

Tunnel and Station Excavation Works

JOHN HOLLAND CPB GHELLA
WATERLOO REDWATCH PRESENTATION

JASON JULIUS

1 FEBRUARY 2018

Acknowledgement

I would like to acknowledge the traditional owners of the land on which we gather today, and pay my respect to elders past, present and future.

John Holland CPB Contractors Ghella

- Australia's most experienced tunnelling contractors
- Built most of Australia's major underground infrastructure in the last 15 years
- Delivery of tunnelling and rail projects in metropolitan cities across the world

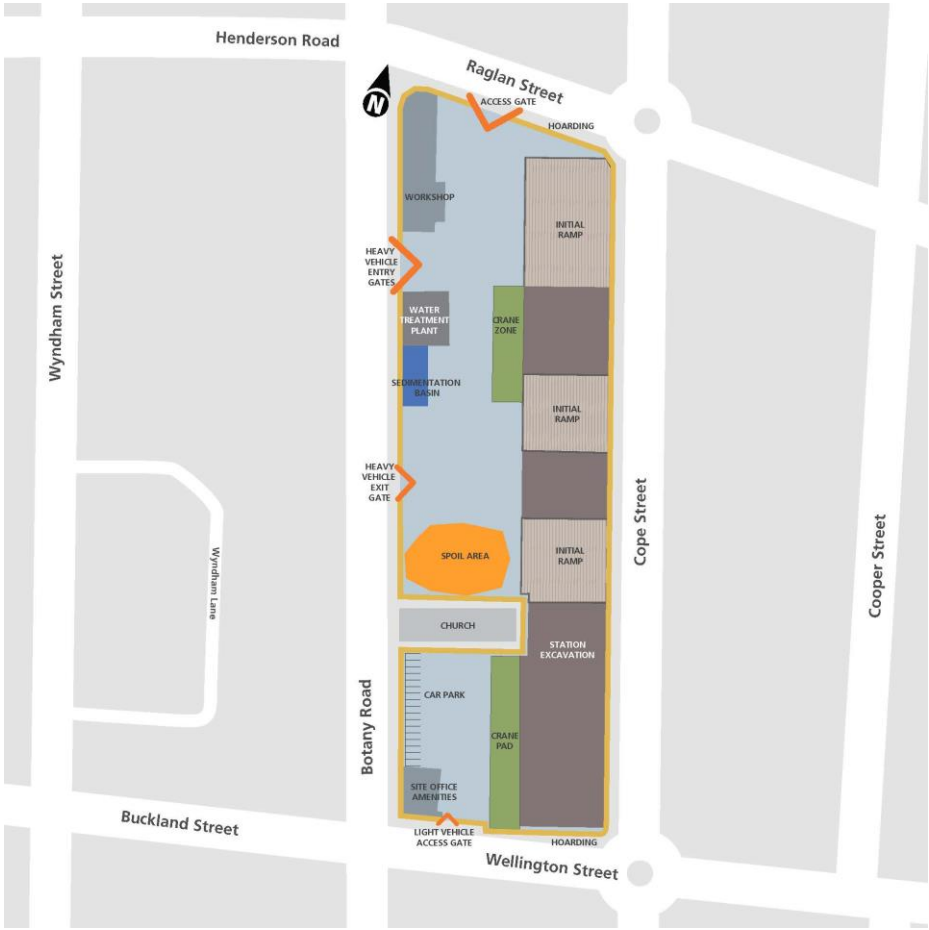
Tunnel and Station Excavation (TSE) Alignment



Tunnel and Station Excavation Scope

- Twin 15.5 km tunnels between Chatswood and Sydenham
- Mined tunnels, caverns, shafts, cross passages, and tunnel drive structures at Chatswood and Marrickville
- Rail crossover cavern at Barangaroo
- Six station excavations at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street and Waterloo
- Establish and operate a precast facility to manufacture about 99,000 concrete segments to line the tunnels

Waterloo Station site



Construction timeline

- Site establishment (underway)
- Heritage investigations (underway)
- Site preparatory works (underway)
- Piling works (Feb 18 to April 18)
- Station excavation (April 18 to early 2019)
- Tunnel boring machine (TBM) break-through (first TBM expected early 2019)

Piling works

- Piling rig/machine will be used to stabilise and reinforce the ground before excavation can commence



Station excavation



During excavation



After excavation

Construction hours

- Standard hours:
 - Monday to Friday 7am to 6pm
 - Saturday 8am to 1pm
- Occasional out-of-hours works for specific activities
- 24-hour tunnelling

Managing noise and vibration

- Noise and Vibration Management Plan
 - The Construction Noise and Vibration Management Plan includes a range of measures to minimise noise impacts from construction including tunnelling
- Comprehensive noise and vibration modelling to predict likely impacts
- Monitoring throughout works
- Hoarding to minimise noise to residents
- Consultation with businesses sensitive to noise and vibration.

Tunnel boring machine (TBM)



Tunnel boring machines at Waterloo

- Two tunnel boring machines (TBMs) will arrive after tunnelling from Marrickville
- TBMs traverse the Waterloo site before being relaunched to tunnel towards the city and Barangaroo



Community relations

- Open, honest communication with all stakeholders
- Actively seek out and meet our neighbours
- Strive to build positive and trusting relationships
- Proactively identify and address issues
- Respond to complaints quickly and effectively.



Historical archaeology



Historical archaeology



Historical archaeology



Contact us

For more information, enquiries or complaints please contact us at:

-  **1800 171 386** 24-hour community information line
-  **tunnels@transport.nsw.gov.au**
-  **sydneymetro.info**
-  **www.facebook.com/SydneyMetro**
-  **Sydney Metro** PO Box K659, Haymarket NSW 1240
-  If you need an interpreter, call TIS National on **131 450** and ask them to call **1800 171 386**