

Foreword

When we began the development of AutoCAD Civil 3D we had three key goals in mind:

- ◆ Provide automation tools for creating coordinated, reliable design information for a range of project types including land development, transportation, and environmental.
- ◆ Enable project teams to use the design information to accurately visualize, simulate, and analyze the performance of the project to come up with the best solutions.
- ◆ Facilitate delivery of higher quality construction documentation.

Our approach for achieving these goals was to develop a 3D information model that could accurately represent the civil engineering workflow and design process. The model, which dynamically connects design and construction documentation, has facilitated new ways of working and has helped civil engineers complete projects faster and with improved accuracy. Engineers are able to make design changes quickly and evaluate more alternatives, identify design issues and conflicts earlier in the process, and deliver higher quality designs faster.

These concepts have revolutionized the Civil Engineering process such that the plan production phase does not have to wait for the design to be completed. As a result, AutoCAD Civil 3D provides efficiencies in both the design automation and plan production stages of a typical design.

This is a departure from traditional 2D drafting based design software and has tremendous potential for improving design productivity and quality of design work. With AutoCAD Civil 3D, the entire design team can work from one model so that all phases of the project, from survey to construction documentation, remain coordinated.

The authors of *Mastering AutoCAD Civil 3D 2009* have embraced this vision from the start of its development. As the product has matured, I have had many conversations with the team at Engineered Efficiency to discuss product decisions and direction. I can recall conversations where James Wedding and I would discuss the reasons *why* we designed the product to work the way it does. Those conversations have helped shape the software and will continue to in the future. As a result, this book contains much more than “picks and clicks.” It has insightful tips, workflow recommendations, and best practices for using AutoCAD Civil 3D in a coordinated team environment.

On behalf of the entire AutoCAD Civil 3D product development team, I hope that AutoCAD Civil 3D enables you to work in ways that allow for creativity and profitability. This book is a great way to expand your understanding of the product and will help you gain the most out of the software.

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