



Civil Site Design

Design - Analyse - Visualise - Deliver

Civil Site Design Pipes

Course Description

The Civil Survey Solutions Civil Site Design (CSD) Pipes course has been designed as a complete tool for the creation of underground drainage systems, sewer systems and general pipe/pit systems for Service Utilities or Obstructions.

Course Duration:	1 Day
Delivery:	Instructor led - maximum of 6 participants
Course Times:	9:00 am—5:00 pm
Software Used:	AutoCAD Civil 3D, Civil Site Design

Prerequisites

Prior to attending this course you should had:

- Skills in working with Surfaces and Roads/Strings using Civil Site Design and/or Civil 3D
- A good working knowledge of basic design and terminology

Upon completion you will be issued with a **Civil Survey Solutions Certificate of Training.**



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Course Objectives

- **Settings**
 - Understanding the settings - pipe tables, pit tables and design controls
- **Laying out Pipes & Pits**
 - Creating and editing pipes and pits
- **Drainage Design**
 - Apply Australian rainfall and runoff guidelines to generate a drainage design
 - Establishing rainfall conditions and drainage design conditions
 - Create and assign drainage catchments, pit bypasses and direct pit/pipe inflows
 - Creating drainage networks
 - Vertical design and drainage networks
 - Understand data exchange with WaterCom Drains and others
- **Sewer Design**
 - Establish sewer design controls and conditions
 - Create/edit house and property connections for sewer level control
 - Create sewer networks
 - Vertical design of sewer networks - working with house connection constraints
 - Generating house connection reports for design checking
- **Learn how to create/edit and work with service obstructions**
- **Outputs**
 - Generate and develop custom reports from the designs including - Pit & Pipe schedules and drainage / sewer reports
 - Create long sections and customise outputs for drainage and sewer networks
- **Investigate trench volume tools**

Topics Covered

- **ARD pipe settings—controlling display and design parameters**
- **Creating and editing pits and pipes**
- **Creating and managing drainage design inputs**
- **Creating and managing sewer design inputs**
- **Service obstruction controls**
- **Creating networks and branch sequencing**
- **Vertical grading of networks**
- **Network editing tools**
- **Plan drafting output**
- **Long section plotting and reports**