

## AutoCAD Civil 3D Survey Networks – Editing and Traverse Analysis – 1.0 Hours

### Workshop Description

#### Summary

AutoCAD® Civil 3D® Survey utilizes a network-based organization for capturing survey observation and coordinate data. This class explores Civil 3D Survey networks and how they provide relationships and connectivity to survey data. The 3D nature of the Civil 3D Survey network is examined as a tool for evaluating and detecting errors in field work. The editing of survey observations and sideshots within the network will be examined in detail. The class then examines how traverses are managed within the network, including the requirements for traverse definition within Civil 3D Survey. The class also examines various techniques for traverse closure reports, closure analysis and the update of observation, sideshot and drawing data.

#### Topics and Schedule

##### Civil 3D Survey Network Overview

Civil 3D Survey Concepts  
Civil 3D Network Concepts, Definition and Management

##### Civil 3D Survey Networks – Editing and Traverse Analysis

Viewing and Checking Survey Data through the Survey Network  
Editing Observations Data through Graphical and Data Editors  
Editing Setup and Import Event Data  
Traverse Definition in Autodesk® Products  
Individual Loop Traverse Closure Reports and Analysis  
Survey Network Analysis and Least Squares Options

#### Learning Objectives

1. Participants will be able to describe the process for creating, displaying and managing survey networks as demonstrated in the sample project used in the class.
2. Participants will be able to describe the process for editing survey setups and observations and their associated data as demonstrated in the sample project used in the class.

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### Learning Objectives (Continued)

- Participants will be able to describe the process for detecting and correcting errors in field observations and coordinate data as demonstrated in the sample project used in the class.
- Participants will be able to describe the process for defining traverses, preparing traverse closure reports and performing traverse analysis as illustrated using the sample survey project used in the course.

<b>AUTOCAD CIVIL 3D SURVEY NETWORKS – EDITING AND TRAVERSE ANALYSIS – ONE HOUR</b>	
Overall Course Length	1.0 Hours
Instructional Time	1.0 HOURS
<b>PROFESSIONAL DEVELOPMENT HOURS (PDHs)</b>	
New York State Land Surveyors	1.0 PDHs
New York State Professional Engineers	1.0 PDHs



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