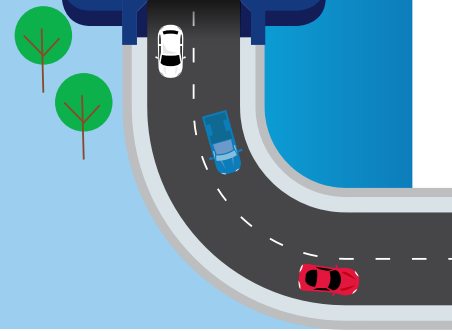


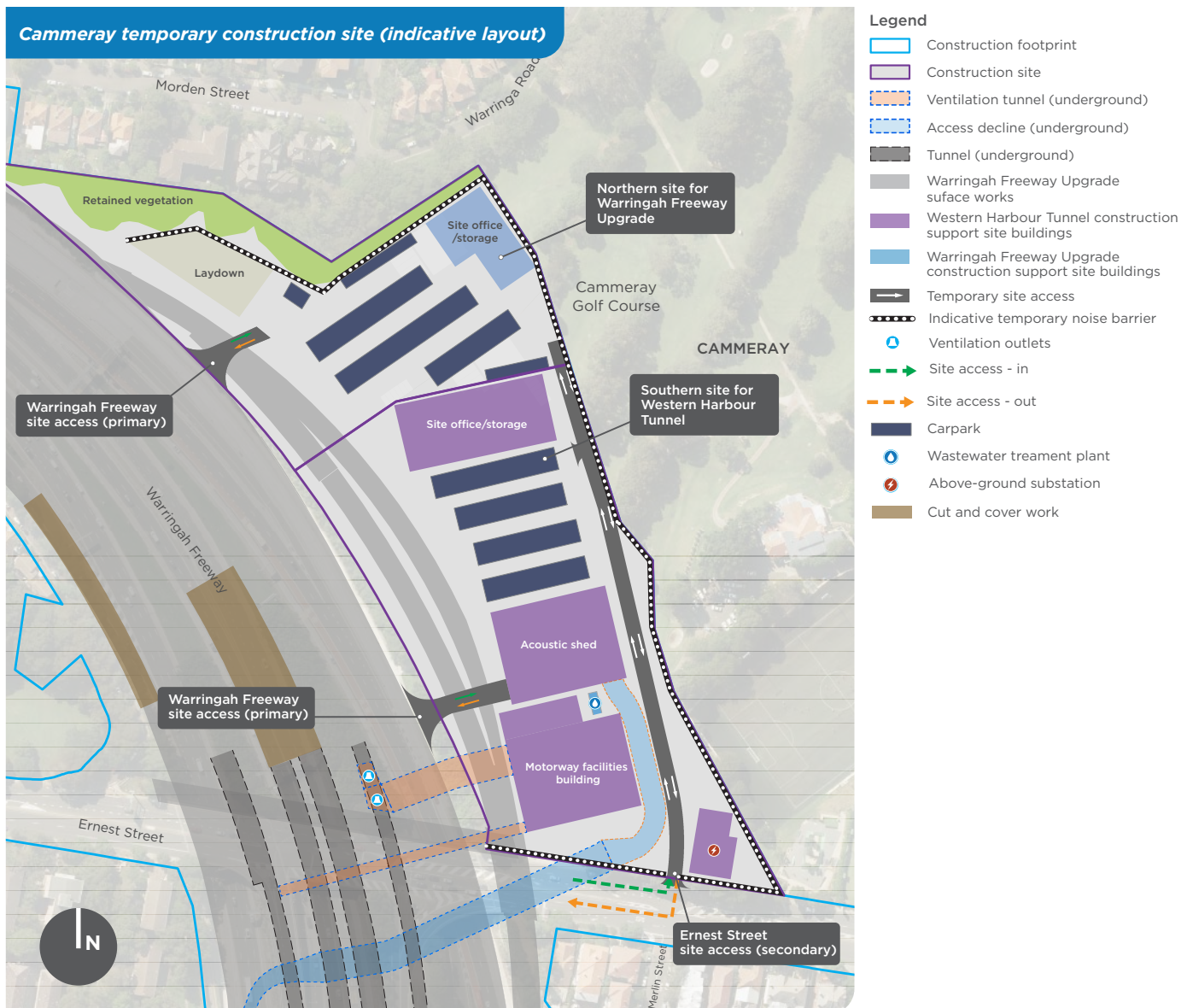


Western Harbour Tunnel and Warringah Freeway Upgrade



Cammeray temporary construction site

We will be setting up two temporary construction sites co-located at the Cammeray Golf Course, next to the Warringah Freeway. One site will be used to support the tunnelling activities for the Western Harbour Tunnel and the second for the Warringah Freeway Upgrade. This site may also be used by the Beaches Link contractor.



We will be using a portion of the Cammeray Golf Course, next to the Warringah Freeway, during construction and for some permanent facilities. This has allowed us to minimise the number of residential properties we need to acquire for this project and to keep the Warringah Freeway flowing while we make it a little wider in this location.

We have also changed the design by moving our motorway control centre from the site to the Artarmon Industrial area to minimise our footprint and leave as much open space as we can once the tunnel is operational.

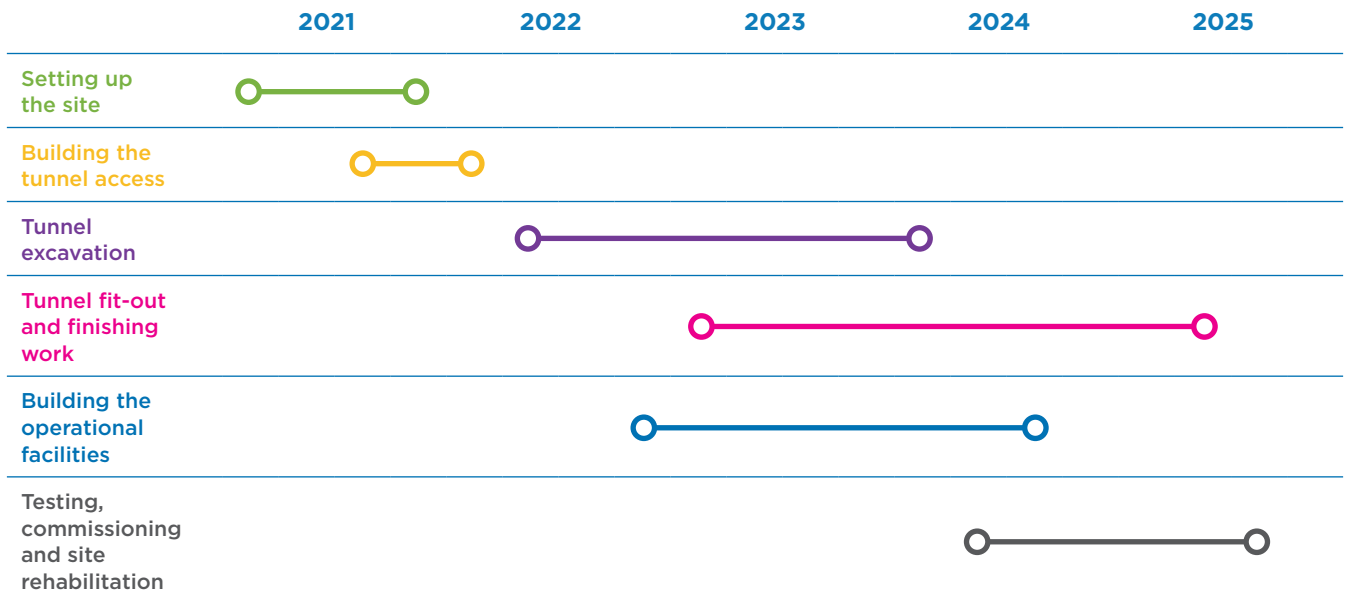
We are continuing to work with the Cammeray Golf Club to minimise impact to the people using the course.

Our key activities include:

- setting up the site, including removing vegetation and carrying out earthworks
- constructing the acoustic shed for tunnelling work
- excavating the tunnel access
- tunnelling, including the main tunnel towards Waverton, ventilation tunnels, cross passages and ramps

- building the motorway facilities, including the electrical substation and fan rooms
- relocating utilities
- local widening of the Warringah Freeway to make space for the Western Harbour Tunnel and Beaches Link portals
- construction of cut and cover structures for the Western Harbour Tunnel and the Beaches Link (within the Warringah Freeway corridor). Beaches Link is subject to a separate environmental assessment and approval
- supporting construction of the Western Harbour Tunnel and the Beaches Link ventilation outlets within the Warringah Freeway corridor
- treating wastewater from tunnelling activities for reuse and disposal offsite
- storing, handling and transporting materials, including tunnel spoil
- finishing work on the tunnel like electrical and mechanical fit outs
- relocating the existing water harvesting dam within the Cammeray Golf Course, which forms part of the North Sydney Council stormwater harvesting scheme
- testing and commissioning of the tunnel and facilities and site rehabilitation for return to Cammeray Golf Club after construction.

Indicative construction timeframe for Cammeray



Indicative timing only

Duration

You may see us in this area for up to five years as we setup, carry out our construction work, then demobilise the site and prepare it for its future use.

We have adjusted our sites and included provisions for the golf course to remain open as a compliant nine-hole course, which will be determined by the Cammeray Golf Club.

The construction peak at the northern portion of this site will be during the cut and cover work and tunnelling work at the southern portion.

Hours of work

We will be tunnelling 24 hours a day, seven days a week. Once we are tunnelling, the majority of the work will take place underground and activity on the surface will reduce. Based on our planned tunnelling rate we expect the impact from tunnelling to be minimal for residents as we will only be working under each property for about one week.

The majority of the tunnelling work on the surface at this site takes place inside the acoustic shed, which manages the potential impacts of noise, dust and light. These sheds are also closed at night to further reduce noise. There may be occasional deliveries and some light vehicle movements outside of standard construction hours. To ensure we are working safely and keeping traffic moving during peak periods we will need to carry out a lot of work outside standard construction hours, during the evening and night.

Traffic / vehicle movements

Access to the site will be mainly via the Warringah Freeway. Two dedicated construction vehicle only access points will be built to provide direct access to the motorway.

We will also have an alternative access via Ernest Street, Cammeray. This will be at the Ernest Street/Merlin Street intersection, which will be upgraded. The upgrade of this intersection will mean the temporary removal of some car parking spaces during construction.

At our construction peak, there will be around 485 heavy vehicle movements and 480 light vehicle movements per day (a vehicle travelling in and out of the site is counted as two movements). For information about peak vehicle movements during construction, please see page 33 of our 'Guide to the EIS' nswroads.work/whtportal-eisguide.

Warringah Freeway currently carries over 250,000 vehicles each day. Once construction is underway, trucks will be moving directly onto the Warringah Freeway.

Noise and vibration

While we are building we will monitor noise and vibration to make sure it meets the appropriate guidelines. We will be using a range of measures to reduce the impact of our work, including:

- additional notification and consultation
- using acoustic sheds for 24 hour tunnelling activities
- laying out our sites so noisy equipment is shielded by other buildings
- turning off machinery and equipment when not in use
- working within standard construction hours
- staging our work to avoid extended periods of consecutive night work in one area
- installing hoards and temporary noise barriers.

You can learn more about how we measure and manage noise by visiting our interactive portal nswroads.work/whtportal or by reading section 3 of our 'Guide to the EIS' nswroads.work/whtportal-eisguide.

If you live near a tunnelling construction site

We will be tunnelling underground 24 hours a day, seven days a week.

The majority of noise activity at these sites will be when we are setting the site up, building the acoustic shed and getting ready for tunnelling. This can take about six months to complete, weather permitting.

Once we are tunnelling the majority of the work is underground, with most of our work taking place inside the acoustic shed. The acoustic shed helps us manage noise, dust and light from our work.

If you live near our surface work



Surface work will be required to connect the tunnel into the existing road network, carry out road upgrades, build new bridges, upgrade existing bridges and build the tunnel entry and exits. You will likely be able to hear some noise from these activities.

Work at these sites will be carried out in stages and some activities will be louder than others. For example, a site set up and earthworks end to be louder than paving, bridge building and finishing work like line marking and installing lights.

If you live near the Warringah Freeway



The Warringah Freeway presents us with a challenge as we need to keep traffic moving while we work.




To do this safely and keep traffic moving we will need to carry out a lot of work during the evening and night.


The noise from this has the potential to be temporarily disruptive to you, particularly at night. An out-of-hours work protocol will be developed in consultation with Department of Planning, Industry and Environment (DPIE) and the Environmental Protection Authority (EPA) and will be followed throughout construction. This will outline appropriate noise management and mitigation measures and will include measures such as providing respite, installing temporary noise barriers and staging our work so we are not working near the same residents for large durations of time. For more detail on the depth of tunnel in your local area, please see pages 24 and 25 of our 'Guide to the EIS' nswroads.work/whtportal-eisguide.

Due to the safety risks of working next to live traffic, we will need to partially close the Warringah Freeway and may need to fully close it for short periods at night to allow certain work to be carried out more effectively. These activities will include paving, installing bridge sections and removing kerbs and medians.

We will be working closely with you to help minimise these impacts.

Contact the Western Harbour Tunnel and Beaches Link team

-  nswroads.work/whtbl
-  whtbl@transport.nsw.gov.au
-  1800 931 189

 Customer feedback
Transport for NSW, Locked Bag 928
North Sydney NSW 2059

Visit our interactive web portal

Read the EIS, find out more or ask our team a question.

 nswroads.work/whtportal



If you need help understanding this information, please contact the Translating and Interpreting Service on 131 450 and ask them to call us on 1800 931 189.

Privacy Transport for NSW is collecting your personal information in connection with the Western Harbour Tunnel and Warringah Freeway Upgrade ("the Project"). In addition to collecting your name and contact details we may collect other information such as your submissions and other communications with us. We will retain and use this information for consultation purposes, including communications and analysis in connection with the Project. We will not disclose your personal information to third parties unless authorised by law and if we include your submissions in any public report we will not identify you. Providing your personal information is voluntary but if you do not provide it we may not include you on our stakeholder database and you might miss further consultation opportunities. Your personal information will be held by us and you can contact us to access or correct it. Please write to us at either whtbl@transport.nsw.gov.au or Transport for NSW, Locked Bag 928, North Sydney NSW 2059.