6 Consultation

This chapter describes the communication and engagement activities carried out to date during the recent stages of the project's development and the preparation of the environmental impact statement. **Table 6-1** outlines the Director-General's Requirements as they relate to community consultation and where these have been addressed in the environmental impact statement. A summary of the consultation carried out during the options and alternatives development stage of the project (from 2002 to 2007) is also provided.

Also outlined in this chapter is the process for the public exhibition of the environmental impact statement as well as planned consultation activities during the construction and commissioning phases, should the project be approved.

Table 6-1 Director-General's Requirements - consultation

Director-General's Requirement	Where addressed
During the preparation of the EIS, consult with the relevant local, State or Australian Government authorities, service providers, community groups and affected landowners. In particular you must consult with:	Information regarding consultation carried out during the environmental impact statement is provided in this chapter.
• Local, State and Australian government authorities, including the: – Environment Protection Authority; – NSW Health; – Office of Environment and Heritage (including Heritage Division); – NSW Office of Water; – Department of Primary Industries; – The Hills Shire Council; – Hornsby Shire Council; and – Ku-ring-gai Municipal Council.	Consultation with government authorities is described in **Section 6.3** and **Section 6.4**. Issues raised by government agencies are identified in **Table 6-6** and issues raised by local councils are identified in **Table 6-7**.
• specialist interest groups, including Local Aboriginal Land Councils and Aboriginal stakeholders;	Consultation with Aboriginal stakeholders is described in **Section 6.3.2** and **Section 6.4.4**. Further details are provided in **Section 7.11** and the technical working paper: Aboriginal heritage (**Appendix M**).
• emergency services;	Consultation with emergency services is described in **Section 6.3**.
• utilities and service providers; and	Consultation with utility and service providers is described in **Section 6.3**.
• the public, including community groups and adjoining and affected landowners.	Consultation with the public, including community groups and adjoining and affected landowners is described in **Section 6.3**.

Director-General's Requirement	Where addressed
The EIS must describe the consultation process and the issues raised, and identify where the design of the infrastructure has been amended in response to these issues. Where amendments have not been made to address an issue a short explanation should be provided.	The consultation process, the issues raised, and where in the environmental impact statement these issues have been addressed is provided in **Section 6.3** and **Section 6.4**.
A Community Communication Framework for construction, identifying relevant stakeholders, procedures and distributing information and receiving/responding to feedback and procedures for resolving community complaints during construction. Key issues addressed in the draft framework should include (but not necessarily be limited to): • air quality monitoring and management; • traffic management (including property access, pedestrian access); • landscaping/urban design matters; • construction activities including out of hours work; and • noise and vibration mitigation and management.	A Community Communication Framework is provided in **Appendix D**.

6.1 Community and stakeholder engagement overview

Community and stakeholder engagement has been and will be carried out in accordance with the Director-General's Requirements, the Community Engagement Policy Statement 2012 (Roads and Maritime, 2012a), the Stakeholder Engagement Framework (Transurban, 2013) and supporting policies and standards.

Meaningful and engaging community consultation is an essential component of any project. Consultation activities have been developed and implemented to build on previous community consultation conducted from 2002 to 2007 as part of the *F3 to Sydney Orbital Link Study* (SKM, 2004) (the 2004 report) and the 2007 Pearlman Review of that study (refer to **Chapter 4**).

Communication and consultation activities have been, or would be, tailored for each phase of the project, including:

- Introductory public information sessions (October and November 2013).
- Request for tender and tender evaluation process.
- Preparation of the environmental impact statement.
- Public exhibition of the environmental impact statement and subsequent project approval.
- Construction and commissioning.
- Operation.

To date, community and stakeholder consultation for the project has included:

- Consultation into the alternatives and options development process as part of the 2004 report and the 2007 Pearlman Review.
- Market sounding as part of the unsolicited proposal process and to initiate the Request for Tender addressing industry stakeholders and potential tender contractors.

- Community events to introduce the NorthConnex project as part of the unsolicited proposal process, giving stakeholders an opportunity to meet the project team, provide feedback, ask questions and identify areas of concern.
- Consultation with government agencies including the Environment Protection Authority, Department of Primary Industries, NSW Health, NSW Office of Environment and Heritage, NSW Office of Water and the Department of Planning and Environment.
- Meetings with The Hills Shire Council, Hornsby Shire Council and Ku-ring-gai Council.
- Briefings with State and Federal Members of Parliament.
- Meetings with emergency services representatives.
- Meetings with services and utility providers.
- Presentations and meetings with key stakeholders such as local schools, the Road Freight Industry Council, the NRMA and business groups.
- Phone, email and written correspondence.
- Set up and regular updates of the project website.
- Community events to raise awareness of the project as part of the unsolicited proposal process with Government. Feedback forms were used to capture community feedback and concerns to inform the development of the tender design options.
- Door knocks, phone calls, one-on-one interviews and letters of acquisition notification addressed to owners of properties potentially required for full or partial surface acquisition for the project. Communication and interviews outlined potential property impacts, property owners' rights and the property acquisition process and timing.
- Interest group briefings targeting: traffic and transport; business and industry; and environment and community.
- Community events displaying the preferred tender design.
- Public access to an interactive website displaying details of the preferred tender design.
- Distribution of community updates and 'letters to the householder' regarding technical field investigations, project progress and milestones as well as community involvement opportunities.

6.2 Consultation objectives and strategy

6.2.1 Consultation objectives

Community and stakeholder consultation aims to provide opportunities for involvement at each project stage. To achieve this, the following project consultation objectives have been applied:

- Ensure an open, accountable and transparent community involvement process.
- Ensure the community and interested stakeholders are proactively provided sufficient information about the project and the likely impacts so they can provide informed input.
- Encourage community support and involvement in the project to facilitate better and more generally accepted outcomes through accessible communication methods.

- Engage with specialist interest groups and residents to discuss key project features including the interchanges, the motorway operations complex, ventilation facilities, tunnel support facilities and construction compounds.
- Ensure appropriate and direct communication with property owners in relation to access to and investigations on landholdings within the study area.
- Integrate community consultation feedback into the environmental impact assessment and specialist studies to deliver a comprehensive analysis supporting the environmental impact statement.
- Ensure community concerns regarding environmental and community impacts are properly addressed.
- Ensure ongoing, appropriate and direct communication with potentially directly affected property owners.
- Build ongoing relationships with the community and stakeholders to ensure optimum project outcomes and be responsive to individuals and the communities concerns.

6.2.2 Consultation strategy

Community consultation has been an integral component in the development of the project. The community consultation program proactively informs and involves stakeholders and community members at each project stage. This approach aims to increase public understanding of, participation in and support for the development of the project. The project has benefitted from the input of local knowledge, insight, experience, goals and priorities, which has helped to identify issues, potential mitigation strategies and opportunities to improve project outcomes. The timing of each consultation phase has been considered to optimise the distribution of information and availability of the project team to minimise the potential for misinformation.

6.3 Consultation process and activities to date

6.3.1 Stakeholders

Stakeholders were identified from 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. Stakeholders were grouped into the following categories:

- Government – comprising Australian government, State government and local government stakeholders.
- Key influencers and interest groups – including media, traffic and transport groups, schools and education institutions, community development and precinct groups, hospital and emergency services, Rotary and Lions Clubs, aged care facilities, environmental groups, businesses and sporting groups.
- Community – including affected landowners, Aboriginal communities, the project corridor communities, the general public and motorists and cyclists.

Table 6-6, **Table 6-7** and **Table 6-8** list agency, government and community issues identified and where these issues are addressed within this environmental impact statement.

Consultation tools and feedback data management

The communication and consultation tools established include:

- Toll free community information line (1800 997 057).
- Project email (enquiries@northconnex.com.au).
- Project website (www.northconnex.com.au).
- Interactive web-mapping tool (http://gisapps.aecomgis.com/northconnex/map_view.html).
- Project database to record correspondence relevant to the project, including contact details and issues raised during the life of the project.
- Registered stakeholder database to receive email updates.
- Community update newsletters and letters to the householder.
- Community information sessions and information displays.
- Targeted stakeholder group forums (traffic and transport, industry and business and environment and community).
- Interest group correspondence including letters and phone calls.
- Stakeholder briefings.
- Face-to-face meetings with individual property owners and residents of properties that may be affected by the project.
- Advertisements and proactive media articles in the local press.
- Letterbox drops.
- Media events at key milestones of the project.

The variety of two-way consultation and communication tools utilised has provided information to community members and enabled the project team to consult with and involve the community in the project.

Project telephone and email address

The project has established and administered a community information telephone line (1800 997 057) and an email address, enquiries@northconnex.com.au to provide the community and stakeholders with a central point for contact. The telephone number and email address have been published on printed project communication material and are provided on the project website. The telephone line is staffed during business hours (9 am to 5 pm) and during site investigations or work conducted outside of business hours. For the announcement of the preferred tender design the operating hours of the project telephone were extended to 7 pm for one week. Hours of operation of the telephone line would be reviewed for the detailed design and construction stages.

The project's community relations team coordinates responses to community and stakeholder enquiries via telephone and email. Statistics of phone calls and emails received are provided in **Table 6-2**.

Table 6-2 Telephone and email statistics

Activity	Total between project launch (June 2013) and 14 June 2014
Community information line calls received	554
Project emails received	731

Project website

The project website (www.northconnex.com.au) provides up to date information about the project. It includes a home page with the latest news, an overview of the project history, key project related materials and background documentation, and contact details.

Stakeholder database

All stakeholder content and activity for the project is managed using a confidential database. All enquiries, comments and issues received by telephone, email or letter are recorded in the database along with project team responses. Feedback received during community events, property owner interviews and stakeholder meetings are also recorded.

A community subscriber register is also maintained through this database. Over 1,654 subscribers have registered to date, since June 2013.

6.3.2 Aboriginal cultural heritage consultation

Aboriginal community consultation for the project has been carried out in accordance with the Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DEC, 2005b) and the Procedure for Aboriginal Cultural Heritage Consultation and Investigation (PACHCI) (Roads and Maritime, 2011c). In line with these requirements, an advertisement was placed inviting the Aboriginal community and other relevant agencies and stakeholders (who hold cultural knowledge relevant to determining the significance of Aboriginal objects and / or places in and around the project) to register their involvement in the consultation process.

Aboriginal consultation carried out to date is summarised in **Table 6-3**.

Table 6-3 Aboriginal consultation

Survey date	Aboriginal representatives
24-25 September 2013	Metropolitan Local Aboriginal Land Council Guringai Tribal Link Aboriginal Corporation
2 October 2013	Metropolitan Local Aboriginal Land Council Guringai Tribal Link Aboriginal Corporation
19 December 2013	Metropolitan Local Aboriginal Land Council

Further details relating to Aboriginal heritage are provided in **Section 7.11** (Aboriginal heritage) and the technical working paper: Aboriginal heritage (**Appendix M)**.

6.3.3 Consultation to date

The following section provides an overview of key consultation activities carried out to date as part of the project, commencing in 2002 with community consultation as part of the options and alternatives development, through to the public exhibition of the preferred tender design in March and April 2014.

An overview of the recent key consultation activities carried out for the project during the tender stage and during the preparation of the environmental impact statement is provided in **Table 6-5**. In addition to these events, a number of community updates have also been distributed along the project corridor and other informal community consultation has been carried out. These are also detailed in **Table 6-5**.

Consultation during the options and alternative development

Consultation has been an important part of project since 2002 with consultation commencing during the 2004 report. Extensive community consultation and engagement activities were undertaken as part of the 2004 report including:

- During 2002 and 2003, publication of a series of community newsletters, media releases and a project website to provide information on the identification and analysis of alternatives and corridor alignment options.
- The establishment of three Community Focus Groups that met during 2002 to provide comments and feedback on alternative and options.
- Public information days held at five locations during May 2002 to provide information to interested stakeholders and community members, and to solicit comment on alternative and options. It was estimated that some 2,000 people visited the displays.
- Route options displays held at four locations during August 2003 to provide information on identified route options, and to receive comments on those options from the community and stakeholders. It was estimated that more than 2,500 people attended these events.

Feedback received from the community and stakeholders was summarised and addressed in the 2004 report. The report summarises the main issues highlighted by stakeholders as:

- Ventilation outlets (predominately issues around number and location of outlets).
- General concerns about air quality.
- Noise.
- Further investigation of public transport options rather than road solutions.
- Health impacts.

Further opportunity was provided for interested parties to provide input into the assessment of corridor alignment options through the 2007 Pearlman Review. As part of the review, the public was invited to make submissions on the 2004 report. A total of 53 submissions were received in early 2007, and each submitter was invited to present its submission at one of three public meetings before the Hon Mahla Pearlman AO in June 2007. Issues raised in submissions and through the public meeting were considered in formulating the recommendations of the 2007 Pearlman Review. Issues raised during the 2007 Pearlman Review included:

- Inadequate consultation.
- Public transport, rail improvements and global warming.
- Amenity issues.
- Cost.

Feedback received during the 2004 report and the 2007 Pearlman Review has been considered as part of the recent design development and in the preparation of the consultation strategy for the project.

Consultation during the tender stage

In October and November 2013, four community engagement events were held to provide up to date information about the status of the project and the design and construct tender process.

This consultation was aimed at informing the community of the unsolicited proposal received by the NSW Government and that the purple corridor identified in the 2004 report was being used to direct the tender designs.

The events were used to gather submissions and comments on the community's key issues and concerns, which were summarised and provided to the three design and construct tenderers to be taken into account as part of their respective designs. In addition to these events, several briefing sessions were also held with councils, government agencies and utility providers to provide input into the tender designs. The dates and details of these meetings are included in **Table 6-5**.

Exhibition of the preferred tender design

Following announcement of the preferred project tender design in March 2014, a further series of four community information sessions were held to provide more detailed information about the project. At these sessions, project design information was provided and community members commented on key issues of interest and concern. Through feedback obtained during those sessions, and in subsequent feedback, key community issues have been identified. These issues have been addressed in this environmental impact statement and as part of the ongoing design development for the project.

During this period, stakeholders were also engaged through interest group meetings. Interest groups included an environmental and community interest group, a business and industry interest group and a traffic and transport interest group.

Changes have been made to the project design and construction methodologies in response to feedback received during this consultation period. Some specific examples are provided in **Table 6-4**. The project team is continuing to examine community feedback as part of ongoing design refinements.

Table 6-4 Project amendments in response to consultation

Issue	Description	Nature of amendment
Visual	The community raised concerns about the visual impacts of the Wilson Road tunnel support facility.	The height of the main emergency smoke extraction building has been lowered to reduce the overall bulk and visual impact of this infrastructure. The site has also been lowered from Pennant Hills Road level and stepped down across the site to further reduce the apparent height of the infrastructure and flatten the steep landscaped batters.
Visual	The community raised concerns about the visual impacts of the Trelawney Street tunnel support facility.	The height of the main smoke emergency extraction building has been lowered to reduce the overall bulk and visual impact of this infrastructure.
Visual	The community raised concerns about the visual impacts during the construction of the operational ancillary infrastructure.	A commitment has been made to investigate the early implementation of noise walls and landscape planting around ancillary facilities in order to provide visual screening and minimise noise impacts during construction.
Traffic / noise	The community raised concerns about the impact on local streets (such as noise and traffic) from the use of the Ventura Road access track to the Darling Mills Creek compound (C2).	The use of the Ventura Road access track at the Darling Mills Creek compound (C2) would be restricted to the delivery and removal of large excavation equipment, with the main access point being directly to and from the Hills M2 Motorway.

The dates and details of consultation on the preferred tender design are included in **Table 6-5**.

Agency consultation

Relevant government agencies including the Department of Planning and Environment, the Environment Protection Authority and Ministry of Health (NSW Health) were consulted during the tender development process as part of interagency regulatory groups meetings. Four meetings were held in 2013 from June to November.

Fire and Rescue NSW

Fire and Rescue NSW was consulted during the tender development stage to provide input into the tender designs. Four meetings were held from July 2013 to February 2014.

Table 6-5 Overview of consultation activities during the tender and environmental impact statement processes

Date	Details
Interagency regulatory meetings	
26 June 2013	Interagency regulatory meeting No.1 was held with the Environment Protection Authority, the Department of Planning and Infrastructure (now the Department of Planning and Environment) and NSW Health. The purpose of the meeting was to introduce the project discuss the planning approvals process and identify likely key environmental issues.
30 July 2013	Interagency regulatory meeting No.2 was held with the Environment Protection Authority, the Department of Planning and Infrastructure (now the Department of Planning and Environment) and NSW Health. The purposed of the meeting was to review to the progress of the project and strategy to date and discuss the approach to assessment of environmental impacts.
26 September 2013	Interagency regulatory meeting No. 3 was held with the Environment Protection Authority, the Department of Planning and Infrastructure (now the Department of Planning and Environment) and NSW Health. The purposed of the meeting was to review to the progress of the project and strategy to date, identify any concerns and further discuss the approach to the assessment of impacts.
21 November 2013	Interagency regulatory meeting No. 4 was held with the Environment Protection Authority and the Department of Planning and Infrastructure (now the Department of Planning and Environment). The purposed of the meeting was to review to the progress of the project and strategy to date, identify any concerns, provide updates on community information sessions and further discuss the approach to the assessment of impacts.
Fire life safety meetings	
18 July 2013	Fire life safety meeting No.1 was held with Fire and Rescue NSW to discuss the requirements for the fire strategy and the fire and life safety design.
3 October 2013	Fire life safety meeting No.2 was held with Fire and Rescue NSW to discuss the requirements for the fire strategy and the fire and life safety design.
30 October 2013	Fire life safety meeting No.3 was held with Fire and Rescue NSW to discuss the requirements for the fire strategy and the fire and life safety design.
20 February 2014	Fire life safety meeting No.4 was held with Fire and Rescue NSW to discuss the requirements for the fire strategy and the fire and life safety design.
Community updates	
September 2013	Community update No.1 was sent to around 14,000 property addresses along the project corridor. The community update introduced the project, provided a map of the project corridor, advised of next steps and provided details on how residents could register to receive future updates. The community update was also published on the project website.
December 2013	Community update No.2 was sent to around 14,000 property addresses along the project corridor. The community update advised the availability of the NorthConnex community involvement issues report, detailed early field investigations and advised next steps including tender assessment and environmental impact statement processes. The community update was also published on the project website with email notifications sent to over 200 registered stakeholders.

Date	Details
Week commencing 16 March 2014	Community update No.3 was sent to around 14,400 property addresses within the project area. The community update announced the preferred design, introduced the Hills M2 Motorway integration works, outlined the key features of the project and invited community members to attend community information sessions held in March – April 2014. Stakeholders were encouraged to provide feedback on the preferred design which would be addressed in the environmental impact statement. The community update was also published on the project website with email notification sent to over 789 registered stakeholders.
Planning focus meeting	
27 September 2013	A planning focus meeting was held at Hornsby Shire Council, from 10 am to 4 pm. Presentations at the meeting introduced the project, described the unsolicited proposal process, outlined the environmental assessment process and provided the expected project delivery program. The meeting was attended by representatives from the Department of Planning and Environment, NSW Health, Hornsby Shire Council, The Hills Shire Council and Ku-ring-gai Council.
Tender stage exhibition	
22 October 2013	A community engagement event was held at Turramurra Masonic Hall and Function Centre, from 6.30 pm to 8 pm, to introduce the NorthConnex project, give stakeholders an opportunity to meet the project team, provide feedback, ask questions and identify areas of concern. A total of 73 stakeholders registered in attendance. Feedback received was provided to the three tenderers for consideration during the development of their respective tender submissions.
23 October 2013	A community engagement event was held at Muirfield Golf Course, from 6.30 pm to 8 pm, to introduce the NorthConnex project, give stakeholders an opportunity to meet the project team, provide feedback, ask questions and identify areas of concern. A total of 101 stakeholders registered in attendance. Feedback received was provided to the three tenderers for consideration during the development of their respective tender submissions.
24 October 2013	A community engagement event was held at Hornsby War Memorial Hall, from 6.30 pm to 8 pm, to introduce the NorthConnex project, give stakeholders an opportunity to meet the project team, provide feedback, ask questions and identify areas of concern. A total of 135 stakeholders registered in attendance. Feedback received was provided to the three tenderers for consideration during the development of their respective tender submissions.
18 November 2013	A community engagement event was held at Cheltenham Recreation Club, from 7 pm to 8.30 pm, to introduce the NorthConnex project, give stakeholders an opportunity to meet the project team, provide feedback, ask questions and identify areas of concern. A total of 37 stakeholders registered in attendance.

Date	Details
Preferred tender design exhibition	
26 March 2014	A community information session was held at Pennant Hills Golf Club, from 7 pm to 9 pm. The event gave stakeholders an opportunity to view and discuss with members of the project team the preferred tender design and the Hills M2 Motorway integration works via an interactive model and display material detailing key project features. Attendees were encouraged to ask questions, provide feedback and identify areas of concern which would be addressed in the environmental impact statement. The event was advertised through a community update, the project website and notifications printed in local newspapers. Issues raised during the meetings were recorded and considered in the environmental impact statement.
27 March 2014	A community information session was held at Hornsby RSL, from 7 pm to 9 pm. The event gave stakeholders an opportunity to view and discuss with members of the project team the preferred tender design and the Hills M2 Motorway integration works via an interactive model and display material detailing key project features. Attendees were encouraged to ask questions, provide feedback and identify areas of concern which would be addressed in the environmental impact statement. The event was advertised through a community update, the project website and notifications printed in local newspapers. Issues raised during the meetings were recorded and considered in the environmental impact statement.
3 April 2014	A community information session was held at Pennant Hills Golf Club, from 7 pm to 8 pm. The event gave stakeholders an opportunity to view and discuss with members of the project team the preferred tender design and the Hills M2 Motorway integration works via an interactive model and display material detailing key project features. Attendees were encouraged to ask questions, provide feedback and identify areas of concern which would be addressed in the environmental impact statement. The event was advertised through a community update, the project website and notifications printed in local newspapers. Issues raised during the meetings were recorded and considered in the environmental impact statement.
5 April 2014	A community information session was held at Pennant Hills Community Centre, from 2 pm to 4 pm. The event gave stakeholders an opportunity to view and discuss with members of the project team the preferred tender design and the Hills M2 Motorway integration works via an interactive model and display material detailing key project features. Attendees were encouraged to ask questions, provide feedback and identify areas of concern which would be addressed in the environmental impact statement. The event was advertised through a community update, the project website and notifications printed in local newspapers. Issues raised during the meetings were recorded and considered in the environmental impact statement.
Utility providers meeting	
25 October 2013	A utility providers meeting was held with Endeavour Energy to discuss potential utility impacts, power supply, utility adjustments and project timing.
25 October 2013	A utility providers meeting was held with Telstra to discuss potential utility impacts, telecommunications, utility adjustments and project timing.
7 November 2013	A utility providers meeting was held with Ausgrid to discuss potential utility impacts, power supply, utility adjustments and project timing.

Date	Details
Interest group meetings	
28 March 2014	An environmental and community interest group meeting was held at Pennant Hills Golf Club. A total of 14 attendees representing environmental organisations and interest groups, and community groups discussed potential impacts from the preferred tender design and key features of the project. Additional information was provided to meeting participants as applicable.
2 April 2014	A business and industry interest group meeting was held at Pennant Hills Road. A total of 17 attendees from organisations representing business and industry groups discussed potential business impacts from the preferred tender design and key features of the project. Additional information was provided to meeting participants as applicable.
3 April 2014	A traffic and transport interest group meeting was held at Pennant Hills. A total of ten attendees from organisations representing traffic and transport groups discussed potential traffic and transport issues from the preferred tender design and key features of the project. Additional information was provided to meeting participants as applicable.
Briefing sessions	
16 October 2013	A briefing session was held with The Hills Shire Council General Manager and Councillors to describe the project and to answer questions. The presentation introduced the project, described the unsolicited proposal process, outlined the environmental impact statement process, outlined potential key issues and provided the expected project delivery program.
24 October 2013	A briefing session was held with State and Federal Members of Parliament to describe the project and to answer questions. The presentation introduced the project, described the unsolicited proposal process, outlined the environmental impact statement process, outlined potential key issues and provided the expected project delivery program.
21 November 2013	An update meeting was held with the Department of Planning and Infrastructure (now Department of Planning and Environment) to discuss planning approval processes and timing.
9 December 2013	A meeting was held with Normanhurst Boys High School and Abbotsleigh School for Girls to introduce the project, establish methods of contact for the schools, parents and students and to answer initial questions.
12 December 2013	A project briefing session was held with the Member for Parramatta to describe the project and to answer questions.
19 December 2013	A project briefing session was held with the Member for Epping and his staff to describe the project and to answer questions.
19 December 2013	A briefing session was held with Ku-ring-gai Council staff to describe the project and to answer questions. The presentation introduced the project, described the unsolicited proposal process, outlined the environmental impact statement process, outlined potential key issues and provided the expected project delivery program.
27 February 2014	A presentation was made to the Independent Advisory Committee on Tunnel Air Quality regarding the air quality modelling approach for the project.

Date	Details
20 March 2014	A briefing session was held with State and Federal Members of Parliament. The purpose of the briefing sessions was to present the preferred tender design and seek feedback.
21 March 2014	A presentation was made to the Roads Freight Industry Council with representatives from the Australian Trucking Association, the Livestock and Bulk Association, Transport Workers Union, Toll and Linfox.
17 April 2014	A presentation was made to the NRMA. The purpose of the meeting was to present the preferred tender design and seek feedback.
8 April 2014	A meeting was held with Ku-ring-gai Council. The purpose of the meeting was to present the preferred tender design and seek council feedback.
9 April 2014	A meeting was held with Hornsby Shire Council. The purpose of the meeting was to present the preferred tender design and seek council feedback.
20 May 2014	A meeting was held with The Hills Shire Council. The purpose of the meeting was to present the preferred tender design and seek council feedback.
5 May – 30 May 2014	Meetings were held with relevant schools, aged care, medical facilities and places of worship within the project area. The purpose of the meetings was to present the preferred tender design, and provide an opportunity to discuss potential construction and operational impacts specific to each facility.
Interviews and surveys	
December 2013	Interviews and surveys were conducted with potentially affected business owners.
Communications	
July 2013	Property owners were notified of geotechnical and ecological field studies, including telephone calls and letterbox drops to targeted residents notifying them of the start of environmental field work.
October 2013	A 'Letter to the householder' was sent to around 14,000 property addresses along the project corridor detailing community engagement events to be held in October 2013. Details of the events were also published on the project website and advertised in local newspapers.
October 2013	Letters were sent to around 200 interest groups inviting them to attend the community engagement events in October 2013 and to provide feedback on the project. Feedback received from interested parties was provided to the three tenderers for consideration during the development of their respective tender designs.
November to December 2013	Property owners were notified of air quality monitoring, noise and heritage field studies, including telephone calls and letterbox drops to targeted residents notifying them of the start of environmental field work.
December 2013	The NorthConnex community involvement issues report was published on the project website. The report provided a summary of the community feedback received to date including issues raised at community engagement events. Over 200 registered stakeholders were informed by email about the publication of the report.

Date	Details
Week commencing 16 March 2014	Postcards were sent to around 7,000 properties within the preferred project corridor (along the proposed tunnel alignment) encouraging residents to attend upcoming community information sessions and to visit the interactive web mapping site for more project information.
Week commencing 16 March 2014	A 'Letter to the householder' was sent accompanied by community update No. 3 distributed to over 3,000 along the corridor potentially affected by the Hills M2 Motorway integration work.
Week commencing 16 March 2014	Letters were sent to over 658 interest groups and local organisations, including schools, places of worship, aged care facilities and clubs. Follow up calls to 79 schools providing project information and eight briefings were held.
Week commencing 16 March 2014	Invitations were sent to around 202 interest groups to attend targeted interest group briefings. Three interest group briefings were held covering: traffic and transport; business and industry; and environment and community.
16 March 2014	The preferred tender design and tenderer was publicly announced by the Prime Minister and Premier for NSW.
16 March 2014	Door knocks and letters of acquisition notification were delivered to potentially directly impacted property owners along the preferred project corridor outlining property impacts, the property acquisition process and timing.
Week commencing 28 April 2014	Phone calls to 25 aged care and medical facilities in the project area and 55 places of worship, providing project information and briefing invitation

6.4 Summary of issues raised

Issues identified during the consultation process for the NorthConnex project by government agencies, local government, interest groups, local communities, and Aboriginal stakeholders have informed the environmental impact assessment process and the ongoing development of the project. A summary of these issues and the locations in the environmental impact statement where they have been addressed are provided below.

6.4.1 Issues raised by government agencies

A list of government agencies consulted over the course of the project and during the preparation of the environmental impact statement, and their key issues and requirements are detailed in **Table 6-6**. **Table 6-6** also identifies the section of this environmental impact statement that has addressed each issue.

6.4.2 Issues raised by local government

Issues raised by The Hills Shire Council, Hornsby Shire Council and Ku-ring-gai Council during the consultation process are detailed in **Table 6-7**. **Table 6-7** also identifies the section of this environmental impact statement that has addressed each issue.

6.4.3 Issues raised by local communities

Questions and issues arising from consultation activities have been recorded in the project's stakeholder database. Rigorous data management enables transparent and comprehensive consideration of feedback in conjunction with the technical inputs, specialist studies and value management design evaluation.

Issues raised by community members, stakeholder and interest groups and local businesses during the consultation process are detailed in **Table 6-8**. To consolidate the feedback received by the community, the table groups inputs by issue category. Some wording has been modified or abbreviated where appropriate to allow consolidation of issues raised by multiple contributors.

Table 6-8 also identifies the section of the environmental impact statement that has addressed each issue.

6.4.4 Issues raised by Aboriginal stakeholders

Representatives of the Metropolitan Local Aboriginal Land Council and the Guringai Tribal Link Aboriginal Corporation have been consulted during the preparation of the Aboriginal heritage assessment for the project. Issues raised by these stakeholders and how they have been addressed are provided in the technical working paper: Aboriginal heritage (**Appendix M**).

Table 6-6 Issues raised by government agencies

Issue category	Issue raised	Where addressed
Environment Protection Authority		
General	The requirements of the *Protection of the Environment Operations Act 1997* should be addressed.	The requirements of the *Protection of the Environment Operations Act 1997* are identified in **Chapter 2** and addressed in the relevant assessment sections, including in relation to air quality (**Section 7.3**), noise (**Section 7.2**), water quality (**Section 7.9**) and waste (**Section 8.3**).
Noise and vibration	Noise and vibration impacts need to be assessed, quantified and reported on.	Construction and operational noise and vibration impacts have been assessed in **Section 7.2**.
	Construction noise associated with the proposed development should be assessed using the Interim Construction Noise Guidelines (DECC, 2009b).	A construction noise impact assessment consistent with the Interim Construction Noise Guidelines is provided in **Section 7.2** and **Appendix F**.
	Vibration from construction and operation should be assessed using the guidelines contained in the Assessing Vibration: A technical guideline (DEC, 2006a).	A construction vibration impact assessment consistent with Assessing Vibration: a technical guideline is provided in **Section 7.2** and **Appendix F**.
	If blasting is required, blast impacts should comply with the guidelines contained in Australian and New Zealand Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990).	Underground blasting may be required during tunnelling activities. However, a detailed quantitative impact assessment of potential blasting impacts has not been conducted because the location of blasting (if it is required) would not be known until tunnelling works are being conducted. If blasting is necessary further assessment would be conducted consistent with the guidelines contained in Australian and New Zealand Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZECC, 1990).
	Operational noise from all industrial activities (including private haul roads and private railway lines) should be assessed using the guidelines contained in the NSW Industrial Noise Policy (EPA, 2000b) and Industrial Noise Policy Application Notes.	An operational industrial noise assessment consistent with the NSW Industrial Noise Policy (EPA, 2000b) and the associated Industrial Noise Policy Application Notes (EPA, 2010) is provided in **Section 7.2** and **Appendix F**.

Issue category	Issue raised	Where addressed
	Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the Environmental Criteria for Road Traffic Noise (EPA, 1999).	An assessment of the project's impacts on traffic generated road noise comparing noise levels with and without the project and consistent with Road Noise Policy (DECCW, 2011) is provided in **Section 7.2** and **Appendix F**. The Road Noise Policy supersedes the Environmental Criteria for Road Traffic Noise (EPA, 1999).
	Noise from new or upgraded public roads should be assessed using the Environmental Criteria for Road Traffic Noise (EPA, 1999).	An assessment of the project's impacts on traffic generated road noise comparing noise levels with and without the project and consistent with the Road Noise Policy (DECCW, 2011) is provided in **Section 7.2** and **Appendix F**.
Air quality	Air quality impacts need to be assessed, quantified and reported on in a detailed air quality impact assessment.	Air quality impacts associated with construction and operation of the project have been assessed in **Section 7.3** and **Appendix G**.
	Air dispersion modelling should be carried out where there is a risk of adverse air quality impacts, or where there is sufficient uncertainty to warrant a rigorous numerical impact assessment.	Air dispersion modelling has been conducted for operation of the project. Results of the modelling have been assessed and are summarised in **Section 7.3**. Detailed results are presented in **Appendix F**.
	Air dispersion modelling should be conducted in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW 2005.	The air dispersion modelling has been carried out in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC, 2005a). A detailed description of the methodology for the air quality assessment, including a description of the modelling is provided in **Section 7.3** and **Appendix G**.
	The project should comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations Act 1997* and the Protection of the *Environment Operations (Clean Air) Regulations 2010*.	The project has been designed to comply with the relevant requirements of the Protection of the Environment Operations Act 1997 and the Protection of the Environment Operations (Clean Air) Regulations 2010.
	Assessment of the project against the priorities and targets adopted under the NSW State Plan and its implementation plan *Action for Air*.	Air quality impacts associated with construction and operation of the project are assessed in **Section 7.3**. The priorities and targets under the NSW State Plan and Action for Air are outlined in **Chapter 3**.
Health	The risk (environmental harm, risk to human health and amenity) associated with potential discharges of fugitive and point source emissions for all stages of the project including operation need to be assessed.	A human health risk assessment has been carried out and is provided in **Section 7.4** and **Appendix H**. Risks to the environment and amenity from fugitive and point sources are assessed in relation to air quality in **Section 7.3** and water quality in **Section 7.9**.

Issue category	Issue raised	Where addressed
	All processes that could result in air emissions should be identified and described.	Processes which may result in air emissions are identified and described in **Section 7.3**.
	Consideration of 'worst case' emissions scenarios and impacts at proposed emission limits.	The human health risk assessment (**Section 7.4**) and the air quality impact assessment (**Section 7.3**) consider 'worst case' emissions scenarios. The technical working paper: air quality (**Appendix G**) includes consideration of an operational scenario to inform identification of potential emissions limits.
	Emission control techniques / practices to be employed on the project.	Mitigation measures to control air emissions are provided in **Section 7.3**.
Geology and soils	Impacts on soils including contaminated sites and general soil issues need to be assessed, quantified and reported on.	The impact of the construction and operation of the project on soils including contamination and general soil issues are assessed in **Section 7.8**.
	An assessment of the contaminated site should be carried out in accordance with the guidelines made or approved under section 105 of the *Contaminated Land Management Act 1997*.	Identification of potentially contaminated sites and appropriate mitigation measures are provided in **Section 7.8**. The assessment takes into account the Managing Land Contamination: Planning Guidelines SEPP 55 – Remediation of Land (DUAP & EPA, 1998) and other relevant guidelines published by the EPA in relation to contaminated land investigations.
	How will site contamination be remediated and/or managed so that the site is, or can be, made suitable for the proposed use?	Identification of potentially contaminated sites and appropriate mitigation measures are provided in **Section 7.8**. The potential for contamination and the need for remediation is also considered.
	All reports should be prepared in accordance with the Guidelines for Consultants Reporting on Contaminated Sites (EPA, 2000a).	Identification of potentially contaminated sites and appropriate mitigation measures are provided in **Section 7.8**. The assessment of potential contaminated land has been conducted with regard to the relevant guidance provided in Guidelines for Consultants Reporting on Contaminated Sites (EPA, 2000a).
	Will a site auditor, accredited under the *Contaminated Land Management Act 1997*, be engaged to issue a site audit statement to certify on the suitability of the current proposed uses?	Identification of potentially contaminated sites and appropriate mitigation measures are provided in **Section 7.8**. If required, an accredited site auditor will be engaged to issue a site audit statement. The need for such a site audit statement will be considered during the detailed design phase of the project.

Issue category	Issue raised	Where addressed
	An assessment of the potential impacts on soil and land resources should be carried out, guided by the Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000).	Assessment of potential soil impact is provided in **Section 7.8**, and has considered the relevant guidance in Soil and Landscape Issues in Environmental Impact Assessment (DLWC, 2000)
	The nature and extent of any significant impacts on soil and land resources should be identified, with particular attention given to: soil erosion and sediment transport; mass movement (landslides); and urban and regional salinity.	An assessment of the impact of construction and operation of the project on soils have been provided in **Section 7.8** with additional information on erosion and sediment transport provided in **Section 7.9**. The potential for mass movement hazards and salinity is considered in **Section 7.8**.
	Mitigation and management options to prevent, control, abate or minimise identified soil and land resource impacts should be provided. The effectiveness and reliability of the measures and any residual impacts after these measures are implemented should be assessed.	Mitigation and management measures to prevent or minimise soil and landscape resource impacts have been provided in **Section 7.8**. The mitigation and management measures are well-known and commonly applied to major infrastructure project construction activities, and on this basis, the effectiveness and reliability of the measures has not been subject to further detailed assessment.
Surface water and ground water	Water quality impacts need to be assessed, quantified and reported on.	An assessment of potential surface water quality impacts is provided in **Section 7.9**. An assessment of potential groundwater is provided in **Section 7.8**.
	Position of any intakes and discharges, volumes, water quality and frequency of all water discharges should be detailed.	Details of project drainage are provided in **Chapter 5**. Information on groundwater inflows, treatment, volumes and discharge requirements are provided in **Section 7.8**. Details on surface water treatment, volumes and discharge are provided in **Section 7.9**.
	Demonstrate all practical options to avoid discharge have been implemented and environmental impacts minimised where discharge is necessary.	Options regarding the management of groundwater inflows and the associated need to treat and discharge water to the environment are discussed in **Chapter 4**. Measures to manage and mitigate discharge have been provided in **Section 7.6**, **Section 7.8** and **Section 7.9**.

Issue category	Issue raised	Where addressed
	Where relevant, include a water balance for the project including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.	An assessment of surface water impacts is provided in **Section 7.9**. Stormwater disposal, volumes, treatment, management and re-use options are provided in **Section 7.8** and **Section 7.9**.
	An assessment needs to be carried out for any water resource (existing surface and groundwater) likely to be affected by the project.	An assessment of groundwater impacts on is provided in **Section 7.8**. An assessment of project impacts on surface water is provided in **Section 7.9**.
	Water Quality Objectives for the receiving waters relevant to the project. These refer to the community's agreed environmental values and human uses endorsed by the NSW Government as goals for ambient waters. Where groundwater may be impacted an assessment should be carried out to identify appropriate groundwater environmental values.	An assessment of surface water impacts, including identification of the receiving environments and appropriate discharge water quality criteria is provided in **Section 7.9**. Potential impacts on groundwater are considered in **Section 7.8**.
	The indicators and associated trigger values or criteria for the identified environmental values should be stated. This information should be sourced from the ANZECC (2000) Guidelines for Fresh and Marine Water Quality.	An assessment of surface water impacts is provided in **Section 7.9**, which includes identification of appropriate discharge water quality criteria based on guidance in the Guidelines for Fresh and Marine Water Quality (ANZECC, 2000)
	Any locally specific water quality objectives, criteria or targets which have been endorsed by the NSW Government should be identified.	An assessment of surface water impacts, including identification of the receiving environments and endorsed water quality objectives, criteria and targets, as relevant, is provided in **Section 7.9**.
	Describe the nature and degree of impact any proposed discharges will have on the receiving environment.	A description and assessment of the impacts associated with the discharge of water to the environment are provided in **Section 7.6**, **Section 7.8** and **Section 7.9**.
	Impacts against the relevant ambient water quality outcomes should be assessed.	An assessment of surface water impacts, including identification of the receiving environments and relevant ambient water quality outcomes is provided in **Section 7.9**.

Issue category	Issue raised	Where addressed
	How will the project be designed and operated to protect the water quality objectives for receiving waters where they are currently being achieved and contribute towards achievement of the water quality objectives over time where they are not currently being achieved?	As identified in **Section 7.9**, water discharge during construction would be in accordance with an environment protection licence issued for the project. The project has been designed to achieve a maximum water discharge quality equivalent to the 95 per cent protection level specified for freshwater eco-systems in accordance with ANZECC guidelines (ANZECC & ARMCANZ, 2000). The discharge water quality level would be determined in consultation with the NSW Environment Protection Authority during the detailed design phase taking into consideration the current water quality of the receiving watercourses.
	Where a discharge is proposed that includes a mixing zone, how will wastewater discharged to waterways ensure ANZECC (2000) water quality criteria for relevant chemical and non-chemical parameters are met at the edge of the initial mixing zone of the discharge and any impacts in the initial mixing zone are reversible?	As identified in **Section 7.9**, water discharge during construction would be in accordance with an environment protection licence issued for the project. The project has been designed to achieve a maximum water discharge quality equivalent to the 95 per cent protection level specified for freshwater eco-systems in accordance with ANZECC guidelines (ANZECC & ARMCANZ, 2000). The discharge water quality level would be determined in consultation with the NSW Environment Protection Authority during the detailed design phase taking into consideration the current water quality of the receiving watercourses.
	Impacts on groundwater and groundwater dependent ecosystems should be assessed.	An assessment of impacts from the construction and operation of the project on groundwater is provided in **Section 7.8** and groundwater dependent ecosystems in **Section 7.6**.
	How will stormwater be managed both during and after construction?	Surface water management during construction and operation is described and assessed in **Section 7.9**.
	How will predicted impacts be monitored and assessed over time?	A surface water quality monitoring program would be developed as identified in **Section 7.9**.
Resource management and waste minimisation	Waste impacts including hazardous material and radiation, waste EARs for waste facilities and general waste need to be assessed, quantified and reported on.	Waste impacts associated with the project are described and assessed in **Section 8.3**.

Issue category	Issue raised	Where addressed
	A detailed plan for in-situ classification of waste material, including the sampling locations and sampling regime that will be employed to classify the waste, particularly with regards to the identification of contamination hotspots should be prepared.	Construction and operational waste management including classification, sampling, proposed quantities and disposal is provided in **Section 8.3**. If relevant contamination is identified during the detailed design of the project, an appropriate plan for in-site sampling and characterisation of materials would be developed.
	Identify, characterise and classify all waste (including waste intended for re-use or recycling) that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations of the waste	Construction and operational waste management include classification, sampling, proposed quantities and disposal is provided in **Section 8.3**.
	All waste should be classified in accordance with the Environment Protection Authority's Classification Guidelines.	Construction and operational waste management include classification, sampling, proposed quantities and disposal is provided in **Section 8.3**. Waste generated by the project would be classified in accordance with the Waste Classification Guidelines.
	All sampling and classification results should be retained for the life of the project in compliance with EPA's Waste Classification Guidelines.	Construction and operational waste management include classification, sampling, proposed quantities and disposal is provided in **Section 8.3**. Waste sampling and classification data would be managed in accordance with the Waste Classification Guidelines.
	How will waste be handled and managed onsite to minimise pollution including: stockpile location and management; and erosion, sediment and leachate control?	Handling and management of waste is outlined in **Section 8.3**. Erosion, sedimentation and surface water management measures are outlined in **Section 7.8** and **Section 7.9**.
	How will waste be handled and managed during transport to a lawful facility? For waste possessing hazardous characteristics, how will the waste be treated or immobilised to render it suitable for transport and disposal?	Handling and management of waste including waste transport is outlined in **Section 8.3**. Wastes involving hazardous characteristics are not anticipated to be handled during construction or operation of the project.
	Procedures and protocols to be implemented to ensure that any waste leaving the site is transported and disposed of lawfully and does not pose a risk to human health or the environment.	A resource and waste assessment including protocols and procedures to be implemented to ensure safe and lawful, transport and disposal of waste is provided in **Section 8.3**.

Issue category	Issue raised	Where addressed
	Statement demonstrating awareness of the Environment Protection Authority's requirements with respect to notification and tracking of waste.	Waste management including transport of waste from the site is assessed in **Section 8.3**. Roads and Maritime is aware of the Environment Protection Authority's requirements with respect to notification and tracking of waste, and would ensure that the construction contractor(s) is similarly aware of these requirements.
	Statement demonstrating awareness of the relevant legislative requirements for the disposal of waste, including any relevant Resource Recovery Exemptions, as gazetted by the Environment Protection Authority.	An assessment of resource requirement and waste management is provided in **Section 8.3**. Roads and Maritime is aware of the legislative requirements with respect to disposal of wastes, and would ensure that the construction contractor(s) is similarly aware of these requirements.
	Outline contingency plans for any event that affects operations at the site that may result in environmental harm including: excessive stockpiling of waste; and volume of leachate generated exceeds the storage capacity available on site.	Mitigation measures for waste management are provided in **Section 8.3**. The Spoil Management Plan to be developed and implemented for the project will include contingency measures in the unlikely event that spoil generation exceeds anticipated volumes and construction site capacities.
Greenhouse gas and climate change	Greenhouse gas emissions impacts need to be assessed, quantified and reported on.	A greenhouse gas assessment is provided in **Section 8.4**.
Cumulative impact	Cumulative impacts associated with existing emission sources as well as any current approved developments linked to the receiving environment.	Cumulative impacts are assessed within the respective impact assessment sections of the environmental impact statement.
Agriculture NSW - Department of Primary Industries		
Biodiversity	Management of weeds during and post construction in the area of construction works.	Weed management and mitigation measures during and following construction are provided in **Section 7.6**.
NSW Office of Water - Department of Primary Industries		
Surface water and groundwater	The project should comply with the relevant requirements of the *Water Management Act 2000* including the objects and water management principles of the act.	A construction and operational water impact assessment consistent with the relevant requirements of the *Water Management Act 2000* is provided in **Section 7.8** and **Section 7.9**. The assessment has taken into account the objects and water management principles of that Act.

Issue category	Issue raised	Where addressed
	A groundwater assessment should be prepared consistent with the requirements of the NSW Aquifer Interference Policy, including both licensing requirements and aquifer impact considerations, for the construction and operational phases.	A ground water assessment consistent with the requirements of the NSW Aquifer Interference Policy is provided in **Section 7.8**. The assessment considers licensing requirements and potential aquifer impacts.
	The project should be consistent with the rules within the Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources and the Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources.	Surface water and ground water assessments consistent with the relevant requirements of the Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources and the Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources are provided in **Section 7.8** and **Section 7.9**.
	Licensing requirements for the project should be in accordance with the provisions of the Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources under the *Water Management Act 2000*.	Licensing requirements are detailed in **Chapter 2**. An assessment of potential groundwater impacts is provided in **Section 7.8**, which takes into account the relevant requirements of application Water Sharing Plans and the *Water Management Act 2000*
	An assessment of the applicability of any exemptions to the project under the *Water Management (General) Regulation 2011*, in particular Clause 2 of Schedule 5 – Road Authorities should be prepared.	Licensing requirements are detailed in **Chapter 2**. An assessment of potential groundwater impacts is provided in **Section 7.8**. Roads and Maritime would take groundwater as a consequence of the construction and ongoing operation of the project, and would rely on the exemptions under clause 2, Schedule 5 of the *Water Management (General) Regulation 2011* to the extent that a water access licence may be required for this groundwater take.
	A detailed assessment of water requirements for the project should be prepared.	An assessment of water requirements for construction and operation of the project is provided in **Section 8.3** and **Section 7.9**.
	A detailed assessment of the potential impact of the project on water sources of the State should be prepared.	Potential surface water impacts are described and assessed in **Section 7.9**. Potential groundwater impacts are described and assessed in **Section 7.8**
	A predictive assessment of the impact of the project on surface water sources should be prepared.	An assessment of potential impacts to surface water has been provided in **Section 7.9**.
	A predicted assessment of the impact on groundwater dependent ecosystems should be prepared.	An assessment of the potential project impacts on groundwater dependent ecosystems is provided in **Section 7.6**.

Issue category	Issue raised	Where addressed
NSW Health		
Noise and vibration	An assessment of the noise and vibration impacts of the project during operation, consistent with the Road Noise Policy (EPA, 2011) should be prepared.	An assessment of the noise and vibration impacts of the project during operation, consistent with the Road Noise Policy (EPA, 2011) is provided in **Section 7.2** and **Appendix F**. Potential human health impacts associated with noise are considered in **Section 7.4** and **Appendix H**.
	An assessment of construction noise and vibration impacts, consistent with the Interim Construction Noise Guidelines (DECC, 2009b) and Assessing Vibration: a technical guideline (DEC, 2006a) should be prepared.	A construction noise and vibration assessment consistent with the Interim Construction Noise Guidelines (DECC, 2009b) and Assessing Vibration: a technical guideline (DEC, 2006a) is provided in **Section 7.2** and **Appendix F**. Potential human health impacts associated with noise are considered in **Section 7.4** and **Appendix H**.
Air quality	An assessment of the impact of operation of the tunnel on regional air quality should be prepared.	An assessment of operational impacts to air quality, including impacts from operation of the project tunnels on regional air quality, is provided in **Section 7.3** and **Appendix G**. Potential human health impacts associated with air quality are considered in **Section 7.4** and **Appendix H**.
	Potential emissions sources relating to construction including dust from unpaved service locations, dust from transport of spoil and emissions from non-road diesel engines should be described. Consideration should be given to all feasible mitigation measures.	A construction air quality assessment including potential emissions sources is provided in **Section 7.3**. Feasible and reasonable mitigation measures are also identified in **Section 7.3**.
Health	A comprehensive assessment of the human health risks associated with the project's impact on local and regional air quality during construction and operation should be prepared.	A comprehensive human health risk assessment, taking into account relevant impacts on local and regional air quality is provided in **Section 7.4** and **Appendix H**.
	The health risk assessment should be conducted in accordance with the approach described in the NSW Health document Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards (2012).	The human health risk assessment has been carried out in accordance with relevant guidance document and in consultation with NSW Health.

Issue category	Issue raised	Where addressed
	Consideration should be given to a range of pollutants including $PM_{2.5}$, PM_{10}, TSP, CO, NO_2 and other nitrogen oxides, volatile organic compounds and ozone. Relevant short and long term exposure and impact of odours should be considered.	The human health risk assessment includes consideration of relevant pollutants and short and long term exposures. The air quality assessment (**Section 7.3** and **Appendix G**) and the human health risk assessment (**Section 7.4** and **Appendix H**) provide justification for the relevant pollutants considered as part of those assessments.
	Both incremental changes in exposure from existing background pollutant levels and the cumulative impacts of project specific and existing pollutant levels should be addressed at the location of receptors.	The human health risk assessment includes consideration of incremental changes in exposure from background pollutant levels and cumulative impacts of project specific and existing pollutant levels.
	Exposure to pollutants should be addressed at the location of the most affected receptors and also for other sensitive receptors such as childcare centres, schools, hospitals and aged care facilities.	The human health risk assessment considers the most affected receivers and other sensitive receivers.
	Consideration should be given to the size of the population exposed to increased concentrations of air pollutants.	The human health risk assessment considers the characteristics of the local population that may be affected by the project.
	The location, configuration and design of all emissions sources including ventilation stack(s) and tunnel portals. The pollutant levels from any stack and/or portal emissions should be modelled.	**Chapter 5** describes the project including the tunnel ventilation system. Modelling of potential air quality impacts is provided in **Section 7.3** and **Appendix G**.
	Consideration should be given to all feasible mitigation measures in addition to stack ventilation, such as filtration of emissions prior to discharge, and a rationale provided for inclusion or exclusion of these measures.	**Section 7.3** and **Appendix G** include consideration of reasonable and feasible mitigation and management measures in the context of residual air quality impacts. This includes analysis of the costs and benefits of potential tunnel filtration.
	An assessment of in tunnel air quality and the human health effects of potential exposure to pollutant scenarios for vehicle occupants (including infants, children and adults) and motorcyclists using the tunnel should be prepared.	An assessment of the potential human health effects of the in-tunnel air quality is provided in **Section 7.4** and **Appendix H**.
NSW Office of Environment and Heritage		
Biodiversity	Impacts on flora and fauna, including threatened species, populations and endangered ecological communities and their habitats should be addressed in accordance with OEH's Threatened Species Survey and Assessment Guidelines and any relevant draft or final recovery plans.	A biodiversity assessment including impacts on flora and fauna, including threatened species, populations and endangered ecological communities and their habitats, and consistent with the relevant requirements of OEH's Threatened Species Survey and Assessment Guidelines (OEH, 2013d) is provided in **Section 7.6**.

Issue category	Issue raised	Where addressed
	Steps taken to mitigate or offset any identified impacts to the environment should be detailed.	Measures to mitigate and manage biodiversity impacts are provided in **Section 7.6**. Preliminary offset calculations are also provided in **Section 7.6** and **Appendix J**.
	The NSW offset principles for major projects (state significant development and state significant infrastructure) should be used to assess and determine the adequacy of any offsets.	Preliminary offset calculations are provided in **Section 7.6** and based on the Biobanking Assessment Methodology. Further development of offsets through a Biodiversity Offset Strategy would be consistent with the NSW offset principles for major projects.
Surface water and groundwater	A preliminary hydrological and hydraulic assessment for the project catchment, including overland flow paths associated with major drainage, should be carried out. The assessment should determine flood extent for a range of flood sizes up to the probable maximum flood (PMF).	The surface water assessment is provided in **Section 7.9**. This has considered potential flooding impacts.
	If the preliminary hydrological and hydraulic assessment indicates that the project is on flood prone land (ie below the PMF level) a detailed assessment should be carried out for both existing and developed conditions.	The project is not located on flood prone land.
	The project should comply with the relevant policies and guidelines including NSW Government Flood Prone Land Policy as set out in the Floodplain Development Manual (2005), Section 117(2) Local Planning Direction 4.3 “Flood Prone Land” and Planning circular PS 07-003 “New guideline and changes to section 117 direction and EP&A Regulation on flood prone land”.	The surface water assessment is provided in **Section 7.9**. This has considered potential flooding impacts, consistent with relevant guidelines. The project is not located on flood prone land.
Aboriginal cultural heritage	Aboriginal cultural heritage should be addressed in accordance with the Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (2005).	The assessment of Aboriginal cultural heritage impacts provided in **Section 7.11** and **Appendix M** has been carried out consistent with the Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (2005).
	Impacts on Aboriginal cultural heritage should be avoided where possible. Where it is not possible, mitigation strategies must be explored in consultation with Aboriginal stakeholders.	There are no anticipated direct impacts on Aboriginal cultural heritage from the project. Measures have been proposed to prevent indirect impacts on Aboriginal cultural heritage sites in the vicinity of works.

Table 6-7 Issues raised by local government

Issue category	Issue raised	Where addressed
The Hills Shire Council		
Consultation process	Consultation should be carried out with other agencies within Transport for NSW, particularly in relation to the impact on public transport and the North West Rail Link project.	Information regarding consultation with various stakeholders including government agencies is provided in this chapter. The project has been designed to avoid direct interaction with NWRL. Potential impacts on public transport are considered in **Section 7.1**.
	Consultation should be carried out with the various emergency services or the Local and Regional Emergency Management Committees.	Information regarding consultation with various stakeholders including local and regional emergency management committees is provided in this chapter. This has included consultation with Fire and Rescue NSW.
	Comprehensive stakeholder engagement required with both Council and the local community	Details of consultation undertaken with the local community and Councils are provided in this chapter.
Noise	Management of truck movements along local roads needs to be carefully managed to mitigate noise impact to local residents	Measures to manage and mitigate noise impacts include those from heavy vehicle movements are provided in **Section 7.2**.
Air quality	How will air quality be measured during the planning and operational phases of the project to ensure that local communities are not adversely affected by tunnel emissions? Details of the location of any temporary or permanent air quality monitoring stations and how air quality data can be assessed should be provided.	Assessment of air quality impacts including baseline monitoring locations, methodology and results are provided in **Section 7.3**. During operation of the project, it is proposed that air quality monitoring would be conducted to verify the air quality performance of the project and demonstrate consistency with air quality modelling predictions presented in this environmental impact statement.
	Impacts on air quality, for local communities located near the tunnel portals, from construction activities.	Assessment of potential air quality impacts during construction and operational is provided in **Section 7.3** and **Appendix G**.
Landscape character and visual amenity	Obligation should be placed on the operator to ensure that any landscaping works at the tunnel interchanges are maintained to an acceptable standard. This would include areas outside any noise walls but within the project corridor.	Details of landscaping including operational mitigation measures are provided in **Section 7.5**. Management measures would be development and implemented during operation to ensure that landscaping within the responsibility of the motorway operator is adequately managed and maintained.
Design	Height of tunnel to avoid impact of overheight vehicles causing delays to motorists.	Design features of the project are described in **Chapter 5**. The tunnel would be the highest tunnel in Sydney at 5.3 metres in order to minimise the likelihood of an incident involving overheight vehicles.

Issue category	Issue raised	Where addressed
	Management of spoil is of concern especially given the number of projects in the local government area	The management of spoil is described in **Section 8.3**. Potential traffic and noise impacts from spoil removal are assessed in **Section 7.1** and **Section 7.2**. Consideration has also been given to cumulative impacts with other major infrastructure projects in the region in relevant assessment sections of this environmental impact statement.
Hornsby Shire Council		
Consultation process	A mechanism needs to be in place to manage awareness of the project on future and new land owners beyond the point of initial consultation.	The consultation strategy for the project including consultation during construction is provided in **Section 6.4** and the Community Communications Framework in **Appendix D**. Roads and Maritime has been active in the provision of information about the project since its inception and public announcement through several media, as summarised in **Section 6.3**.
	Details regarding complaints handling in regards to noise and vibration.	The consultation strategy includes a complaint handling procedure is provided in **Section 6.4**. Complaints handling mechanisms and procedures would be reviewed and updated as required prior to the commencement of construction and prior to project opening, to reflect the specific needs and issues for those project phases.
Noise and vibration	Noise from plant and equipment associated with the project should be considered in line with the NSW Industrial Noise Policy.	An operational industrial noise assessment consistent with the NSW Industrial Noise Policy (EPA, 2000b) is provided in Section 7.2 and Appendix F.
	Consideration should be given to impacts from architectural noise and emission treatments in addition to the construction of the primary infrastructure.	An assessment of potential noise impacts and feasible and reasonable mitigation measures is provided in **Section 7.2**.
	Noise and vibration mitigation measures during standard construction work hours.	Measures to manage and mitigate noise and vibration impacts are provided in **Section 7.2**. While much of the construction of the project can be carried out during standard construction hours, some construction activities including tunnelling and tunnelling support, and works within live motorways, must be scheduled out of standard construction hours and / or on a continuous basis for practical or safety reasons.

Issue category	Issue raised	Where addressed
	Selection and application of best work practices to minimise noise impacts.	Measures to manage and mitigate noise and vibration impacts are provided in **Section 7.2**. These measures reflect reasonable and feasible noise mitigation consistent with the requirements of noise assessment policies in NSW.
Biodiversity	Impacts on remnant Blue Gum High Forest, a Critical Endangered Ecological Community listed under the *Environment Protection and Biodiversity Conservation Act 1999* and the *Threatened Species Conservation Act 1995* that occurs within the Pennant Hills Road corridor.	Potential biodiversity impacts including impacts to endangered ecological communities are considered in **Section 7.6** and **Appendix J**. Blue Gum High Forest consistent with the definition of this community under the *Threatened Species Conservation Act 1995* would be impacted by the project. However, this community within does not meet the equivalent community definition under the *Environment Protection and Biodiversity Conservation Act 1999* within the project disturbance footprint.
	Impacts on remnant Turpentine Ironbark Forest, a Critical Endangered Ecological Community listed under the *Environment Protection and Biodiversity Conservation Act 1999* and the *Threatened Species Conservation Act 1995* that occurs within the broader vicinity of the Pennant Hills Road corridor.	Potential biodiversity impacts including impacts to endangered ecological communities are considered in **Section 7.6** and **Appendix J**. Sydney Turpentine Ironbark Forest consistent with the definition of this community under the *Threatened Species Conservation Act 1995* would be impacted by the project. However, this community within does not meet the equivalent community definition under the *Environment Protection and Biodiversity Conservation Act 1999* within the project disturbance footprint.
	Impacts on non-Critical Endangered Ecological Community or Endangered Ecological Community vegetation contained within the Pennant Hills Road corridor and adjacent areas.	A biodiversity impact assessment is provided in **Section 7.6** and **Appendix J**. The assessment includes consideration of listed threatened species, communities, populations and their habitats.
	Impacts on threatened species that occur or potentially occur within or utilise the road corridor (including nesting, foraging, refuge and dispersal).	A biodiversity impact assessment is provided in **Section 7.6** and **Appendix J**.
	Changes to connectivity and edge effects on the linear remnant vegetation within the Pennant Hills Road corridor and adjacent patches of Blue Gum High Forest.	A biodiversity impact assessment is provided in **Section 7.6** and **Appendix J**. The assessment includes consideration of listed threatened species, communities, populations and their habitats.
	Changes to connectivity of stepping stone vegetation between the Cockle Creek, Lane Cove River and Berowra Creek catchments.	A biodiversity impact assessment is provided in **Section 7.6** and **Appendix J**. The assessment includes consideration of vegetation and habitat connectivity.

Issue category	Issue raised	Where addressed
	Impacts of the project on connectivity for the spread of floristic genetics including seed dispersal via wind, water and fauna and also the pollination of plants through insects and other fauna.	A biodiversity impact assessment is provided in **Section 7.6** and **Appendix J**. The assessment includes consideration of vegetation and habitat connectivity.
	Impacts of the project on connectivity for the movement of fauna species between linear remnant patches within the corridor and adjacent vegetation.	A biodiversity impact assessment, including the identification of wildlife corridors, is provided in **Section 7.6** and **Appendix J**. The assessment also includes consideration of vegetation and habitat connectivity.
	Consideration should be given to the *Draft Hornsby Shire Council Local Environment Plan 2012*, the *Draft Hornsby Shire Council Development Control Plan 2012*, particularly 1B.6 and 1C.1 and Councils Green Offsets Code 2013.	Preliminary calculations of biodiversity offsets are provided in **Section 7.6**. The offsets have been calculated consistent with the Biobanking Assessment Methodology, which has been adopted for use in NSW.
	Impacts upon groundwater and surface water and related impacts (water quality, flora and fauna) upon tributaries of Berowra Creek and Lane Cove River.	Groundwater impacts are assessed in **Section 7.8**. Surface water impacts including water quality are assessed in **Section 7.9**. Biodiversity impacts have been provided in **Section 7.6.3**. These assessments have considered potential impacts on Berowra Creek and the Lane Cover River, including their catchments, water quality and ecology, where relevant.
	Mitigation options and offsets including: weed management and the control of pathogens; alternative locations that minimise impacts on local flora and fauna; protected areas of vegetation and habitat; additional habitat created due to any lost habitat (offset); features to provide suitable fauna crossings; fauna exclusion area in high traffic areas; and fauna refuge areas.	Measures to mitigate and manage biodiversity impacts are been provided in **Section 7.6**. The project has been designed to avoid and minimise the need to clear vegetation, particularly vegetation and habitats of conservation significance, where reasonable and feasible. Preliminary calculations of biodiversity offsets are provided in **Section 7.6**.

Issue category	Issue raised	Where addressed
	Impacts to Kenley Park including: Remnant Blue Gum High Forest and connectivity of vegetation within the park to adjacent Blue Gum Forest; threatened species habitat, populations and communities; connectivity role of the park in relation to stepping stone vegetation between Lane Cove River and Berowra Creek catchments; Transport Infrastructure Development Corporation offset works; and stormwater drainage into tributary of Berowra Creek through Berowra Valley National Park.	A biodiversity impact assessment is provided in **Section 7.6** and **Appendix J**. This assessment considers listed threatened species, communities, populations and their habitats, vegetation and habitat connectivity, indirect impacts through surface and groundwater effects, and cumulative impacts and offsets associated with other major infrastructure projects in the region. Direct impacts to Kenley Park have been avoided through the project design.
Landscape character and visual amenity	The design and visual amenity of associated facilities should be considered both during and after construction, including the impact of temporary hoardings, equipment etc.	An assessment of construction and operational urban design, landscape character and visual amenity is provided in **Section 7.5**. The urban design of the project, including ancillary facilities, would be further developed during detailed design.
	Consideration of impacts should include impacts on views and vistas, including visual settings, amenity and streetscapes.	Assessment of construction and operational urban design, landscape character and visual amenity impacts is provided in **Section 7.5**. The urban design of the project, including ancillary facilities, would be further developed during detailed design.
Socio-economic	An assessment of socio-economic impacts should include the Pacific Highway from Berowra to Wahroonga.	An assessment of social and economic impacts is provided in **Section 7.7**. This includes relevant areas along and around the Pacific Highway.
Geology and soils	Consideration should be given to mitigation options for erosion and sediment control.	Measures to mitigate and manage erosion and sedimentation are provided in **Section 7.8**.
	Likely nature and classification of excavated material should be in accordance with the Department of Environment, Climate Change and Water NSW *Waste Classification Guidelines* and the Environment Protection Authority's *General Resource Recovery Exemptions*.	An assessment of waste, including spoil management is provided in **Section 8.3**. Waste materials would be characterised consistent with the requirements of the Waste Classification Guidelines.
	The potential use of recycled excavated material should be in accordance with the Environment Protection Authority's General Resource Recovery Exemptions pursuant to the *Protection of the Environment Operations (Waste) Regulations 2005*.	An assessment of waste, including spoil management and re-use options is provided in **Section 8.3**. Waste materials would be characterised consistent with the requirements of the Waste Classification Guidelines.

Issue category	Issue raised	Where addressed
Non-Aboriginal heritage	Consideration should be given to draft and listed heritage items and heritage conservation area.	An assessment of non-Aboriginal heritage is provided in **Section 7.10**. The assessment includes consideration of currently listed heritage items, heritage items currently subject to draft listings, and heritage conservation areas.
	Both tunnel portals will be located within existing and adjacent heritage conservation areas.	An assessment of non-Aboriginal heritage, including consideration of heritage conservation areas, is provided in **Section 7.10**. The assessment has taken into account potential impacts on heritage conservation areas.
Land use and property	An assessment of land use and property impacts should include the Pacific Highway from Berowra to Wahroonga.	An assessment of land use and property impacts is provided in **Section 8.1**. The assessment considers land potentially directly and indirectly impacted by the project.
Ku-ring-gai Council		
Biodiversity	For above ground infrastructure located in or adjacent to bushland the planning for bushfire requirements will need to be carefully considered in terms of impact on biodiversity.	Potential biodiversity impacts including consideration of development within bushfire prone land is provided in **Section 7.6**. An assessment of project hazards and risks, including in relation to bushfires, is provided in **Section 8.3**.
Surface water and groundwater	Regional specific guidelines developed by Hornsby Shire Council and Ku-ring-gai Council should be considered in line with the ANZECC 2000 guidelines in relation to water quality impacts. Drainage for project facilities and infrastructure as part of construction and operation	An assessment of surface water, water quality impacts is provided in **Section 7.9**. Where relevant and available, this has considered local guidelines and surface water quality data. Details of project drainage infrastructure are provided in **Chapter 5**, with the potential for localised flooding and drainage changes considered in **Section 7.9**.

Issue category	Issue raised	Where addressed
Traffic	Consideration of traffic impacts / benefits to Pacific Highway for both construction and operation.	An assessment of construction and operational traffic impacts / benefits is provided in **Section 7.1** and **Appendix E**. The assessment includes consideration of the impacts and benefits for the local and regional road network, including the Pacific Highway where relevant.
Noise	Extent of noise reduction measures at the northern portal to be addressed in the EIS.	Measures to manage and mitigate noise impacts are provided in **Section 7.2**. The assessment includes consideration of noise impacts around the northern portal as a result of construction traffic and activities, operational traffic, operational ancillary facilities, and potential portal breakout noise. Noise mitigation and management measures have been identified and proposed in response to modelling and assessment of these noise sources.

Table 6-8 Issues raised by the community

Issue category	Issue raised	Where addressed
Process		
Strategic justification and project need	Appropriateness of the unsolicited proposal process with NSW Government and Transurban.	The unsolicited proposals process in NSW, as outlined in Unsolicited Proposals: Guide for Submission and Assessment (NSW Government, 2014) (revised and updated since its original publication in 2012), is a consistent, transparent and streamlined approach for the receipt, assessment and determination of unsolicited proposals that may be developed and submitted by the private sector for works and/ or activities that would have historically been conducted by Government. Unsolicited proposals and the guidelines that govern their assessment and published on the NSW Government website (http://www.nsw.gov.au/your-government/unsolicited-proposals). The unsolicited proposal received by Government from Transurban and the Westlink M7 Motorway Sponsors in relation to the NorthConnex project has been conducted strictly in accordance with published guidelines that govern unsolicited proposals.
	Selection criteria and process for appointing the preferred tenderer and design.	An outline of the tender evaluation process is provided in **Chapter 4**. A key input into the assessment of tenders was an analysis of potential environmental, social and land use impacts associated with each tender design.
	Evidence that the preferred scheme was the 'best' option.	An overview of the options development process and the tender evaluation process is provided in **Chapter 4**.
	Government investment should focus on public transport initiatives and improvements as well as cycling infrastructure.	The NSW Government recognises the need to provide balanced planning, funding and implementation of transport infrastructure that responds to the needs of New South Wales, including Sydney. The NSW Long Term Transport Master Plan (Transport for NSW, December 2012a) responds to this need with a clear and transparent framework of transport infrastructure priorities, including investments in road, rail and other public transport infrastructure. The Master Plan includes arrangements for funding new and upgrade transport infrastructure, including public transport infrastructure, and a prioritised program for delivery of this infrastructure.
	Support for project as a solution to improve existing traffic congestion and noise impacts along Pennant Hills Road.	The support for the project is acknowledged.

Issue category	Issue raised	Where addressed
	Cost-benefit assessment of project impacts and project objectives.	The justification and conclusion of the project, having taken into account the identified environmental impacts and mitigation measures, is provided in **Chapter 11**. This includes consideration of the project against the objects of the *Environmental Planning and Assessment Act 1979*.
Project funding	Project funding, government contributions and commercial incentives for Transurban.	Project funding arrangements are described in **Chapter 4**. The Australian and State Governments have each committed up to $405 million to the project. The remainder of the cost of the project would be funded by Transurban and the Westlink M7 Shareholders and would be recouped from tolls on the project and changes to tolling for heavy vehicles on some Sydney motorways. The proposed toll on the project would be generally consistent with the tolling structure on the Hills M2 Motorway.
	Increase in tolling and taxes to benefit private sector investment (Transurban).	Project funding arrangements are described in **Chapter 4**. The Australian and State Governments have each committed up to $405 million to the project. The remainder of the cost of the project would be funded by Transurban and the Westlink M7 Shareholders and would be recouped from tolls on the project and changes to tolling for heavy vehicles on some Sydney motorways. The proposed toll on the project would be generally consistent with the tolling structure on the Hills M2 Motorway.
	Increase tolls for trucking industry.	Project funding arrangements, including tolling changes, are described in **Chapter 4**. The Australian and State Governments have each committed up to $405 million to the project. The remainder of the cost of the project would be funded by Transurban and the Westlink M7 Shareholders and would be recouped from tolls on the project and changes to tolling for heavy vehicles on some Sydney motorways. The proposed toll on the project would be generally consistent with the tolling structure on the Hills M2 Motorway.
	Concession Deed changes across the motorway network to fund the Project proposal.	Project funding arrangements are described in **Chapter 4**. The Australian and State Governments have each committed up to $405 million to the project. The remainder of the cost of the project would be funded by Transurban and the Westlink M7 Shareholders and would be recouped from tolls on the project and changes to tolling for heavy vehicles on some Sydney motorways. The proposed toll on the project would be generally consistent with the tolling structure on the Hills M2 Motorway.

Issue category	Issue raised	Where addressed
	Security of project finance and funding needs to ensure the viability of the project.	Project funding arrangements are described in **Chapter 4**. The Australian and State Governments have each committed up to $405 million to the project. The remainder of the cost of the project would be funded by Transurban and the Westlink M7 shareholders and would be recouped from tolls on the project and changes to tolling for heavy vehicles on some Sydney motorways. The proposed toll on the project would be generally consistent with the tolling structure on the Hills M2 Motorway.
	Consideration of distance based and time of use tolling.	Project funding arrangements are described in **Chapter 4**. The proposed toll on the project would be consistent with the tolling structure on the Hills M2 Motorway.
Project development and alternatives	Consideration of alternatives to the proposed tunnel to alleviate traffic congestion.	Project options and alternatives are provided in **Chapter 4**.
	Consideration of other corridors as part of the current project. A more long term option for an extra crossing over the Hawkesbury River, connection to the Westlink M7 and inclusion of a rail line should be included. The 'yellow route' from the 2004 study would resolve the Macquarie Park accessibility problems.	Project options and alternatives are provided in **Chapter 4**. Project alternatives and route alignment options have been assessed through several reports, including community consultation, since 2002. A road tunnel connection consistent with the project has been reviewed and confirmed as meeting the transport needs of Sydney in the immediate term.
	An option for upgrading the Pacific Highway (south / east from M1 Pacific Motorway interchange) should be included.	Upgrading of the Pacific Highway is outside the scope of this project but has been considered in previous studies by Roads and Maritime since 2002 (refer to **Chapter 4**).
	The 'purple route' was preferred as it followed the alignment of Pennant Hills Road and avoided going under homes.	The preferred tender design is within the purple corridor option identified by the 2004 report. Details of the options assessment is provided in **Chapter 4**.
	Project delivery program including construction start, staging and duration.	The project description including project staging is provided in **Chapter 5**. The program for delivery of the project has been developed to strike an appropriate balance between timely implementation of the project and minimisation of impacts on the surrounding environment and communities.

Issue category	Issue raised	Where addressed
	Selection and alternatives for the location of the northern ventilation facility, away from residential area and schools. Suggested alternative to locate the facility within the industrial area located to the North or to the south around Pearce's corner.	The locations of the two project ventilation facilities has taken into account operational efficiencies associated with location close to the main alignment tunnel portals, and balanced consideration of other relevant factors including engineering and construction practicality, local topography and landscape, availability and access to land and the need to acquire land, environmental and land use impacts, and potential community disruption during construction. Further details regarding site selection for the ventilation facilities is provided in **Chapter 4**.
	Selection and alternatives for the location of the southern ventilation facility, away from residential area. Suggested alternative to locate the facility within the Pennant Hills Golf Club, to the east of Pennant Hills Road.	The ventilation facilities for project have been shown through the air quality assessment (refer to **Section 7.3**), human health risk assessment (refer to **Section 7.4**) and the noise assessment (refer **Section 7.2**) to meet acceptable air quality, health and noise outcomes during operation. In most cases, impacts on receivers adjacent to and around the ventilation facilities are very low. On this basis, it has been concluded that both ventilation facilities could be operated in their proposed locations without significant impacts on the environment or local communities. Further details regarding site selection for the ventilation facilities is provided in **Chapter 4**.
	Selection and alternatives for the location of the Wilson Road tunnel support facility. Suggested alternative to locate the facility across Pennant Hills Road in Observatory Park.	For operational and safety reasons, the tunnel support facilities are required to be located at around third points along the main alignment tunnels and directly above the tunnels. The assessments undertaken and presented in this environmental impact statement demonstrate that the Wilson Road tunnel support facility could be constructed and operated without significant impacts on the environment or local communities. Further details regarding site selection for the tunnel support facilities is provided in **Chapter 4**.
	Selection and alternatives for the location of the Trelawney Street tunnel support facility. Suggested alternative to locate the facility in the industrial land area across Pennant Hills Road.	For operational and safety reasons, the tunnel support facilities were required to be located at around third points along the main alignment tunnels and directly above the tunnels. The assessments undertaken and presented in this environmental impact statement demonstrate that the Trelawney Street tunnel support facility could be constructed and operated without significant impacts on the environment or local communities. Further details regarding site selection for the tunnel support facilities is provided in **Chapter 4**.

Issue category	Issue raised	Where addressed
	Consideration of the Equilibria project proposal as a design alternative. The Equilibria proposal involved the northern portals of the NorthConnex tunnel being moved approximately one kilometre further north along the M1 Pacific Motorway and for the current footprint of the M1 Pacific Motorway to be used for residential development.	The alternative Equilibria proposal to government would need to be considered under the NSW Government's unsolicited proposals process. The equilibria proposal does not align with the unsolicited proposal currently being considered by the NSW Government in accordance with *The Guide of Submissions and Assessment of Unsolicited Proposals (2012).* A response has been provided to the Equilibria proponents citing safety, traffic management, financial and equity limitations including: • No suitable alternative for dangerous goods vehicles travelling along the M1 Pacific Motorway. Vehicles carrying dangerous goods would be forced off the motorway around Berowra and would need to travel through additional residential areas of Berowra, Asquith and Hornsby. Alternatively, safety standards would need to be relaxed to allow dangerous goods vehicles in the tunnel which would have potential implications for in-tunnel road safety. • Forcing vehicles who need to access the Pennant Hills road corridor from the M1 Pacific Motorway through a tolled tunnel. • Lack of consideration of traffic management issues of the tunnel extension were closed due to an incident (unlike NorthConnex with Pennant Hills Road remaining as an alternative). • Lack of robust financial and cost estimate information that allows for proposal appraisal. The additional length of tunnelling would also require another intermediate tunnel support facility (similar to the Wilson Road and Trelawney Street tunnel support facilities) in order to provide a safe in-tunnel environment in the event of an emergency. This would result in additional land acquisition, and associated social and environmental impacts.
Project scope	The location, number, scale and design features of the northern and southern interchanges.	A project description including interchange information is provided in **Section 5**. The northern and southern interchanges have been designed to provide efficient traffic connections, and to balance environmental and community issues to minimise impacts overall.
	Design options including elevated sections of road or ramps.	Design refinements carried out as part of the tender process are described in **Chapter 4**.
	Mid-tunnel access options for motorists (eg near Beecroft Road).	The reasons for not including an intermediate interchange in the scope of the project are discussed in **Chapter 4**.

Issue category	Issue raised	Where addressed
	Tunnel depth, alignment options following Pennant Hills Road or under properties.	Design refinements carried out as part of the tender process, including consideration of tunnel depth and the horizontal alignment are described in **Chapter 4**.
	Tunnel interface, including design and safety implications, with other infrastructure such as the North West Rail Link.	Design refinement details including the consideration of other infrastructure are provided in **Chapter 4**.
	Hills M2 Motorway integration work is on the same side of the motorway as the previous widening for the Hills M2 Motorway Upgrade project. The same residents will be impacted again.	The scope of the Hills M2 Motorway integration works is detailed in **Chapter 5**. Potential impacts from this project component are provided throughout the impact assessment sections in **Chapter 7** and **Chapter 8**.
	Southern interchange ramp design and location resulting in impacts on nearby residential areas.	The design of the southern interchange is described in **Chapter 5**. Potential impacts from this project component are provided throughout the impact assessment sections in **Chapter 7** and **Chapter 8**. The southern interchange and tunnel portals have been design and located to optimise traffic efficiency, minimise engineering complexity and cost, and minimise potential impacts on the environment, local communities and land use. The need for land acquisition has been minimise through design of this infrastructure.
	Northern interchange and tunnel portal entry and exit design and locations resulting in impacts on nearby residential areas.	The design of the northern interchange is described in **Chapter 5**. Potential impacts from this project component are provided throughout the impact assessment sections in **Chapter 7** and **Chapter 8**. The northern interchange and tunnel portals have been design and located to optimise traffic efficiency, minimise engineering complexity and cost, and minimise potential impacts on the environment, local communities and land use. The need for land acquisition has been minimise through design of this infrastructure.
	Design, including form and height, of the tunnel ventilation and support facilities in relation to existing residential context.	Project description including the design of the tunnel, ancillary facilities and ventilation system is provided in **Chapter 5**. Tunnel ventilation facilities have been design to provide efficient and effective dispersion of emissions, having regard to surrounding receivers, meteorology and topography. The need to minimise visual impacts, land take and disruption to the local community were also important factors taken into account in the design of the ventilation facilities. A similar design process has been applied to other ancillary facilities, which have been subject to a balance assessment of potential environmental, community and land use issues to minimise potential impacts overall.

Issue category	Issue raised	Where addressed
	Limitation of tunnel design to include only two lanes in each direction, when the tunnel is opened.	Design options including the number of lanes are provided in **Chapter 4**. The decision to open with project to two lanes of traffic in each direction has been based on traffic forecasting and detailed analysis of traffic demands. To future-proof the project, space has been allowed in the main alignment tunnels to mark a third lane in each direction, if growth in traffic demand and other operational considers warrant increased tunnel capacity.
	Noise reduction road surface material to be considered as part of project design.	Measures to mitigate and manage noise impacts are provided in **Section 7.2**. The design of the project includes low noise road pavement for surface works on motorways.
	Future extent of additional widening along the M1 Pacific Motorway to accommodate the use of the third lane in each direction.	Any future widening of the M1 Pacific Motorway, if undertaken, is outside the scope of this project. If required in the future, works on the M1 Pacific Motorway would be subject to separate assessment and approval in accordance with the *Environmental Planning and Assessment Act 1979*.
Environmental assessment	Environmental impact statement methodology for the project.	The impact assessment methodology for each environmental aspect is consistent with relevant guidelines. Details of the assessment methodologies are provided in **Chapter 7** and **Chapter 8**.
	Consideration of construction and operational impacts.	Assessment of environmental impacts from construction and operation of the project is provided in the respective sections of **Chapter 7** and **Chapter 8**.
	Consideration of alternatives.	A description of the options and alternatives process is provided in **Chapter 4**.
	Degree to which issues raised by the community are addressed in the environmental impact statement.	Details of community consultation are provided in this chapter. Issues raised have been considered in the environmental impact statement and in the design of the project.
	Degree to which the assessment process is conducted in an independent manner.	This environmental impact statement has been: • Prepared in accordance with relevant guidelines developed by regulatory agencies. • Certified by the authors as neither false nor misleading. • Reviewed by regulatory agencies including the Department of Planning and Environment, the EPA, NSW Health, NSW Office of Water, Office of Environment and Heritage, and Department of Primary Industries. The Department of Planning and Environment has undertaken an assessment of the project and recommended the Minister for Planning makes a determination with consideration given to community and regulatory agency inputs.

Issue category	Issue raised	Where addressed
	Extend consultation period as part of the environmental impact statement public exhibition period due to lack of consultation during the project development phase, the complexity and scale of the project and the significant potential impact of the project.	The public exhibition period for this environmental impact statement is determined by the Department of Planning and Environment, and in accordance with the provisions of the *Environmental Planning and Assessment Act 1979*. The minimum period for public exhibition would be 30 days. Any extensions to this period are at the discretion of the Department of Planning and Environment.
	Environmental impact statement, technical documents and air quality data should be presented in plain-English and accessible to the public.	The environmental impact statement is prepared to enable the document to be accessible and understood by the general public. A series of community information sessions have been programmed during the public exhibition of the environmental impact statement to provide further opportunities for interested community members to discuss information presented in the environmental impact statement.
Consultation process	Availability and accessibility of data collected from field investigations such as noise, air quality and traffic monitoring data to the public.	The data collected from field investigations has been presented in the relevant sections of this environmental impact statement.
	Timing and inadequacy of available project information and distribution.	Consultation undertaken during the preparation of the environmental impact statement is described in this chapter. Consultation has included provision of information to the community as it becomes available, and will continued through the public exhibition of the environmental impact statement, including community information sessions.
	Extent of distribution area for project related communication (such as Community Update newsletters and letters to the householder).	The distribution area for community information materials has covered the local community around all project components. In identifying the distribution area, all endeavours were made to ensure that potentially affected and interested community members were informed of project consultation activities.
	Details of the communication program to advise the community of the project scope, proposed design, tender evaluation, environmental assessment process, project development and opportunities for consultation.	Details of the consultation process throughout the project are provided in this chapter.
	Accessibility and location selection of community information session venues.	Community information sessions were scheduled across the project corridor. In identifying the community information venues, all endeavours were made to ensure that potentially affected and interested community members had reasonable access to information session venues.

Issue category	Issue raised	Where addressed
	Community event format – formal Question and Answer structure does not provide enough opportunity for individuals to raise questions and concerns across the project.	Community events were structured to provide a balance between those who preferred to ask questions in an open forum and those who prefer to ask questions on an individual basis. A mix of question-answer sessions, information displays and one-on-one discussions with members of the project team have been provided.
	Concern regarding the limited project details available for effective community consultation in the early project stages.	Project details were provided to the community at community information sessions at the earliest available opportunity.
	Lack of transparency and community involvement as part of the unsolicited proposal process.	The unsolicited proposals process in NSW, as outlined in Unsolicited Proposals: Guide for Submission and Assessment (NSW Government, 2014) (revised and updated since its original publication in 2012), is a consistent, transparent and streamlined approach for the receipt, assessment and determination of unsolicited proposals that may be developed and submitted by the private sector for works and/ or activities that would have historically been conducted by Government. Unsolicited proposals and the guidelines that govern their assessment and published on the NSW Government website (http://www.nsw.gov.au/your-government/unsolicited-proposals). The unsolicited proposal received by Government from Transurban and the Westlink M7 Motorway Shareholders in relation to the project has been conducted strictly in accordance with published guidelines that govern unsolicited proposals.
	Accessibility of background information and previous studies such as the Pearlman Report.	Background information including the 2004 report and the 2007 Pearlman Review are available on the Roads and Maritime Services website at: (www.rms.nsw.gov.au/roadprojects/projects/building_sydney_motorways) Background information relevant to the project has been provided through community information sessions as it has become available.
	Opportunity for community consultation on the preferred tender design to inform changes to the project proposal.	Community consultation throughout the detailed design and construction stages are described in this chapter and the Community Communication Framework in **Appendix D**. Consultation on the location and design of the project has been ongoing since 2002.
	Lack of consultation with residents regarding the location and the design of ancillary project surface infrastructure, including the location of the ventilation outlets and tunnel support facilities.	The selection process for the locations of the ancillary infrastructure is provided in **Chapter 4**. The project, including ancillary project infrastructure, has been designed with a balanced consideration of engineering practicalities, cost implications, road network performance and safety, environmental and community impacts, and land use and land acquisition requirements. The project design has been optimised to minimise impacts overall.

Issue category	Issue raised	Where addressed
	Limited and inaccurate visual images to represent the project proposal. Before and after images requested to provide a more clear understanding of proposed buildings and sites.	Before and after artists' impressions of the project are provided in **Section 7.5**.
	Concern project information may not be reaching non-English speaking background families and communities.	Community updates provide relevant information for people of non-English speaking background to gain information regarding the project, including details of translation services.
	Inadequate consultation and notification regarding Hills M2 Motorway integration work. Work will result in cumulative construction and long-term impacts on the same communities impacted by the recent Hills M2 Motorway Upgrade project.	Consultation with the local community regarding the Hills M2 Motorway integration works is described in this chapter. The relevant sections of the environmental impact statement have considered the cumulative impacts with the recently completed Hills M2 Motorway Upgrade project.
	Complaint management during construction, particularly in relation to night-time work impact on the sleep of local residents.	Consultation strategy including complaint management during construction is provided in this chapter and the Community Communication Framework in **Appendix D**. Information regarding proposed the hours of works are provided in **Chapter 5**.
Potential environmental impacts		
Construction methodology	Construction program, duration of activities and extent of impacts around construction compounds.	The project description including construction staging is provided in **Chapter 5**. The program for delivery of the project has been developed to strike an appropriate balance between timely implementation of the project and minimisation of impacts on the surrounding environment and communities.
	Construction hours for activities at construction compounds.	Project description including construction hours at ancillary facilities is provided in **Chapter 5**. While much of the construction of the project can be carried out during standard construction hours, some construction activities including tunnelling and tunnelling support, and works within live motorways, must be scheduled out of standard construction hours and / or on a continuous basis for practical or safety reasons.
Operational traffic	Potential project benefit to reduce current traffic levels on Pennant Hills Road and the local traffic network.	Assessment of traffic impacts including identification of potential benefits is provided in **Section 7.1** and **Appendix E**.

Issue category	Issue raised	Where addressed
	Improved reliability along Pennant Hills Road due to a reduction in traffic accidents.	Assessment of traffic impacts including identification of potential benefits is provided in **Section 7.1** and **Appendix E**.
	Impact to traffic flow on the Hills M2 Motorway, Pennant Hills Road, local area networks and the Sydney Orbital network.	Assessment of traffic impacts including identification of potential benefits is provided in **Section 7.1** and **Appendix E**.
	Traffic on Pennant Hills Road will not improve as a result of the project because the existing topography and surrounding bushland reserves make Pennant Hills Road the primary north-south roadway.	Assessment of traffic impacts including identification of potential benefits is provided in **Section 7.1** and **Appendix E**.
	Management of trucks on Pennant Hills Road and incentives to use the tunnel.	Details regarding heavy vehicle regulatory measures are provided in **Chapter 5**.
	Adjustments to Pennant Hills Road as part of the project proposal to reduce the number of surface lanes, changes to traffic light sequences, funnel vehicles into the tunnel and to include a dedicated bus lane and / or cycle lane.	A detailed description of all work associated with the project is provided in **Chapter 5**. While the project provides opportunities for future enhancements along Pennant Hills Road, these do not form part of the scope of this project and would need to be considered separately by the relevant government agencies.
	Changes to existing intersections and interchanges at the northern and southern end of the tunnel.	A detailed description of work associated with the project including surface works around interchanges is provided in **Chapter 5**.
	Ineffective operation of the interchanges and their integration into the local road network resulting in drivers using local roads as rat runs, especially during construction.	Assessment of traffic performance of the interchanges is provided in **Section 7.1** and **Appendix E**.
	Changes to the local road network and traffic conditions on local streets.	Changes to the local road network are outlined in **Chapter 5**.

Issue category	Issue raised	Where addressed
	Use of traffic lights at the tunnel entry and exit points.	Traffic lights are not proposed at tunnel entry and exit points. Traffic lights at tunnel entry and exit points would not be consistent with the intended operation of the project as a seamless, efficient motorway connection.
	Traffic modelling to remove 50 per cent of trucks off Pennant Hills Road is not enough to make an improvement given the increase in future traffic volumes. Pennant Hills Road will remain congested.	Assessment of operational traffic impacts, including future conditions along Pennant Hills Road, is provided in **Section 7.1**.
Construction traffic	Access to construction areas from residential roads and residents impacted along truck haulage routes.	Site access and egress and haulage routes are provided in **Section 7.1**. Wherever possible, site access points have been located with direct access to and from the arterial road network.
	Construction access for work on the Darling Mills Creek viaduct should not use Ventura Road for access.	Access arrangements for the Darling Mills Creek compound are described in **Chapter 5**. In response to this feedback received, use of Ventura Road access tack has been limited to the delivery and removal of large excavation equipment only. The main access point would be directly to and from the Hills M2 Motorway.
	Construction impact on bushwalking access under the Darling Mills Creek viaduct.	Impacts during construction to the walking track are described in **Section 7.7**.
	Traffic delays on the Hills M2 Motorway and local roads as a result of construction activities and truck movements.	An assessment of construction traffic impacts is provided in **Section 7.1**. Disruptions to traffic during construction would be managed to minimise the extent and duration of impacts to the surrounding road network.
	Impact on existing traffic volumes on Pennant Hills Road and the surrounding road network by introducing large numbers of construction vehicles onto these roads.	An assessment of construction traffic impacts is provided in **Section 7.1**. Construction traffic would be scheduled and managed to minimise potential impacts on the surrounding road network where reasonable and feasible.
	Traffic impact from increase in heavy vehicles during construction on location streets and intersections	An assessment of construction traffic impacts is provided in **Section 7.1**. Construction traffic would be scheduled and managed to minimise potential impacts on the surrounding road network where reasonable and feasible.
	Traffic impact along spoil haulage routes.	An assessment of construction traffic impacts is provided in **Section 7.1**.

Issue category	Issue raised	Where addressed
	Existing parking problems on local streets, particularly near to bus and train stops, will increase during construction.	An assessment of construction traffic impacts is provided in **Section 7.1**. It is proposed to utilise a central parking location for construction workers in order to limit potential parking impacts surrounding the compounds.
	Managing pedestrians around heavy construction vehicles especially during school hours.	An assessment of construction traffic impacts, including the identification of mitigation measures which consider the safety of the public, is provided in **Section 7.1**. Construction traffic would be scheduled and managed to minimise potential impacts on the surrounding road network where feasible and reasonable.
Public transport impact	Changes to public transport service and routes along Pennant Hill Roads, Hills M2 Motorway and local streets during construction and operation.	Potential impacts on public transport and local streets during construction and operation of the project are described in **Section 7.7**.
	Changes to public transport services and routes along the Hills M2 Motorway during construction and operation.	Potential impacts on public transport during construction and operation of the project are described in **Section 7.7**.
	Impact to existing bus stops including Barclay Road and Oakes Road during construction and / or operation.	Potential impacts on public transport during construction and operation, including potential for alterations to the Barclay Road and Oakes Road bus stops are described in **Section 7.7**.
	Provision of additional parking around train stations and bus stops should be considered.	Provision of additional car parking for public transport infrastructure is outside the scope of this project.
Cyclist considerations	Impact to cyclists on the Hills M2 Motorway during construction of required westbound integration work.	Potential impacts on cyclists during construction and alternative cycle routes are discussed in **Section 7.7.3**.
	Safety and design considerations for an alternative cycle route during construction.	Potential impacts on cyclists during construction and alternative cycle routes are discussed in **Section 7.7**.
	Opportunity to include a dedicated cycle lane on Pennant Hills Road.	The project offers the potential to consider enhancements along Pennant Hills Road in the future, however these do not form part of this project. The potential for future embellishments would be subject to separate consideration by relevant government agencies and local councils.
Operational traffic safety	Likelihood of an incident as a result of overheight vehicles within the tunnel.	The tunnel has been designed as the highest tunnel is Sydney to reduce the likelihood of an incident involving overheight vehicles. This, along with tunnel overheight detection systems are discussed in **Section 8.2**.

Issue category	Issue raised	Where addressed
	Risk to local communities of a tunnel collapse incident similar to what occurred during the construction of the Lane Cove Road tunnel.	Lessons learnt from the Lane Cove tunnel incident have been applied to the design and construction methods for this project. The risk of tunnel collapse is discussed in **Section 8.2**.
	Tunnel design features to minimise driver fatigue and potential for in-tunnel incidents.	Measures to minimise operational hazards and risks including the potential for in-tunnel incidents are provided in **Section 8.2**. In-tunnel way finding signage is proposed in order to provide interest to the journey through the tunnel and minimise the risk of driver fatigue.
Hazard and incident response	Management of dangerous goods vehicles in the tunnel.	Dangerous goods would not be allowed in the tunnel.
	Incident management in case of fire or blackout in the tunnel.	Tunnel emergency management infrastructure and procedures are described in **Chapter 5** and **Section 8.2**.
	Potential for motorists to be trapped in the tunnel during major bushfire events. The M1 Pacific Motorway and Pennant Hills Road have been blocked as a result of bushfires in the past.	The design of tunnel includes in-tunnel management measures in the event of incidents. These are described in **Section 8.2**.
	Development of emergency response management plan.	The emergency response and management features of the project are described in **Section 8.2**.
Noise and vibration	Existing and increasing noise levels from heavy vehicles on Pennant Hills Road.	Assessment of construction and operational noise impacts is provided in **Section 7.2** and **Appendix F**.
	Existing and increasing noise levels on Hills M2 Motorway from heavy vehicles and the use of compression breaking. Existing noise issues since the connection with the Westlink M7 remains unresolved and will increase as a result of widening work and additional heavy vehicles from the tunnel.	Assessment of construction and operational noise impacts is provided in **Section 7.2** and **Appendix F**.
	Existing and increasing noise levels along the M1 Pacific Motorway.	Assessment of construction and operational noise impacts is provided in **Section 7.2** and **Appendix F**.

Issue category	Issue raised	Where addressed
	Acceptability of noise impact assessment methodology, including adequacy of monitoring and modelling as well as the process for determining noise mitigation options and properties eligible to receive noise treatment.	The noise and vibration methodology, assessment of potential impacts, and management and mitigation measures are provided in **Section 7.2** and **Appendix F**.
	Noise wall movements along the NorthConnex tunnel, M1 Pacific Motorway and the Hills M2 Motorway.	Measures to manage and mitigate operational noise impacts, including an assessment of noise barriers, is provided in **Section 7.2**.
	Noise wall design, height, material and colour. Noise walls should blend into environmental surroundings, eg painted green, similar to some existing noise walls along the Hills M2 Motorway.	An assessment of visual and urban design impacts including noise walls is provided **Section 7.5**. Final details of the nature, location and design of noise walls would be established during detailed design of the project.
	Consideration of noise walls along the Darling Mills Creek viaduct on the Hills M2 Motorway.	Measures to manage and mitigate operational noise impacts, including an assessment of noise barriers, is provided in **Section 7.2**. Final details of the nature, location and design of noise walls would be established during detailed design of the project.
	Design and extent of new noise walls around the tunnel support facilities and ventilation facilities. Clarification on existing noise walls to be retained along the M1 Pacific Motorway.	Measures to manage and mitigate operational noise impacts, including an assessment of noise barriers, is provided in **Section 7.2**. Final details of the nature, location and design of noise walls would be established during detailed design of the project.
	Inadequate existing noise walls along existing roads including the Hills M2 Motorway and M1 Pacific Motorway. Many existing noise walls are made of old materials and are not high enough.	Measures to manage and mitigation operational noise impacts, including an assessment of noise barriers, is provided in **Section 7.2**. Final details of the nature, location and design of noise walls would be established during detailed design of the project.
	Noise impact at properties located near to ventilation outlets and the tunnel support facilities during construction and operation.	Assessment of construction and operational noise impacts is provided in **Section 7.2** and **Appendix F**.
	Noise impact at properties located near the northern and southern interchange.	Assessment of construction and operational noise impacts is provided in **Section 7.2** and **Appendix F**.

Issue category	Issue raised	Where addressed
	Noise impact on residential properties nearby construction compounds and along spoil disposal haulage routes.	Assessment of construction noise impacts, including construction traffic noise, is provided in **Section 7.2** and **Appendix F**.
	Noise impact as a result of night work as part of tunnelling and along the Hills M2 Motorway.	Assessment of construction noise impacts, including potential out of hours works, is provided in **Section 7.2** and **Appendix F**.
	Vibration impact as a result of tunnelling work and construction activities, particularly at night.	Assessment of construction vibration impacts is provided in **Section 7.2** and **Appendix F**.
	Vibration impact in homes located above the tunnel during operation, particularly where the tunnel ramps are shallow to the surface.	Assessment of construction vibration impacts is provided in **Section 7.2** and **Appendix F**.
	Operational vibration impact resulting in disruption and property damage.	Assessment of construction vibration impacts is provided in **Section 7.2**. The operation of the project tunnels is not anticipated to generate vibration impacts.
	Acceptable noise levels for construction and operation.	Assessment of construction and operational noise impacts is provided in **Section 7.2**. The noise criteria have been established in accordance with the relevant applicable noise assessment guidelines and policies endorsed by the Environment Protection Authority.
	Impact along the Hills M2 Motorway from night work and the relocation of existing operational noise walls.	Assessment of construction and operational noise impacts is provided in **Section 7.2**, including for construction activities to be conducted outside of standard construction hours.
	Construction noise impact at properties along Pennant Hills Road, the Hills M2 Motorway and around the two interchanges.	Assessment of construction noise impacts is provided in **Section 7.2** and **Appendix F**.
Air quality	Construction dust impact at properties near Pennant Hills Road, Hills M2 Motorway and construction compounds.	Assessment of construction air quality impacts is provided in **Section 7.3** and **Appendix G**.
	Potential improvements to local air quality that would result from less congestion and traffic on Pennant Hills Road.	Assessment of operational air quality impacts and benefits is provided in **Section 7.3** and **Appendix G**.

Issue category	Issue raised	Where addressed
	Qualitative and quantitative effects on regional and local air quality.	Assessment of construction and operational air quality impacts is provided in **Section 7.3** and **Appendix G**.
	Monitoring, management and mitigation of potential local air quality impact. Transparency and availability of air quality data and assessments to the public.	Assessment of construction and operational air quality impacts and measures to manage and mitigate the impact is provided in **Section 7.3**. Air quality data is provided in the technical working paper: air quality in **Appendix G**.
	Opportunity for tunnel design to minimise in tunnel air quality impact.	The tunnel has been designed to maintain appropriate air quality within the tunnel that is protective of the health and amenity of motorists. An assessment of the air quality within the tunnels is provided in **Section 7.4**.
	Number, location and design height of ventilation facilities along the project corridor.	A description of ventilation systems and facilities is provided in **Chapter 5** and **Section 7.3**.
	Opportunity to use filtration to treat air quality in the tunnel and from ventilation facilities such as on the M5 East, particularly in residential areas.	Discussion of potential filtration as part of the project ventilation system is provided in **Section 7.3**. Based on an assessment of the costs and benefits of tunnel filtration, and in light of the minimal air quality and human health impacts of the project, it has been concluded that tunnel filtration is not warranted.
	Management of in-tunnel air quality during operation and during incident response.	The project ventilation system has been designed to maintain appropriate air quality within the tunnel that is protective of the health and amenity of motorists. An assessment of the air quality within the tunnels is provided in **Section 7.4**.
	Location of existing background air quality monitoring stations.	The rationale for the locations of the background air quality monitoring stations is provided in **Section 7.3**.
	Duration of background monitoring to inform the air quality assessment.	An overview of background air quality monitoring is provided in **Section 7.3**.
	Location of permanent air quality monitoring locations as part of tunnel operations.	Operational air quality monitoring is described in in **Section 7.3**. Details of operational air quality monitoring would be developed during detailed design of the project, and to meet the specific requirements of conditions of approval, if relevant.
	Consideration should be given to monitoring air quality at residential properties nearby the ventilation outlets.	Operational air quality monitoring is described in in **Section 7.3**. Details of operational air quality monitoring would be developed during detailed design of the project, and to meet the specific requirements of conditions of approval, if relevant.
	Clarification on what pollutants are being monitored and measured.	The air quality impact assessment methodology is provided in **Section 7.3**, including pollutants that have been monitored.

Issue category	Issue raised	Where addressed
	Clarification on who is responsible for monitoring and the analysis of the results.	Monitoring has been undertaken by the project on behalf of Roads and Maritime. The analysis of air quality results has been undertaken as part of the environmental impact statement. Future monitoring requirements would be determined in consultation with the Environment Protection Authority and would be undertaken by the motorway operator.
	Existing air quality impact along the Hills M2 Motorway, M1 Pacific Motorway and Pennant Hills Road will not be addressed but rather impact will increase.	The assessment of construction and operational air quality impacts and benefits is provided in **Section 7.3**. Air quality modelling has been conducted for areas likely to be affected by air quality changes associated with the project.
	Consideration of weather conditions as part of the air quality assessment.	The air quality impact assessment includes consideration of meteorological conditions. The methodology is described in **Section 7.3**.
	Air pollution contributions from NorthConnex tunnel emissions in comparison to other pollution source contributions in Sydney.	Assessment of construction and operational air quality impacts and benefits is provided in **Section 7.3**. Predicted contributions of air pollutants from the project have been compared with background concentrations of those pollutants.
	Consideration for the EPA to license emissions discharge from the tunnel under the *Protection of the Environment Operations Act 1997*.	Schedule 1 of the *Protection of the Environment Operations Act 1997* provides activities for which an environment protection licence is required. In includes construction but not operation of the project.
	Assessment of impacts from nano-particles as part of the air quality assessment.	The air quality assessment has been undertaken in accordance with the Director-General's Requirements and the Approved Methods for the Modelling and Assessment of Air Pollutants (DEC, 2005a). The methodology is described in **Section 7.3**. The assessments particles as small as the $PM_{2.5}$ fraction.
	Scope of air quality assessment to include the tunnel at full capacity.	The air quality assessment includes a scenario for the theoretical maximum peak hour capacity. This is provided in **Section 7.3**.
	Potential assessment of impacts from tunnel portal emissions.	Assessment of operational air quality impacts and benefits is provided in **Section 7.3**. The project does not currently propose portal emissions from the main alignment tunnels, however this approach may be considered in the future and would be subject to appropriate assessment and approval at the relevant time.
	Air quality assessment to include the microclimate of the Spring Gully valley, prevailing winds and other metrological conditions.	The air quality impact assessment includes consideration of local and regional meteorological conditions. The methodology is described in **Section 7.3**.

Issue category	Issue raised	Where addressed
	Requirements and scope for continuous monitoring of air quality impacts and transparency in reporting.	Operational air quality monitoring is described in in **Section 7.3**. Details of operational air quality monitoring would be developed during detailed design of the project, and to meet the specific requirements of conditions of approval, if relevant.
	Two ventilation outlets are insufficient to manage in-tunnel air quality and will result in concentrating emissions at two points rather than distributing emissions across multiple points.	Assessment of operational air quality impacts within the tunnel and around the two ventilation outlets is provided in **Section 7.3**. The assessment demonstrates that two ventilation facilities are adequate to ensure that air pollution contributions from the project are within air quality and health risk criteria, and in most cases lower than existing background pollution.
Health	Air quality impact as a result of the project may cause health issues for residents living near ventilation and emergency smoke extraction facilities.	Assessment of health impacts is provided in **Section 7.4**. The health assessment demonstrates that the project would not pose an unacceptable health risk.
	Adverse impacts from air pollution, particularly on young children and elderly residents.	Assessment of health impacts is provided in **Section 7.4**. The assessment includes consideration of sensitive populations, including infants, children and the elderly.
	Air quality impact at schools and other sensitive receivers within the project corridor.	Assessment of health impacts is provided in **Section 7.4**. The assessment includes consideration of sensitive receivers.
	Health impacts on nearby residents experiencing increased stress caused by the project.	Assessment of health impacts is provided in **Section 7.4**.
	Impacts from new substations on local residents as a result of exposure to electro-magnetic fields.	Consideration of electric and magnetic fields from substations is provided in **Section 8.2**. Substations and electrical infrastructure would be designed to meet current guidance on electric and magnetic fields from the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).
	Impacts on health as a result of long-term exposure versus short term impacts and irritation.	Assessment of health impacts is provided in **Section 7.4**. The assessment includes consideration of both acute (short term) and chronic (long term) health effects.
	Increase in the incidence of cancer and cardio-respiratory disease as a result of the project.	Assessment of health impacts is provided in **Section 7.4**. The assessment includes consideration of cancer and cardio-respiratory disease.
	Impact of ultra-fine particles on health.	Assessment of health impacts is provided in **Section 7.4**.

Issue category	Issue raised	Where addressed
	Response to findings from previous reports, noting impact to local air quality as a result of tunnel ventilation outlets and / or portals.	Assessment of health impacts is provided in **Section 7.4**. The assessment considers previous advice from the National Health & Medical Research Council in relation to air quality in and around road tunnels.
Landscape character and visual amenity	Noise wall treatment and colour should complement existing environmental surroundings along the M1 Pacific Motorway and the Hills M2 Motorway.	An assessment of visual and urban design including noise walls is provided **Section 7.5**. Noise wall treatment long the Mills M2 Motorway would be consistent with the urban design for the recently completed Hills M2 Motorway Upgrade project.
	Visual impact on nearby residents from the location of signage and lighting along the Hill M2 Motorway, tunnel portals, toll gantries and other support facilities.	Assessment of visual impact from the operation of the project is provided in **Section 7.5**.
	Visual impact from tunnel ramps and entry and exit portals, including view changes and impacted sight lines.	Assessment of visual impact from the operation of the project is provided in **Section 7.5**.
	Visual impact of ventilation facilities and outlets.	Assessment of visual impact from the operation of the project is provided in **Section 7.5**.
	Request for permanent noise walls and landscaping plantings around the operational ancillary facilities to be carried out early in the construction program.	In response to feedback received during the preferred tender design exhibition a mitigation measure was incorporated to consider the early implementation of permanent noise walls and landscaping around operational ancillary facilities during construction planning. This is described in **Section 7.5**.
	Visual impact from tunnel support facilities.	Assessment of visual impact from the operation of the project is provided in **Section 7.5**. In response to the feedback received during the preferred tender design exhibition, the two tunnel support facilities have been lowered in height to reduce their overall bulk and visual impact.
	Impacts from poor landscaping along existing noise walls and the removal of existing vegetation during construction.	An assessment of visual impact from construction and operation of the project is provided in **Section 7.5**. Further details of urban design and landscaping measures would be developed during detailed design.
	Overshadowing and privacy impacts from new buildings on residential properties.	An assessment of visual impact from the operation of the project, including consideration of overshadowing, is provided in **Section 7.5**.

Issue category	Issue raised	Where addressed
Biodiversity	Identification, management and monitoring of potential impacts on the remaining Blue Gum Forest ridge line. Impact may result from a change in ground conditions and geology.	An assessment of biodiversity impacts, including impacts to Blue Gum High Forest, from construction of the project is provided in **Section 7.6**.
	Assessment of impact on microbats and their habitat as a result of the project and nearby ventilation facilities.	Assessment of biodiversity impacts from construction and operation of the project, including potential impacts to microbats, is provided in **Section 7.6**.
	Loss of established trees and vegetation currently providing a buffer to existing roads.	Assessment of biodiversity impacts from construction and operation of the project is provided in **Section 7.6**. Visual impacts associated with the loss of screening vegetation are provided in **Section 7.5**.
	Replanting of native flora during and post construction.	Landscaping and rehabilitation measures are described in **Section 7.5** and **Section 7.6**. Further details of urban design and landscaping measures would be developed during detailed design. It is intended that landscaping would be implemented with native species.
	Seed collection before the removal of vegetation to develop native tube stock for replanting.	Rehabilitation measures to mitigate biodiversity impacts are provided in **Section 7.6**.
	Potential impacts on the Bidjigal Reserve Trust land management area.	Assessment of biodiversity impact from construction and operation of the project is provided in **Section 7.6**. The assessment takes into account potential indirect impacts on the Bidjigal Reserve.
Geology and soils	Concern regarding unstable geotechnical conditions along the corridor.	Assessment of regional geology is provided in **Section 7.8**. Consideration of potential hazards and risks associated with unstable ground conditions are provided in **Section 8.2**.
	Uncertainty regarding existing underground services resulting in tunnelling impacts.	Impacts to existing services are described in **Section 8.1**.
Surface water and ground water	Management of drainage and groundwater issues along the length of the tunnel.	Assessment of surface water impacts, including management measures, is provided in **Section 7.9**. Assessment of groundwater impacts, including management measures, is provided in **Section 7.8**.
	Impacts on existing protected riparian zones such as Spring Gully Creek.	Assessment of surface water impacts and measures to manage and mitigate these impacts is provided in **Section 7.9**.
	Concerns regarding existing drainage issues.	Assessment of surface water impacts and measures to manage and mitigate these impacts is provided in **Section 7.9**.

Issue category	Issue raised	Where addressed
Non-Aboriginal heritage	Impacts on the Hornsby Heritage Conservation Area.	Assessment of potential non-Aboriginal heritage impacts, including conservation areas, is provided in **Section 7.10**.
Resource management and waste minimisation	Management and storage of material from the tunnel and associated surface work.	Management, storage and disposal of spoil is described in **Section 8.3**.
	Peak oil phenomenon and its potential impact on project viability.	Peak oil is discussed in **Section 8.3**.
Cumulative impacts	Cumulative construction impacts and fatigue experienced by nearby residents from the project (including the Hills M2 Motorway integration work), the North West Rail Link, the Epping to Thornleigh third track and the Hills M2 Motorway Upgrade project.	Cumulative impacts with other major construction projects in the region are assessed within the relevant impact assessment sections in **Chapter 7** and **Chapter 8**. Potential construction fatigue associated with the Hills M2 Motorway integration works are discussed in **Section 7.2**.
Social and economic		
Social and economic	Impact on and loss of community facilities to accommodate construction sites.	Assessment of construction and operational impacts on community facilities is provided in **Section 7.7**.
	Aesthetic impact at properties near Pennant Hills Road and the Hills M2 Motorway as a result of construction activities.	An assessment of visual impacts from construction is provided **Section 7.5**.
	Impact on quality of life for residents living near ventilation outlets.	Consideration of social impacts is provided in **Section 7.7**. Impacts on the community are described throughout the relevant assessment chapters.
	Recent community impact from the Hills M2 Motorway Upgrade project.	Assessment of cumulative noise impacts and potential construction fatigue along the Hills M2 Motorway (from the cumulative impacts of the project and the recently completed Hills M2 Motorway Upgrade project) is provided in **Section 7.2**.
Business	Impact on local business as a result of acquisition or loss in passing trade on Pennant Hills Road.	Potential business impacts, including from direct acquisition and from a loss in passing trade is provided in **Section 7.7**.
	Impact on local businesses as a result of construction impact.	Potential business impacts during construction are described in **Section 7.7**.

Issue category	Issue raised	Where addressed
	Opportunities for local businesses.	Potential business impacts and opportunities during construction and operation are described in **Section 7.7**.
	Support for businesses affected by the project.	Mitigation and management measures relating to business impacts are provided in **Section 7.7**.
Land use and property	Early identification and notification of potentially impacted properties along the corridor. Rights and influence (do property owners have a say?) of potentially affected property owners.	Details regarding notification and consultation with affected stakeholders are provided in this **Section 6.1** and **Section 6.3.1** of this chapter. Additional details regarding property impacts are provided in **Section 8.1**.
	Property damage as a result of construction and operation and rectification of damage by the project.	Existing conditions surveys would be undertaken on properties within the preferred project corridor. This, and the potential for damage to properties from vibration, is described in **Section 7.2**.
	Property acquisition of Roads and Maritime owned properties near the southern interchange for the project.	Details regarding property acquisition are provided in **Section 8.1**. Roads and Maritime already own a number of properties required for the project.
	Impact on properties located near the southern and northern interchanges.	Assessment of impacts on land use and property is provided in **Section 8.1**.
	Certainty of the nature and the extent of properties affected by acquisition as part of the project.	Details regarding property acquisition are provided in **Section 8.1**.
	Property valuation process and timing – the project should purchase properties at pre-project values.	Property acquisition would be undertaken in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991*.
	Property owner compensation for loss of property value and quality of life impact as a result of the project.	This environmental impact statement demonstrates that the project would not have a significant impact on surrounding properties or receivers. There would therefore be no basis for devaluation of properties as a result of the potential impacts of the project.
	Property value guarantee and/or buy back scheme similar to what was offered as part of the M5 East project.	This environmental impact statement demonstrates that the project would not have a significant impact on surrounding properties or receivers. There would therefore be no basis for devaluation of properties as a result of the potential impacts of the project.
	Impact on property values above the tunnel or nearby ancillary surface infrastructure.	This environmental impact statement demonstrates that the project would not have a significant impact on surrounding properties or receivers. There would therefore be no basis for devaluation of properties as a result of the potential impacts of the project.

Issue category	Issue raised	Where addressed
	Consideration of voluntary property acquisition as part of the project.	Property acquisition would be undertaken for properties Property acquisition would be undertaken in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991*.
	Impact of sub-stratum land acquisition, constraining the future development of private property.	Property acquisition, including sub-stratum acquisition, would be undertaken in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991*.
	Compensation for sub-stratum land acquisition.	Property acquisition, including sub-stratum acquisition would be undertaken in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991*.
	Unnecessary impact on private property instead of using public spaces such as Observatory Park and Brickpit Park.	The site selection process to determine the location of construction and operational ancillary facilities is provided in **Chapter 4**. Impacts to Observatory Park have been avoided due to the high ecological and heritage value of that site. Brickpit Park is an historical landfill, and has been avoided based on contamination and geotechnical stability issues.
	Long-term insurance from the project for damages that occur in the future, post construction, as a result of tunnel operation.	Existing condition surveys of properties within the preferred project corridor would be undertaken prior to construction in consultation with each property owner. Any damage attributable to the project would be rectified at no cost to the property owner.
	Request for additional geotechnical investigations nearby residences to avoid property impacts and confirm suitability of ground conditions for tunnelling.	Geotechnical investigations have been undertaken to inform the preferred tender design. It is likely that additional geotechnical investigation would be required to inform the detailed design for the project.
	Damage to homes from heavy vehicle movements on residential streets, particularly on older or heritage listed properties.	Vibration impacts from construction and operation, and management measures are provided in **Section 7.2**. Potential impacts to heritage listed properties are assessed in **Section 7.10**.

6.5 Consultation during the exhibition of the environmental impact statement

The environmental impact statement will be advertised and placed on public exhibition for a minimum of 30 days. The environmental impact statement will be available for viewing at the following locations:

- **Hills Shire Council**, 3 Columbia Court, Baulkham Hills.
- **Hornsby Shire Council**, 296 Pacific Highway, Hornsby.
- **Ku-ring-gai Council**, 818 Pacific Highway, Gordon.
- **Gosford City Council**, 49 Mann Street, Gosford.
- **Parramatta City Council**, 30 Darcy Street, Parramatta.
- **Turramurra Library**, 5 Ray Street, Turramurra.
- **Pennant Hills Library**, corner of Ramsey Road and Yarra Road, Pennant Hills.
- **Epping Library,** Chambers Court, Epping.
- **Hornsby Central Library**, 28-44 George Street, Hornsby.
- **Baulkham Hills Library**, Railway Street, Baulkham Hills.
- **NorthConnex Community Information Centre**, 354 – 356 Pennant Hills Road, Pennant Hills.
- **Roads and Maritime Services North Sydney office**, Level 9, 101 Miller Street, North Sydney.
- **Department of Planning and Environment Information Centre**, 23-33 Bridge Street, Sydney.
- **Nature Conservation Council of NSW,** 2/5 Wilson Street, Newtown.

Opening hours of these venues and additional locations where the environmental impact statement can be viewed are provided on the project website (www.northconnex.com.au).

Static displays advertising the environmental impact statement public exhibition will be set up at the following locations:

- Westfield Hornsby, 236 Pacific Highway, Hornsby.
- Pennant Hills Shopping Centre, 4-10 Hillcrest Road, Pennant Hills.
- Thornleigh Marketplace, 2-12 The Comenarra Parkway, Thornleigh.
- Carlingford Court, Pennant Hills Rd, Carlingford.
- Brickpit Park, Dartford Road, Thornleigh.

Staffed displays and stakeholder / community meetings will be held during the exhibition of the environmental impact statement to promote access to project information, environmental impact statement documentation and project representatives. These meetings and displays will provide opportunity for members of the community to ask questions of the project team and help to further inform the development of formal submissions regarding the proposal. During the public exhibition period, the community, government agencies and other interested parties are invited to make written submissions on the project to the Department Planning and Environment.

The community will be informed of the staffed displays through a community update, letters to interest groups who have registered with the project, email notification to registered stakeholders, information on the project website and advertisements in the local and metropolitan media.

During the exhibition of the environmental impact statement an interactive mapping tool will be available to assist community members and property owners in understanding the potential impacts of the project.

Following the exhibition of the environmental impact statement, the Director-General would provide copies of submissions received to Roads and Maritime or a report containing a summary of the issues raised. The Director-General would then require Roads and Maritime to prepare a submissions report to respond to the issues raised. Additionally a preferred infrastructure report may be prepared at this time if changes are proposed to the project.

The Director-General would prepare a Director-General's environmental assessment report and provide it to the Minister for Planning. The Minister for Planning would then decide whether or not to approve the project and the related conditions of approval.

6.6 Future consultation

Following the exhibition period, Roads and Maritime would continue to identify and manage issues of interest or concern to the community during the assessment and approval process and, if the project is approved, during the construction, commissioning and the operational phases. The aims of ongoing communication and consultation are to provide the community with:

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

6.6.1 Consultation during construction and commissioning stages

A community liaison involvement plan would be developed prior to construction and implemented during to construction. This would set out the methods to be employed and stakeholders targeted as part of consultation and communication. **Appendix D** provides a Community Communication Framework for construction, identifying relevant stakeholders, procedures and distributing information and receiving / responding to feedback and procedures for resolving community complaints during construction.

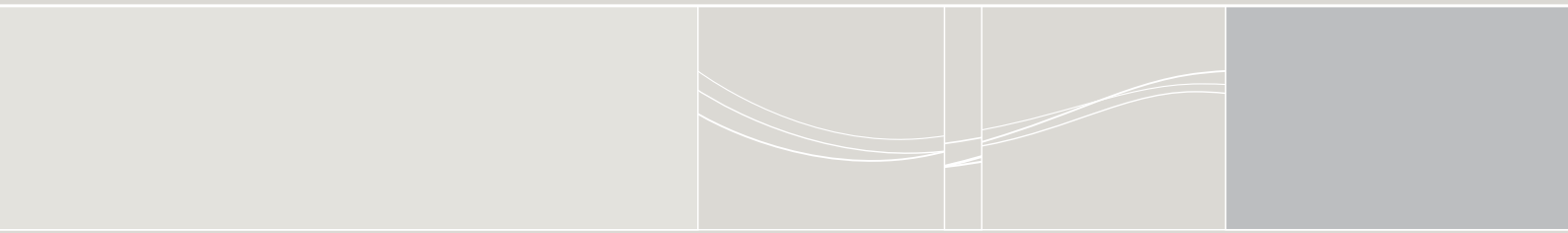
As a minimum, consultation during the detailed design and construction phases of the project would include:

- Ongoing consultation with the emergency services to comply with up-to-date emergency response procedures during construction and operation and to ensure the construction would not constrain emergency services responses in the area.
- Ongoing consultation with The Hill Shire Council, Hornsby Shire Council and Ku-ring-gai Council to manage and minimise any impact on existing infrastructure.
- Ongoing consultation with government agencies including the Department of Planning and Environment, Environment Protection Authority, Department of Primary Industries, NSW Health and NSW Office of Environment and Heritage.
- Provision of regular updates to the surrounding community throughout the remainder of the planning and construction phases.
- Development and maintenance of a comprehensive community complaints register and response system.
- Ongoing consultation with landowners who may be potentially impacted by the project and nearby landowners, residents, business owners and community facility operators. This would include notification, as appropriate, before the start of construction activities, including out of hours work, to minimise any access disruption. Notices relating to road work and road network access changes would be issued as email alerts, placed in local newspapers and delivered to letterboxes at least five days before the change.

6.6.2 Consultation during project operation

Community liaison would continue during the operation phase of the project. Community consultation protocols would be established within an Operational Environmental Management Plan. This would include protocols for:

- Ongoing management of community complaints during operations.
- Community notifications prior to major maintenance activities.
- Wider notifications of major maintenance activities that require full tunnel carriageway closures.



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