

General CADD Pro

General CADD Pro (GC6) is the new release of drafting software by General CADD specifically targeted at surveyors. Where General CADD has been around for years under several names and has always provided support for surveyors as third party scripts, now the surveyors' routines have been integrated into the main package.

As a general-purpose drafting program, GC6 has all the basic drafting and plotting functions you might need, such as the ability to draw lines, circles, and text, manage layers, snap to existing drawing features, and plot.

The basic command interface can be run off menus on the side or top of the screen, or through dialog boxes, or by typing two-letter commands on a command line.

As a neophyte GC6 user, I found that I was able to locate the commands I needed through the menus and then learn the two-letter versions as I went along to speed up the process. An experienced user would be able to enter commands with one hand on the keyboard while operating the mouse with the other hand and be quite efficient.

The program has many basic features you would expect, such as complex line types, line weight control, raster images, and a wide selection of fonts and hatch patterns. Plotting is provided through normal Windows plotting devices.

GC6 provides dialog boxes that allow coordinate lists to be imported or

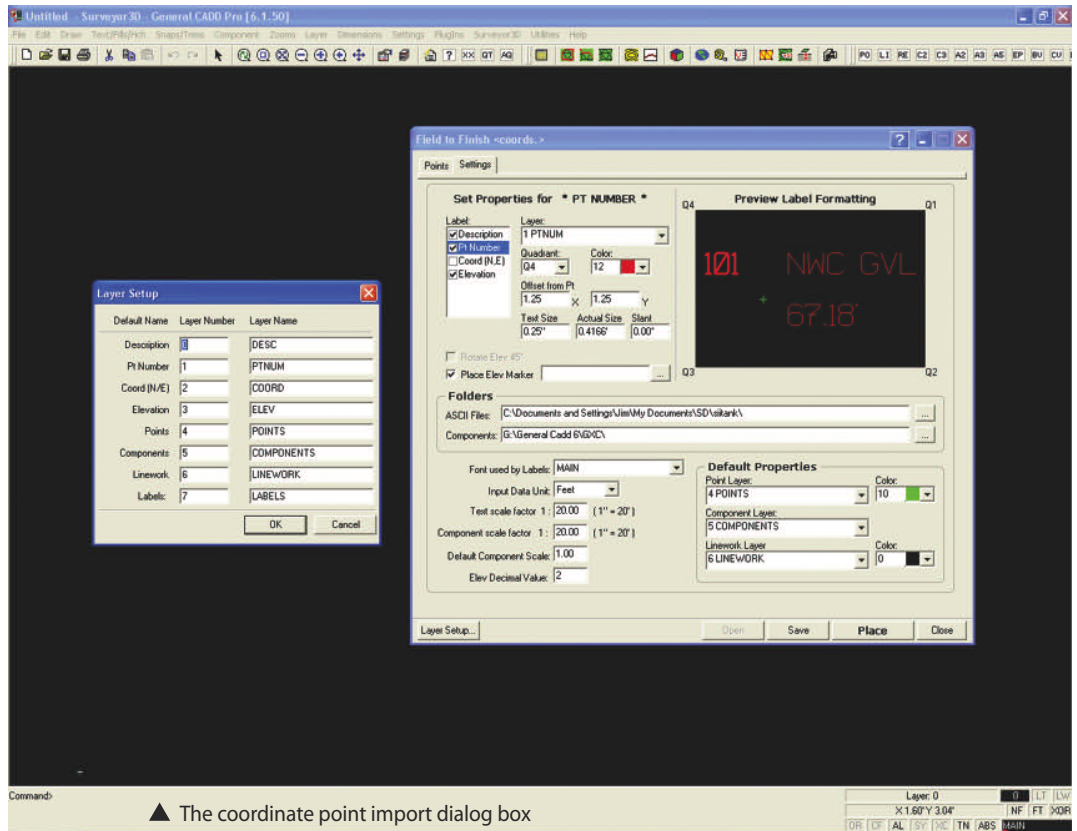
exported. The lists can be formatted in a number of typical ways that are compatible with other surveying software packages. Although GC6 assumes you are using another program or data collector to balance your traverse and convert your sideshots to coordinates, it does provide a compass balancing routine, and sideshots can be entered from the keyboard. Coordinate lists can be extracted from the points in the drawing and then written to a text file to be reloaded into a data collector.

When using COGO commands, GC6 is inherently a two-dimensional coordinate package. It does keep track of the elevation of points for use in its surfacing and contour routines but does not apply the vertical components to the intersections and inverses of COGO. Although all of the intersections can be performed with basic CAD geometry, routines are

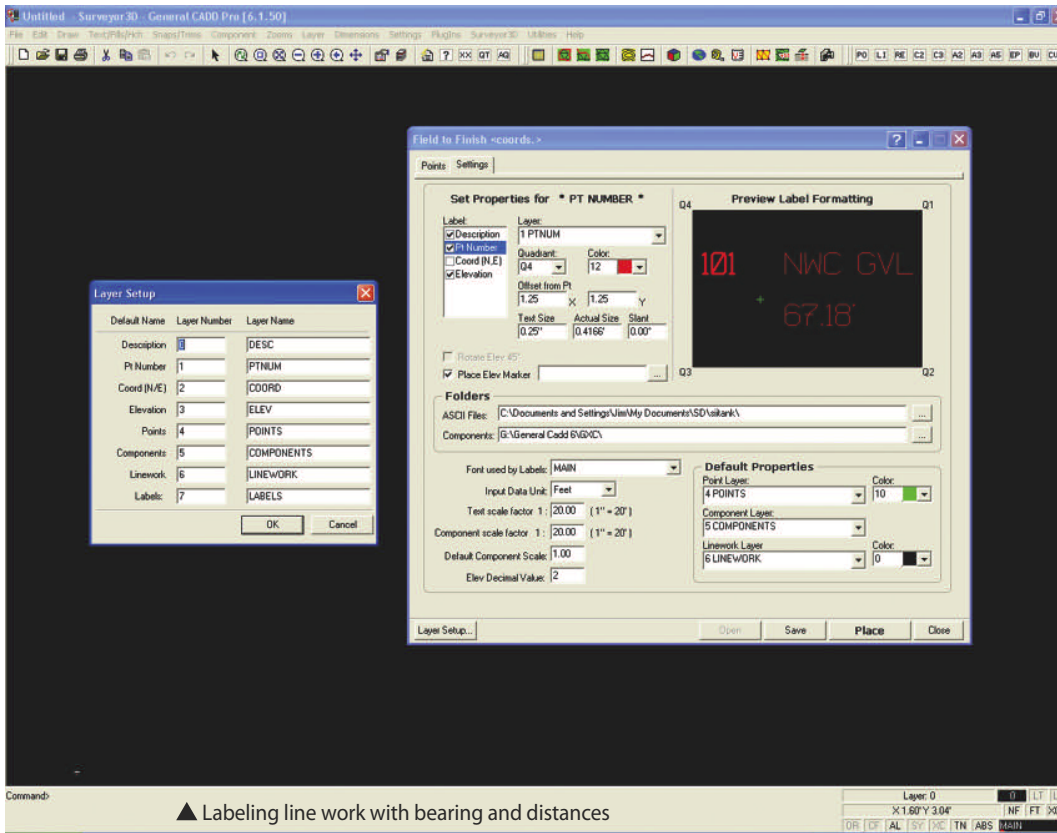
provided for normal intersections. Labeling the bearing and distance of lines can be controlled by a floating menu, which is used in conjunction with the keyboard commands. Raster images can be added to the drawings, and if georeferencing information is available, the images will be placed automatically on the correct real-world coordinates.

Commands are included to create a TIN from sideshots, add breaklines, swap TIN triangles, and then contour the data. Volumes and cross sections can be extracted from the TIN as needed. GC6 uses parametric line types to automatically annotate the contour's interval, if desired.

An important feature of GC6 is the ability to import and export files in other CAD formats. GC6 can read and write Autodesk AutoCAD files from release 9 through 2008. Other CAD data



▲ The coordinate point import dialog box



▲ Labeling line work with bearing and distances

patible with most other versions of Windows.

General CADD 6 has the ability to map almost any project that a surveyor would work on. With its low cost per seat and its ability to use other CAD systems file formats, General CADD 6 could easily be integrated into just about any surveying office as a very effective tool. ↓

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types such as text fonts and hatch patterns can be imported and converted for use.

Documentation is easy to access, with the F1 key or help button, and provides the information needed along with examples for the command. Having used AutoCAD for about 20 years, I found the command structure of GC6 easy to pick up and would expect to be quite proficient after a few weeks of concentrated production use. Although this package has been evolving for many years, it has maintained a very consistent, useable and learnable user interface.

This review was prepared from GC6 release 6.1.50. The package sells for \$698 and uses a USB security dongle for each license. Upgrades, plug-ins, and numerous scripts are provided via downloads from General CADD's website, with new commands and functionality being added frequently. Many of the surveying commands are actually scripts that have been provided by other users. Although I reviewed GC6 on Windows XP, it is com-



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