

BETTER RESULTS BEGIN WITH BETTER DELIVERABLES

DESIGN BETTER CIVIL INFRASTRUCTURE
WITH OPENROADS DESIGNER



Bentley®

MODEL-BASED DESIGN **KEY**

As a design professional in the world of civil infrastructure, you're required to fully convey understanding of your project and design intent to many people in several ways. At the same time, the industry and its project delivery methods are advancing, increasing the demands required to meet contract requirements. You need a solution that allows you to produce a range of deliverables, effortlessly, from one model in one application.

That's why designers and engineers turn to OpenRoads Designer.

Better collaboration leads to:

- › **BETTER UNDERSTANDING**
- › **BETTER QUALITY**
- › **BETTER STAKEHOLDER BUY-IN**
- › **BETTER RESULTS**



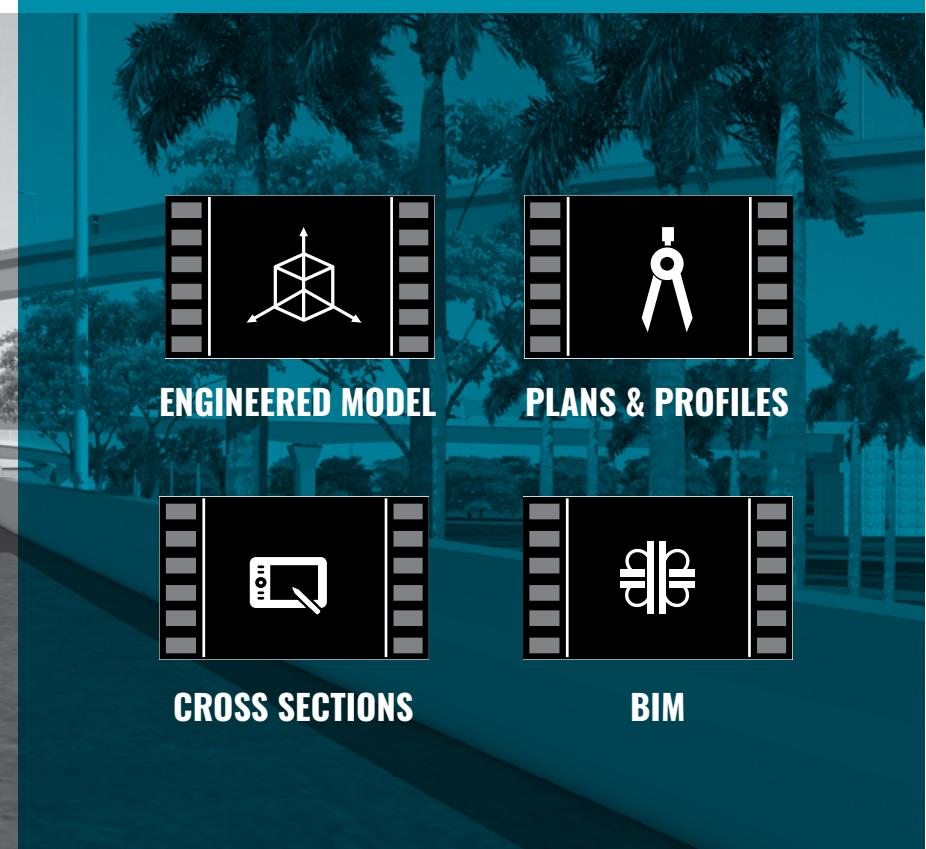
DELIVER BETTER **DESIGNS** with OpenRoads Designer

OpenRoads Designer CONNECT Edition addresses the demands of an evolving infrastructure industry. It employs a model-based approach that places your 3D model at the center of the design as a hub for all data. With your 3D model as the design authority, you can efficiently and confidently work from one, live dynamic model to:

Watch videos to see how



- Design all aspects of your project in one composite model
- Ensure your design data conveys engineered intent
- Incorporate data from all disciplines
- Produce a wide array of accurate deliverables





BUSINESS **BENEFITS**

OpenRoads Designer's ability to automate the production of a complete array of design deliverables enables engineers to work faster, smarter, and more efficiently to accelerate project delivery.

› **INCREASE PRODUCTIVITY**

No time and energy is wasted creating dead-end data. Model-based design centralizes data and extends the useful lifespan of all engineering content.

› **REDUCE ERRORS AND OMISSIONS**

Parametric modeling delivers consistent and reliable output deliverables.

› **SAVE TIME AND MONEY**

Deliver more, faster with the ability to produce a wide range of deliverables from ONE application – plans, 3D design data, earthwork, reports, visualization, BIM, and construction data.

› **MITIGATE RISK**

Reduce field coordination problems and changes during construction.

REAL WORLD SUCCESS

ATKINS

Project Neon

Las Vegas, Nevada, United States

Project Neon is Nevada's largest public works initiated by Nevada Department of Transportation (NDOT) to reconfigure the state's busiest stretch of roadway, spanning 3.7 miles along Interstate 15. The highway carries 300,000 vehicles a day. Atkins is the lead designer on this USD 1 billion project, responsible for overseeing and designing portions of three new local arterials and associated infrastructure elements. The project is expected to reduce the number of merge and diverge sections, improving traffic flow and safety.



THE PROJECT TEAM:

Atkins used InRoads, MicroStation, and ProjectWise to implement a collaborative BIM process among the multi-discipline project team to model new and existing roadways, utilities, and bridge foundations; perform clash detection; generate thousands of plan sheets; and manage more than 170,000 documents and over 660 gigabytes of data. ProjectWise provided a common data environment to streamline workflows, minimizing rework to save countless design hours.

PROJECT PLAYBOOK:

InRoads, LEAP, MicroStation, OpenRoads, ProjectWise, STAAD.Pro



REAL WORLD SUCCESS

AURECON

Nekkies Roundabout

Knysna, Eden, South Africa

Situated on South Africa's N2 highway near Knysna, the Nekkies Roundabout is being upgraded within a larger footprint to improve safety for motorized and non-motorized travelers. With the area facing rapid urbanization and high pedestrian and informal housing volumes, Aurecon South Africa, as part of its final design deliverables, built a simulation model capable of estimating at what stage the new roundabout will reach capacity.



THE PROJECT TEAM:

Using OpenRoads, Aurecon imported a photographic point-cloud survey and designed a full roundabout solution, which was exported as a digital terrain model to LumenRT to further render the visualization, including pedestrian and vehicle interaction. The project team used the LumenRT video at meetings and as part of the public participation process, reducing uncertainties and ultimately reducing contractors' prices. Integrating Bentley capabilities enabled a more accurate determination of the roundabout's capacity to optimize the engineering solution and return on investment.



PROJECT PLAYBOOK:

LumenRT, OpenRoads

BETTER RESULTS

Begin with OpenRoads Designer

OpenRoads Designer solves your critical business issues so you can meet the requirements needed for your civil engineering projects. This single application supports all aspects of a detailed roadway design including survey, geotechnical, drainage, subsurface utilities, corridor modeling, analysis, and quantification.

OpenRoads Designer provides the latest technology and capabilities you need to efficiently design, model, and produce project deliverables in a dynamic, interactive, and parametrically enabled environment.

**> SEE FOR YOURSELF THE POWER
OF BETTER DELIVERABLES WITH
OPENROADS DESIGNER**

Read User Success Stories >

