1. Record Nr. UNINA9911044025003321

Autore Walz Stephen

Titolo Autodesk Civil 3D 2026 from Start to Finish: Learn Dynamic,

Automation-Led Workflows and Intelligent Tools for Modern Civil

Infrastructure Designs

Pubbl/distr/stampa Birmingham:,: Packt Publishing, Limited,, 2025

©2025

ISBN 9781806028344

Edizione [1st ed.]

Descrizione fisica 1 online resource (484 pages)

Altri autori (Persone) SabatTony

Disciplina 620/.00420285536

Soggetti Three-dimensional modeling

Three-dimensional display systems

Computer-aided design

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Description based upon print version of record.

Nota di contenuto Cover -- Copyright -- Contributors -- Table of Contents -- Preface --

Your Book Comes with Exclusive Perks - Here's How to Unlock Them -- Part 1: Getting Acquainted with Civil 3D and Starting Your Next Project for Success -- Chapter 1: Introduction to Civil 3D -- Technical requirements -- What is Civil 3D? -- What types of BIM projects can Civil 3D manage? -- Exploring the Civil 3D user interface -- The first tier of the ribbon -- The second tier of the ribbon -- The third tier of the ribbon -- Toolspace -- Drawing area -- Command line -- Understanding Civil 3D elements -- Summary -- Chapter 2: Setting Up

Toolspace within Civil 3D -- Customizing object styles and object label styles -- Expediting project work with file templates -- Summary -- Chapter 3: Sharing Data within Civil 3D -- Technical requirements -- Understanding file relationships -- Model files -- Survey model -- Alignment model -- Grading model -- Utility model -- Reference files -- Site plan reference file -- Grading reference file -- Utility plan reference file -- Profile reference file -- Section reference file -- Sheet files -- Learning how data shortcuts work -- Creating data shortcuts within Civil 3D -- Summary -- Part 2: Designing and Modeling with Civil 3D from Scratch -- Chapter 4: Existing Conditions Modeling and

the Design Environment -- Technical requirements -- Exploring the

Analysis -- Technical requirements -- Survey setup -- Existing conditions display settings -- Survey workflow overview -- Analyzing your existing conditions -- Summary -- Chapter 5: Leveraging Points, Lines, and Curves -- Technical requirements -- Setting up a new file to import points from survey data -- Introduction to points -- Introduction to lines and curves -- Summary -- Chapter 6: Surfaces -- The First Foundational Component to Design within Civil 3D -- Technical requirements

Technical requirements. Generating a surface model -- Creating a surface -- Adding components to the surface model -- Understanding surface display and annotation style -- Surface Styles -- Label Styles -- Table Styles --Surface manipulation and management -- Slope analysis -- Analyzing elevations -- Creating a data shortcut -- Summary -- Chapter 7: Alignments - The Second Foundational Component to Design within Civil 3D -- Technical requirements -- Alignment creation --Understanding alignment styles -- Types of alignment styles --Alignment design checks -- Alignment label styles -- Alignment table styles -- Alignment manipulation and management -- Summary --Chapter 8: Profiles - The Third Foundational Component to Designs Within Civil 3D -- Technical requirements -- Understanding the ways to create a profile -- Setting up profile views -- Creating design profiles -- Understanding profiles and profile view styles -- Profile Styles -- Design Checks -- Label Styles -- Profile Views -- Profile View Styles -- Further analysis of our profile and alignment geometry --Summary -- Part 3: Leveraging Design-Specific Tool Belts -- Chapter 9: Land Development Toolbelt for Everyday Use -- Technical requirements -- Setting up the Site Plan Reference file -- Creating and managing parcels -- Creating and managing sites -- Leveraging grading tools for our site design -- Summary -- Chapter 10: Roadway Modeling Tool Belt for Everyday Use -- Technical requirements -- Creating and managing assemblies -- Creating and modifying corridors -- Creating and modifying intersections and cul-de-sacs -- Creating a surface from corridors -- Summary -- Chapter 11: Advanced Roadway Modeling Toolbelt for Everyday Use -- Technical requirements --Updating assemblies and designing driveways -- Designing a dead end -- Designing our residential subdivision main entrance -- Summary. Chapter 12: Utility Modeling Tool Belt for Everyday Use -- Technical requirements -- Refining proposed Surface models to accommodate proper site drainage -- Creating and modifying storm drainage pipe networks -- Creating and modifying sanitary sewer pipe networks --Creating and modifying pressure networks -- Summary -- Part 4: Advanced Capabilities with Civil 3D -- Chapter 13: Section Creation and Analysis -- Technical requirements -- Creating sample lines along alignments -- Creating Section Views to display modeled objects --Creating intelligent section sheets for plan production -- Summary --Chapter 14: Automating Sheet Creation -- Technical requirements --Automating plan sheet creation -- Automating Plan and Profile sheet creation -- Automating Cross Sections sheet creation -- Summary --Chapter 15: Efficiency Gains Through Civil 3D Advancements --Targeted Data References -- Model Viewer -- Understanding nodes, concepts, and packages -- Building our first Dynamo for Civil 3D 2026 script -- Summary -- Other BooksYou May Enjoy -- Index.

Sommario/riassunto

Design civil infrastructure faster and boost collaboration with Autodesk Civil 3D 2026's new autonomous workflows that optimize delivery as an individual, team, or organization.Bonus 1: Access chapter-by-chapter video tutorials on YouTube--follow along visually with every topic covered in the book.Bonus 2: Download exercise files to practice each.