

# 2021 Virtual Workshops 4-4 Traverse Adjustment, Best Practices for Network Solutions Carlson GNSS RTK Systems Recorded 12/14/21

This virtual workshop session, led by Doug Aaberg and hosted by That CAD Girl, provides a detailed walkthrough of Carlson Survey tools for performing traverse adjustments, compass rule balancing, and least squares network adjustments. The presentation includes practical demonstrations using real survey data, focusing on everyday workflows for field and office surveyors.

## Key Topics:

- Carlson Survey's Edit Process Raw and Traverse Adjustment tools
- Compass Rule and Least Squares (SNET) adjustment methods
- Integrating RTK/GNSS data with EDM traverses
- Managing raw files, control points, and error tolerances
- Practical field and office workflows for survey accuracy

Descriptions, transcripts and other details of this recording have been AI-generated and may contain errors.

This session was presented by Doug Aaberg on 12/14/2022.

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# **2021 Virtual Workshops 4-2 Advanced Field to Finish in Carlson Survey cont., Recorded 12/14/2021**

This virtual training session continues the Advanced Field-to-Finish workshop led by Doug, focusing on Carlson Survey tools for automating legends, tree features, and pipe networks. The session demonstrates practical workflows for survey data processing, symbol management, and integration with Carlson Hydrology for plan and profile generation.

## **Key Topics:**

- Field-to-Finish legend creation and symbol management
- Tree feature setup and automation
- Pipe feature and sewer network integration
- Carlson Hydrology module usage for plan/profile drawings
- Code table organization and substitution codes

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This session was presented by Doug Aaberg on 12/14/2022.

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# **2021 Virtual Workshops 4-1**

# **Advanced Field to Finish in Carlson Survey Recorded 12/14/2021**

This advanced Carlson Software workshop, led by Doug Aaberg, focused on mastering Field to Finish workflows for survey professionals. The session demonstrated efficient coding, linework automation, and advanced features in AutoCAD Survey 2022 to streamline field-to-office data processing.

## **Key Topics:**

- Field to Finish essentials and advanced coding techniques
- Efficient linework creation, templates, and special codes
- Automating survey drafting with Carlson Software
- Handling 2D/3D linework, offsets, and templates
- Real-world workflow improvements and troubleshooting

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This session was presented by Doug Aaberg on 12/14/2022.

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## **2021 Virtual Workshops 3-4 Tips & Tricks for Site Grading**

# Recorded 12/09/2021

This session from the 2021 Virtual Workshop series provides a detailed, step-by-step demonstration of grading, drawing cleanup, and surface modeling techniques in Carlson Civil. It focuses on using LandXML, Civil 3D object imports, and the SiteNet/Takeoff tools to create accurate surface models and calculate earthwork and material quantities.

## Key Topics:

- Importing and managing LandXML and Civil 3D data
- Drawing cleanup and layer management best practices
- Building existing and design surfaces in SiteNet
- Performing topsoil removal/replacement and material takeoff calculations
- Troubleshooting proxy entities and nested blocks

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This session was presented by Jennifer DiBona on 12/09/2022.

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## 2021 Virtual Workshops 3-3 Making Models from a Mess

# Recorded 12/09/2021

This 2021 Virtual Workshop session, *Making Models from a Mess*, teaches Carlson Software users how to clean up and prepare messy CAD drawings for accurate surface modeling and grading. The session covers practical workflows for converting 2D linework into 3D data, managing layers, and building balanced, constructible surfaces.

## Key Topics:

- Converting 2D polylines and contours into 3D surfaces
- Cleaning and organizing CAD layers for modeling
- Grading workflows using Carlson Civil and Takeoff tools
- Handling curb lines, building pads, and daylight projections
- Calculating cut/fill volumes and balancing earthwork

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This session was presented by Jennifer DiBona on 12/09/2022.

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## 2021 Virtual Workshops 3-2 Site Grading Project from Start to Finish

# Recording 12/09/2021

This virtual workshop session, led by Jennifer DiBona of That CAD Girl, provides a comprehensive walkthrough of a site grading project using Carlson Civil software. The training covers practical tools and workflows for converting 2D linework into 3D models, managing layers, and building accurate grading surfaces from start to finish.

## Key Topics:

- Elevating 2D to 3D polylines using Carlson Civil tools
- Layer management and PDH credit tracking
- Site grading workflow: building pads, curbs, slopes, and surfaces
- Managing arcs, vertices, and polyline densification
- Creating and refining surface models for design and construction

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This session was presented by Jennifer DiBona on 12/09/2022.

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## 2021 Virtual Workshops 3-1 Basics of Surface Modeling in Carlson Software

# Recorded 12/09/2021

This session from That CAD Girl's 2021 Virtual Workshops introduces the fundamentals of surface modeling in Carlson Software. Jennifer DiBona demonstrates how to build, verify, and refine surfaces using points, breaklines, and public elevation data sources.

## Key Topics:

- Building and checking surfaces in Carlson Software
- Using shrink-wrap boundaries, 3D viewer, and triangulate & contour tools
- Creating and applying breaklines for accurate terrain models
- Importing and merging public elevation datasets (NED, Google Earth)
- Best practices for contour generation and data exchange (LandXML)

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This session was presented by Jennifer DiBona on 12/09/2022.

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## 2021 Virtual Workshops 2-4 Basic Introduction to Carlson

# Field to Finish

## Recorded 12/02/2021

This virtual workshop session provides an in-depth demonstration of Carlson Software's *Field to Finish* feature, showing how to automate point layering, symbol insertion, and linework generation from survey data. The session walks through setup, coding, and customization of FLD files to streamline survey drafting and surface modeling workflows.

### Key Topics:

- Introduction to Carlson Field to Finish
- Comparison to Land Desktop and Civil 3D description keys
- Setting up and editing FLD code tables
- Layer management and symbol control
- Handling descriptive codes and special characters
- Q&A on tree surveys, point groups, and symbol scaling

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This session was presented by Jennifer DiBona on 12/02/2022.

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# 2021 Virtual Workshops 2-3

## Survey Project from Start to

# **Finish**

## **Recorded 12/02/2021**

This session from the 2021 Virtual Workshops walks participants through a complete Carlson Survey project from importing field data and creating boundaries to building surfaces and generating deliverables. Jennifer DiBona demonstrates practical workflows, data management techniques, and visualization tools to streamline survey drafting and analysis.

### **Key Topics:**

- Importing and managing survey point data
- Creating boundaries and deed descriptions
- Using point groups, field-to-finish, and surface modeling
- Deed correlation and alignment tools
- Annotation, legends, and final sheet preparation

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This session was presented by Jennifer DiBona on 12/02/2022.

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# **2021 Virtual Workshops 2-2 Intro to Carlson Software**

# Recorded 12/02/2021.

This virtual workshop session introduces participants to Carlson Software, covering setup, configuration, and point management within IntelliCAD. It explains default settings, project folder organization, templates, and best practices for integrating Carlson with AutoCAD and Civil 3D workflows.

## Key Topics:

- Carlson Software interface and module overview
- Default configuration and project/data folder setup
- Managing settings, templates, and builds
- Working with points, surfaces, and coordinate files
- Importing Civil 3D data and LandXML files

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This session was presented by Jennifer DiBona on 12/02/2022.