NSW GOVERNMENT

Transport for NSW

Beaches Link and Gore Hill Freeway Connection

Chapter 7

Stakeholder and community engagement

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7 Stakeholder and community engagement

This chapter provides an overview of the stakeholder and community engagement activities carried out during the project's development and during the preparation of this environmental impact statement. An overview of engagement and consultation tools which would be used to support the public exhibition of this environmental impact statement and during delivery of the project is also provided.

The Secretary's environmental assessment requirements as they relate to stakeholder and community engagement, and where in the environmental impact statement they have been addressed, are detailed in Table 7-1.

Table 7-1 Secretary's environmental assessment requirements – Stakeholder and community engagement

Secretary's requirement	Where addressed in EIS
Consultation	
1. The project must be informed by consultation, including with relevant local, State and Commonwealth government agencies (including the Harbour Master where disturbance of seabeds, shipping channel closures or marine movement of materials/spoil are proposed), infrastructure and service providers, special interest groups (including Local Aboriginal Land Councils, Aboriginal stakeholders, and pedestrian and bicycle user groups), affected landowners, businesses and the community.	A summary of consultation carried out to date is provided in **Section 7.1** and **Section 7.2**. A summary of feedback received is provided in **Section 7.3**. A summary of project refinements in response to feedback is provided in **Section 7.4**. Project refinements have also been considered in **Chapter 5** (Project description).
2. The Proponent must document the consultation process, and demonstrate how the program has responded to the inputs received.	The consultation process is documented in **Section 7.1** and **Section 7.2**. A summary of the feedback received and how the feedback has been addressed is provided in **Section 7.3**. A summary of project refinements in response to feedback is also provided in **Section 7.4**. Project refinements have also been considered in **Chapter 5** (Project description).
3. The Proponent must describe the timing and type of community consultation proposed during the design and delivery of the project, the mechanisms for community feedback, the mechanisms for keeping the community informed, and procedures for complaints handling and resolution.	The engagement timeline is provided in **Section 7.1.2**. Ongoing and future engagement for the project is outlined in **Section 7.5**. A detailed Community communication strategy would be developed and implemented during delivery of the project. This would be based on the community consultation framework provided in **Appendix E** (Community consultation framework). Mechanisms for distributing information and seeking feedback, and procedures for complaints handling and resolution are provided in

Secretary's requirement	Where addressed in EIS
	Appendix E (Community consultation framework).
4. The Proponent must assess the potential for complaint fatigue to occur during construction of the project and describe how mitigation measures, complaint handling procedures and community consultation mechanisms will mitigate complaint fatigue. The assessment must consider the cumulative impacts from the program and other major projects in the area.	The potential for complaint fatigue to occur and proposed mitigation measures are described in **Section 7.5**. Complaint handling procedures are outlined in **Appendix E** (Community consultation framework). Potential cumulative impacts from the project are considered in **Chapter 27** (Cumulative impacts).
Socio-economic, Land Use and Property	
6. A draft Community Consultation Framework must be prepared identifying relevant stakeholders, procedures for distributing information and receiving/responding to feedback and procedures for resolving stakeholder and community complaints during construction and operation. Key issues that must be addressed in the draft Framework include, but are not limited to: a. traffic management (including property access, pedestrian access); b. landscaping/urban design matters; c. construction activities including out of hours work; and d. noise and vibration mitigation and management.	A Community consultation framework is provided in **Appendix E**. The content of the framework is summarised in **Section 7.5**.

7.1 Engagement and consultation process

Consultation forms a key component of engagement. For the purpose of this document, the definitions of consultation and engagement are provided in Table 7-2 in line with International Association of Public Participation definitions.

Table 7-2 Engagement and consultation definitions

Term	Definition
Engagement	In this document, engagement refers to any type of interaction with the community or stakeholders and is also used to refer to the community and stakeholder engagement program holistically. Engagement includes communication, consultation, notification and education.
Consultation	In this document, consultation refers to the level of engagement of a specific activity. Specifically where the term consultation has been used, this describes the process where the aim of the engagement is to obtain public and community feedback on a matter and use this information for project development.

7.1.1 Engagement objectives and strategy

The engagement process aims to provide opportunities for community and stakeholder involvement throughout all phases of the project. To achieve this, the following engagement objectives have been applied:

- Provide clear, consistent and timely information about the project to stakeholders and the community
- Provide communications in a variety of mediums
- Promote and raise awareness of the project and engagement activities being carried out
- Foster and develop positive and meaningful relationships with stakeholders and the community
- Identify opportunities for community and stakeholder groups to be proactively involved in the project
- Collaborate with the community and stakeholders to help shape the design of the project at each key development phase
- Address and respond to community and stakeholder issues raised in a timely and transparent manner
- Use lessons learnt from other major infrastructure projects to improve on community and stakeholder engagement
- Meet the statutory requirements for consultation under the *Environment Planning and Assessment Act 1979*
- Meet the Secretary's environmental assessment requirements.

Community and stakeholder engagement has been an integral component in the development of the project and the Western Harbour Tunnel and Beaches Link program of works more widely. The engagement process has proactively informed and engaged stakeholders and community members during project development. This approach aimed to increase public understanding of the project, encourage participation in the development process, and promote the benefits of the project to local communities and stakeholders. The project has benefited from the input of local knowledge, insight, experience, goals and priorities and learnings from other major infrastructure projects, which has helped to identify issues, potential mitigation strategies and opportunities to improve project outcomes.

7.1.2 Engagement timeline

Engagement for the Beaches Link and Gore Hill Freeway Connection project was carried out by Transport for NSW as part of the engagement process for the wider Western Harbour Tunnel and Beaches Link program of works. Engagement with key government and other project stakeholders, including Port Authority of NSW, Sydney Metro, Infrastructure NSW, Greater Sydney Operations (including Transport Management Centre and Sydney Coordination Office) (within Transport for NSW) and Northern Beaches B-Line, has occurred since early 2016 to help shape the design and plan investigations. Engagement with the community and broader stakeholders commenced in March 2017 and has continued through to the preparation of this environmental impact statement.

Community and stakeholder engagement has been carried out in accordance with the Secretary's environmental assessment requirements. A summary of the community and stakeholder engagement process and timeline for the project is shown in Figure 7-1.

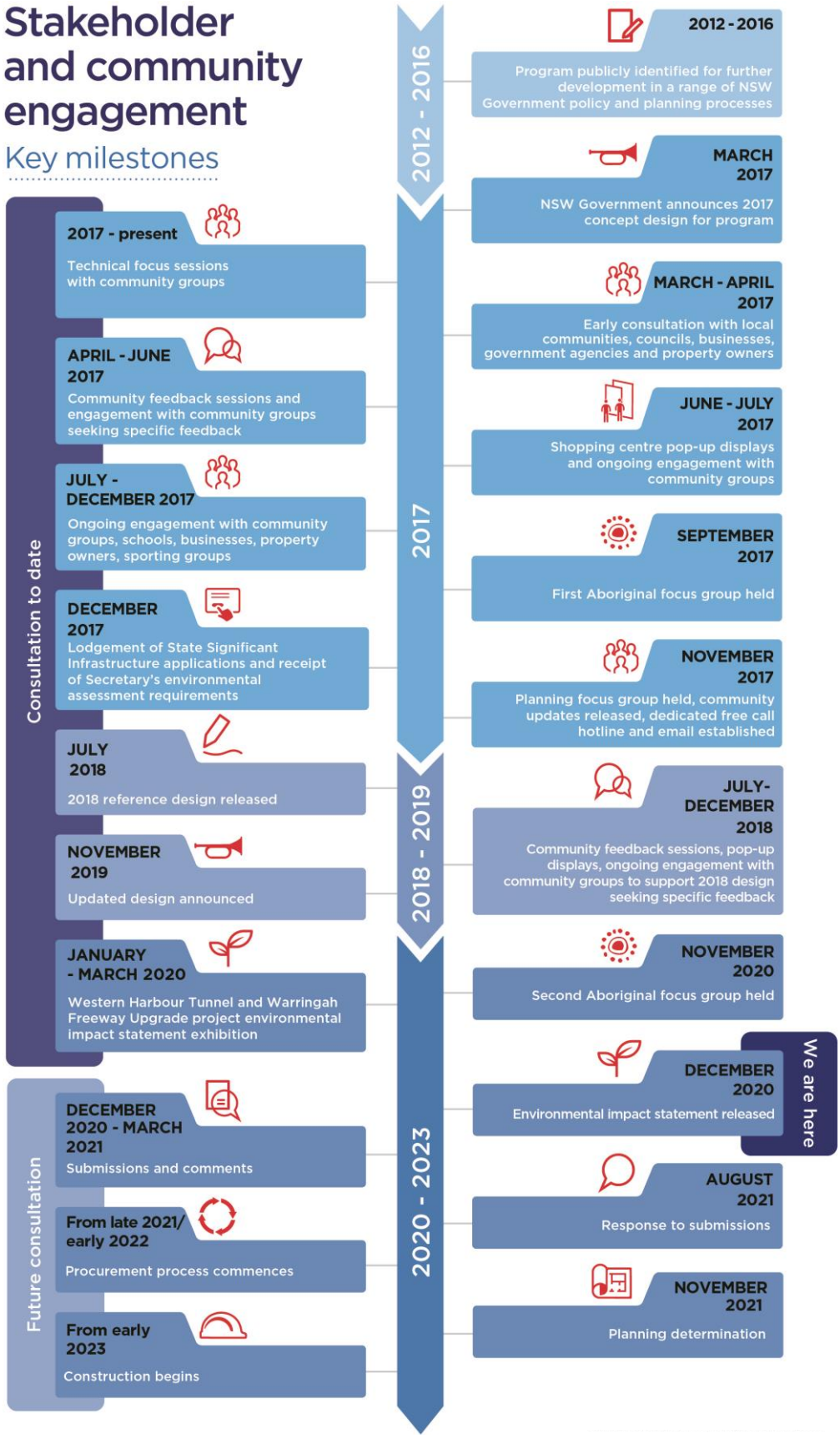

Figure 7-1 Beaches Link and Gore Hill Freeway Connection project community and stakeholder engagement process

7.1.3 Stakeholders

Stakeholders were identified through consideration of the project's potential direct and indirect impacts and from records of previous correspondence with relevant government bodies, business groups and community groups. Engagement has included ongoing liaison and consultation with the following stakeholder groups:

- Government Ministers and elected representatives
- Australian and NSW government agencies
- Local councils
- Property owners and residents along and near the alignment
- Members of the community
- Community service providers
- Business and industry groups
- Education, health and sporting facilities along or near the alignment
- Local precinct committees and/or resident action groups
- Marine stakeholders and waterway users
- Aboriginal groups and the Metropolitan Local Aboriginal Land Council (LALC)
- Pedestrians and cyclists
- Service and utility providers.

7.1.4 Engagement and consultation tools

A variety of two-way consultation and communication tools have been used to provide information to the community, providing a range of opportunities for the community to be consulted and involved throughout the project's development.

Communication and consultation tools established for the project include:

- Toll free community information line (1800 931 189)
- Project email (whtbl@transport.nsw.gov.au (previously whtbl@rms.nsw.gov.au))
- Project website (nswroads.work/whtbl)
- Interactive project portal (nswroads.work/blportal)
- Project database to record correspondence relevant to the project, including contact details and issues raised during the life of the project
- Community update newsletters, fact sheets, and letters to residents
- Guide to the environmental impact statement
- Community information sessions including virtual information sessions, information displays and staffed displays at local shopping centres
- Registered stakeholder database email updates
- Stakeholder briefings, meetings, workshops, and presentations
- Interest group correspondence including letters and phone calls
- Face-to-face meetings and doorknocks with individual property owners and residents of properties which may be affected by the project

- Advertisements and proactive media articles in the local press
- Letterbox drops
- Translating and Interpreting services for Culturally and Linguistically Diverse (CALD) communities (131 450)
- Media events at key milestones of the project.

These tools would be used to support the public exhibition of this environmental impact statement and during further design development and delivery of the project (subject to COVID-19 requirements).

Due to COVID-19 restrictions, staffed displays and face to face community information sessions of the environmental impact statement are not proposed to occur during the exhibition period. However this requirement will be reviewed if restrictions are eased and safety controls allow. In order to ensure that adequate opportunities are available for the community to ask questions on the content of the environmental impact statement, Transport for NSW will be running virtual information sessions throughout January and February 2021. Transport for NSW will continue to investigate the opportunity for face to face community information sessions provided COVID-19 guidelines allow.

Details of the times and topics for the virtual information sessions, as well as any potential face to face community information sessions, would be provided through the project website, email notifications to registered stakeholders, community updates, and advertisements in local and metropolitan media.

7.2 Engagement activities to date

An extensive community engagement process has been carried out for the project before exhibition of the environmental impact statement. This has included two rounds of formal public consultation for the Western Harbour Tunnel and Beaches Link program of works:

- Between April and June 2017 following the announcement of the concept design
- Between July and December 2018 following the publishing of the proposed reference design.

Between 29 January and 30 March 2020, the Department of Planning, Industry and Environment placed the Western Harbour Tunnel and Warringah Freeway Upgrade project environmental impact statement on public exhibition for feedback. As part of this process, various community engagement activities were carried out. Although the purpose of the engagement was to support the Western Harbour Tunnel and Warringah Freeway Upgrade project, community enquiries about the Beaches Link project were also responded to by members of the project team.

In addition to these formal engagement periods, engagement and consultation with stakeholders has been ongoing throughout the project's development, with the project team holding numerous workshops and meetings with councils, community groups and other stakeholders. The following provides a summary of engagement activities carried out to date.

7.2.1 Australian, NSW and local government agencies

Engagement and consultation has been carried out with key Australian, NSW and local government agencies as summarised in Table 7-3. Feedback on specific environmental, technical and socio-economic matters provided by government stakeholders has informed the design development of the Beaches Link and Gore Hill Freeway Connection project.

Table 7-3 Consultation with Australian, NSW and local government agencies

Stakeholder	Timeframe	Engagement topics/activities
Other divisions of Transport for NSW (eg Sydney Trains)	2016 – present	• Various project updates to different functional areas across the Transport cluster to maintain coordinated planning across projects and operations • Northern Beaches B-Line and bus service coordination and future network planning post completion of the Western Harbour Tunnel and Beaches Link program of works • Consultation with Greater Sydney Operations (including Transport Management Centre and Sydney Coordination Office) in carrying out site investigations • Planning sessions with Greater Sydney Operations (including Transport Management Centre and Sydney Coordination Office) to plan traffic management during construction and operation • Site visit to the Traffic Management Centre to discuss and observe existing operation of the Warringah Freeway, the Sydney Harbour Bridge, Warringah Road, Military Road and other critical road links to understand how key adjoining transport corridors perform during peak traffic demand periods • North Sydney public transport integration and transport planning • Transport integration working group • North Sydney Integrated Transport Program working group • Health, safety and environmental briefings • Marine construction overview to understand implications for marine traffic • T1 North Shore and Western Line and T9 Northern Line underground interface.
Sydney Metro	2016 – present	• Sydney Metro City & Southwest tunnel design and construction coordination • North Sydney public transport integration and precinct planning.
Department of Planning, Industry and Environment (Crown Lands)	2017 – present	• General project overview and updates.
Metropolitan LALC	2017 – present	• Regular meetings and correspondence to provide project briefings and seek feedback • Correspondence with CEO, Metropolitan LALC, regarding location of sites in Artarmon, Northbridge, Wakehurst Parkway and Balgowlah • Involvement of site officers in archaeological surveys and field surveys

Stakeholder	Timeframe	Engagement topics/activities
		• Involvement of site officers in survey, recording and condition assessment of cultural heritage close to the construction footprint, including site adjacent to the Wakehurst Parkway.
Australian Government Department of Agriculture, Water and the Environment	2017 – present	• General project overview and updates • Consultation regarding the potential for offshore disposal of dredged material at the designated offshore disposal site • Development of testing plans and permit applications.
Australian Government Department of Infrastructure, Transport, Regional Development and Communications	2017	• General project overview and update.
Infrastructure Australia	2017 – present	• General project overview and updates.
Department of Planning, Industry and Environment (Planning and Assessment)	2017 – present	• General project overview and updates • Warringah Freeway and Gore Hill Freeway concept overview presentation • Frenchs Forest precinct planning and transport integration • Planning focus session on lodgement of State Significant Infrastructure application • Western Harbour Tunnel and Beaches Link program of works site tour to understand design and key challenges • Western Harbour Tunnel and Beaches Link program of works construction methodology, noise, vibration and spoil management presentation.
Greater Sydney Commission	2017 – present	• Multiple project overview and update meetings • North Sydney precinct and transport planning sessions • Frenchs Forest precinct planning • Land use and employment assumptions for design development.
Government Architect NSW	2017 – present	• Project overviews and updates • North Sydney Integrated Transport Program working group • Reference Design Urban Design review panel.
Port Authority of NSW	2017 – present	• Regular project updates and briefings • Stakeholder sessions prior to geotechnical investigations in Sydney Harbour and Middle Harbour • Simulation with Sydney Harbour Pilots undertaken at Brisbane Smartship facility for transporting immersed

Stakeholder	Timeframe	Engagement topics/activities
		tube tunnel units into Middle Harbour and through the Spit Bridge • Development of Harbour Master's conditions for proposed dredging, cofferdams, immersed tube tunnel construction and general marine logistics within Sydney Harbour and Middle Harbour • Planning focus meeting on lodgement of State Significant Infrastructure application.
NSW Urban Growth (now Infrastructure NSW from July 2019)	2016 – present	• Project overviews and updates • Planning focus meeting on lodgement of State Significant Infrastructure application.
NSW Small Business Commissioner	2018	• Project briefing/update.
Department of Planning, Industry and Environment (Regions, Industry, Agriculture and Resources)	2017 – present	• General project overview and updates • Agency briefings on terrestrial biodiversity, freshwater and contamination, marine water (hydrodynamics and dredging) • Marine ecology survey and water quality testing • Consultation for the development of the project application for offshore disposal of dredged material • Planning focus meeting on lodgement of State Significant Infrastructure application.
NSW Environment Protection Authority (EPA)	2017 – present	• General project overview and updates • Marine ecology survey and water quality testing • Planning focus meeting on lodgement of State Significant Infrastructure application • Western Harbour Tunnel and Beaches Link program of works construction methodology, noise, vibration and spoil management presentation • Consultation for the development of the project application for offshore disposal of dredged material • Briefing to the Advisory Committee on Tunnel Air Quality (ACTAQ). Members of the committee were provided the air quality technical report and health impact assessment for review and comment.
Infrastructure NSW	2016 – present	• Multiple project overview and update sessions • Multiple reviews by Infrastructure NSW on various aspects on the design and construction aspects of the project • Review of environmental and community impacts, mitigation and assessment process • Planning focus meeting on lodgement of State Significant Infrastructure submission.
NSW National Parks and Wildlife Services	2017	• Planning focus meeting on lodgement of State Significant Infrastructure application.

Stakeholder	Timeframe	Engagement topics/activities
Department of Premier and Cabinet (Environment, Energy and Science)	2016 – present	• Multiple project overview and update sessions • Planning focus meeting on lodgement of State Significant Infrastructure application • Agency briefings on terrestrial biodiversity, freshwater and contamination, marine water (hydrodynamics and dredging).
Department of Premier and Cabinet (Heritage)	2017	• Planning focus meeting on lodgement of State Significant Infrastructure application • Agency briefings on Aboriginal heritage and non-Aboriginal heritage.
NSW Treasury	2016 – present	• Multiple project overview and update sessions • Planning focus meeting on lodgement of State Significant Infrastructure application • Regular engagement via Western Harbour Tunnel and Beaches Link program of works steering committees.
Sydney Harbour Federation Trust	2017	• Planning focus meeting on lodgement of State Significant Infrastructure application.
Ministry of Health	2017 – present	• Planning focus meeting on lodgement of State Significant Infrastructure application • Project update during environmental impact statement development • Briefing to the Advisory Committee on Tunnel Air Quality. Members of the committee were provided the air quality technical report and health impact assessment for review and comment.
NSW Chief Scientist & Engineer	2017 – present	• Project overview and update session • Planning focus meeting on lodgement of State Significant Infrastructure application • Joint public consultation on approach to Western Harbour Tunnel and Beaches Link air quality and ventilation outlet locations • Briefing to the Advisory Committee on Tunnel Air Quality. Members of the committee were provided the air quality technical report and health impact assessment for review and comment.
Northern Beaches Council	2017 – present	• Project briefings and updates, including briefings on geotechnical investigations, project design, potential project impacts and temporary construction support sites, noise, air quality, future land use after the project is complete and the development of the environmental impact statement • Discussion of feedback from the local community • Planning focus meeting on lodgement of State Significant Infrastructure application.

Stakeholder	Timeframe	Engagement topics/activities
Willoughby City Council	2017 – present	• Project updates on geotechnical work planning, potential project impacts, temporary construction support sites, noise, air quality, future land use after the project is complete and the development of the environmental impact statement • Discussion of feedback from the local community • Planning focus meeting on lodgement of State Significant Infrastructure application.
Mosman Council	2017 – present	• Project updates on the project design, potential project impacts and temporary construction support sites, noise, air quality, and the development of the environmental impact statement • Planning focus meeting on lodgement of State Significant Infrastructure application.
Lane Cove Council	2017 – present	• Project updates on the development of the design, construction methodology, active transport connections, motorway facilities, ventilation outlets, tunnel entry and exit points, spoil transport, tunnel depth and alignment, potential community impacts, air quality, and the development of the environmental impact statement • Planning focus meeting on lodgement of State Significant Infrastructure application.
North Sydney Council	2017 – present	• Updates on tunnel design, project justification, urban design, community engagement process, public transport integration, ventilation outlet locations, air quality and monitoring, potential impacts to Cammeray Golf Course, active transport and pedestrian connections, opportunities and potential impacts to the North Sydney area, and the development of the environmental impact statement • North Sydney Integrated Transport Program working group • North Sydney urban design workshops to discuss potential impacts and proposed mitigation measures – particularly at and around temporary construction support sites and permanent facilities • Planning focus meeting on lodgement of State Significant Infrastructure application.
City of Sydney Council	2017	• General project overview and update.

7.2.2 Utility providers

Engagement and consultation has been carried out with utility providers through activities including briefings, meetings and ongoing technical engagement. These activities provided:

- An overview of the Western Harbour Tunnel and Beaches Link program of works including the proposed design and construction method
- Discussions about the possible impact on utility assets
- Discussion and development of potential relocation and protection strategies
- An opportunity to provide feedback and discuss any issues or concerns.

Providers that have been engaging with the Beaches Link and Gore Hill Freeway Connection project team include:

- Ausgrid
- Jemena
- Telstra
- Sydney Water.

Feedback from these utility providers has informed the design for utility relocation and/or protection, where applicable.

7.2.3 Aboriginal stakeholders

Consultation with Aboriginal stakeholders was carried out in accordance with requirements outlined in Chapter 15 (Aboriginal cultural heritage) of this environmental impact statement.

Table 7-4 provides a summary of engagement and consultation activities carried out. Refer to Appendix L (Technical working paper: Aboriginal cultural heritage assessment report) for further details on Aboriginal stakeholder engagement.

Table 7-4 Consultation with Aboriginal stakeholders

Stakeholder	Summary
National Native Title Tribunal	Contacted to identify any registered native title claimants of native title holders for the options assessment area. No registered native title claimants were identified in relation to the study area.
Aboriginal site officers	Aboriginal site officers nominated by the Metropolitan LALC were present for archaeological surveys, recording and condition assessment of cultural heritage.
• Department of Premier and Cabinet (Heritage) • NSW Aboriginal Land Council • Metropolitan LALC • Aboriginal Heritage Office • Registrar appointed under the *Aboriginal Land Rights Act 1983* • National Native Title Tribunal	Organisations were written to during June and July 2017 seeking the details of Aboriginal people who may have an interest in the project and who may hold cultural knowledge about objects and places in the study area.

Stakeholder	Summary
• Native Title Services Corporation Limited • Northern Beaches Council • North Sydney Council.	
Aboriginal Focus Group	Identified Aboriginal stakeholders (registered Aboriginal parties) were contacted by letter and advertisement and invited to attend focus group meetings to discuss the project and received comment on the draft archaeological survey methodology. The first Aboriginal Focus Group was held in September 2017. A second Aboriginal Focus Group was held in November 2020 to outline the findings of the Aboriginal cultural heritage assessment and seek feedback from registered Aboriginal parties.

7.2.4 Business stakeholders

A business survey was carried out to gain a better understanding of the main issues, perceptions and concerns of businesses in regard to construction and operation of the project. Surveys were conducted during a three-week period in November 2017 in nine local centres that may be susceptible to direct or indirect effects of construction and/or operation. Businesses were approached at random within these local centres, with every effort made to survey a range of business types across the study area. The results of the business survey are provided Appendix U (Technical working paper: Socio-economic assessment) and discussed in Chapter 21 (Socio-economics).

Local business owners also attended community information sessions. Further engagement with business stakeholders would be carried out during the environmental impact statement exhibition period, this may include door knocking and letter box drops (subject to COVID-19 requirements and with social distancing and other safety measures implemented as required).

7.2.5 Directly impacted landowners and residents

In March 2017, property owners affected by the concept design were notified. In July 2018, property owners affected by the proposed reference design were notified. In November 2019, property owners affected by the updated access road design at Balgowlah were notified and assigned a Personal Manager Acquisition. Residential property owners were provided the opportunity to start the acquisition process (at owner discretion). Further engagement would be carried out with affected property owners as the project progresses.

All acquisition required for the project is carried out in a manner consistent with the *Land Acquisition (Just Terms Compensation) Act 1991* (NSW) (Just Terms Act), the *Land Acquisition Information Guide* and the land acquisition reforms announced by the NSW Government in 2016.

Transport for NSW has appointed a Personal Manager Acquisition to help land owners who may be affected by acquisition for the project. The Personal Manager Acquisition is in regular contact with these individuals to provide updates on the project and respond to questions and queries. Should acquisition for the project be confirmed for a particular property, the Personal Manager Acquisition would work with the affected land owners and residents to offer assistance and support throughout the acquisition and relocation process (refer to Chapter 20 (Land use and property)).

7.2.6 Community

Western Harbour Tunnel and Beaches Link program of works engagement

Community engagement was carried out for the whole Western Harbour Tunnel and Beaches Link program of works by Transport for NSW (formerly Roads and Maritime). The following section describes the community feedback received during the 2017 and 2018 consultation periods for the program of works, in addition to engagement carried out with a number of community and interest groups.

2017 concept design

In March 2017, the NSW Government announced the Western Harbour Tunnel and Beaches Link program of works design. Feedback on the concept design was invited between 16 March 2017 and 31 July 2017, supported by community engagement activities summarised in Table 7-5.

Table 7-5 2017 concept design – community engagement activities

Activity	Details
General program information and feedback channels	
Program website	nswroads.work/whtbl (previously rms.nsw.gov.au/whtbl).
Program email address	Over 700 emails were sent to the program email account: whtbl@transport.nsw.gov.au (previously motorwaydevelopment@rms.nsw.gov.au).
Program 1800 number	Over 1000 telephone calls were received via the program information line: 1800 789 297.
Letterbox drops	More than 330,000 program fact sheets and community feedback session information flyers delivered.
Online community engagement map	More than 1700 comments posted on specific topics by members of the community.
Subscribers to program updates	Over 2300 subscribers to receive ongoing program updates.
Ministerial	About 90 customer enquiries issued as ministerial inquiries.
Hosted events	
Community Feedback Sessions attended by program team and technical specialists	Sixteen sessions attended by more than 2100 people at the following locations: • Mosman Club (two sessions) • McMahons Point Community Centre (two sessions) • Chatswood Club (two sessions) • Balmain Town Hall (two sessions) • Manly-Warringah Leagues Club (two sessions) • Northbridge Bowling Club (two sessions) • North Sydney Oval Function Centre (two sessions) • Seaforth Community Centre (one session) • Fred Hutley Hall, North Sydney Council Chambers (one session).
Pop up information displays	Twelve displays in major shopping centres attended by more than 800 people including: • Birkenhead Point Shopping Centre (two sessions)

Activity	Details
	• Warringah Mall (four sessions) • Balgowlah Stockland (two sessions) • Chatswood Westfield (four sessions).
Direct engagement with individual stakeholders	
Meetings with residents and stakeholders	More than 25 meetings were attended by more than 1000 people.
Door knocks	More than 1500 residences.
Notifications of investigation work	
Marine geotechnical notifications	More than 170 notifications to properties in the vicinity of the proposed harbour crossings.
Land based geotechnical notifications	More than 5500 notifications and more than 1200 door knocks.
Noise monitoring installation notifications	More than 590 notifications and more than 470 door knocks.
Air quality monitoring station installations	More than 50 notifications and more than 40 door knocks.
Media	
Newspaper advertisements	89 half page advertisements, placed in the local media in the weeks preceding the community feedback sessions.
Media releases	One media release was issued by the NSW Government to coincide with the announcements of the preferred corridor and start of field investigation works.
Facebook	More than 169,000 people reached through two direct program related Facebook posts on the NSW Roads Facebook page, as well as a broadly targeted Facebook advertising campaign.

2018 proposed reference design

In July 2018, the NSW Government announced the proposed reference design for the Western Harbour Tunnel and Beaches Link program of works. Feedback on the proposed reference design was invited between 26 July 2018 and 1 December 2018, supported by community engagement activities summarised in Table 7-6.

Feedback from this period helped to inform the design which has been included in this environmental impact statement. A summary of this feedback and where it has been addressed is provided in Table 7-8.

Table 7-6 2018 proposed reference design – community engagement activities

Activity	Detail
General program information and feedback channels	
Program website	nswroads.work/whtbl (previously rms.nsw.gov.au/whtbl).
Program email address	Around 2320 emails were sent to the program email account: whtbl@transport.nsw.gov.au (previously whtbl@rms.nsw.gov.au).

Activity	Detail
Program 1800 number	More than 300 telephone calls were received via the program information line: 1800 931 189.
Letterbox drops	About 400,000 program fact sheets and community feedback session information flyers delivered.
Online community engagement map	More than 4000 comments posted on specific topics by members of the community (https://www.rms.nsw.gov.au/projects/western-harbour-tunnel-beaches-link/consultation-map-bl.html).
Feedback forms	More than 530 written feedback forms received at community sessions.
Subscribers to program updates	Over 3300 subscribers to receive ongoing program updates.
Ministerial	Over 90 customer enquiries issued as ministerial inquiries.
Hosted events	
Community Feedback Sessions attended by program team and technical specialists	Twenty sessions attended by more than 2600 people at the following locations: • Balgowlah Club Totem (one session) • Balgowlah Golf Club (one session) • Crows Nest Centre (two sessions) • Mosman RSL (two sessions) • Fred Hutley Hall, North Sydney Council Chambers (two sessions) • Waverton Bowling Club (two sessions) • Balgowlah RSL (three sessions) • Manly Warringah Leagues Club (two sessions) • Balmain Town Hall (two sessions) • Northbridge Golf Club (two sessions) • Cammeray Golf Club (one session).
Pop up information displays	Six displays in major shopping centres attended by more than 590 people including: • Birkenhead Point Outlet Centre (three sessions) • Balgowlah Stockland (three sessions).
Direct engagement with individual stakeholders	
Stakeholder meetings	More than 88 meetings were held with local precinct committees, schools and associated Parents & Citizens (P&C) Associations, resident groups, special interest groups, sporting associations, Government agencies and local councils.
Door knocks	More than 3890 residences.
Notifications of investigation work	
Land based geotechnical notifications	More than 132 notifications and more than 20 doorknocks.
Media	
Newspaper advertisements	Eighteen half page advertisements, placed in the local media in the weeks preceding the community feedback sessions.

Activity	Detail
Media releases	One media release was issued by the NSW Government to coincide with the announcements of the further developed design.

2019 project updated design

In November 2019, the NSW Government announced an updated design for the Beaches Link and Gore Hill Freeway Connection project.

The community were advised of the preferred temporary construction support sites at Wakehurst Parkway east (BL13) and Flat Rock Drive (BL2), an updated design of the Balgowlah access road (noting the Balgowlah access road has since evolved to that presented in this environmental impact statement) and the updated timing for the Beaches Link and Gore Hill Freeway Connection project environmental impact statement.

Community updates were uploaded onto the project website and distributed to 46,500 properties along the Beaches Link alignment and suburb specific fact sheets were created to update the community about design changes in their area. The fact sheets focussed on Balgowlah, Cammeray, Willoughby, Seaforth and Frenchs Forest.

In addition, an email was sent to 2592 subscribers, informing them of the changes and linking them to the community update on the website.

2020 Western Harbour Tunnel and Warringah Freeway Upgrade project environmental impact statement public exhibition

As stated in Section 7.2, during the display period of the Western Harbour Tunnel and Warringah Freeway Upgrade project environmental impact statement between 29 January and 30 March 2020, general questions around the design, project alignment, project timelines and impacts of the Beaches Link and Gore Hill Freeway Connection project were asked by community members. A dedicated technical expert from the Beaches Link and Gore Hill Freeway Connection project team attended the information sessions in order to respond to these questions.

Submissions made on the Western Harbour Tunnel and Warringah Freeway Upgrade project environmental impact statement that related to the Beaches Link and Gore Hill Freeway project were considered in the preparation of this environmental impact statement.

Community and interest groups

Engagement and consultation has been carried out with a number of community and interest groups through activities such as briefings, meetings, presentations and workshops. These activities provided:

- An overview of the Western Harbour Tunnel and Beaches Link program of works, including the proposed design and construction method
- Information on potential impacts during construction and operation including air quality, noise and vibration, traffic and transport, biodiversity, and maritime issues
- Further detail on options considered and their advantages and disadvantages
- The opportunity to provide feedback and discuss any issues or concerns
- The opportunity to present community options for analysis by the technical and environmental team.

Engagement and consultation has occurred with the following community and interest groups:

- Artarmon Progress Association
- Naremburn Progress Association
- Northbridge Progress Association

- Federation of Willoughby Progress Associations
- North Sydney Precinct Committees
- Plateau Precinct (Cammeray)
- Waverton Precinct Committee
- Waverton Progress Association
- Willoughby Progress Association
- Willoughby South Progress Association
- Wollstonecraft Precinct Committee
- Crows Nest Rotary Club
- North Sydney Rotary Club
- Mosman Rotary Club
- Northbridge Rotary Club
- Marist College North Shore
- North Sydney Boys High School
- Seaforth Primary School and P&C
- Northern Beaches Secondary College Balgowlah Boys Campus
- St Cecilia's Catholic Primary School
- St Mary’s Primary School
- Anzac Park Public School
- Anzac Park Public School P&C Association
- Cammeray Public School
- Cammeray Public School P&C Association
- Monte Sant' Angelo Mercy College
- Wenona School
- Balgowlah Golf Club
- Cammeray Golf Club
- Seaforth Residents Group
- Serpentine Crescent Residents Group
- Balgowlah Residents Group
- Dudley Street residents
- Seaforth Football Club
- Northbridge Sailing Club
- The Greens North Sydney
- Save Manly Dam Catchment Committee.

7.3 Feedback received

Feedback and issues identified during the engagement program by stakeholders and the community have informed the environmental assessment and the ongoing development of the project. A summary of these issues and where they have been addressed is provided in the following section.

7.3.1 Summary of feedback received

Feedback received was recorded and considered during the preparation of this environmental impact statement and throughout the development of the project.

Table 7-7 provides a summary of the feedback topics and number of comments received during the 2017 and 2018 engagement periods for the Western Harbour Tunnel and Beaches Link program of works, and where this has been considered in the environmental impact statement for the Beaches Link and Gore Hill Freeway Connection project.

Table 7-7 Summary of stakeholder and community feedback

Feedback topic	Number of comments 2017	Number of comments 2018	Environmental impact statement reference
Air quality impacts, location and operation of tunnel ventilation system, potential impact on health	1068	4729	Air quality impacts are assessed in Chapter 12 (Air quality) Location and operation of tunnel ventilation outlets and motorway facilities is described in Chapter 5 (Project description) and Appendix H (Technical working paper: Air quality) Assessment of potential human health impact is provided in Chapter 13 (Human health) and Appendix I (Technical working paper: Health impact assessment)
Design – tunnel entry and exit portals, alignment, road connections, depth, project description, suggested design changes, motorway features	928	1566	Chapter 4 (Project development and alternatives), Chapter 5 (Project description) and this chapter in Section 7.4
Transport mode, public transport alternatives, network integration, connectivity, integration with other key projects and proposed infrastructure (eg Northern Beaches B-Line, Sydney Metro)	547	1974	Chapter 3 (Strategic context and project need) Chapter 4 (Project development and alternatives) Chapter 5 (Project description) Chapter 8 (Construction traffic and transport), Chapter 9 (Operational traffic and transport) and Appendix F (Technical working paper: Traffic and transport)

Feedback topic	Number of comments 2017	Number of comments 2018	Environmental impact statement reference
Potential property impact on directly and indirectly affected properties, including property value and potential increase in urban density, property condition surveys, property access, property acquisition	501	1756	Chapter 20 (Land use and property) and Appendix U (Technical working paper: Socio-economic assessment)
Construction impact, location of temporary construction support sites, impact of temporary construction support sites, hours of work, night work, spoil transport, cumulative impacts, light spill	383	3475	Chapter 6 (Construction work)
Potential impact on local streets, rat runs, local road safety, construction traffic, impact on parking spaces, congestion, road network performance, local road connections, increased traffic, cumulative traffic impact, travel time	398	4023	Chapter 8 (Construction traffic and transport), Chapter 9 (Operational traffic and transport) and Appendix F (Technical working paper: Traffic and transport) Chapter 27 (Cumulative impacts)
Traffic modelling	273	312	Chapter 8 (Construction traffic and transport), Chapter 9 (Operational traffic and transport) and Appendix F (Technical working paper: Traffic and transport)
Satisfaction with engagement	151	86	This chapter provides an overview of the engagement and consultation process feedback received
Impact on fauna, flora, vegetation, green spaces, National Parks	177	1676	Chapter 19 (Biodiversity) and Appendix S (Technical working paper: Biodiversity development assessment report)
Need for land bridges and open space	1	2175	Chapter 22 (Urban design and visual amenity)
Drainage and flooding	2	133	Chapter 18 (Flooding) and Appendix R (Technical working paper: Flooding)
Project cost, cost benefit ratio and tolling	97	437	A description of tolling infrastructure is provided in Chapter 5 (Project description). Tolling cost modelling is not subject to this environmental impact assessment

Feedback topic	Number of comments 2017	Number of comments 2018	Environmental impact statement reference
Support for project	89	184	This chapter provides an overview of the engagement and consultation process feedback received
Dissatisfaction with engagement process, need for further project detail, consideration of different ways to engage with the community and stakeholders including different mediums	81	232	Consultation has been adapted as the project progresses. The project has endeavoured to provide information in a variety of different mediums for stakeholders as detailed in this chapter
Noise impact, construction noise, cumulative noise impact, road traffic noise changes, noise walls, noise monitoring	73	2646	Chapter 10 (Construction noise and vibration), Chapter 11 (Operational noise and vibration) and Appendix G (Technical working paper: Noise and vibration)
Cycling, cycleway facilities, active transport	61	336	Chapter 8 (Construction traffic and Transport), Chapter 9 (Operational traffic and transport) and Appendix F (Technical working paper: Traffic and transport)
Oppose project	59	2243	This chapter provides an overview of the engagement and consultation process and feedback received
Visual amenity, visual impact of temporary/permanent structures, overshadowing, urban design	21	306	Chapter 22 (Urban design and visual amenity), Chapter 21 (Socio-economics) and Appendix U (Technical working paper: Socio-economic assessment)
EIS process and project approval	18	58	Chapter 2 (Assessment process)
Aboriginal and non-Aboriginal heritage	14	486	Chapter 15 (Aboriginal cultural heritage), Appendix L (Technical working paper: Aboriginal cultural heritage assessment report), Chapter 14 (Non-Aboriginal heritage) and Appendix J (Technical working paper: Non-Aboriginal heritage)
Impact on community amenity during construction/operation, neighbourhood character, local business impact	8	39	Chapter 21 (Socio-economics) and Appendix U (Technical working paper: Socio-economic assessment)
Project timing	6	80	Chapter 5 (Project description) and Chapter 6 (Construction work)

7.3.2 Issues raised by government agencies and local government

A list of government stakeholders consulted and details on engagement activities and topics is provided in Section 7.2.1. Feedback from government stakeholders has informed the design development of the Beaches Link and Gore Hill Freeway Connection project and is addressed throughout the chapters of this environmental impact statement.

7.3.3 Issues raised by the community

All questions, comments and issues raised by the community have been recorded in the project's database. Feedback received during both consultation periods has been considered and addressed as part of the environmental assessment and, wherever possible, has been incorporated into the design.

Feedback from the 2017 consultation period was addressed in the Beaches Link and Gore Hill Freeway Connection scoping report (Roads and Maritime Services, 2017c), submitted to Department of Planning, Industry and Environment in October 2017. This feedback informed the development of the proposed reference design, as discussed further in Section 7.4.

Feedback from the 2018 consultation period, including key issues raised by community members, stakeholder interest groups and local businesses are provided in Table 7-8. To consolidate the feedback received by the community, feedback has been grouped by issue category and summarised where appropriate. This table also provides the Transport for NSW response and/or the reference to where this feedback has been addressed in this document.

7.3.4 Issues raised by Aboriginal stakeholders

Feedback from Aboriginal stakeholders, including key issues, and how they have been addressed are provided in Chapter 15 (Aboriginal cultural heritage) and Appendix L (Technical working paper: Aboriginal cultural heritage assessment report). Feedback from the Aboriginal Focus Group sessions is provided in Annexure A of Appendix L (Technical working paper: Aboriginal cultural heritage assessment report).

Table 7-8 Issues raised by the community

Issue category	Issue raised	Response to issue and where addressed
Strategic justification and project need	Project viability studies, including the business case, should be released to public.	An overview of the strategic context and project need are provided in Chapter 3 (Strategic context and project need). An overview of the development process and options considered are provided in Chapter 4 (Project development and alternatives).
	Requested more information on whether increased private vehicle road capacity would impact the future development of the North District and Northern Beaches employment centres.	The project would provide increased capacity, connectivity, resilience, and result in a decrease in travel time between employment centres. This is anticipated to have a positive impact and encourage future development in the business centres. Refer to Chapter 9 (Operational traffic and transport) and Appendix F (Technical working paper: Traffic and transport) for further information. The potential social and economic impacts of the project are considered and assessed in Chapter 21 (Socio-economics).
Project development and alternatives	Further investigations into other transport mode options should have been carried out prior to choosing a road option.	An overview of the strategic context and project need are provided in Chapter 3 (Strategic context and project need). An overview of the development process and options considered are provided in Chapter 4 (Project development and alternatives).
	Preference for public transport over motorways.	The project (as part of the broader Western Harbour Tunnel and Beaches Link program of works) has been planned as part of an integrated transport network to meet the diverse travel and transport needs of Sydney. This includes a well-developed road, rail, bus, ferry, walking and cycling network. An overview of the strategic context and project need are provided in Chapter 3 (Strategic context and project need). The project has been designed to provide high quality access for express bus services expected to travel via the proposed Beaches Link tunnels in
	Project should be replaced by a metro or heavy rail.	
	Consideration should be given to a dual rail/road.	

Issue category	Issue raised	Response to issue and where addressed
		the future – providing a significant improvement in public transport travel times and reliability. The project has also been designed to provide significant improvement in existing public transport route travel times by reducing congestion on existing arterial roads. In addition, the Western Harbour Tunnel and Warringah Freeway Upgrade project would provide significant improvements to the efficiency and connectivity of the southbound bus lane on the Warringah Freeway from Miller Street to Sydney Harbour Bridge and direct access to North Sydney to enable interchange with the new Sydney Metro and Sydney Trains. The core capacity improvement offered by the Western Harbour Tunnel and Warringah Freeway project is key to enabling the proposed Beaches Link and Gore Hill Freeway Connection project and the associated significant change in connectivity and reliability for the northern transport network. More information on public and active transport connections can be found in Chapter 3 (Strategic context and project need) and Chapter 5 (Project description). An overview of the development process and alternatives is provided in Chapter 4 (Project development and alternatives). Public transport is also addressed in Chapter 9 (Operational traffic and transport).
	Concerns about toll prices.	A description of tolling infrastructure is provided in Chapter 5 (Project description). The potential social and economic impacts of the project are considered and assessed in Chapter 21 (Socio-economics). Tolling cost modelling is not subject to this environmental impact assessment.

Issue category	Issue raised	Response to issue and where addressed
Tunnel design	Potential impacts to property due to tunnel depth.	Pre-construction building/structure condition surveys would be offered and prepared for properties (where the offer is accepted by the owner) within the zone of influence of tunnel settlement (where the degree of severity has been assessed as 'slight' or above and within the minimum working distances for cosmetic and structural damage due to vibration) prior to the commencement of tunnelling and vibration intensive activities in the vicinity with the potential to affect the building/structure. This survey provides a clear record of the property's condition prior to works starting. Post-construction building condition surveys would be offered to property owners of buildings for which a pre-construction building condition survey was carried out. Where the project is deemed the cause of building and/or property damage, the damage would be repaired at no cost to the property owner. An Independent Property Impact Assessment Panel, comprising geotechnical and engineering experts, would be established prior to the commencement of works to independently verify building condition survey reports, resolve any property damage disputes and establish ongoing settlement monitoring requirements. Potential impacts to property due to tunnel depth is considered and assessed in Chapter 16 (Geology, soils and groundwater).
Construction	Proximity of temporary construction support sites to homes, businesses and schools.	Proposed temporary construction support sites have been selected to support safe and efficient construction. Key factors applied to identification of potential temporary construction support sites include: • Locate the temporary construction support sites as close as possible to the tunnels or surface works they support to minimise unnecessary tunnelling or heavy vehicle movements • Avoid sensitive environments and community locations where possible • Avoid material impacts to heritage sites or items
	Objections to the proposed site locations.	

Issue category	Issue raised	Response to issue and where addressed
		• Maximise opportunities for direct access to motorways and arterial roads or water transport opportunities for construction traffic, and avoid the need to use local residential streets if possible • Minimise direct and indirect property impacts and acquisitions, particularly in residential areas. More information on the sites can be found in Chapter 6 (Construction work).
	Impacts to ambulance and patient transport and access to the Northern Beaches Hospital during construction.	The realignment and upgrade of the Wakehurst Parkway would be staged to maintain traffic at all times. Works in the hospital precinct area would mainly be pavement works and linemarking works.
	Potential hours of operation and impacts of construction activities carried out up to 24 hours per day seven days a week.	Above ground civil construction work such as spoil haulage would, where feasible, generally be carried out between the following standard construction hours: • 7am to 6pm Monday to Friday • 8am to 1pm Saturday • Generally, no work on Sundays or public holidays. Activities that support tunnelling works and fitout, including above ground work supporting underground activities such as spoil handling, may need to occur 24 hours per day, up to seven days per week. Tunnel excavation and spoil handling outside of standard construction hours would be carried out within acoustic sheds at temporary construction support sites that would support tunnel excavation. For works undertaken outside of standard hours, the potentially affected community would be notified in advance. More information can be found in Chapter 6 (Construction work).

Issue category	Issue raised	Response to issue and where addressed
	Duration of construction work and potential for long program delays.	Significant effort has been invested in understanding the key construction activities, their durations, key delay risks and mitigation strategies. More information can be found in Chapter 6 (Construction work).
	Future use of temporary construction support sites including proposed rehabilitation and/or use during operation.	Proposed temporary construction support sites and would be returned at completion of works to the community as open space, wherever possible. Rehabilitation of temporary construction support sites would be carried out with relevant landowners, the local council and community. A dedicated consultation process jointly led by Transport for NSW and Northern Beaches Council would take place to give the community an opportunity to provide input to the final layout of the new and improved open space and recreation facilities at Balgowlah. This consultation would be separate to the consultation for the Beaches Link and Gore Hill Freeway Connection environmental impact statement. This process would start after the environmental impact statement public exhibition period and well in advance of construction starting. As part of this consultation process, a community reference group would be established, with representative stakeholder groups and the community, to support Transport for NSW and Northern Beaches Council with the development of this important public space. The project would return an area, equivalent to around 90 per cent of the current open space, to the community as new and improved public open space and recreation facilities. Residual land, primarily to the east and north of the new access road, would progressively become available through the construction period, which would facilitate re-purposing it to the new open space and recreation facilities. This would allow it to be handed over progressively for use by the community. The new open space and recreation facilities to the west of the proposed access road, between the access road and Burnt

Issue category	Issue raised	Response to issue and where addressed
		Bridge Creek Deviation, would be constructed after completion of the project and then handed over to Northern Beaches Council. More information can be found in Chapter 5 (Project description) and Chapter 6 (Construction work).
Consultation process	Inadequate consultation and dissatisfaction with the process.	This chapter provides an overview of the communication and engagement activities carried out to date, and engagement and communication tools which would be used to support the public exhibition of this environmental impact statement and during project delivery. Communication tools and activities for informing and consulting with stakeholders would continue to be flexible, to suit the nature and scale of each stakeholder's interests and issues, and to reflect any restrictions on face to face engagement pending any COVID-19 requirements in place during the life of the project. A detailed Community communication strategy would be developed prior to the start of construction pending project approval. This would be based on the framework developed and included in Appendix E (Community consultation framework).
	Lack of transparency and community involvement as part of the early project development.	
	Timing and inadequacy of available project information and distribution.	
	Lack of trust in the validity of the information provided.	
	Dissatisfaction with project team response timeframes.	
	Accessibility, location selection and timing of community information sessions.	
Air quality	Effectiveness of the proposed tunnel ventilation system.	The independent NSW Chief Scientist and Engineer has released a report (ACTAQ, 2018b) in relation to road tunnel air quality. The report found that emissions from well-designed road tunnels cause a negligible change to surrounding air quality, and as such, there is little to no health benefit for
	Locations of ventilation outlets.	

Issue category	Issue raised	Response to issue and where addressed
	Proximity of ventilation outlets to sensitive receivers including schools and recreational facilities.	surrounding communities in installing filtration and air treatment systems in such tunnels. Further information is available at www.chiefscientist.nsw.gov.au and nswroads.work/airquality. Ventilation outlet locations have been carefully selected to make sure they operate efficiently and there would be minimal changes to local air quality. The air quality assessment has demonstrated that the emissions from the project's ventilation outlets would have a negligible impact on existing ambient pollutant concentrations and would pose a very low risk to human health. In this context, there is no basis to justify the cost and energy use associated with installation and operation of filtration systems. The ventilation systems for Beaches Link would be built strictly in compliance with any conditions specified in the Department of Planning, Industry, and Environment's planning approval, and would be operated to comply with the terms of the Environment Protection Licence to be issued by the NSW Environment Protection Authority. A description of the ventilation systems and facilities is provided in Chapter 5 (Project description), Chapter 12 (Air quality) and Appendix H (Technical working paper: Air quality).
	Air quality impacts would be more around the ventilation outlets and portals than at other locations.	
	Concern five kilometres of tunnel would then place five kilometres "worth" of emissions into a single local area.	
	Cumulative air quality impacts when multiple ventilation outlets were present in a single area/suburb.	
	Preference for the ventilation system to include filtration.	
	Multiple citations of use of ventilation outlets overseas and suggestion this is best and standard practice.	
	Health implications to residents and children's schools due to the proximity of unfiltered ventilation outlets to Lambs Road and Clegg Street.	

Issue category	Issue raised	Response to issue and where addressed
	Potential impacts during construction including exposure to emissions and carcinogens produced from processing of sandstone and granite producing silica dust.	Potential construction air quality impacts are considered and assessed in Chapter 12 (Air quality) and Appendix H (Technical working paper: Air quality).
	Potential air quality impacts as the result of road widening.	
	Impacts from contaminants and dust from construction work and spoil haulage.	
	Request for accurate on-going air quality monitoring.	Ongoing air quality monitoring would occur during both construction and operation. Refer to Chapter 12 (Air quality) for further information.
	Climate change impacts.	Chapter 26 (Climate change and greenhouse gas) assesses the potential impacts of climate change on the project, and greenhouse gas emissions generated by the construction and operation of the project.
Operational traffic	New motorway would result in increased traffic on local streets and key arterial routes.	Potential operational traffic and transport impacts have been assessed and considered in Chapter 9 (Operational traffic and transport) and in Appendix F (Technical working paper: Traffic and transport).
	New motorway would create new rat runs.	
	Increased vehicles on local streets trying to access the new portals.	
	Increased commuter traffic creating parking needs in local street which cannot accommodate the demand.	

Issue category	Issue raised	Response to issue and where addressed
	Project will encourage the use of private vehicles for longer trips.	Refer to Appendix F (Technical working paper: Traffic and transport) for an assessment of likely induced traffic due to the project.
	Requested details on the potential for the program to deliver long term traffic reduction benefits for Military Road and whether a local road improvements program will be delivered as part of the program.	Traffic modelling has indicated that there would be traffic reductions on alternative routes like Military Road, Warringah Road and Eastern Valley Way due to the Western Harbour Tunnel and Beaches Link program of works. As part of the Beaches Link and Gore Hill Freeway Connection project, adjustments would not be made to Military Road; however, the project would provide the opportunity for agencies (eg councils and Transport for NSW network management teams) to consider other opportunities for local road improvements. Operational traffic impacts and benefits are outlined in Chapter 9 (Operational traffic and transport) and in Appendix F (Technical working paper: Traffic and transport).
Construction traffic	Increased traffic on local streets around temporary construction support sites.	Temporary construction support sites have been selected to provide direct access to the arterial road network, dedicated parking for construction workers (where possible) and would keep trucks and vehicles off local streets during construction, wherever possible. During construction, the main priority is to maintain the safety of the public in and around the sites and the immediate areas adjacent to the sites. Vehicle access to and from temporary construction support sites would be managed to maintain pedestrian, cyclist and motorist safety. Assessment of construction traffic impacts including potential benefits is provided in Chapter 8 (Construction traffic and transport) and in Appendix F (Technical working paper: Traffic and transport).
	Increased traffic around Eastern Valley Way and Edinburgh Road, Willoughby.	
	Disruptions to Northbridge residents due to congestion on Flat Rock Drive, Alpha Road, Brook Street, Sailors Bay Road, Eastern Valley Way and Strathallen Avenue.	
	Reduced safety on local streets as the result of increased heavy vehicles.	

Issue category	Issue raised	Response to issue and where addressed
	Access to construction areas from residential roads and residents impacted along truck haulage routes.	
	Loss of residential parking on local streets as the result of project staff parking.	
	Increased rat running down local streets by both construction staff and community avoiding areas under construction.	
	Reduced road safety around schools as the result of increased heavy vehicle traffic. Particularly in areas where children are required to cross roads alone and during peak periods including drop off and collections.	
	Heavy vehicle use of narrow local streets and impacts to adjacent residents.	
	Rat runs at Woodbine Street, North Balgowlah to connect to the access road due to no Wakehurst Parkway access when tunnel is operational.	
	Traffic flow impacts for Sydney Road.	

Issue category	Issue raised	Response to issue and where addressed
Public transport	Potential impacts to bus routes during construction and operation.	Assessment of potential impacts to public transport is provided in Chapter 8 (Construction traffic and transport), Chapter 9 (Operational traffic and transport) and in Appendix F (Technical working paper: Traffic and transport).
	Preference for dedicated express bus lanes in current road infrastructure.	Public transport is addressed in Chapter 9 (Operational traffic and transport). An overview of the strategic context and project need is provided in Chapter 3 (Strategic context and project need).
Noise and vibration	Potential damage to property as a result of tunnelling activities.	Minimum working distances for vibration intensive construction activities and vibration monitoring would be implemented where applicable to manage potential vibration impacts to property during construction. Ground movement impacts would be managed through predictive settlement models, building condition surveys (including for heritage assets) and the establishment of an Independent Property Impact Assessment Panel. Pre-construction building/structure condition surveys would be offered and prepared for properties (where the offer is accepted by the owner) within the zone of influence of tunnel settlement (where the degree of severity has been assessed as 'slight' or above and within the minimum working distances for cosmetic and structural damage due to vibration) prior to the commencement of tunnelling and vibration intensive activities in the vicinity with the potential to affect the building/structure. This survey provides a clear record of the property's condition prior to works starting. Post-construction building condition surveys would be offered to property owners of buildings for which a pre-construction building condition survey was carried out. Where the project is deemed the cause of building and/or property damage, the damage would be repaired at no cost to the property owner.
	Potential damage to property as the result of underground blasting activities.	
	Conservation of heritage homes and potential for cosmetic damage as a result of tunnelling activities, underground blasting and heavy vehicle movements.	

Issue category	Issue raised	Response to issue and where addressed
		The Independent Property Impact Assessment Panel, comprising geotechnical and engineering experts, would be established prior to the commencement of works to independently verify building condition survey reports, resolve any property damage disputes and establish ongoing settlement monitoring requirements. Refer to Chapter 10 (Construction noise and vibration), Appendix G (Technical working paper: Noise and vibration) and Chapter 16 (Geology, groundwater and soils) for further information.
	Noise during construction activities.	Potential noise impacts are considered and assessed in Chapter 10 (Construction noise and vibration) and Appendix G (Technical working paper: Noise and vibration).
	Noise as the result of 24 hour tunnelling activities.	Potential noise and vibration impacts from tunnelling activities are considered and assessed in Chapter 10 (Construction noise and vibration) and Appendix G (Technical working paper: Noise and vibration).
	Vibration issues as the result of tunnelling activities.	
	Hours of work and potential noise impacts.	Ongoing engagement would be carried out with schools about the timing and duration of construction work and management of potential impacts. Where possible additional mitigation measures would be implemented to further reduce impacts. Proposed hours of work are discussed in Chapter 6 (Construction work). Potential construction noise impacts are considered and assessed in Chapter 10 (Construction noise and vibration) and Appendix G (Technical working paper: Noise and vibration).
	Duration of activities and subsequent duration of noise impacts.	
	Potential impacts of noise at sensitive receivers like schools during peak exam periods.	
	Noise impacts during construction.	

Issue category	Issue raised	Response to issue and where addressed
	Noise from heavy vehicle traffic.	Heavy vehicle traffic is considered as part of the noise assessment and is addressed in Chapter 10 (Construction noise and vibration) and Appendix G (Technical working paper: Noise and vibration).
	Low frequency noise and vibration during construction and operation.	Potential noise and vibrations impacts are considered and assessed in Chapter 10 (Construction noise and vibration), Chapter 11 (Operational noise and vibration) and Appendix G (Technical working paper: Noise and vibration).
	Potential noise impacts as a result of road widening.	Potential noise impacts during construction are considered and assessed in Chapter 10 (Construction noise and vibration) and Appendix G (Technical working paper: Noise and vibration).
Open space	Loss of open space during construction for recreational and leisure activities.	Potential social and economic issues are considered and assessed in Chapter 21 (Socio-economics). Also refer to Chapter 22 (Urban design and visual amenity).
	Closure of Manly Dam mountain bike trail.	The realignment and upgrade of the Wakehurst Parkway would be staged with existing walking and bike trails to remain operational. Some minor diversions of these would be required from time to time during staging of works to ensure safe passage of the public through the project. Refer to Chapter 8 (Construction traffic and transport), Chapter 9 (Operational traffic and transport) and Appendix F (Technical working paper: Traffic and transport) for an assessment on impacts to active transport due to both construction and operation.
	Adequate design options to include active transport options.	The project has been planned as part of an integrated transport network to meet the diverse travel and transport needs of Sydney. This includes a well-developed road, rail, bus, ferry, walking and cycling network.

Issue category	Issue raised	Response to issue and where addressed
		An overview of the strategic context and project need are provided in Chapter 3 (Strategic context and project need). Assessment of potential impacts to active transport is provided in Chapter 9 (Operational traffic and transport) and in Appendix F (Technical working paper: Traffic and transport).
	Increased population to the Peninsula that is considered to be already over-developed with a need for more sporting facilities and parking.	The project has the opportunity to enhance and/or add to the amount of public open space, and recreation facilities and associated parking through potential re-purposing works at Balgowlah, Seaforth/Killarney Heights and Flat Rock Reserve. The final design of the re-purposing of open space would be determined in collaboration with the relevant council and through further community consultation.
	Reduction of Artarmon Park at the end of the construction.	The project would require the permanent acquisition of a portion of land at Artarmon Park adjacent to the Gore Hill Freeway to accommodate road infrastructure associated with the Gore Hill Freeway Connection component. This would not impact the ongoing use or functioning of the park and its facilities.
	Students from Northern Beaches Secondary College Balgowlah Boys Campus cannot access the oval.	Works associated with the project at Balgowlah Golf Course, including the surface connections at Balgowlah, would be staged to maintain safe access to Balgowlah Oval for the public, including students, clubs and scouts would continue to have access. Some minor temporary diversions of the existing access arrangements would be required from time to time during staging works to provide safe passage of the public through the project. The existing pedestrian bridge across Sydney Road adjacent to the high school is expected to remain in place and remain operational at all times.
	Clubs and Scouts from the Balgowlah Scout Hall could not access open space.	

Issue category	Issue raised	Response to issue and where addressed
	Lack of active transport from Artarmon Park to Artarmon Reserve.	The cycle network in the Gore Hill Freeway and Artarmon area consists of a mix of off-road shared user paths and on-road cycle routes on local and collector roads. Refer to Chapter 8 (Construction traffic and transport), Chapter 9 (Operational traffic and transport) and Appendix F (Technical working paper: Traffic and transport) for an assessment on impacts to active transport due to both construction and operation.
	Closure of the Balgowlah Golf Course and acquisition of Dudley Street properties.	Acquisition of Crown land at Balgowlah Golf Course would result in closure of the golf course. The project has been designed to optimise opportunities for the re-purposing of the remaining Crown land into new open space and recreation facilities. Final designs would be determined in conjunction with the Northern Beaches Council and through further community consultation. A dedicated consultation process jointly led by Transport for NSW and Northern Beaches Council would take place to give the community an opportunity to provide input to the final layout of the new open space and recreation facilities at Balgowlah. This consultation would be separate to the consultation for the Beaches Link and Gore Hill Freeway Connection environmental impact statement. This process would start after the environmental impact statement public exhibition period and well in advance of construction starting. As part of this consultation process, a community reference group would be established, with representative stakeholder groups and the community, to support Transport for NSW and Northern Beaches Council with the development of this important public space. The project would return an area, equivalent to around 90 per cent of the current open space, to the community as new and improved public open space and recreation facilities. Further information regarding future opportunities for re-purposing of the remaining Crown land is provided in the Chapter 20 (Land use and property).

Issue category	Issue raised	Response to issue and where addressed
		All acquisition required for the project is carried out in a manner consistent with the *Land Acquisition (Just Terms Compensation) Act 1991* (NSW) (Just Terms Act), the *Land Acquisition Information Guide* and the land acquisition reforms announced by the NSW Government in 2016. Transport for NSW has appointed a Personal Manager Acquisition to help land owners who may be affected by acquisition for the project. The Personal Manager Acquisition is in regular contact with these individuals to provide updates on the project and respond to questions and queries. Refer to Chapter 20 (Land use and property) for further information.
Visual amenity	Loss of amenity to Clive Park and the Northbridge Baths.	Temporary construction support sites, including at Spit West Reserve (BL9) and the Middle Harbour cofferdams (BL7 and BL8), would be temporary and would be developed to minimise visual impacts for adjacent receivers where feasible and reasonable. Refer to Chapter 22 (Urban design and visual amenity) for further information.
	Design and visual amenity of the ventilation outlets.	A description of ventilation systems and facilities is provided in Chapter 5 (Project description). Consideration and assessment of urban design and visual amenity is provided in Chapter 22 (Urban design and visual amenity).
	Light pollution from compounds and work during construction.	Site lighting would be designed to minimise glare issues and light spillage into adjoining properties. Refer to Chapter 22 (Urban design and visual amenity) for further information.
	Visual impacts for residents living adjacent to construction compounds.	Hoardings and temporary noise walls would be erected to provide visual screening where appropriate. Refer to Chapter 22 (Urban design and visual amenity) for further information.

Issue category	Issue raised	Response to issue and where addressed
	Visual impacts of the noise attenuation sheds on adjacent residents.	Acoustic sheds would be designed to be visually recessive and to minimise potential overshadowing impacts where possible. Refer to Chapter 22 (Urban design and visual amenity) for further information.
	Permanent loss of amenity.	Potential visual amenity impacts are considered and assessed in Chapter 22 (Urban design and visual amenity).
Flora and fauna (on land)	Potential impacts to threatened species such as the Powerful Owl and the Eastern Pygmy Possum due to Wakehurst Parkway widening.	Vegetation removal along Wakehurst Parkway would be timed to avoid the winter breeding period for the Eastern Pygmy-possum (May to July), where feasible and reasonable. Refer to Chapter 19 (Biodiversity) and Appendix S (Biodiversity development assessment report) for further information on potential impacts to threatened species including the Powerful Owl and Eastern Pygmy Possum.
	Impacts on mature trees currently within the Balgowlah Golf Course and on Burnt Bridge Creek Deviation.	Final works to be carried out within Balgowlah Golf Course including adjacent to the existing Burnt Bridge Creek would be subject to further design development. Development of the final layout of the new open space and recreation facilities would be undertaken in conjunction with the Northern Beaches Council and through further community consultation. Every effort would be made to retain mature trees, however the dedicated consultation process would determine the final layout and this would influence decisions regarding vegetation. More information on vegetation removal and potential impacts can be found in Appendix W (Technical working paper: Arboricultural impact assessment).

Issue category	Issue raised	Response to issue and where addressed
	Loss of tree cover at Artarmon Park and the assurance of offset vegetation and mature trees.	The project has endeavoured to limit vegetation removal wherever possible and replanting would be carried out as part of rehabilitation work. Transport for NSW would work with Willoughby Council to develop a plan for the rehabilitation of Artarmon Park where the area may have been impacted by excavation works adjacent to the Gore Hill Freeway Connection component. More information on vegetation removal and potential impacts can be found in Appendix W (Technical working paper: Arboricultural impact assessment).
	Desire for fauna crossings at Wakehurst Parkway.	Fauna crossings along Wakehurst Parkway have been included in the design. Refer to Chapter 5 (Project description) for further information.
Flora and fauna (marine)	Damage to marine environments.	Design development for the project included a strong focus on evaluation of potential tunnelling methods for the crossing of Middle Harbour. This analysis was carried out by a multidisciplinary team including design, construction, transport planning, and environmental specialists to ensure a comprehensive analysis. An immersed tube tunnel has been selected as the preferred tunnelling method for the Middle Harbour crossing. The dredging methodology has been designed to minimise impacts on the marine environment and is detailed in Chapter 6 (Construction work). This includes use of appropriate environmental controls to minimise the risk of sediment and contaminants within the sediments being mobilised into the water. These measures reflect best environmental practice to reduce the water quality impacts of dredging and would result in an overall reduction in the extent and intensity of the dredge plumes. There are precedents for successful and environmentally sensitive dredging and immersed tube tunnel construction in sensitive marine environments, like that found at the Middle Harbour crossing, with
	Potential impacts to the marine environment including effects to tidal flows and disturbance of toxic sediments.	
	Environmental impacts to seagrass beds, mangroves and other species affected by tidal and sediment changes and seabed or increased run off.	

Issue category	Issue raised	Response to issue and where addressed
		appropriate technology and methodologies available. Industry experts with direct experience in such work have been engaged for the project to develop the appropriate methodology, equipment and controls. Detailed studies and modelling have been carried out as part of the Western Harbour Tunnel and Beaches Link program of works to understand the harbour's tides, currents, water quality, and marine ecology, along with extensive testing of the sediments at the location of the proposed harbour crossing. Consultation has taken place with technical, marine ecology and human health experts, as well as drawing on knowledge of Sydney Harbour obtained during previous projects. For further information refer to: • Chapter 16 (Geology, groundwater and soils) • Chapter 17 (Hydrodynamics and water quality) • Chapter 19 (Biodiversity) and Appendix T (Technical working paper: Marine ecology).
Hazards and waste	Run off of hazardous materials.	Management and treatment of wastewater discharge is discussed in Chapter 17 (Hydrodynamics and water quality). Management of spoil, including management of potential runoff from stockpiles, is discussed in Chapter 24 (Resource use and waste management).
	Impacts of dumping soil.	The project design has taken into account the principles of the resource management hierarchy as defined in the *Waste Avoidance and Resource Recovery Act 2001.* For further details on the management of waste disposal refer to Chapter 24 (Resource use and waste management).
Social amenity	Reduction in property values as the result of construction activities including noise, pollution	Property values are driven by a range of economic, social and amenity factors, for example housing supply and demand, interest rates, economic

Issue category	Issue raised	Response to issue and where addressed
	concerns, dust, presence of tunnels underneath homes, the proximity of ventilation outlets and tunnel ramps, increased traffic and parking issues. Loss of open space would result in reduction of property prices.	growth, local amenity and accessibility to such things as employment and social infrastructure. It is likely that broader external factors would influence property values more than perceived or actual impacts resulting from the project. Furthermore, improvements to transport access, reduced travel times and reduced congestion on surface arterial roads delivered by the project are likely to improve liability in many areas. Refer to Chapter 21 (Socio-economics) and Appendix U (Technical working paper: Socio-economic assessment) for further information.
	Impacts to social amenity because of construction vehicles in nearby residential streets.	Temporary construction support sites have been selected to provide direct access to the arterial road network, dedicated parking for construction workers (where possible) and to keep trucks and light vehicles off local streets during construction wherever possible. Construction workers would be encouraged to use public transport wherever possible and demand for construction personnel parking would be managed with shuttle buses where appropriate. Potential traffic impacts are considered and assessed in Chapter 8 (Construction Traffic and transport). Also refer to Chapter 21 (Socio-economics) for information on potential impacts on socio-economic issues.
Cumulative impacts	Cumulative construction traffic impacts as the result of multiple projects active in the area.	Multi-party engagement and cooperation would be established prior to construction to maximise the opportunities for all contributors to work together to minimise adverse impacts or enhance benefits of multiple projects occurring concurrently or consecutively. Potential cumulative construction impacts are assessed and considered in Chapter 27 (Cumulative impacts). For further details, also refer to: • Chapter 6 (Construction work) • Traffic and transport: Chapter 8 (Construction traffic and transport) and Appendix F (Technical working paper: Traffic and transport)
	Potential for construction fatigue as a result of ongoing construction activities.	

Issue category	Issue raised	Response to issue and where addressed
		• Noise and vibration: Chapter 10 (Construction noise and vibration) and Appendix G (Technical working paper: Noise and vibration) • Air quality: Chapter 12 (Air quality) and Appendix H (Technical working paper: Air quality) • Human health: Chapter 13 (Human health) and Appendix I (Technical working paper: Health impact assessment) • Chapter 19 (Biodiversity) • Chapter 21 (Socio-economics).
Heritage	Impacts to local Aboriginal sites.	Assessment of potential impacts to Aboriginal heritage is provided in Chapter 15 (Aboriginal heritage) and Appendix L (Aboriginal cultural heritage assessment report).
Health	General concerns about health as the result of air quality.	During construction, the priority would be to ensure public health and safety. Potential air quality impacts would be managed through standard construction air quality mitigation and management measures, which would include dust suppression measures, selection of construction equipment and/or materials handling techniques that minimise dust generation, minimisation of exposed areas during construction and monitoring activities. Emissions from plant and equipment would be minor and localised. Assessment of construction and operational air quality impacts is provided in Chapter 12 (Air quality) and Appendix H (Technical working paper: Air quality). Potential impacts to health are addressed in Chapter 13 (Human health).
	Potential adverse impacts to health as the result of existing medical conditions like asthma and allergies.	
	Exposure to silica dust from spoil transport.	

Issue category	Issue raised	Response to issue and where addressed
	Health concerns and risks around contaminated harbour spoil.	Design development for the project included a strong focus on evaluation of potential tunnelling methods for the crossing of Middle Harbour. This analysis was carried out by a multidisciplinary team including design, construction, transport planning, and environmental specialists to ensure a comprehensive analysis. An immersed tube tunnel has been selected as the preferred tunnelling method for the Middle Harbour crossing. The dredging methodology has been designed to minimise impacts on the marine environment and is detailed in Chapter 6 (Construction work). This includes use of appropriate environmental controls to minimise the risk of sediment and contaminants within the sediments being mobilised into the water. These measures reflect best environmental practice to reduce the water quality impacts of dredging and would result in an overall reduction in the extent and intensity of the dredge plumes. There are precedents for successful and environmentally sensitive dredging and immersed tube tunnel construction in sensitive marine environments, like that found at the Middle Harbour crossing, with appropriate technology and methodologies available. Industry experts with direct experience in such work have been engaged for the project to develop the appropriate methodology, equipment and controls. For further information refer to: • Chapter 16 (Geology, groundwater and soils) • Chapter 17 (Hydrodynamics and water quality).

Issue category	Issue raised	Response to issue and where addressed
	Potential impacts to health of stakeholder using sporting facilities adjacent to temporary construction support sites.	A comprehensive and robust environmental assessment has been carried out for the project which assesses the potential risks to health and safety as a result of the project. Assessment of construction and operational air quality impacts is provided in Chapter 12 (Air quality) and Appendix H (Technical working paper: Air quality). Potential impacts to health are addressed in Chapter 13 (Human health).
	Potential increases in population, and associated issues, in the Northern Beaches due to increased access due to the Western Harbour Tunnel and Beaches Link program of works.	The potential social and economic impacts of the project are considered and assessed in Chapter 21 (Socio-economics). Also refer to Chapter 9 (Operational traffic and transport) and Chapter 13 (Human health).

7.4 Summary of project refinements in response to feedback

A summary of how community and stakeholder feedback has been incorporated into the project is provided in Table 7-9 below.

Table 7-9 Design refinements – considerations in response to feedback

Stakeholder and community	Response
Ventilation outlets should be located to minimise community concerns, environmental and property impact.	Permanent ventilation outlets would be placed in the Warringah Freeway corridor allowing the motorway facilities for Western Harbour Tunnel and Beaches Link to be co-located, simplifying long-term operational and maintenance activities and allowing for design synergies and reduced property impact. The air quality assessment has demonstrated that operation of the ventilation outlets for the project would have a negligible impact on existing ambient pollutant concentrations and would pose a very low risk to human health. Chapter 4 (Project development and alternatives) details the alternative tunnel design and ventilation options considered to meet the air quality criteria for the project.
Concerns regarding proximity of connections to and from the and Seaforth Oval, including: Wakehurst Parkway to houses 1. Tunnel portal locations 2. Ventilation outlet located near residential streets.	The proposed tunnel portal including motorway facility and ventilation outlet would be located about 500 metres north of Seaforth Oval on Wakehurst Parkway, compared to the initial design location west of Kirkwood Street in 2017. Further project development has reduced private property impacts by relocating the temporary construction support site from the Seaforth Oval overflow carpark to the Sydney Water site north of Kirkwood Street (Wakehurst parkway east construction support site (BL13)). With respect to the connections to and from the Wakehurst Parkway, temporary construction support facilities are now located wholly within Transport for NSW and Sydney Water owned land. The connection to and from the Wakehurst Parkway north of Kirkwood Street was adopted which moved the portal, motorway facility and ventilation outlet north of residential properties. The relocated portal also allowed for ramp tunnel grades to be reduced therefore resulting in improved operational efficiencies. Reduced impacts to Duffys Forest endangered ecological community within Transport for NSW land associated with the original option of a temporary construction support site for tunnelling adjacent to Seaforth Oval. Refer to Chapter 4 (Project development and alternatives) for further details.
Options for alternative construction methodologies, temporary construction support sites, and routes to minimise the project impact.	The current proposed construction methodologies for the project have been developed in conjunction with a team of national and international experts with direct experience in the design and construction of major infrastructure within urban environments. These methods have considered the following key factors:

Stakeholder and community feedback	Response
	• Ability to deliver the required project scope and connectivity • Minimise environmental impacts • Minimise impacts to communities • Ensure safety for construction workers and the public • Minimise the time and cost risks associated with construction • Maximise value for money • Maximise efficiency of construction and future operations of the asset to minimise energy use and operational costs. Proposed temporary construction support sites have been selected to support safe and efficient construction. Key factors applied to identification of potential temporary construction support sites include: • Locate the temporary construction support sites as close as possible to the tunnels or surface works they support to minimise unnecessary tunnelling or heavy vehicle movements • Avoid sensitive environments and community locations where possible • Avoid material impacts to heritage sites or items • Maximise opportunities for direct access to motorways and arterial roads or water transport opportunities for construction traffic, and avoid the need to use local residential streets if possible • Minimise direct and indirect property impacts and acquisitions, particularly in residential areas • Impacts to the functionality of open space. Two temporary construction support sites in particular have been subject to more detailed alternative evaluation: • Wakehurst Parkway east construction support site (BL13) • Flat Rock Drive construction support site (BL2) Refer to Chapter 4 (Project development and alternatives) and Chapter 6 (Construction work) for further information.
Concerns about potential changes to local roads, including rat-runs through local streets to access the tunnels.	Potential rat-running would be addressed further through consultation with relevant councils and may include the implementation of traffic calming measures in local streets (refer to Chapter 9 (Operational traffic and transport)).
Concern Seaforth Oval sports field would be directly impacted by construction. Concern about construction traffic on local streets and around the oval.	Temporary construction support sites have been chosen and would be designed to minimise local impacts. The Wakehurst Parkway east construction support site (BL13) for tunnelling has been relocated away from the Seaforth Oval carpark and is located at the rear of the Sydney Water Bantry Bay water tanks and north of Kirkwood Street (see Wakehurst Parkway east construction support site (BL13) in Chapter 6 (Construction work)). The relocated temporary construction support site would reduce potential impacts on Seaforth Oval and the Seaforth local community.

Stakeholder and community feedback	Response
	Additionally, construction traffic carrying tunnel spoil would head north (not south) on Wakehurst Parkway from Wakehurst Parkway east (BL13) construction support site and avoid any potential impact to the Seaforth shopping precinct along Sydney Road.
Desire for safe and accessible active transport and connections to existing cycle and walking trails, including the desire to keep shared user path under Burnt Bridge Creek Deviation.	The project would improve safe and accessible active transport and connections by providing new dedicated shared user paths along Wakehurst Parkway, including new underpasses to connect existing trails of Garigal National Park and Manly Dam Reserve. The shared user path crossing Burnt Bridge Creek Deviation would be maintained throughout and after construction.
Preference for tunnel ramps and construction to use Balgowlah Golf Course rather than impacting homes, Burnt Bridge Creek bushland or Seaforth Public School (west of Burnt Bridge Creek Deviation).	The modified surface connections at Balgowlah detailed in Chapter 5 (Project description) have been made to reduce community, bushland and private property impacts. The proposed tunnel alignment has been changed so that the tunnel ramps would be located in the centre of Burnt Bridge Creek Deviation. The revised tunnel alignment would also avoid impacts on private properties and minimise impacts to bushland west of Burnt Bridge Creek Deviation. Part of the Balgowlah Golf Course would be used for a temporary construction support site and permanent facilities including a ventilation outlet and new access road, which would mean: • Reduced construction impact on local residences and Seaforth Public School • Less disruption to traffic and buses • Opportunity to re-purpose the Balgowlah Golf Course as new open space and recreation facilities to improve amenity and help manage the growing shortfall in recreational space in the area, in line with Northern Beaches Council objectives. The final design of the re-purposing works would be determined in conjunction with Northern Beaches Council and through further community consultation.
Concern about a ventilation outlet to be located in the Burnt Bridge Creek ‘valley’.	The design of the ventilation systems, including ventilation outlet locations, has been carefully developed to make sure they operate efficiently and there would be minimal changes to local air quality. The proposed ventilation outlet would be located near the tunnel ramps, in the Balgowlah Golf Course precinct. Operation of these facilities would be carried out in accordance with strict guidelines and would be monitored closely by the relevant authorities. Refer to Chapter 12 (Air quality), Appendix H (Technical working paper: Air quality), Chapter 13 (Human health) and Appendix I (Technical working paper: Health impact assessment) for details on operational impacts and management measures in relation to ventilation outlets.

Stakeholder and community feedback	Response
Concern about queuing of vehicles going in and out of the tunnel ramps and traffic impacts on local roads.	Improved design of connections to Condamine Street and a new access road to Sydney Road would provide improved access outcomes and reduced congestion for the local road network. Refer to Chapter 9 (Operational traffic and transport) for further details on operational impacts.
Desire to avoid Artarmon Reserve sports field	There would be no temporary construction support site located at Artarmon Reserve or direct impact to Artarmon Reserve sports field.
Desire to avoid the homes to the north of Gore Hill Freeway	No residential properties would be acquired in this area.
Preference to locate the ventilation outlet to the south of Gore Hill Freeway in industrial area	The proposed ventilation outlet would be located in the Artarmon industrial area, south of Gore Hill Freeway. Refer to Chapter 12 (Air quality), Appendix H (Technical working paper: Air quality), Chapter 13 (Human health) and Appendix I (Technical working paper: Health impact assessment) for details on operational impacts and management measures in relation to ventilation outlets.
Concerns about the clearing of bushland adjacent to Gore Hill Freeway	The project has avoided impact to Artarmon Reserve through redesign and by further widening to the south. Widening to the north would require vegetation removal in Artarmon Park. The final extent of removal would be assessed during further design development and detailed construction planning, and further reduced where feasible and reasonable. Appendix W (Technical working paper: Arboricultural impact assessment) provides a preliminary assessment of trees that could be retained subject to further design development and construction planning.
Desire to be able to access both the Western Harbour Tunnel and Beaches Link from Artarmon.	Access to Beaches Link via Gore Hill Freeway and Reserve Road and access to Western Harbour Tunnel provided via Gore Hill Freeway.
Concern regarding proximity to schools in the Cammeray and North Sydney area, in particular in relation to ventilation outlets.	The design of the ventilation systems, including ventilation outlet locations, has been carefully developed to make sure they operate efficiently and there would be minimal changes to local air quality. The air quality assessment has demonstrated that the emissions from the ventilation outlets of the project have a negligible impact on existing ambient pollutant concentrations and would pose a very low risk to human health. Operation of these facilities would be carried out in accordance with strict guidelines and would be monitored closely by the relevant authorities. Refer to Chapter 12 (Air quality), Appendix H (Technical working paper: Air quality), Chapter 13 (Human health), Appendix I (Technical working paper: Health impact assessment), Chapter 10 (Construction noise and vibration) and Appendix G (Technical working paper: Noise and vibration) for details on construction management measures.

7.5 Future engagement

A Community consultation framework (Appendix E) has been prepared to guide the planning and delivery of communication and stakeholder engagement activities across the project.

The objective of ongoing communication and stakeholder engagement program for the project, guided by the Community consultation framework, is to provide the community with:

- Accurate and accessible information about the processes and activities associated with the project
- Information in a timely manner
- Appropriate avenues for providing comment or raising concerns, and to ensure the community is aware of the avenues
- A high level of responsiveness to community feedback and concerns throughout development and delivery of the project.

The Community consultation framework informs the delivery of the communication and stakeholder engagement in line with the requirements of the Secretary's environmental assessment requirements. The framework addresses key issues of concern to the community, including:

- Enquiries and complaints handling procedures
- Monitoring, reporting and evaluation procedures
- Mechanisms for distributing information and seeking feedback
- Specific issues management including:
  - Traffic management (including property access and pedestrian access)
  - Landscaping and urban design matters
  - Construction activities including out of hours work
  - Noise and vibration mitigation and management.

7.5.1 Submissions report

Following exhibition of this environmental impact statement, the Secretary would provide copies of submissions from the community and stakeholders to Transport for NSW as the proponent. Transport for NSW would then prepare a submissions report to respond to the feedback received in submissions. The Secretary may also require Transport for NSW to prepare a preferred infrastructure report to outline any proposed changes to the project. This report may be made publicly available if significant changes to the project are proposed.

The Secretary would prepare an assessment report and provide it to the Minister for Planning and Public Spaces, who would then decide whether to approve the project and, if approved, identify a set of conditions of approval for Transport for NSW to adhere to during construction and operation of the project.

Community involvement would continue as part of the project's construction, should the project be approved. A construction contractor would be engaged to carry out further design development and construction. Together with the proponent, the construction contractor would be responsible for communication and engagement and a detailed communication and engagement strategy would be developed and implemented. This would be based on the framework provided in Appendix E (Community consultation framework).

Community liaison would also continue during the operation phase of the project. A communication plan would be developed to support maintenance and operations of the motorway as a key part of the operational environmental management plan framework.

7.5.2 Managing consultation fatigue

The extent and impacts of consultation fatigue would be assessed by:

- Identifying potentially impacted stakeholders and community members by both previous/current projects and the project
- Analysing the type, extent and timing of consultation, for both this project and other projects, that has been/would be received by these community members
- Determining whether consultation for the project is likely to result in overload or disinterest for community members.

The community relations team would continue to work with the project teams for other major projects and developments in the area to identify those persons or organisations who may be susceptible to consultation fatigue.

The community relations team would work to develop an integrated approach to contacting persons or organisations which may experience consultation fatigue and would determine which communication mechanisms stakeholders prefer.

7.5.3 Managing construction fatigue

The extent and impact of construction fatigue would be assessed by:

- Identifying where the project would have sustained impacts to stakeholders or community members
- Identifying whether the project would result in similar or overlapping impacts with other projects, to the same stakeholders or community members
- Analysing whether the project would increase the magnitude and intensity of overlapping impacts on any stakeholders or community members
- Analysing the extension of duration of impacts for stakeholders or community members.

A preliminary assessment was completed to identify areas where the project would potentially have sustained impacts to stakeholders or community members who may be susceptible to construction fatigue. Project activities which could lead to construction fatigue, potentially impacted groups, and a summary of management measures proposed to address these issues is provided in Chapter 27 (Cumulative impacts).

During construction of the project, the community relations team would build a working relationship with the project teams for other major projects to identify stakeholders or community members who may be susceptible to construction fatigue. The community relations team would ensure the expectations of these stakeholders or community members are managed for the project.

7.5.4 Managing complaint fatigue

The extent and impact of complaint fatigue would be assessed by:

- Identifying regular complainants from previous and current projects close to the temporary construction support sites
- Analysing the cause and solution to each complaint
- Determining whether the project would result in similar or overlapping impacts with other projects, which are likely to result in a complaint.

A complaints management system would be implemented for the duration of construction. This would include the recording of complaints and how the complaint has been addressed (within a complaints register). Complainants would be contacted within 24 hours to follow up and respond to their complaint. A Community Complaints Commissioner (an independent specialist) would

oversee the system and follow up on any complaint where the public is not satisfied with the response.

The community relations team would build a working relationship with the project teams for other major projects and developments which would be under construction at the same time as the project to identify stakeholders and community members who may be susceptible to complaint fatigue.

Transport for NSW would ensure a number of different complaint mechanisms are provided to cater to different needs and preferences. Complaint management tools for the project are outlined in Appendix E (Community consultation framework).

7.5.5 Interface management

The community relations team would work closely with other government agencies to ensure the various State Government and local government projects are releasing and/or consulting on projects in collaboration with each other and to reduce consultation and construction fatigue in local communities.

At present there is a formal group, the Intergovernmental Working Group – Northern Beaches/Mosman, which meets regularly to manage potential cumulative impacts. The group consists of engagement leads from agencies which have an interface around the Northern Beaches/Mosman precinct. Attendance at meetings varies depending on the work and activities being carried out at the time and includes:

- Mosman Council
- Northern Beaches Council
- Manly MP office
- Pittwater MP office
- Transport for NSW.

Additional coordination groups would be developed as required.