

Creating Contour Map using 3D Grid File

The following instructions will guide you through the process of creating a contour map from the surveyed point data that represents the existing field conditions. These instructions assume that the point data has already been downloaded and drawn in Carlson Software, and that you have already created your grid file. Carlson modules are displayed as **{Civil Design}**, main menus are displayed as **[Surface]**, and submenus and menu commands are displayed as **<Contour from grid file>**.

- 1) If there only certain areas of the plan view to be contoured draw an inclusion boundary around that area. (i.e., perimeter of site)
- 2) If there only certain areas of the plan view to be excluded from being contoured, draw an exclusion boundary around that area. (i.e., building outlines)
- 3) Inclusion and exclusion lines must be closed polylines.
- 4) Create Contours from grid: **{Civil Design}** \implies **[Surface]** \implies **<Contour from ...>** \implies **<Contour from grid file>**
- 5) In the command line it will prompt the user to select inclusion area polylines. Select any inclusion polylines if applicable.
- 6) Next, in the command line it will prompt the user to select exclusion area polylines. Select any exclusion polylines if applicable.
- 7) The Grid File to Process dialogue box: Select the grid file that was created for the project, then click **"Open"**.
- 8) The Contour from Grid File dialogue box: The parameters from the contours to be created are set here.
- 9) Rename the contour layer name as desired by the user (i.e., CTR - Existing), change the contour interval to fit the site.
- 10) If the Draw Index Contours option was selected, the Index Contour Options appears.
- 11) Click the Index Contour **"Settings"** button and set the parameters for the contour index.
- 12) The user can now set the index interval of the index contours, the line width, the layer of the index contour, and the color. Click the **"Settings"** button to set these parameters. Once the options have been set click **"Ok"**.
- 13) In the command line the number of cells read appears.
- 14) The command line displays the values being contoured as they are drawn on the screen.
- 15) The site is now contoured.