

# Construction



## For Estimating & 3D Modeling

*Take your projects into the field with Carlson Construction – integrated survey and 3D surface modeling software for site & road construction*

Carlson Construction is an integrated cut/fill takeoff and 3D surface modeling software solution designed for site and road construction from CAD files. It offers powerful section and 3D viewing tools for elevating 2D designs to 3D model files.

Core Abilities:

- Cut/Fill Estimating
- Output 3D Machine Control Files (Carlson Grade, Trimble, CAT-Accugrade, Leica, and Topcon)
- Output Construction Staking files for site, roadway, and building columns and offsets
- As-Built Mapping

Carlson Construction's Material Quantities Reports give estimators the volume, area, length and/or count for items such as asphalt, gravel, curb, or any "subgrade" or "select fill" that's defined. For construction data prep, Carlson Construction creates surfaces from points and contours and can easily move lines from the "wrong" elevation and slope to the correct elevation and slope.



Carlson Construction makes the files you need for the field.

**BREAK NEW GROUND**

**Be "project ready" and meet the demand for data prep/3D model building with Carlson Construction – the software solution that works with CAD or PDF files for:**

- Construction staking
- Machine Control Data Prep
- Cut/Fill Volumes
- As-Built Mapping

**Carlson Construction can do it**

**Need to import and/or upload data from a field survey?**

**Looking to create a surface from data within a CAD drawing?**

**Have to move «break-lines» or «grade-lines»?**

Carlson Construction can create surfaces from points and contours and can easily move lines from the «wrong» elevation and slope to the correct elevation and slope. Also, take edge-of-pavements, contours and annotation from 2D to 3D, or to re-engineer projects when necessary.

**Benefits of Carlson Construction**

- Works with industry standard AutoCAD®, IntelliCAD® .dwg files
- Imports PDF and Microstation-DGN files
- Drawing Cleanup — Takes your AutoCAD and Microstation files and fixes common "bad CAD" errors
- Powerful tools to edit the design
- 3D viewing tools and graphics so that you may validate your surface models
- Powerful road design functionality to handle centerlines, profiles, sections, templates and transitions
- Full support for all major 3D Machine Control formats for today's heavy equipment
- Import/Export «Native» Machine Control Files — Carlson Grade (.tin, .cl, .grd, .fit, .dwg, .dxf, .pin, .ntr, .cgc, .crd, .loc); Topcon (.tn3, .ln3, .rd3); Trimble (.ttm); Leica
- Ability to import your drawing into Google Earth



↑ Cut-Fill Color Map with Surface Inspector Tool

↑ Final Surface Model Check with Existing and Proposed Contours

↑ Editing Edge-of-Pavement with Carlson Construction 3D Elevating Tools

← 3D Image of Final Grade

