

North East Link - Melbourne Australia

Project

The North East Link is a major infrastructure project under construction in Melbourne, Australia, that will connect the M80 Metropolitan Ring Road at Greensborough to the Eastern Freeway at Bulleen.

The project includes the new 6.5km twin tunnels from Bulleen to Watsonia.

The two tunnels and a simultaneous modernisation of the freeway will reduce traffic congestion, cut journey times by 35 minutes and take 15,000 trucks a day off local roads.

When completed, it will be the longest road tunnel in the State of Victoria.

Early works began in 2020, with tunnelling starting in mid-2024 and completion expected in late 2028

In 2023, Euroform was awarded the supply of two Internal Structure Installation Gantries (ISIG) for the installation of the prefabricated elements that form a secondary service tunnel for the passage of utilities within the main tunnel.

The service tunnel consists of culvert segments, rectangular concrete elements weighing approximately 29 tonnes each.

The ISIG is a self-propelled bridge that moves into the main tunnel to transport and install the culverts to form the service tunnel. The precast elements are picked up from a Multi Service Vehicle (MSV), which travels over the bridge, and they are temporarily stored in a dedicated area aboard the ISIG. When the deck is clear, the culverts are picked up and installed on the primary tunnel lining.

Positioning of the prefabricated elements is carried out by opening a sliding platform in the centre of the gantry deck and using a special crane installed on the ISIG to move and install the culverts in their final position.

The ISIG permits transit to and from the Tunnel Boring Machine via an integrated ramp, that allows the wheeled site vehicles to drive over the culvert installation area when the crane is not in operation.

The ISIG is completely independent of the TBM and does not interfere with the excavation of the main tunnel.

CLIENT

Spark North East Link Design & Construct Joint Venture

Top crane and front ramp



Centre gantry deck and stored culverts



Culverts stored on the ISIG



Service tunnel



Front ramp



ISIG

