Bentley Systems Announces Generative AI Game-Changer for Civil Site Design

Company unveils first-to-market AI-powered civil engineering application that delivers optimized, accurate site designs up to 10 times faster than traditional methods

VANCOUVER (Bentley Systems' Year in Infrastructure 2024), October 9, 2024 – Bentley Systems, Incorporated (Nasdaq: BSY), the infrastructure engineering software company, today announced new generative AI capabilities for civil site design, including a design copilot, site layout optimizations, and automated drawing production that will drive new levels of productivity and accuracy.

Building on its success in applying AI-powered digital twins to asset maintenance—to detect and assess problems before failures occur—Bentley is bringing AI to the design phase of the infrastructure lifecycle to automate repetitive tasks, such as drawing production, so that engineers can focus on higher-value activities.

Putting AI into Action—Introducing OpenSite+
Bentley's OpenSite+ is the first engineering application leveraging generative AI for civil site design. It helps engineers swiftly design residential, commercial, and industrial sites with AI tools, significantly boosting productivity and accuracy.

A digital twin-native product, built with Bentley's iTwin platform, OpenSite+ delivers AI-powered efficiencies and better-quality designs with:

- **Enhanced Design Experience with Copilot:** Users can quickly create, revise, and interact with requirements documentation and 3D site models through natural language interactions —to automatically make real-time design changes with precision and ease.

- **Layout Optimization:** Users can enhance efficiency, reduce errors, and rework site designs in minutes with one-click earthwork optimization. Bentley's AI-powered design layout agent can evaluate thousands of layout options and suggest alternative designs in real-time, helping users make better design decisions sooner, saving time and money.

- **Automated Drawing Production:** Users can reduce time spent on mundane drawing tasks, accelerating drawing production by up to 10 times, and improve drawing accuracy using AI-powered annotation, labeling, and sheeting that automatically places labels and dimensions according to organizational standards that are optimized for legibility and aesthetics.

- **Smart Design Tools**: Users can create and revise designs using intelligent, editable objects such as building pads, parking layouts, driveways, sidewalks, and ponds to complete projects in a fraction of time compared to traditional CAD software.

With OpenSite+, users also maintain control over their proprietary data during AI training, which creates a solid foundation to responsibly guide the development of AI models.

"By leveraging their past data to optimize future work, generative AI will revolutionize infrastructure design, improving engineers' productivity and accuracy without sacrificing on quality," said Mike Campbell, chief product officer at Bentley Systems. "OpenSite+ is just the first example of how Bentley is applying generative AI to benefit infrastructure design and project delivery."

OpenSite+ early adopter, Joe Viscuso, senior vice president and director of Strategic Growth at Pennoni, commented, "OpenSite+ is a game-changer. By combining design and routine tasks into one powerful platform, it eliminates the need to switch between multiple programs. It streamlines our workflow, automates repetitive tasks, and ensures accuracy as we make changes in real-time. This means faster project completion with superior results, helping Pennoni stay ahead of the curve in both technology and innovation."

OpenSite+ is the first of a new generation of Bentley Open Applications which run on desktops for optimal responsiveness, while offering the benefits of cloud-based applications, such as automatic updates and cross-operating system availability. The iTwin-native architecture enables seamless collaboration and data-centric workflows. Data is saved directly in a digital twin, which in turn can include data from other sources to provide full context for design work.

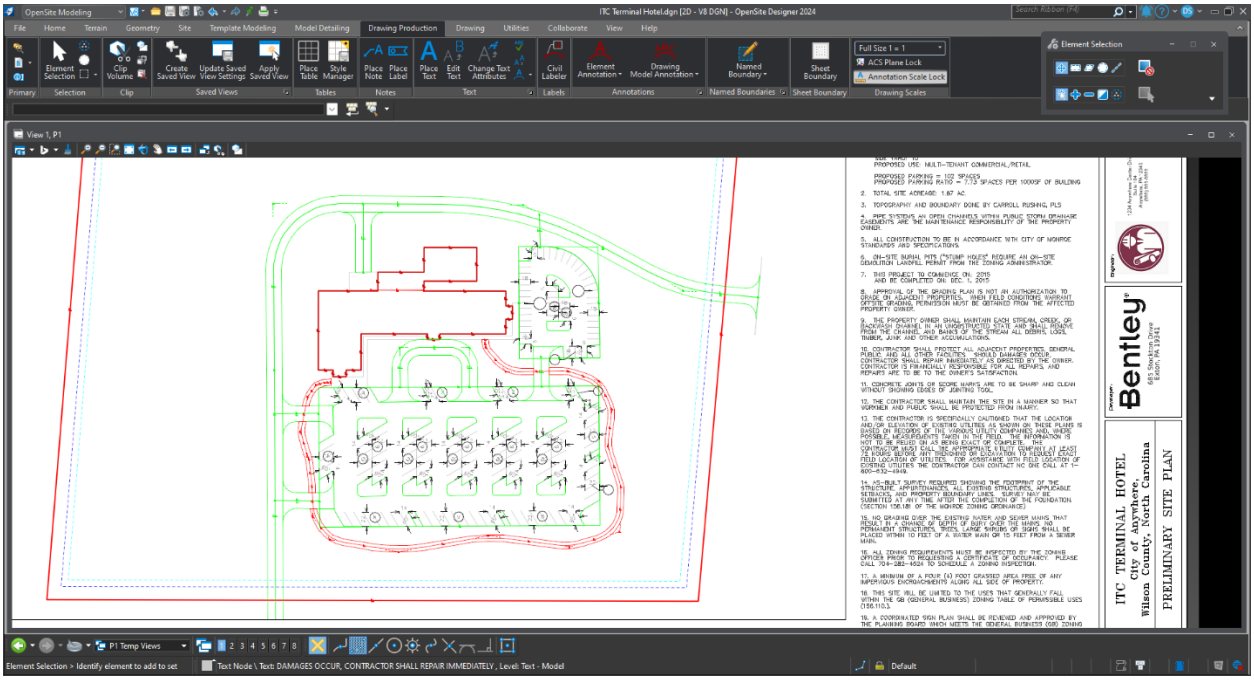
Availability
North American site engineering firms can apply for early access.

# # #

About Bentley Systems
Bentley Systems (Nasdaq: BSY) is the infrastructure engineering software company. We provide innovative software to advance the world's infrastructure – sustaining both the global economy and environment. Our industry-leading software solutions are used by professionals, and organizations of every size, for the design, construction, and operations of roads and bridges, rail and transit, water and wastewater, public works and utilities, buildings and campuses, mining, and industrial facilities. Our offerings, powered by the iTwin Platform for infrastructure digital twins, include MicroStation and Bentley Open applications for modeling and simulation, Seequent's software for geoprofessionals, and Bentley Infrastructure Cloud encompassing ProjectWise for project delivery, SYNCHRO for construction management, and AssetWise for asset operations. Bentley Systems' 5,200 colleagues generate annual revenues of more than $1 billion in 194 countries.

For more information, contact:
Bentley Press: Chris Phillips, PR@news.bentley.com
Bentley Investors: Eric Boyer, ir@bentley.com

Associated images:



Bentley's OpenSite+ software uses AI to automate annotation and plan production for civil site design. (Photo Bentley Systems)

Bentley's OpenSite+ software with copilot uses organization-specific documents and design models for quick insights and edits. (Photo Bentley Systems)