



The Northern Road Upgrade Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park

NSW Environmental Impact Statement / Commonwealth Draft Environmental Impact Statement

Volume 1: Main Report

June 2017



The Northern Road Upgrade – Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park

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Prepared for Roads and Maritime Services By Jacobs Australia RMS: 17.274

ISBN: 978-1-925659-22-1

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Appendix L – Technical working paper: Soils, water and contamination

Appendix M – Technical working paper: Aboriginal cultural heritage assessment report

Appendix N – Technical working paper: Non- Aboriginal heritage

Appendix O – Technical working paper: Urban design, landscape character and visual impact assessment

Appendix P – Technical working paper: Air quality

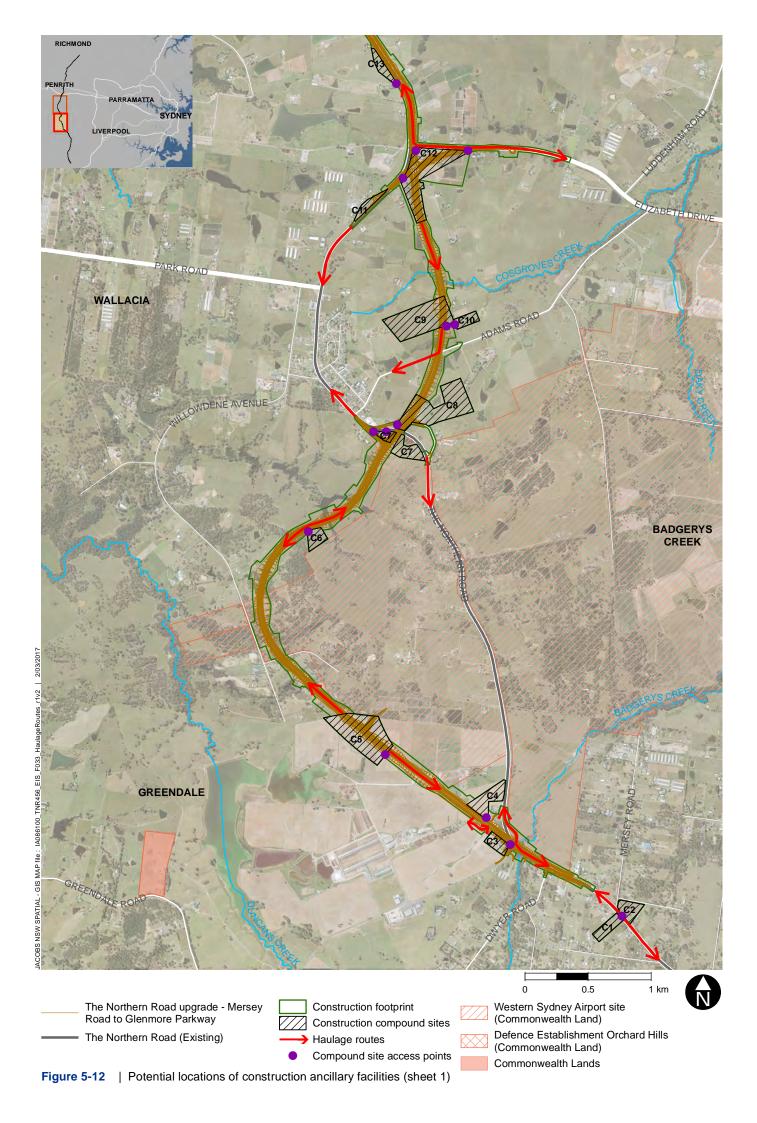
Appendix Q – Technical working paper: Greenhouse gas assessment and Climate change risk assessment

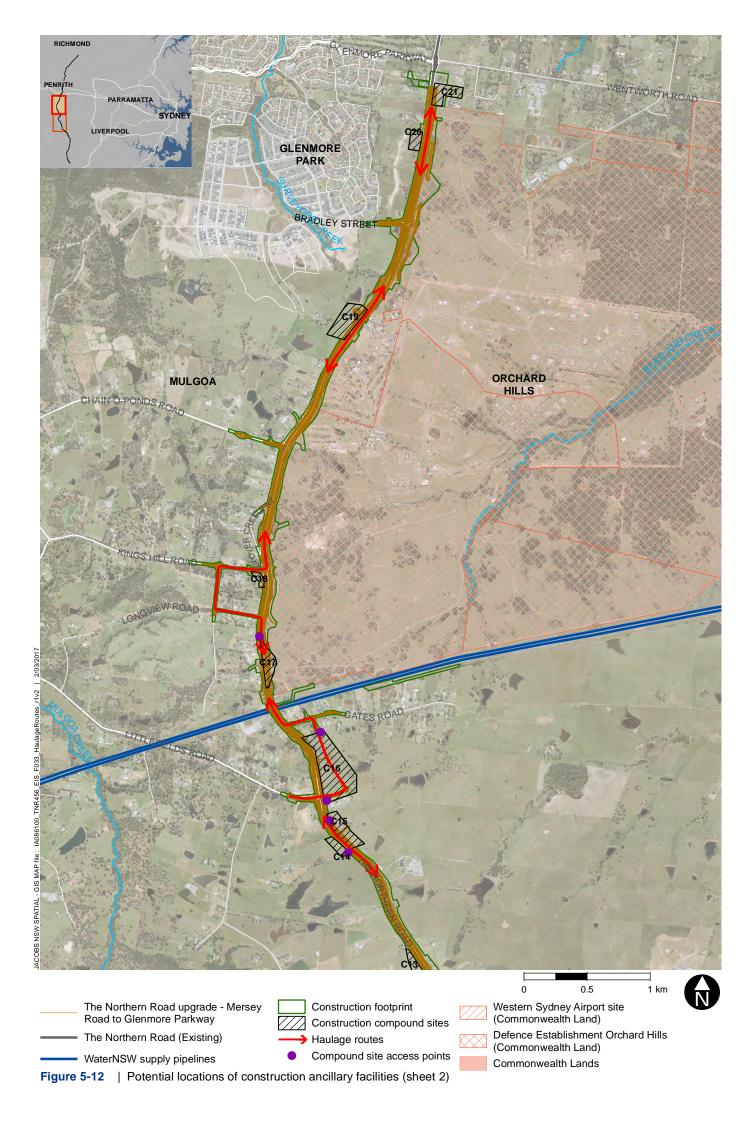
Appendix R – Draft Community Involvement Plan

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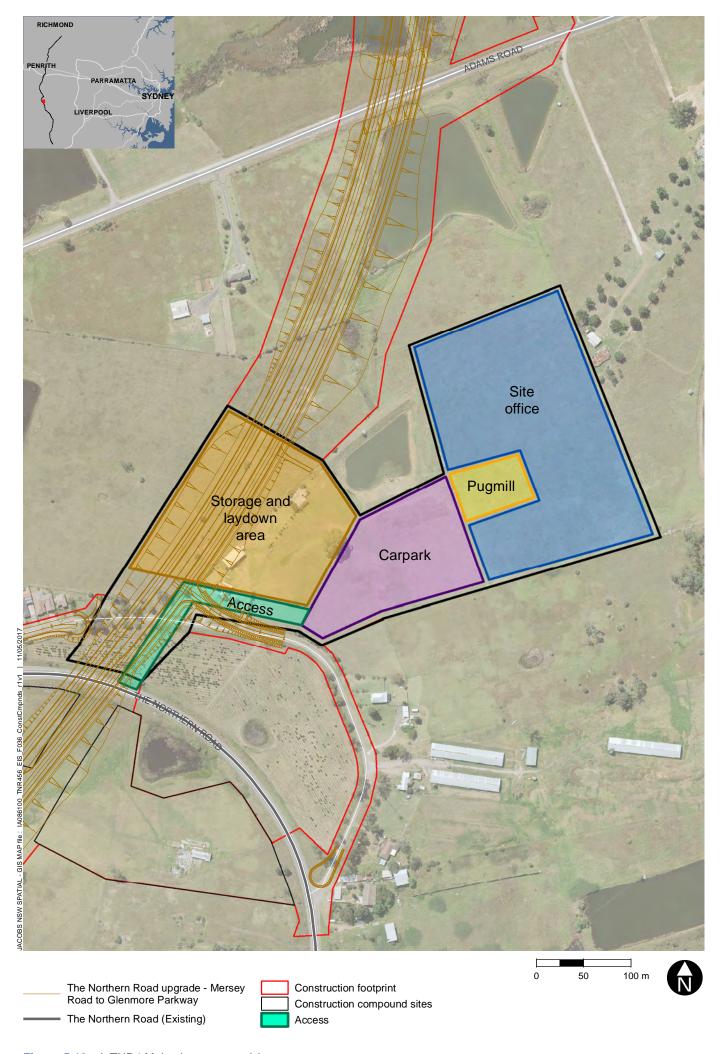


Figure 5-13 | TNR4 Main site compound 8

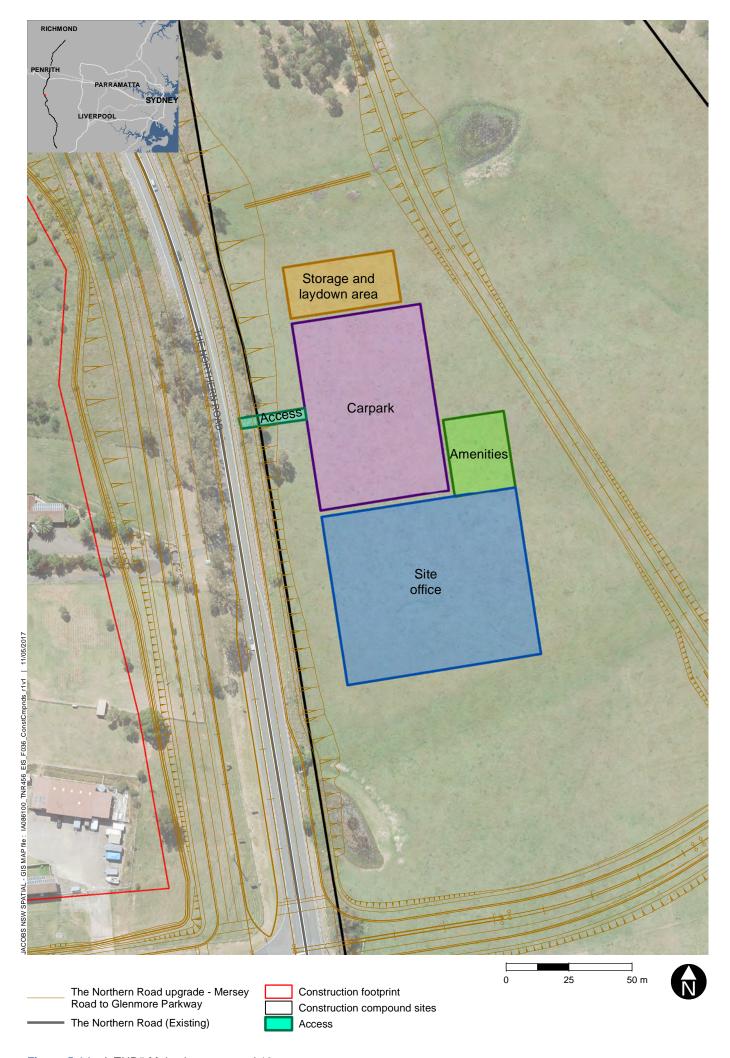


Figure 5-14 | TNR5 Main site compound 16

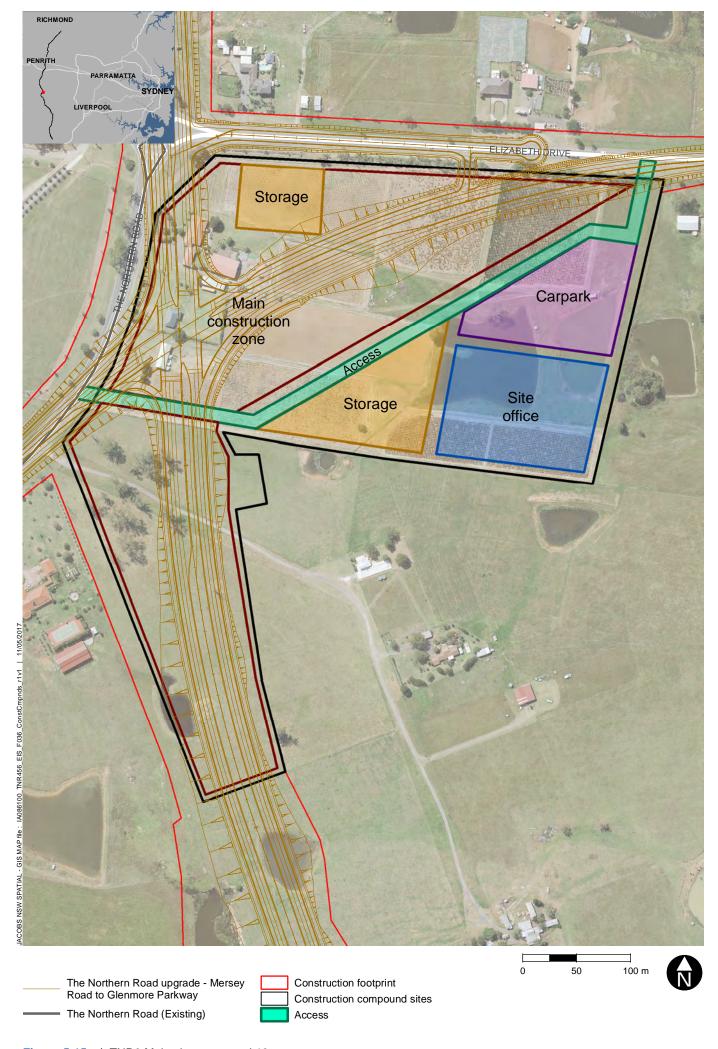


Figure 5-15 | TNR6 Main site compound 12

The proposed ancillary facility sites were assessed in accordance with the Critical SSI Standard Conditions of Approval for linear infrastructure projects which can be accessed on the DPE website:

http://www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/Systems/~/link.aspx? id=F4FB682E8DA144D08F6E554C06ACDB1E& z=z

These standard conditions have been developed to help infrastructure providers understand the types of conditions likely to be applied to State significant projects if they are approved, including conditions related to ancillary facilities. Condition B4 of the standard conditions outlines expected criteria for locating ancillary facilities. The criteria are generally as follows:

- a) Located more than 50 m from a waterway unless an erosion and sediment control plan is prepared and implemented so as not to affect water quality in the waterway in accordance with *Managing Urban Stormwater* series
- b) Within or adjacent to land where the critical state significant infrastructure is being carried out
- c) With ready access to a road network
- d) So as to avoid the need for heavy vehicles to travel on local streets or through residential areas in order to access the facility
- e) On level land
- f) So as to be in accordance with the Interim Construction Noise Guidelines (DECC, 2009) or as otherwise agreed in writing with affected landowners and occupiers
- g) So as not to require vegetation clearing beyond the extent of clearing approved under other terms of this approval except as approved by the ER as minor clearing
- h) So as not to have any impact on heritage items (including areas of archaeological sensitivity) beyond the impacts identified, assessed and approved under other terms of this approval
- i) So as not to affect lawful uses of adjacent properties that are being carried out at the date upon which construction or establishment of the facility is to commence
- j) To enable operation of the ancillary facility during flood events referred to in Section 8.1 and to avoid or minimise, to the greatest extent practicable, adverse flood impacts on the surrounding environment and other properties and infrastructure
- k) So as to have sufficient area for the storage of raw materials to minimise, to the greatest extent practicable, the number of deliveries required outside standard construction hours.

Each proposed ancillary facility has been assessed to ascertain whether it would comply with these criteria – refer Table 5-16. Where a site would not meet the criteria, further discussion and management measures are provided in Table 5-17.

Table 5-16 Summary of proposed ancillary site locations against criteria

Compound location	Ancillary facility site location criteria										
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
C1	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C2	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C3	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C4	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C5	Υ	Υ	NO	Υ	Υ	Y*	Υ	Υ	Υ	Υ	Υ

Compound location	Ancillary facility site location criteria										
C6	Υ	Υ	NO	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
C7	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C8	Υ	Υ	Υ	Υ	Υ	No*	Υ	Υ	Υ	Υ	Υ
C9	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C10	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C11	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C12	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C13	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C14	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C15	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C16	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C17	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C18	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C19	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C20	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ
C21	Υ	Υ	Υ	Υ	Υ	No	Υ	Υ	Υ	Υ	Υ

^{*}Preferred locations for pug mill

As identified in Table 5-16, some of the proposed ancillary facilities would not meet some of the criteria specified in standard condition B4, specifically criteria (c) and (f). Further assessment of these sites against these specific criteria is provided in Table 5-17, including proposed management measures and justification for proposing these sites.

Operation of the compound sites and laydown facilities would result in construction noise, air (dust), traffic and visual impacts. Refer to Chapters 7.2, 8.6, 7.1 and 8.5 respectively.

Table 5-17 Further assessment of ancillary facilities that would not meet condition B4 criteria

Criteria	Proposed management measure
c) With ready access to a road network	Applicable compound or laydown site(s) C5, C6. Additional assessment Compound sites C5 and C6 are required for construction of the realigned section of The Northern Road bypassing the Western Sydney Airport site. There is no current road access to these sites. There would not be a dedicated haul/access road constructed for these sites. Access to C5 and C6 would be via the mainline construction access to a suitable access point on The Northern Road.

Criteria	Proposed management measure
	By not constructing a dedicated haul/access road, potential impacts associated with clearing vegetation would be minimised. There would also be fewer indirect impacts associated with dust and noise emissions outside of the proposed construction footprint.
f) So as to be in accordance with the Interim Construction Noise Guidelines (DECC, 2009) or as otherwise agreed in writing with affected landowners and occupiers	Applicable compound or laydown site(s) All sites with the exception of C5 and C6. Additional assessment There would be residential receivers located within 200 m of the proposed construction compound and laydown sites. However, due to the predominantly rural-residential nature of the project area, the number of affected receivers would be relatively low. The potential construction noise impact is assessed in Section 7.2. Typically, in most times, noise emissions from standard-sized compounds would be relatively low. However, any use of heavy vehicles and reversing beepers at stockpile, laydown or maintenance facilities may impact nearby receivers, particularly during night-time operations. Noise impacts may be expected during loading operations at larger compounds during night-time work. Predictions of construction noise impact (refer to Appendix H) consider, variously, each construction stage running concurrent with all 21 ancillary facilities operating simultaneously. Predicted worst case construction noise levels from daytime activities would comply with Noise Management Levels (NMLs) for most receivers within the study area. However, predicted worst case construction noise levels from outof-hours work would exceed night time NMLs at most receivers within the study area at some time, including noise as a result of construction activity within ancillary facilities. There may be a need for a pug mill within compound C5 or C8. The need for a batching plant or pug mill within compound C5 or C8. The need for a batching plant or pug mill would be considered and assessed further once a construction contractor commences. An Ancillary Facilities Management Plan outlining management practices and procedures for the establishment and operation of all ancillary facilities would be prepared to the satisfaction of the Secretary of the DPE and Minister for the Department of Environment and Energy.

Stockpile sites would be used to temporarily store excess spoil and inert wastes such as concrete from demolition before being either reused on site or disposed off site. Stockpile sites would also include environmental protection measures such as sediment barriers and hoardings to minimise impacts on sensitive receivers from dust, and receiving waters from erosion and sedimentation. Stockpile sites would be established and managed in accordance with Roads and Maritime Stockpile Site Management Guideline (2011).

Temporary sediment basins

Because of the site topography and the number of cross drainage culverts, about 50 temporary sediment basins would be required to treat every section of the construction area throughout all stages of construction. In order to minimise the number of sediment basins, and the impact of construction of these basins on the local natural environment, the Blue Book (Soils and Construction, 2008 Volume 2D Main Road) criterion of 'Minimum 150 m³ of annual sediment loss has been adopted. This criterion indicates that if the estimated annual soil losses from a disturbed catchment are less than 150 m³, then a sediment basin may not be required subject to other erosion and sediment controls being implemented.

Where sediment basins are not required (catchment areas less than one hectare), an Erosion and Sediment Control Plan would include additional controls and small sediment traps (typically less than 5 m³ each).

The proposed locations and sizes of the temporary sediment basins are presented in Section 8.2. The design and the location of the road would have a substantial effect on the size and location of the basins. Changes to the road design in the future may result in changes to basin locations or the addition of new basins, resulting in an adjustment of the construction boundary identified for the proposed basins.

These temporary sediment basins would be removed at the end of construction and the disturbed land rehabilitated and landscaped, unless otherwise agreed in consultation with the landowner.

At the completion of construction, all ancillary facilities would be decommissioned and any disturbed land rehabilitated and landscaped to a minimum standard of its pre-construction condition. Excess spoil in stockpiles would be used for landscaping where reasonably practicable and warranted.

5.4.13 Traffic management and access

Construction traffic

The majority of traffic generated during construction would be from the delivery of plant, equipment and materials. There would also be movements by light vehicles associated with staff accessing the construction areas.

It is anticipated that the peak construction workforce for each of the three stages would be similar and not more than about 40 people per day. As the three stages would overlap, the peak workforce for the project (all three stages) would therefore be about 120 people per day when all three stages are under full construction – generally between mid-2018 and late 2019.

Construction traffic would have the greatest impact on the surrounding road network during the morning and evening peak periods.

During the peak traffic periods, about 230 additional light vehicles are expected to be generated per day as a result of construction traffic. Assuming that 80 per cent of these light vehicles would arrive in the same hour, the likely peak hour volume on the busiest days would be in the order of 184 vehicles per hour with almost all of these vehicles arriving at the work site in the morning and leaving in the afternoon. The majority of this traffic would likely travel along The Northern Road from the north, with a small proportion travelling along Elizabeth Drive from the east. Furthermore, the average traffic generation for any one work site would be around one-third of the peak volume at 62 two-way vehicle trips per day. This number of trucks is unlikely to have a significant traffic impact on the road network. A detailed assessment of potential impacts on traffic during construction is provided in Section 7.1.

Traffic management

Construction activities would be subject to careful traffic management. A traffic management and access plan would be prepared for the project during detailed design and construction planning. It is expected that there would need to be a series of traffic changes and management measures to allow the widening and intersection work to be carried out with minimum disruption to traffic flows on The Northern Road and adjoining local roads, while still preserving worker and road user safety.

Traffic management measures would be based on the predicted impacts during construction staging and are likely to include:

 Reduced speed limits at traffic switches, particularly between Mersey Road and Eaton Road, where traffic would be diverted from the existing The Northern Road alignment to a single carriageway to allow for the closure of the existing The Northern Road alignment through the Western Sydney Airport site

- Reduced speed limits and active traffic controls wherever construction activities take place over live traffic, such as tie-ins and bridge construction at Adams Road
- Temporary traffic lights to safely maintain construction vehicle access to construction facilities adjacent to public roads
- Temporary traffic calming. A temporary roundabout is likely to be in operation during the
 construction of traffic lights at the intersection of The Northern Road and Luddenham south
 access. Reduced speed limits would be required near this temporary roundabout
- Staging plans, to be prepared in consultation with adjoining contractors.

Access and haulage routes

Designated access and haulage routes for construction vehicles entering and exiting construction areas and temporary ancillary facilities would be along The Northern Road and surrounding arterial network where practicable. Construction access may be required on Adams Road while the bridge is being constructed. Light vehicles may also access local roads including residential areas of Luddenham for services, and parts of Willowdene Avenue and Vicar Park Lane for access to the mainline construction areas.

The use of local roads by heavy vehicles to access temporary ancillary facilities would be limited as far as is reasonably practicable.

Where the construction contractor identifies possible alternative haulage routes or construction access tracks in order to accommodate construction staging, the following general requirements would need to be met:

- Be located on relatively flat ground to minimise soil and water quality impacts
- Have consideration to dwellings that may be affected by noise or dust, and avoiding routes that are adjacent to dwellings where possible
- · Be located where there is easy and safe access to the construction site
- Would not impact upon matters listed under the EPBC Act or TSC Act
- Would result in minimal vegetation clearing.

For haulage routes or access tracks located outside the construction footprint, further environmental assessment and approval may be required.

Roads and Maritime would work with its construction partner (once selected) to ensure that access to properties can be maintained throughout construction, or alternative arrangements would be negotiated with relevant property owners.

5.4.14 Construction workforce

Table 5-18 outlines the indicative construction timeframe for the various construction stages of the project. The construction workforce is expected to fluctuate, depending on the construction activity and number of activities occurring concurrently. Construction of the project would be delivered through three separate construction contracts (see Section 5.5).

It is anticipated that the peak construction workforce for each of the three stages would be similar and not more than about 40 people per day. The peak workforce for the project (all three stages) would therefore be about 120 people per day when all three stages are under full construction – generally between mid-2018 and late 2019.

The construction workforce for the project would generally comprise labourers, plant operators, tradesmen, technicians and supervisors and sub-contractors.

Table 5-18 Indicative construction timeframe for project stages

Project	Project construction timing															
construction stage	2017			2018			2019			2020						
Mersey Road Bringelly to Eaton Road Luddenham																
Littlefields Road Luddenham to Glenmore Parkway Glenmore Park																
Littlefields Road to Eaton Road Luddenham																

The timing of these stages would be confirmed once a construction contractor is appointed to the project. However, it is expected that the indicative duration of construction activities outlined in Table 5-19 would apply to the project.

Table 5-19 Indicative construction activity timing

Construction activity	Duration of activity	Work outside standard hours Yes/No	Haulage % at night	
Early works	6 months	Y	<1%	
Earthworks	18 months	N	N/A	
Road work (widening, new roads, and intersections)	4 months	Υ	~ 5%	
Construction of bridge over Adam Road	6 months	Y	~ 5%	
Drainage	15 months	Y	~ 1%	
Pavements	18 months	Y	~ 10%	
Utility relocation	15 months	Y	<1%	
Finishing work	9 months	Y	<1%	

5.4.15 Construction work hours

Where reasonable and feasible, construction would be carried out during standard working hours as defined by the *Interim Construction Noise Guideline* (OEH, 2009) and presented in Table 5-20. Most of the noisiest activities would be able to be carried out during standard construction hours.

Table 5-20 Standard working hours

Day	Start time	Finish time
Monday to Friday	7am	6pm
Saturday	8am	1pm
Sunday and public holidays	No work	

While the majority of the project could be constructed during standard hours, a number of construction activities would need to be undertaken outside standard working hours. Typical activities that would likely be undertaken outside standard working hours could include, but are not limited to:

- Installation of traffic controls, such as concrete barriers
- Some bridge construction, including installing structures such as girders, concrete decking and drainage
- Resurfacing of the existing asphalt pavement
- Removal of existing static signage and installation of new signs
- Removal of existing traffic barriers and installation of temporary and permanent traffic barriers
- Removal of existing lane marking and application of new lane marking
- Delivery of plant and materials that is required outside these hours as requested by police or other authorities for safety reasons
- Installation of lighting and CCTV
- Any work that does not cause noise emissions to be audible at any sensitive receptor
- Emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

Night-time construction activities would be supported by out-of-hours operation of temporary ancillary facilities. The exact timing of out-of-hours work would depend on construction techniques and would be subject to the requirements of the construction contractor.

There are three key reasons to undertake work outside standard hours:

- To minimise traffic delays on The Northern Road and the surrounding road network
- To protect public safety
- To protect construction worker safety.

The Northern Road is a heavily utilised arterial road. Constructing the project under traffic is a complex task that would inevitably involve lane closures. Closing lanes during peak periods in particular would result in substantial traffic disruption at the work site and along The Northern Road. In addition, congestion can increase the potential for traffic incidents and often has a flow-on effect of causing congestion on the surrounding road network, increasing the potential for secondary incidents. It is therefore considered inappropriate to undertake some work in circumstances where a large number of people would be affected by daytime traffic disruption.

In addition, working on busy roads such as The Northern Road can also pose safety risks to both construction personnel and road users if appropriate measures are not put in place. Construction work associated with roads often require temporary changes to lanes and other traffic control measures which are different to the usual conditions experienced by road users at these locations. These changes increase the potential for traffic incidents that can affect the safety of construction personnel and other road users. Work outside standard hours, when there is less traffic, reduces the safety risk to workers.

An assessment of the potential noise impacts associated with construction of the project (including potential impacts from out-of-hours work) is included in Section 7.2. This assessment has been undertaken in accordance with the *Interim Construction Noise Guidelines* (DECC, 2009) and feasible and reasonable noise management measures are identified as part of this assessment.

Work outside of standard hours is expected to be subject to relevant conditions of an environment protection licence issued under the Protection of the *Environment Operations Act 1997* (POEO Act). Environment protection licence conditions would potentially include measures relating to noise emissions, community notifications and procedures for recording and addressing complaints. Additional information regarding licences and approvals that may be required to construct the project is provided in Chapter 2.

Where work is required outside standard working hours, measures would be implemented to minimise noise and other types of disturbance to residents, which would include but not limited to:

- Notifying residents of any out-of-hours work
- Minimising the out-of-hours work in residential areas where reasonable
- Including respite periods in accordance with the Interim Construction Noise Guideline (Department of Environment and Climate Change NSW, 2009)
- Using noise shielding for noisy equipment where feasible
- Undertaking noisy activities during daytime hours where reasonable and feasible.

5.4.16 Plant and equipment

The plant and equipment required for each of the key construction activities are outlined in Table 5-21. Plant and equipment requirements would be refined during detailed design and construction planning.

Table 5-21 Plant and equipment requirements

Construction phase/activity	Indicative plant and equipment					
Early works	Trucks Light vehicles Generators	Crane Bobcat				
Earthworks	Light vehicles Excavator Dump trucks Compactors	Bulldozers Graders Water carts Bobcat				
Road work (widening and new roads) and intersections	Excavators Bulldozers Water carts Graders Dump trucks Vibrating rollers Spray sealing equipment	Asphalt paving machines Concrete saws Compactors Cranes Slip-forming machines Concrete pumps Concrete trucks				
Construction of bridge over Adam Road	Light vehicles Excavators Generators Rock breaker Concrete pumps Welding equipment	Cranes Piling machines Concrete trucks Generators Oxy-cutting equipment Cherry pickers				
Drainage work	Light vehicles Excavators Generators Jackhammers Concrete pumps	Concrete trucks Cranes Compactors Boring machines Bobcats				

Construction phase/activity	Indicative plant and equipment				
Pavements	Light vehicles Excavators Generators Asphalt paving machines Concrete trucks Cranes	Concrete saws Compactors Slip-forming machines Concrete pumps Generators			
Utility relocation	Light vehicles Excavators Generators Excavators Boring machines Piling machines	Cranes Generators Dump trucks Plate compactors Concrete pumps Concrete truck			
Finishing work	Light vehicles Excavators Generators Dump trucks Concrete trucks Hydromulching equipment	Cranes Water cart Compactor Bobcats Road marking machine Welding equipment			

5.4.17 Construction materials

Construction of the project would require various materials and pre-cast elements. The major construction materials required would include:

- General fill and select fill for earthworks
- Sand and soils for landscaping
- Geotextile materials
- Pavement materials including road base and sub-base
- Materials for lining drainage channels
- Aggregate for concrete, asphalt and bitumen
- Cement and concrete
- Steel for reinforcement
- Wood for use in formwork and other temporary structures
- Water
- Pre-cast concrete including pipes, culvert segments and roadside barriers
- Mechanical and electrical equipment for VMS.

Materials would be sourced from licensed facilities and commercial suppliers in nearby areas. None of the materials proposed to be used are considered to be in short supply. Material quantities would be determined throughout detailed design prior to the start of construction and would be reduced where possible through efficient design, construction and procurement processes.

5.4.18 Natural resource consumption

All construction activities associated with the project would consume energy. Activities with high energy demands include:

- Excavation of earth and rock cuttings
- Removal, relocation and compaction of excavated material in fill embankments
- Transport of raw materials and structural elements (such as pre-cast bridge beams)
- Construction of pavement and bridges
- Operation of electronic signage and lighting
- Consumption of fuel by equipment and construction vehicles.

Equipment and vehicles would consume a large quantity of fuel. It is estimated that up to 3.5 million litres of fuel (diesel and petrol) would be used to construct the project.

Electricity needs on the site would be minor, and connecting the offices to the local power grid would be sufficient. Some generators may be necessary for emergency power supply.

Construction of the project would take about three years and require up to about 50 to 60 megalitres of water (non-potable and potable). Water would be available along the project alignment from existing filling points (potable water requiring metered standpipes) and potentially from the existing water sources along the proposed new alignment. Where existing water sources are not available, water would be transported to site as required.

Water would also be required during establishment of landscaped areas. The landscape establishment period is typically 12 weeks, with weekly watering required during this period to assist the growth and establishment of plants. Once landscaped areas are successfully established, it is not anticipated that there would be a requirement for water during operation of the road.

The principles of Ecologically Sustainable Development (ESD) have been recognised and applied during the development and assessment of the project. Chapter 10 identifies the principles of ESD, including the project's consistency with the Transport Environment and Sustainability Policy Framework (TfNSW, 2013).

5.5 Staging

5.5.1 Potential delivery scenarios

The project would be delivered through three separate construction contracts. The proposed order of construction, start and duration of construction would depend on the procurement strategy adopted following project approval. The indicative order and timing of construction is presented in Table 5-22.

Table 5-22 Plant and equipment requirements

Likely delivery staging	Possible construction start	Possible opening date
The Northern Road Upgrade – from Mersey Road, Bringelly to Eaton Road, Luddenham	Early 2018	Late 2019/early 2020
The Northern Road Upgrade – from Littlefields Road, Luddenham to Glenmore Parkway, Glenmore Park	Early 2018	Mid-2020

Likely delivery staging	Possible construction start	Possible opening date
The Northern Road Upgrade – Eaton Road, Luddenham to Littlefields Road, Luddenham	Early 2018	Mid-2020

Construction is expected to start in early 2018 and continue for about three years. The design of the project has considered the requirements to minimise impact on existing traffic, enabling safe construction access and egress and minimising the impact of disruption. Staging of the construction would consider:

- The need to minimise user disruption
- The need for local road and property access
- The need for land acquisition
- The earthworks balance, within each stage and across all stages of the project
- The sequence of utility adjustment and traffic staging considerations
- The sequence in which completed stages could be open to traffic.

Each stage of the project is expected to be delivered in a separate construction package and would include all activities needed to complete the stage, including utilities adjustments, road construction, bridge construction, traffic management, lighting and finishing work.

5.5.2 Mersey Road to Eaton Road

This stage is the diversion around the Western Sydney Airport site and would generally involve construction through greenfield areas (that is, where there is no existing development), which would have little impact on traffic flows.

Construction would be staged so that one carriageway is completed early to allow traffic to be switched from the existing The Northern Road through this area, allowing the existing The Northern Road to be closed to general traffic. Indicative staging would involve:

- Construction of the section of project from Leppington Pastoral Company driveway to Luddenham offline, where there would be little disruption to traffic flow
- The tie-in works at Luddenham, which would be constructed under traffic, mostly at night
- The tie-in at the southern end, which would be undertaken in two main stages
- Construction of the new carriageway, with traffic on the existing carriageway
- Switching traffic to the newly constructed carriageway to allow upgrading of the existing carriageway
- Construction of a temporary roundabout at the Luddenham southern connection until the section from Littlefields Road to Eaton Road Luddenham is completed
- Replacement of the temporary roundabout with traffic lights.

5.5.3 Littlefields Road to Glenmore Parkway

This stage would involve road widening, generally within and to the east of the existing road corridor. As such, staging is an important consideration so that construction minimises disturbance to road users. Indicative staging would involve:

 Construction of the northbound carriageway between Littlefields Road and the WaterNSW Supply Pipelines (this would occur in conjunction with construction of the Littlefields extension to the east, Gates Link Road and upgrade to Gates Road and construction of the northbound carriageway and U turn facility

- Switching traffic in the areas where construction is complete to allow construction of the southbound carriageway in conjunction with the Vineyard Road extension to Kings Hill Road and a u-turn facility in Chain-O-Ponds Road
- Switching traffic again to the southbound carriageway to allow construction of the remainder of the northbound carriageway
- Tie-ins with the other construction stages.

5.5.4 Eaton Road to Littlefields Road

The stage between Eaton Road and Elizabeth Drive Luddenham would generally involve construction in greenfield areas (that is, where there is no existing development), which would have little impact on traffic flows. Indicative staging would involve:

- · Construction of the bridge over Adams Road
- Realignment of Elizabeth Drive (constructed off line)
- Tie-in of Elizabeth Drive (constructed under traffic)
- Construction of the section north of the existing Elizabeth Drive intersection and The Northern Road in two main stages:
 - construction of the new carriageway (constructed under traffic on the existing carriageway)
 - upgrading of the existing carriageway (constructed under traffic on the new carriageway).

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6 Consultation

This chapter describes the consultation process and activities that were, and would continue to be, undertaken for the project. It also presents a summary of issues raised by the community and stakeholders and where they are addressed in this EIS.

Table 6-1 outlines the environmental assessment requirements (SEARs) of the Secretary of the NSW Department of Planning and Environment and Commonwealth EIS Guidelines as they relate to consultation with government, stakeholders and community groups, and identifies where these are addressed in this EIS.

Table 6-1 EIS assessment requirements – Consultation

Requirements	Where addressed in EIS	
Secretary's Environmental Assessment Requirements (NSW EP&A Act)		
The EIS must also address the following specific matters: Social and Economic — including: • a draft Community Involvement Plan for the works, identifying relevant stakeholders, procedures for distributing information and receiving/responding to feedback and procedures for resolving community complaints during construction. Key issues that should be addressed in the draft Plan should include (but not necessarily be limited to): - traffic management (including property access and	A Draft Community Involvement Plan for the project is provided in Appendix R.	
pedestrian access), and noise and vibration mitigation and management, including work outside standard construction hours.		
During the preparation of the EIS, you must consult with the relevant local, State and Commonwealth Government authorities, service providers, community groups and affected landowners.	Chapter 6	
In particular you must consult with Local, State and Commonwealth government authorities, including the:	Consultation with government agencies is described in Section	
Environment Protection Authority	6.2.	
Office of Environment and Heritage (including Heritage Division)	Issues raised by government agencies are presented in Table 6-	
Department of Primary Industries	7.	
NSW Office of Water		
Sydney Catchment Authority		
Civil Aviation Safety Authority		
AirServices Australia		
Where known, the operator of the proposed Western Sydney Airport		
Department of Defence		

Requirements	Where addressed in EIS	
Ministry of Health, including the South Western Sydney and Nepean Blue Mountains Local Health Districts		
Liverpool City Council		
Penrith City Council		
Emergency Services.		
Specialist interest groups, including local sporting groups, Aboriginal stakeholders, and pedestrian and bicycle user groups.	Consultation with special interest groups and Aboriginal stakeholders is described in Section 6.2.3 and the outcomes of consultation are presented in Section 6.3.3. Further details are provided in Section 8.3 and Appendix M – Aboriginal Cultural Heritage Assessment Report).	
Utilities and service providers.	Consultation with utilities and service providers and issues raised are described in Table 6-8.	
The public, including community groups, businesses, and adjoining and affected landowners.	Consultation with the public, including community groups and adjoining and affected landowners, is described in Section 6.2. Community feedback is presented in Table 6-8.	
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 is outlined in Section 6.2. The feedback and issues raised by government agencies, local councils and the community (with reference to where they are addressed in the EIS), are presented in Section 6.3.	
Commonwealth EIS Guidelines (Commonwealth EPBC Act)		
Any consultation about the action, including:	Chapter 6, specifically:	
Any consultation that has already taken place	Section 6.2 Consultation	
Proposed consultation about relevant impacts of the action	process and activities to dateSection 6.4 Future consultation	
If there has been consultation about the proposed action, any documented response to, or result of, the consultation	 Section 6.3 Summary of issues raised Section 6.3.2 Issues raised by 	
Identification of affected parties, including a statement mentioning any communities that may be affected and	the community, and Section 6.3.3 Issues raised by the	

Requirements	Where addressed in EIS
describing their views.	Aboriginal community.
Details of any public consultation activities undertaken, and their outcomes.	Consultation with the public, including community groups and adjoining and affected landowners, is described in Section 6.2. Community feedback is presented in Table 6-8. Public consultation outcomes are also discussed in Section 7.4 Socio-economic and land use.
Details of any consultation with indigenous stakeholders.	Consultation with special interest groups and Aboriginal stakeholders is described in Section 6.2.3 and the outcomes of consultation are presented in Section 6.3.3. Further details are provided in Section 8.3 and Appendix M – Aboriginal Cultural Heritage Assessment Report).

6.1 Consultation objectives and strategy

Roads and Maritime developed a Draft Community Involvement Plan (Appendix R) to identify key objectives and a program for consultation with community, stakeholders and government agencies. These objectives have guided all communication and consultation with stakeholders in preparing this EIS and would continue to apply to all stages of the project to ensure consistent implementation and appropriate consultation with all stakeholders.

The project objectives are aligned with other projects on The Northern Road as well as the WSIP objectives and include:

- Providing regular and targeted information to build awareness about The Northern Road
 Upgrade and the likely impacts and benefits of the project
- Providing clear direction to the community and stakeholders about whether we are providing information or seeking feedback so that expectations are clear at all stages of engagement
- Ensuring community and stakeholder views are continuously fed into the project's development and used to understand and effectively assess impacts
- Collaborating with government agencies and local councils to ensure a whole-of-government approach and consistent key messages.

In addition to the community and stakeholder consultation objectives, the following values underpin Roads and Maritime's consultation activities carried out for the project:

- Customer focus We place the customer at the centre of everything we do
- Collaboration We value each other and create better outcomes by working together
- Solutions We deliver sustainable and innovative solutions to NSW's transport needs
- Integrity We take responsibility and communicate openly
- Safety We prioritise safety for our people and our customers.

The Draft Community Involvement Plan has been developed in accordance with the SEARs and includes:

- · Identification of relevant stakeholders
- Procedures for distributing information and receiving and responding to feedback
- Procedures for resolving community complaints during construction
- Traffic management (including property access and pedestrian access)
- Noise and vibration mitigation and management, including work outside standard construction hours.

6.2 Consultation process and activities to date

6.2.1 Overview

Roads and Maritime has carried out an extensive community consultation program for the project and other Western Sydney Infrastructure Plan (WSIP) projects.

In April 2014, the project was first announced as part of the WSIP program by The Hon Jamie Briggs, Assistant Minister for Infrastructure and Regional Development.

In July and August 2015, Roads and Maritime released – for community and stakeholder comment – a preliminary design and access strategy for The Northern Road Upgrade between Littlefields Road, Luddenham and Jamison Road, South Penrith and route options for the proposed new alignment of The Northern Road to bypass the Western Sydney Airport.

In October 2015, Roads and Maritime released a Consultation Report covering several WSIP projects including The Northern Road Upgrade between Mersey Road, Bringelly to Littlefields Road, Luddenham and Littlefields Road, Luddenham to Jamison Road, South Penrith.

In November 2015, Roads and Maritime announced the preferred route for The Northern Road Upgrade between Mersey Road, Bringelly and Littlefields Road, Luddenham. After considering early studies and community feedback, the eastern option that provides a bypass to access the Luddenham town centre and homes along the existing The Northern Road was selected as the preferred route.

In February and March 2016, Roads and Maritime displayed the preliminary design and access strategy between Mersey Road, Bringelly and Adams Road, Luddenham. At that time, the community was informed that more information on The Northern Road Upgrade, between Adams Road and Littlefields Road would be presented to the community in mid-2016, following further investigations of other transport projects in the area.

In May 2016, Roads and Maritime released a Consultation Report detailing stakeholder and community feedback following consultation of the preliminary design and access strategy between Mersey Road, Bringelly and Adams Road, Luddenham.

In July and August 2016, Roads and Maritime released a preliminary design and access strategy between Eaton Road, Luddenham and Littlefields Road, Luddenham as well as an updated access strategy for property access from Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park. These were developed in response to community feedback requesting fewer sets of traffic lights along The Northern Road Upgrade.

6.2.2 Communication and consultation tools

A number of channels and communication tools have been and continue to be used to inform and engage stakeholders. These include:

- Community information contact line: 1800 703 457
- Project email: wsip@rms.nsw.gov.au

- Project website: www.rms.nsw.gov.au/thenorthernroad
- Project video and animations via the WSIP interactive portal https://v2.communityanalytics.com.au/rms/wsip
- Project database to record all correspondence relevant to the project, including stakeholder contact details and issues raised during the life of the project
- Community information sessions
- Meetings with key stakeholders
- Face-to-face meetings with individual property owners, businesses and residents that may be directly affected by the project
- Community update newsletters
- Letterbox drops
- Mail-outs (addressed and unaddressed)
- Door knocking within the immediate project areas
- Feedback form
- Media releases
- Advertisements in local newspapers
- Variable message signs along roadsides in the area during consultation display periods.

6.2.3 Aboriginal cultural heritage consultation

The aim of consultation is to integrate cultural and archaeological knowledge and ensure registered stakeholders have information to make decisions on Aboriginal cultural heritage.

Roads and Maritime is committed to effective consultation with Aboriginal communities regarding its activities and the potential for impact on Aboriginal cultural heritage. The Roads and Maritime developed the Procedure for Aboriginal Cultural Heritage Consultation and Investigation (PACHCI) to provide a consistent means of effective consultation with Aboriginal communities regarding activities that may impact on Aboriginal cultural heritage, and a consistent assessment process for Roads and Maritime activities across NSW.

Consultation with Aboriginal people has also been carried out in accordance with the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (OEH, 2010a) and the requirements of Clause 80C of the National Parks and Wildlife Regulation 2009.

Roads and Maritime invited Aboriginal people who hold knowledge relevant to determining the cultural heritage significance of Aboriginal objects and Aboriginal places in the project area to register an interest in a process of community consultation. Investigations for the project have included consultation with 61 Aboriginal community groups and individuals, as listed in Appendix M – Aboriginal Cultural Heritage Assessment Report.

The formal consultation process has included:

- Advertising for registered stakeholders (refer Appendix M)
- Notification letters to government agencies
- Notification of the closing date for registration
- Provision of proposed archaeological assessment methodology (20 January 2016) (allowing a 28 day review) outlining the methodology to prepare the Cultural Heritage Assessment Report (CHAR)
- Ongoing compilation of a register of individuals and groups for consultation

- Provision of the draft CHAR to Aboriginal stakeholders for a 28 day review and comment period (comments were received from Tocomwall and Darug Land Observations and are incorporated in the CHAR and included in Appendix M)
- The holding of an Aboriginal focus group meeting to discuss assessment methodology, investigation results, the CHAR and detailed mitigation strategies (27 April 2016)
- Ongoing consultation with the local Aboriginal community.

6.2.4 Consultation undertaken before preparation of the EIS

Stakeholders were identified in consideration of the project's potential direct and indirect impacts and from records of past and current contact with relevant government bodies, stakeholders and interest groups. Stakeholders were also identified in accordance with the requirements of the SEARs and Commonwealth EIS Guidelines.

Stakeholders were grouped into the following categories:

- · Potentially directly affected property owners, including adjoining land owners
- Interest groups, such as community, business owners and business groups
- Local Aboriginal Land Councils
- Government and non-government agencies
- The broader community.

It is noted that in reference to the SEARs, no local sporting groups were consulted as the project would not impact any sporting facilities or groups. Additionally, no local sporting groups came forward during consultation with the general public.

A list of stakeholder groups that have been consulted is provided in Table 6-2.

Table 6-2 Stakeholder groups identified for the project

Community / stakeholder group	Stakeholder
Federal Government	Department of the Prime Minister and Cabinet Minister for Urban Infrastructure Minister for Infrastructure and Transport Minister for Regional Development Federal Member for Hume Federal Member for Lindsay Federal Member for Werriwa
State Government	Department of Premier and Cabinet Minister for Roads, Maritime and Freight Minister for Transport and Infrastructure Minister for Western Sydney State Member for Mulgoa State Member for Camden
Government partners	Federal Department of Infrastructure and Regional Development (Infrastructure Investment and Western Sydney units) Transport for NSW
Government agencies	Australian Government Department of the Environment and Energy (DoEE) NSW Environment Protection Authority (EPA)

Community / stakeholder group	Stakeholder
	NSW Office of Environment and Heritage (OEH) NSW Department of Primary Industries NSW Department of Planning and Environment WaterNSW Civil Aviation Safety Authority AirServices Australia Commonwealth Department of Defence Ministry of Health, including the South Western Sydney and Nepean Blue Mountains Local Health Districts UrbanGrowth NSW Infrastructure NSW Infrastructure Australia Greater Sydney Commission
Councils	Penrith City Council Liverpool City Council Western Sydney Regional Organisation of Councils (WSROC)
Specialist interest groups, including Local Aboriginal Land Councils and Aboriginal stakeholders	Deerubbin Land Council Gandangara Land Council Tharawal Land Council Aboriginal Heritage Office
Emergency services	NSW Fire and Rescue NSW Rural Fire Service Penrith Local Area Command NSW Police Force State Emergency Service NSW Ambulance Service
Utilities and service providers	Sydney Water Telstra Optus Jemena Gas TransGrid Energy Endeavour Energy NBN Co (National Broadband Network)
The public, including educational facilities, community groups, businesses, and adjoining and affected landowners	Educational facilities: Luddenham Public School Holy Family Primary School Luddenham Long Day Child Care Centre Community groups: Bicycle NSW Luddenham Progress Association Numerous individual businesses and adjoining and affected landowners

6.2.5 Consultation carried out before preparation of this EIS

In July and August 2015, Roads and Maritime released a preliminary design and access strategy for The Northern Road Upgrade between Littlefields Road, Luddenham and Jamison Road, South Penrith and route options for the proposed new alignment of The Northern Road to bypass Luddenham and the Western Sydney Airport for community and stakeholder comment. The following consultation activities were associated with this announcement.

Community update newsletter – In July 2015, a community update newsletter was distributed for The Northern Road Upgrade between Mersey Road, Bringelly and Littlefields Road, Luddenham. The newsletter included a general overview of the WSIP, key features of the project and further information to provide feedback (including details of the information sessions).

The newsletters, published on the Roads and Maritime website, were available at all community information sessions, and were also letterbox dropped to 20,700 local residences across the different project areas. The community update newsletter is available to view at <a href="http://www.rms.nsw.gov.au/documents/projects/sydney-west/the-northern-road/the

Postcard – A postcard was mailed to 47,000 local residences outlining WSIP, the projects on public display and further information to provide feedback (including details of the information sessions).

Door knock – 590 homes were door knocked at the beginning of consultation. The purpose was to notify local residents along the proposed corridor of the four shortlisted route options and provide dates for the upcoming community information sessions. The July 2015 community update newsletter was provided. Where the door knock was unsuccessful a 'Sorry We Missed You' flyer was left at the premises.

Media releases – A joint media release from the Australian and NSW governments was distributed to all major metropolitan and western Sydney publications on Thursday 17 April 2014. The media release, titled 'Local Stakeholders Welcome \$3.5 Billion Infrastructure Plan', marked the first announcement to the public on the proposed major upgrades to The Northern Road and Bringelly Road and the construction of other WSIP projects including the proposed M12 Motorway.

A joint media release from the Australian and NSW governments was distributed to all major Sydney metropolitan and western Sydney publications on Tuesday 14 July 2015. The media release, titled 'Next Major Road Upgrade Stages Announced for Western Sydney' encouraged local community members and stakeholders to get involved in the consultation process. A summary of key media releases prior to preparation of the EIS is provided in Table 6-3.

Table 6-3 Key media releases for the project prior to EIS preparation

Announcement	Date	Link
Local Stakeholders Welcome \$3.5 Billion Infrastructure Plan	17 April 2014	http://minister.infrastructure.gov.au/jb/rele ases/2014/April/jb029_2014.aspx
Getting on with Delivering Western Sydney's \$3.5Billion Roads Package	01 May 2014	http://minister.infrastructure.gov.au/jb/rele ases/2014/May/jb032_2014.aspx
Western Sydney Infrastructure Plan	13 May 2014	http://minister.infrastructure.gov.au/wt/rele ases/2014/May/budget-infra_15- 2014.aspx
Western Sydney Infrastructure Plan: Delivering First Stage of \$500 Million Bringelly Road Upgrade	01 July 2014	http://minister.infrastructure.gov.au/jb/rele ases/2014/July/jb058_2014.aspx

Announcement	Date	Link
Next Major Road Upgrade Stages Announced for Western Sydney	14 July 2015	http://www.rms.nsw.gov.au/about/news- events/news/members-of- parliament/2015/150714-next-major-road- upgrade-stages-announced-for-western- sydney.html

Newspaper advertisements – A total of 11 newspaper advertisements appeared between Tuesday 14 and Tuesday 21 July 2015 to raise awareness of the consultation and information sessions.

Publications included the Penrith Press, Penrith Gazette, Penrith Western Weekender, South West Advertiser, Macarthur Chronicle, Liverpool Leader, Liverpool Champion, The Sydney Morning Herald and The Daily Telegraph.

Additionally, in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* (EP&A Act), newspaper advertisements were placed in July 2015 to notify the public that the State Significant Infrastructure application for the project was lodged with the Department of Planning and Environment.

Email – Emails were sent from Roads and Maritime to stakeholders (community members and groups on the Roads and Maritime WSIP project database), local Members of Parliament (MPs) and other government stakeholders to raise awareness of the consultation and information sessions. A reminder email noting that consultation was closing on Friday 14 August 2015 was also sent to stakeholders before this date.

SMS – Reminder text messages were sent to stakeholders on the stakeholder and community database at the start of consultation and on the day before each information session.

Webpage – The project webpage (www.rms.nsw.gov.au/wsip) is regularly updated with the latest project information including all relevant community update newsletters and how to submit feedback. A total of 3856 unique page visitors were recorded during July and August 2015, when Roads and Maritime carried out consultation for the WSIP projects.

WSIP web portal – An interactive web portal covering all aspects of the WSIP was launched on 13 July 2015. The web portal includes nine videos about the projects and provides a space for viewers to leave feedback. A total of 2836 unique visitors to the web portal were recorded during the consultation period. A banner directing people to the portal was placed on the Roads and Maritime home page http://www.rms.nsw.gov.au/ and on the www.nsw.gov.au website.

Information sessions – Six community information sessions were held between 22 July and 8 August 2015. The purpose was to provide the community with the opportunity to view all display materials, talk with members of the project team and submit feedback in person. Project teams from Transport for NSW, Sydney Water, Department of Planning and Environment, and the DIRD were also present at some of the sessions to provide information on other projects in the area. Table 6-4 outlines the details of these community information sessions.

Table 6-4 Details of community information sessions July–August 2015

Date	Location
Wednesday 22 July 2015 4–8pm	Penrith Anglican College Gymnasium 338–356 Wentworth Road, Orchard Hills
Saturday 25 July 2015 12–3pm	Bringelly Community Centre 5 Greendale Road, Bringelly

Date	Location
Wednesday 29 July 2015	Holy Family Primary School Hall
3–7pm	Lot 32 Willowdene Avenue, Luddenham
Saturday 1 August 2015	Glenmore Park Youth and Community Centre
11am–2pm	Luttrell Street (off Town Terrace), Glenmore Park
Thursday 6 August 2015	Kemps Creek Public School Hall
3–7pm	100 Cross Street, Kemps Creek
Saturday 8 August 2015	Holy Family Primary School Hall
12–3pm	Lot 32 Willowdene Avenue, Luddenham

Key agency and Ministerial briefings – Roads and Maritime holds monthly meetings with the DIRD and Transport for NSW to facilitate information exchange across government agencies on projects in the area.

There have been a number of Ministerial briefings on the progress of the planning for the upgrade, including a briefing in July 2015 with Federal Member for Lindsay, Ms Fiona Scott MP, State Minister the Hon Duncan Gay MLC, and local State Members Mr Stuart Ayres MP and Mrs Tanya Davies MP.

Liverpool and Penrith City Councils were also briefed on the project prior to community consultation in early July 2015.

Electronic variable message signs (VMS) – Eight VMS were displayed along The Northern Road, Elizabeth Drive and Bringelly Road during the consultation period to notify the community of the information sessions.

Static poster displays – Project posters were displayed during the consultation period at Penrith Library, Penrith Civic Centre, Narellan Library, Camden Council, Camden Library, Liverpool Library, Liverpool City Council and Fairfield City Council.

Meetings and briefings – Individual, face-to-face meetings were held with residential and commercial property owners and business operators to discuss property impacts including property acquisition. Meetings with property owners have been ongoing regarding property acquisition.

6.2.6 Consultation carried out during preparation of this EIS

Community update newsletters – Newsletters were sent to the community and stakeholders in November 2015, February 2016 and July 2016.

The newsletter distributed in November 2015 outlined the preferred eastern option for The Northern Road Upgrade between Mersey Road, Bringelly and Littlefields Road, Luddenham. The newsletter included a map and details of the project, why the alternative options were not chosen, questions and answers, and information on how to provide feedback. The newsletter was sent to more than 2200 stakeholders. It is available to view at

 $\frac{http://www.rms.nsw.gov.au/documents/projects/sydney-west/the-northern-road/the-northern-road-stage-4-community-update-1511.pdf$

The newsletter distributed in February 2016 outlined the preliminary design and access strategy for part of the alignment (between Mersey Road, Bringelly and just north of Adams Road, Luddenham). The newsletter included an overview of the WSIP, key features of the project and further details on the information sessions and how to provide feedback. The newsletter was available online and was also letter box dropped to 2300 local residents and businesses. It is available to view at http://www.rms.nsw.gov.au/documents/projects/sydney-west/the-northern-road/bringelly-northern-road-upgrade-stage-4-2016-02.pdf

The newsletter distributed in July 2016 outlined the preliminary design and access strategy between Eaton Road, Luddenham and Littlefields Road, Luddenham as well as the alternative

access arrangements for Littlefields Road and Gates Road. The newsletter included details of The Northern Road Upgrade from Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park, key features of the project, a map and information on how to provide feedback on the project. The newsletter was distributed to 10,000 residents and businesses. It is available to view at http://www.rms.nsw.gov.au/documents/projects/sydney-west/the-northern-road/the-northern-rd-upgrade-project-update-2016-07.pdf

Door knock – The project team door knocked 65 affected property owners in August 2016. The purpose was to notify local residents along the proposed corridor of the preliminary design and to seek feedback. The July 2016 community update newsletter was provided. Where the door knock was unsuccessful, a business card was left at the property.

Media releases – Roads and Maritime announced the preferred route for the Luddenham and Western Sydney Airport bypass on 12 November 2015. A further media release announcing shortlisted options for the proposed M12 Motorway (which would tie into The Northern Road) was released on 15 February 2016. A media release announcing the release of the Consultation Report was issued on 19 May 2016 and on 22 July 2016, Roads and Maritime issued a media release encouraging the community to have a say on the final stage of The Northern Road upgrade. A summary of key media releases during preparation of the EIS is provided in Table 6-5.

Table 6-5 Key media releases for the project during preparation of the EIS

Announcement	Date	Link
Preferred Route for The Northern Road Upgrade Luddenham and Western Sydney Airport Bypass (Stage 4)	12 November 2015	http://minister.infrastructure.gov.au/p f/releases/2015/November/pf024_20 15.aspx
Shortlisted Route Options for Proposed M12 Motorway Announced (includes an announcement regarding The Northern Road)	15 February 2016	http://www.rms.nsw.gov.au/about/ne ws-events/news/roads-and- maritime/2016/160215-m12- motorway-route-options.html
Consultation Report for M12 Motorway Route Options and The Northern Road Upgrade Stage 4	19 May 2016	http://www.rms.nsw.gov.au/about/ne ws-events/news/roads-and- maritime/2016/160519-consultation- report-m12-motorway-northern-rd- stage-4.html
Community Invited to have a Final Say on the Final Stage of the Northern Road Upgrade	22 July 2016	http://www.rms.nsw.gov.au/about/ne ws-events/news/roads-and- maritime/2016/160722-have-a-say- on-the-final-stage-of-the-northern- road-upgrade.html

Newspaper advertisements – Roads and Maritime placed advertisements in the *Koori Mail*, *Penrith Press*, *Penrith Gazette* and *Western Weekender* between Tuesday 17 November and Friday 20 November 2015. The purpose of these advertisements was to invite Aboriginal people and Aboriginal groups that hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in The Northern Road Upgrade to provide feedback. Six advertisements were also placed in the South West Advertiser, Penrith Press and *Macarthur Chronicle* announcing the eastern option as the preferred route and inviting community and stakeholder feedback.

A total of 11 newspaper advertisements were placed between 17 and 26 February 2016 to raise awareness and promote the consultation period for The Northern Road Upgrade between Mersey Road, Bringelly and the preliminary design and access strategy for just north of Adams Road, Luddenham. Publications included the *Penrith Press*, *Penrith Gazette*, *Macarthur Chronicle*, *Liverpool Leader*, *Liverpool Champion* and *Penrith Western Weekender*.

Roads and Maritime placed eight advertisements between 22 July and 12 August 2016 in the *Liverpool Champion*, *Penrith Press*, *Penrith Western Weekender* and *The Advertiser* to announce the preliminary design and access strategy for The Northern Road Upgrade between Eaton Road and Littlefields Road and to encourage community and stakeholder feedback.

Stakeholder emails – On 12 November 2015, Roads and Maritime sent emails to 883 stakeholders (community members and groups), local MPs and other government stakeholders to announce the preferred route option for the diversion of The Northern Road Upgrade around the Western Sydney Airport site.

On 15 February 2016, Roads and Maritime sent emails to 954 stakeholders (community members and groups), local MPs and other government stakeholders to raise awareness of the consultation and information sessions in February and March 2016. A reminder email noting the consultation would close on 11 March was sent to stakeholders before the closing date.

On 22 July 2016, Roads and Maritime sent emails to 950 stakeholders to announce the preliminary design and access strategy for The Northern Road Upgrade from Mersey Road to Glenmore Parkway and to encourage stakeholders to provide feedback.

SMS – Reminder text messages were sent to stakeholders at the start of the February and March 2016 consultation period and on the day before each information session.

Webpage – The project webpage is regularly updated with the latest project information including all relevant community update newsletters and how to submit feedback. A total of 1906 unique page visitors were recorded in February and March 2016, when Roads and Maritime carried out consultation for the preliminary design and access strategy for The Northern Road between Mersey Road and Littlefields Road.

During the July 2016 consultation period, there were 1197 unique visitors to The Northern Road webpage.

From July 2015 and mid-August 2016, there were 9062 unique web visitors The Northern Road webpage. This figure does not include repeat visits during the same session.

WSIP portal – For the February and March 2016 consultation period, a new video was developed for The Northern Road Upgrade between Mersey Road and Littlefields Road. There were 548 unique visitors to The Northern Road webpage during this consultation period. A banner directing people to the portal was placed on the Roads and Maritime home page www.communityanalytics.com.au/wsip.

For the July 2016 consultation period, a new video was developed showing the preliminary design and access strategy between Eaton Road and Littlefields Road, and the alternative access arrangement for Gates Roads and Littlefields Road. There were 484 unique visitors to the video page during this consultation period.

Information sessions – Four community information sessions were held between 24 February and 5 March 2016. The purpose was to provide the community with an opportunity to view display materials, talk with members of the project and property teams and submit feedback in person. Project teams from DIRD, Department of Planning and Environment and Sydney Water were also present at some of the sessions to provide information on other projects in the area.

Table 6-6 outlines the details of the four community information sessions.

Table 6-6 Details of community information sessions February–March 2016

Date	Location
Wednesday 24 February 2016	Holy Family Primary School Hall
5–8pm	Lot 32 Willowdene Avenue, Luddenham
Saturday 27 February 2016	Kemps Creek Public School Hall
10am–1pm	100 Cross Street, Kemps Creek
Wednesday 2 March 2016	Kemps Creek Public School Hall
3–6pm	100 Cross Street, Kemps Creek
Saturday 5 March 2016	Holy Family Primary School Hall
10am–1pm	Lot 32 Willowdene Avenue, Luddenham

Electronic variable message signs (VMS) – Seven VMS were displayed along The Northern Road, Elizabeth Drive and Bringelly Road during the February and March 2016 consultation period to notify the community about upcoming information sessions.

Key agency and Ministerial briefings – On 12 February 2016, Roads and Maritime held a briefing with the Federal Member for Lindsay, Ms Fiona Scott MP, Federal Member for Macarthur Mr Russell Matheson MP and local State Members Mr Stuart Ayres MP, Mrs Tanya Davies MP and Mr Chris Patterson MP.

Briefings were also held with Fairfield City Council (16 February), Liverpool City Council (18 February), Penrith City Council (22 February) and Western Sydney Parklands Trust (10 February).

Roads and Maritime also holds monthly meetings with the DIRD and Transport for NSW to facilitate information exchange across government agencies on projects in the area.

Meetings and briefings (October 2015 – August 2016) – Meetings and briefings have been held with key government agencies, local councils and industry stakeholders to explain specific details of the project and gather feedback. Opportunities for meetings and briefings with stakeholders would continue throughout the life of the project.

Roads and Maritime invited stakeholders to meet to discuss the project and/or provide feedback on the project as part of the EIS process. The following stakeholders were invited to face-to-face meetings:

- NSW Environment Protection Authority
- NSW Office of Environment and Heritage (OEH)
- NSW Department of Primary Industries (NSW Agriculture, NSW Fisheries, DPI Water)
- WaterNSW
- Civil Aviation Safety Authority (Commonwealth)
- AirServices Australia (Commonwealth)
- Department of Defence (Commonwealth)
- NSW Ministry of Health, including the South Western Sydney and Nepean Blue Mountains Local Health Districts
- Penrith City Council
- Liverpool City Council
- NSW Police

- NSW Ambulance
- NSW Fire and Rescue
- NSW Rural Fire Service
- NSW State Emergency Service
- Bicycle NSW
- NSW Taxi Industry Association and NSW Taxi Council.

The following stakeholders accepted the invitation to meet with Roads and Maritime:

- Nepean Area Health Services Department of Health (March 2016)
- Penrith City Council (April 2016)
- Liverpool City Council (May 2016).

The following utilities and government agencies have also been engaged during the project on a Utility Coordination Team for the WSIP:

- Telstra
- Optus
- Transgrid
- Endeavour Energy
- Jemena
- Sydney Water
- WaterNSW
- National Broadband Network (NBN)
- Department of Planning and Environment
- DIRD.

Property owners who were not able to meet with Roads and Maritime at the community information sessions were given the opportunity to meet at a more convenient time. Individual, face-to-face meetings were held with residential and commercial property owners and business operators to discuss property impacts including property acquisition. Meetings with property owners have been ongoing regarding property acquisition.

Liverpool and Penrith City Councils were further briefed on the project in mid-February 2016, April 2016, May 2016 and July 2016 as part of the EIS consultation process.

Roads and Maritime also met with the Luddenham Progress Association to discuss the shortlisted route options at the southern end of the proposed upgrade in early December 2015.

6.3 Summary of issues raised

6.3.1 Issues raised by government agencies

Roads and Maritime has consulted on an ongoing basis with key State and local government agencies identified in Table 6-7 (and including those outlined in the SEARs). This consultation was designed to ensure agency issues and concerns were understood, documented and addressed, and that attendees had an opportunity to discuss any aspect of the project. Consultation has included phone calls, emails and face-to-face meetings.

Table 6-7 provides a summary of the consultation carried out, and issues raised by government agencies and local councils and where these issues are addressed in this EIS.

Table 6-7 Summary of issues raised by Commonwealth, State and local government

Stakeholder	Issues raised	Where addressed in EIS
Department of Primary Industries – Agriculture NSW	 Management of weeds Minimisation of impact on good quality cropping land Impact on access for farm gate sales 	Weed management is assessed in Section 7.3 Impact on cropping land and farm gate sales is assessed in Section 7.4 and the Socio- economic Working Paper (Appendix J of the EIS)
Department of Primary – Fisheries NSW	 Protection of aquatic habitats and threatened species The project should be designed to: maintain fish passage, minimise potential water quality and erosion impacts on waterways, and avoid moving or harming riparian and aquatic vegetation Design and construction of bridges and culverts should be in accordance with Policy and Guidelines for Fish Friendly Waterway Crossings 	Aquatic impacts and management measures are assessed in Section 7.3 and water quality impacts and management measures are addressed in Section 8.2
Department of Primary Industries – DPI Water	 Consistency with water sharing plans and site water usage/management Licensing considerations, including identification of water requirements, water supply sources and any groundwater extraction requirements Impacts on surface water resources Impacts on groundwater resources Impacts on groundwater dependent ecosystems, wetlands and riparian land 	Surface and groundwater impacts and management measures, including licensing requirements, are addressed in Section 8.2 Potential impacts on Groundwater Dependent Ecosystems, wetlands and riparian land are also addressed in Section 7.3
NSW Environment Protection Authority (NSW EPA)	Requirements for an environment protection licence (EPL)	Licensing requirements for the project, including EPL requirements, are addressed in Section 2.2.1
NSW Health – Nepean Blue Mountains Local Health District	 Impacts of traffic congestion on health facilities Design of proposed pedestrian and cycle routes – bike tracks should be separated from roadways and safe crossings and be well lit, and footpaths should be regularly inspected and maintained, and effectively lit Noise and air quality impacts on local communities in the vicinity of Luddenham and Mulgoa 	Provision and design of pedestrian and cycle routes are addressed in Chapter 5 Traffic impacts on local communities are addressed in Section 7.1 Noise impacts on local communities are addressed in Section 7.2 Air quality impacts on local communities are addressed in Section 8.6
NSW Health –	Cyclist and pedestrian access and	Cyclist and pedestrian access

Stakeholder	Issues raised	Where addressed in EIS
South Western Sydney Local Health District	 safety Noise and air quality impacts on local communities in the vicinity of Luddenham and Mulgoa 	and safety are addressed in Section 7.1 Noise impacts on local communities are addressed in Section 7.2 Air quality impacts on local communities are addressed in Section 8.6
Office of Environment and Heritage (OEH)	Impacts on Aboriginal heritage (including cultural and archaeological significance)	Impacts on Aboriginal heritage are addressed in Section 8.3
Liverpool City Council	 Consideration of land use changes along the corridor Traffic interface with expected additional developments in the region such as the Western Sydney Airport Property access arrangements along the corridor Impacts on hydrology, soils and water Urban design interfaces with other developments 	Traffic interface and property access arrangement are addressed in Section 7.1 Consideration of land use changes and property access arrangements are also addressed in Section 7.4 Impacts on hydrology are addressed in Section 8.1 Impacts on soils and water are addressed in Section 8.2 Urban design interfaces are addressed in Section 8.6
Penrith City Council	 General additions and amendments to the SEARs Changes to flow rate and duration of receiving watercourses as a result of the project A Water Sensitive Urban Design (WSUD) Strategy which details how stormwater quality and quantity control measures would be implemented during both construction and operational phases Stormwater quality and quantity Identification of any contaminated land remediation Assessment of the impacts on local fauna of severed connectivity, vehicle strike, road lighting, noise and vibration during construction and operation of the road The use of native species for landscaping Impacts on aquatic habitat of fish and other fauna that utilise the creeks, including macroinvertebrates Preparation of a Waste Management 	SEARs as presented in Appendix B are addressed throughout the relevant chapters of the EIS: Section 7.3 – Biodiversity Section 8.1 – Flooding and hydrology Section 8.2 – Soils, water and contamination Section 8.7 – Resources and waste management

Stakeholder	Issues raised	Where addressed in EIS
	Plan (WMP)	
NSW Police	 Construction work zones are to be safe for motorists and workers Congestion on other arterial roads in the area during construction 	Construction traffic impacts and management measures are addressed in Section 7.1

6.3.2 Issues raised by the community

Consultation was generally carried out during July to August 2015, February to March 2016 and July to August 2016, as outlined in Section 6.2.1. Many submissions raised general issues for the entire WSIP while others raised issues concerning individual aspects of the project, as follows:

- July to August 2015 296 submissions were received
- February to March 2016 36 submissions were received specific to the Luddenham and the Western Sydney Airport bypass section (between Mersey Road and Adams Road) of The Northern Road Upgrade
- July to August 2016 22 submissions were received on the section from Eaton Road to Littlefields Road.

Table 6-8 provides a summary of the issues raised by the community, community groups (including pedestrian and bicycle user groups), businesses and adjoining and affected landowners. It consolidates the issues raised for the purpose of the EIS and indicates where the issue is addressed in the EIS. Key issues raised included:

- Consultation
- Property acquisition and property value
- Property access
- Noise and air quality impact
- Flora and fauna
- Construction impacts
- Traffic impact and management (congestion)
- Cycle access and facilities
- Design recommendations, particularly about intersection locations and the need to increase capacity
- · Route options.

The outcomes of this consultation process have informed the design and development of the project to date.

Table 6-8 mentions where each issue is addressed and assessed in the EIS.

Table 6-8 Summary of issues raised by the community – individuals, special interest groups, utilities and service providers.

Key issue		Where addressed in EIS or response
Consultation	Need for ongoing consultation	Chapter 6

Key issue	Issues raised	Where addressed in EIS or response
	Consultation with bicycle clubs on the design, facility and treatment of cycleways Quality of consultation including the need for appropriate documentation in languages other than English	
Property acquisition and value	Impact on property values along The Northern Road Further explanation of the property acquisition process Property compensation (fair compensation) Land value in the overall area The impact of partial acquisition on existing businesses Changes to property access	Section7.4
Noise and air quality	Impact on local amenity Concern about the potential noise impacts Impacts on Luddenham town centre Concern about the potential increase in pollution	Section 7.2
Flora and fauna	Consideration of Cumberland Plain woodlands Consideration to Cumberland Plain Recovery Plan Impacts on flora and fauna near Willowdene Avenue	Section 7.3
Aboriginal and European Heritage	Concern about the impact on European and Aboriginal heritage sites	Section 8.3 Section 8.4
Construction impacts	Concern about impact on the local community and businesses during construction Mitigation measures for issues such as dust and noise during construction Compensation to businesses to cover loss of trade during construction	Section 7.2 Section 7.4 Section 8.6
Traffic impacts	Changes to traffic conditions Changes to travel times Traffic demand from the Western Sydney Airport	Section 7.1
Cycle access and facilities	Design requirements of the shared path Use of the Upgrade by cyclists The cycleway infrastructure should consider not only existing users, but also the likely future users who may choose to commute in and around the airport precinct	Section 7.1
Design recommendati ons	Comments on changes to local roads such as Vicar Lane and Adams Road Request for Elizabeth Drive to be upgraded to a 4-way intersection Ensure sufficient time is allowed for those with a disability when crossing roads Number and width of lanes Bus lane restrictions	Chapter 5 Section 7.1 Section 8.1

Key issue	Issues raised	Where addressed in EIS or response
	Further information on planned road closures Make u-turn bays roundabouts Any upgrades to drainage systems	
Route options	General comment/preference for the shortlisted Luddenham and Western Sydney Airport bypass options	Chapter 4

Throughout consultation, community feedback was considered where either appropriate or possible. The design has been refined in some areas to minimise the severance of properties, particularly in the planned airport bypass section. This has generally been achieved by aligning the project along property boundaries. In some areas this was not possible due to the requirement to provide a safe road design, with safe sight lines and road curvature. As such, some issues that were raised by the community did not result in design changes.

The inclusion of right turn lanes or bays and additional connections to the local road network also have safety and operational implications, where cars attempt to cross four lanes of oncoming traffic at unsignalised intersections. Alternative options have been provided to allow for safe access to properties and the local road network. Additional infrastructure requests such as retaining walls and wider shared paths have implications for property acquisition, maintenance and cost. A key consideration is the provision of a safe and cost effective road alignment for all users. This has been a key consideration throughout the concept design process and would continue to be through detailed design.

6.3.3 Issues raised by the Aboriginal community

Roads and Maritime has engaged Kelleher Nightingale Consulting to undertake an Aboriginal community consultation and cultural heritage investigations. This process is consistent with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (OEH, 2010). The outcomes of consultation with the Aboriginal community are outlined in Section 8-3 and Appendix M – Aboriginal Cultural Heritage Assessment Report and summarised below.

Comments received from Tocomwall and Darug Land Observations are summarised in Table 6-9.

Table 6-9 Summary of issues raised by the Aboriginal community

Issues raised	Where addressed in EIS or response
Support for the draft methodology proposed for the Aboriginal cultural heritage assessment	Noted. See Methodology section of the CHAR (Appendix M) and Section 8.3.1.
Advice as to how the CHAR methodology would inform understanding of the individual cultures that exist in the region	See Methodology section of the CHAR (Appendix M) and Section 7.4.1.
Comment that any recovered artefacts should be reburied 'on Country'	Recovered artefacts would be managed in accordance with the methodology outlined in the CHAR (Appendix M) of the EIS.
Darug Land Observations would like to receive a copy of any section 90 Aboriginal Heritage Impact Permits (AHIP)	As identified in Section 2.2.1 of the EIS, no AHIP is required for any project approved under Part 5.1 of the EP&A Act, which applies to this project.

Issues raised	Where addressed in EIS or response
Darug Land Observations would like to be involved in the monitoring of topsoil removal and all other works carried out on site	Aboriginal consultation and involvement during construction would be undertaken in accordance with the Roads and Maritime PACHCI and the CHAR (Appendix M) of the EIS.

6.4 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 its construction. The aim of ongoing communication and consultation is 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 the community is aware of how to provide feedback
- A high level of responsiveness to issues and concerns throughout the development and delivery of the project.

6.4.1 Consultation during the exhibition of the EIS

The EIS is being advertised and placed on public exhibition for a minimum of 30 days in accordance with the NSW EP&A Regulation, the Federal Minister's approval to publish and the Commonwealth EPBC Regulation. The EIS is available for viewing at the following locations:

Penrith City Library

601 High Street, Penrith Monday to Friday 9am to 8pm Saturday 9am to 5pm Sunday 10am to 5pm

Liverpool Library

170 George Street, Liverpool Monday to Friday 9.30am to 8pm Saturday 9.30am to 4pm Sunday 12pm to 4pm

Camden Council

70 Central Avenue, Oran Park Monday to Friday 8.30am to 5pm

Narellan Library

Cnr Queen and Elyard St, Narellan Monday, Wednesday 9:30am - 8:00pm Tuesday, Thursday, Friday 9:30am - 5:00pm Saturday 9:00am - 3:00pm

Nature Conservation Council

14/338 Pitt Street, Sydney Monday to Friday 8.30am to 5pm Roads and Maritime will also be hosting community information sessions. A project information line will be available throughout the exhibition period to answer questions from the community relating to the project 1800 703 457 (toll free). Staffed displays and stakeholder/community meetings are being held during the exhibition of the EIS to enable community representatives to ask questions and to provide further information for consideration in the assessment process. Staffed displays will be at the following locations:

Holy Family Primary School

Willowdene Avenue, Luddenham Saturday 1 July 2017, 10am to 1pm Wednesday 19 July 2017, 3pm to 7pm

Orchard Hills Masonic Centre

290 Homestead Road, Orchard Hills

Saturday 22 July 2017, 10am to 1pm

During the EIS exhibition, the community, government agencies and other interested parties are invited to make written submissions on the project to the NSW Department of Planning and Environment and to the Federal Minister for the Environment and Energy.

In terms of the NSW approvals process, following the exhibition of the EIS, the Secretary of the Department of Planning and Environment will provide copies of submissions to Roads and Maritime or a report containing a summary of the issues raised. The Secretary may then require Roads and Maritime to prepare a submissions report to respond to the issues raised in the submissions, and may require a preferred infrastructure report to outline any proposed changes to the project. If significant changes to the project are proposed, the Secretary may make the preferred infrastructure report publicly available.

The Secretary will prepare a Secretary's environmental assessment report and provide it to the Minister for Planning. The Minister for Planning will then decide whether or not to approve the project and the conditions to be attached. In terms of the Commonwealth approvals process, Roads and Maritime will be required to finalise the EIS based on the submissions received. A copy of all submissions is to be included in the final EIS and be submitted to the Federal Minister for the Environment and Energy for consideration and published for information. The Department of Environment and Energy will prepare a Recommendations Report and provide it to the Minister for the Environment and Energy. The Minister will then decide whether or not to approve the action and the conditions to be attached.

6.4.2 Consultation during construction

Should the project proceed to construction, the project team would continue to work with the community to ensure they are informed about the project and have opportunities to provide feedback to the project team. Key involvement activities and tools would include:

- Development and implementation of a detailed construction communications plan
- Notification of upcoming construction work (including targeted letterbox drops)
- 24 hour toll-free project information phone line
- Transport Management Centre (TMC) communication channels; radio crosses and interviews, variable message signs throughout the metropolitan network
- Live Traffic and Transport Info websites and TMC 24 hour Traffic Information Line (132 701)
- Public displays
- Complaints management process
- Regular updates to the project website/website

- Newsletters, information brochures and fact sheets
- Clear signage at construction sites
- Media releases and project advertisements in local and metropolitan papers
- Construction updates (including for councils, emergency services and bus operators).

A more detailed description of the consultation activities that would be undertaken during construction can be found in Appendix R – Draft Community Involvement Plan.