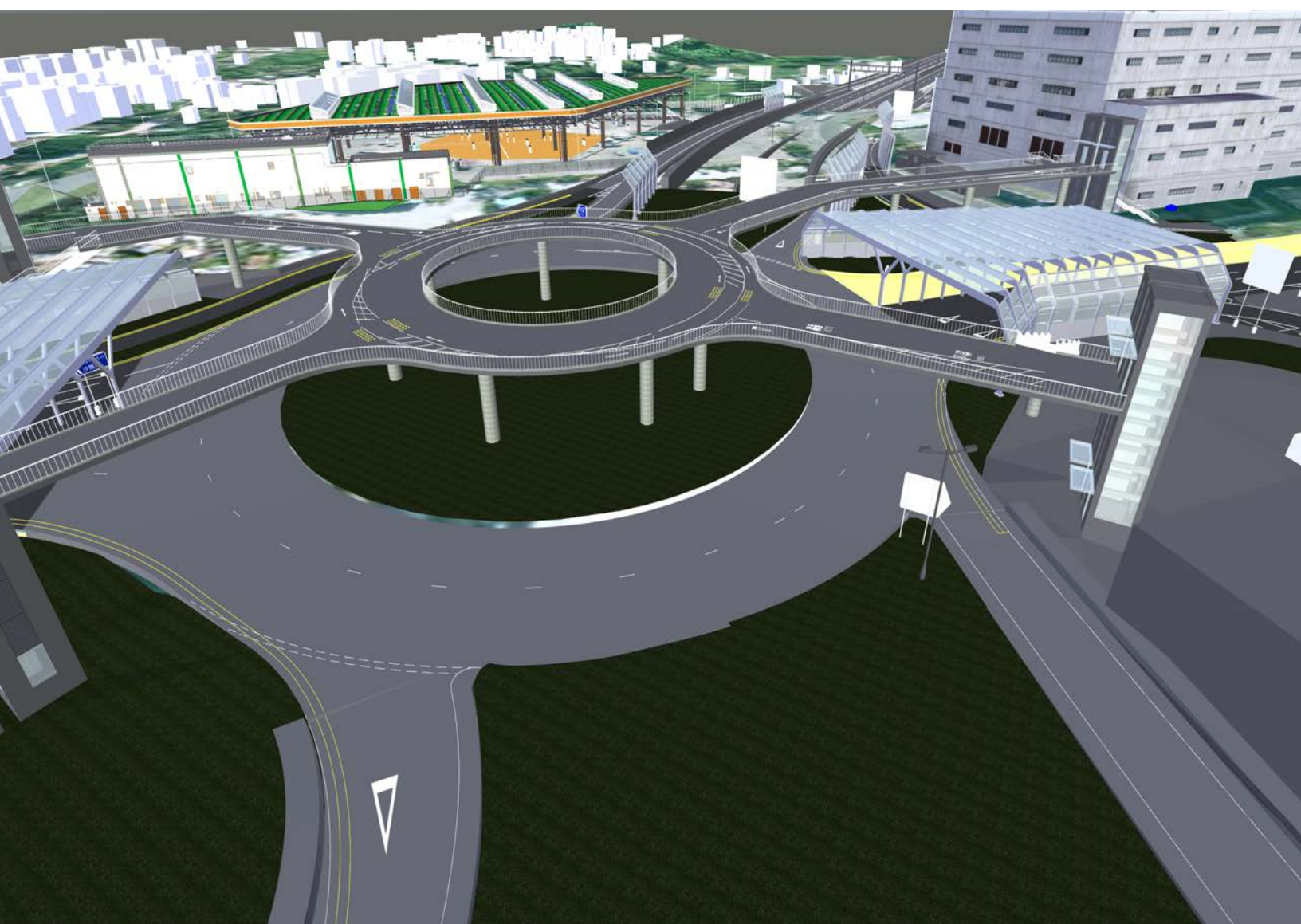


Advancing Urban Planning through Digital Twins



Civil Engineering and Development Department, Hong Kong SAR Government and AECOM

The Digital Design for the Establishment of the Kwu Tung North, New Development Area | Hong Kong

The Hong Kong government decided to create new development areas (NDAs) to address long-term housing demands. AECOM Asia Co. was engaged as the planning, design, and construction consultant for the NDA in Kwu Tung North. The estimated HKD 100 million project will cover 4.5 square kilometers and will accommodate 119,600 people, becoming one of the most densely populated towns in Hong Kong.

The project team used ContextCapture and OpenBuildings Designer to create 3D spatial models for stakeholders. LumenRT helped conduct analyses to show a 360-degree view of design's ability to withstand wind and seasonal weather. During design review, the team made about 10 significant and 50 minor design changes directly in the model. In 2018, the design was finalized. **Project Playbook:** ContextCapture, LumenRT, OpenBuildings Designer, ProjectWise