

Industry: Roads

Products: Bentley MXROAD, MicroStation, PowerCivil for Denmark, Bentley Navigator, Bentley Map, Bentley Descartes

User: The Danish Road Directorate

Country: Denmark

November 2, 2015

Danish Road Directorate Employs Digital Design and Construction to Improve Collaboration and Save Costs

To further its adoption of 3D modeling, digital design, and automated machine control, the Danish Road Directorate decided to employ new processes for the Herning – Holstebro project in Holstebro, Denmark. The USD 580 million design-build project consisted of 39 km of highway including eight interchanges, four railway crossings, and five landscape bridges. The tenders were based on design-build and disciplinary contracts. The goals of the project, which was used as a proving ground for digital design and construction, included:

- Create consistent use of digital data
- Reuse digital data throughout the lifecycle
- Resolve conflicts during design phases

To take full advantage of the collaboration between internal project members and external partners, the team standardized on MicroStation, along with Bentley Navigator, Bentley Descartes, Bentley MXROAD, and PowerCivil for Denmark. Its processes included creating an environment for all participants (even those not using the modeling and design software), so that they could take part in the digital work and information management oversight.

The creation of the digital workflow for sharing data across disciplines established a sustainable solution with meaningful impact for all parties involved across the project's lifecycle. As a result, the Danish Road Directorate and its external partners have been able to achieve significant efficiency gains.

Associated with the project, the Danish Road Directorate has undertaken the "Digital Construction" initiative. This will bring collaboration into the Danish infrastructure industry and serve as a voluntary national collaboration among builders, consultants and contractors. The goal is to create efficiency in infrastructure projects by using digital tools.

Morten Sørensen, CAD-manager, Danish Road Directorate, said, "Bentley software has the unique capability to manage our geo-coordinated projects and, together with our needs for customizable features and user interface, this makes it the perfect CAD product."



Image Link: <https://www.hightail.com/download/bXBhYnUwMVhZY1FsYzhUQw>

Caption: The Danish Road Directorate- Herning - Holstebro