



Thomson East Coast Line, TE311 South Bedok Station and Tunnels Land Transport Authority

Location: Singapore

Date: 2016 – 2019

Structure: TBM Tunnels

Length: 2 x 265m

Cross-Section: Tunnel DIA 5.8/6.35; TBM DIA 6.67m

Geology: Old Alluvium

Cost: US \$124 million (total incl. station)

Client: MCC Singapore

Owner: Land Transport Authority



Figure 1. TBM Assembly for Changi Bound Drive (Courtesy of MCC).

Tender Support and Tunnel Manager for Tunneling Works:

The construction started in 2016 for the Land Transport Authority's (Owner) new MRT line. Its total length is 43 km, with 32 stations. Each of the two running tunnels for TE311 is 265m long and has a precast concrete segmental lining with an inner diameter of 5.8m, thickness of 275mm and a ring length of 1.4m. The tunnel boring was successfully completed in May 2019.

Gall Zeidler Consultants (GZ) provided tender support to the contractor MCC - China Jingye Engineering Corporation Limited (Singapore Branch) during the bidding phase and the Tunnel Manager during the construction phase. His involvement started with ordering the EPBM (6.67m diameter), factory acceptance test, assembly and re-assembly of the TBM.



Figure 2. TBM Conversion for Woodlands Bound Main Drive (Courtesy of MCC).