CivilCAD 2004
The new generation

NewsLetter 9   *CivilCAD 2004 Version 3*

The 1st quarter of 2005 marks the release of the new *CivilCAD 2004 Ver 3*. Following our tradition in former versions, this version also includes improvements in performances, usability and addition of new features. The concept of simplicity and easy access remains. As in former versions, in this version we have also tried to refer to customers' notes and requests.
At the beginning of the New Year we are celebrating our user number 2000 and wishing to maintain our desire of been No. 1.

CivilCAD 2004 3D ACT
Simulation at a simplicity and quality you have never met

Existing G.L and future design simulations have lately become an integral part of the majority of civil engineering projects. The need in 3D simulation is in two major aspects:
- A visualization tool for committees and public organizations.
- An engineering tool that enables the designer to check and trace problems in the design.

CivilCAD 2004 3D ACT, Sivan Design's new software, is the outcome of over a year of intense cooperation between Sivan Design, *CivilCAD 2004* developer and 3D ACT, 3D simulations specialists. *CivilCAD 2004 3D ACT* is the implementation of the companies' mutual vision to create a software that enables a 3D simulation as part of every engineering project, at a single click, without extra costs and at the highest standards.

We will be happy to supply more details on the new product upon demand.

Jerusalem mountains, 2005

Changes in the software's upgrades policy

Downloading **CivilCAD 2004** upgrades from the company's web-site (www.sivandesign.com) has become an efficient, easy to use tool to maintain the customer's product up-to date. Lately we have changed the software's upgrades policy – after downloading the file and running it in the computer, a message requesting an authorization key will appear. The request will be followed by a unique key number that will be supplied by the software. After sending the number to Sivan Design (send to: support@sivandesign.co.il), the number will be processed and an authorization key will be resent, enabling using the software and updating it for the entire service period of the customer. At the end of the service period, another request for a key will appear, supporting upgrades for an additional one year.

Innovations, changes and improvements

Roads

1. **Vertical alignment template**
In the new version we enable the user to save an AutoCAD file that will be later used as the V. Alignment's TEMPLATE for layers' colors definitions, line widths definitions etc. The file will be saved as RoadVer.dwg and will be located in the CivilCAD 2004 folder (C:\CivilCAD 2004). This option is valid for AutoCAD users only.

2. **Improvement in the road's layout layers deletion process**
Recreation of roads' layouts has been changed and works much faster.

3. **A new option to read and write Super elevations data**
In the new version, the user can read and write the data of the Super elevations table from/into an ASCII file. To use the option, new read and write buttons have been added to the SE window, enabling to import/export the table's data into an external file.

4. **Definitions for the affects of the Super elevations**
In the Super elevations window, a new option has been added enabling to define the affect of the SE according to the following two options:
    a. Change shoulders according to current segments.
    b. Change current segments only.

Option (a) is the same option that exists in the former version – changes in the asphalt segment will affect the shoulders to change correspondingly – shoulders that have a lower slope than the asphalt slope will be automatically changed to fit to the asphalt slope. Option (b) fixes the slope's changes to the current segment only (either the asphalt, shoulder, side walk or any other segment that is currently been used) in such a way that there is no mutual affect between the segments.

5. Cross sections frames (sheets) division

This option has been completely changed. The DXF button has been removed and joined into the Frames division button. In the frames division window, there are two new main options:

    (1) Model space -   the cross sections' sheets will be created in the Model space (automatic division into files).

    (2) Paper space -   The sections' sheets will be created in the Paper space (as been before).

Three options have been add to the Model space:
- The option to choose the paper size (A4-A0) or use Custom size.
- The option to add the company's logo.
- Arranging the sections in the paper by rows.

Another option that has been added to the window enables to maximize the number of sections in a sheet by reducing the space between the sections while been arranged on the paper. To use this option, remove the check sign from the 'Align sections by rows' check box.

6. Joining the format of cross sections' TEMPLATE files in the 'Cross sections' and 'Extract' windows

The typical cross sections format in the Cross sections and Extract windows has been joined into one format (TML files). The format enables creation of a Template that can be read from both windows.

7. Changing the 'Options' window format

The roads' 'Options' window has been changed to include sub-forms. Each category (Vertical alignment, Cross-sections etc) has been divided into a separate sub-form. Choosing between the sub-forms will be done by the "Category" Combo-box at the top of the window.

Walls design

8. Two walls design methods (formats)

The walls design module (retaining walls) has been separated into two main methods- Format 1 for roads designers and Format 2 for land developers and site engineers. Setting the format will be done through the Walls list window, in the combo-box at the top. The main differences between the formats are: (a) The display, (b) Format 1 can be attached to a road while Format 2 works as a stand-alone wall only.

9. Working with AutoCAD in the walls profile

AutoCAD users can use the AutoCAD as the profile's drawing environment. As part of this change, the user can also set the actual scales of the profile (Format 2 will usually be shown at identical scales for height and length).

10. Filtering heights from the layout to the profile
Working in Format 2 enables to scan and filter blocks from the wall's layout to the profile. By placing the USER_WDLEVEL.dwg block (located in the software's folder) on the wall's layout, along the alignment, the user can define the G.L at the front AND back of the wall and the level at the top of the wall. After doing so, the software can scan these levels and project them onto the profile.

11. Automatic steps definition along the wall (Format 2 only)
By pressing the Init options button (a white paper button) in the vertical alignment, you can automatically create steps in the wall's profile, in any desire space and height.

12. Wall's profile TEMPLATE
The same as in roads, the new version enables to save an AutoCAD file that will be later used as the profie's TEMPALE (saving layers colors, line widths etc). The file will be saved as 'Wallver.dwg' and will be located in the software's folder (C:\CivilCAD 2004). The option is available for AutoCAD users only.

General:

13. Windows 98 and AutoCAD 2000 - 2005
The problem of using the software with Windows 98 and AutoCAD 2000 – 2005 has been finally solved.

14. Working with Total stations
The new TopCon 7000 total station and Sokkia's new series of instruments have been added to the software. You can now easily read and write files directly from/to these instruments.

15. Working with AutoCAD 2005
The new version is fully compatible with AutoCAD 2005.

16. Showing contours in designed planes
The option of showing contours in designed planes (designed contours) has been changed to enable controlling the contours display from the Design planes 'Options' window.

<u>Pipelines</u>

17. Manually setting the pipe's layout width

You can now set the pipe's layout width manually. In the 'Options' window of the pipeline's layout, a 'Pipeline width' field has been added, enabling the following VALUES:

- 0 value - The line's width will be defined by the pipe's diameter.
- 1 value - No width to the line.
- Other -   The line's width will be according to the entered value.