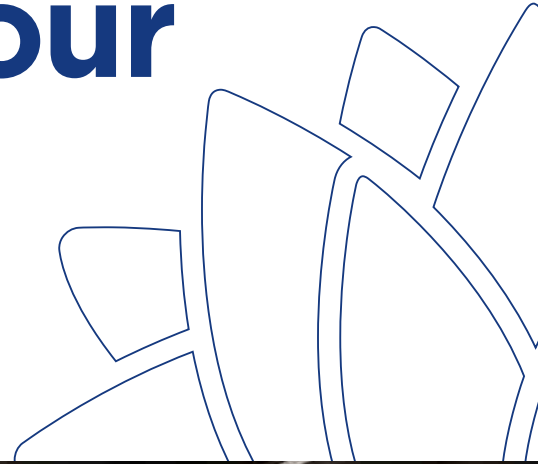


Western Harbour Tunnel

Project update





Western Harbour Tunnel

including the Warringah Freeway Upgrade



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Project overview

Western Harbour Tunnel is a major transport infrastructure project that will make it easier, faster and safer to get around Sydney.

Sydney Harbour Bridge and Sydney Harbour Tunnel are at the heart of Sydney's road transport network.

Both are now at over-capacity and a single incident can have a major flow-on effect on travel times across the transport network and impact our economy.

As Sydney continues to grow, with more and more trips being made, so will the challenges to our transport network.

Western Harbour Tunnel is key to delivering the transport vision for Sydney.

It will change the way people move around Sydney and how people travel between the North Shore, the central business district (CBD) and Western and Southern Sydney.

With Western Harbour Tunnel people will spend less time in traffic and have more time for themselves and their families.

Western Harbour Tunnel includes over six kilometres of mainline tunnels as well as upgrading over nine kilometres of surface roads.

Largely underground, the Western Harbour Tunnel has been designed to have minimal impacts on communities and to minimise property needs.

The project includes:

Western Harbour Tunnel

- a new tunnel from the Rozelle interchange, under Sydney Harbour to the Warringah Freeway

The Warringah Freeway Upgrade

- streamlining Australia's busiest road.

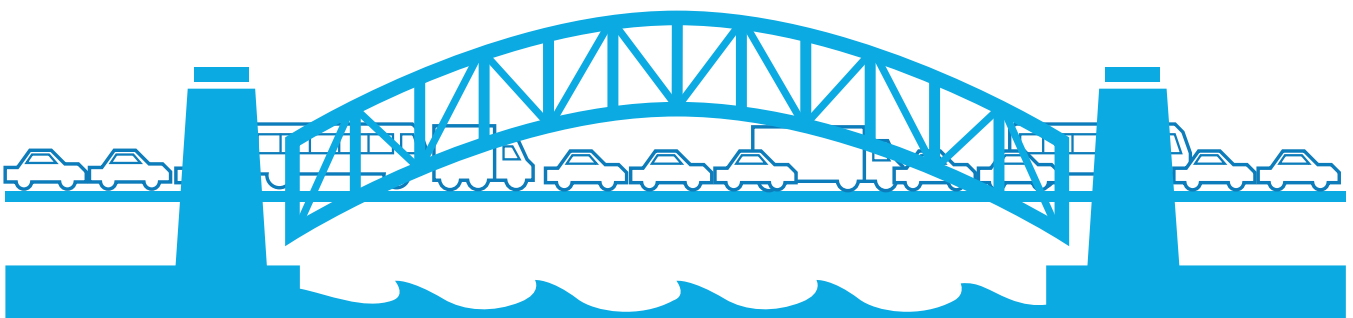
Western Harbour Tunnel will:

- Create a western bypass of the CBD and take pressure off the congested Sydney Harbour Bridge, Anzac Bridge and Western Distributor
- Integrate with public transport, improve travel times and boost reliability for cross-harbour trips and the broader network
- Provide core capacity that enables improved links across Sydney.

Western Harbour Tunnel

less time in traffic, more time for you

more than
4.3 million people
cross **Sydney Harbour Bridge and Tunnel**
by car, bus and train every week



Project benefits

Western Harbour Tunnel delivers a new crossing of Sydney Harbour and creates a western bypass of the Sydney CBD.

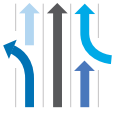
The project includes upgrading four kilometres of Australia's busiest road, the Warringah Freeway.

Improved public transport

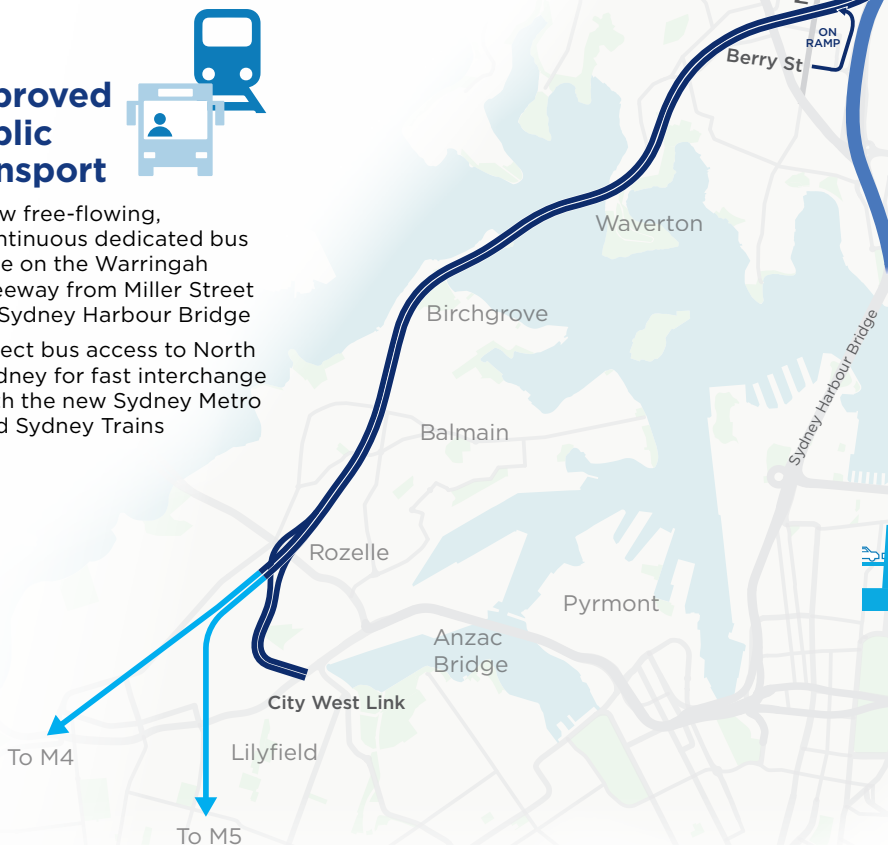


- New free-flowing, continuous dedicated bus lane on the Warringah Freeway from Miller Street to Sydney Harbour Bridge
- Direct bus access to North Sydney for fast interchange with the new Sydney Metro and Sydney Trains

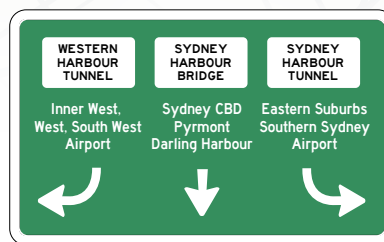
Streamline the Warringah Freeway



- Safer and simpler journeys
- Easier to navigate
- Reduces traffic weaving
- Optimises traffic flow across three crossings



Take pressure off Sydney Harbour Bridge and Tunnel



More direct harbour crossings

Change how we cross Sydney Harbour

- Take pressure off Sydney Harbour Bridge and Tunnel, Anzac Bridge and Western Distributor, easing congestion
- Providing an alternative way to get to Sydney Airport

Improved active transport



- Dedicated cycleway between Miller Street, Cammeray Park and Falcon Street
- Improved connections over the Warringah Freeway at Ridge Street, Ernest Street and High Street



Travel time savings

- ⌚ Rozelle to North Sydney up to 10 minutes
- ⌚ Chatswood to Airport up to 21 minutes
- ⌚ Mosman to Airport up to 18 minutes
- ⌚ Olympic Park to North Sydney up to 13 minutes
- ⌚ Manly to Parramatta up to 25 minutes

Design changes led by community feedback

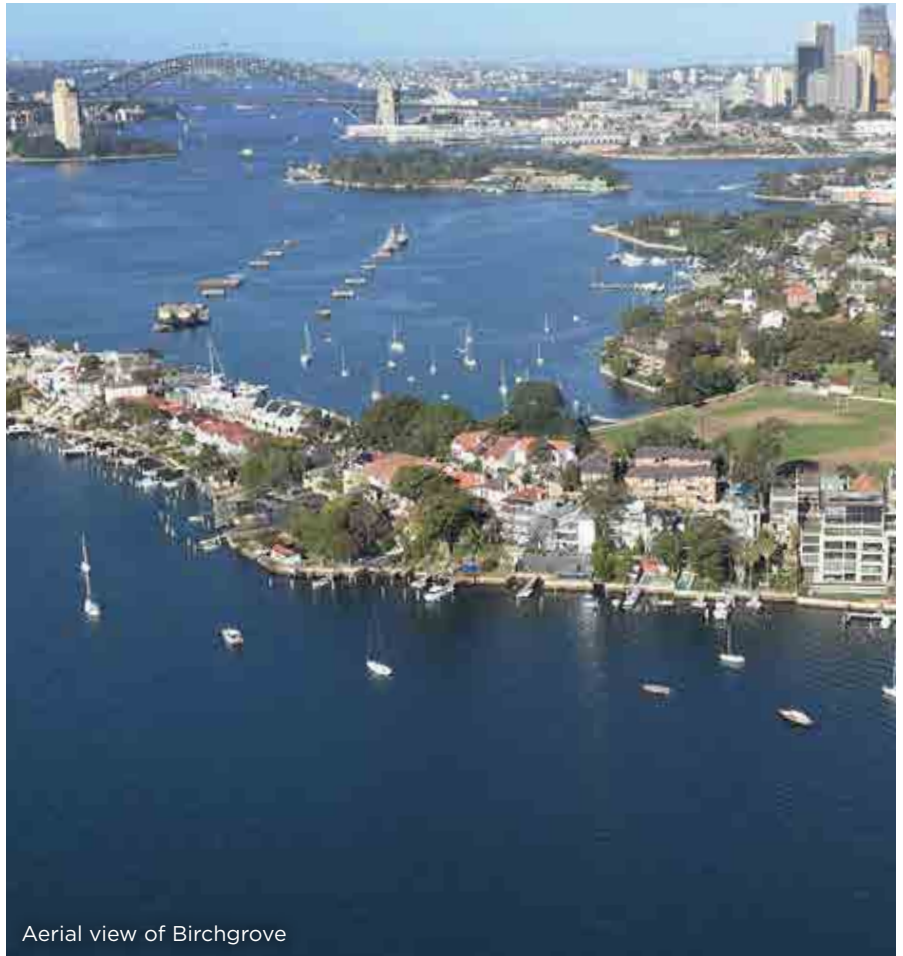
In March 2017, the NSW Government released a project concept and started detailed design work on the Western Harbour Tunnel project.

Since then, there has been extensive community engagement, geotechnical testing, field studies and market sounding with the finance and construction industries.

This project update provides an overview of how the proposed design has evolved, incorporating feedback from community and stakeholder groups over the past year.

Roads and Maritime Services want to hear what you think about where we are up to. We will shortly commence community engagement on the design presented in this project update.

Once we have heard your feedback, we will continue to refine the design. The NSW Government will then progress this refined design through the planning assessment process. This will include the exhibition of Environmental Impact Statements (EISs) when the community can provide formal feedback.



Aerial view of Birchgrove

What we've heard

Extensive engagement has included over 5000 face-to-face conversations via a series of 16 community feedback sessions, 12 shopping centre displays, workshops and meetings with schools and community groups.

We have made significant changes to the design based on what we have heard from the community.

Inner West

What we heard	How the design addresses this
Do not use Birchgrove Oval for construction purposes	No proposal to use Birchgrove Oval for construction
Keep heavy construction traffic off the streets of Balmain and Birchgrove	No tunnel spoil transport through Balmain or Birchgrove local streets Water transport to be used wherever possible
Concerns about air quality and the proposed location of a ventilation facility in Rozelle	Ventilation facility will be located at the planned Rozelle Interchange Air quality has been assessed as part of the WestConnex M4-M5 Link EIS and is also being addressed in the Western Harbour Tunnel environmental assessment No additional facilities required for the Western Harbour Tunnel in the Inner West

Cammeray and North Sydney

What we heard	How the design addresses this
<p>Minimise the impact to St Leonards Park and Anzac Park</p>	<p>Motorway facilities located at Cammeray Golf Course next to the Warringah Freeway – not St Leonards Park</p> <p>Temporary impact to St Leonards Park in the sloping area between the bowls club and the Warringah Freeway</p> <p>Minimal, permanent impact generally along the Warringah Freeway</p> <p>Minimal temporary impact to Anzac Park for installation of drainage and kerb realignment</p>
<p>Concerns about air quality and the proposed location of ventilation facilities in Cammeray</p>	<p>Ventilation facilities will be located near the tunnel ramps, in the Warringah Freeway corridor</p> <p>An air quality assessment, taking into account local conditions (including topography), is being undertaken and will be detailed in the EIS</p>
<p>Desire for improved active transport connections</p>	<p>Dedicated cycleway between Miller Street, Cammeray Park and Falcon Street and improved connections over the Warringah Freeway at Ridge Street, Ernest Street and High Street</p>

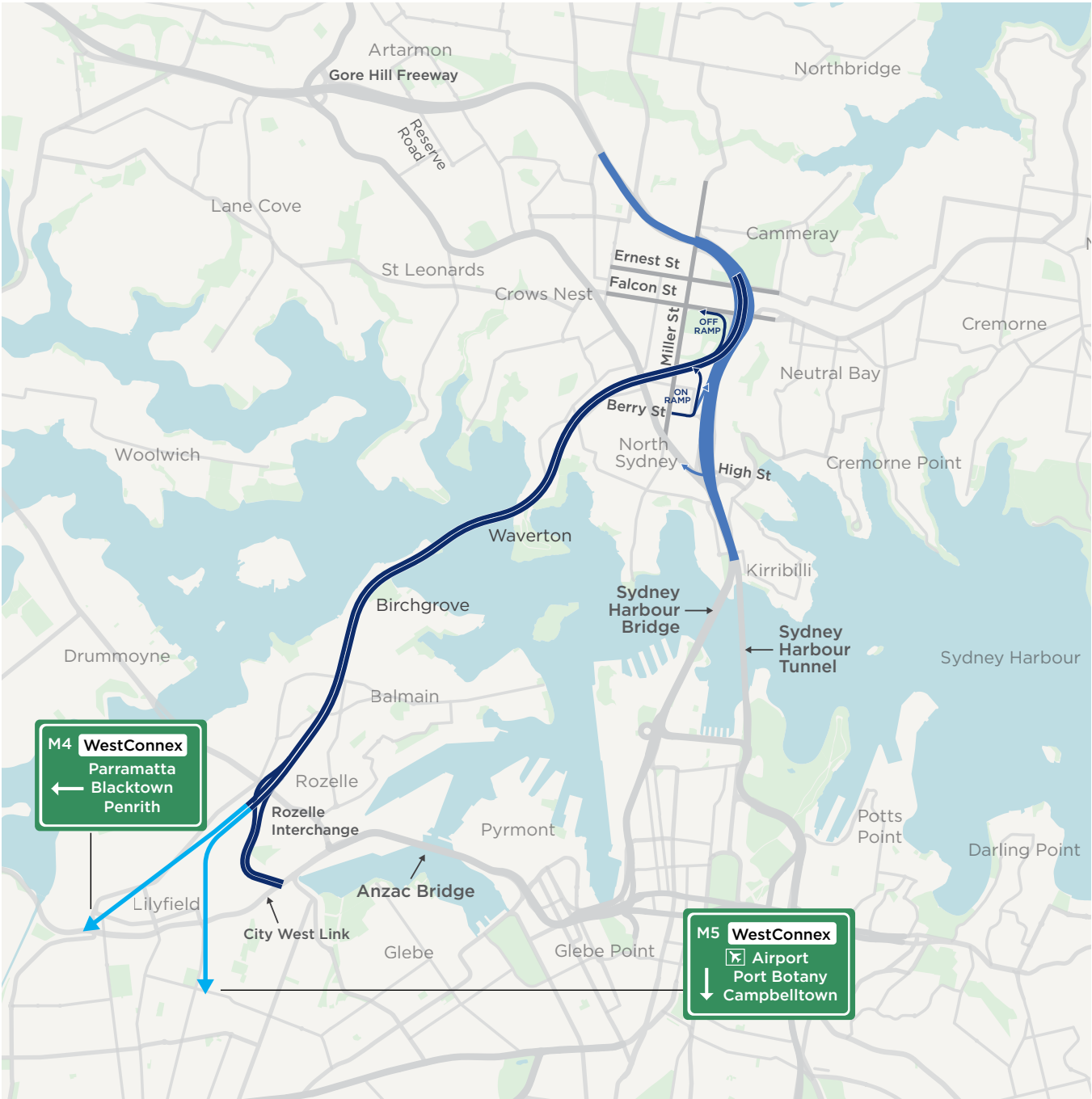


Cammeray

Design facts and map

Western Harbour Tunnel

Western Harbour Tunnel	6.5 kilometres	Three lanes each way
The Warringah Freeway Upgrade	4 kilometres	Major streamlining, improved way-finding, reduced merging



Legend

- Western Harbour Tunnel
- Warringah Freeway Upgrade
- WestConnex
- Motorways
- Major roads

0 1km 2km

N

Project need

As Sydney's population grows, our economy and jobs will also grow, as will the number of trips made in and around Sydney every day.

Congestion costs our economy around \$6.1 billion a year. By 2030, this cost is expected to hit \$12.6 billion a year.

Motorway connections, as part of an integrated transport network, provide critical support to a growing economy in a global city like Sydney.

Western Harbour Tunnel is a key initiative for Sydney's integrated transport network. It will relieve congestion, improve access by public transport to jobs and services and increase the efficiency of the freight network.

The project has been identified as an infrastructure priority by both the NSW and Commonwealth Governments.

It supports the NSW Government's strategic objectives for Greater Sydney and delivers on recommendations made by Infrastructure Australia.

In 2018, the NSW Government delivered a long term planning and transport blueprint, releasing:

- Greater Sydney Commission's Greater Sydney Region Plan and District Plans, which establish a vision for Sydney as a productive, sustainable metropolis of three cities where people can access jobs and services within 30-minutes by public transport
- Future Transport 2056 (see page 10).

Western Harbour Tunnel:

Supports the Greater Sydney Region Plan

(Greater Sydney Commission, 2018) vision for access by public transport to the Eastern Harbour City, including Sydney Harbour, St Leonards, Chatswood and Macquarie Park.

Supports the Eastern City and North District Plans

(Greater Sydney Commission, 2018), special objectives to maintain the Harbour City's economic success and support sustainable growth of strategic centres across the North District. By reducing pressure on arterial roads, the project also facilitates improvements to places in the Eastern City and North Districts.

Aligns with the State Infrastructure Strategy (INSW 2018)

This strategy recognises that the Western Harbour Tunnel will considerably strengthen the capacity and resilience of the Sydney motorway network.

'Crucially the western bypass of the CBD provides the opportunity to remove through-traffic from sensitive residential and commercial precincts, improving public amenity and enabling the allocation of more surface road space to public transport, walking and cycling'

Supports customer outcomes Future Transport 2056

including enabling 30-minute access to jobs and services by public transport, improving the legibility of the transport network and improving freight journey times by better separating local and through-traffic.

Aligns with Infrastructure Australia's Priority List

which is developed by this independent infrastructure advisor to define the nation's infrastructure priorities. The project is listed as a priority initiative.

Funding

The NSW Government is investing a record \$51.2 billion over four years to 2021/22 for public transport and roads.

This represents a \$9.8 billion, or 23.6 per cent increase on the four years to 2020/21 included in the 2017/18 NSW State Budget.

The total amount is comprised of \$26.6 billion for public transport and \$24.6 billion for roads.

Over the next four years, a total \$556.2 million has been allocated for the Western Harbour Tunnel and Beaches Link Program.

A total of \$130 million has been allocated for the 2018/19 financial year for planning and early works for the Western Harbour Tunnel and Beaches Link.

Future Transport 2056

By 2056, NSW will have more than 12 million residents and Sydney will become a global city of eight million people, similar in size to London or New York.

Planning and investment for Greater Sydney will focus around the three cities concept – the Western Parkland City, the Central River City and the Eastern Harbour City.

The NSW Government's Future Transport Strategy is an overarching strategy supported by a suite of plans to achieve a 40-year vision for our transport system.

Future Transport has been developed in close collaboration with the Greater Sydney Commission, Infrastructure NSW, the NSW Department of Premier and Cabinet and the NSW Department of Planning and Environment.

Future Transport 2056 identifies Western Harbour Tunnel as a committed infrastructure initiative along with the F6 Extension, Sydney Metro West and Parramatta Light Rail.

As part of the Movement and Place Framework outlined in Future Transport 2056,

motorways are identified as strategically significant roads that move people and goods rapidly over long distances.

Movement corridors and motorways are highly important for the movement of people and goods, with a key role to provide efficient movement across the road network where there is little interaction with adjacent land use. As such motorways provide a critical function in taking long distance through-traffic off surface roads when access to places is not required.

The Future Transport vision for the transport network is one where different road and rail links form part of an integrated and connected network across the Greater Sydney region with each of the three cities in a hierarchy of corridors performing different functions.

Motorways can support a city-shaping function as they facilitate higher speed and volume linkages between cities and centres. While motorways provide access across the metropolitan area and to and from regional NSW, as part of this vision, they are complemented by city-serving corridors better suited to accessing centres.

Within the 10-kilometre area around metropolitan centres, city-serving corridors will be able to support higher frequency, reliable on-street public transport while city-shaping motorways divert major traffic away from centres.

This is our vision for the integrated network around the Harbour CBD where the network of new motorways, including WestConnex and Western Harbour Tunnel will support high volume and capacity of private vehicles, road-based public transport and freight movement. At the same time they will enable busy surface roads, such as Parramatta Road, Victoria Road and Military Road, to support more on-street public transport to provide reliable access to land uses along these roads.

Motorways such as Western Harbour Tunnel support successful places, a key outcome sought from Future Transport 2056. They provide for a through-traffic bypass of places such as the Sydney CBD, facilitate a 30-minute city by allowing greater surface priority for public transport, and create the opportunity for better places, for example at Neutral Bay or Rozelle.





Artist's impression of proposed Victoria Cross interchange. Image courtesy Sydney Metro

Integrated planning

As a large urban expanse, Greater Sydney is reliant on strategic centres across the metropolitan area to provide employment and services.

Ensuring these centres are connected with each other and the rest of Sydney by an effective integrated transport network is fundamental to supporting access to jobs, housing, recreation and services, facilitating business-to-business connections and attracting investment.

This requires a range of transport modes, including mass transit solutions such as heavy rail or metro rail, and other solutions, including bus, light rail, motorways and active transport.

Western Harbour Tunnel complements other major NSW Government initiatives:

Sydney Metro

Enables direct connections to Sydney Metro, for example interchange for Beaches Link express buses at Victoria Cross station in North Sydney, increasing the metro catchment and providing a fast, one-transfer journey between the Northern Beaches and Greater Sydney.

B-Line

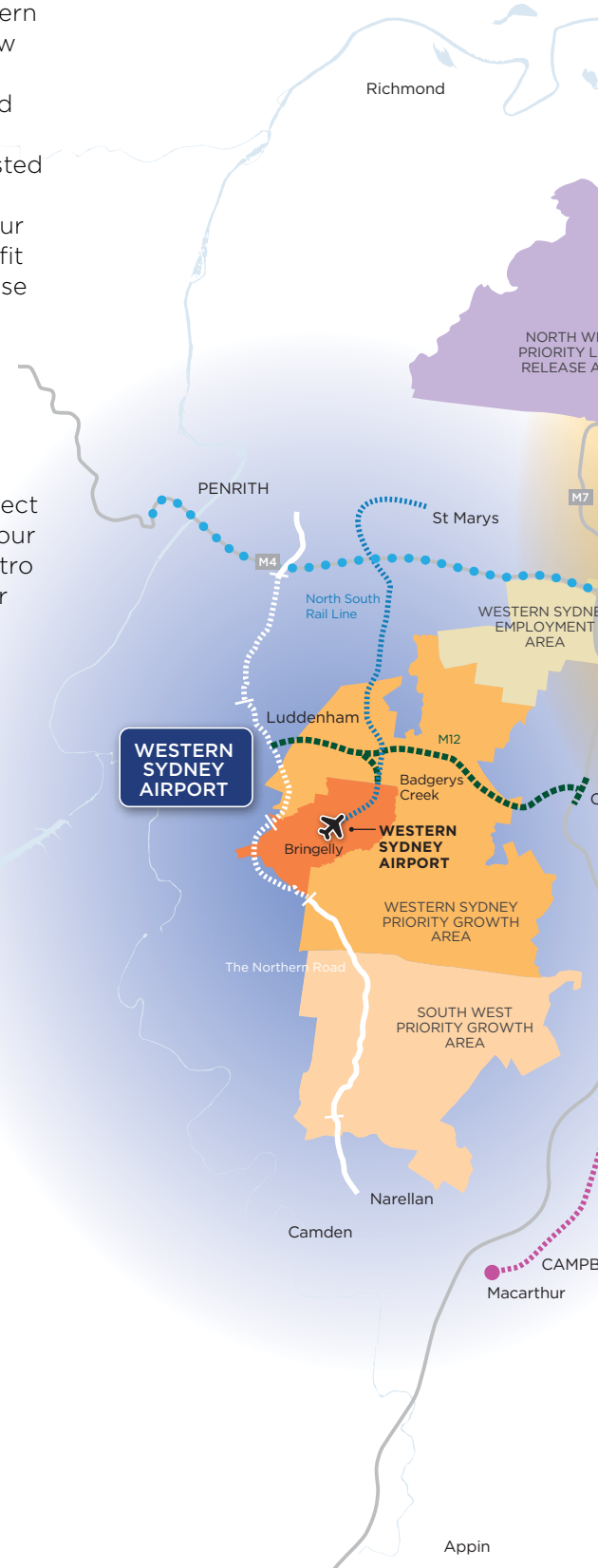
Beaches Link will provide the opportunity to further the benefits of the new Northern Beaches B-Line by enabling express services through Beaches Link and reduced congestion on existing arterial routes.

WestConnex

With the direct connection to the WestConnex Motorway via the Rozelle Interchange, the Western Harbour Tunnel will form a new motorway-standard western bypass of the Sydney CBD and improve the performance and function of the heavily congested Anzac Bridge, Western Distributor and Sydney Harbour Bridge corridor. This will benefit existing bus customers on these routes and provide access to Sydney's motorway network west and south.

Sydney Metro West

Western Harbour Tunnel will provide opportunities to connect centres north of Sydney Harbour with the proposed Sydney Metro West line via Western Harbour Tunnel.





Legend

Existing motorways/highways

Projects completed

- WestConnex New M4 widening
- M5 widening

Public transport in delivery

- B-Line
- Sydney Metro Northwest
- Sydney Metro City and Southwest
- City & South East Light Rail

Public transport in planning

- Parramatta Light Rail
- Sydney Metro West
- North South Rail Line

Motorway projects in delivery

- NorthConnex
- WestConnex New M4 tunnel
- WestConnex New M5
- WestConnex M4-M5 Link
- The Northern Road
- M4 Smart Motorway

Major transport projects in planning

- Warringah Freeway Upgrade
- Western Harbour Tunnel
- Beaches Link
- F6 Extension - Stage 1
- F6 Extension - Kogarah to Loftus
- M12
- Sydney Gateway
- The Northern Road
- T4 and T8 Rail Upgrades
More Trains More Services

Growth areas

- North West Land Release Area
- Western Sydney Priority Growth Area
- South West Priority Growth Area
- Western Sydney Airport
- Western Sydney Employment Area

Sydney Harbour – the challenge



Over 250,000 vehicles cross the harbour on Sydney Harbour Bridge and Harbour Tunnel every weekday.

When Sydney Harbour Bridge opened in 1932 it carried 11,000 vehicles each day. Today it carries over 160,000 vehicles each day.

The Sydney Harbour crossings are near capacity and vulnerable to incidents and delays.

A single peak-hour incident causes flow-on impacts that can severely affect traffic across Sydney for hours.

Buses travelling on Sydney Harbour Bridge into the Sydney CBD experience high rates of travel-time variability.

The Sydney Harbour crossings serve motorists going to, from and around the Sydney CBD.

We rely on the Sydney Harbour crossings for access to the Sydney CBD and for trips that bypass the Sydney CBD.

Serving these dual functions adds to pressure on these roads and contributes to congestion of Sydney Harbour Bridge and Sydney Harbour Tunnel, as well as Western Distributor and Anzac Bridge.

The Warringah Freeway is one of Australia's busiest and most complex roads.

It is a corridor of critical importance to the Sydney transport network, providing access to both Sydney Harbour crossings and supporting over 600 inbound buses in the morning peak.

It also supports access to key employment areas, such as North Sydney, St Leonards, Chatswood and Macquarie Park and provides access to Lane Cove Tunnel, Pacific Highway, Brook Street and Military Road.

The Warringah Freeway has evolved over time to cater for increased traffic and new connections. The result is a busy and complex road that requires drivers to frequently merge and weave across multiple lanes.

As Sydney's population and economy grows, pressure on roads is increasing.

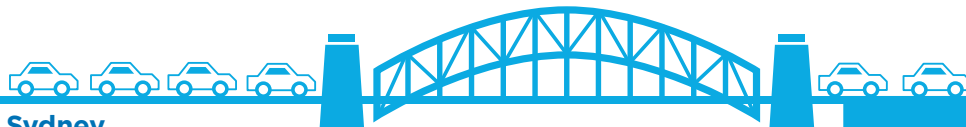
In the next 15 years there will be over 30 per cent more trips being made around Sydney each day.

This will put further pressure on the Sydney Harbour crossings and the Warringah Freeway, leading to travel time deterioration and increased vulnerability to delays.

On average between 2014 and 2017

1,400
incidents on

Sydney Harbour Bridge and the Warringah Freeway every year



\$66.4m

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Sydney Harbour – the solution

Western Harbour Tunnel

- A new motorway tunnel connection across Sydney Harbour between the Rozelle Interchange and the Warringah Freeway near North Sydney
- Forms a new western bypass of the Sydney CBD, providing an alternative to the heavily congested Sydney Harbour Bridge, Western Distributor and Anzac Bridge
- Reduces pressure and provides faster and more reliable journeys on roads around the Sydney CBD
- Increases the resilience of the road network to incidents and delays
- Provides capacity for new connections to Beaches Link.

The Warringah Freeway Upgrade

An upgrade to Australia’s busiest road between Sydney Harbour Bridge and Naremburn:

- Easier to navigate with improved wayfinding and reconfigured lanes
- Provides a free-flowing continuous bus lane southbound on the Warringah Freeway – removing weaving between buses and other traffic
- Improves active transport links along and across the Warringah Freeway, including at Ridge Street, High Street and Ernest Street.

A new crossing of Sydney Harbour and western bypass of Sydney CBD

For the first time, people will be able to take the most direct route for their trip:

- Going to or from the west, inner west, south west, the airport and Bays Precinct – take the Western Harbour Tunnel
- Going to or from the eastern suburbs, southern Sydney and the airport – take the Sydney Harbour Tunnel
- Going to or from the Sydney CBD and Pyrmont – take Sydney Harbour Bridge.



More direct harbour crossings including two routes to Sydney Airport



Morning peak travel times in 2027, with and without Western Harbour Tunnel and Beaches Link (WHTBL)

Origin	Destination	Without WHTBL	With WHTBL	Percentage faster
Rozelle	North Sydney	24 mins	15 mins	40%
Mosman	Sydney Airport	48 mins	30 mins	38%
Olympic Park	North Sydney	37 mins	24 mins	34%

* Based on 2027 traffic forecasts.

Beaches Link – a companion project

Beaches Link is being designed as a companion project to Western Harbour Tunnel.

Together, both projects will deliver major transport benefits to Sydney, making it easier, faster and safer to get around.

The two projects interconnect with each other on the Warringah Freeway, delivering free-flowing travel between the Northern Beaches and the Sydney CBD/ WestConnex interchange at Rozelle.

Heavily constrained routes to the Northern Beaches impact on all road users including bus commuters and Military Road and Warringah Road are currently among Sydney's most congested roads.

Areas such as Mosman, Willoughby, Artarmon and the Northern Beaches run the risk of lagging behind the rest of Sydney because of poor transport.

Beaches Link is key to delivering this transport vision.

It will unlock new levels of access to jobs, recreation and services, including health and education, across Sydney.

With Beaches Link, people will spend less time in traffic and have more time for themselves and their families.

Beaches Link includes over 11 kilometres of tunnels as well as upgrading over five kilometres of surface roads.

Beaches Link will be largely underground and its design has been improved as a direct result of community feedback. This fresh design work has minimised the surface impacts and reduced property needs.

Beaches Link

A new tunnel from the Northern Beaches, under Middle Harbour.

It will connect to the Gore Hill Freeway for travel between Manly, the Northern Beaches to Chatswood, Macquarie Park and North West Sydney.

It will also connect to the Warringah Freeway for journeys to North Sydney, Sydney CBD and Sydney's south and south west.

For further detail on Beaches Link go to www.rms.nsw.gov.au/whtbl

Beaches Link will:

- Improve journey times and reliability on critical transport routes on both sides of Middle Harbour
- For the first time, provide a motorway link between the Northern Beaches and the rest of Sydney
- Relieve traffic pressure on the North Shore
- Integrate with Sydney's public transport network (bus, metro and rail) to deliver significant improvements for bus services.

Beaches Link
less time in traffic, more time for you

currently

69,000 vehicles

a day cross **Spit Bridge**

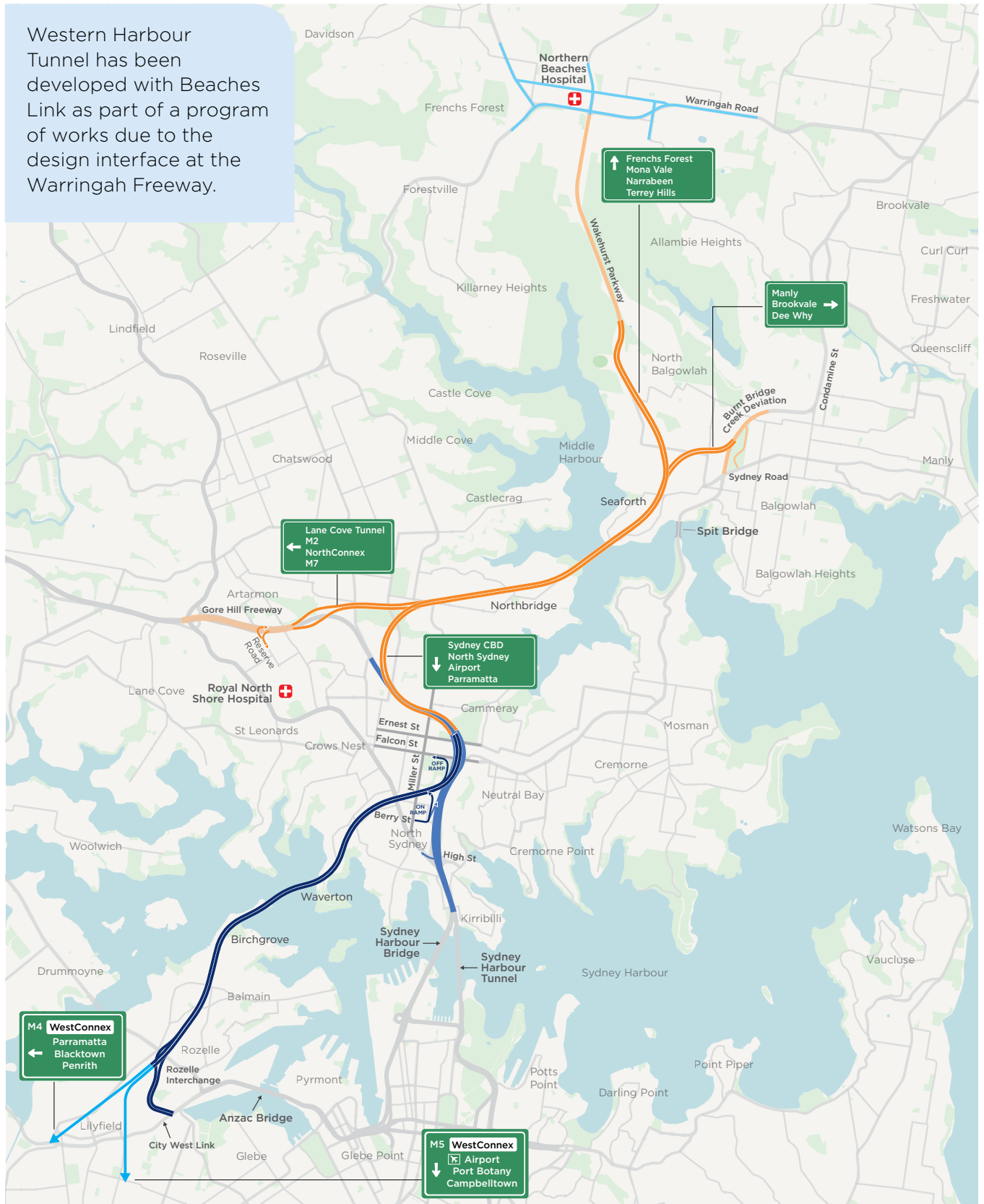
forecast to carry **80,000 vehicles by 2037**

with **43 bus routes**



Western Harbour Tunnel and Beaches Link map: combined projects

Western Harbour Tunnel has been developed with Beaches Link as part of a program of works due to the design interface at the Warringah Freeway.



Legend		
Beaches Link	Wakehurst Parkway Upgrade	Motorways
Western Harbour Tunnel	WestConnex	Major roads
Warringah Freeway Upgrade	Northern Beaches Hospital roadworks	

Public transport

Western Harbour Tunnel and the upgrade of the Warringah Freeway will deliver wide-ranging public transport benefits to Sydney.

Western Harbour Tunnel will take pressure off the Sydney Harbour Bridge and Sydney Harbour Tunnel, Anzac Bridge and Western Distributor.

Improved travel speeds and reliability on these corridors will particularly benefit bus customers to and from the west heading towards the Sydney CBD, including those currently using buses on Victoria Road, the City West Link and the Anzac Bridge.

This is because traffic heading across the Harbour will effectively be diverted away from the Anzac Bridge and Western Distributor and into Western Harbour Tunnel.

A new free-flowing, continuous dedicated bus lane will be a feature of the Warringah Freeway Upgrade.

This new continuous bus lane extending from Miller Street to Sydney Harbour Bridge will improve CBD access for bus customers.

The project will provide efficient access to North Sydney for buses accessing the precinct, and a fast interchange with Sydney Metro (at Victoria Cross metro station) and Sydney Trains (at North Sydney station) - opening up easy access to Sydney Metro and Sydney Trains stations right across Sydney.

Opportunities also exist to connect centres north of Sydney Harbour with the proposed Sydney Metro West line via Western Harbour Tunnel, enabling simple one-transfer journeys to a wider range of jobs and services.

Both the Western Harbour Tunnel and the Warringah Freeway Upgrade will provide new road capacity and connectivity for express bus routes between key centres, with all proposed links compatible with Sydney's bus fleet, including double deck buses.

Specifically, the project creates the potential to introduce direct express bus access between the Inner West and Lower North Shore.

This creates the opportunity to introduce new express services to key employment and education centres, directly linking North Sydney (and beyond) to The Bays Precinct, the University of Sydney, and Royal Prince Alfred Hospital.

The ability for bus 'through' customers to bypass the Sydney CBD will also reduce pressure on transport services and infrastructure within the CBD.

Metro and Sydney Trains

Work on the Warringah Freeway will include a new, uninterrupted bus lane from Cammeray to the Sydney Harbour Bridge which will feature an access link to North Sydney.

This will allow express buses from the Northern Beaches and North Shore to have direct access to Sydney Trains at North Sydney station and the new Sydney Metro at Victoria Cross.



B-line bus

Active transport

Western Harbour Tunnel delivers 2.5 kilometres of



Artist's impression: Ernest Street Land bridge

Improvements along the Warringah Freeway will align with the proposed North Shore Link Cycleway, identified as a strategic link in Sydney's Cycling Future.

These new active transport connections will provide new ways for commuters to travel and create new paths for recreation.

North Shore cycleway

- New infrastructure and improvements will contribute to North Shore Link Cycleway
- Ridge Street Bridge will be rebuilt to provide more room for cyclists and pedestrians
- Dedicated cycleway between Miller and Falcon Streets

- Ernest Street Bridge across the Warringah Freeway will be upgraded to link Cammeray Golf Course with Anzac Park, connecting local communities and schools
- Improvements will enhance shared active transport crossings of High Street.



Existing use of Ernest Street Bridge

Stronger measures on tunnel emissions

Sydney's air quality

Sydney's air quality is good by national and international standards.

In NSW, the Office of Environment and Heritage (OEH) monitors, analyses and publishes information about air quality.

The Environment Protection Authority regulates air quality and implements measures for managing and reporting air pollution.

Despite there being more cars on the road, a number of initiatives and technological developments in both engine emissions and fuel quality have resulted in substantial reductions to Sydney's vehicle emissions over the past two decades.

Although the number of cars is expected to further increase

as our population grows, total emissions from motor vehicles are expected to continue to fall over the next decade due to new, cleaner vehicles replacing older technology vehicles.

Modern tunnel ventilation

Western Harbour Tunnel will be designed to achieve:

- Strict in-tunnel air quality limits
- No emissions from ramps
- Emissions from ventilation facilities indistinguishable from background air quality.

In-tunnel air quality is achieved by ensuring sufficient air flow through the tunnel to prevent the build up of vehicle emissions.

The air-flow is achieved through a combination of traffic flow, tunnel size and ventilation design (jet fans).

Recent NSW tunnels longer than one kilometre are required to have zero ramp emissions, whereas outside Australia almost all road tunnels have ramp emissions.

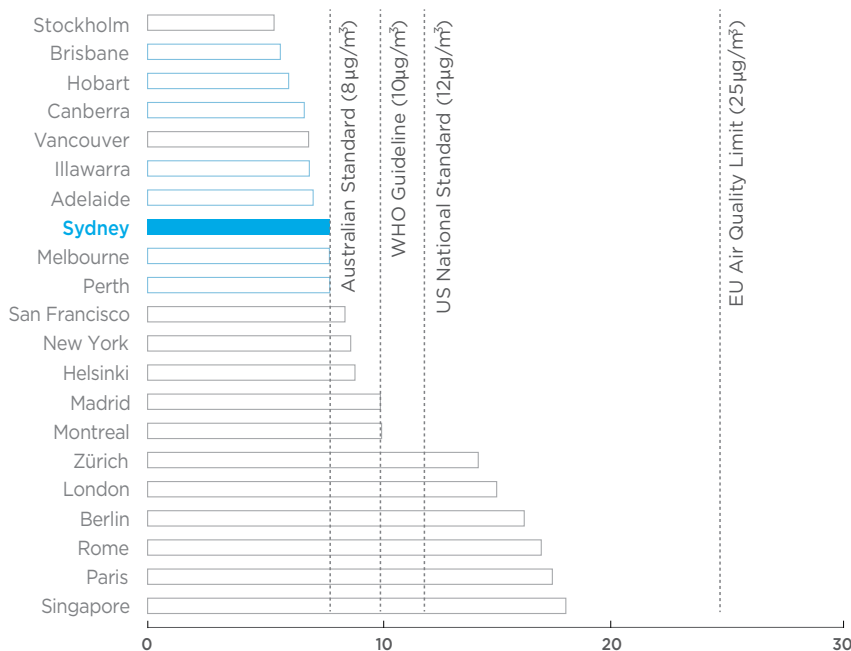
To achieve zero ramp emissions, jet fans draw in air from the exit ramp to ensure a net inflow of air at the ramp so that all tunnel emissions are removed through an elevated ventilation facility.

This is most efficiently done when the ventilation facility is positioned near the exit ramp, reducing ongoing energy use and improving effectiveness.

This is why all ventilation facilities for Western Harbour Tunnel will be located near tunnel exit ramps.

Locations of ventilation facilities for Western Harbour Tunnel are shown on the maps for tunnel ramps on the following pages.

Australia's air quality standards are stringent by global standards



Air quality in Sydney and internationally

Annual Average PM_{2.5} Concentrations µg/m³

Source: World Health Organization



Cars built after 2013 emit **97% less** oxides of nitrogen than vehicles built in 1976

Diesel trucks built after 2013 emit **92% less** particles of matter than trucks built in 1996

By 2036 there will be a **48% decrease** in PM_{2.5} vehicle emissions since 2003

Western Harbour Tunnel will have elevated ventilation facilities that are very effective at ejecting tunnel air high into the atmosphere through a combination of buoyancy and speed.

Once in the atmosphere, the ejected tunnel air dilutes hundreds of times as it mixes with the surrounding air and becomes indistinguishable from background levels.

The effectiveness of a ventilation facility design in dispersing tunnel air under all operating and weather conditions is assessed through specialised computer modelling using actual hour-by-hour weather data for a full year.

Once complete, Western Harbour Tunnel will be continuously monitored at the ventilation facilities to control the ventilation system.

This will ensure that strict limits outlined in the approval conditions are complied with at all times.

Once operating, air quality monitoring data will be publicly available on the new motorway website.

Assessment and regulation

The NSW Government has announced stronger measures on emissions from motorway tunnels.

The NSW Environment Protection Authority (EPA) will regulate the ventilation facilities of all current and future operating motorway tunnels in NSW, including the new Western Harbour Tunnel.

The EPA will require tunnel operators to meet air quality limits and undertake air quality monitoring.

Additional checks will be required before determination of the Environmental Impact Statements (EISs) for the project.

The Advisory Committee on Tunnel Air Quality (ACTAQ) will coordinate a scientific review of the project's air emissions from ventilation facilities. ACTAQ, which advises the NSW Government on tunnel ventilation design and operation, is convened via the Office of the NSW Chief Scientist and Engineer.

The NSW Chief Health Officer will release a statement on the potential health impacts of emissions from tunnel ventilation facilities.

The Minister for Planning will not approve a motorway tunnel project until the ACTAQ scientific review is considered.

The Western Harbour Tunnel will be subject to stringent assessment of the tunnel ventilation systems and ambient air quality in surrounding areas.

Further reading

Roads and Maritime interactive portal on air quality:

www.rms.nsw.gov.au/airquality

NSW Chief Scientist and Engineer:

www.chiefscientist.nsw.gov.au/reports/advisory-committee-on-tunnel-air-quality



Artist's impression longitudinal tunnel ventilation system

Design and construction





This project update provides information about the proposed reference design for an integrated transport solution that includes Western Harbour Tunnel and the Warringah Freeway Upgrade.

Most of Western Harbour Tunnel will be deep underground.

Community and stakeholder input over the last year has resulted in significant design changes to the project.

Roads and Maritime wants to hear what you think about this proposed reference design.

We will shortly commence community engagement on the design presented in this project update.

The Warringah Freeway Upgrade



The Warringah Freeway Upgrade is the key piece of network integration for the Western Harbour Tunnel project and will streamline operations for Australia's busiest road.

Key features

- The upgrade involves essential works to integrate Western Harbour Tunnel and Beaches Link with the existing freeway network

- The Warringah Freeway Upgrade works extend for around four kilometres between the northern end of the Sydney Harbour Bridge and Willoughby Road.

Benefits

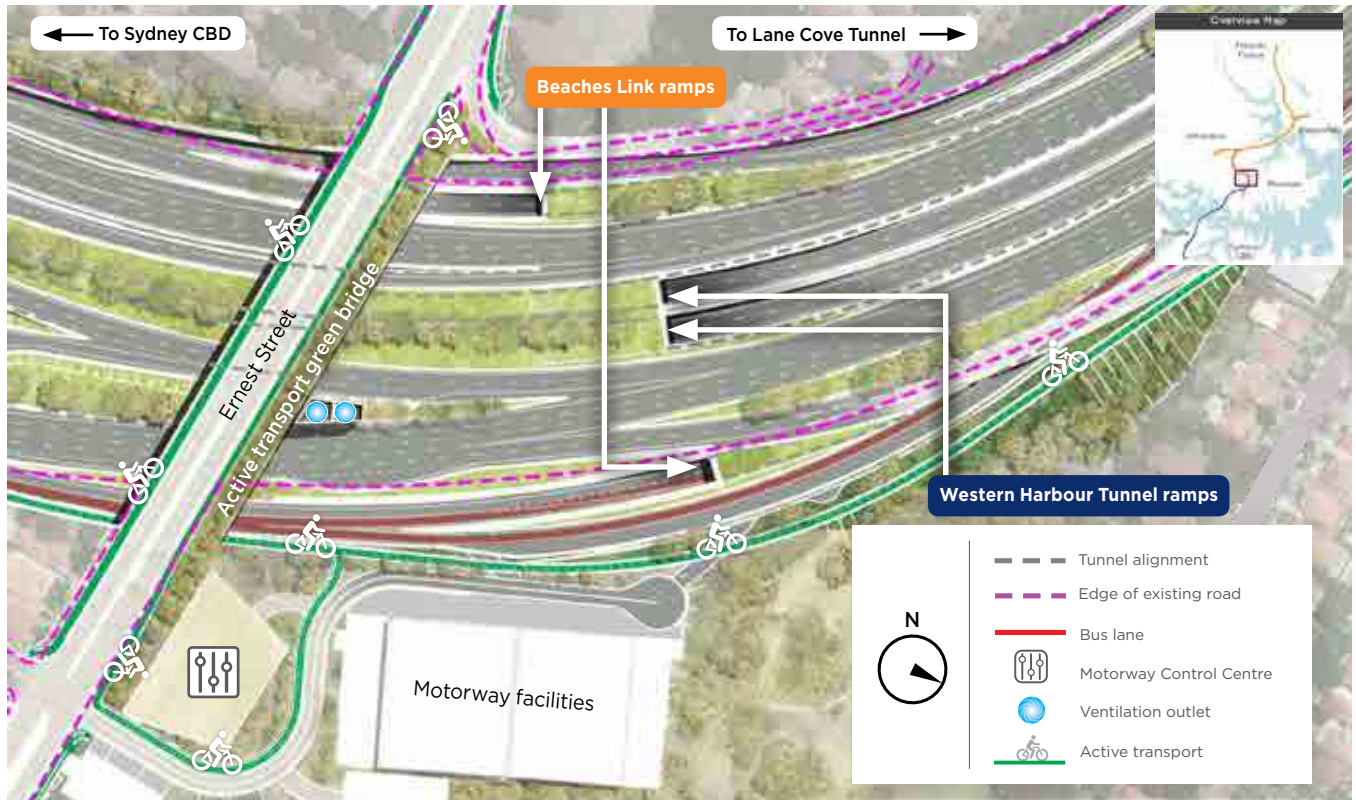
- Streamlines operations by reducing the number of merges, making it easier to navigate
- Optimises the traffic flow of the three harbour crossings, making the network more efficient
- Provides a continuous, free-flowing southbound bus lane on the Warringah Freeway – removing weaving between buses and other traffic
- Improves active transport links including:
 - a dedicated cycleway between Miller Street and Falcon Street with connections to the new Ernest Street active transport link and Falcon Street shared use bridge



- upgraded and wider Ridge Street bridge for pedestrians and cyclists
- new shared use path at High Street bridge
- Upgraded and improved interchange at Falcon Street
- Improved bus transit times for all buses using the Warringah Freeway
- Direct bus access to North Sydney.



Cammeray



Motorway tunnels for both Western Harbour Tunnel and Beaches Link surface in the Warringah Freeway corridor between Ernest Street and Miller Street, North Sydney, allowing direct connections to the wider Sydney motorway network.

This area is proposed to be used as both a construction site and location of permanent facilities.

Key features

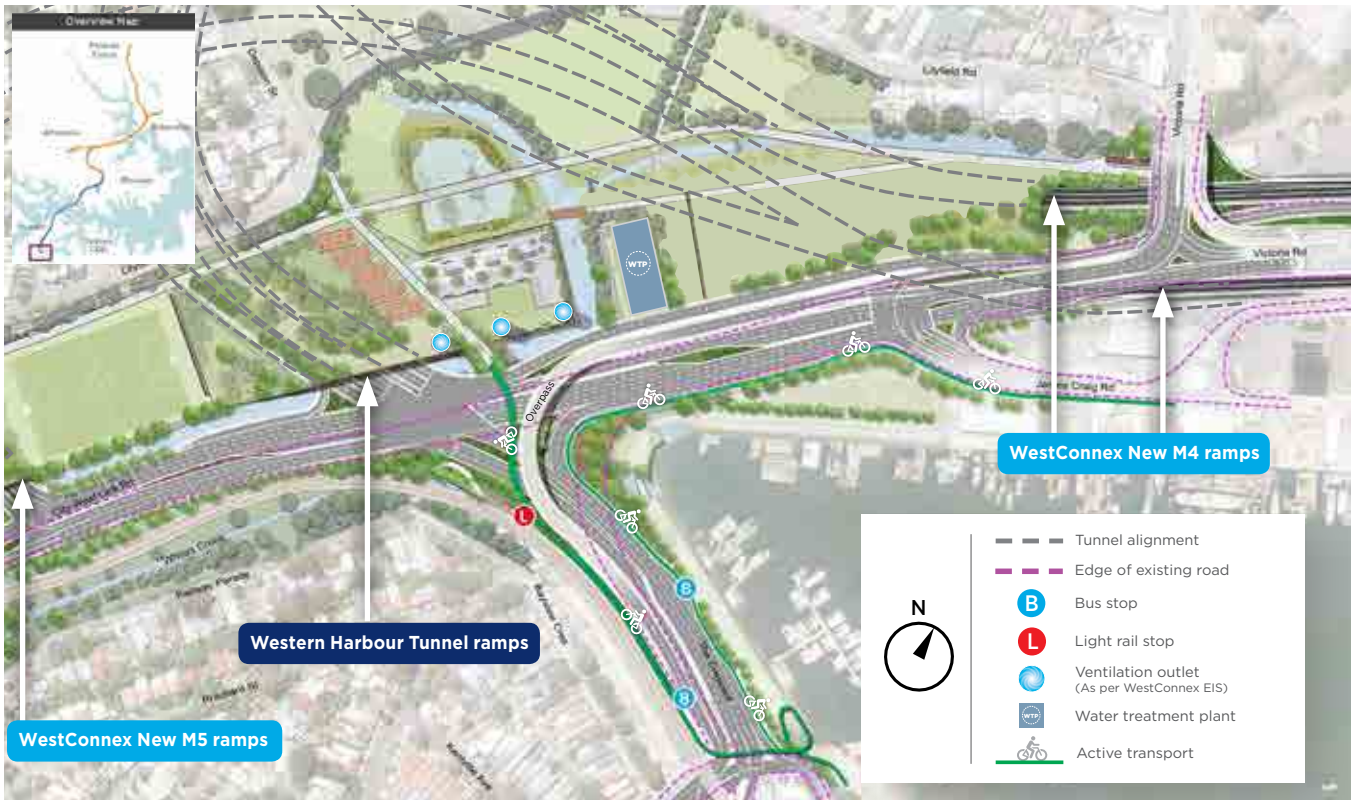
- Western Harbour Tunnel entry and exit ramps
- Beaches Link entry and exit ramps
- Underground ramps between Western Harbour Tunnel and Beaches Link
- Upgraded Ernest Street Bridge, including a 9.5-metre-wide active transport connection between Anzac Park and Cammeray Golf Course
- Motorway facilities for both Western Harbour Tunnel and Beaches Link within the existing Cammeray Golf Course and ventilation facility located in the Warringah Freeway corridor
- Western Harbour Tunnel motorway control centre next to Ernest Street near the Warringah Freeway.

Benefits

- Improves connectivity to key employment areas of North Sydney and the Sydney CBD for Northern Beaches commuters
- Provides simple access to Western Harbour Tunnel for North Shore and Northern Beaches drivers
- Improves pedestrian and cyclist access between Cammeray Golf Course and Anzac Park - new and wider pathways connecting communities
- Tunnel ramp locations maximise the use of the existing road corridor and minimise private property acquisition requirements
- Permanent facilities in the road corridor and golf course minimise private property impacts
- Provides direct connection for southbound Beaches Link buses to the Warringah Freeway bus lane.



Rozelle Interchange connection



The southern end of the Western Harbour Tunnel integrates with WestConnex motorway at the Rozelle Interchange.

Connecting at Rozelle provides strategic links for traffic bypassing the Sydney CBD to access the M4 Western Motorway, M5 South West Motorway and local communities in the Inner West.

Key features

- Underground tunnel connection to M4-M5 Link tunnel (three lanes in each direction)
- Tunnel ramps surfacing at City West Link
- Overpass for movements from The Crescent (south) to The Crescent (east) at Rozelle
- Network integration works at the intersection of Johnston Street and The Crescent.

Benefits

- Provides an alternate route for traffic bypassing the Sydney CBD, currently using the Anzac Bridge, Western Distributor and Sydney Harbour Bridge corridor
- Improves connectivity to key employment areas in the Inner West, South West and Western suburbs of Sydney
- Further improves traffic flows around City West Link and The Crescent at Rozelle
- Further improves Sydney's road freight corridor by directly connecting with WestConnex and the broader Sydney motorway network.



Western Harbour Tunnel vertical alignment

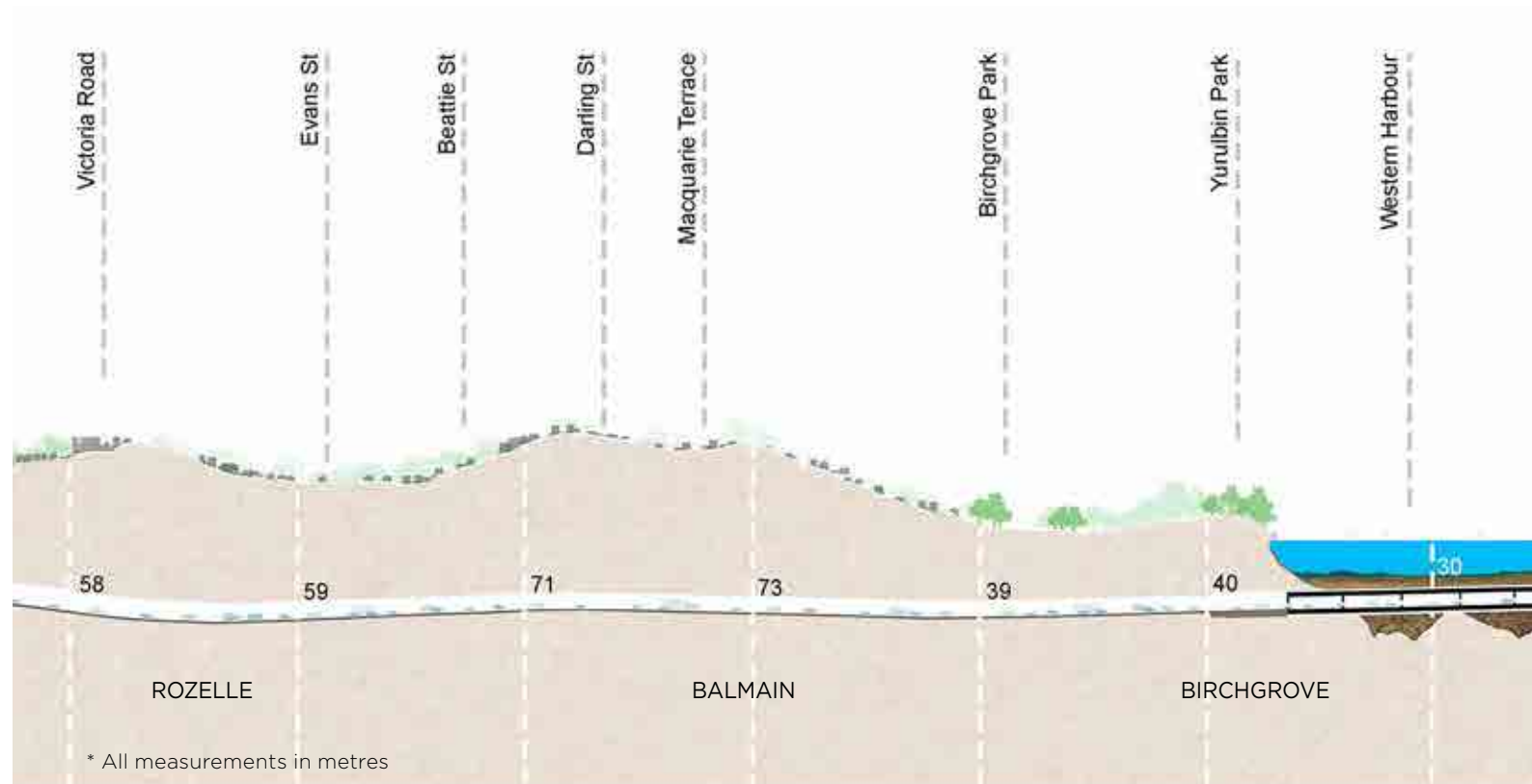
Rozelle to North Sydney

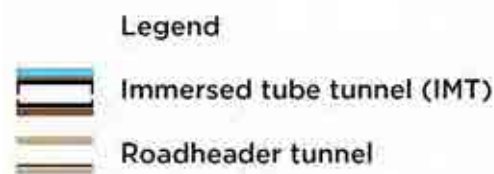
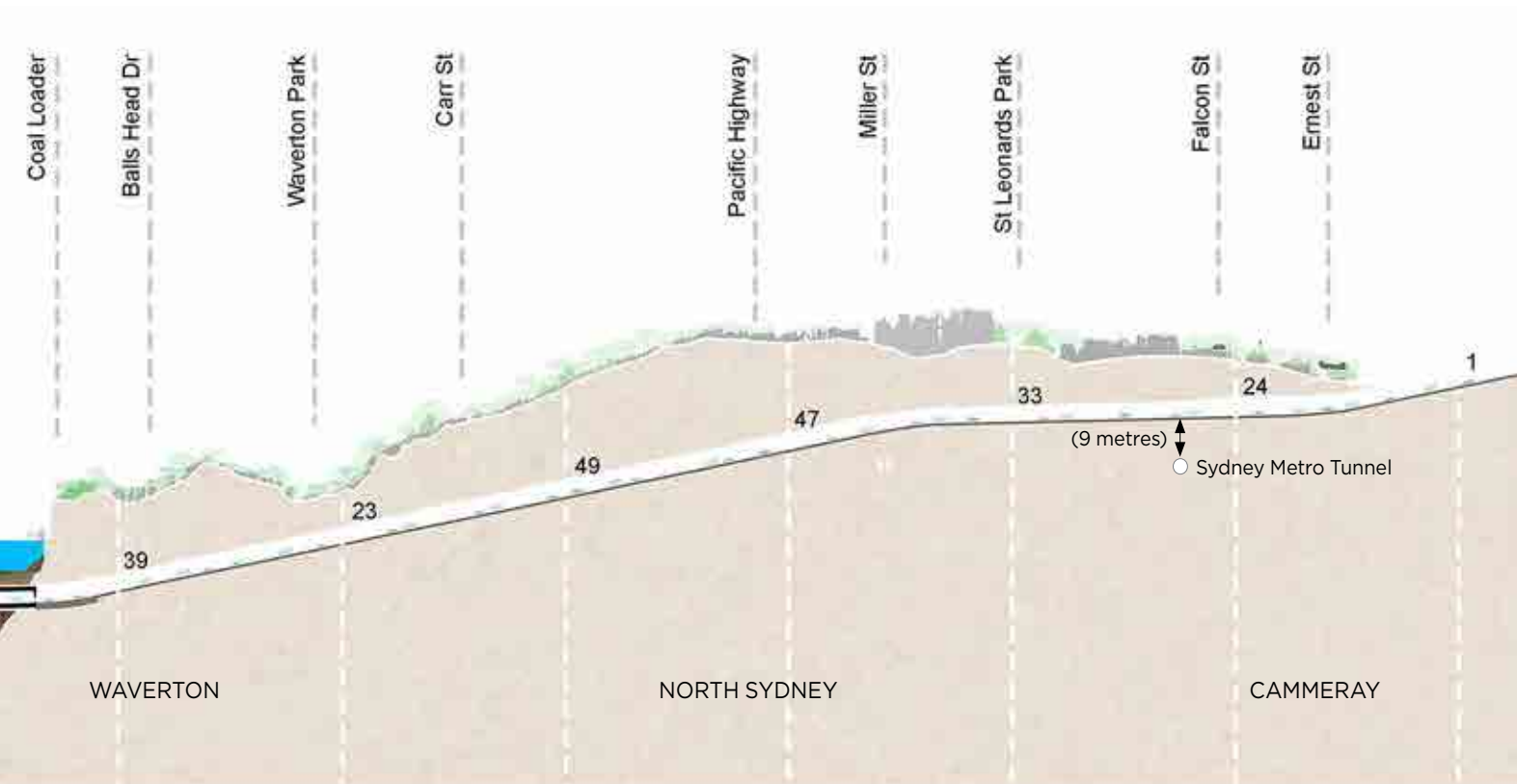
Most of the project will be deep underground in tunnels. This greatly reduces surface impacts, including to private property, communities and the environment.

The tunnels, built mostly through high-quality Sydney sandstone, will be engineered and constructed by industry leaders using world-class technology, and world's best practice in terms of safety, efficiency and road user experience.

The vertical alignment diagrams show the approximate depth of the tunnels below the surface along the alignment of the Western Harbour Tunnel.

The depths, shown in metres, are measured from ground level to the road surface in the tunnel.





Construction

On a global scale, building a major tunnel beneath Sydney Harbour as part of a network of new road tunnels will be a significant engineering achievement.

The majority of the project will be in deep tunnels, greatly reducing surface construction impacts and the need for private properties.

To build the tunnels and surface works, construction sites are needed to ensure that:

- Tunnels and surface works seamlessly integrate with the existing road network and connect users to destinations
- Construction machinery, equipment and materials can be stored safely
- Construction personnel have appropriate amenities
- There is adequate access to construction areas for removal of excavated material and delivery of raw materials such as concrete and steel
- There is enough space to build the project safely and efficiently.

All these measures ensure the project can be delivered safely while minimising overall construction times and levels of impact to communities, the road network and the environment.

Tunnel construction

After extensive assessments by a multi-disciplinary team with local and international experience (including design, construction and environment specialists) the preferred method for building the tunnels is:

1. Land tunnels

Using multiple road header machines to cut through sandstone at depths of up to 100 metres below Sydney – methodology proven on all road tunnels constructed in Sydney to date.

Spoil from tunnels is a clean and stable fill material, being essentially crushed rock, which is generally beneficially reused at development sites across Greater Sydney. Unless a specific opportunity exists to use spoil as part of the site restoration, all of the spoil will be transferred away from the construction site to suitable end locations.

Tunnelling will take place 24 hours a day, seven days a week to deliver benefits as soon as possible; however hours for spoil haulage will be limited to reduce community impacts.

2. Waterway crossings

Building the crossings of Sydney Harbour using immersed tube tunnelling – a proven methodology adopted on many global road and rail tunnel projects (including the existing Sydney Harbour Tunnel).

The construction strategy has been chosen because it:

- Is most suited to the cross section of a modern motorway – reducing excavation and spoil haulage
- Reduces geotechnical risk associated with tunnelling under Sydney Harbour and Middle Harbour – making it safer to build
- Provides the lowest vertical grades – making it easier for cars and heavy vehicles and reducing vehicle emissions
- Provides the shortest and most efficient route.

Immersed tube tunnels have been successfully delivered in sensitive and highly utilised marine environments across the world, with this experience being captured by the project team.

The location and technique has been developed after careful consideration of sensitive marine habitats, natural water flows, contamination, existing uses and heritage items, and will be constructed under strict environmental regulation.

As with many harbours around the world that have an industrial heritage, Sydney Harbour has levels of contamination in some of the bed sediments.

Suitable processes for the removal and disposal of such sediment, and construction in such marine environments, are well understood both domestically and internationally. We have taken expert advice from local and international experts in preparing our design and proposed methodology for handling and managing sediment.

Marine sediment removal is done routinely to keep shipping channels operational, to enable infrastructure works, and to remediate marine environments.

Ultimately, these materials are removed from the marine environment, cleaning up the area in which the works were actually undertaken.

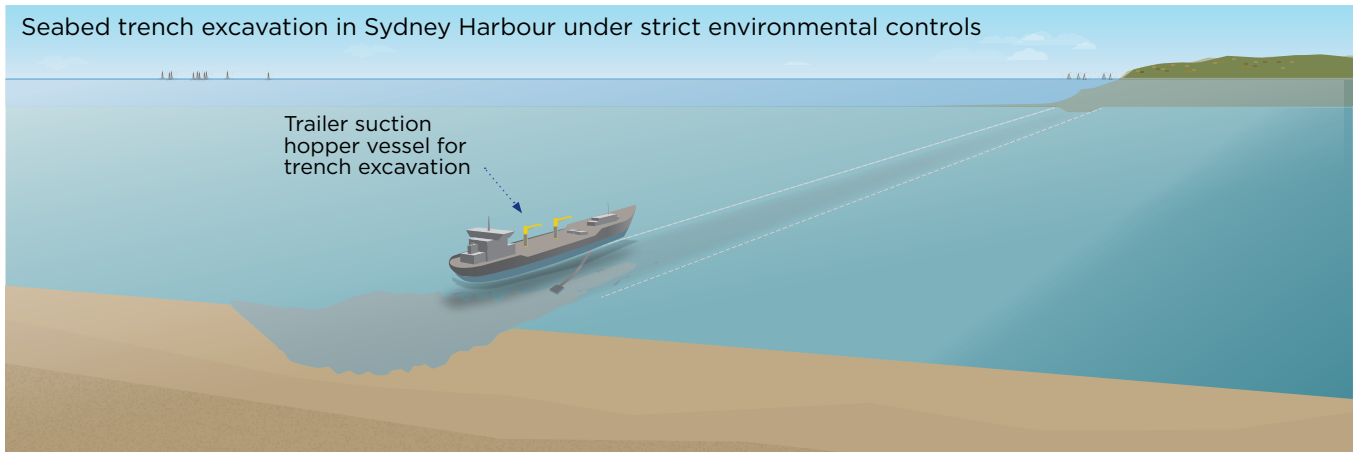
The project team is working with key maritime stakeholders, including Port Authority of NSW, the Harbour Master and Transport for NSW to ensure the appropriate management of impacts to commercial shipping, ferries, recreational activities and other harbour uses.

Construction of an immersed tube tunnel

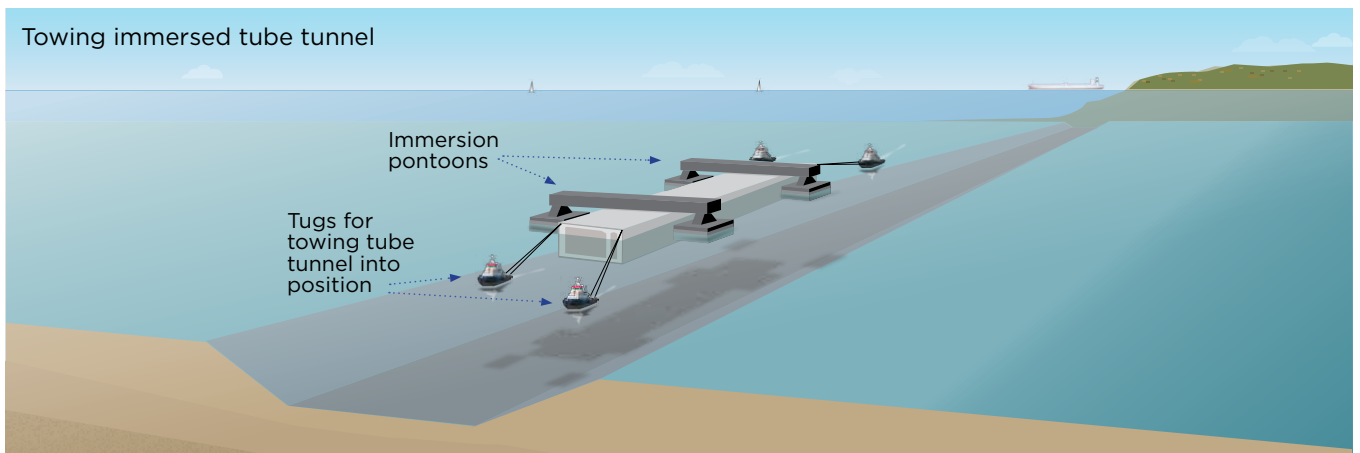
- Excavation for the immersed tube tunnels and their construction will be subject to stringent environmental safeguards
- Seabed excavated to prepare trench that tunnel units will be laid into
- Immersed tube tunnel units are fabricated elsewhere and then towed into place above the excavated trench
- Immersed tube tunnel units are then lowered one at a time creating the tunnel
- Rock ballast is laid over the tunnel units to protect the structure.

Immersed tube tunnel construction sequence

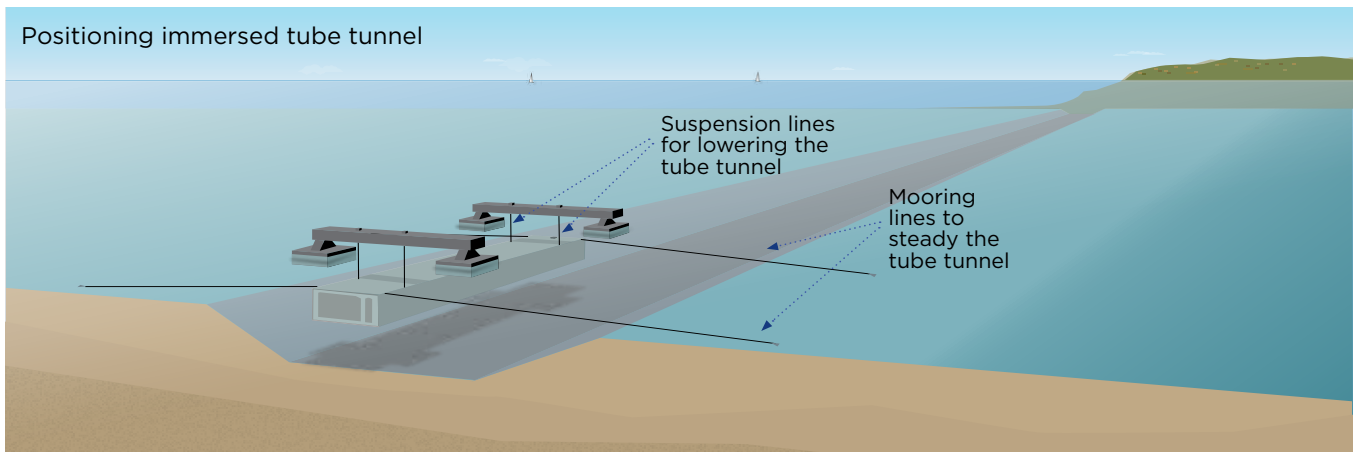
Seabed trench excavation in Sydney Harbour under strict environmental controls



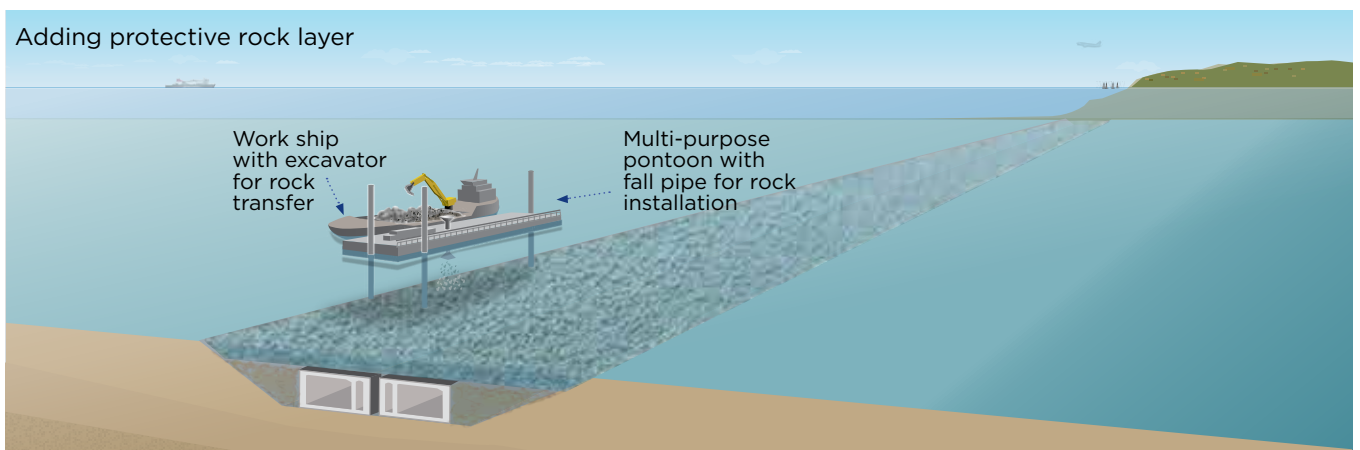
Towing immersed tube tunnel



Positioning immersed tube tunnel



Adding protective rock layer



Temporary construction sites

The proposed construction sites for Western Harbour Tunnel have been carefully selected, taking into account community and industry feedback.

Construction sites are temporary. After works have been completed, they will be remediated for future use.

The sites aim to:

- Minimise the number of private properties acquired
- Minimise impacts to the community
- Minimise impacts to the environment
- Have good main road or water access to minimise the number of trucks on local streets
- Maintain the functionality of open spaces as much as possible
- Provide opportunities for re-use of the sites post construction
- Ensure the works can be delivered safely.

Construction site type	Function	Key activities
Land based tunnelling	<p>These sites enable road header tunnelling to occur below Sydney, as well as fit-out of the tunnels.</p> <p>The ability to tunnel from multiple sites provides significant construction time savings, delivering project benefits sooner and reducing the duration of construction disruption</p>	<ul style="list-style-type: none"> • Tunnel excavation • Tunnel spoil removal • Tunnel fit-out (concrete, steel, mechanical equipment) • Amenities for workers
Waterway crossings	<p>These sites have two main functions; enabling the immersed tube tunnels to connect with the road header tunnels, and fit-out of the immersed tube tunnel sections</p>	<ul style="list-style-type: none"> • Tunnel excavation • Connecting the water and land tunnels • Immersed tube tunnel section fit-out • Tunnel spoil removal • Amenities for workers
Surface works	<p>These sites enable all surface works like road upgrades and widenings required to deliver the connections road users need. The ability to locate these sites next to surface works activities allows for more efficient construction, reducing transportation of machinery and materials through local areas</p>	<ul style="list-style-type: none"> • Road pavement widening and adjustments including temporary traffic staging • Cut and cover tunnel construction • Bridge construction • Drainage construction • Utilities relocations • Amenities for workers

Cammeray Golf Course



Temporary construction site proposed for both tunnelling and surface works for Western Harbour Tunnel, the Warringah Freeway Upgrade and Beaches Link Tunnel.

A number of construction activities have been consolidated into this site to ensure it is used as efficiently as possible. This minimises impacts in other locations around North Sydney and Cammeray, including to private property and parks.

Key activities

- Entry site for Western Harbour Tunnel road header machines tunnelling north and south from the golf course
- Western Harbour Tunnel and Beaches Link tunnel fit-out
- Tunnel spoil removal by truck with direct access to arterial roads and the motorway network
- Storage for construction materials
- Amenities for construction workers
- Construction of the Western Harbour Tunnel and Beaches Link motorway facilities and ventilation facilities
- Construction of Western Harbour Tunnel motorway control centre
- Construction of the new Ernest Street bridge
- Construction staging for the Warringah Freeway Upgrade.

Reducing our impact

- Minimises the requirements for private property acquisition
- Minimises impacts on St Leonards Park and Anzac Park
- Direct access to the Warringah Freeway and Ernest Street for spoil haulage and construction delivery – keeping trucks off local streets
- Acoustic shed for tunnelling works to contain noise and dust
- No impacts to all-weather football pitch, skate park or tennis courts
- We will work with the golf club with the objective of allowing the golf course to remain open throughout construction
- Permanent impacts will be significantly smaller than the temporary construction site shown.



Anzac Park, Cammeray



A temporary site is proposed to support drainage upgrades and local road works.

The works will be relatively minor, short-term, and contained on the eastern side of the park, on the opposite side to the War Memorial and Anzac Park Public School.

Key activities

- New trenches for stormwater drainage through Anzac Park
- New pit for stormwater drainage under the Warringah Freeway
- Kerb and pavement adjustment work for the realignment of Cammeray Avenue.

Reducing our impact

- Improved drainage in this area, which is currently flood prone
- Park will be fully restored post construction
- No impacts to Anzac Park Public School or Anzac Memorial
- No private property required
- Minimal disruption to park use.

St Leonards Park, North Sydney



A temporary site in a small part of the park near the Warringah Freeway.

This site is needed to build the shallow section of tunnel for the connection to Falcon Street.

The area will be restored for community use after construction.

A new, wider pedestrian and cycle bridge will replace the existing Ridge Street bridge.

Key activities

- Construction of cut and cover tunnel for Western Harbour Tunnel exit ramp to Falcon Street
- Support the construction of the renewed Ridge Street pedestrian and cyclist bridge
- There is a small portion of land along the Miller Street/Falcon Street intersection and on the Falcon Street off ramp that will be permanently impacted. These areas are very small and are not expected to change the way the park is viewed or used
- Approximately 200m² of Roads and Maritime land along the Warringah Freeway boundary will be required.

Reducing our impact

- Design of construction site will minimise the temporary impact to St Leonards Park
- No impact to the ovals, bowling greens, netball courts or gardens
- No impact to War Memorial
- Access via Ridge Street will be needed for approximately two months to establish the site, after this primary construction access for heavy vehicles will be via the Warringah Freeway and Falcon Street
- We will work with North Sydney Council and the community to determine the appropriate landscape treatment and community amenities after works have been completed.



Blue Street, North Sydney



This site will be used as a base for major surface works for the Warringah Freeway Upgrade.

The site is currently proposed to be used in the removal of the Northern Toll Plaza on Sydney Harbour Bridge, expected to be complete before the Warringah Freeway Upgrade works.

Key activities

- Project management offices for construction activities
- Support local road network integration work within the North Sydney CBD
- Support High Street bridge widening work
- Construction personnel amenities
- Construction materials and storage.

Reducing our impact

- Use of Government owned land – no private property required
- Located in a commercial area, rather than residential
- Good transport access minimising disruption to local streets
- Located next to the North Shore Rail Line and close to the Pacific Highway and the Warringah Freeway, the site is well serviced by both road and rail options for construction personnel.

Berrys Bay, Waverton



Berrys Bay is a key tunnelling site for Western Harbour Tunnel, supporting road header tunnelling to the north and also to the south towards the immersed tube crossing of the harbour.

Water-based transport will be used for spoil and major equipment to minimise impacts on the surrounding local streets.

The NSW Government will engage with the local community on the future use of this site, with the intention to provide public open space and public facilities.



Key activities

- Entry site for road header machines tunnelling north and south
- Fit-out of Western Harbour Tunnel
- Water-based transport of tunnel spoil back to Glebe Island.

Reducing our impact

- Major deliveries and spoil removal via water to limit impact on surrounding community and local streets
- Berrys Bay site uses Government land – no private property required
- Woodley's Boatshed will be retained

- An acoustic shed will be erected over the tunnelling site and barge mooring minimising noise and dust
- No permanent facilities are required at this location
- Public access to use of Balls Head Reserve, Coal Loader facility, Carradah Park and the beach next to the quarantine buildings will not be impacted
- The site will require the temporary relocation of a number of swing moorings. We will provide alternative temporary moorings in the same area, in Berrys Bay. We will be contacting boat owners directly and will work with them to minimise the impact of the relocation.

Sydney Harbour temporary cofferdams



Temporary cofferdams are proposed offshore near Balls Head and Yurulbin Point.

Key activities

- Temporary cofferdams for the construction of concrete transition structures connecting the tunnels under dry land with the tunnels under the harbour
- Cofferdams are temporary steel structures approximately 50 metres x 25 metres (a bit larger than an Olympic swimming pool) that are drained of water.

- These facilities are proposed for the construction of concrete 'adaptors' (transition structures) connecting the road header (land) tunnels and immersed tube (under-sea) tunnel
- One will be located around 20 metres offshore from Yurulbin Park, Birchgrove and the other will be located around 20 metres offshore from Balls Head, Waverton.

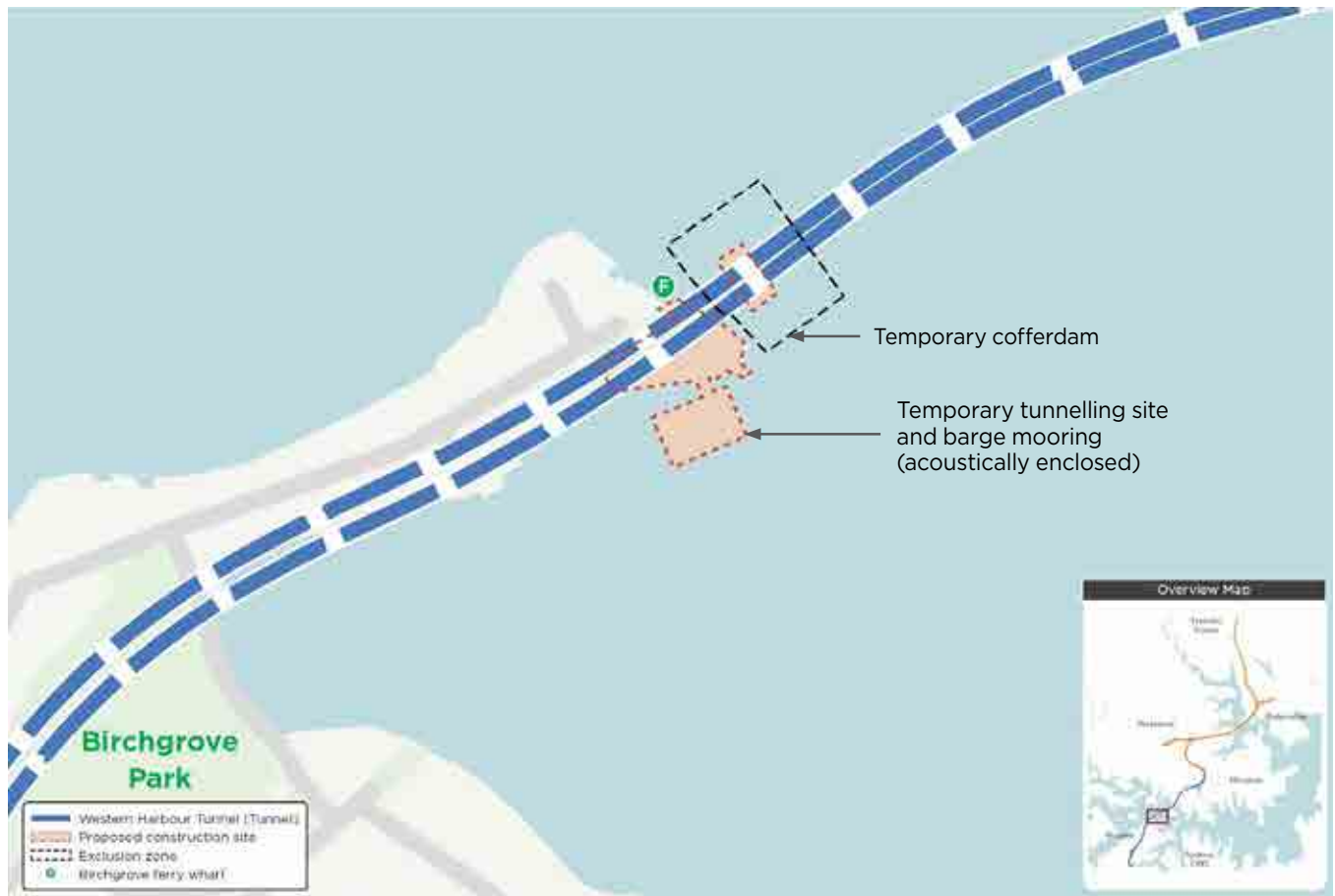
Reducing our impact

- Locating cofferdams offshore avoids direct impacts to private property and foreshore areas
- Cofferdams will be supported by water-based transport - keeping trucks off local streets
- There will be no permanent facilities at these locations, apart from the tunnels below
- No direct impact to Balls Head Coal Loader facility

- The Birchgrove Ferry Wharf will need to be temporarily relocated during construction. We are working with Transport for NSW to identify the most suitable temporary location
- The ships MV Cape Don and Baragoola will need to be temporarily relocated during construction. It is proposed these vessels be moved only slightly south to retain access to the Coal Loader precinct. We will work with the two respective preservation societies to minimise the impact
- We are working with key stakeholders, including Port Authority of NSW and Transport for NSW to coordinate activities with commercial shipping, ferries, recreational boating and other harbour users.



Yurulbin Point, Birchgrove



Temporary tunnelling site to support tunnelling under the Birchgrove peninsula and into the immersed tube transition structure for the Sydney Harbour crossing.

Water-based transport for spoil and equipment will be used to minimise impacts on surrounding local streets.

Key activities

- Entry site for road header machines tunnelling north and south
- Water-based transport of tunnel spoil back to Glebe Island.

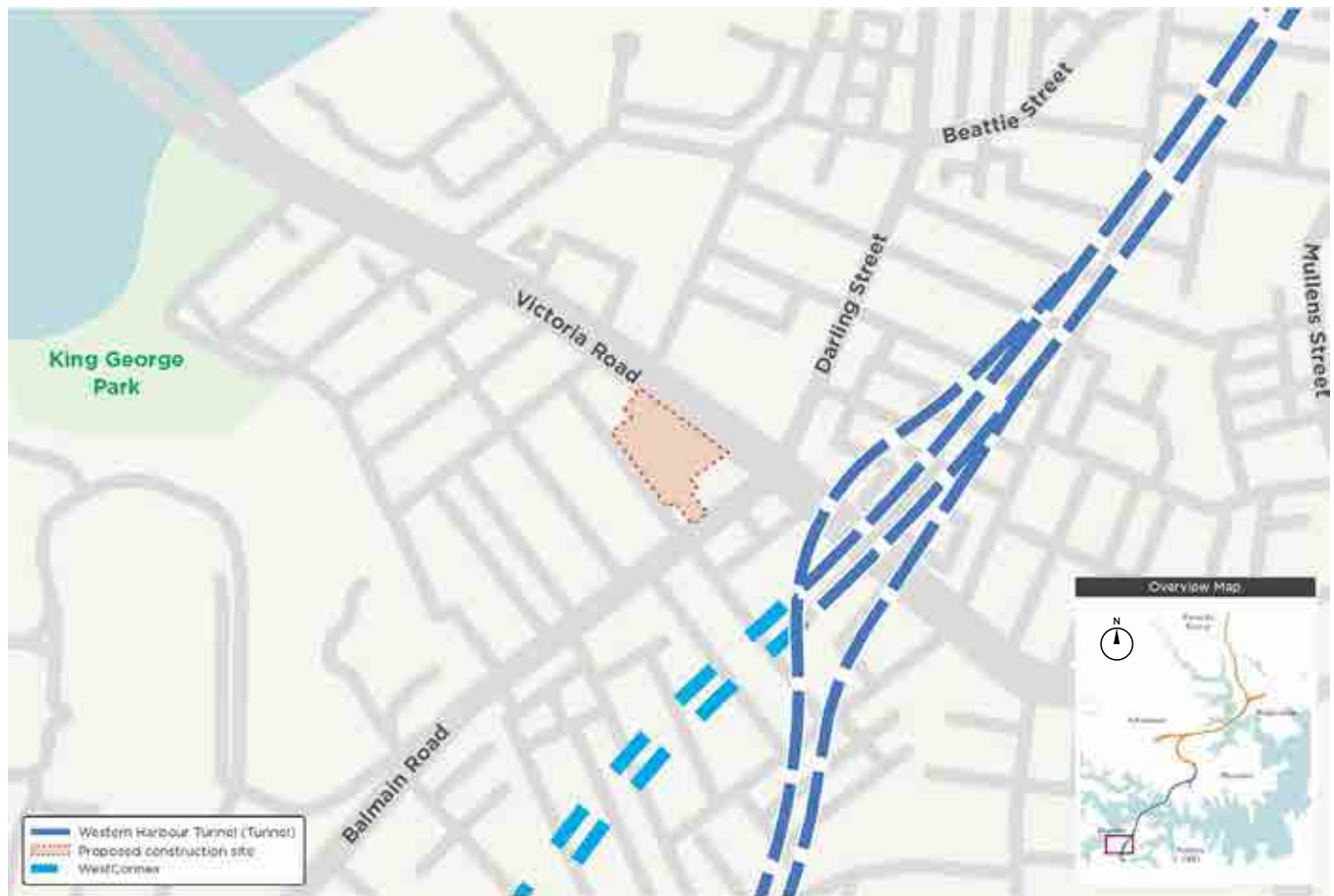
Reducing our impact

- Major deliveries and spoil removal via water to avoid impact on surrounding community and local streets in Balmain and Birchgrove
- Yurulbin Point site uses Government land - no private property required
- Use of Yurulbin Point as a temporary site, avoids impact to Birchgrove Oval
- An acoustic shed will be erected to enclose tunnelling works and barge mooring - minimising noise and dust

- No permanent facilities are required at this location
- We are working with the original landscape architect for the site to review proposed temporary impacts and refurbishment concepts
- The layout of the temporary site will be designed to minimise impacts to the park during construction.



Victoria Road, Rozelle



This site will be used as the primary tunnelling site south of Sydney Harbour.

This is a temporary site – no major permanent facilities are required at this location.

Key activities

- Entry site for road header machines tunnelling north and south
- Western Harbour Tunnel fit-out
- Tunnel spoil removal direct onto the arterial road network.

Reducing our impact

- Roads and Maritime recognises the importance of this site as the home of the Balmain Tigers Leagues Club and will work with all parties concerned
- Using this site before any development or urban renewal minimises impact to residential and active commercial properties
- The size and location of the site provides the ability to tunnel north and south, reducing overall tunnelling times

- Provides direct access for spoil transport to Victoria Road – keeps trucks off local streets
- An acoustic shed for tunnelling works will contain noise and dust
- Existing dilapidated buildings will be removed, providing a clear site for future urban renewal by others
- Allows for completion of the Rozelle Interchange without a complex interface and ongoing disruption.



Glebe Island and White Bay



This site is proposed as the Western Harbour Tunnel completion and fit-out site for immersed tube tunnel units.

It is proposed to fabricate the steel 'shells' for the immersed tube units elsewhere. At White Bay, the steel shells will be reinforced with concrete and fitted out for their future use.

Once this work is done, they will be floated into position and lowered to the sea bed.

- The site is also proposed for spoil transfer from barge transport, and as a transporting staging point for water-based transport to cofferdams at Berrys Bay and Yurulbin Point – minimising haulage and logistics through local communities

- There will be rigorous and comprehensive environmental procedures for sediment management. Similar work has been successfully completed on several recent Sydney Harbour projects including Garden Island (2010)
- The site will be returned to Port Authority of NSW following completion of the project.

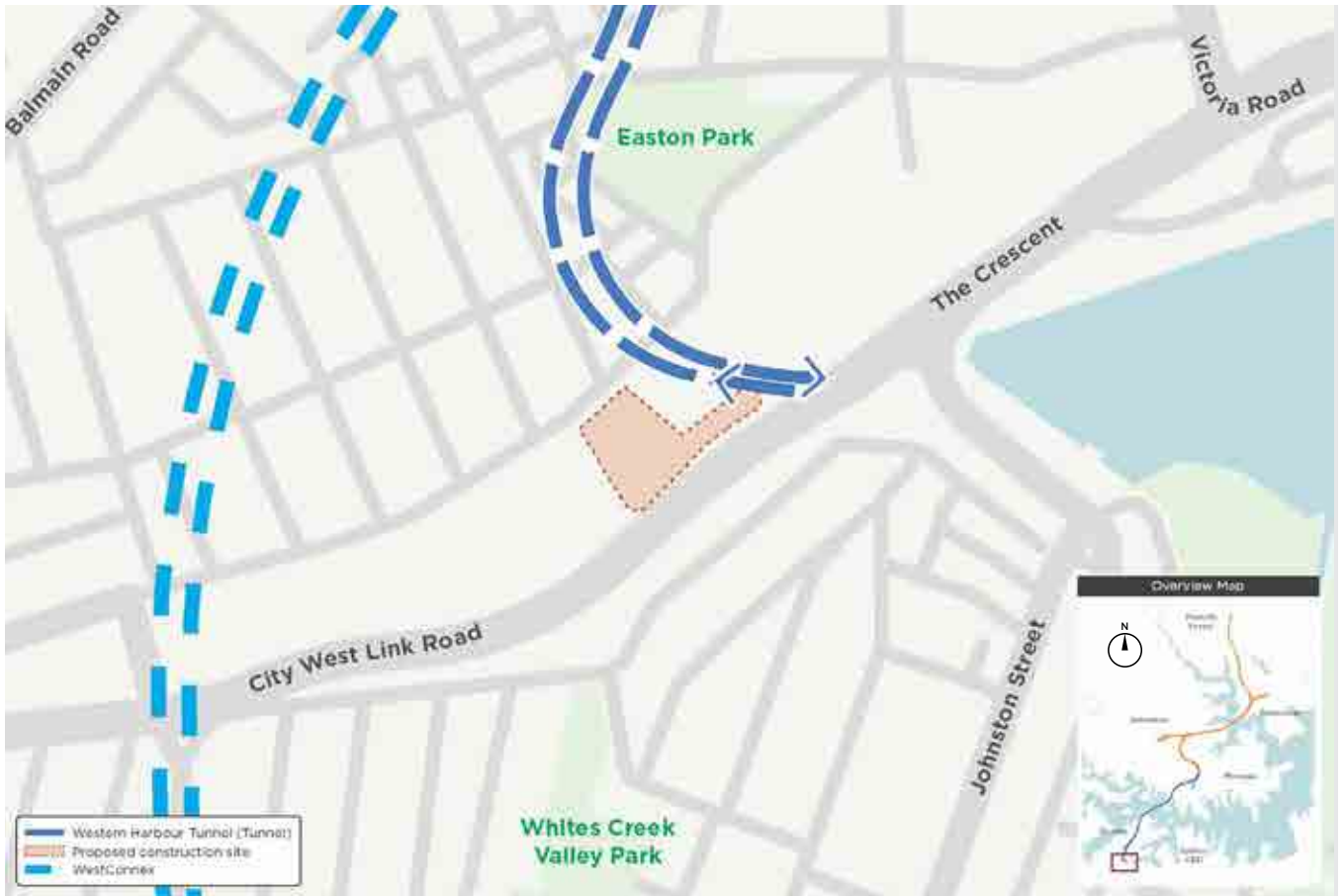
Key activities

- Immersed tube fit-out for the Western Harbour Tunnel units
- Transfer and treatment of sediment for transfer into trucks for safe disposal
- Handling of spoil from Yurulbin Point and Berrys Bay sites
- Deliveries to on-water construction sites and cofferdams.

Reducing our impact

- Enabling water-based construction activities and transport – keeping trucks off local streets
- Reduces the construction footprint in other areas
- Uses Government-owned land – no private property acquisition required
- We are working with Port Authority of NSW to minimise the impact on users of the port facilities, both landside and waterside
- Close to water-based sites, good road access and currently used for commercial/ industrial activity
- No permanent facilities are required at this location.

Rozelle Rail Yards



This will be a shared site with the M4-M5 Link project located within the remediated former Rozelle Rail Yards site.

We will get access to this site once the WestConnex M4-M5 Link project has finished work in this site.

Tunnelling will be undertaken from the Victoria Road site (see page 40).

Key activities

- Fit-out of the Western Harbour Tunnel ventilation facilities constructed as part of the WestConnex M4-M5 Link project
- Tunnel fit-out of the Western Harbour Tunnel ramps that surface at City West Link.

Reducing our impact

- The site provides direct access to City West Link, keeping trucks off local roads
- Using a site, once finished by another project, minimises the footprint of construction in the area and reduces impact on private property.



Safety is the number one priority

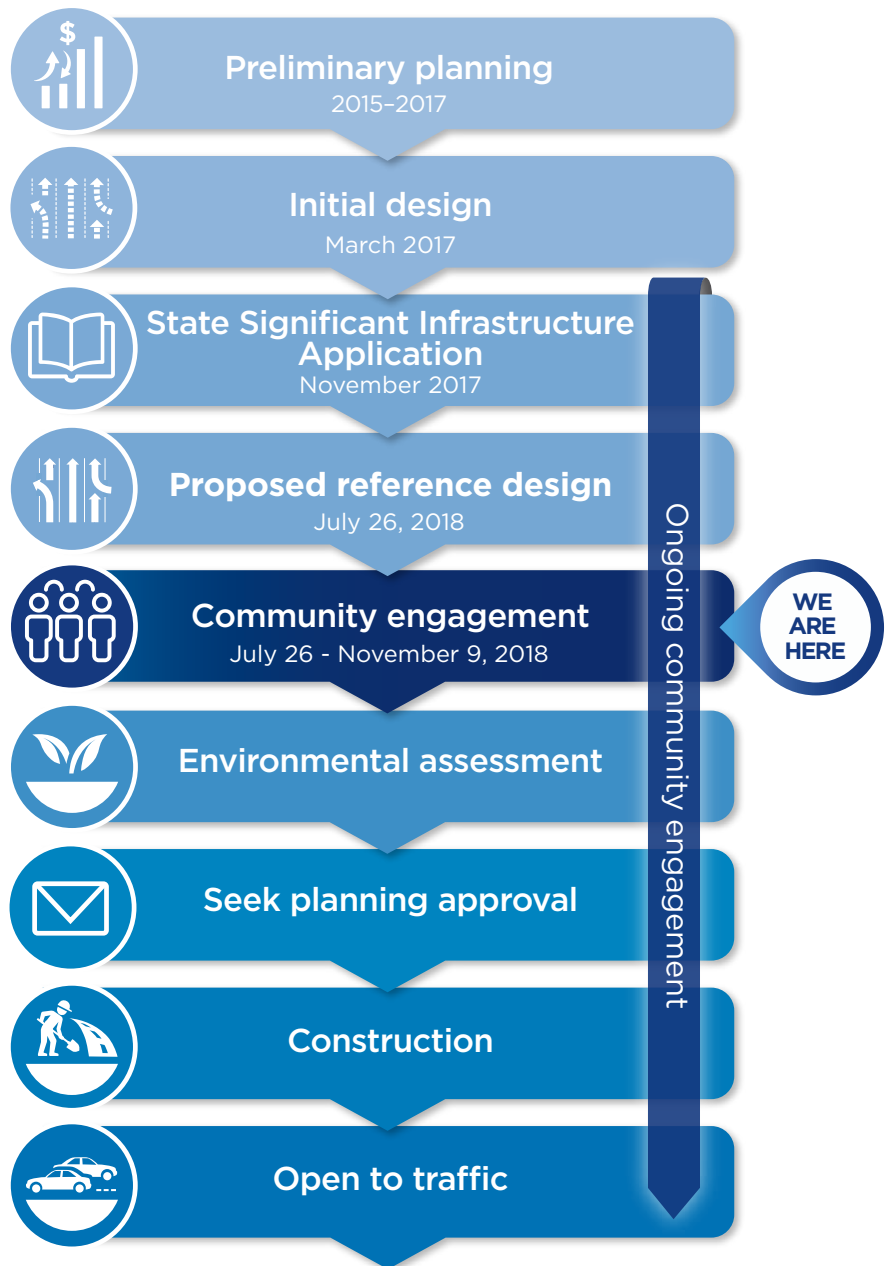
Western Harbour Tunnel will feature world-class safety systems including:

- Constant video monitoring, including automated analysis systems to identify incidents and immediately alert the tunnel control centre
- Cross passages at regular intervals to allow safe passage from one tunnel to another
- Breakdown bays along the tunnel
- Fire suppression systems
- As a safety precaution, ventilation systems are designed to manage smoke in the unlikely event of a vehicle fire in the tunnel
- Comprehensive, tested incident response plans – with response teams on standby at key locations, including tow-trucks



Next steps

- Community and stakeholder engagement continues in the second half of 2018
- This will include a series of community feedback sessions, shopping centre displays, workshops and meetings with community groups, including schools and sporting clubs
- Roads and Maritime will work with councils and the community on urban design and final form of spaces used for the project
- Refinement of the design will take into account your feedback. This will include cost estimates to allow the NSW Government to consider its funding options
- Public exhibition of the Environmental Impact Statement based on the refined design
- During the exhibition period, community sessions will be held and formal submissions will be accepted by the NSW Department of Planning and Environment.



We want to hear what you think about where we are up to. Roads and Maritime will shortly commence community engagement on the proposed reference design presented in this document.

This engagement program will conclude on Friday 9 November 2018.

We encourage you to provide us with your feedback to help us develop the best project we can. You can do so by attending one of our community engagement sessions, or by phone or email at any time. See contact details on the next page.

Environmental impact assessments

Once Roads and Maritime has received community and stakeholder feedback on the proposed reference design, Roads and Maritime will refine the design and prepare the Environmental Impact Statements (EISs).

There will be two EISs - one for Western Harbour Tunnel and the Warringah Freeway Upgrade and one for Beaches Link (including the Gore Hill Freeway connection). These will include more detailed information on the projects such as:

- A detailed description of the project, construction activities and potential construction staging
- A comprehensive assessment of key environmental issues, including a description of the existing environment, assessment of potential direct and indirect impacts associated with the project from construction through to operation, including noise, vibration, traffic and air quality
- A detailed assessment of proposed tunnel ventilation systems
- Description of measures and strategies to be implemented to avoid, minimise, manage, mitigate, offset and or monitor the potential impacts of the project

- Identification and response to issues raised by stakeholders and the community.

The NSW Department of Planning and Environment will conduct the environmental assessments for Western Harbour Tunnel and Beaches Link.

The EISs will be prepared in accordance with the *Environmental Protection and Assessment Act 1979* and will address the Secretary's Environmental Assessment Requirements (SEARs) issued in December 2017.

You can view the SEARs by following the link on our project web page www.rms.nsw.gov.au/whtbl or at the Department of Planning and Environment major projects website: www.majorprojects.planning.nsw.gov.au

During the EIS exhibition period, Roads and Maritime will hold a series of display sessions for the community along the project alignment.

Display sessions will be advertised in the local press, on the Roads and Maritime website and via social media.

The EIS documents will be available on the NSW Department of Planning and Environment website.

You can sign up to our project mailing list to receive project updates by contacting the project team. See contact details below.

You will be able to make formal submissions on any aspect of the project once the EISs are on exhibition. These submissions will be considered in EIS assessment process.





All submissions will be reviewed by the NSW Department of Planning and Environment and forwarded to Roads and Maritime for response.

A report summarising the submissions and the Roads and Maritime responses will be published after the exhibition period.

Roads and Maritime will continue to engage with the community and stakeholders in the lead up to EIS exhibition, throughout the exhibition period and after it is completed.

You can provide feedback to the project team at any time.

For more information

-  www.rms.nsw.gov.au/whtbl
-  1800 931 189
-  whtbl@rms.nsw.gov.au
-  Customer feedback
Roads and Maritime Services
Locked Bag 928, North Sydney NSW 2059



This document contains important information about transport projects in your area. If you need an interpreter, please call the Translating and Interpreting Service on **131 450** and ask them to call the project team on **1800 931 189**. The interpreter will then help you with translation.


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Notes


Notes

Contact us

 www.rms.nsw.gov.au/whtbl

 1800 931 189

 whtbl@rms.nsw.gov.au

 Customer feedback
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