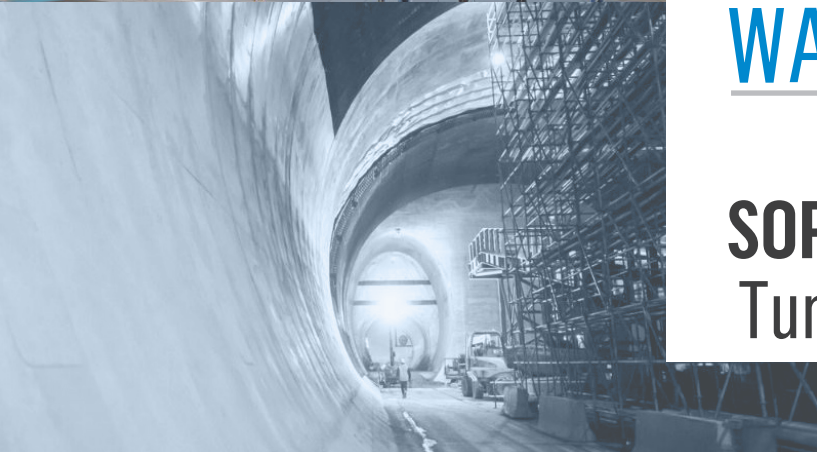


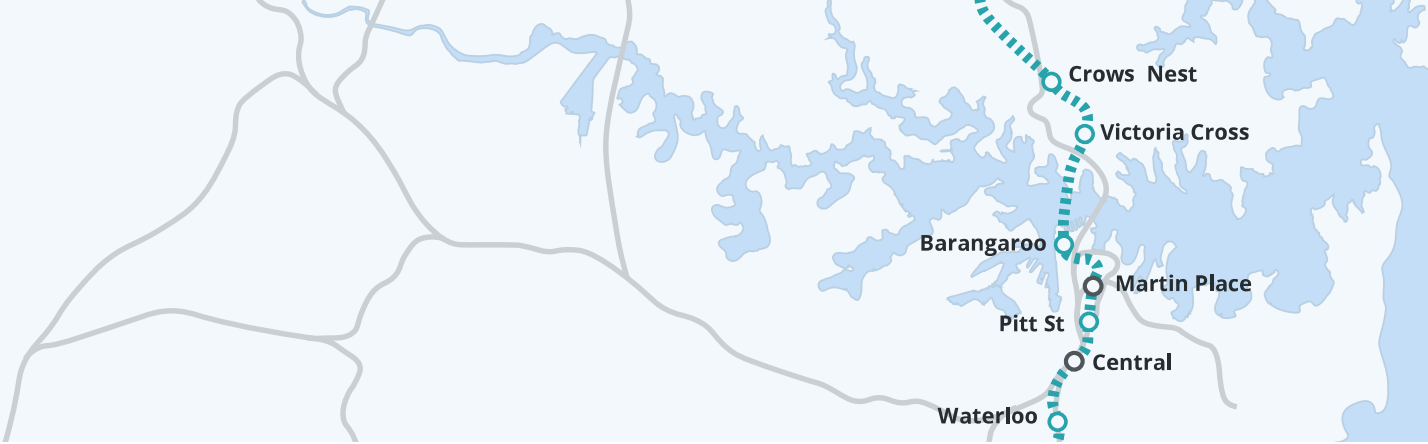
CASE STUDY



SYDNEY METRO CITY & SOUTHWEST SUB-STRUCTURE WATERPROOFING



SOPREMA FLAGON PVC
Tunnelling System



SYDNEY METRO IS AUSTRALIA'S BIGGEST PUBLIC TRANSPORT PROJECT, REVOLUTIONIZING THE WAY AUSTRALIA'S LARGEST CITY TRAVELS

From the north west, metro rail is being extended under Sydney Harbour, through new underground city stations and beyond to the south west. In 2024, its total railway network will cover more than 66 km and serve a capacity of 40,000 customers per hour with its 31 metro stations.



PROJECT DETAILS

PROJECT NAME

Sydney Metro City & Southwest - Tunnel and Station Excavation Works (TSE)

SCOPE OF WORKS

Waterproofing of underground works, infrastructure

LOCATION

Sydney, Australia

SITES

Martin Place, Victoria Cross, Pitt Street, Crows Nest and Waterloo

CONSTRUCTION DATE

2018–2021

OWNER

NSW Government

TUNNELLING CONTRACTOR

John Holland CPB Ghella Joint Venture (JHCPBG)

INSTALLERS

Eptec Group and Advanced Weather Proofing



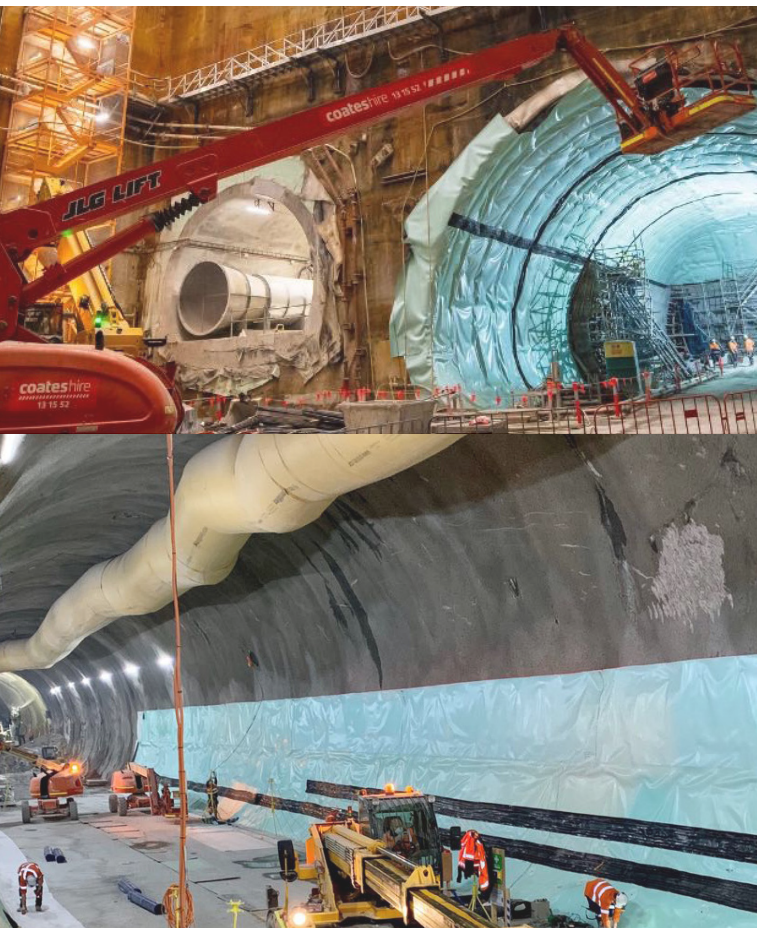


SOPREMA WATERPROOFS THE UNDERGROUND WORKS

SOPREMA FLAGON PVC tunnelling system was installed in a few of the deepest stations on the city's metro train line, which are expected to host large buildings above the stations: Martin Place, Victoria Cross, Pitt Street, Crows Nest, and Waterloo Station sites.

Thanks to its flexibility and high mechanical resistance to geological movement and high hydrological pressure, SOPREMA's FLAGON PVC system was chosen to waterproof these challenging underground structures.

The **FLAGON PVC** tunnelling system is composed of **FLAGON BSL**, **GEOLAND PP FR**, **FLAGON PVC PZ**, **FLAGON COMPARTMENT JOINT**, **FLAGON ANCHOR**, and a **PREDIMAX INJECTION HOSE**.



BENEFITS

- The waterproofing system can be repaired, even years after its installation, without any excavation or destructive investigation.
- The system allows for application onto wet or irregular substrates.
- Quality control of the waterproofing system is very reliable and easily achieved.
- High mechanical resistance to geological movement and high hydrological pressure are present.
- The system is cost efficient, on both materials and installation time levels.
- The system has a long service life.



THE INTRODUCTION OF AN INNOVATIVE PRODUCT TO THE AUSTRALIAN TUNNELLING INDUSTRY

Thanks to the John Holland CPB Ghella Joint Venture (JHCPBG) for selecting PVC membranes from SOPREMA. SOPREMA initiated a change to market trends and offered the Australian market a proven technology for waterproofing underground structures that is easier to install.

The JHCPBG Project Manager was impressed by SOPREMA's overall service and was pleased to be associated with the introduction of an innovative product and a new company to the Australian tunnelling industry.

