SURVEY

Carlson
BREAK NEW GROUND

Surveyors' #1 Software Choice

- Get full tool kit – everything from network least squares to surface modeling
- Work seamlessly between office and field
- Establish company-wide design styles
- Create GIS links & exchange Esri® data

Choose your platform – Carlson Survey works on:

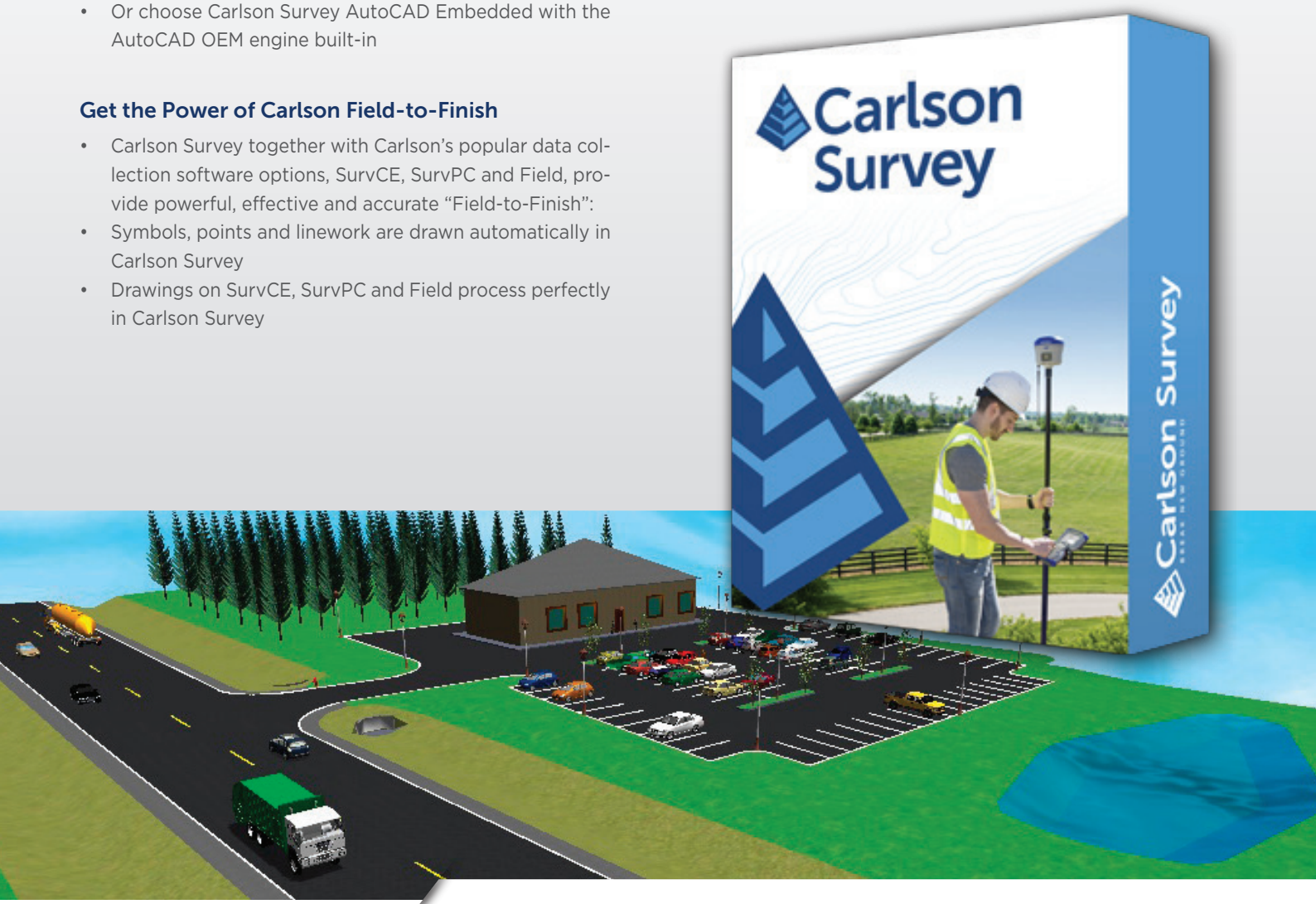
- AutoCAD® versions 2007 to current
- IntelliCAD® (built-in)
- Or choose Carlson Survey AutoCAD Embedded with the AutoCAD OEM engine built-in

Get the Power of Carlson Field-to-Finish

- Carlson Survey together with Carlson's popular data collection software options, SurvCE, SurvPC and Field, provide powerful, effective and accurate "Field-to-Finish":
- Symbols, points and linework are drawn automatically in Carlson Survey
- Drawings on SurvCE, SurvPC and Field process perfectly in Carlson Survey

"Carlson works because their developers come from a survey background. I find it has the right kind of thought process – the way it leads you through [the survey process] is exactly the way a surveyor thinks."

Stewart Bazeley, Baypoint Surveys, Bournemouth, Dorset, U.K.



AUTODESK. Authorized Developer

Authorized IntelliCAD® Technology Consortium Member

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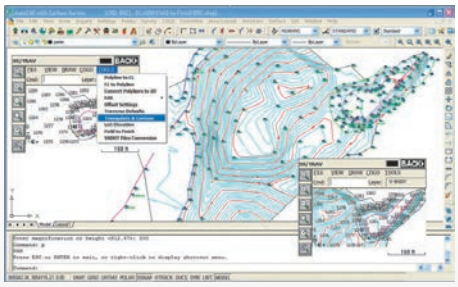
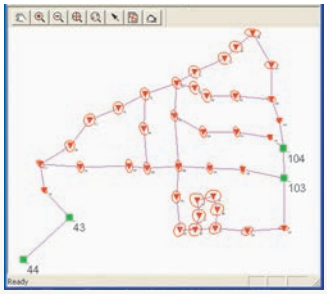
Carlson SURVEY - Features

Top New Features

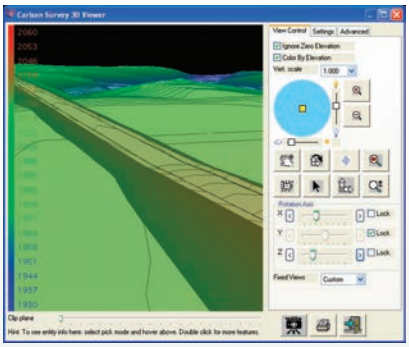
- **Carlson Cloud:** Transfer files and messages to SurvCE users in the field
- **Geodetic Mapping:** Calcs for geodetic angles, distances and areas
- **Annotative Text/Points:** Auto resize for drawing scale.
- **Lock Points:** Lock selected points in the coordinate database to prevent modifications
- **Field-to-Finish:** New pipe network feature coding
- **Google Earth:** Added export for text, images and surfaces and import for points with photos



Contour in both Carlson Survey and SurvCE



SurvNet traverse network with error ellipses



Carlson Survey 3D viewer image

Survey Commands

Data Collection Interfaces: Upload and download to popular data collectors
Traverse Adjustment: Spreadsheet editor for raw data with graphics and processing for traverse adjustments
SurvNET: Advanced network least-squares for total station, GPS and level data
Field-to-Finish: Draw points with styles and in point groups set by point descriptions and draw linework by several flexible methods
Field-to-Finish Inspector: Inspect all field-to-finish elements, see description source and re-draw based on descriptions edits
COGO: Streamlined inverse, traverse, sideshot, intersections, interpolation, translate, rotate, scale and align
Coordinate Transformations: Transform coordinates and screen entities between lat/lon and grid projections as well as local to local by Helmert and least-squares methods
Deeds: Enter deed by description, read deed data from deed file, deed reports, deed correlation and generate legal description from drawing
Cut Sheets: Create custom cut sheet reports with reference grades and station-offsets

Surface Commands

Build Surfaces: By triangulation or rectangular grids
Contouring: One step triangulate and contour from 3D ensities as well as contouring from surface files
Surface Manager: Change surface display properties and adjust surface functions to add and remove points and breaklines and swap edges
Volumes: Earthwork volumes between triangulation or grid surfaces
Pad Design: Tie cut/fill slopes from pad perimeter to surface, build pad surface, calculate and balance volumes, and edit pad parameters

Centerlines

Design and Edit Centerlines: Design or input alignments on screen or in dialog with graphics
Label Stations and Offsets: Annotate station and offsets along centerline and at selected points
Calculate Offsets: Reports stations and offsets for selected points along centerline
Create Offset Points: Create points at specified stations and offsets
Spirals: Flexible handling of the most complex spiral curves including "spiral-only" elements going arc-spiral-arc, arc-spiral-line and line-spiral-line

Profiles

Create Profiles: From surfaces, screen entities, points on centerline, etc.
Quick Profile: One step profile creation with real-time update while adjusting centerline
Input-Edit Profiles: Enter profile data in dual spreadsheet and graphic window, and design in reference to controlling profile grade points
Draw Profiles: Draws profiles on grids or plan-profile sheets with auto-updating based on edits
Profiles To 3D: Create points and 3D polylines from profiles

Points

Import/Export: User-defined import and export of point data along with conversions with specific other formats
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 rule options to fix automatically
Point Tools: Utilities for modifying point labels such as move with leader, twist and resize

Area/Layout

Label Areas: Customized area label styles and several methods to select areas to label
Size Areas: Sliding side area, hinged area, area radial from curve and bearing area cutoff
Lot Network: Commands for subdividing a site into lot and ROW areas. Dynamically updates areas for any changes to boundaries. Includes ability to label linework and areas and to draw setback boundaries
Lot Manager: Lot definitions by point numbers with functions to create lots, conduct map check for closure, edit in spreadsheet with graphics, report lots and draw lots
Offsets, Intersection and Cul-de-Sacs: Layout for ROW and EOP linework

Annotation

Angle & Distance Labels: Flexible routines to label linework in all possible layout combinations plus available rules to automatically fix label overlaps and revise labels when entities move
Curve Labels: Label curve data in stack, along arc or in table
Survey Text: Routines to create typical plat labels such as offset and building dimensions
Linetypes: Draw special linetypes

GIS Commands

GIS Data: Input, edit, query, report, label and inspect database data attached to drawing entities
ESRI: Import/Export feature data by Esri MSC or SHP
Geo-Referenced Images: Place geo-referenced images into the drawing
Place Camera Symbol/Image: Draw a camera symbol with an attached image

General

Coordinate Systems: 100s of projections including SurvCE
CSLReport Formatter: Create customized, professional reports
Symbol Library: Hundreds of 2D and 3D symbols
Project Setup: Flexible data storage methods
Drawing Explorer: Manage and access project data files
Drawing Cleanup: Fix common drafting errors
Drafting Enhancements: Handy tools for working in Autocad® such as Join Nearest, Shrinkwrap Entities, Polyline Utilities, Drawing Inspector, Layer Inspector and Twist Screen
Data Compatibility: Supports industry standard LandXML and scores of specific data conversions
Document Management: Use Data Depot for sharing and archiving files
CAD Standards: Draw items with standardized properties

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