OpenRoads Designer CONNECT Edition Fact Sheet
SELECT Users

OpenRoads Designer CONNECT Edition is a new application for road and highway design that replaces the capabilities of the following applications in a single offering:

- Bentley GEOPAK Civil Engineering Suite
- Power GEOPAK
- Bentley GeoMacao
- InRoads
- InRoads Suite
- PowerCivil
- Power InRoads
- Bentley MXROAD
- Bentley MXROAD Suite
- Bentley PowerCivil
- Bentley PowerCivil Americas
- Bentley PowerCivil Baltics
- Bentley PowerCivil Benelux
- Bentley PowerCivil Brazil
- Bentley PowerCivil China
- Bentley PowerCivil Czech Rep
- Bentley PowerCivil DACH
- Bentley PowerCivil Denmark
- Bentley PowerCivil Finland
- Bentley PowerCivil France
- Bentley PowerCivil Italy
- Bentley PowerCivil Japan
- Bentley PowerCivil Latin America
- Bentley PowerCivil Middle East
- Bentley PowerCivil Norway
- Bentley PowerCivil Poland
- Bentley PowerCivil Portugal
- Bentley PowerCivil Russia
- Bentley PowerCivil South Africa
- Bentley PowerCivil Spain
- Bentley PowerCivil Sweden
- Bentley PowerCivil Turkey
- Bentley PowerCivil UK & Ireland

Language Packs and Regional Kits will be delivered with the OpenRoads Designer CONNECT Edition license.

What are the capabilities OpenRoads Designer CONNECT Edition?

OpenRoads CONNECT Edition is the successor to Bentley's industry leading civil engineering brands InRoads, GEOPAK, MX, and PowerCivil, and is a comprehensive, multi-discipline 3D modeling application that advances the delivery of roadway projects from conceptual design through construction.

OpenRoads Designer blends traditional engineering workflows for plan, profile, and cross-sections with 3D parametric modeling to enable the model-centric creation of all design deliverables.

OpenRoads Designer supports all aspects of a detailed roadway design including survey, geotechnical, drainage, subsurface utilities, terrain, road, roadway furniture, and more. The incorporation of reality meshes, imagery, point cloud, and other geocoordinated data sources can provide the continuous context of real-world conditions throughout the design and construction lifecycle.

OpenRoads Designer completes the convergence of InRoads, GEOPAK, MX, and PowerCivil, but adds many powerful new innovations, including:

- **Progressive Conceptual Design.** Users can directly progress conceptual designs created with *OpenRoads ConceptStation,* preserving all work and data. *OpenRoads ConceptStation* enables rapid conceptual and preliminary design, leveraging existing context captured through reality meshes, point clouds, GIS, and other sources, and creating compelling presentations with engineering precision.

- **Contextual Design.** All detailed design in *OpenRoads Designer* is driven by functional components, which inherently respond contextually to express appropriate design, annotation, and plan set display behaviors. Design models are expressed in multiple live views including plan, profile, cross section, and 3D; changes in one view are live and dynamically update all views.

- **Multi-discipline Support.** *OpenRoads Designer* integrates support for each discipline with specific user profiles dedicated to each discipline. Users can switch discipline perspectives, for instance from Road Design profile to Subsurface Utility profile.

- **Reality Modeling Tools.** *OpenRoads Designer* includes a fully-functioned toolset to incorporate and edit all reality modeling data types, including the capability to extract ground-level features from reality meshes and LiDAR, as well as to reference point clouds and imagery.

- **Geotechnical Tools.** Users can connect directly to gINT geotechnical databases to incorporate subsurface terrain details into their models for improving grading and piling. Subsurface terrains can be generated or modeled based on the bore hole materials and projected in road and drainage profiles, sections, and plans.

- **Subsurface Utilities.** Users can select from a large catalog of functional components for utility and drainage to model underground drainage and utility networks. Drainage models can be optimized for water flow using integrated water analysis tools, with results available in data tables or visually in a profile view.

- **Rich Deliverables.** An expanded set of deliverables range from traditional plan sets and animations to digital construction models—for automated machine control and field positioning systems including for excavation, grading, piling, and paving.

- **Live Plan Generation.** Plan generation need no longer be a separate process limited to a point in time, as settings and annotations are dynamically updated and live in the model. Views are saved with specific display rules and sheet index embedded, making it easy to navigate between model and drawings. Up-to-date drawings can be generated automatically at any time, creating a natural and fluid design environment for both modeling and detailing.

- **Enlivened Visualization.** *OpenRoads Designer* provides direct integration to Bentley LumenRT for producing cinematic visualization, adding vegetation, reflecting nature and climate, and for traffic simulation with VISSIM.

Designs created in *OpenRoads Designer* benefit from BIM Review through *OpenRoads Navigator,* in the office, in the field, and at the site. *OpenRoads Navigator* enables not only visualization and review of 3D designs, but also status visibility—allowing dispersed teams to progress approvals and the resolution of issues.

A detailed functional overview is available online at **OpenRoads Designer**.

When will OpenRoads Designer CONNECT Edition be available?

Early Access will begin December 1, 2016 and is open to all Bentley subscribers. General Availability will occur no later than March 31, 2017.

What if I have one or more of the applications being replaced by OpenRoads Designer CONNECT Edition?

In order to facilitate the migration of the above listed applications to OpenRoads Designer CONNECT Edition, each subscription for one of these applications is being converted to an Open Roads Designer CONNECT Edition subscription at the next subscription renewal. The new OpenRoads Designer CONNECT Edition subscription enables use of OpenRoads Designer CONNECT Edition and each of the applications in your current agreement that OpenRoads Designer CONNECT Edition is replacing. This continued entitlement will let you take advantage of significant new capabilities of OpenRoads Designer CONNECT Edition, while also providing the necessary flexibility to complete ongoing projects and plan your migration.

How do I get OpenRoads Designer CONNECT Edition SELECT coverage?

OpenRoads Designer CONNECT Edition SELECT coverage will be required for a new purchase of any application that is being replaced, beginning December 1, 2016. For subscriptions on existing licenses of these applications, your SELECT coverage for these applications will require OpenRoads Designer CONNECT Edition coverage at your contract renewal date.

What changes should I expect with my SELECT renewal?

Each license of any individual application to be migrated to OpenRoads Designer CONNECT Edition will be replaced by an Open Roads Designer CONNECT Edition license on your SELECT subscription. For example, if you presently have 2 licenses of InRoads and 1 license of Bentley MXROAD, these licenses will be replaced with 3 licenses of OpenRoads Designer CONNECT Edition at SELECT renewal.

OpenRoads Designer CONNECT Edition has a SELECT subscription price, which will apply to all of your OpenRoads Designer CONNECT Edition licenses. If you find that your covered licenses are more than you need, your SELECT benefits include the flexibility to portfolio balance your subscription at renewal. You can exchange the value of these or other owned licenses for the use of other application titles available under SELECT.

How can I plan a successful migration to OpenRoads Designer CONNECT Edition?

A successful transition relies on three key steps:

1. An accurate assessment of your current processes and configuration

2. A thorough understanding of the benefits that OpenRoads Designer CONNECT Edition delivers to your organization or project

3. A well-planned migration strategy

Bentley is ready to help you with all of these steps as well as to make recommendations on how you can improve your design efficiency and project delivery processes by employing the new capabilities of OpenRoads Designer.

What assistance is available for me to make a successful migration to OpenRoads Designer?

There are several ways that we can help your organization in your migration. We recommend that you begin the process by speaking with your Account Manager or User Advancement Advocate so that you can gain a complete understanding of the help that is available to you, including:

- Licensing and contract assistance (Bentley Subscription Renewals Team)

- Workflow studies, implementation planning, and migration services (Bentley User Advancement Team)

- Training programs (Bentley Institute)

What online assistance is available for me to make a successful migration to OpenRoads Designer CONNECT Edition?

Documentation to assist you in the planning of your migration is available at the following link on the Bentley Communities site:
OpenRoads Designer CONNECT Edition.

Will I still be able to purchase licenses of the applications that are being replaced by OpenRoads Designer?

Licenses of all applications being replaced with OpenRoads Designer CONNECT Edition may continue to be purchased until General Availability of OpenRoads Designer CONNECT Edition. In the United States and Canada, General Availability will occur no later than March 31, 2017. In other countries, General Availability will occur with the delivery of the appropriate Language Packs and Regional Kits.

As of December 1, 2016, OpenRoads Designer CONNECT Edition SELECT coverage will be sold with each of these licenses, and this SELECT fee will entitle you to its use in addition to the purchased GEOPAK, InRoads, MX, or PowerCivil license.

Will PowerCivil for Country capabilities be delivered with OpenRoads Designer CONNECT Edition?

Yes. OpenRoads Designer CONNECT Edition is a single application that replaces all PowerCivil for Country applications. Language Packs and Regional Kits will be delivered with OpenRoads Designer CONNECT Edition, rather than through separately branded versions as they were with the PowerCivil product line. See the chart below for currently planned general availability dates.

Language Pack and Country Kit General Availability

Language Pack and Country Kit	General Availability	Language Pack and Country Kit	General Availability
English (Australasia) #	July, 2017	Spanish (L. America)	September, 2017
English (India) #	July, 2017	Czech	September, 2017
English (Middle East)	July, 2017	Polish	September, 2017
English (UK)	July, 2017	English (Baltics)	September, 2017
Simplified Chinese	July, 2017	English (Benelux)	September, 2017
French	July, 2017	English (Denmark)	September, 2017
Italian	July, 2017	English (Sweden)	September, 2017
Spanish	July, 2017	German	September, 2017

Will my current workspace work with OpenRoads Designer CONNECT Edition?

Your current workspace can be migrated forward to OpenRoads Designer CONNECT Edition. To take full advantage of new and incremental OpenRoads Designer CONNECT Edition functionality, existing workspaces will need to be upgraded with the new necessary settings.

What are the hardware requirements for OpenRoads Designer CONNECT Edition?

OpenRoads Designer CONNECT Edition is a native 64-bit application that will operate on Windows 7 and higher. Hardware requirements are provided in the table below:

Processor	Intel® or AMD® processor 1.0 GHz or greater. OpenRoads Designer is not supported on a CPU that does not support SSE2.
Memory	8 GB minimum 16 GB recommended. More memory almost always improves performance, particularly when working with larger models.
Hard Disk	9 GB free disk space (which includes the 5.6 GB install footprint for a complete installation)
Video	See the graphics card manufacturer for latest information on DirectX drivers. 1024 MB of video RAM or higher is recommended. If insufficient video RAM or no graphics card supported by DirectX can be found, OpenRoads Designer attempts to use software emulation. For optimal performance, graphics display color depth should be set to 24-bit or higher. When using a color depth setting of 16-bit, some inconsistencies will be noted.
Resolution	1600 x 1200 or higher

Is MicroStation required as a platform for OpenRoads Designer CONNECT Edition?

No, OpenRoads Designer CONNECT Edition is a standalone application built on the same platform as MicroStation. It does not require MicroStation as a prerequisite.

Will my data be preserved?

Yes, DGN remains as the core format. You will be able to import and export data to and from OpenRoads Designer to InRoads, GEOPAK, MX, PowerCivil for Country, and Bentley GeoMacao applications. As is the case with new software of any type, if you take advantage of new capabilities that have no counterpart in previous versions of your applications, you will not be able to export the associated data from OpenRoads Designer for use in these applications.

Will I still be able to use my legacy preference files (DDB, XIN, PSS etc.) with OpenRoads Designer?

You will be provided with utilities that directly convert your legacy preference files for use in OpenRoads Designer.

Am I able to run previous versions of InRoads, GEOPAK, MX, PowerCivil for Country, Bentley GeoMacao, and OpenRoads Designer on the same machine?

Yes.

Will all my legacy functionality (plan view labelers, legal description writers, etc.) be available in OpenRoads Designer?

OpenRoads Designer CONNECT Edition is a new application and we have updated many of its workflows to enhance your productivity and your user experience. Some toolsets have updated and improved alternatives.

What should I do if I have additional questions on OpenRoads Designer capabilities, training, and migration plans?

Please contact Chris Bober at chris.bober@bentley.com.

What should I do if I have additional questions on OpenRoads Designer subscription renewal?

Please contact your Subscription Renewals Representative

Bentley®
Advancing Infrastructure

For more information visit www.bentley.com/OpenRoads