MURL Station and Tunnel Upgrade

Location
Melbourne CBD, Victoria

Client
Metro Trains Melbourne

Commencement Date
June 2015

Completion Date
February 2016

Contract Value
$8 million

BMD Constructions maintained safe operation of public transport services to the local community of Melbourne and other users of the Melbourne Underground Rail Loop (MURL) during the station and tunnel fire hydrant upgrade.

Overview

The MURL station and tunnel fire hydrant upgrade involved the replacement of the fire hydrant systems throughout the four MURL tunnels and three stations for Metro Trains Melbourne. The project has proved a challenge with the majority of works presenting heavy interaction with the public and transport services. The existing system has reached its design life and is required to be replaced whilst maintaining a fully functional system.

Project scope

Project Scope included:

- Decommissioning and removal of existing DN100 fire hydrant piping and components throughout the four MURL Tunnels,
- Installation of over 13km DN150 fire hydrant pipework and associated fire equipment,
- Replacement of entire fire hydrant systems within Parliament, Melbourne Central and Flagstaff Stations, involving public concourse and shopping areas, service corridors and under platforms areas,
- Upgrades to all town main connections to conform to authority requirements and regulations.

Outcomes

The team managed to significantly reduce the amount of manual handling through the use of engineered tools, mechanical aids and developed installation practices.

The project's success has been a result of completing the majority of scope works within schedule taking into account a number of unforeseen challenges.

The projects key challenge was the requirement to replace all of the tunnels pipework over eight weekend rail occupations from July to September. This was achieved by using hi-rail equipment with the implementation of unique purpose built equipment. All firefighting systems have remained fully functional for the project.