

## Rozelle Interchange tunnel design

Online tunnel tool now available

September 2019

Example Rozelle Railyards parkland

\*Artist's impression of Rozelle Parklands - consultation to determine the park's final design is expected to begin early 2020.



The Rozelle Interchange is the final stage of WestConnex providing an underground connection to the New M4 and New M5 tunnels, and a bypass of Victoria Road between Iron Cove and the ANZAC Bridge. The Rozelle Interchange will **deliver up to 10 hectares of open space** and also connect to the future Western Harbour Tunnel.

- More than 100,000 trips a day are expected on the M4-M5 Link when it opens in 2023, reducing congestion on local streets.
- The toll-free Iron Cove Link is expected to reduce traffic by almost 50 per cent along Victoria Road.
- In the morning peak in 2031, WestConnex will improve travel times from the west to the Sydney CBD by up to 15 to 20 minutes.

The Joint Venture of John Holland and CPB Contractors (JHCPB) started work this year on the Rozelle Interchange including work to build the Iron Cove Link, **with tunneling due to start in early 2020**.

### Tunnel design

The tunnel design for the Rozelle Interchange has now been finalised and can be seen over the page. We invite you to view it using the online tunnel tool found at [www.westconnex.com.au/tunnelling](http://www.westconnex.com.au/tunnelling)

You may notice some differences between the concept design provided in the Environmental Impact Statement (EIS) released in 2017, and the tunnel design shown over the page.

It's not uncommon for changes and improvements to be made to the concept design after the EIS following the detailed design process.

### What has changed from the EIS?

The project team has made a number of design improvements that have been assessed and are consistent with the impacts outlined in the EIS.

These improvements include more open space within the Rozelle Rail Yards by placing ventilation facilities underground instead of above ground.

You can see both the EIS concept design map and the updated tunnel map over the page. As well as the traffic tunnels, the tunnel alignment map also now includes the location of cross passages, permanent ventilation tunnels, substations and temporary access tunnels required during construction.

While not shown on the EIS map, these supporting tunnels were referenced, assessed and approved in the EIS and are essential safety and support features of underground roads.

## Online tunnel tool

You can find more information about the tunnels, including their type, location and depth in relation to your property at the online tunnel tool: [www.westconnex.com.au/tunnelling](http://www.westconnex.com.au/tunnelling)

## Tunnel depths at Rozelle Interchange

The average depths of the tunnels will be approximately 35 metres, and around 65 metres at their deepest. Construction of these tunnels will continue to follow well-established construction methods used for the Sydney region. They will be built safely ensuring compliance with all criteria detailed in the project's planning approvals.

## Tunnel construction

Investigations into the **ground conditions** along the alignment have determined the Rozelle Interchange tunnels are located mainly in Hawkesbury sandstone, a coarse rock that is ideal for excavation due to its uniform structure and strength.

Tunnelling will be largely carried out by machines called roadheaders that use a rotating head to slowly excavate the rock. This is followed by the installation of ground support such as inserting rockbolts (metal rods) and spraying concrete. The **construction method** is adapted based on the ground conditions experienced in that area.

**Extensive monitoring** of the ground is carried out both inside the tunnel and on the surface to pick up any ground movement. Every section of newly excavated tunnel is checked by our geotechnical and engineering teams who determine the type of roof support required. Over the coming weeks you may notice our surveying team start to install markers on the kerbs and roads alongside the tunnel alignment.

Further detailed information about construction of the tunnels will be provided at information sessions being held in October, and in updates to be distributed later in the year.

## EIS concept design



**Supporting tunnels** for the Rozelle Interchange are shown on the map opposite. These include:

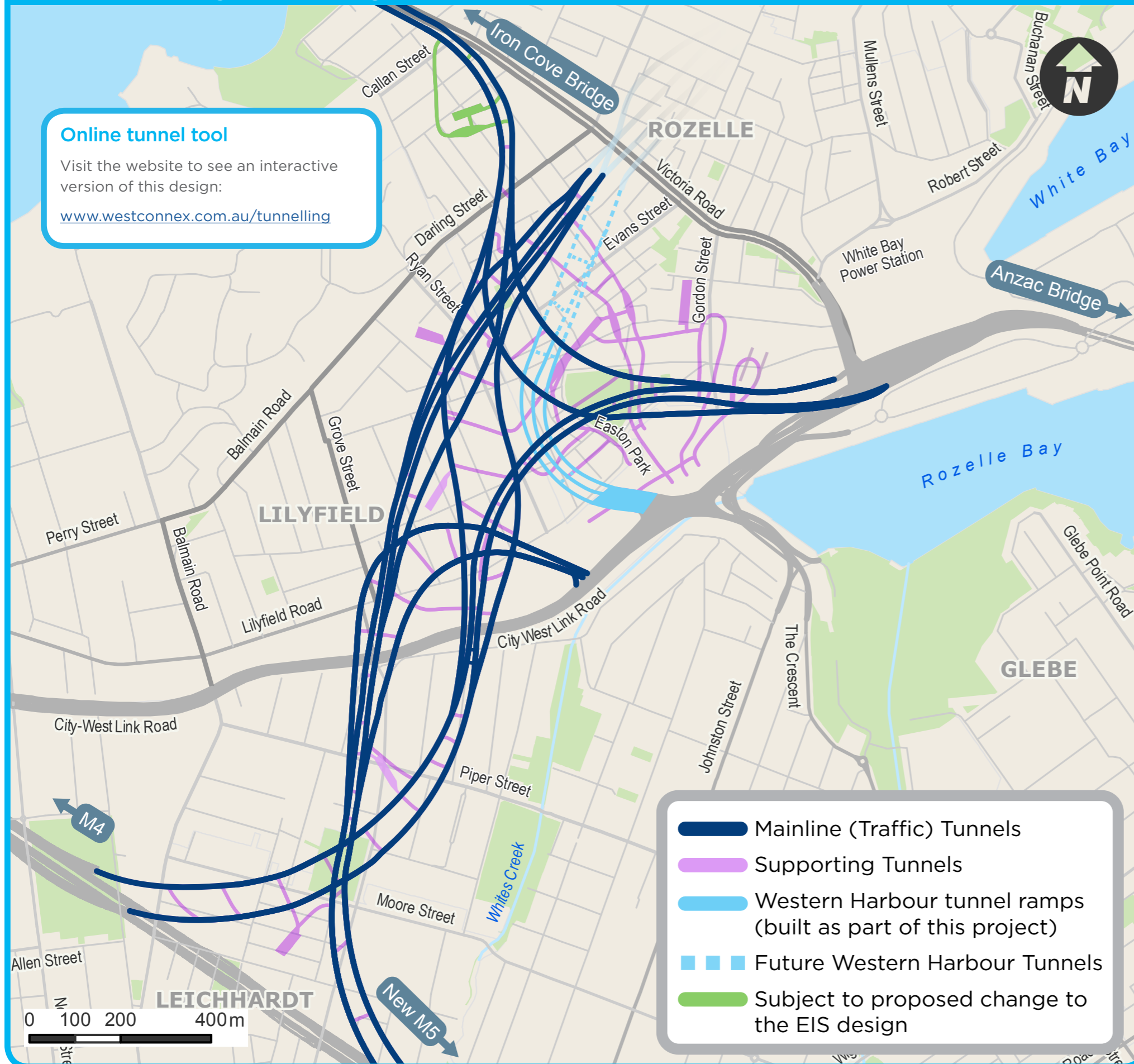
- **Cross passages** - regularly spaced passages that connect traffic tunnels to provide emergency access and contain electrical equipment
- **Ventilation tunnels** - to facilitate air flow through the traffic tunnels. Ventilation facilities (not including the ventilation outlets) have been placed underground to reduce the impact at surface level and provide more open space in the Rozelle Park.
- **Substations** - nine caverns will be built below ground to house electrical switchboards required for powering the tunnels, further reducing the impact on the surface
- **Temporary access tunnels** - passages required to construct the tunnels efficiently. These tunnels will be backfilled at the end of the project

For further information regarding the Western Harbour Tunnel, please contact the community hotline on [1800 931 189](tel:1800931189).

## Rozelle Interchange connections to the road network



## Rozelle Interchange tunnel design



### Online tunnel tool

Visit the website to see an interactive version of this design:

[www.westconnex.com.au/tunnelling](http://www.westconnex.com.au/tunnelling)

## Subsurface acquisition

Transport for NSW (TfNSW) manages all property acquisitions for the project. Subsurface land is compulsorily acquired to allow us to create a path for the tunnel. This is normal for tunnelling projects in Sydney. It includes some land passing directly under properties in Rozelle, Lilyfield, Leichhardt and Annandale. The surface area and any building or other structures on your land will not be affected by subsurface acquisition, and in most circumstances no compensation is payable. You will still be able to do normal renovations such as building a pool, subject to council approval.

You may have already received your substratum acquisition letter, with the remaining letters being progressively sent by TfNSW over the next 12-18 months.

## You will be offered a property condition survey

If your property is located within 50 metres of the outer edge of the tunnels you will be offered a property condition survey before and after construction. The survey is free of charge and will ensure there is a clear record of your property's condition. In the unlikely event damage is caused by our construction work, it will be repaired at no cost to you.

Offers for property condition surveys are sent out progressively, approximately 2-3 months prior to tunnelling occurring near your property. We strongly recommend that you accept the offer and book a time for an inspection.

TfNSW has established an Independent Property Impact Assessment Panel to review property damage disputes. Further details regarding this panel will be provided before the start of tunnelling.

## Additional changes to the design

We are proposing a number of additional design improvements to Rozelle Interchange. These changes are subject to the modification and consultation process managed by the Department of Planning, Industry and Environment (DPIE).

These design improvements include:

1. Crescent Overpass and active transport links - consultation on this modification closed on September 25. Thank you to those members of the community who made submissions. These are now being reviewed by DPIE and a submissions report responding to the submissions will be prepared and released publicly later this year.
2. A proposal to change the EIS design at the toll free Iron Cove Link section of the project, indicated in green on the map. The proposal involves moving aboveground ventilation buildings underground, reducing the surface footprint and visual impact, but resulting in additional tunnelling.

You will be invited to comment on the modification above in the coming months. Full details of the changes and the impacts will be provided as part of the formal DPIE process.

## What's next

Communication will be sent out gradually ahead of the construction program, so we ask for your patience as we reach everyone. If you are located within 50 metres of the tunnel alignment you can expect the following contact from us before we tunnel near your property:

- further written information by late 2019 regarding construction of the tunnel
- offer for pre-construction property condition report two to three months prior to tunnelling happening near you
- resident meetings



We are aiming to deliver information to you about our construction activities by sending emails. If you haven't already signed up to receive these e-updates please provide your email address to [info@rozelleinterchange.com.au](mailto:info@rozelleinterchange.com.au) or contact [1800 660 248](tel:1800660248).



### Resident meetings

Information sessions about tunnelling will be held for residents located within 50 metres of the tunnels over the next few months. These meetings will be limited to small groups so that your questions can be answered. If you would like to attend one of the following sessions, please contact us.

#### Rozelle residents

Tuesday 1 October	6:00pm
Thursday 3 October	4:00pm
Wednesday 9 October	4:00pm
Tuesday 15 October	6:00pm
Thursday 17 October	4:00pm
Thursday 17 October	6:00pm
Tuesday 22 October	4:00pm
Tuesday 22 October	6:00pm

### Leichhardt/Annandale residents

Tuesday 1 October	4:00pm
Wednesday 9 October	6:00pm

### Iron Cove residents (North of Balmain Road)

Thursday 3 October	6:00pm
Tuesday 15 October	4:00pm

We will schedule additional resident meetings if there is demand. Future drop-in sessions for the general public will be organised throughout construction.

### Getting in contact

 [info@rozelleinterchange.com.au](mailto:info@rozelleinterchange.com.au)

 [1800 660 248](tel:1800660248)

 Community information centre located at 68-72 Lilyfield Road, Rozelle 2039

 [westconnex.com.au/projects/m4-m5-link-rozelleinterchange](http://westconnex.com.au/projects/m4-m5-link-rozelleinterchange)



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