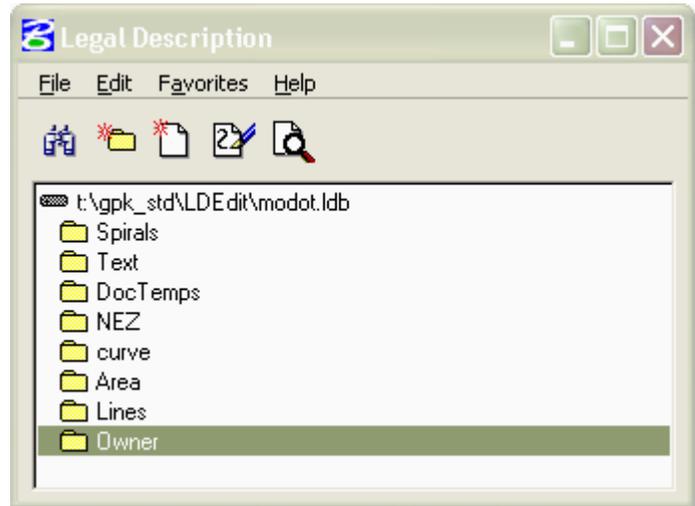
Once the settings are checked, click **OK**.

6.5 Editing the Legal Description Library

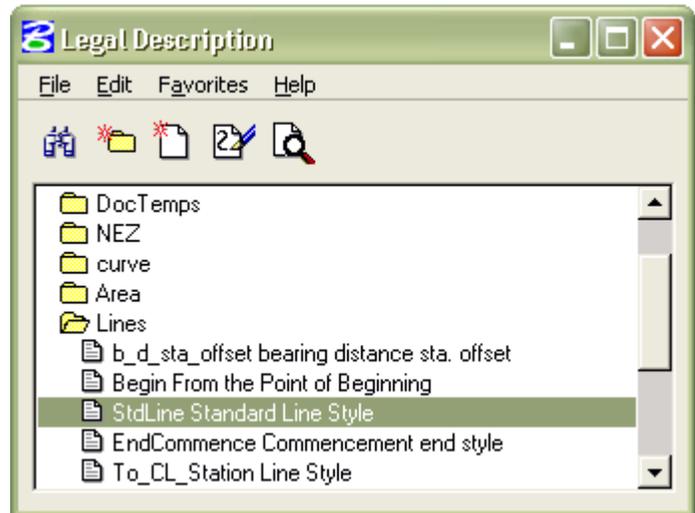
To edit the current library go to **Library > Edit Library**, which will display the **Edit Library** dialog box. This will bring up the current library; you just need to select **Edit**.



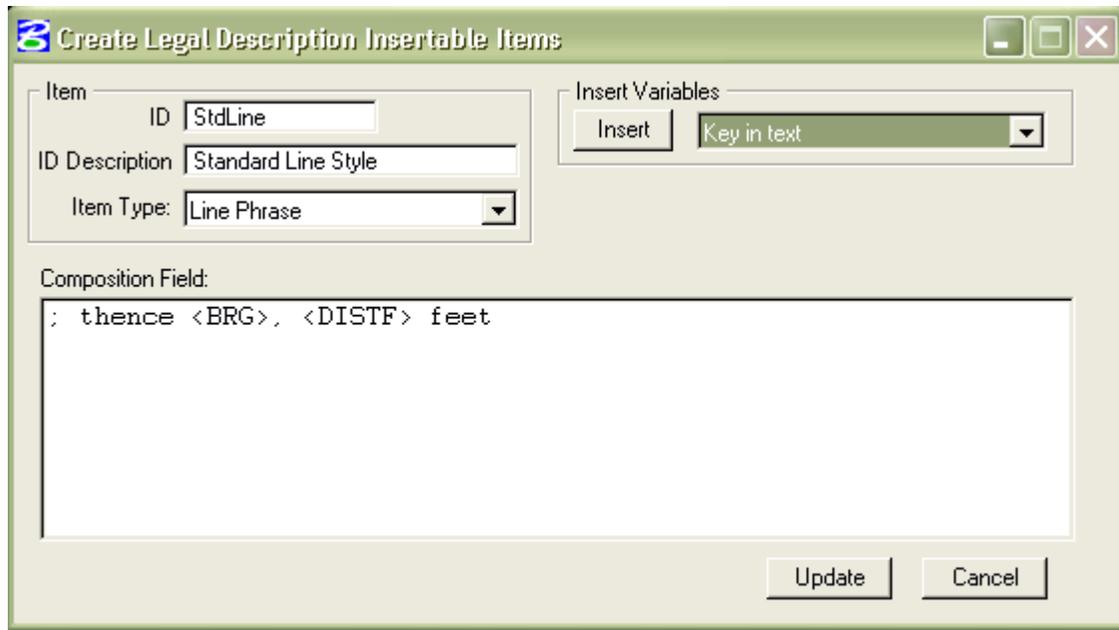
The Legal Description library employs a hierarchical database wherein an unlimited number of groups and/or items can be organized in an unlimited number of categories and subcategories. There are seven folders that contain standard wording for description phrases.



By selecting one of the items (i.e., **StdLine Standard Line Style**) or selecting **Edit > New Item** invokes the **Create Legal Description Insertable Items** dialog, which displays the Item and associated description.



The **Create Legal Description Insertable Items** dialog box can be used to edit existing phrases or create new ones as needed. Four groups are defined within the dialog:



Item - Herein the **ID** (the name), **ID Description** and **Item Type** (one of the seven folders) are defined.

Insert Variables - Dynamically changes to reflect the variables supported under each Item Type.

Composition Field - List box, which dynamically changes to reflect the current description.

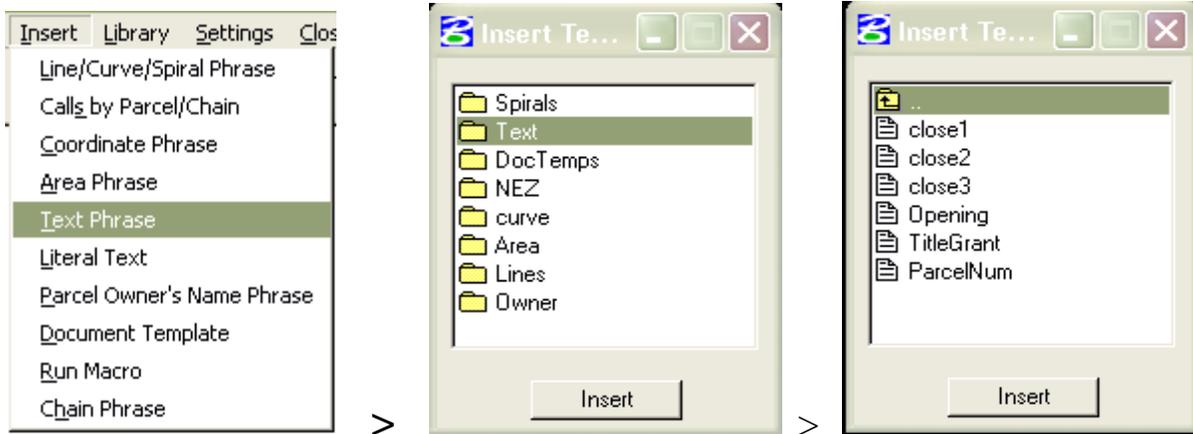
Action buttons - Located in the lower right corner of the dialog, **Update** closes the dialog and updates the Legal Description Library database file, while **Cancel** simply closes the dialog with no updating occurring.

6.6 Insert

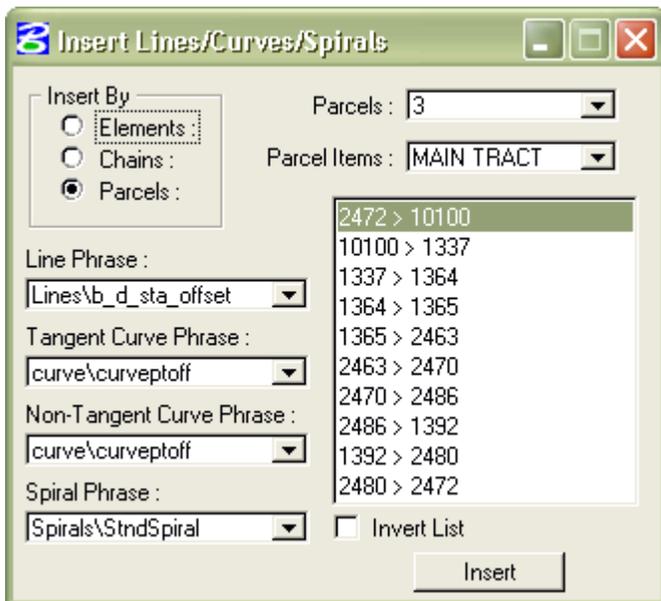
As each item is highlighted in the list, the **Insert** dialog opens. The dialog varies depending on which option is selected. When **Insert** within the Insert dialog is clicked, additional description phrases are added within the list box. If the phrase is not exactly what the user desires, manual changes may be made.

6.6.1 Insert Text Phrase

Several options are supported within the text option and are built into the phrase within the Library.



6.6.2 Insert Line / Curve / Spiral Phrase



Insert By allows you to select from elements, chains or parcels as a feature to describe. Each one will change the look of the dialog box to accommodate additional information associated with the feature.

All the **Phrase** drop downs allow you to pick from the items in the current library.

Invert List When activated, all elements within the list box are inverted. Supported on Chains and Parcels only.

6.7 File

Allows the user to open, save and exit the **Legal Description Editor**.

6.7.1 File > New or clicking on the icon to the left will clear the current description from the **Legal Description Editor** dialog and allow the user to start a new file.

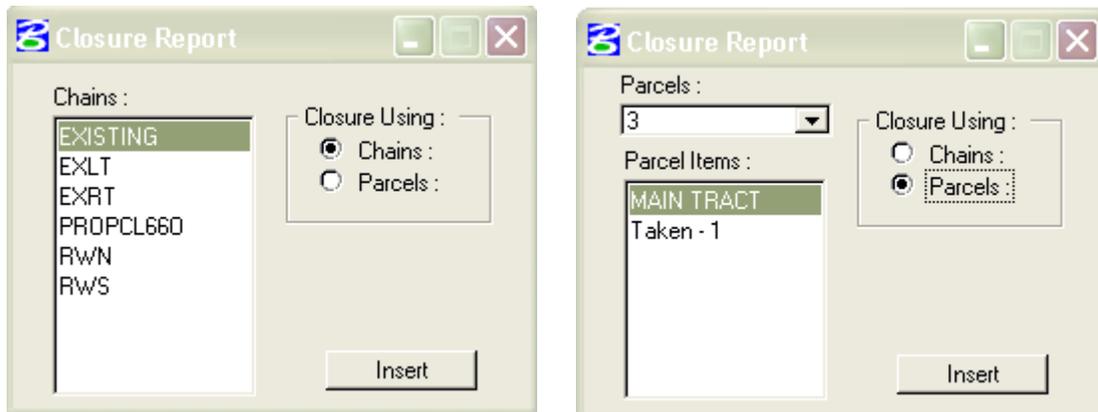
6.7.2 File > Open An existing file can be opened for editing or review by using either **File > Open** or the standard Windows File Open icon to the left.

6.7.3 File > Save/Save As allows the user to save the description. If this is a new description, both the **Save** and the **Save As** options will have the same results.

6.7.4 File > Exit will close the dialog. If the file has not been saved, the user will be asked whether to save changes or not.

6.8 Closure Report

Closure > Report activates the **Closure Report** dialog depicted in its two forms below. The selected radio button in the **Closure Using** area of the dialog determines whether the report is for a **Chain** or a **Parcel**. The box for chains is shown on the left while the one for parcels is on the right.



Clicking on the Insert button will insert a closure report in the **Legal Description Editor**.

