NSW GOVERNMENT

Roads and Maritime Services

F6 Extension Stage 1

New M5 Motorway at Arncliffe to President Avenue at Kogarah

Environmental Impact Statement

Appendix A
Statutory Requirements

Volume 3

A

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1 Statutory Requirements

1.1 Section 5.16 of the Environmental Planning and Assessment Act 1979

Performance outcomes	Secretary Environmental Assessment Requirements (SEARs) – SSI 8931	Where addressed
1. Environmental Impact Assessment Process The process for assessment of the proposal is transparent, balanced, well focussed and legal.	1. The Environmental Impact Statement must be prepared in accordance with Part 3 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation).	Chapter 1
	2. It is the Proponent's responsibility to determine whether the project needs to be referred to the Commonwealth Department of the Environment and Energy for an approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).	Section 2.4.1
	3. The onus is on the Proponent to ensure legislative requirements relevant to the project are met.	Chapter 2
2. Environmental Impact Statement The project is described in sufficient detail to enable clear understanding that the project has been developed through an iterative process of impact identification and assessment and project refinement to avoid, minimise or offset impacts so that the project, on balance, has the least adverse environmental, social, and economic impact, including its cumulative impacts.	1. The EIS must include, but not necessarily be limited to, the following: a) an executive summary;	Executive summary
	b) a description of the project and all components and activities (including ancillary components and activities) required to construct and operate it, including:	Chapter 6
	– the proposed route;	Section 6.1
	– design of the tunnels, interchanges (inclusive of tunnel portals and entry and exit ramps), road user, pedestrian and cyclist facilities, signage and lighting;	Section 6.3 Section 6.8 Section 6.9
	– surface road upgrade works, including road widening, intersection treatments and grade separation works, property access, parking, pedestrian and cyclist facilities (including appropriate locations for pedestrian and cyclist under passes or overbridges) and public transport facilities;	Section 6.4 to section 6.8
	– ancillary infrastructure and operational facilities, such as operational and maintenance facilities, ventilation structures and systems, water treatment structures and systems and fire and emergency services and infrastructure for the proposal, including (if required) additional infrastructure (such as tolling infrastructure);	Section 6.9
	– location and operational requirements of construction ancillary facilities and access;	Section 7.3
	– land use changes as a result of the proposal and the acquisition of privately owned, Council and Crown lands, and impacts to Council and Crown lands; and	Chapter 14
	– the relationship and/or integration of the project with existing and proposed transport infrastructure;	Section 4.1.2 Section 4.4.1 Section 4.4.2 Section 6.3 Chapter 8 and Appendix C1.

Performance outcomes	SSI 8931	Where addressed
	c) a statement of the objective(s) of the project, including how it meets the objectives of the overall F6 Extension Proposal.	Section 4.3 Section 5.2 Section 5.7
	d) a summary of the strategic need for the project with regard to its State significance and relevant State Government policy;	Chapter 4
	e) an analysis of any feasible alternatives to the project[1];	Chapter 5
	f) a description of feasible options within the project[2], including: – alternative methods considered for the construction of the project, including the tunnels; and – staging of the proposal;	Chapter 5
	g) a description of how alternatives to and options within the project were analysed to inform the selection of the preferred alternative / option. The description must contain sufficient detail to enable an understanding of why the preferred alternative to, and options within, the project were selected, including:	Chapter 5
	– details of the short-listed route and tunnel options considered, and the criteria that was considered in the selection of the preferred route and tunnel design;	Section 5.2
	– details of the alternative construction methods that were considered, particularly the tie-in with the New M5 tunnel, and the President Avenue interchange;	Section 5.5
	– details of tunnel design and ventilation options considered to meet the air quality criteria for the proposal; and	Section 5.5
	– a justification for the preferred proposal taking into consideration the objects of the Environmental Planning and Assessment Act 1979;	Section 24.8
	h) a concise description of the general biophysical and socio-economic environment that is likely to be directly and indirectly impacted by the project (including offsite impacts). Elements of the environment that are not likely to be affected by the project do not need to be described;	Section 24.2
	i) a demonstration of how the project design has been developed to avoid or minimise likely adverse direct and indirect impacts during construction and operation of the project;	Chapter 5 Section 24.3
	j) the identification and assessment of key issues as provided in the 'Assessment of Key Issues' performance outcome;	Chapter 8 – Chapter 24
	k) a statement of the outcome(s) the proponent would achieve for each key issue;	Chapter 8 through Chapter 24 Section 24.7

[1] Alternatives to a project are different projects which would achieve the same project objective(s) including the consequences of not carrying out the project. For example, alternatives to a road project may be a rail project in the same area and alternate routes for the road, or a combination of these alternatives.
[2] Options within the project are variations of the same project. For example, options within a road project could be design of an intersection; the location or design of a bridge; locations for a ventilation outlet.

Performance outcomes	SSI 8931	Where addressed
	l) measures to avoid, minimise or offset impacts must be linked to the impact(s) they treat, so it is clear which measures would be applied to each impact;	Chapter 8 through Chapter 24
	m) consideration of the interactions between mitigation measures, between impacts and between measures and impacts;[3]	Chapter 8 through Chapter 24
	n) identification of other environmental impacts and proposed measures for managing and/or mitigating the level of impact;	Chapter 8 through Chapter 24
	o) an assessment of the cumulative impacts of the project taking into account other projects that have been approved but where construction has not commenced, projects that have commenced construction, and projects that have recently been completed;	Chapter 8 through Chapter 24
	p) an overview of the potential cumulative impacts of the staged delivery of the F6 Extension (Arncliffe to Loftus) and likely changes to the magnitude of impacts;	Chapter 8 through Chapter 24
	q) statutory context of the project as a whole, including: - how the project meets the provisions of the EP&A Act and EP&A Regulation; and - a list of any approvals that must be obtained under any other Act or law before the project may lawfully be carried out;	Chapter 2
	r) a chapter that synthesises the environmental impact assessment and provides:	Chapter 24
	– a succinct but full description of the project for which approval is sought;	Section 24.1
	– a description of any uncertainties that still exist around design, construction methodologies and/or operational methodologies and how these would be resolved in the next stages of the project;	Section 24.4
	– a compilation of the impacts of the project that have not been avoided	Section 24.5
	– a compilation of the proposed measures associated with each impact to avoid or minimise (through design refinements or ongoing management during construction and operation) or offset these impacts	Section 24.6
	– a compilation of the outcome(s) the proponent would achieve; and	Section 24.7
	– the reasons justifying carrying out the project as proposed, having regard to the biophysical, economic and social considerations, including ecologically sustainable development and cumulative impacts; and	Section 24.8
	s) relevant project plans, drawings, diagrams in an electronic format that enables integration with mapping and other technical software.	Provided to the Department of Planning and Environment separately to this EIS

[3] Measures proposed to avoid or minimise one impact may cause an unintended impact on another issue. Therefore these impacts and their interactions need to be analysed and resolved where possible.

Performance outcomes	SSI 8931	Where addressed
	2. The EIS must only include data and analysis that is reasonably needed to make a decision on the proposal. Relevant information must be succinctly summarised in the EIS and included in full in appendices. Irrelevant, conflicting or duplicated information must be avoided.	Assessment Chapters
3. Assessment of key issues* Key issue impacts are assessed objectively and thoroughly to provide confidence that the project will be constructed and operated within acceptable levels of impact. * Key issues are nominated by the Proponent in the SSI project application and by the Department in the SEARs. Key issues need to be reviewed throughout the preparation of the EIS to ensure any new key issues that emerge are captured. The key issues identified in this document are not exhaustive but are key issues common to most SSI projects.	1. The level of assessment of likely impacts must be proportionate to the significance of, or degree of impact on, the issue, within the context of the proposal location and the surrounding environment. The level of assessment must be commensurate to the degree of impact and sufficient to ensure that the Department and other government agencies are able to understand and assess impacts.	Assessment Chapters
	2. For each key issue the Proponent must: a) describe the biophysical and socio-economic environment, as far as it is relevant to that issue, including adequate baseline data, in terms of temporal, spatial and parameters monitored;	Assessment Chapters
	b) describe the legislative and policy context, as far as it is relevant to the issue;	Assessment Chapters
	c) identify, describe and quantify (if possible) the impacts associated with the issue, including the likelihood and consequence of the impact (risk assessment), and the cumulative impacts of: i. concurrent project construction activities; and ii. proposed and approved projects (where information is available at the time of writing);	Assessment Chapters
	d) demonstrate how potential impacts have been avoided (through design, or construction or operation methodologies);	Assessment Chapters
	e) detail how likely impacts that have not been avoided through design would be minimised, and the predicted effectiveness of these measures (against performance criteria where relevant); and	Assessment Chapters
	f) detail how any residual impacts would be managed or offset, and the approach and effectiveness of these measures.	Assessment Chapters
	3. Where multiple reasonable and feasible options to avoid or minimise impacts are available, they must be identified and considered and the proposed measure justified taking into account the public interest.	Assessment Chapters

Performance outcomes	SSI 8931	Where addressed
4. Consultation The project is developed with meaningful and effective engagement during project design and delivery.	1. The project must be informed by consultation, including with relevant local, State and Commonwealth government agencies, infrastructure and service providers, special interest groups (including Local Aboriginal Land Councils, Aboriginal stakeholders, sporting associations and groups, environmental groups, pedestrian and bicycle user groups), affected landowners, businesses and the community.	Chapter 3
	2. The Proponent must document the consultation process including the range of consultation techniques that would be employed for different stakeholder groups, and demonstrate how the project has responded to the inputs received.	Chapter 3
	3. The Proponent must describe the timing and type of community consultation proposed during the planning for and the design and delivery of the project, the mechanisms for community feedback, the mechanisms for keeping the community informed, and procedures for complaints handling and resolution.	Chapter 3
	4. The Proponent must consider the potential for consultation, complaint and construction fatigue to occur during construction of the project and describe how community engagement would be sustained, complaint reporting would be encouraged, complaint handling procedures would be responsive and the implementation of mitigation measures would be timely. The Proponent must consider the cumulative impacts from the project and other major projects in the local area.	Chapter 3
1. Transport and Traffic Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts. The safety of transport system customers is maintained. Impacts on network capacity and the level of service are effectively managed. Works are compatible with existing infrastructure and future transport corridors.	1. The Proponent must assess construction transport and traffic (network, vehicle, pedestrian and cyclists) impacts, including, but not necessarily limited to:	Section 8.4
	a) a considered approach to route identification, including for spoil haulage, and scheduling of transport movements, particularly outside standard construction hours;	Section 8.4
	b) the number, frequency and size of construction related vehicles (passenger, commercial and heavy vehicles, including spoil management movements);	Section 8.4
	c) construction worker parking;	Section 8.4
	d) the nature of existing traffic (types and number of movements) on construction access routes (including consideration of peak traffic times and sensitive road users and parking demand and arrangements including adequate parking for sports games);	Section 8.4
	e) access constraints and impacts on public transport, pedestrians and cyclists;	Section 8.4
	f) how construction of the project affects the condition and capacity of, and the need to close, divert or otherwise reconfigure elements of the local road, cycle and pedestrian network and public carparks;	Section 8.4
	g) details on construction scheduling and management to maintain traffic capacity along President Avenue and sports field parking during construction.	Section 8.4

Performance outcomes	SSI 8931	Where addressed
	h) details of how construction and scheduling of works would be coordinated in regard to public events and cumulative traffic impacts resulting from concurrent work on the project and other major projects, under or preparing for or commencing construction in the vicinity of the proposal;	Section 8.4
	i) alternatives to road transport of construction spoil including rail options as well as potential re-use in proposed fill areas or in association with Resource Recovery Exceptions (if obtained from the EPA) to minimise traffic impacts on the road network; and	Chapter 5 Chapter 21 Section 8.4
	j) the likely risks of the project to public safety, paying particular attention to recreational users of open space in the area including Rockdale Bicentennial Park, Memorial Fields, Ilinden Sports Centre, Scarborough Park north, Barton Park and the Kogarah Golf Course.	Section 8.4
	2. The Proponent must assess and model the operational transport impacts of the project including, but not necessarily limited to:	Chapter 8.7
	a) forecast travel demand and traffic volumes (expressed in terms of total numbers and heavy and light vehicle numbers) for the project and the surrounding road, cycle and public transport networks; including potential shifts of traffic movements on alternate routes inside and outside the proposal area and impact of any permanent road closures directly attributable to the SSI;	Section 8.7
	b) impacts on access to and parking for commercial centres and health and education facilities within the vicinity of the project;	Section 8.7
	c) travel time analysis;	Section 8.7
	d) performance of key interchanges and intersections by undertaking a level of service analysis at key locations;	Section 8.7
	e) wider transport interactions (local and regional roads, cycling, public and freight transport);	Section 8.7
	f) induced traffic and operational implications for existing and proposed public transport (particularly with respect to strategic bus corridors and bus routes and permanent closure/relocation of bus stops) and consideration of opportunities to improve public transport;	Section 8.7
	g) impacts on cyclists and pedestrian access and safety;	Section 8.7
	h) opportunities for active transport, including new and integrated cycling and pedestrian elements connecting to surrounding networks;	Section 8.7
	i) property and business access and on street parking; and	Section 8.7
	j) an explanation for the scope of the modelled area, including justification of the nominated boundaries.	Section 8.1
	3. The operational transport impact assessment must consider both operation of the Project (Stage 1) in isolation and as part of the overall F6 Extension Proposal, and other relevant motorway projects.	Section 8.1 Section 8.7

Performance outcomes	SSI 8931	Where addressed
2. Air Quality The project is designed, constructed and operated in a manner that minimises air quality impacts (including nuisance dust and odour) to minimise risks to human health and the environment to the greatest extent practicable.	1. The Proponent must undertake an air quality impact assessment (AQIA) addressing local and regional air quality impacts for construction and operation of the project in accordance with the current guidelines.	Appendix E
	2. The Proponent must ensure the AQIA also includes the following: a) demonstrated ability to comply with the relevant regulatory framework, specifically the Protection of the Environment Operations Act 1997 and the Protection of the Environment Operations (Clean Air) Regulation 2010;	Section 9.5 Section 9.6 Appendix E
	b) the identification of all potential sources of air pollution including details of the location, configuration and design of all potential emission sources including ventilation systems and tunnel portals;	Section 9.5 Section 9.6 Appendix E
	c) a review of vehicle emission trends and an assessment that uses or sources best available information on vehicle emission factors;	Section 9.4 Appendix E
	d) an assessment of impacts (including human health impacts) from potential emissions of PM10, PM2.5, CO, NO2 and other nitrogen oxides and volatile organic compounds (e.g. BTEX) including consideration of short and long-term exposure periods;	Section 9.5 Section 9.6 Appendix E
	e) consider the impacts from the dispersal of these air pollutants on the ambient air quality along the proposal route, proposed ventilation outlets and portals, surface roads, ramps and interchanges and the alternative surface road routes;	Section 9.5 Section 9.6 Appendix E
	f) a qualitative assessment of the redistribution of ambient air quality impacts compared with existing conditions, due to the predicted changes in traffic volumes;	Section 9.6.7
	g) assessment of worst case scenarios for in-tunnel and ambient air quality, including a range of potential ventilation scenarios and range of traffic scenarios, including worst case design maximum traffic flow scenario (variable speed) and worst case breakdown scenario, and discussion of the likely occurrence of each;	Chapter 9.6 Appendix E
	h) details of the proposed tunnel design and mitigation measures to address in-tunnel air quality and the air quality in the vicinity of portals and any mechanical ventilation systems (i.e. ventilation outlets and air inlets) including details of proposed air quality monitoring (including frequency and criteria);	Chapter 5 Chapter 6 Appendix E
	i) a demonstration of how the project and ventilation design ensures that concentrations of air emissions meet NSW, national and international best practice for in-tunnel and ambient air quality, and taking into consideration the approved criteria for the New M5 project and the In-Tunnel Air Quality (Nitrogen Dioxide) Policy;	Section 9.6 Appendix E
	j) details of any emergency ventilation systems, such as air intake/ exhaust outlets, including protocols for the operation of these systems in emergency situations, potential emission of air pollutants and their dispersal, and safety procedures;	Chapter 6

Performance outcomes	SSI 8931	Where addressed
	k) details of in-tunnel air quality control measures considered, including air filtration, and justification of the proposed measures or for the exclusion of other measures;	Section 5.5.1 Section 9.7 Appendix E
	l) a description and assessment of the impacts of potential emissions sources relating to construction, including details of the proposed mitigation measures to prevent the generation and emission of dust (particulate matter and TSP) and air pollutants (including odours) during the construction of the project, particularly in relation to ancillary facilities (such as concrete batching plants), tunnel spoil handling and cut and cover earthworks, the use of mobile plant, stockpiles and the processing and movement of spoil; and	Section 9.5
	m) a cumulative assessment of the in-tunnel, local and regional air quality impacts from the operation of the project and due to the operation of and potential continuous travel through existing and committed future motorway tunnels and surface roads.	Chapter 9 Appendix E
	3. The Proponent must undertake a landfill gas assessment in the vicinity of the President Avenue interchange and provide details on proposed methods and options for managing and mitigating impacts during construction and operation.	Section 9.5.5 Section 16.3
3. Health and Safety The project is designed, constructed and operated in a manner that minimises air quality impacts (including nuisance dust and odour) to minimise risks to human health and the environment to the greatest extent practicable.	1. The Proponent must assess the potential health impacts from the construction and operation of the project.	Chapter 15 Section 15.3 Section 15.4
	2. The assessment must: a) describe the current known health status of the potentially affected population;	Section 10.2
	b) describe how the design of the proposal minimises adverse health impacts and maximises health benefits;	Section 3.3 of Appendix F
	c) assess human health impacts from the operation and use of the tunnel under a range of conditions, including worst case operating conditions and the potential length of existing and committed future motorway tunnels in Sydney;	Section 10.4.1
	d) human health risks and costs associated with the construction and operation of the proposal, including those associated with air quality, groundwater quality, odours, noise and vibration (including residual noise following application of mitigation measures), construction fatigue and social impacts (including from acquisitions) on the adjacent and surrounding areas, as well as opportunity costs (such as those from social infrastructure and active transport impacts) during the construction and operation of the proposal;	Section 10.3 and section 10.5. Chapter 9 Chapter 11 Chapter 15 Chapter 17
	e) include both incremental changes in exposure from existing background pollutant levels and the impacts of project specific pollutant levels at the location of the most exposed receivers and other sensitive receptors (including public open space areas, sportsgrounds, child care centres, schools, hospitals and aged care facilities);	Section 10.3.1 Section 10.4.2

Performance outcomes	SSI 8931	Where addressed
	f) assess the likely risks of the project to public safety, paying particular attention to pedestrian safety, subsidence risks, flood risks and the handling and use of dangerous goods;	Section 10.3.4 Section 10.4.5 Chapters 8, 13, 14
	g) assess the opportunities for health improvement;	Section 10.3 Section 10.4 Appendix F
	h) assess the distribution of the health risks and benefits;	Section 10.4.6
	i) include a cumulative human health impact assessment inclusive of in- tunnel users, local and regional impacts due to the operation of and potential continuous travel through existing and committed future motorway tunnels and surface roads.	Section 10.4.1 Section 10.4.2
4. Noise and Vibration - Amenity Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on acoustic amenity. Increases in noise emissions and vibration affecting nearby properties and other sensitive receivers during operation of the project are effectively managed to protect the amenity and well-being of the community.	1. The Proponent must assess construction and operational noise and vibration impacts in accordance with relevant NSW noise and vibration guidelines. The assessment must take into consideration and address the redistribution of traffic (including on local feeder roads) and operational plant and equipment, and must include consideration of impacts to sensitive receivers and include consideration of sleep disturbance and, as relevant, the characteristics of noise and vibration (for example, low frequency noise).	Section 11.1 Section 11.3 Section 11.4
	2. An assessment of construction noise and vibration impacts must include: a) the nature of construction activities (including transport, tonal or impulsive noise-generating works and the removal of operational noise barriers, as relevant);	Section 11.3
	b) the intensity and duration of noise and vibration impacts (both air and ground borne). This must include consideration of extended impacts associated with ancillary facilities and activities (and the like) and construction fatigue;	Section 11.3 Section 11.3.6
	c) the identification of receivers, existing and likely under approved developments, during the construction period;	Section 11.2.1
	d) the nature, sensitivity and impact to receivers;	Section 11.3 Section 11.4
	e) the need to balance timely conclusion of noise and vibration-generating works with periods of receiver respite, and other factors that may influence the timing and duration of construction activities (such as traffic management);	Section 11.5
	f) the potential for works outside standard construction hours, including predicted levels, exceedances, number of potentially affected receivers, and justification for the activity in terms of the Interim Construction Noise Guideline (DECCW, 2009);	Section 11.3
	g) a cumulative noise and vibration assessment inclusive of impacts from the project (including concurrent project construction activities);	Section 11.3.6

Performance outcomes	SSI 8931	Where addressed
	h) a cumulative noise and vibration assessment of the impacts from the project and the construction of other transport infrastructure and development in the vicinity of the project including taking into account the installation and removal of temporary noise walls;	Section 11.3.6
	i) details and analysis of the predicted effectiveness of mitigation measures to adequately manage identified impacts, including cumulative impacts as identified in (g) and (h) and a clear identification of residual noise and vibration following application of mitigation measures; and	Section 11.3.5 Appendix G
	j) description of how community preferences could be taken into account in the design of mitigation measures and consider tailored mitigation, management and communication strategies.	Appendix G
	3. The Proponent must demonstrate that blast impacts are capable of complying with the current guidelines, if blasting is required.	Section 11.3.3
5. Noise and Vibration - Structural Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on the structural integrity of buildings and items including Aboriginal places and environmental heritage. Increases in noise emissions and vibration affecting environmental heritage as defined in the Heritage Act 1977 during operation of the project are effectively managed.	1. The Proponent must assess construction and operation noise and vibration impacts in accordance with relevant NSW noise and vibration guidelines. The assessment must include consideration of impacts to the structural integrity and heritage significance of items (including Aboriginal places and items of environmental heritage) and piped infrastructure, Muddy Creek constructed channel as well as property in general.	Chapter 11 Chapter 14 Chapter 19
	2. The Proponent must demonstrate that blast impacts are capable of complying with the current guidelines, if blasting is required.	Section 11.3.4
6. Biodiversity The project design considers all feasible measures to avoid and minimise impacts on terrestrial and aquatic biodiversity. Offsets and/or supplementary measures are assured which are equivalent to any remaining impacts of project construction and operation.	1. Biodiversity impacts related to the proposal are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR).	Appendix H
	2. The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s. 6.12), Biodiversity Conservation Regulation 2017 (s 6.8) and Biodiversity Assessment Method (BAM) including details of the measures proposed to address the offset obligation as follows: a) the total number and classes of biodiversity credits required to be retired for the developments/project;	Section 12.5 Appendix H
	b) the number of classes of like-for-like biodiversity credits proposed to be retired;	Section 12.5
	c) the number and classes of biodiversity credits proposed to be retired in accordance with the variation rules;	Section 12.5
	d) any proposal to fund a biodiversity conservation action; and	Section 12.5
	e) any proposal to make a payment to the Biodiversity Conservation Fund.	Section 12.5

Performance outcomes	SSI 8931	Where addressed
	3. If requesting the application of the variation rules, the BDAR must contain details of what reasonable steps have been taken to attempt to obtain the required like-for-like biodiversity credits.	Not applicable. The BDAR does not propose to apply a variation rule to seeking offsets.
	4. The BDAR must be prepared by a person accredited in accordance with the Accreditation scheme for the Application of the Biodiversity Assessment Method Order 2017 under s. 6.10 of the Biodiversity Conservation Act 2016.	Appendix H
	5. In accordance with section 9.1 and 9.2 of the BAM the BDAR must assess all direct and indirect impacts of the project on native vegetation, threatened ecological communities and threatened species habitat based on current records.	Section 12.3 Section 12.4 Appendix H
	6. The biodiversity assessment must consider impacts on: a) wetland vegetation communities over the entire project alignment; and	Section 12.3 Section 12.4 Appendix H
	b) wetland fauna habitat	Section 12.3 Section12.4 Appendix H
	7. The biodiversity assessment must assess cumulative impacts with current road projects such as additional impacts, prolongment of biodiversity impacts, and deferment of habitat rehabilitation works.	Section 12.4.6 Appendix H
	8. Impacts on biodiversity values that cannot be assessed using the BAM must also be otherwise assessed. The values include: a) Impacts on fish habitats and nurseries within and adjoining the project area; and	Section 12.3 Section 12.4 Appendix H
	b) matters of national significance listed under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.	Section 12.3 Section 12.4
	9. The assessment of aquatic habitats must identify mitigation and management measures to minimise construction impacts including the spread of aquatic weeds.	Section 12.3 Section 12.4 Section 12.6
	10. The EIS must include design opportunities for improvement of the Rockdale Wetlands including measures to reduce the potential for de- oxygenation of and increased nutrient inputs to waters.	Chapter 18
	11. Where waterbodies are to be reconstructed, the design should be consistent with the current guidelines.	Chapter 13
7. Place Making and Urban Design The project design complements the visual amenity, character and quality of the surrounding environment. The project contributes to the	1. The Proponent must identify how functional 'place' outcomes of public benefit would be achieved, including design principles and strategies that: a) give consideration to adjacent areas identified for future urban renewal;	Appendix C

Performance outcomes	SSI 8931	Where addressed
accessibility and connectivity of communities.	b) capitalise on reduced traffic volumes and reduced through traffic, particularly in and around commercial and community facilities;	Appendix C
	c) avoid locating infrastructure, including ancillary facilities adjoining residential areas and other sensitive receivers, and justify where this cannot be achieved;	Appendix C
	d) achieve high quality landscaping, streetscapes, architecture and design;	Appendix C
	e) identify urban design strategies and opportunities that would enhance healthy, cohesive and inclusive communities, including in relation to accessibility and connectivity;	Appendix C
	f) identify opportunities to enhance the visual, recreational and biodiversity values of the Rockdale Wetlands;	Appendix C
	g) consider resulting residual land treatments, and demonstrate how the proposed hard and soft urban design elements of the proposal would be consistent with the existing and desired future character of the area (e.g. wetlands and green corridor) traversed or affected by the project, particularly at President Avenue;	Appendix C
	h) identify opportunities to utilise surplus or residual land, particularly for the provision of community space (passive and active recreational opportunities and facilities) and utilise key structures (such as ventilation outlets) for multiple uses i.e. integration with other structures; and	Appendix C
	i) explore the use of Crime Prevention Through Environmental Design (CPTED) principles including natural surveillance during the design development process for elements including lighting, walkways, signage and landscaping.	Appendix C
	2. The Proponent must describe the accessibility elements of the proposal including relevant accessibility legislation and guidelines, including: a) Impacts on public transport infrastructure and services;	Chapter 8 Appendix D
	b) impacts on pedestrian and cyclist access and safety across and adjoining the proposal; and	Chapter 8 Appendix D
	c) opportunities to integrate and enhance accessibility including the provisions for public and active transport infrastructure as a result of the proposal.	Appendix C
	3. The Proponent must assess the visual and landscape impacts of the proposal, including ancillary infrastructure on: a) views and vistas;	Section 13.6.2 Section 13.7.2 Appendix C2
	b) streetscapes, key sites and buildings;	Section 13.6 Section 13.7 Appendix C2
	c) landscaping, green spaces, wetlands and existing trees and tree canopy, including an assessment of likely magnitude of impacts to trees and need for removal to be undertaken by an arborist, including the provision of measures to minimise and offset impacts;	Section 13.6 Section 13.7 Appendix C Appendix H

Performance outcomes	SSI 8931	Where addressed
	d) heritage items including Aboriginal places, environmental heritage; and areas of heritage sensitivity; and	Section 13.6 Section 13.7 Chapter 19 Chapter 20 Appendix N
	e) the local community.	Section 13.6 Section 13.7
	4. The Proponent must provide visual representations of the proposal from key receiver locations to illustrate the proposal and its visual impacts.	Section 13.6 Section 13.7 Appendix C
8. Socio-economic, Land Use and Property The project minimises adverse social and economic impacts and capitalises on opportunities potentially available to affected communities. The project minimises impacts to property and business and achieves appropriate integration with adjoining land uses, including maintenance of appropriate access to properties and community facilities, and minimisation of displacement of existing land use activities, dwellings and infrastructure.	1. The Proponent must assess social and economic impacts (of all phases of the project) in accordance with the current guidelines (including cumulative construction and operational impacts of the proposal and other major projects in the vicinity of the project) and in consultation with relevant land owners (such as those land owners whose property is being acquired or local residents who would be directly affected by road widening or loss of on street parking).	Section 14.4 Section 14.5 Section 15.3 Section 15.4
	2. The Proponent must assess impacts from construction and operation on potentially affected properties, businesses, and recreational space users, including amenity impacts (including from cumulative and extended construction time frames and construction fatigue, particularly where use of current road project construction facilities are proposed), traffic congestion, property acquisitions/ adjustments, future land uses, restricted access, parking and business disruption, relevant statutory rights, and community severance and barrier impacts resulting from the project.	Section 8.4 Section 8.5 Section 13.6 Section 13.7 Section 14.4 Section 14.5 Section 15.3 Section 15.4
	3. The Proponent must identify and assess the need for temporary and permanent relocation during construction of community facilities such as sports fields and playgrounds.	Section 14.4 Section 14.5 Section 15.3 Section 15.4
	4. The Proponent must assess potential impacts on the Muddy Creek constructed channel such as damage due to subsidence.	Section 14.4 Section 15.4
	5. The Proponent must assess potential impacts on utilities directly affected by the project (including communications, electricity, gas, fuel, stormwater, potable water and sewerage) and identify management options for impacted utilities, including its relocation or adjustment.	Section 14.5 Section 15.3 Section 15.4
	6. A draft Community Consultation Framework must be prepared identifying relevant stakeholders, procedures for distributing information and receiving/ responding to feedback and procedures for resolving stakeholder and community complaints during planning, design, construction and operation. Key issues that must be addressed in the draft Framework include, but are not limited to: a) traffic management (including property access, pedestrian access and parking at sports fields);	Appendix B Chapter 3 Section 15.2.5 Section 15.1.3

Performance outcomes	SSI 8931	Where addressed
	b) landscaping/urban design matters including preservation/ provision of active transport corridors, environmental amenity, sports fields, playgrounds and passive recreational space;	Appendix B
	c) adjustment or relocation of utilities;	Appendix B
	d) construction activities including out of hours work; and	Appendix B
	e) noise and vibration mitigation and management.	Appendix B
9. Water - Hydrology Long term impacts on surface water and groundwater hydrology (including drawdown, flow rates and volumes) are minimised. The environmental values of nearby, connected and affected water sources, groundwater and dependent ecological systems including estuarine and marine water (if applicable) are maintained (where values are achieved) or improved and maintained (where values are not achieved). Sustainable use of water resources.	1. The Proponent must describe (and map) the existing hydrological regime for any surface and groundwater resource (including reliance by users e.g. bore water for domestic use and irrigation, and for ecological purposes and groundwater dependent ecosystems) likely to be impacted by the project, including rivers, streams, wetlands and estuaries as described in Appendix 2 of the Framework for Biodiversity Assessment – NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014).	Section 18.2 Section 17.2 Section 12.2
	2. The Proponent must prepare a detailed water balance for ground and surface water including the proposed intake and discharge locations (including mapping of these locations), volume, frequency and duration for both the construction and operational phases of the project.	Section 18.3.1 Section 18.4.1 Section 17.3.8
	3. The Proponent must assess and model the impact of the construction and operation of the project and any ancillary facilities (both built elements and discharges) on surface and groundwater hydrology in accordance with the current guidelines, including:	Section 18.3.1 Section 18.4.1
	a) natural processes within rivers, wetlands, estuaries and floodplains that affect the health of the fluvial, riparian and estuarine systems and landscape health (such as modified discharge volumes, durations and velocities), aquatic connectivity, water-dependent fauna and flora and access to habitat for spawning and refuge;	Section 18.3.1 Section 18.4.1 Section 12.3 Section 12.4
	b) impacts from any permanent and temporary interruption of groundwater flow, including the extent of drawdown, change in ground water levels, barriers to flows, implications for groundwater dependent on surface flows, ecosystems and species, groundwater users and the potential for settlement	Section 17.3 Section 17.4
	c) changes to environmental water availability and flows;	Section 18.3.1 Section 18.4.1 Section 17.3 Section 17.4
	d) direct or indirect increases in erosion, siltation, destruction of aquatic and riparian vegetation or a reduction in the stability of river banks or watercourses;	Section 18.2.2 Section 18.3.1 Section 18.4.1 Section 12.3

Performance outcomes	SSI 8931	Where addressed
	e) minimising the effects of proposed stormwater and wastewater management during construction and operation on natural hydrological attributes (such as volumes, flow rates, management methods and re□use options) and on the conveyance capacity of the existing stormwater systems where discharges are proposed through such systems or modifications are proposed to these systems; and	Section 18.3.1 Section 18.6
	f) measures to mitigate the impacts of the proposal and manage the disposal of produced and incidental water.	Section 18.6
	4. The assessment must provide details of the landform (following completion) of the sites to be excavated or modified (e.g. portals and cut and cover works), including void management and rehabilitation measures.	Chapter 13 Section 17.4.7
	5. The Proponent must identify any requirements for baseline monitoring of hydrological attributes.	Section 18.6 Section 17.1.3
	6. The assessment must include details of proposed surface and groundwater monitoring.	Section 18.6 Section 17.3.5 Section 17.4.8
	7. The proposed tunnels must be designed to minimise impacts on aquifers, groundwater flows and groundwater dependent ecosystems.	Section 17.2.1 Section 17.2.4 Section 17.2.8 Section 17.3.3
10. Water - Quality The project is designed, constructed and operated to protect the NSW Water Quality Objectives where they are currently being achieved, and contribute towards achievement of the Water Quality Objectives over time where they are currently not being achieved, including downstream of the project to the extent of the project impact including estuarine and marine waters (if applicable).	1. The Proponent must: a) describe the background conditions for any surface or groundwater resource likely to be affected by the development;	Section 18.2 Section 17.2
	b) state the ambient NSW Water Quality Objectives (NSW WQO) (as endorsed by the NSW Government [see www.environment.nsw.gov.au/ieo/index.htm]) and environmental values for the receiving waters (including groundwater where appropriate) relevant to the project and that represent the community's uses and values for those receiving waters, including the indicators and associated trigger values or criteria for the identified environmental values in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government;	Section 18.1 Appendix L
	c) identify and estimate the quality and quantity of all pollutants that may be introduced into the water cycle by source and discharge point and describe the nature and degree of impact that any discharge(s) may have on the receiving environment, including consideration of all pollutants that pose a risk of non□trivial harm to human health and the environment;	Section 18.3.1 Section 18.4.1
	d) identify the rainfall event that the water quality protection measures would be designed to treat;	Section 18.4.1 Section 18.6
	e) assess the significance of any identified impacts including consideration of the relevant ambient water quality outcomes;	Section 18.3.1 Section 18.4.1

Performance outcomes	SSI 8931	Where addressed
	f) demonstrate how construction and operation of the project (including mitigating effects of proposed stormwater and wastewater management) would, to the extent that the project can influence, ensure that: – where the NSW WQOs for receiving waters are currently being met they would continue to be protected; and – where the NSW WQOs are not currently being met, activities would work toward their achievement over time;	Section 18.3.1 Section 18.4.1 Appendix L
	g) justify, if required, why the WQOs cannot be maintained or achieved over time;	Section 18.3.1 Section 18.4.1
	h) demonstrate that all practical measures to avoid or minimise water pollution and protect human health and the environment from harm are investigated and implemented;	Section 18.6
	i) identify sensitive receiving environments (which may include wetlands/ estuarine waters upstream and downstream of the project including their catchments) and develop a strategy to avoid or minimise impacts on these environments; and	Section 18.2
	j) identify proposed monitoring locations, monitoring frequency and indicators of surface and groundwater quality.	Section 18.6 Section 17.4.8 Appendix L
	2. The assessment should consider the results of any current water quality studies, as available, in the project catchment.	Section 18.2 Appendix L
	3. The assessment should include concept designs for water quality treatment structures taking into account water sensitive urban design principles.	Section 18.2 Section 18.6
11. Flooding The project minimises adverse impacts on existing flooding characteristics. Construction and operation of the project avoids or minimises the risk of, and adverse impacts from, infrastructure flooding, flooding hazards, or dam failure.	1. The EIS must map the following features relevant to flooding as described in the NSW Floodplain Development Manual 2005 (NSW Government, 2005) including: a) Flood prone land;	Figures 18-2 to 18-4 Appendix M
	b) Flood planning areas, the area below the flood planning level; and	Figures 18-2 to 18-4 Appendix M
	c) Hydraulic categorisation (floodways and flood storage areas).	Figures 18-2 to 18-4 Appendix M
	2. The Proponent must assess and model, where appropriate, the impacts on flood behaviour during construction and operation for a full range of flood events up to the probable maximum flood (taking into account sea level rise and increased storm intensity due to climate change) including: a) how the tunnel entries and cut-and-cover sections of the tunnels would be protected from flooding during construction works;	Section 18.3.2 Section 18.4.2 Section 18.6
	b) any detrimental increases in the potential flood affectation of the project infrastructure and other properties, assets and infrastructure;	Section 18.3.2 Section 18.4.2

Performance outcomes	SSI 8931	Where addressed
	c) consistency (or inconsistency) with applicable Council floodplain risk management plans;	Section 18.4.2
	d) compatibility with the flood hazard of the land;	Section 18.2 Section 18.4
	e) compatibility with the hydraulic functions of flow conveyance in flood ways and storage areas of the land;	Section 18.1.2
	f) whether there would be adverse effect to beneficial inundation of the floodplain environment, on, or adjacent to or downstream of the site;	Section 18.3.2 Section 18.4.2
	g) downstream velocity and scour potential;	Section 18.3.2 Section 18.4.2
	h) impacts the development may have upon existing community emergency management arrangements for flooding. These matters must be discussed with the State Emergency Services and Council;	Section 18.4.2
	i) any impacts the development may have on the social and economic costs to the community as consequence of flooding;	Section 18.4.2
	j) any mitigation measures required to offset potential flood risks attributable to the project (these mitigation measures must be discussed with the State Emergency Services and Council where appropriate).	Section 18.6
	3. The assessment should take into consideration any flood studies undertaken by local government councils, as available.	Section 18.1
	4. The EIS must assess and model the effect of the proposed development (including fill) on current flood behaviour for the 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.	Section 18.4.2
12. Soils The environmental values of land, including soils, subsoils and landforms, are protected. Risks arising from the disturbance and excavation of land and disposal of soil are minimised, including disturbance to acid sulfate soils and site contamination.	1. The Proponent must verify the risk of acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Risk Map) within, and in the area likely to be impacted by, the project.	Section 16.2.1 Section 16.3.4
	2. The Proponent must assess the impact of the project on acid sulfate soils (including impacts of acidic runoff offsite) in accordance with the current guidelines and detail the mitigation measures proposed to minimise potential impacts.	Section 16.3.4 Section 16.5
	3. The Proponent must assess whether the land is likely to be contaminated and identify if remediation of the land is required, having regard to the ecological and human health risks posed by the contamination in the context of past, existing and future land uses. Where assessment and/or remediation is required, the Proponent must document how the assessment and/or remediation would be undertaken in accordance with current guidelines.	Section 16.3 Section 16.4 Section 16.5 Appendix J Appendix F

Performance outcomes	SSI 8931	Where addressed
	4. A baseline contamination assessment must be undertaken for filled land in the vicinity of the proposed cut and cover works near President Avenue. The Proponent must provide details of contamination characteristics and measures to manage this spoil, including spoil stockpile management, transport and disposal to avoid adverse impacts to land, water quality and sensitive receivers;	Section 16.2.4 Section 16.2.6 Section 16.5
	5. The Proponent must assess whether salinity is likely to be an issue and if so, determine the presence, extent and severity of soil salinity within the project area.	Section 16.2.1 Section 16.3.2
	6. The Proponent must assess the impacts of the project on soil salinity and how it may affect groundwater resources, hydrology and vegetation.	Section 16.3.2 Section 17.3.3 Section 17.4.3 Appendix K Appendix H
	7. The Proponent must assess the impacts on soil and land resources (including erosion risk or hazard). Particular attention must be given to soil erosion and sediment transport consistent with the practices and principles in the current guidelines.	Section 16.3.1 Section 16.4.1
	8. The Proponent must assess the impact of any disturbance of contaminated groundwater and the tunnels should be carefully designed so as not to exacerbate mobilisation of contaminated groundwater and/or prevent contaminated groundwater flow.	Section 16.3 Section 16.4 Section 17.2.6 Section 17.3.4 Section 17.4.4
13. Heritage The design, construction and operation of the project facilitates, to the greatest extent possible, the long-term protection, conservation and management of the heritage significance of items of environmental heritage and Aboriginal objects and places. The design, construction and operation of the project avoids or minimises impacts, to the greatest extent possible, on the heritage significance of environmental heritage and Aboriginal objects and places.	1. The Proponent must identify and assess any direct and/or indirect impacts (including cumulative, vibration and visual impacts) to the heritage significance of listed (and nominated) heritage items inclusive of: a) Aboriginal places and objects, as defined under the National Parks and Wildlife Act 1974 and in accordance with the principles and methods of assessment identified in the current guidelines;	Section 20.3 Section 20.4
	b) Aboriginal places of heritage significance, as defined in the Standard Instrument – Principal Local Environmental Plan;	There are no Aboriginal places of heritage significance within the project footprint.
	c) environmental heritage, as defined under the Heritage Act 1977 including potential items of heritage value, conservation areas, open space heritage landscapes, built heritage landscapes and archaeology);	Section 19.3
	d) items listed on the State, National and World Heritage lists; and	Section 19.2.2

Performance outcomes	SSI 8931	Where addressed
	e) heritage items and conservation areas identified in local and regional planning environmental instruments covering the project area.	Section 19.2.2
	2. Where impacts to State or locally significant heritage items or archaeology are identified, the assessment must: a) include a significance assessment and statement of heritage impact for all heritage items (including any unlisted places that are assessed of heritage value);	Section 19.3.1 Section 19.2.3 Appendix N
	b) provide a discussion of alternative locations and design options that have been considered to reduce heritage impacts;	Chapter 5
	c) in areas identified as having potential archaeological significance, undertake a comprehensive archaeological assessment and management plan in line with Heritage Council guidelines which includes a methodology and research design to assess the impact of the works on the potential archaeological resource and to guide physical archaeological test excavations and include the results of these excavations. This is to be carried out by a suitably qualified archaeologist and is to discuss the likelihood of significant historical and Aboriginal archaeology on the site, how this may be impacted by the project, and include measures to mitigate any impacts;	Section 19.2.4 Section 19.3
	d) consider impacts to the item of significance caused by, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, increased traffic, visual amenity, landscape and vistas, curtilage, subsidence, hydrological changes (including Kings Wetland and Patmore Swamp) and architectural noise treatment (as relevant);	Section 19.3
	e) provide a comparative analysis to inform the rarity and representative value of any heritage places proposed for demolition;	Section 19.7
	f) outline mitigation measures to avoid and minimise identified impacts in accordance with the current guidelines; and	Section 19.6
	g) be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria).	Section 19.1.5
	3. The Proponent must identify and describe the Aboriginal cultural heritage values of the area and where this includes archaeological investigations of Aboriginal objects, this must be conducted by a suitably qualified archaeologist, meeting the minimum qualification requirements specified in section 1.6 of the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW 2010).	Section 20.2.5
	4. Where impacts to Aboriginal objects and/ or places are proposed, or Aboriginal cultural heritage values are identified, consultation must be undertaken with Aboriginal people in accordance with the current guidelines and conservation, management and impact mitigation measures must be identified.	Section 20.1.5 Section 20.5

Performance outcomes	SSI 8931	Where addressed
	5. The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented and any Aboriginal objects recorded as part of the assessment must be documented and notified to OEH.	Section 20.1.5 Section 20.2.4
14. Sustainability The project reduces the NSW Government's operating costs and ensures the effective and efficient use of resources. Conservation of natural resources is maximised.	1. The Proponent must assess the sustainability of the project in accordance with the Infrastructure Sustainability Council of Australia (ISCA) Infrastructure Sustainability Rating Tool and recommend an appropriate target rating for the project.	Section 23.2
	2. The Proponent must assess the project against the current guidelines including targets and strategies to improve Government efficiency in use of water, energy and transport.	Section 23.1 Section 23.3
15. Waste All wastes generated during the construction and operation of the project are effectively stored, handled, treated, reused, recycled and/or disposed of lawfully and in a manner that protects environmental values.	1. The Proponent must assess predicted waste generated from the project during construction and operation, including: a) classification of the waste in accordance with the current guidelines	Section 21.3 Section 21.4
	b) estimates/ details of the quantity of each classification of waste to be generated during the construction of the project, including bulk earthworks and spoil balance;	Section 21.3
	c) handling of waste including measures to facilitate segregation and prevent cross contamination;	Section 21.3
	d) management of waste including estimated location and volume of stockpiles;	Section 21.3
	e) waste minimisation and reuse;	Section 21.3
	f) lawful disposal or recycling locations for each type of waste; and	Section 21.3
	g) contingencies for the above, including managing unexpected waste volumes.	Section 21.5
	2. The Proponent must assess potential environmental impacts from the excavation, handling, storage on site and transport of the waste particularly with relation to sediment/leachate control, noise and dust.	Section 21.3.6 Section 21.4.3
16. Climate Change Risk The project is designed, constructed and operated to be resilient to the future impacts of climate change	The Proponent must assess the risk and vulnerability of the project to climate change in accordance with the current guidelines.	Section 22.1
	The Proponent must quantify specific climate change risks with reference to the NSW Government's climate projections at 10 km resolution (or lesser resolution if 10 km projections are not available) and incorporate specific adaptation actions in the design.	Section 22.2 Section 22.3 Section 22.4 Appendix O
17. Hazards	The Proponent must describe the process for assessing the risk of emissions from ventilation facilities on aircraft operations taking into consideration the requirements of the Airports Act 1996 (Commonwealth) and the Airport Regulations 1997.	Section 10.4.5

1.2 Environmental Planning and Assessment Regulation 2000, Part 3 of Schedule 2 checklist

SSI 8931	Where addressed
6 Form of the environmental impact statement	
An environmental impact statement must contain the following information:	
a) the name, address and professional qualifications of the person by whom the statement is prepared,	Certification page
b) the name and address of the responsible person,	Certification page
c) the address of the land: i. in respect of which the development application is made, or ii. on which the activity or infrastructure to which the statement relates is to be carried out.	Certification page
d) a description of the development, activity or infrastructure to which the statement relates,	Certification page
e) an assessment by the person by whom the statement is prepared of the environmental impact of the development, activity or infrastructure to which the statement relates, dealing with the matters referred to in this Schedule, and	Certification page
f) a declaration by the person by whom the statement is prepared to the effect that: i. the statement has been prepared in accordance with this Schedule, and ii. the statement contains all available information that is relevant to the environmental assessment of the development, activity or infrastructure to which the statement relates, and iii. that the information contained in the statement is neither false nor misleading.	Certification page
7 Content of environmental impact statement	
1. An environmental impact statement must also include each of the following:	
a) A summary of the environmental impact statement.	Executive summary
b) A statement of the objectives of the development, activity or infrastructure.	Chapter 1
c) An analysis of any feasible alternatives to the carrying out of the development, activity or infrastructure, having regard to its objectives, including the consequences of not carrying out the development, activity or infrastructure.	Chapter 5
d) An analysis of the development, activity or infrastructure.	
i. A full description of the development, activity or infrastructure.	Chapter 6
ii. A general description of the environment likely to be affected by the development, activity or infrastructure, together with a detailed description of those aspects of the environment that are likely to be significantly affected.	Executive Summary Chapter 8 through Chapter 24
iii. The likely impact on the environment of the development, activity or infrastructure.	Chapter 8 through Chapter 24
iv. A full description of the measures proposed to mitigate any adverse effects of the development, activity or infrastructure on the environment.	Chapter 8 through Chapter 24
v. A list of any approvals that must be obtained under any other Act or law before the development, activity or infrastructure may lawfully be carried out.	Chapter 2
e) A compilation (in a single section of the environmental impact statement) of the measures referred to in item (d) (iv).	Chapter 25
f) The reasons justifying the carrying out of the development, activity or infrastructure in the manner proposed, having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development set out in subclause (4) of Schedule 2 Part 3 Section 7.	Chapter 23 and Chapter 24

SSI 8931	Where addressed
2. Subclause (1) is subject to the environmental assessment requirements that relate to the environmental impact statement.	SEARs are addressed throughout the document Summary: Appendix A
3. Not applicable	N/A
4. The principles of ecologically sustainable development.	Chapter 23

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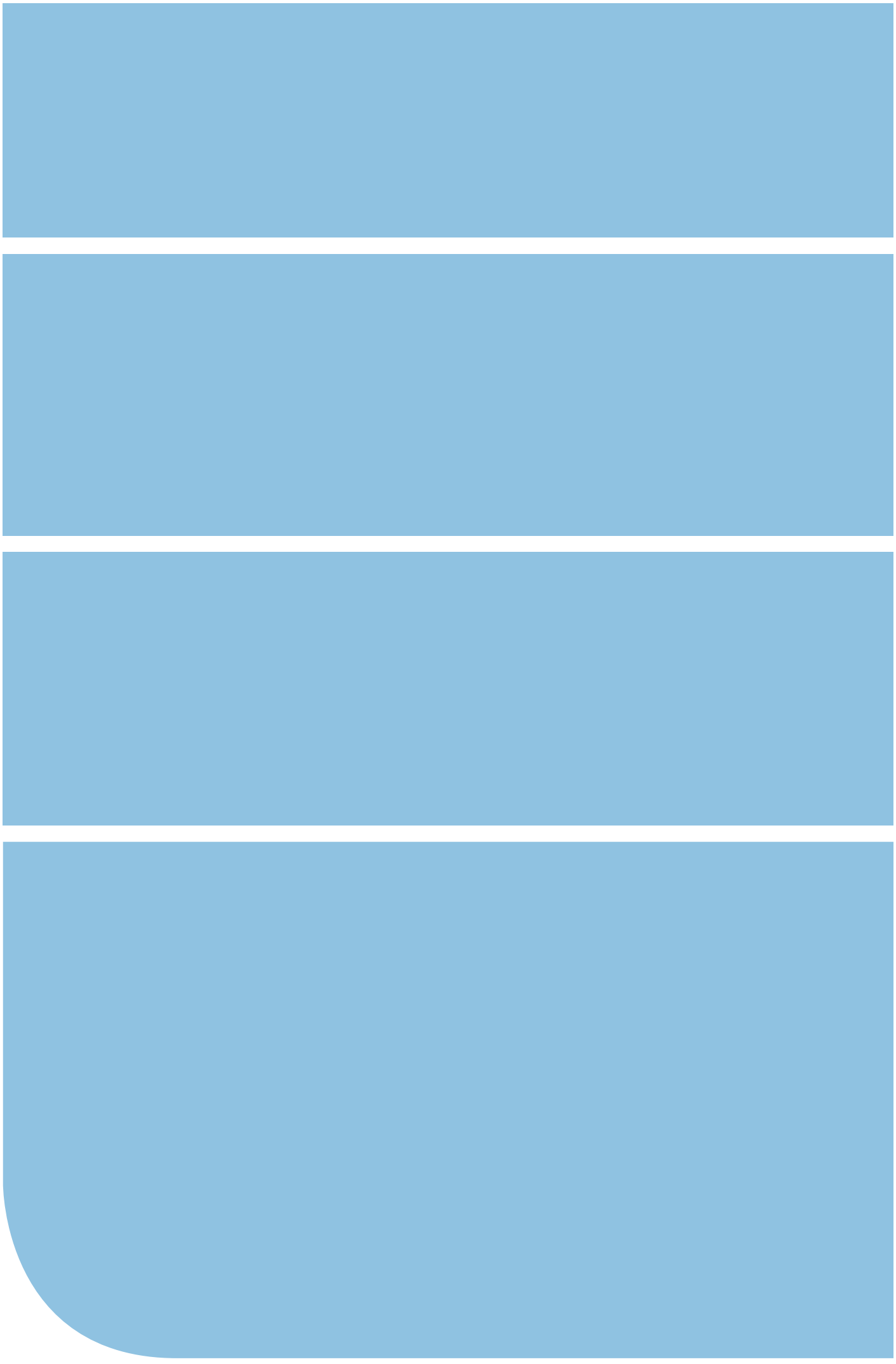

Roads and Maritime Services

F6 Extension Stage 1

New M5 Motorway at Arncliffe to President Avenue at Kogarah

Environmental Impact Statement

Appendix B
Draft Community Consultation Framework

Volume 3

B

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Contents

Glossary of terms and abbreviations

Term	Definition
CEP	Community Engagement Plan
CIP	Community Involvement Plan
CNVMP	Construction Noise and Vibration Management Plan
SEARs	Secretary's Environmental Assessment Requirements

1 Introduction

This Draft Community Consultation Framework provides a framework to consult with the community about the project and to receive and respond to feedback. The Framework has been prepared in accordance with the Secretary's Environmental Assessment Requirements (SEARs) for the F6 Extension Stage 1 New M5 Motorway at Arncliffe to President Avenue at Kogarah (the project). The project would comprise a new multi-lane road link between the New M5 Motorway tunnel underground at Arncliffe and an intersection at President Avenue at Kogarah. Underground stub tunnels would be constructed at the southern extent of the project to provide connections for future stages of the F6 Extension.

The SEARs state that a draft Community Consultation Framework must be prepared, identifying relevant stakeholders (refer to **section 6**), procedures for distributing information and receiving/ responding to feedback (refer to **section 5**) and procedures for resolving stakeholder and community complaints during planning, design, construction and operation (refer to **section 3**). Key issues that must be addressed in the draft Framework include, but are not limited to:

- traffic management (including property access, pedestrian access and parking at sports fields) (refer to **section 7.1**);
- landscaping/urban design matters including preservation/ provision of shared cycle and pedestrian pathways, environmental amenity, sports fields, playgrounds and passive recreational space (refer to **section 7.5**);
- adjustment or relocation of utilities (refer to **section 7.3**);
- construction activities including out of hours work (refer to **section 7.2**); and
- noise and vibration mitigation and management (refer to **section 7.4**).

Conditions of approval for the project would likely require the preparation of a Community Involvement Plan (CIP) that outlines the community consultation and engagement activities that would be delivered during construction.

2 Consultation purpose and objectives

Roads and Maritime aims to engage in an open, proactive and transparent community consultation process prior to and during construction of the project. This will ensure that the project:

- Meets community and stakeholder expectations to include feedback in the design, construction and management of the project
- Meets reasonable community and stakeholder needs for information about the project
- Utilises community and stakeholder feedback to identify and resolve issues
- Meets Roads and Maritime community consultation guidelines to deliver a 'customer focused' engagement strategy.

During construction of the project, the community and stakeholder consultation process will aim to:

- Ensure the community and stakeholders have a high level of awareness of construction activities and related work
- Ensure accurate and timely information is provided to the community and stakeholders
- Ensure information provided is accessible
- Provide a timely response to issues and concerns raised by the community and stakeholders
- Identify issues for consideration in construction management and the operation of the project
- Address and where feasible, resolve issues to improve outcomes for the community and stakeholders, and in doing so, minimise the construction impacts of the project.

3 Enquiries and complaints handling procedures

A complaints management system will be developed and implemented prior to the commencement of construction activities. The complaints management system will be in use during construction.

Details of how to make a complaint will be included in all communications materials, such as community updates, notifications and the project website. A manned 24-hour telephone line will be established before construction and be maintained during construction and operation.

A complaints and enquiry register would be established to record details, response and outcome of the complaint/enquiry. All complaints would be investigated and an appropriate response would be provided to the complainant.

Figure 3-1 illustrates the steps in a typical complaints handling process.

Figure 3-1 Complaints handling process

4 Monitoring, reporting and evaluation

The performance and effectiveness of community consultation and engagement activities undertaken during the construction of the project would be regularly monitored and measured against key performance indicators set for the construction contractor. Data for this process would be collected by:

- Measuring the performance, timeliness and effectiveness of communications activities and tools through the implementation of the Community Engagement Plan including the complaints and enquiries handling process
- Ensuring the adequacy of the CIP and its effectiveness in delivering the projects community engagement campaign
- Demonstrating proactive communication
- Identifying issues and repeated complaints about preventable issues.

In order to conduct an impartial review of the project's communications and stakeholder engagement performance, community focus groups would also be held to discuss project performance and benchmark the effectiveness of community engagement activities.

Processes and communication channels would be modified, if required, based on feedback or issues identified in the monitoring process.

5 Mechanisms for distributing information and seeking feedback

A range of communications tools can be used for seeking community feedback throughout the construction of the project. The application of these tools will be outlined in the Community Engagement Plan.

5.1 Community Engagement Plan

This framework document would be developed into a Community Engagement Plan (CEP). The CEP would manage community involvement during the design and construction of the project. As a minimum the CEP would contain:

- A list of stakeholders
- Stakeholder level of involvement and means of engagement
- Map of impacted properties
- A register of potential impacts
- A risk assessment and proposed actions to mitigate or minimise the impact to stakeholders
- External and internal communications protocols as relevant to the implementation of the CEP
- Procedures for dealing with complaints and enquiries
- Procedures for early notification to the community
- Procedures for publicising the details of design and construction work
- Procedures for publicising information on air quality, tunnelling and building condition surveys
- Procedures for training employees and subcontractors as relevant to the implementation of the CEP
- A Crisis Communications Plan.

5.2 Community information

Relevant authorities, stakeholders and the local community would remain informed throughout construction using a variety of communications tools. The method of communication would be based on the level of information to be provided and the timeframe for the delivery of information.

Methods of communication would include:

- Notifications of proposed work
- Web-based information
- Videos and animations
- Digital tools including the use of augmented and virtual reality to display project information
- Stakeholder meetings
- Staffed community information sessions
- Ongoing liaison with Stakeholder Liaison Group formed during the development phase of the project
- Community liaison groups (may be required by conditions of approval)
- Advertisements and media announcements
- Social media
- Email alerts
- Door knocking as required dependent on project activities
- Print advertising.

6 Stakeholder identification

The key stakeholders currently identified for the project are listed in **Table 6-1**, along with the planned method of engagement for each stakeholder group. The list of stakeholders will continue to evolve as the project progresses and further issues are identified.

Consultation Manager has been used to track contact with stakeholders.

Table 6-1 Key stakeholders for the project

Stakeholder group	Stakeholders	Method of engagement
Government Ministers and elected representatives	• The Premier • The Minister for Roads, Maritime and Freight • The Minister for WestConnex • Member for Kogarah • Member for Rockdale • Member for Oatley • Member for Miranda • Member for Cronulla • Member for Heathcote • Member for Holsworthy	• Meetings and briefings • Community updates • Phone calls, letters, emails • Project team to distribute information at key project milestones
Federal and State Government agencies and Councils	• Roads and Maritime Services • Sydney Motorway Corporation • Department of Premier and Cabinet • Department of Planning & Environment • NSW Office of Environment & Heritage • Department of Lands – Land and Property Information – Government Property NSW • NSW Department of Primary Industries • Multicultural NSW • NSW Health • Transport for NSW • Urban Growth • Department of Health • Heritage Council of NSW • Office of the Chief Scientist • NSW Environment Protection Authority • Traffic Management Centre • Civil Aviation Safety Authority • Bayside Council • Southern Sydney Regional Organisation of Councils (SSROC)	• Briefing by Roads and Maritime Services • Briefing by project team • Project team to distribute information at key project milestones • Phone calls, letters, emails

Stakeholder group	Stakeholders	Method of engagement
Industry groups and business chambers	• Australasian College of Road Safety • Australian Industry Group • Business Council of Australia • Engineers Australia • Infrastructure Partnerships Australia • NRMA • NSW Business Chamber • Sydney Business Chamber • Brighton Le Sands Business Chamber • Kogarah Residents Association Incorporated	• Project communications at key project milestones • Briefings by project team if required. • Phone calls, letters, emails
Utilities	• Sydney Water • Ausgrid • Transgrid • Jemena • Telstra • Optus • NBNCo	• Project communications at key project milestones • Consultation for investigations • Notifications • Project briefings • Phone calls, letters, emails
Freight industry	• Australian Trucking Association (NSW) • Road Freight NSW • NatRoad Ltd • NSW Freight Advisory Council • NSW Road Freight Industry Council • Roads Australia	• Briefings by project team • Project communications at key project milestones • Phone calls, letters, emails
Cycling groups	• Bicycle NSW • Southern Cross Cycle Club • St George Bicycle User Group • Sutherland Shire Cycling Club	• Project communications at key project milestones • Briefings by project team • Phone calls, letters, emails
Public transport	• Sydney Buses (Transport for NSW) • Private bus operators • NSW Taxi Council	• Project communications at key project milestones • Briefings by project team • Phone calls, letters, emails
Motoring organisations	• Australian Automobile Association • NRMA • Motorcycle Council of NSW	• Project communications at key project milestones • Briefings by project team • Phone calls, letters, emails
Community action groups	• Moorefield Estate Residents Against the F6 • F6 Action Group • Anti-WestConnex Action Groups	• Project updates at key project milestones • Briefings if required • Meetings • Phone calls, emails, letters

Stakeholder group	Stakeholders	Method of engagement
Local community organisations	• Kogarah Rotary Club • Kogarah Lions Club • Kogarah Probus Club • Monterey Probus Club • Rockdale Probus Club • Advance Diversity Services • Macedonian Australian Welfare Association of Sydney Inc • Greek Orthodox Community of NSW • St George Football Association • Rockdale City Suns FC • Dolls Point FC	• Project communications at key project milestones • Briefings by project team if required
Educational facilities	• Al Zahra College • Arncliffe Public School • Arncliffe West Infants Public School • Athelstane Public School • Bexley Public School • Brighton-Le-Sands Public School • Cairnsfoot Special School • Carlton South Public School • Intellectual Disability Foundation of St George • James Cook Boys Technology High School • Kingdom Culture Christian School • Kogarah High School • Kogarah Public School • Kyeemagh Public School • Marist College Kogarah • Moorefield Girls High School • Rockdale Public School • St Dominic Savio School • St Georges Girls High School • St Georges School • St Joseph's Catholic Primary School • St Mary's and St Mina's Coptic Orthodox College • St Patrick's Catholic Primary School • St Thomas More Catholic • St George School Sports Association	• Project updates at key project milestones • Briefings to Principal and Parents and Citizens committee, if required • Project update for monthly school publications • Phone calls, letters, emails

Stakeholder group	Stakeholders	Method of engagement
Childcare facilities	• Babyccino • Babyland Childcare centre • Bambino's Kindergarten • Banbury Cottage Child Care Centre • Bright Star's Pre-School & Long Day Care Centre • Busy Bee Long Day Care Centre • Carlton Child Care Centre • Do Re Mi Long Day Care • Giggle N Learn Family Daycare • Integricare Rockdale • Integricare Occasional Care Centre • Kogarah Uniting Church • Little Dolphins Long Day Care Centre • Little Dragons Academy • Little Sails Day Care Centre • Little Star Early Learning Centre • Lorikeet Early learning Centre • North Brighton Pre-School • Ocean Street Kindergarten • Pineapple Club Family Day Care • Roslyn Hall Child Care Centre • Shining Stars Child Care Centre • St George Bank Child Care Centre • St Mary's Day Care Centre • St Paul's Child Care Centre • Uniting Frederick Street Pre-School, Rockdale	• Project updates at key project milestones • Briefings if required • Information for newsletters if required • Phone calls, letters, emails
Medical facilities	• Australian Medical Association (NSW) • Asthma Foundation • St George Private Hospital • Calvary Hospital • Wesley Hospital • Dr Glenn and Partners Medical Imaging • Wu Sunrise Chinese Medicine • Kogarah Medical Centre • Kogarah Railway Medical Centre • Kogarah Premier Medical Centre • Catholic Healthcare Bethlehem House • St George Health • Conon Care Centre, Kogarah Clinic • St George After House GP Service • Omni Eye Centre • Eastbrooke Medical Centre Carlton	• Project updates at key project milestones • Briefings if required • Phone calls, letters , emails

Stakeholder group	Stakeholders	Method of engagement
Local community	• Marsh Street • Flora Street • Valda Avenue • Eve Street • French Street • West Botany Street • Innesdale Road • Kogarah Golf Club • Levey Street • President Avenue • O'Neil Street • O'Connell Street • Moorefield Estate • Moorefield Bowling and Sports Co-op Ltd • Sheralee Tourist Caravan Park	• Project updates at key project milestones • Briefings if required • Community information sessions • Online engagement tools • Doorknocks

Stakeholder group	Stakeholders	Method of engagement
Places of worship	• St Patricks Catholic Church, Kogarah • Child Jesus and St. Joseph Church - Society of ST Pius X • Catholic Church Latin Mass Rockdale - St. Mary's House • St Joseph's Church • St Mary MacKillop Catholic Church • Mary Help of Christians Convent • St Francis Xavier's Church • Greek Orthodox Parish and Community of Kogarah • St Savvas of Kalymnos Orthodox Church and Community • Macedonian Orthodox Church of the Resurrection • Macedonian Orthodox Church of St Petka • Kirkplace Presbyterian Church • Rockdale Presbyterian Church • Uniting Church Rockdale • Rockdale Uniting Church • Kogarah Uniting Church • St Mary & St Mina Coptic Orthodox Cathedral • Pentecostal Christian Assembly • Malayalam Pentecostal Church • Iglesia Ni Cristo • Carlton Kogarah Baptist Church • Masjid Al Hidaya • Masjid Darul • Imaan • Saint Paul's Anglican Church • Saint John's Anglican Church • Shree Shirdi Sai Sansthan • Nan Tien Buddhist Temple • Christ Living Church • Harvest Church of Christ Rockdale • Sydney Chinese Alliance Church, Rockdale • Bay City Church	• Project updates at key project milestones • Briefings if required • Phone calls, letters, emails

7 Specific issues management

The SEARs for the project outline some construction activities that will require specific communications and/or management strategies due to the nature of the potential impact and/or stakeholder group. These strategies would be managed through the CIP.

Indicative communications and management strategies are identified in **section 7.1** to **section 7.5** for the following specific construction activities:

- Traffic management including property and pedestrian access during construction and parking at sports fields
- Construction activities and out of hours work
- Adjustment or relocation of utilities
- Noise and vibration
- Landscaping and urban design including the preservation/provision of shared cycle and pedestrian pathways, environmental amenity, sports fields, playgrounds and passive recreational space.

7.1 Traffic and transport management

Communications strategies regarding traffic and transport management (including property and pedestrian access and parking at sports fields) would include:

- A Traffic and Transport Liaison Group would be established, including representatives from Bayside Council, motorist, cyclist and pedestrian stakeholders to discuss traffic management and road safety during construction
- Temporary changes in bus stops would be undertaken in consultation with Transport NSW and relevant bus operators
- Local road closures would be managed in consultation with Roads and Maritime, local councils and property owners likely to be impacted
- Consultation with property owners or occupiers will be undertaken to determine their requirements and to discuss alternative access arrangements to be provided, where required
- A Business Management Plan would be prepared in consultation with the owners of identified businesses in order to maintain appropriate access during business hours and visibility of the business to potential customers
- Information relating to traffic management and altered traffic conditions would be disseminated to the community through:
  - Regular updates to the project website with details of current traffic arrangements
  - Signage in advance of changes to bus stops, parking, or pedestrian and cyclist facilities
  - Major traffic detours would be advertised in advance through the Transport Management Centre and in local print media
  - Existing variable message signs on the Sydney road network would be used to inform the community of these changes
  - Letterbox drops/notifications
- Information relating to potential impacts to parking at sport fields during construction will be disseminated to the community through
  - Regular updates to the project website on impacts from construction activities
  - Direct engagement with sporting organisations and Bayside Council
  - Regular engagement with the Stakeholder Liaison Group
- A 1800 number and email address will be available for the community to find out about and/or report traffic related issues.

7.2 Construction activities and out of hours work

Meetings would be held with stakeholders near construction compounds and worksites, especially residents and businesses to understand and address their issues.

For out of hours works, consultation will take place with consideration to Practice note vii of the ENMM and Strategy 2 of the *Interim Noise Construction Guideline*[1]. Notifications would be issued to explain construction activities, work hours and potential impacts from the construction activities prior to work occurring.

Out of hours works would also be undertaken in accordance with any requirements of the conditions of approval for the project.

7.3 Adjustment or relocation of utilities

It is likely that utilities and services located within or close to the project, including electricity, gas, telecommunications (including optic fibre cables), and sewer and water mains, would need to be protected, relocated or realigned as part of construction of the project.

The management of major utilities within the identified areas of interest is outlined in **Chapter 14** (Property and land use). The location of other existing utility services and any changes required for the project would be confirmed by the construction contractor during the detailed design of the project in consultation with the relevant utility providers.

7.4 Noise and vibration

Feasible and reasonable noise mitigation measures would be implemented to ensure that the potential for adverse impact on the local community is minimised. These mitigation measures would be further developed during detailed design by the contractor and provided in a Construction Noise and Vibration Management Plan (CNVMP).

Community consultation regarding construction noise and vibration will be detailed in the Community Involvement Plan for the construction of the project and will include a 24 hour hotline and complaints management process. Consultation with the affected receptors will occur prior to and during construction.

7.5 Landscaping and urban design

Communications strategies regarding landscaping and urban design would include:

- Opportunities would be identified to seek and incorporate community and stakeholder feedback into landscaping and urban design plans
- A Social Infrastructure Plan would be prepared in consultation with the community and relevant councils. The Social Infrastructure Plan would detail community and social facilities that will be delivered or enhanced as part of the project
- Early engagement would take place with Council and key stakeholder groups regarding planting, noise walls and other urban design elements
- Consultation with residents would occur regarding design and implementation of noise walls, vegetation and landscaping
- Early engagement on the shared cycle and pedestrian pathways, sports fields, playgrounds and passive recreational space will take place with Council and key stakeholder groups
- Consultation with the community would occur on the shared cycle and pedestrian pathways, sports fields, playgrounds and passive recreational space for post construction use.

[1] Department of Environment and Climate Change (2009). *Interim Construction Noise Guideline*

8 Conclusion

Subject to obtaining planning approval, this framework would be developed into the CEP.

The CEP would provide further details regarding community involvement during design, construction and the project opening phase.

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