Carlson Civil

— Civil design that puts you in the passing lane

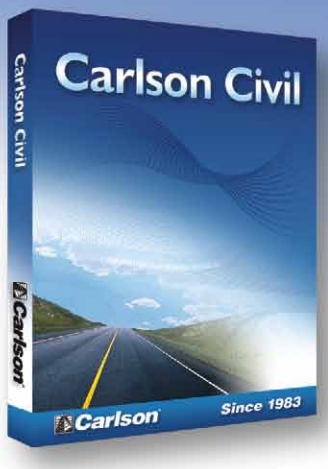
Get Powerful Automation

What might take days with other civil software takes just hours, or even minutes, with the powerful, intuitive Carlson Civil.

Road NETwork. Build all roads, intersections and cul-de-sacs in 2D and 3D with a single click of the "PROCESS" button.

Site NETwork. Elevate your estimating accuracy with this intuitive layer-based surface generator and earthwork calculator.

Lot NETwork. Quickly define an entire subdivision of lots based on an outer boundary, interior ROWs or Centerlines, and a simple set of user-defined "rules," then pick "PROCESS" and the lots appear, defined and labeled.



Be Competitive with Carlson

"[Carlson Civil] enables us to provide the same service as the big firms without the level of cost."

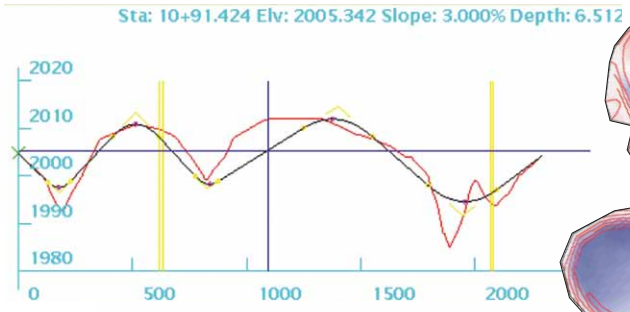
Eric Almond, *Almond Engineering, PA, Jacksonville, Florida*

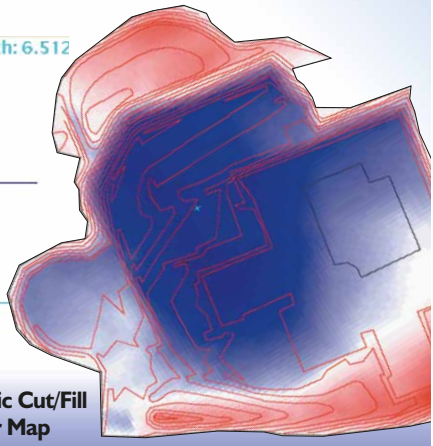
"Since we started using Carlson Software, we've been able to be much more responsive to our customers. We can get answers to them in a much shorter amount of time. And the Carlson support staff is outstanding. It amazes me that I can call in, get a person right away, get my question answered and be right back to production."

Carlson Offers Choice

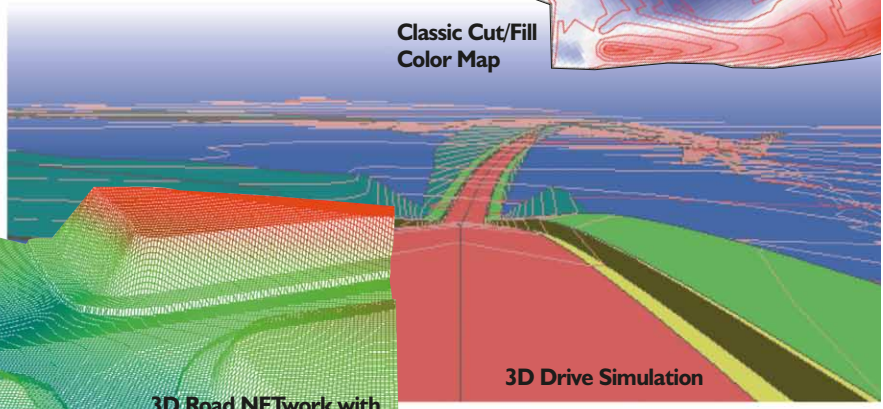
- AutoCAD® or IntelliCAD® – Carlson Civil runs on top of any AutoCAD® or Map® from versions 2004 and up AND Carlson Civil comes with built-in IntelliCAD®
- Automatic, Prompt or Manual – Carlson's fully dynamic design environment – its trademark "networking" – means that changes made to one aspect of your design are reflected in all other related aspects
- 2D, 3D, or Flyover – get true 2D, easy-to-use 3D, plus the ability to view an aerial image draped onto a surface in both the Carlson 3D Viewer and Surface 3D Flyover
- Affordable, Voluntary Maintenance Programs – Carlson customers are allowed to choose to upgrade based solely on the merits of the software's new features. There is no retirement of software.

Road Design Interface with Dynamic Graphics

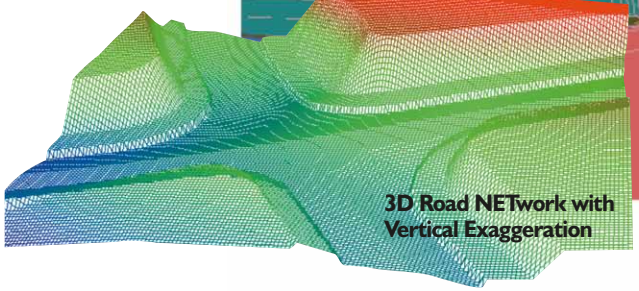




Classic Cut/Fill Color Map



3D Drive Simulation



3D Road NETwork with Vertical Exaggeration

AUTODESK®
Authorized Developer

Authorized IntelliCAD® Technology Consortium Member

Find out more now: call 800-989-5028 or visit www.carlsonsw.com/civil

Since 1983

Carlson®
...For the Total Project

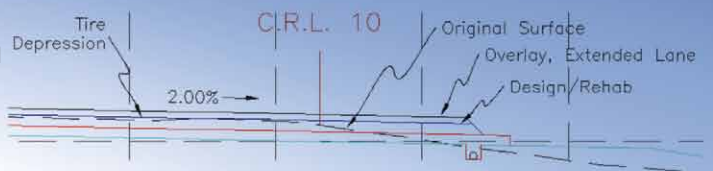
Carlson Civil

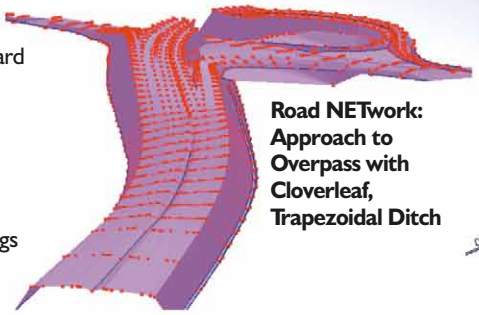
— Advanced technology that works for you

Top New Features

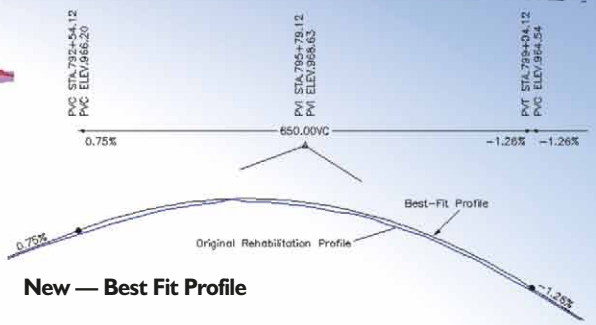
- **New Dual CAD/3D Viewer** — check the design and adjust the drawing at the same time
- **Road NETwork Enhancements** with support for rounded template transitions and medians that cross the centerline
- **Cleanup for Lot Linework** that automatically finds any overshoots or undershoots and highlights them
- **New Footprint Creator** — a library of different house footprints
- **Road Rehabilitation** command to create profiles for specified overlay with milling or leveling.
- Command for **Vehicle Path Tracking**, which allows you to trace wheel paths for vehicle dimensions along centerline.
- **Edit Contours** and instantly update the underlying 3D model (updates the underlying TIN surface to match the modified contours), a feature that is unique to Carlson.

Template Detail for Road Rehabilitation





Road NETwork: Approach to Overpass with Cloverleaf, Trapezoidal Ditch



New — Best Fit Profile

General

- CAD Platforms: AutoCAD versions 2004 and up as well as AutoCAD Map, Land Desktop and Civil3D, and IntelliCAD 7.2
- Project Setup: Flexible data and settings storage
- Drafting Enhancements: Handy tools for working in AutoCAD/IntelliCAD
- Data Compatibility: Supports industry standard LandXML plus specific data conversions
- Languages: Spanish, Portuguese, Russian, French, German, in addition to English

CAD Standards

- Draw Standard Item: Create common CAD entities with pre-defined properties
- Settings Explorer: Manage all program settings from single interface
- Settings Libraries: Setup tables for symbols, layers, road templates, etc.
- Data Depot: Document management for workgroups and archiving
- Project Sub-Folders: Custom controls of data folders by type

3D Data

- Elevate 2D to 3D: For spot elevation, polylines, contours and pads
- Edit-Assign Polyline Elevations: Elevates 3D polylines using control points
- 3D Polyline Tools: Draw, offset, fillet and merge 3D polylines

Surfaces

- Build Surfaces: By triangulation or rectangular grids
- Contouring: One step from 3D entities or from surface files
- Triangulation Utilities: TIN math and offset, simplify and merge functions
- Surface Manager: Change surface properties and data
- 3D Surface Flyover: 3D viewer with vehicle to drive over surface or follow 3D path
- Slope Analysis: Slope reports and zone analysis

Grading

- Volumes: Earthwork volumes between triangulation or grid surfaces
- Pad Design: Tie cut/fill slopes from pad perimeters
- Cut/Fill Color Maps and Labels: Draw shaded red/blue map with labels
- SiteNET: Organize surfaces by layer with subgrade adjustments

Centerlines

- Design Centerlines: Input alignments on screen or in dialog with graphics
- Label Stations and Offsets: Annotate along centerline at selected points
- Calculate Offsets: Reports stations and offsets for selected points along centerline
- Offset Points: Create points at specified stations and offsets
- Spirals: Flexible handling of most complex spiral curves

Profiles

- Create Profiles: From surfaces, screen entities, points on centerline, etc.
- Quick Profile: One step profile creation with real-time updates
- Input-Edit Profiles: Enter profile data in dual spreadsheet and graphics
- Draw Profiles: Draws profiles on grids or plan-profile sheets
- Profiles To 3D: Create points and 3D polylines from profiles

Sections

- Create Sections: From surfaces, screen entities, points, etc.
- Quick Sections: One step creation of sections
- Draw Sections: In vertical stack or sheets
- Input-Edit Sections: Enter section data in dual spreadsheet and graphics
- Sections to 3D: Create points and 3D polylines from sections
- Mass Haul: Diagrams and Analysis
- Section Volumes: By end areas method

Road Design

- Template Design: Detailed yet simple template design
- Template Transitions: Define transitions for templates and superelevation
- Road Network: Dynamic road design with intersections and cul-de-sacs

Points

- Draw Points: Draw points with settings for symbols, layers and styles
- Point Groups: Point group manager to define sets of point by filters
- Coordinate File History: Tracks all changes to points with report and undo functions
- Fix Point Label Overlaps: Finds point label overlaps with rules to fix automatically
- Point Tools: Utilities for modify point labels such as move with leader, twist and resize

Area/Layout

- Label Areas: Customized area label styles
- Size Areas: Sliding side, hinged and radial from curve
- Lot Manager: Definitions by point numbers
- Lot Network: Size lots along alignment
- Parking, Intersections and Cul-de-Sacs: Layout for linework

Annotation

- Angle & Distance Labels: Flexible routines to label linework
- Curve Labels: Label curve data in stack, along arc or in table
- Mapping Labels: Routines to create typical plat labels
- Linetypes: Draw special linetypes

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