

MALAYSIA'S RAILWAY PROJECT HONOURED FOR BIM ADVANCEMENTS

The Klang Valley Mass Rapid Transit (KVMRT) Sungai Buloh-Serdang-Putrajaya Line in Kuala Lumpur, Malaysia, has won the Be Inspired Award 2017 for BIM Advancements in Rail and Transit.

The Be Inspired Awards programme is designed to honour the extraordinary work of Bentley users that advance the infrastructure design, construction and operations throughout the world. It is held as part of Bentley's annual Year in Infrastructure conference. In 2017, the event took place in Singapore in October – the first time it was held in Asia.

The KVMRT Sungai Buloh-Serdang-Putrajaya is the second mass rapid transit line being developed for the Greater Kuala Lumpur-Klang Valley region of Malaysia, and the first metro project in Asia to adopt a BIM Level 2 strategy. The MYR 32 billion railway project spans 52.2 km, of which 13.5 km is underground, includes 35 stations, and upon completion will serve approximately two million people.

MRT Corporation (MRT Corp) mandated a BIM methodology, including 3D photogrammetry for verification at critical milestones

to improve design collaboration, construction feasibility and accuracy of as-built information, and ensure sustainability of asset information throughout the project lifecycle.

MRT Corp used ProjectWise as the common platform to streamline the design process among the numerous design disciplines and AssetWise for lifecycle information management. Bentley applications provided a connected data environment for all disciplines to work dynamically using a federated model for coordinated design, and enabled the integration of design and asset information with the operation and maintenance system to ensure optimal asset performance throughout the project lifecycle.

The team used ContextCapture to verify design accuracy, importing point clouds into the 3D construction models to reference existing conditions. Bentley's BIM advancements reduced rework and improved design collaboration by 35 percent. ■

Project Playbook: AssetWise, ContextCapture, ProjectWise, STAAD.Pro.



© Mass Rapid Transit Corporation Sdn Bhd

The KVMRT Sungai Buloh-Serdang-Putrajaya is the second mass rapid transit line being developed for the Greater Kuala Lumpur-Klang Valley region of Malaysia, and the first metro project in Asia to adopt a BIM Level 2 strategy.