

Legal Descriptions

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 is probably the best tool. However, if you need a description that will serve as the basis for a deed, the more versatile Legal Description Editor is the better choice.

1. Make Legal COGO Command

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.

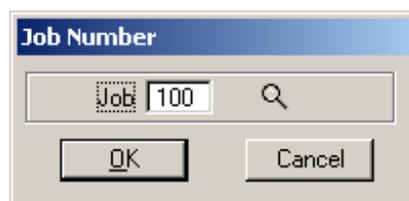
Use the MAKE LEGAL command to create a legal description for parcel 30 in the text file parcel30.txt. View the file, which will be located in the working directory.

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.

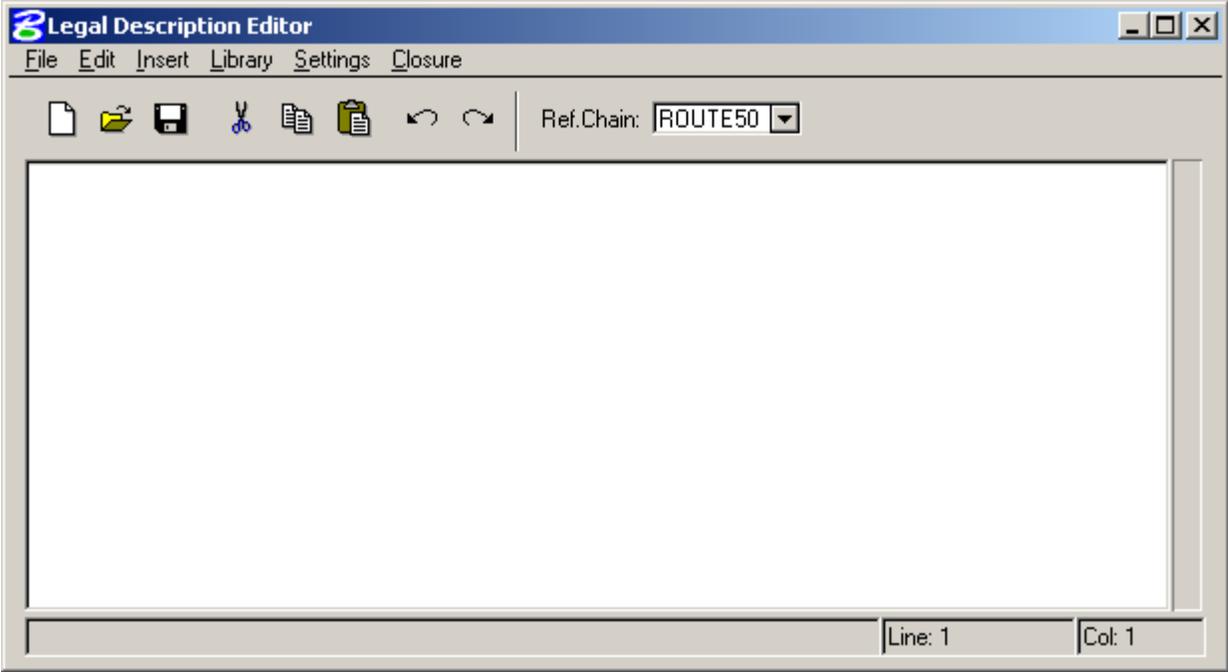


The MicroStation pull down path is **Applications > GEOPAK Road > Geometry > Legal Description**. When the tool is invoked, the first dialog asks for the Job Number as shown below. **Enter Job 100 and click OK.**



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This will display the main dialog box shown below. It is resizable. 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.

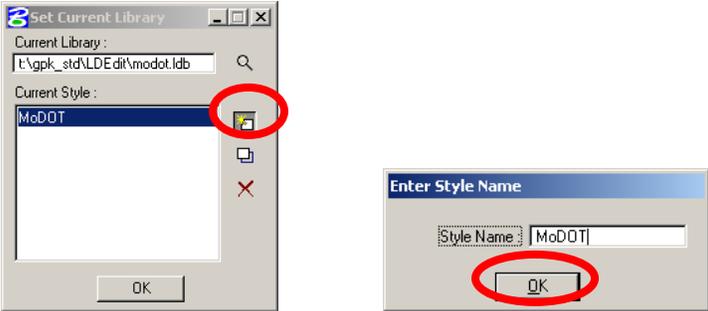


Key parts of the dialog are presented in the following subsections.

2.1 Library

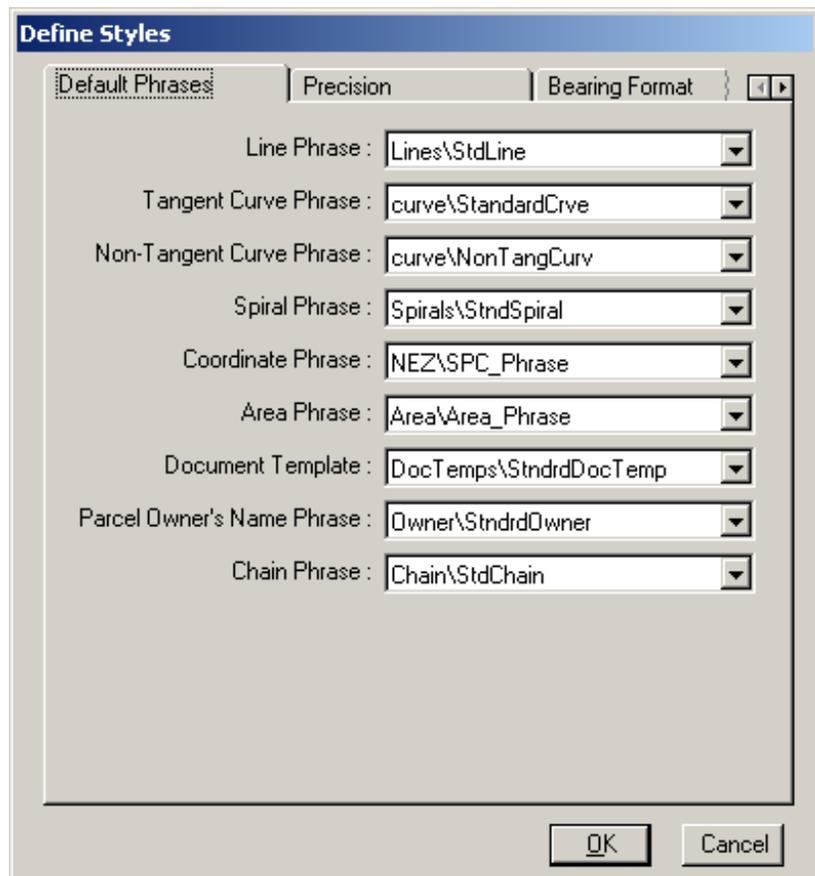
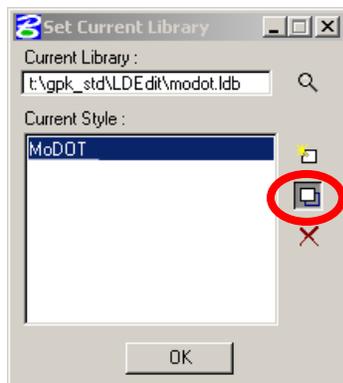
The Legal Description Editor uses a library containing certain pre-defined parameters, which allow the user to select pre-defined default phrases and settings to write a meets and bound legal description.

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. Select the **modot.ldb** by clicking on the File button and navigating to **t:\Gpk_Std\LDEdit\modot.ldb**. After selecting the current library, select on the Add button to enter the Style Name. Enter the Style Name **MoDOT** if not already there and click **OK**.



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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.



View the different tabs if you wish, but do not change anything. When finished, click **OK**. You will again return to the Set Current Library dialog. This time click **OK**.

2.2 Settings

The screenshot shows the 'Global Settings' dialog box. It contains the following settings:

- CL Alignment:** Choose chain which defines the centerline alignment: ROUTE50
- Sequencing:** Next or starting numeric sequence designation: 1000; Next or starting alphabetic sequence designation: A
- Macros:** chains/parcels (button), Expanded (button)
- Dist. Units:** Dist. Units: Feet; Ft. Definition: US Survey
- Tolerances:** Curve tangency (sec.): 1.000
- Area computations:** Full Precision

The **Settings > Define Global settings** dialog, shown above, 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**.