



KENSINGTON COMMUNITY REFERENCE GROUP

MEETING 1

7 FEBRUARY 2019



COMMUNITY REFERENCE GROUPS

- A Metro Tunnel Environmental Performance Requirement to collectively provide for representation of interested and relevant stakeholders
- Kensington and Arden Community Reference Groups (CRG) established October 2017
- Standalone CRG established for Kensington
- Combined Arden and Parkville CRG formed



METRO TUNNEL PROJECT



Western Portal

South Kensington

North Melbourne

Parkville

West Melbourne

The existing 'North Melbourne' station will be renamed West Melbourne.

Melbourne Central

Flagstaff

State Library

Parliament

Town Hall

Southern Cross

Flinders Street

Richmond

Anzac

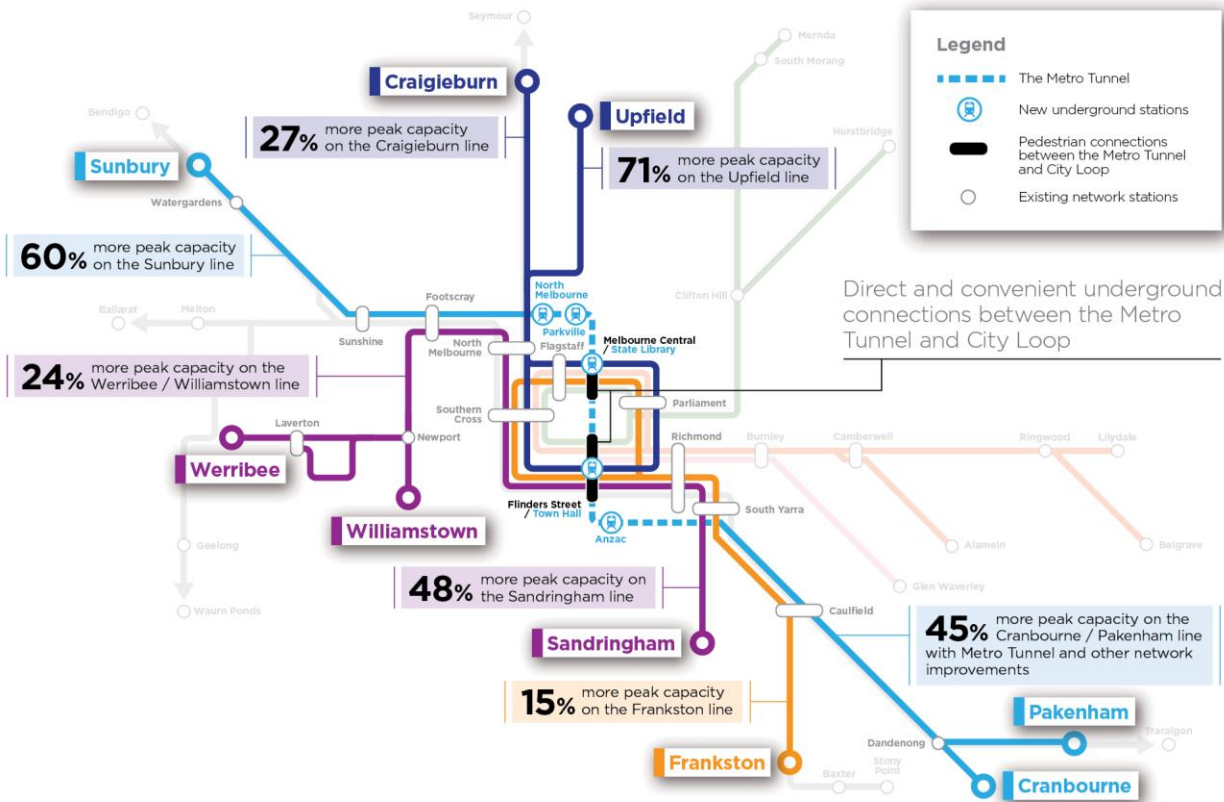
South Yarra

Eastern Portal

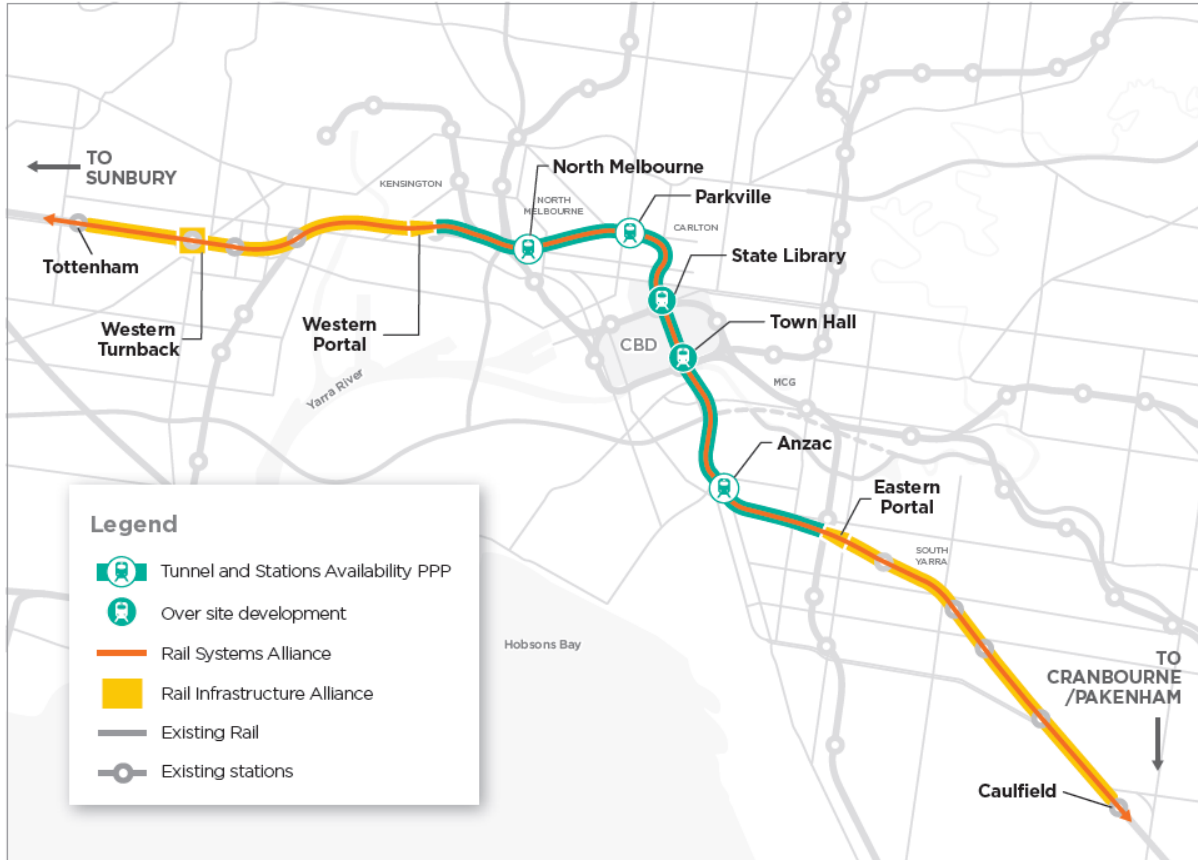
Cranbourne / Pakenham Line

Sunbury Line

CAPACITY BENEFITS



WORK PACKAGES



TUNNEL AND STATIONS (AVAILABILITY PPP)

- 9km twin tunnels and five underground stations including fit-out
- Mechanical and electrical systems
- Tunnel and stations maintenance
- Rail systems installation within the tunnel

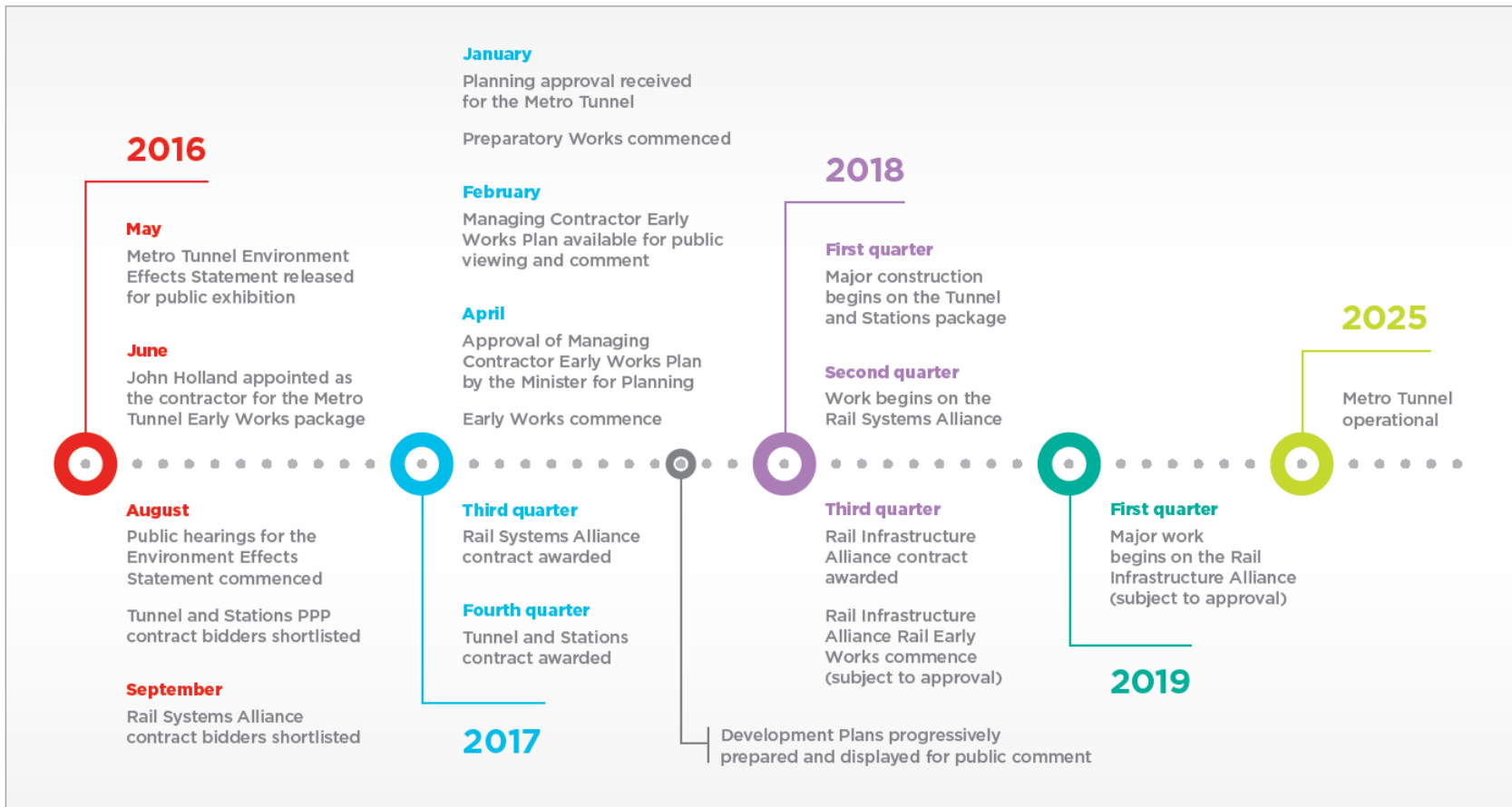
RAIL INFRASTRUCTURE (ALLIANCE)

- Eastern and Western Portals
- Integration of portal with existing rail networks (civil track, overhead line equipment, signalling)
- Eastern and Western Turnback
- Wider network enhancements

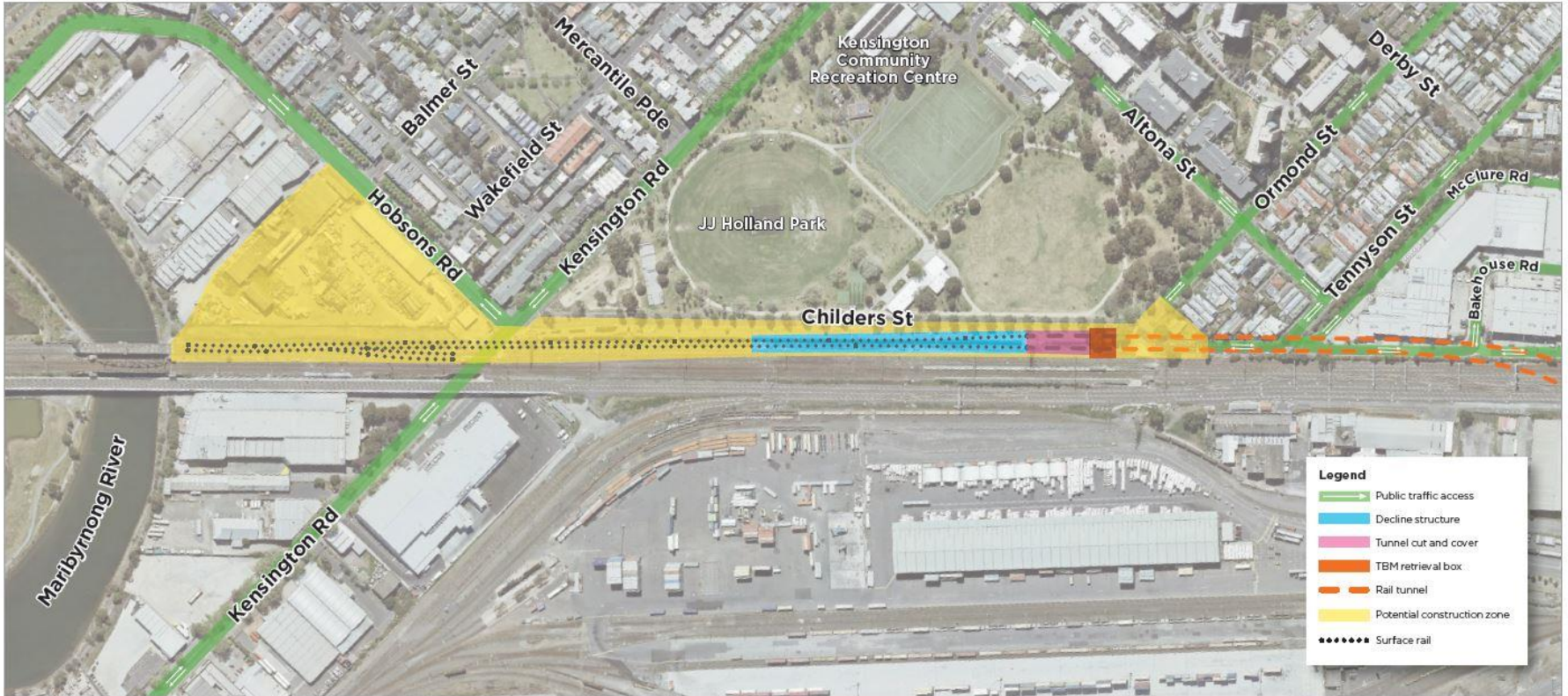
RAIL SYSTEMS (ALLIANCE)

- High capacity signalling
- Conventional signalling upgrades and modifications
- Communication systems
- Platform screen doors
- Train control and operational control systems
- Systems integration and end-to-end commissioning

PROJECT TIMELINE



WESTERN TUNNEL ENTRANCE SCOPE



Access maintained through construction site on Childers Street for over-height vehicles accessing the Lloyd Street Business Estate and residents on Childers Street and Tennyson Street (south of the truncation).

indicative only



DISCUSSION ITEMS



DISCUSSION ITEMS

- Dust management
- Site maintenance



DESIGN DEVELOPMENT



DEVELOPMENT PLAN OVERVIEW

- Mandatory planning approval process for Metro Tunnel contractors
- Contains design sketches and functional layouts detailing legacy infrastructure and how areas will be reinstated at the end of the project
- Available for public inspection and comment
- Requires approval by the Minister for Planning before major construction works can start

DESIGN PROGRESSION

TIMING	ACTIVITY
May 2018	<ul style="list-style-type: none">• Development Plan for the egress building approved (CYP)• Stage 1 of major construction, and detailed design, starts
September 2018	<ul style="list-style-type: none">• Design integration starts following appointment of RIA
October 2018 – January 2019	<ul style="list-style-type: none">• Stakeholder workshops to develop concepts for the western tunnel entrance design (RIA)
February 2019	<ul style="list-style-type: none">• Draft Development Plan for the western tunnel entrance on public display (RIA)
Ongoing	<ul style="list-style-type: none">• Integrated detailed design and refinement• Community engagement

DRAFT RIA WESTERN PORTAL DEVELOPMENT PLAN

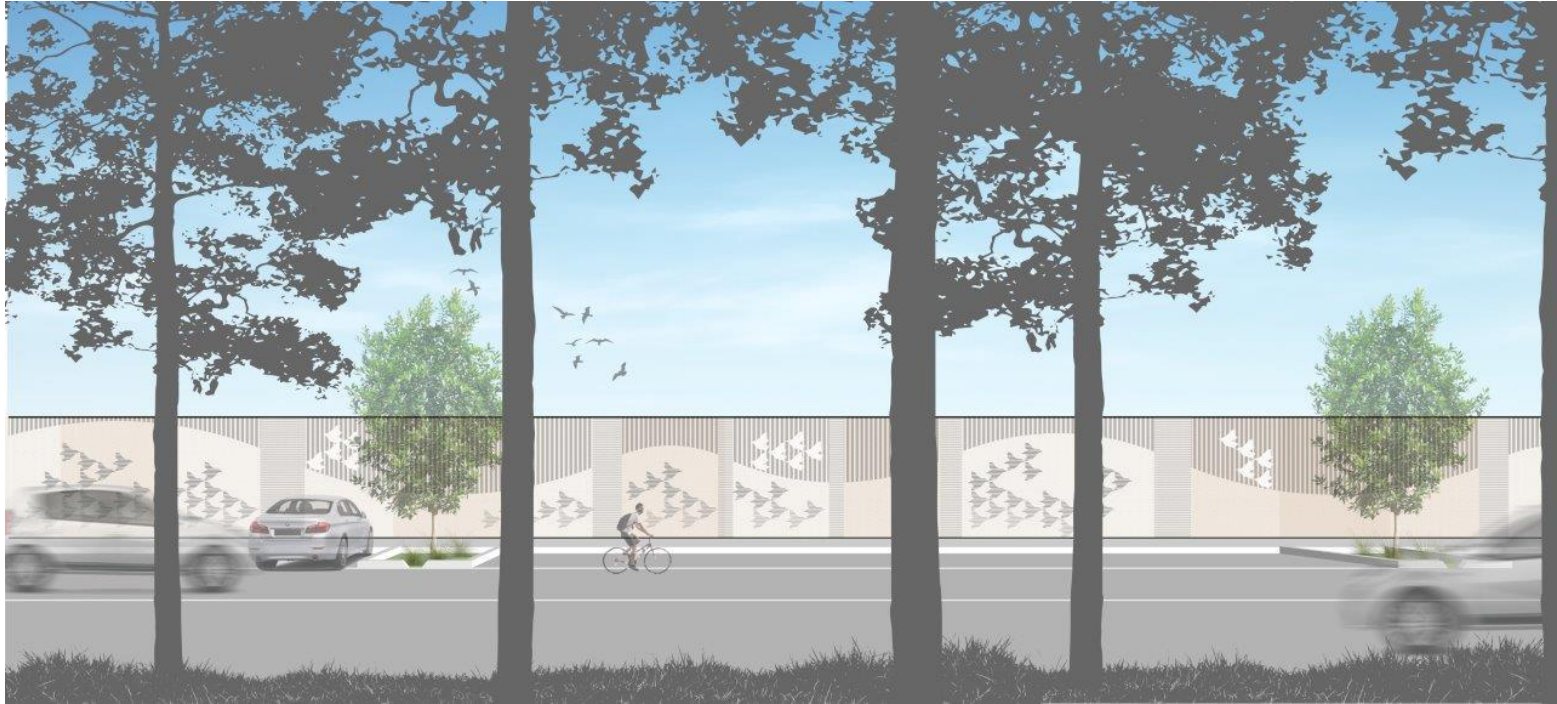
TIMING	ACTIVITY
4 February	Public display period starts Plans available at metrotunnel.vic.gov.au Online survey Letterbox drop and doorknock
6 - 7 February	Community pop-ups at South Kensington station
9 February	Community drop-in information session
22 February	Public display period ends and submissions close
March – April	Collate and respond to public submissions
Mid 2019	Anticipated approval from Minister of Planning

DRAFT DESIGN ELEMENTS



Indicative only

CONCEPT FLOOD WALL ILLUSTRATION



Indicative only



PROGRAM



2018 RECAP

- Tunnel Boring Machine (TBM) retrieval shaft site occupation and establishment – April
- Stage 1 closure of Childers Street – August
- Rail-side piling for TBM retrieval shaft – July to September
- Start of cross passage ground improvement works – September
- Childers Street gas main protection works – November to December
- Hobsons Road and Childers Street site preparation and establishment – September 2018



2019 MILESTONES

- Major construction on the tunnel entrance infrastructure starts – February
- Cross passage ground improvement works in Kensington completed – third quarter
- Tunnelling between North Melbourne and Kensington starts – mid year
- Retrieval of TBM 1 – third to fourth quarter
- Retrieval of TBM 2 – fourth quarter



HOBSONS ROAD CAR PARK



CHILDERS STREET SITE ESTABLISHMENT



PROGRESS UPDATE

Recently completed activities

- Car park construction at Hobsons Road
- Childers Street long term closure implemented
- Removal of hedge and seven trees on Childers Street
- Installation of temporary road barriers, site fencing and hoarding
- Gas main protection works
- Cyclist detour line marking and signage
- Road-side pile guide wall construction



PROGRESS UPDATE

Ongoing and upcoming activities

- Site preparation and establishment on Childers Street
- Site and service investigations on Childers Street
- Rail embankment retaining wall
- 24 hour works in rail corridor (10-14 Feb & 23-25 Feb)
- Road-side piling for TBM retrieval shaft
- Cross passage ground improvement works (Lloyd Street, Lloyd Street Business Estate)



CHILDERS STREET SITE ESTABLISHMENT

CONSTRUCTION PROGRAM

Activity	Feb	Mar	Apr	May	Jun
Childers Street site establishment	Dark Grey	Dark Grey	Light Blue	Light Blue	Light Blue
Site and service investigations	Medium Grey	Medium Grey	Light Blue	Light Blue	Light Blue
Rail embankment retaining wall piling	Dark Grey	Dark Grey	Dark Grey	Light Blue	Light Blue
Temporary bentonite plant construction	Light Blue	Light Blue	Medium Grey	Medium Grey	Medium Grey
Relocation of overhead rail structures & signalling cables	Dark Grey	Dark Grey	Light Blue	Light Blue	Light Blue
Driven piling works	Light Blue	Medium Grey	Medium Grey	Medium Grey	Light Blue
Diaphragm wall works	Light Blue	Light Blue	Light Blue	Dark Grey	Dark Grey
Road-side bored piling	Medium Grey	Medium Grey	Medium Grey	Light Blue	Light Blue
Cross passage ground improvement works	Dark Grey	Dark Grey	Dark Grey	Dark Grey	Dark Grey
Hoarding construction & painting	Medium Grey	Medium Grey	Light Blue	Light Blue	Light Blue

Indicative only

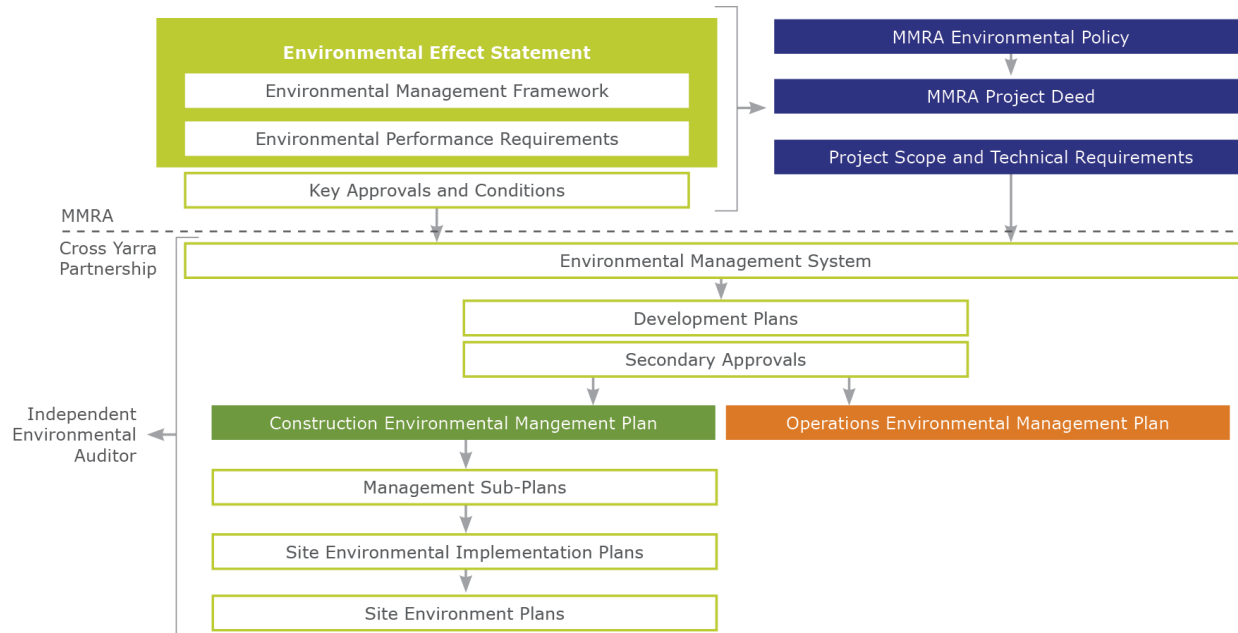


RAIL-SIDE PILING, CHILDERS STREET

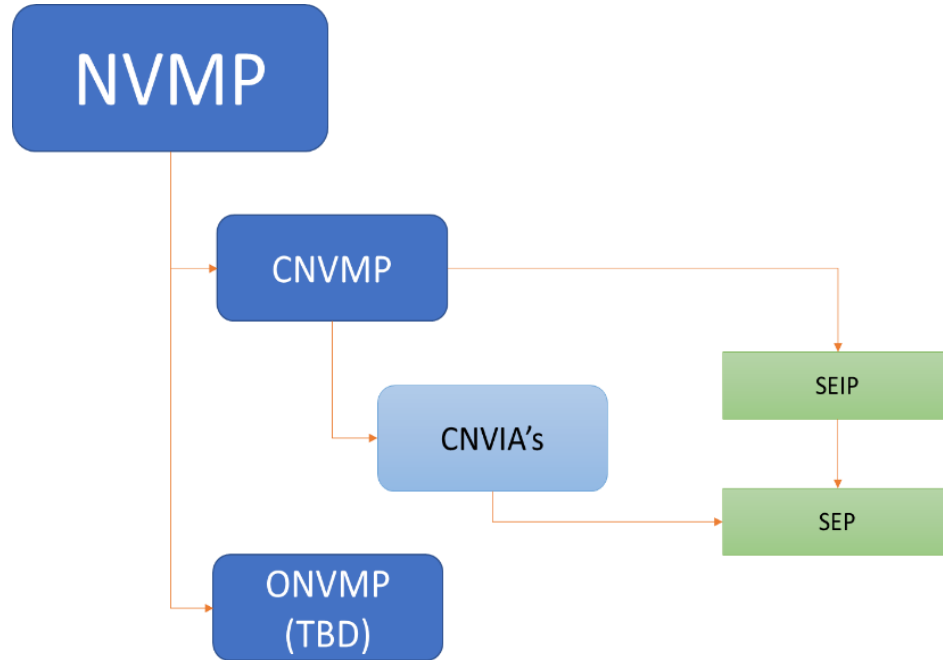


ENVIRONMENT UPDATE

ENVIRONMENTAL MANAGEMENT FRAMEWORK



NOISE AND VIBRATION



NOISE AND VIBRATION – CNVIA

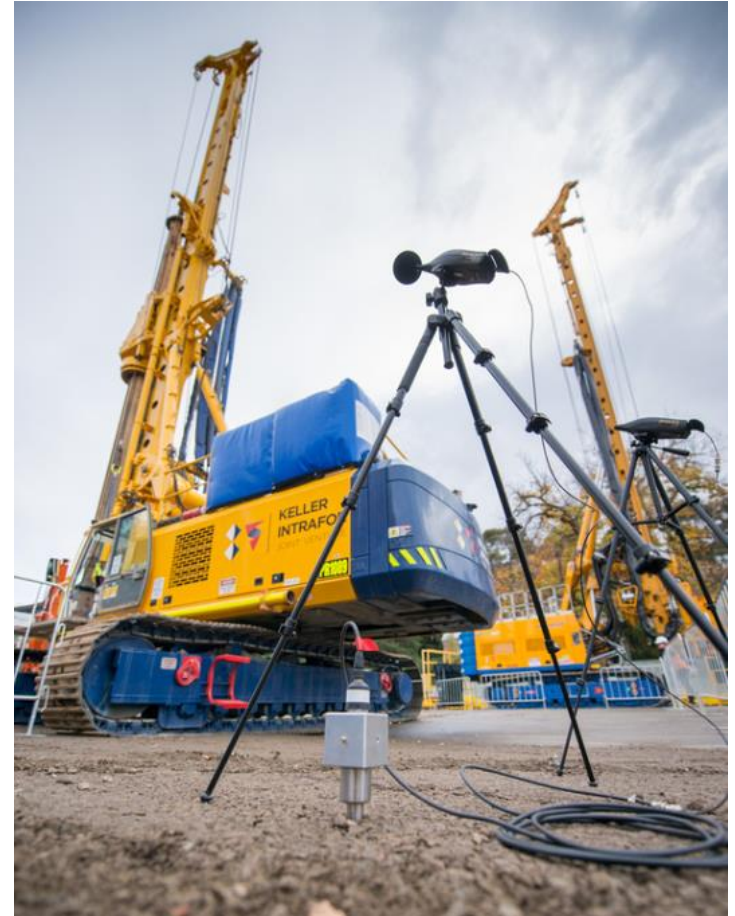
Construction Noise & Vibration Impact Assessment (CNVIA)

- Identification of sensitive receivers
- Description of site specific works
- Baseline measurement results
- Site specific noise and vibration management targets
 - EPR guideline targets
 - Residential Impact Mitigation Guidelines
 - EPA 1254
- Predictions of noise and vibration impacts
- Site monitoring regime

NOISE AND VIBRATION – MONITORING

Monitoring:

- Attended:
 - Check change to construction methodology
 - Subjective information to refine construction methods
 - Differentiate between construction noise sources and other sources such as road traffic
- Ongoing during works:
 - Regularly review data
 - Determine if further mitigation required





NOISE AND VIBRATION – MONITORING

- Unattended:
 - 24hr real time monitoring regime
 - Alerting system to ensure guidelines are adhered too
 - Data reported on monthly to RPV
 - Data audited quarterly by the Independent Environmental Auditor

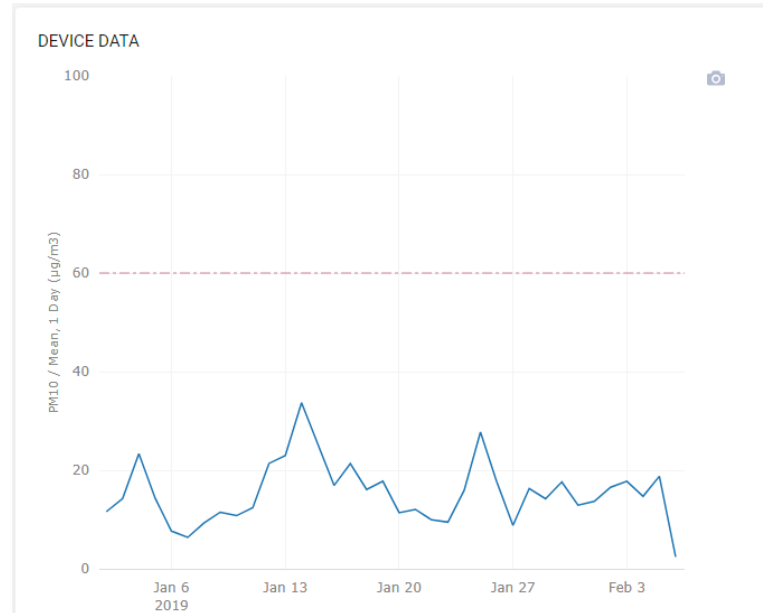
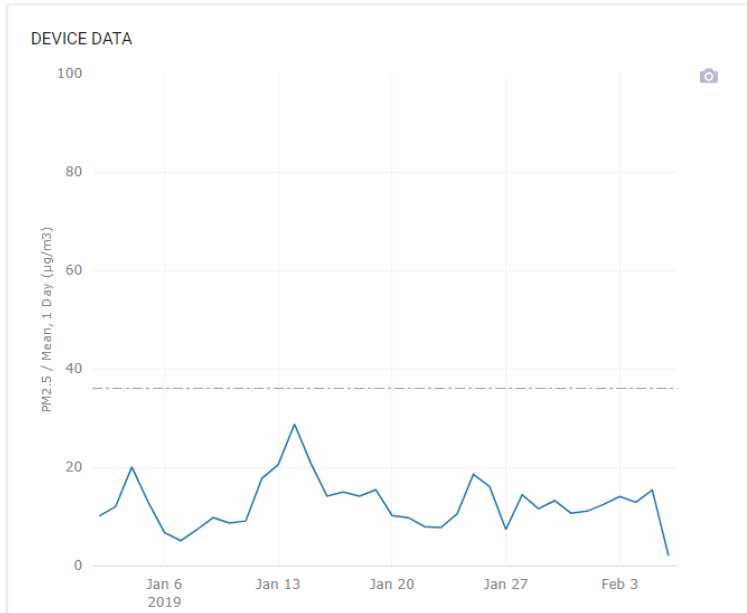
SPOIL MANAGEMENT

- Soil sampling and classification using EPA guidelines
- Transported using covered trucks and approved haulage routes
- Transported to pre-determined location and facility licensed to accept each type of waste
- On-site dust mitigation:
 - Water cart/hoses to wet down exposed earth
 - Polymer spray
 - Street sweepers on surrounding roads
 - Air quality monitoring

ENVIRONMENTAL MONITORING

January – February 2019

- Air Quality



ENVIRONMENTAL MONITORING

January – February 2019

- Attended noise monitoring, road-side piling (15min L_{aeq})
 - 133 Ormond 60dBa; modelled 74dBa
 - 123 Ormond 58dBa; modelled 69dBa
 - KCCC 54dBa; modelled 56dBa

CONSTRUCTION NOISE – SHEET PILING

- Noise is a subjective issue experienced differently by everyone
- There is no **one size fits all** approach
- Predictive noise modelling assessments underway
- Factors considered for proactive mitigation:
 - Proximity to works
 - Individual considerations
 - Special circumstances
- Encourage residents to contact project to discuss mitigation options



ENVIRONMENTAL MODELLING

Sheet Piling Works (mostly during normal construction hours)

- Kensington Road precinct: modelled 56 – 64 Db
- Childers Street/Altona Street precinct: modelled 57 – 61 Db
- No anticipated highly noise affected properties



TRAFFIC AND TRANSPORT



TRAFFIC MANAGEMENT

Ongoing activities

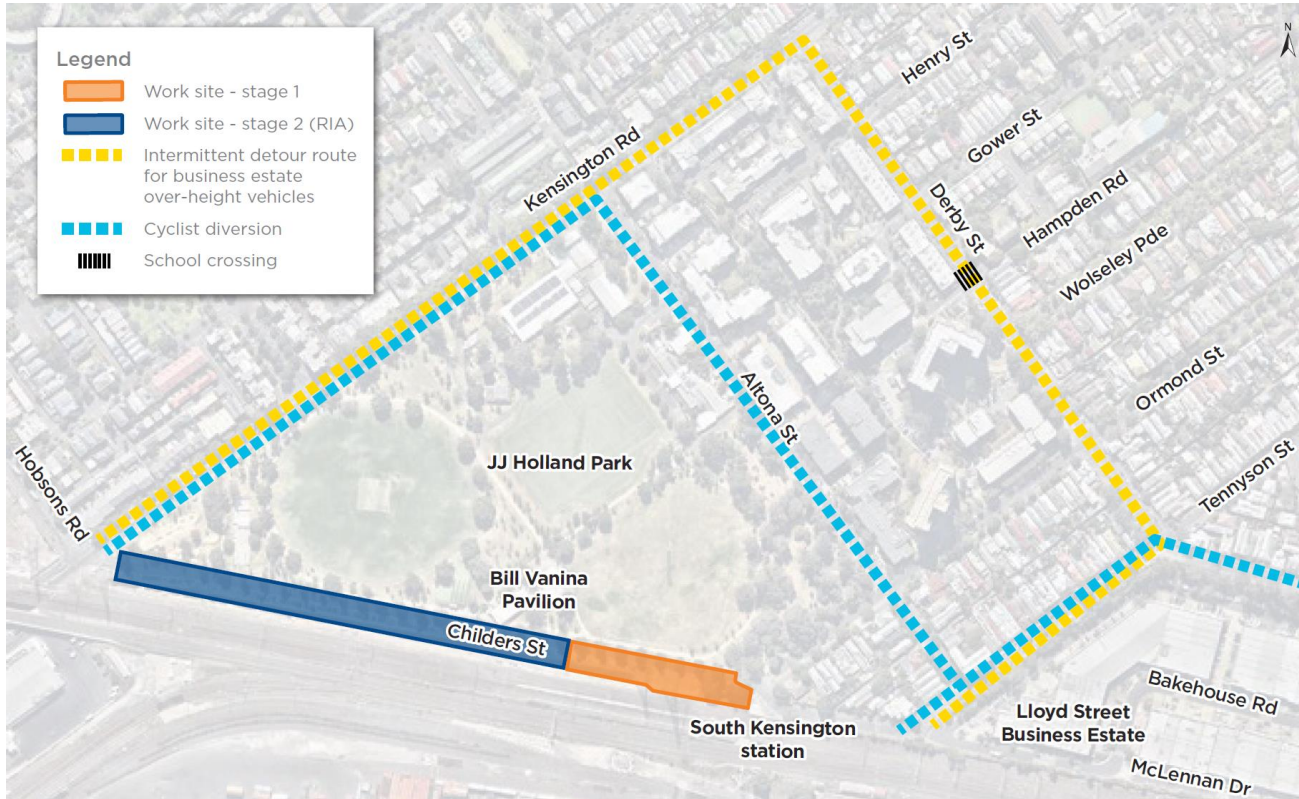
- Childers Street closed to through traffic (authorised vehicles only)
 - Pedestrian and cycling detours in place
 - Offset car park established

TRAFFIC MANAGEMENT

Upcoming activities

- Increased truck movements associated with the delivery of machinery and materials
- Traffic management on Kensington and Hobsons roads, and Childers Street during non-destructive digging (NDD) works
- Overnight road closures of Kensington Road for bentonite plant gantry installation
- **Some overnight closures of Lloyd Street to install pipes beneath roads** (access to LSBE maintained via Childers Street)
- Traffic management within LSBE for ground improvement works

DETOUR ROUTES





TEMPORARY DETOUR, CHILDERS STREET



TRANSPORT CHANGES

So 24 hour works can take place safely, buses will replace trains from Sunday 10 February to Wednesday 13 February, from 8.30pm to the last service each night on the:

- Werribee and Williamstown lines: between North Melbourne, Newport and Williamstown stations.

Buses will also replace trains at various times in late February and March. These disruptions will take place outside of peak times.



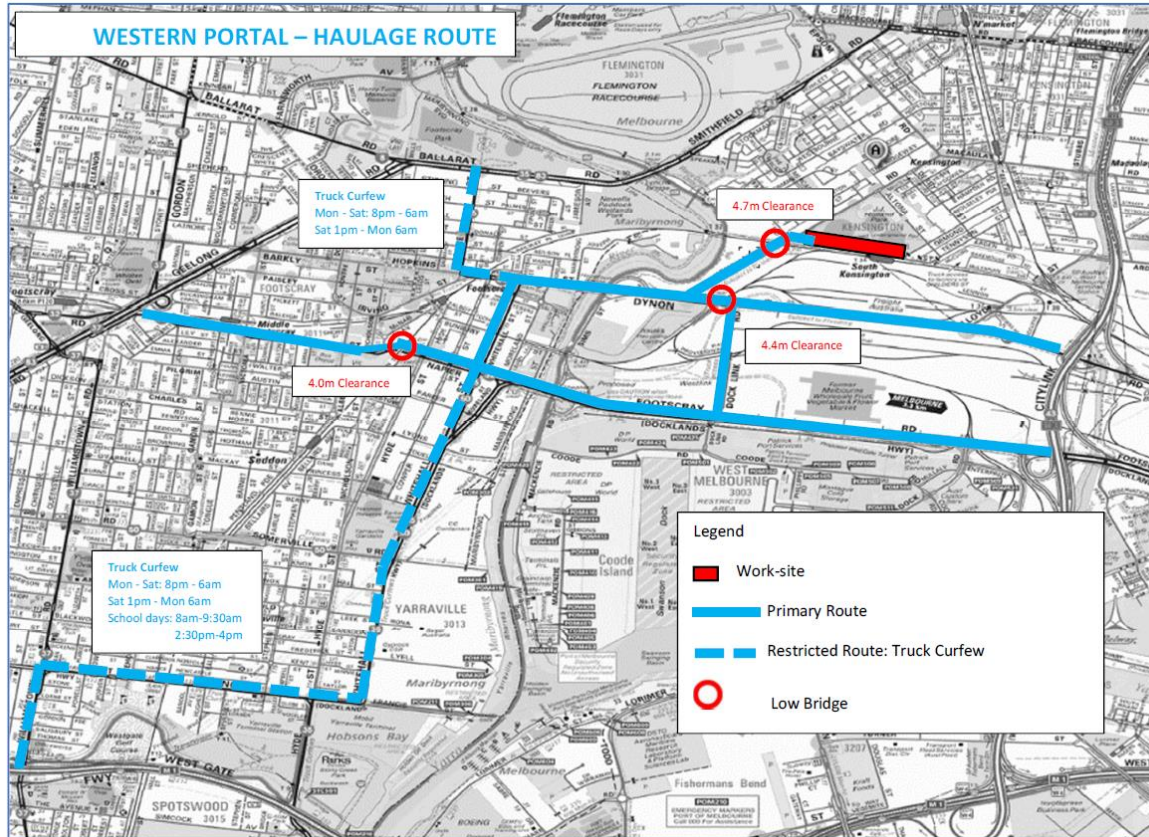
COMMUNITY UPDATE

TOP ISSUES

Key issues raised during January

- Use of temporary over-height vehicle detour route
 - Responses to individual enquiries and stakeholder feedback
- Truck movements along Kensington Road
 - Raised at pre-starts and with sub-contractors
- Parking in local streets
 - Raised at pre-starts and with sub-contractors
- Dust around Childers Street
 - Water carts on site to mitigate

TRUCK HAULAGE ROUTE





CREATIVE PROGRAM UPDATE

Hoarding artwork

- Designed and painted by artist Mike Makatron
- Painting at 135 Ormond, 13 – 16 February
- Painting at JJ Holland Park, 18 – 25 February
 - Kensington Children's Co-operative and Unison Community Housing painting event, 19 February
- Community celebration – Kensington Community Festival, 31 March



OTHER ITEMS?



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North Melbourne

Parkville

West Melbourne

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