



F3 Freeway to Raymond Terrace

Upgrading the Pacific Highway

**CONCEPT DESIGN SUBMISSIONS REPORT
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Executive summary

As part of the Pacific Highway Upgrade Program, the RTA has undertaken preferred route selection and development of a concept design for the upgrade of a 15 kilometre section of the Pacific Highway between the F3 Freeway and Raymond Terrace. The F3 Freeway to Raymond Terrace section forms the 'missing link' between the F3 Freeway and the Raymond Terrace bypass.

Planning for this upgrade of the Pacific Highway began in October 2004. A wide range of route options were investigated, including options proposed by the community both within and outside the initial study area. A preferred route was subsequently selected, and further refinement of the alignment and interchange layouts has led to the current concept design for the upgrade.

In order to understand the needs of the community, the RTA held public displays of the project at key milestones including route options, preferred route, and concept design. In addition to these public displays, the RTA and project team has met with stakeholders and members of the community. A project website and toll free 1800 project information line has also been established.

This report outlines the submissions received and the RTA's responses to the issues raised during the concept design display which was held between Monday 14 July and Friday 15 August 2008. Approximately 150 submissions were received in response to the display, including individuals and organisations who contacted the project team to provide comment on the project concept design, make recommendations for the environmental assessment, seeking further information or requesting a meeting with the project team.

The proposed interchange arrangements attracted the most submissions. Comments particularly focussed on the project's impact on the Hunter Region Botanic Gardens, access to Heatherbrae, and the Tomago interchange.

The RTA has recognised the community's concern and has revised the interchange arrangements near the Hunter Region Botanic Gardens. Options for the design of the southbound off ramp at this interchange are provided in Appendix C of this report. A decision on the preferred interchange option will be made as part of the environmental assessment phase for the project.

The RTA will approach Port Stephens and Newcastle Council to formally reserve the corridor in their local environmental plan. The boundaries of the corridor would be based on the final concept design.

Timing of final project approval and construction will depend on funding availability. Once this is determined, an environmental assessment will commence and planning approval sought.

1 Introduction

1.1 Project background

The Australian and New South Wales governments have been jointly upgrading the Pacific Highway since 1996. Together, \$3.6 billion has been committed to continue the upgrade of the highway between 2009 and 2014.

Currently 332 kilometres out of a total of 664 kilometres of the Pacific Highway between Hexham and the Queensland border are now four lane divided road. A further 69 kilometres is under construction, with environmental assessments and concept designs being prepared for the remaining sections of single lane highway.

As part of the Pacific Highway Upgrade Program, the RTA has undertaken preferred route selection and development of a concept design for the upgrade of a 15 kilometre section of the Pacific Highway between the F3 Freeway and Raymond Terrace. The F3 Freeway to Raymond Terrace section forms the 'missing link' between the F3 Freeway and the Raymond Terrace bypass.

Planning for this upgrade of the Pacific Highway began in October 2004. A wide range of route options were investigated, including options proposed by the community both within and outside the initial study area. A preferred route was subsequently selected, and further refinement of the alignment and the interchange layouts has led to the current concept design for the upgrade.

1.2 Project objectives

The objectives of the Pacific Highway Upgrade Program are to:

- Significantly reduce road accidents and injuries.
- Reduce travel times.
- Reduce freight transport costs.
- Develop a route that involves the community and considers their interests.
- Provide a route that supports economic development.
- Manage the upgrading of the route in accordance with Ecologically Sustainable Development principles.
- Provide the best value for money.

As well as contributing to the Pacific Highway Upgrade Program objectives, specific project objectives will also need to be met for road safety, geometry, access, flood immunity, environmental management, community expectations and expenditure.

2 Consultation framework

2.1 Consultation objectives

The needs and interests of the community and other key stakeholders residing within or having an interest in the study area are diverse. It is therefore paramount that effective consultation activities are implemented to maximise community involvement and capture the range of views throughout all stages of project development from selection of route options to detailed design. A set of objectives, as documented in the *Community Involvement Plan* (Maunsell, 2005), the *Route Options Development Report* (RTA, 2005), the *Preferred Route Report* (RTA, 2006) and the *Concept Design Report* (RTA, 2008) have been developed for this project as follows:

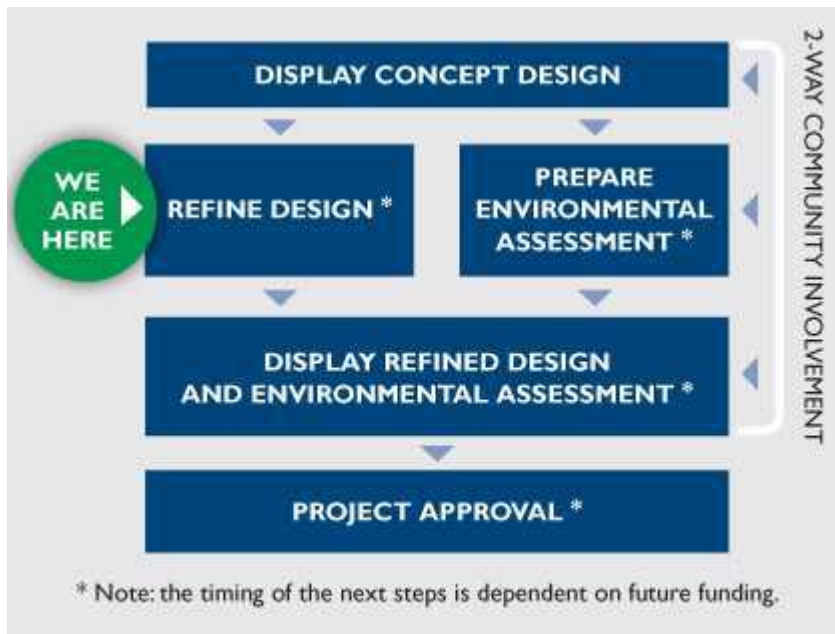
- To ensure an open, accountable and transparent community involvement process.
- To ensure all potentially affected property owners and interested stakeholders are provided with sufficient information about the project and the likely impacts, so that they can provide input.
- To ensure appropriate and direct communication by the project team with property owners in relation to access and investigations on properties within the study area.
- To encourage community involvement in the project to facilitate better outcomes.
- To provide a range of opportunities for stakeholders and the wider public to contribute and provide input into the project.
- To build ongoing relationships between the RTA, its contractors and stakeholders.

2.2 Community involvement activities

Key community involvement activities conducted during the project familiarisation, route options, preferred route, and concept design stages have comprised:

- The distribution of four community updates in November 2004, October 2005, August 2006 and July 2008.
- A community information session.
- A planning focus meeting with representatives from various agencies and stakeholder groups.
- Establishment of a community liaison group.
- Establishment of a 1800 free call project information line.
- Establishment of a project website.
- Eight formal meetings with the liaison group, including a bus tour of the study area and a route options workshop.
- Individual meetings with local councils and representatives of Local Aboriginal Land Councils, Department of Environment, Climate Change and Water, Industry and Investment NSW and Department of Planning.
- Key affected landowner interviews and local business surveys.
- Public display of route options, the preferred route and concept design.

Figure 2.1: Community involvement process



3 Consultation approach

Consultation activities during the concept design display between Monday 14 July and Friday 15 August 2008 include;

Five static display locations were established at:

- Newcastle City Council.
- Port Stephens Shire Council.
- Heatherbrae Visitor Information Centre.
- RTA Hunter Regional Office.
- RTA Pacific Highway Office, Grafton

On Thursday 31 July, Saturday 2 August and Thursday 7 August 2008 members of the project team staffed a display at the Heatherbrae Visitor Information Centre. The staffed display provided an opportunity for members of the community and other interested parties to directly engage and discuss issues of concern with the project team.

Letters including the concept design community update were sent to the following stakeholders advising of the concept design display:

- Directly affected property owners.
- Owners directly affected by the preferred route but no longer directly affected by the concept design.
- Property owners in the vicinity of the study corridor.
- Members of the community liaison group.
- Councils and State Government authorities.
- Other parties that had registered an interest in the project.

Following the letter, directly affected property owners were contacted by telephone and offered a meeting with the project team.

1500 copies of the concept design community update were also distributed to members of the community, relevant Government agencies, local councils and other stakeholders. Further copies of the update were placed at the static display locations and distributed following requests to the project information line.

Members of the liaison group also received a CD copy of the concept design report at a group meeting on Thursday 31 July 2008 at the Heatherbrae Information Centre, Motto Farm.

4 Consultation response

The staffed displays were attended by five people, of which one was a directly affected property owner.

In addition to the staffed displays, meetings were held with directly affected property owners and business owners who thought they may be affected by the preferred route. Three meetings were held with the board of the Hunter Region Botanic Gardens.

The project information line received 13 calls between 14 July and 15 September 2008. Up to Tuesday 23 September 2008, the project team has received 119 emails, letters and faxes. A register of people who made a submission and the issues they raised is contained in Appendix B. There have been no new submissions received following the display, but there has been correspondence and meetings with several people to further discuss issues they have raised.

During the display of the concept design, approximately 150 individuals or groups contacted the project and made comments on the concept design, recommendations for the environmental assessment, requesting further information or requesting meetings with the project team.

Issues raised during the display of the concept design are summarised in the tables below. Table 4.1 summarises feedback from State Government authorities and councils. Table 4.2 summarises feedback from the community.

Table 4.1 Feedback from State Government authorities and councils

Ref	Issue	Response
1. Flora and fauna		
S6	Land at Black Hill adjacent to Black Hill has high cultural and environmental significance. A full assessment of the cumulative impacts of development of this parcel and the feasibility of compensatory habitat should be undertaken as part of the impact assessment process.	Further cultural and ecological assessments would be undertaken as part of the environmental assessment process.
S7	The route alignment should follow existing highway as close as possible to minimise impact on remnant vegetation and conservation areas.	Alternative alignments were considered as part of the route selection and preferred route phases. The process of selecting the preferred route considered submissions received, minimised environmental impacts, and addressed geometric and functionality requirements of the highway. Other environmental impacts would be addressed during the detailed design and the environmental assessment process.

Ref	Issue	Response
S7	There is a significant impact on vegetation at Black Hill. It would be preferable to locate the road adjacent to John Renshaw Drive. Similarly near to west of Black Hill, move the alignment further north to avoid the wetlands and associated small patch of vegetation.	See above for response on the selection of the preferred route. During the detailed design phase and environmental assessment phase the RTA will endeavour to minimise the project footprint.
S7	In Heatherbrae, the route alignment should follow cleared or disturbed areas, such as option A3 in the route options report, minimising damage to Tomago sandbeds.	See above for response on the selection of the preferred route.
S7	Clearing of native vegetation under Roads Act 1993 does not require approval. However as the proposal impacts two endangered ecological communities it is hoped that further environmental reports are undertaken.	Further flora and fauna studies would be undertaken as necessary during the environmental assessment phase.
S7	Consideration to be given to using existing infrastructure, minimising construction in sensitive areas - for example moving the route alignment closer to near Windeyers Creek before joining the highway north of Heatherbrae.	Alternative alignments were considered as part of the route selection and preferred route phases. The process of selecting the preferred route considered submissions received, minimised environmental impacts, and addressed geometric and functionality requirements of the highway. Other environmental impacts would be addressed during the detailed design and the environmental assessment phase.
S8	Project will require mitigation measures such as sediment basins, noise barriers and fauna crossings. Road boundaries should allow for installation, operation and maintenance of the measures during both construction and operation of the project.	The RTA recognises the requirements for environmental mitigation including sedimentation basins, noise barriers and fauna crossings. The proposed boundaries allow space for the construction and maintenance of those items where needed.
S13	The concept design report identifies measures to avoid significant wetland areas, and there is no objection to the route or concept design. However, the Department of Primary Industries Aquatic Habitat Protection Unit (AHPU) would like to be consulted during the EA phase. AHPU considers that portions of degraded tidal land adjacent to the highway north of Hexham will be identified as ideal for rehabilitation and environmental compensation and will ensure no net loss in fish habitat.	The RTA will consult with appropriate Authorities during the EA phase and consider whether compensatory habitat is required.

Ref	Issue	Response
2. Water quality		
S10	Land affected by the proposed works will impact on existing and future water infrastructure needs and poses a risk to Tomago Sandbeds. A maximum buffer needs to be maintained between the planned road and groundwater extraction bores. Hunter Water Corporation must be further engaged in the detailed design phase so that environmental risks are adequately addressed.	The RTA understands the importance of the Tomago Sandbeds and would work with the Hunter Water Corporation during the detailed design phase to ensure that the design minimises the impact and risks to the sandbeds.
3. Flooding		
S6	Conformance is required to the principles of the NSW Government Floodplain Development Manual.	The NSW Floodplain Development Manual would be considered in the development of the final detailed design.
4. Interchanges		
S6	An on ramp from Lenaghans Drive would enter too close to the merging 100km/h traffic although locating a ramp further south would remove the tree buffer between residences and the F3, reducing amenity.	No on ramp is proposed at Lenaghans Drive.
S6, S9, S14	An elevated roadway at the entrance to the Hunter Region Botanic Gardens (HRBG) will adversely affect the operation of the gardens.	The RTA has been working with the HRBG to understand their concerns and develop alternative proposals. This is discussed further in Section 5.2.
5. Traffic and transport		
S6	Consideration should be given to increased freight and other traffic movements as a result of the Beresfield intermodal freight facility and Hexham Redevelopment Project.	Queensland Rail has advised the RTA of its proposed intermodal freight facility. The RTA would undertake detailed design such that the upgraded highway would adequately serve the proposed facility.
S6	Due consideration should be given to pedestrian and cyclist movements.	Noted.
S1	What are the predicted impacts on existing SH10?	The traffic analysis shows a significant shift in traffic from the existing highway to the proposed highway.
6. Services		
S3	Hunter Water plans to relocate a water main at Black Hill.	The RTA will work with Hunter Water to ensure the relocation of the water main is compatible with both Hunter Water and the RTA's requirements.

Ref	Issue	Response
7. Land impacts		
S10	Access must be maintained during construction.	Access would generally be maintained during construction. There may be occasions during construction when access would be temporarily disrupted but the RTA would consult with affected property owners to ensure that the times and durations of the works are acceptable.
S13	The route as now proposed would not impact on significant agricultural resources. Future design should focus on minimising the dissection of rural properties and providing adequate access to those properties affected.	Noted.
S13	A portion of the route overlies a known coal resource currently under investigation and evaluation for underground extraction. The Mine Subsidence Board should be consulted to ensure the upgraded highway is designed to allow for future extraction of coal resources.	The Mine Subsidence Board will be consulted during detailed design to determine the impact of the proposed future mining and the necessary design criteria.
S15	The Hexham Re-development Project consists of a train support facility, an industrial subdivision, and an intermodal facility; the site has been gazetted as a State Significant Site. The highway upgrade should make the following allowances: the new bridge over Purgatory Creek should have sufficient elevation to provide an emergency evacuation route; and the bridge over the Hunter River and its approaches should be designed to accommodate the rails and roads associated with the train support facility.	The Hexham Re-development project is likely to be delivered before the highway upgrade. The RTA has reviewed the concept design and considers that it can be adapted to accommodate the Hexham project. The RTA will work with QRNetwork to ensure the compatibility of the two projects during their development.

Table 4.2 Feedback from the community

Ref	Issue	Response
1. Flora and fauna		
C46	Considers that koala habitats are found beyond the area mapped by the RTA in the consultation documentation. Therefore the proposed route will bisect koala habitat. There are records of koalas in both the Weathertex and Hunter Water land.	Further fauna studies would be undertaken as part of the environmental assessment process. This would include reviewing any records of koala sightings in the land adjacent to the highway.

Ref	Issue	Response
C133	The HRBG has been in discussions to enhance the koala habitat within the gardens. The project boundaries within the north-western boundary of the gardens would preclude this.	The RTA has modified the alignment in this area from that in the 2008 design to further reduce impacts on HRBG. It would further refine the alignment during the detailed design phase. This would include reviewing whether ingress into the HRBG can be further reduced.
2. Water quality		
C133	Concerned about road surface run off into sensitive wetlands and subsequent effects on wetland flora and fauna.	All road surface runoff would be managed through various sediment and surface water quality control devices, prior to releasing to the environment.
3. Flooding		
C22 C45 C134	Concerned that the proposed design of the approaches to the Hunter crossing has inadequate capacity to allow floodwater to pass under the highway. The RTA should provide more bridges to increase this capacity. This may have a significant impact on: <ul style="list-style-type: none"> • 5000 acres of farmland in Millers Forest. • Beresfield/Tarro and Hexham communities 	The RTA has commissioned extensive flood modelling to understand the interaction between the proposed highway and floodwaters. The flood modelling has been used to determine the size of openings required to let water through thus minimising flood backwater effects. This has influenced both the length of bridges and numbers of culverts.
C134	State Planning and the RTA should undertake a comprehensive flood study that considers all proposals in the area, including those being developed by Queensland Rail for the Old Hexham Coal Washery site.	Queensland Rail's site is the far side of the New England Highway from the Hunter River. Therefore, while the impacts of flooding on this land need to be considered in the RTA's modelling, the form of the Queensland Rail infrastructure does not have a material impact on the severity of flooding.

Ref	Issue	Response
4. Interchanges and ramps		
C48, C135	<p>The ramp arrangements at Tomago are considered to be unnecessarily complicated. Reasons for opposing this interchange arrangement included:</p> <ul style="list-style-type: none"> • It would be a tortuous route for heavy vehicles. • The visual impact of the high level return route combined with the proposed power station is unacceptable. • The ease of access from Tomago Road is unacceptable. • The proposed impact on Old Punt Road is unacceptable. 	<p>The Tomago interchange would provide connection between two parallel roads – the existing highway and the Motorway. The design is consistent with RTA standards and accommodates all light and heavy vehicle movements. The visual impact would be addressed during the detailed design phase. The interchange does not impact on the operation of Old Punt Road.</p>
C37, C48, C135	<p>Alternative proposals to the Tomago interchange included:</p> <ul style="list-style-type: none"> • A diamond interchange adjacent to the Shell service station. • Fully raising the new highway and putting a roundabout interchange underneath. 	<p>Both of these options were considered during the development of the concept design, but were discounted as either not feasible, due to traffic capacity or cost, or having unacceptable property/environmental impacts.</p>
C30	<p>Concept design appears to indicate that northbound traffic travelling along the existing highway will be forced onto the new highway to Tomago.</p>	<p>This is not the case. The existing highway will remain in its current configuration and traffic will not be forced onto the new highway at Tomago. The layout has been reviewed to ensure that it does not unintentionally give the impression that such forced movements occur.</p>
C37	<p>The interchange at Tomago is too far from Heatherbrae and will not encourage northbound motorists to stop at Heatherbrae.</p>	<p>The RTA has relocated the northbound offload ramp from Tomago Road interchange to a location near the Shell service station at Heatherbrae. See Section 5.2.</p>
C18	<p>Agree with the concept of bypassing Heatherbrae, but concerned about access to the existing highway for right hand turn movements from side roads.</p>	<p>Movements to and from side roads from the existing highway in Heatherbrae are not affected by the upgrade and are outside the scope of this project.</p>
C37, C133	<p>The proposed northern interchange should be closer to Heatherbrae to encourage motorists to stop.</p>	<p>The location of the northern interchange has been determined by considering a number of factors, including alignment of the existing highway, the upgrade design and cost.</p>

Ref	Issue	Response
		On that basis it has been selected as being the most suitable and providing the best value for money.
C29, C34, C35, C56	<p>Traffic should be encouraged to travel through Heatherbrae. Suggestions as to how this could be achieved included:</p> <ul style="list-style-type: none"> • Not allowing northbound traffic on the new highway until after Heatherbrae. • Moving the northbound off ramp to the Shell service station which is closer to Heatherbrae. • Repositioning southbound off ramp closer to Heatherbrae. • Removing the southbound off ramp. • Allowing for the future provision of a full interchange at Masonite Road. 	<p>The northbound offload ramp at Tomago has been relocated to near the Shell service station at Heatherbrae. This decision has been made for its benefit in a number of areas, including user and community amenity and cost.</p> <p>It is not proposed to relocate the northern interchange for the reasons given above.</p>
C25, C26, C31, C32, C38, C39, C42, C53, C54, C60, C62, C64, C72, C73, C74, C75, C77, C79, C81, C82, C83, C87, C89, C92, C93, C95, C96, C97, C98, C99, C100, C101, C102, C103, C104, C105, C106, C107, C108, C109, C110, C111, C112, C113, C114, C115, C117, C118, C119, C120, C121, C122, C123, C124, C125, C126, C127, C128, C129, C130, C131, C132, C133, C145, C147, C148, C150, C155, C151	<p>The off ramp over the entrance to the HRBG is unacceptable. The reasons cited for this included:</p> <ul style="list-style-type: none"> • Elimination of the gardens' frontage and landscaping. • Creation of a visual barrier across the front of the gardens. • Exposure of visitors and volunteers to unacceptable noise nuisance. Any sound barriers would add to the visual impact. • Increased shadowing over the gardens. • Reduction of access to the gardens if clearance is not adequate for tour buses. • Exposure of visitors and volunteers to exhaust fumes. • Impact of unsightly noise barrier. • Impacts on the gardens' visitor numbers and revenue. • Will detract from the pleasant and welcoming entrance that currently entices visitors. 	<p>The RTA has adopted two alternative concept designs that would address these concerns. See Section 5.2.</p> <p>A decision on the preferred concept design will be made as part of the environmental assessment plan for the project.</p>

Ref	Issue	Response
C63, C65, C66, C67, C83, C90, C137	Concerned with the ramp across the entrance to the HRBG.	See above response.
C75, C93, C95	Concerned that the distance from the northern interchange to the HRBG will discourage visitors.	See above response
C39, C26, C38, C54, C60, C67, C71, C73, C75, C89, C91, C95, C96, C106, C108, C114, C119, C120, C122, C127, C133, C146	<p>The future viability of the HRBG is at risk. The interchange arrangement will discourage visitors to the HRBG. A decrease in visitor numbers would have the following impacts:</p> <ul style="list-style-type: none"> • Reduction in revenue raised in car parking fees and the café. • Decreased prospects for grants, where visitor throughput is an important criteria in the allocation of grants. • Less sponsorship from local business. 	The RTA's revised concept design removes adverse physical impacts and would allow for further enhancement of the entrance to the HRBG.
C32, C38, C60, C61, C64, C74, C79, C93, C95, C97, C98, C100, C102, C104, C107, C111, C112, C113, C116, C120, C121, C122, C127, C129, C132, C133, C146, C147, C148	<p>The RTA should select an alternative option to minimise the impact on the HRBG. Options identified included:</p> <ul style="list-style-type: none"> • Move the ramp further south. • Move the ramp further north to encouraging visitors to the gardens, but would also provide ready access to the industrial areas and Newcastle. • Not providing a southbound exit ramp. • Continue to use the existing highway as is. 	The RTA has adopted an alternative concept design which addresses these concerns. See Section 5.2.
C8, C26, C31, C32, C39, C42, C54, C67, C72, C73, C75, C76, C77, C81, C82, C83, C84, C89, C91, C92, C93, C95, C97, C99, C102, C103, C105, C106, C107, C108, C110, C113,	<p>The gardens are a unique asset/resource to the Hunter Valley providing great value to the community. This is compromised by the proposed design. The HRBG has been developed over 22 years as a result of an enormous amount of work by dedicated volunteers, and financial support from local businesses and citizens. This has been completely disregarded by the RTA.</p>	See above. The RTA seeks to address all community concerns that are impacted by its proposal. That has been demonstrated by its willingness to continue dialogue with HRBG to reach the concept as it stands.

Ref	Issue	Response
C116, C117, C118, C119, C123, C125, C126, C128, C129, C130, C131, C132, C146, C147, C148, C151		
C38, C39, C47, C53, C87, C93, C96 C102, C110	<p>The value of the HRBG and the work of the HRBG volunteers has been overlooked in the planning of the proposed. Examples cited of where the RTA has considered less long term assets included:</p> <ul style="list-style-type: none"> • The effort made to avoid the Shell petrol station on the other side of the road. • Putting the needs of traffic accessing Tomago over the ongoing viability of the HRBG. 	See above.
C90, C102, C130	The entrance to the HRBG should be redesigned to make the entrance more direct and user friendly, particularly for visitors unfamiliar with the area.	See above.
C24	Concerned that the Tomago interchange will act as a "rat run" for northbound traffic taking the longer, but higher speed route to Tomago Road from the existing Hexham Bridge.	The interchange has been configured to provide amenity for Pacific Highway users going to and from Tomago Road. It is impossible to prevent other undesirable movements arising from provision for legitimate movements. However in the detail design phase, the ramps would be designed to accommodate the traffic flows predicted by traffic modelling.
5. Traffic and transport		
C134	<p>There has been insufficient co-ordination with the local road network, including:</p> <ul style="list-style-type: none"> • The relationship with the interchanges at Weakleys Drive and Raymond Terrace. • Does not address issues at Maitland Road, Hexham. 	The objective of the proposed highway is to service the long distance motorists with connectivity to the local road network, as distinct from upgrading other local roads. The RTA is currently undertaking a separate study which addresses the needs of the local road network.

Ref	Issue	Response
C52	If the project impacts on Weakleys Drive suggests redirecting traffic to the New England Highway via John Renshaw Drive.	Outside the scope of this project.
C134	Not convinced that enough traffic will use the proposed upgrade due to its poor connections with the surrounding network.	Traffic modelling indicates the motorway will attract all traffic travelling to and from Sydney and Brisbane over its length.
C134	Concerned about the traffic using local roads and interchanges during construction	Prior to construction commencing the RTA would require its Contractor to develop a detailed Traffic Management Plan to demonstrate how they would manage traffic during construction.
C153	Ensure current bus movements are maintained at the Tomago Road intersection and that bus stops are maintained in current positions.	The bus stops will be able to remain in close to the current locations and allowable movements at the intersection will be maintained.
7. Land impacts/ acquisition		
C133	Resumption of the existing cleared area for freeway development will require further clearing of native vegetation to meet the lease requirements of a 20m buffer zone for bush fire control purposes. This could include loss of native vegetation that borders onto and may include part of the Banksia Forest.	The RTA has modified the alignment in this area from that in the 2008 design to further reduce impacts on HRBG. It would further refine the alignment during the detailed design phase. That would include reviewing whether ingress into the HRBG can be further reduced.
C51	A tourist service centre is planned for the land adjacent to the Tomago interchange. The current form of the interchange would preclude the centre as planned.	The RTA is not aware of any formal application for planning approvals for a service centre in this location.
C133, C135	Business operations will be affected by land take, and discussions are required with the RTA to ensure that these operational issues are adequately addressed. This includes fencing and regeneration of land impacted.	The compensation arrangements are governed by the Just Terms Compensation Act and would include consideration of disruptions to business operations as a result of land acquisition.
C137	Concerned about land acquisition.	As above.

Ref	Issue	Response
C93, C133	The encroachment into HRBG is excessive.	The RTA has modified the alignment in this area from that in the 2008 design to further reduce impacts on HRBG. It would further refine the alignment during the detailed design phase. This would include reviewing whether ingress into the HRBG can be further reduced.
C47	Will there be any lighting associated with the highway off-ramp?	Lighting for all interchanges and ramps would be provided in accordance with RTA Design Standards.
C134	The view across Hexham Swamp will be spoilt by the proposed design. Large trees provided as screening would mitigate this.	During the detailed design the RTA would develop landscaping plans to address visual issues.
8. Noise/noise walls		
C134	Concerned about the noise impact from the proposed design as it will carry easily over the swamp, particularly at night.	Noise modelling would be undertaken as part of the environmental assessment process. The extent of noise mitigation would be determined at that stage. The RTA is committed to effectively managing the roads and traffic system under its control to minimise the noise and vibration impacts of road construction, maintenance and operation on the built and natural environment.
C47	What noise mitigation measures are proposed and have the detailed studies been undertaken?	See above.
C76, C133	Sound barriers, if constructed from solid material will restrict views over the gardens from the proposed highway that might otherwise encourage people to stop on their next trip. Clear barriers, if installed but not regularly maintained will deteriorate giving a blurred view of the gardens. The sound barriers will need to be very carefully considered so that they don't impinge on the landscape and the HRBG's aesthetic values.	Noise modelling would be undertaken as part of the environmental assessment process. The extent of noise mitigation would be determined at that stage. In developing proposals near to the HRBG the RTA would consider aesthetic and maintenance issues as well as community concerns.

Ref	Issue	Response
9. Access		
C48	The proposed highway prevents any road access to the land between the Hunter River and the proposed highway near Tomago Road.	The RTA does not propose to provide direct access to this land from the new highway.
C21	The Tomago interchange impacts on the proposed Macquarie Generation power station. In the interchange's current configuration it would necessitate the redesign of the power station and an application to modify the existing planning approval.	The Tomago interchange has been reconfigured to eliminate any impact on the power station. See Section 5.2.
C8	Access arrangement for the HRBG – what provisions are proposed for the following: <ul style="list-style-type: none"> • School coaches coming from the south. • Will school coaches be required to make extensive detours on either entry or exit? • What impacts will the project have on the safety of school excursions? 	Access arrangements for the HRBG would be designed to accommodate coaches and would be in accordance with RTA standards. The detail of the access arrangements would be developed during the detailed design in discussion with the HRBG. There would be no reduction in safety, by comparison to existing bus access arrangements to and from the existing highway.
C44, C135, C152	Concerned about the impact of the new highway on access to existing businesses.	Access arrangements to businesses were one of the issues taken into account in reaching the interchange configuration as it now exists. The design provides interchanges both to the north and south of Heatherbrae.
C135	Requests that the proposal take into account existing land use on both sides of the motorway at an existing internal road and adjacent to a Hunter Water easement, to permit ongoing tractor access.	Access for a tractor would be permitted beneath the Windeyers Creek Bridge, which is 200m long and would have 3.6m vertical clearance, adequate for tractor access.
C43	Opposed to the removal of the current left turn from Leneghans Drive to the F3 Freeway southbound. This would result in drivers travelling through Minmi township. If the RTA needs to close the access at Leneghans Drive, a southbound onramp should be provided at Stockrington.	The RTA has considered this suggestion but considers the current and predicted demand for this movement does not justify the additional project costs and that the movements would be catered for by alternative paths which are already included in the design as it stands.

Ref	Issue	Response
10. Economic		
C10, C34, C37, C40	Concerned that the proposed design bypasses Heatherbrae thus reducing through traffic and impacting negatively on businesses and local employment.	The decision to bypass Heatherbrae was made in consultation with the community during the preferred route stage. The RTA considered options both through and bypassing Heatherbrae, but decided to bypass the town because of community concerns and environmental impacts. The access arrangements to Heatherbrae from the highway have been considered to minimise affects to businesses.
11. Rest stop/ service centre		
C133	Consideration to be given to designating the HRBG a driver reviver stop.	Noted.
C133	The RTA has an objective to retain or replace existing rest areas. The HRBG has functioned in this capacity for years and should be encouraged and assisted to continue this function.	Noted.
C35	The RTA should give existing businesses first preferences to bid for new truck stop facilities.	The RTA would make decisions on truck stop facilities as part of the detailed design process with reference to Department of Planning strategies for the area and with further consultation with local communities and businesses.
C34, C35, C135	Support the concept of a "Highway Service Centre Precinct" in Heatherbrae to mitigate lost business due to the bypassing of the town. The RTA should provide signage to support this.	The RTA recognises the value of Heatherbrae as a service centre for long distance motorists. During the project's detailed design the RTA would undertake consultation with the Heatherbrae business community to develop the appropriate signage.
C29, C35	Signage should be provided (for both northbound and southbound traffic) for the truck stop on John Renshaw Drive at Beresfield.	The signage concepts would be developed during the detailed design phase of the project in accordance with the RTA's design standards.
C51	There is a need for a tourist information service centre at Tomago to serve all councils above Raymond Terrace, the Upper and Lower Hunter Region and Newcastle.	Any tourist information service centre is the responsibility of the local councils.

Ref	Issue	Response
C153	There is a bus stop on the existing highway on the north side of Tomago Road.	No changes are proposed to this bus stop.
12. Compensation		
C133	The HRBG board accepts that the F3 Freeway development will result in a loss of land and subsequent development opportunities. The board seeks adequate compensation for loss of potential use of a portion of the site. Further, the board is of the opinion that compensation should be used to enhance the site for the benefit and enjoyment of its visitors.	Compensation to land owners and tenants is governed by the <i>Just Terms Compensation Act</i> . The RTA would work with the HRBG board in relation to this and other associated issues.
13. Costs and funding		
C3	Requested clarification on the availability of funding for the project.	There is currently no funding allocated for the project to continue beyond concept design.
14. Signage		
C9	Substantial signage must be installed prior to and at the Black Hill interchange for north bound traffic as well as at the half interchange on the north of Heatherbrae for southbound traffic showing: <ul style="list-style-type: none"> • Services available (fuel, food). • Clear plan showing the existing highways and new freeway connection points. 	The RTA would develop signposting arrangements during the detailed design phase. In developing the signage arrangement the RTA would take into account the needs of local businesses.
C133, C8	To minimise the reduction in visitor numbers the HRBG requests that the RTA provide the following signage a) tourist oriented directional signage to the HRBG at any interchange immediately south to be included with locality directional signage b) tourist oriented directional signage at the intersection of local main roads with similar Pacific Highway c) a sign at least of similar dimensions to the existing HRBG sign, to be located in a position visible to passing F3 Freeway traffic.	Generally the RTA provides directional signage to road and place names. However the RTA also has a policy for Tourist Signposting and Guide Signposting, to provide directions to significant tourist areas and giving an indication of the type of facilities that are available in a location. Consideration would be given to any requests for tourist signage in accordance with those policies during the detailed design phase.
C133	Clear, signposted access to the HRBG is required during construction.	See above.

Ref	Issue	Response
C29, C34, C35	<p>Suggestion to assist with business viability that the RTA give the Heatherbrae Centre 'landmark' signage in the appropriate lead up positions to the Heatherbrae off ramps. This could include:</p> <ul style="list-style-type: none"> • Bulk and scope of the signage commensurate with the importance of highway services in Heatherbrae. • Showing route through Heatherbrae to be shorter than the highway, thus demonstrating its convenience. 	See above. Heatherbrae may be further considered as a service town, in accordance with guidelines that are being used for that purpose elsewhere on the Pacific Highway.
15. Consultation		
C58	Appreciates the comprehensive consultation process undertaken by Maunsell and the RTA with local stakeholders.	Noted.
C56	Concerned that since the route displays in 2006 considerable work has been carried out on the design without any consultation with the community or businesses.	The preferred route was displayed in 2006. The only part of the project that has been developed since is the interchange arrangements, and these were included in the concept design display.

5 Post-submission concept design refinement

5.1 Process of reviewing submissions

Following the concept design display the RTA has reviewed all the issues raised. The issues raised broadly fell into three categories:

- Matters that were considered during previous consultation periods including the preferred route submissions period and which apply to the preferred route and not the concept design itself. The RTA noted those concerns, but will not take any further action on them.
- Issues that relate to the detail and refinement of the design or the further environmental investigations that will take place as part of the environmental assessment process. Those matters have been noted and would be considered and addressed during the next phases of the project.
- Those issues that apply to the concept design and impact on setting the project's boundaries. Those issues have been reviewed by the RTA and the RTA has elected to make changes to the interchanges in the vicinity of Tomago Road and HRBG.

The revised concept design for the interchanges at Tomago Road and HRBG is outlined in Section 5.2 below.

5.2 Tomago Road and Botanic Gardens interchange review

The submissions which raised concerns about the interchange arrangements broadly raised the following concerns:

- Impact of the southbound off ramp adjacent to the botanic gardens.
- Complexity of the Tomago interchange.
- Impact of the Tomago interchange on the proposed power station.
- Loss of trade for Heatherbrae businesses as a result of the township being bypassed and the proposed ramp arrangements.

The RTA has undertaken a thorough review of the issues raised, and potential ways to alleviate community concerns. This has included both revisiting previous ramp arrangements considered and developing new alternative arrangements. The review included further meetings with the HRBG to fully understand their concerns. A number of alternative options were developed and these were reviewed by the RTA to assess how they performed in meeting the project objectives and addressing the community concerns. The revised concept design is shown in Appendix A. Alternative alignments for the southbound (SB) off ramp near the Hunter Region Botanic Gardens are shown in Appendix C. A decision on the preferred design will be made as part of the environmental assessment phase for the project.

5.2.1 *Tomago interchange*

The functionality of the interchange at Tomago is unchanged from that described in the *Concept Design Report* (RTA, 2008). The northbound offload ramp has been shifted further toward Heatherbrae to minimise impact on the proposed power station. The existing highway needs to be realigned away from there to accommodate the northbound off ramp. This arrangement is shown on Figure A.7 in Appendix A.

5.2.2 *Alignment at Hunter Region Botanic Gardens*

The alignments of both the proposed and existing highways have been amended to reduce the impact at the HRBG. The existing highway has been shifted westwards and the new highway is at ground level past the entrance to the HRBG. The alignment of the existing highway is unchanged in plan but would rise over the existing highway to cross south of the entrance to the HRBG. This arrangement is shown on Figures A.8 and A.9 in Appendix A. For the HRBG this has the following advantages:

- Removes the high level viaduct across the frontage of the HRBG and brings the proposed highway down to the same level as the existing.
- Deletes the off ramp which was across the entrance to the HRBG.
- Maintains the entrance to the HRBG off the existing highway, but moves it south so that visitors must turn in and travel along a disused part of the existing highway before arriving at the entrance.

5.2.3 *Southbound off ramp*

As discussed above the southbound off ramp has been removed from being above the entrance to the HRBG. The RTA has developed two alternative proposals. A decision on the final interchange layout will be made during the environmental assessment phase. The options are:

- Adjacent to Old Punt Road, taking the off ramp over the existing highway joining the existing highway just south of Old Punt Road. See Figure C1, Appendix C.
- North of the HRBG threading the off ramp underneath the new highway to join the realigned existing highway. See Figure C2, Appendix C.

5.2.4 *Relocated northbound off ramp*

The RTA has relocated the northbound off ramp from Tomago Road to the south of the HRBG. The off ramp meets the realigned existing highway to the south of the HRBG. See Figure A.9.

6 Next steps

6.1 Future development of the project

The RTA will approach Port Stephens and Newcastle Council to formally reserve the corridor in their local environmental plans. The boundaries of the corridor will be based on the final concept design.

Detailed environmental assessment will commence and formal planning approval sought closer to construction, the timing of which would depend on funding availability. Further refinements may occur during the environmental assessment stage of the project and in response to community concerns.

6.2 Future consultation

The toll free project information line will continue to operate and the project website will be updated throughout future stages of the project.

The environmental assessment will be placed on display for community comment.

6.3 Assessment under Part 3A of the EP&A Act

The RTA will seek project approval for the proposed F3 Freeway to Raymond Terrace upgrade under Part 3A of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The Minister for Planning has declared under Section 75B of the EP&A Act, by Order published in NSW Government Gazette No. 175 on 8 December 2006, that development for the purpose of upgrading certain segments of the Pacific Highway is a project to which Part 3A of the EP&A Act applies. The F3 Freeway to Raymond Terrace Pacific Highway Upgrade is one of the declared segments under the order and is therefore a project to which Part 3A applies. The Proposal has been declared as a critical infrastructure project under Section 75C of the EP&A Act by the Minister for Planning under an Order published in NSW Government Gazette No. 175 on 8 December 2006.

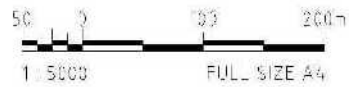
The Proposal requires the approval of the Minister for Planning.

Appendix A: Sketches of the revised concept design



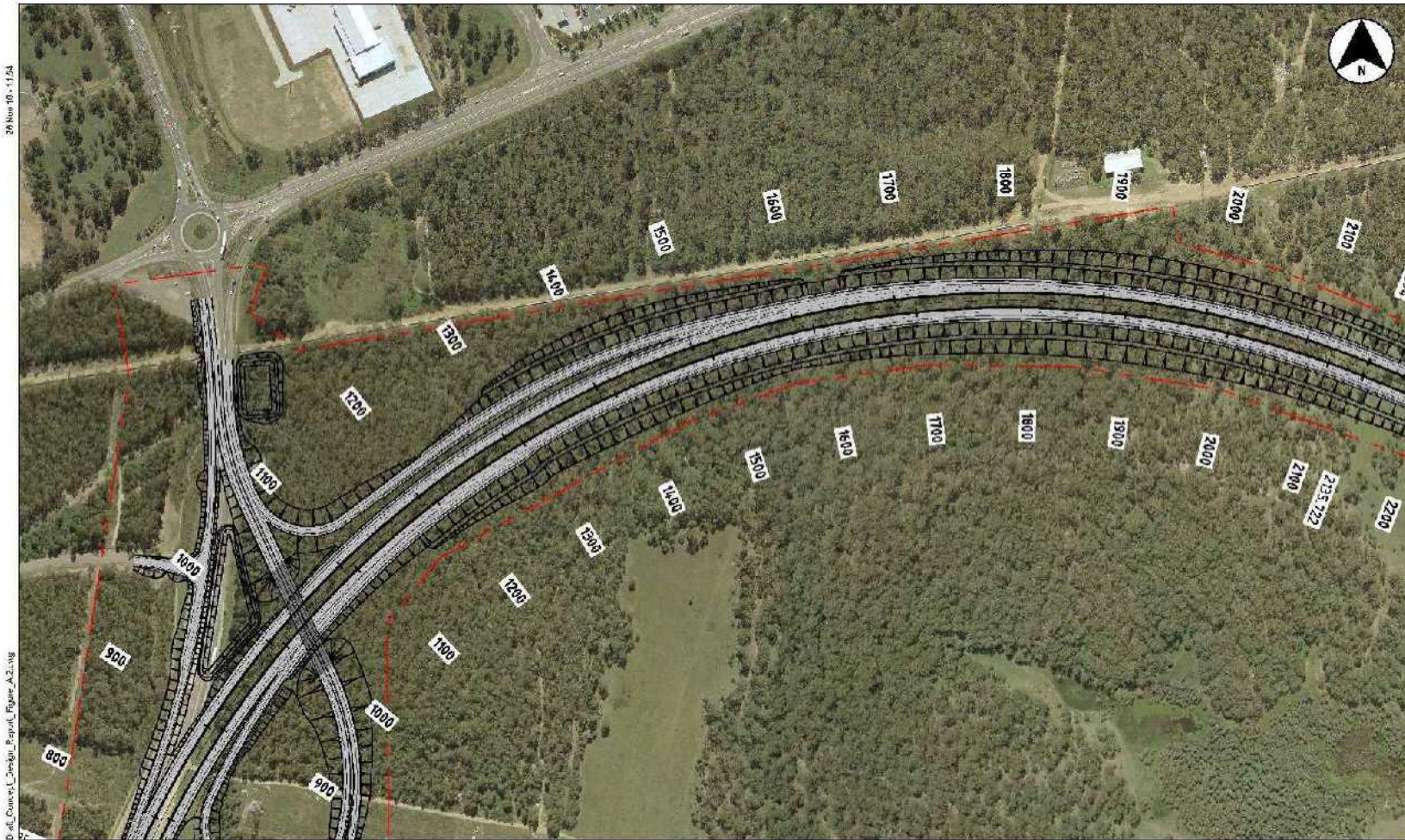
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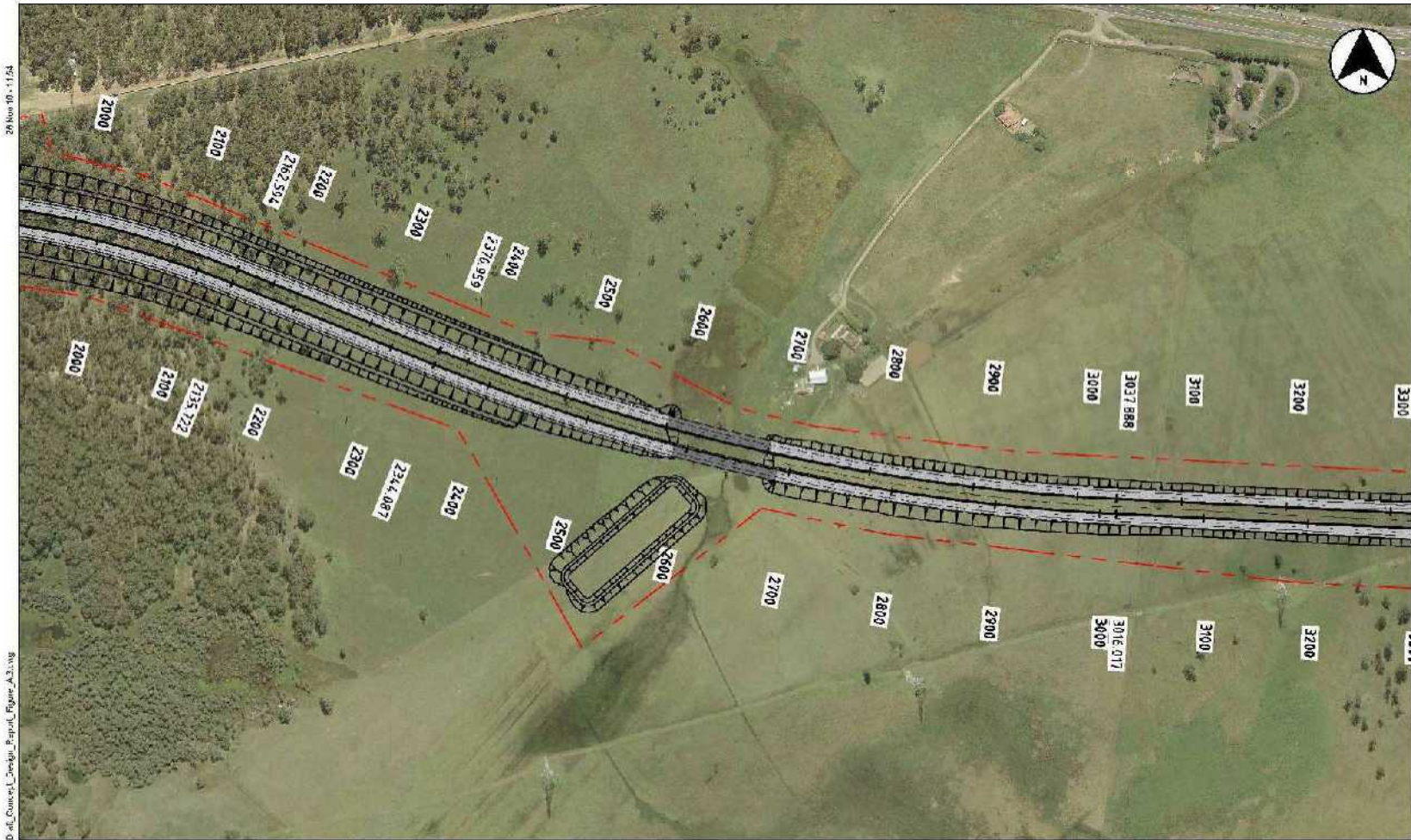
NSW ROADS AND TRAFFIC AUTHORITY
F3 TO RAYMOND TERRACE
CONCEPT DESIGN LAYOUT

Figure A.1



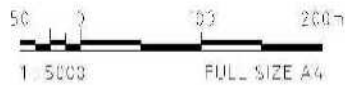
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F3 TO RAYMOND TERRACE
CONCEPT DESIGN LAYOUT

Figure A.2



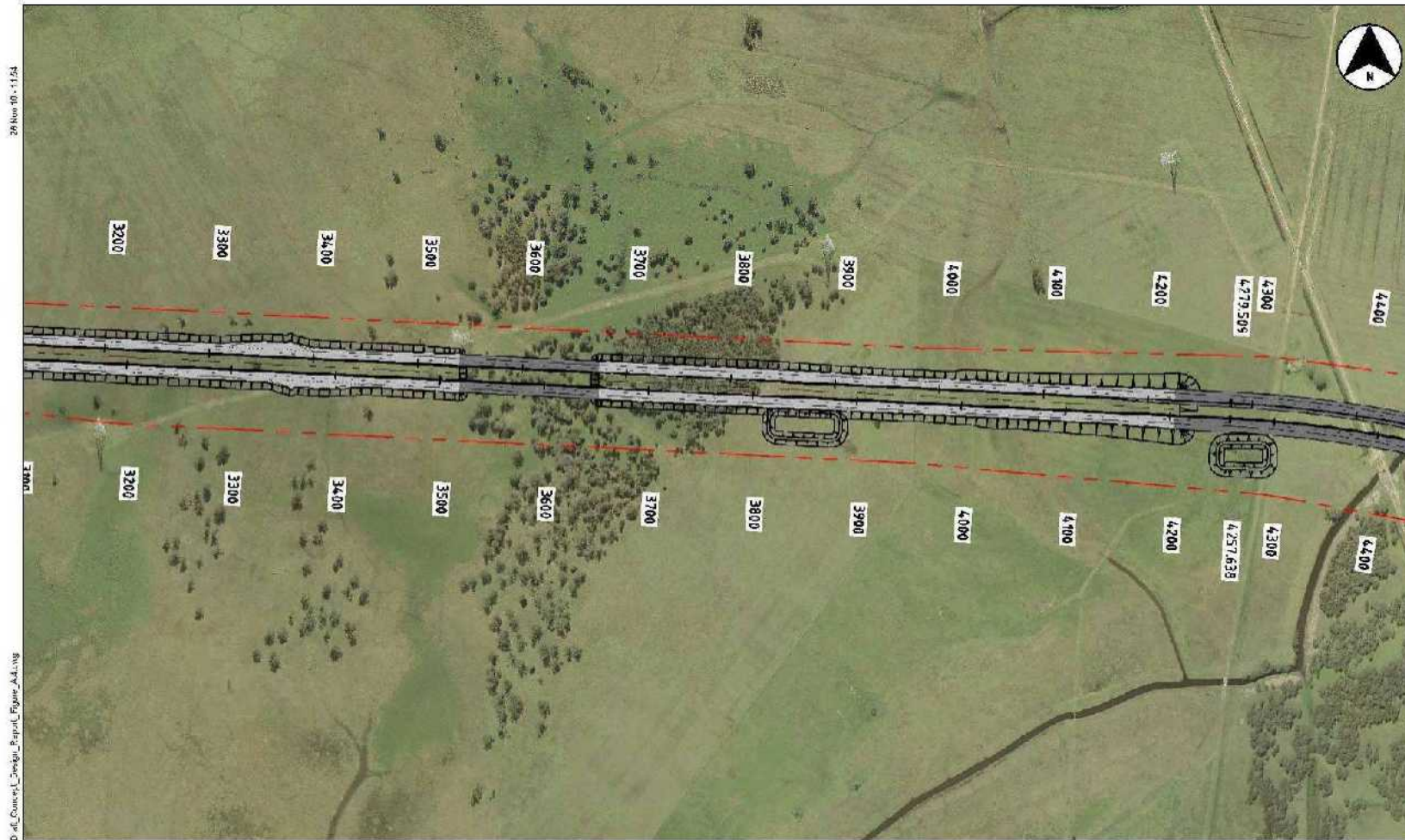
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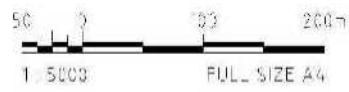
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CONCEPT DESIGN LAYOUT

Figure A.3



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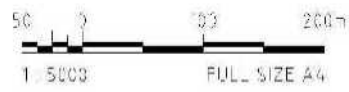


NSW ROADS AND TRAFFIC AUTHORITY
F3 TO RAYMOND TERRACE
CONCEPT DESIGN LAYOUT
Figure A.4



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NSW ROADS AND TRAFFIC AUTHORITY
F3 TO RAYMOND TERRACE
CONCEPT DESIGN LAYOUT
Figure A.5

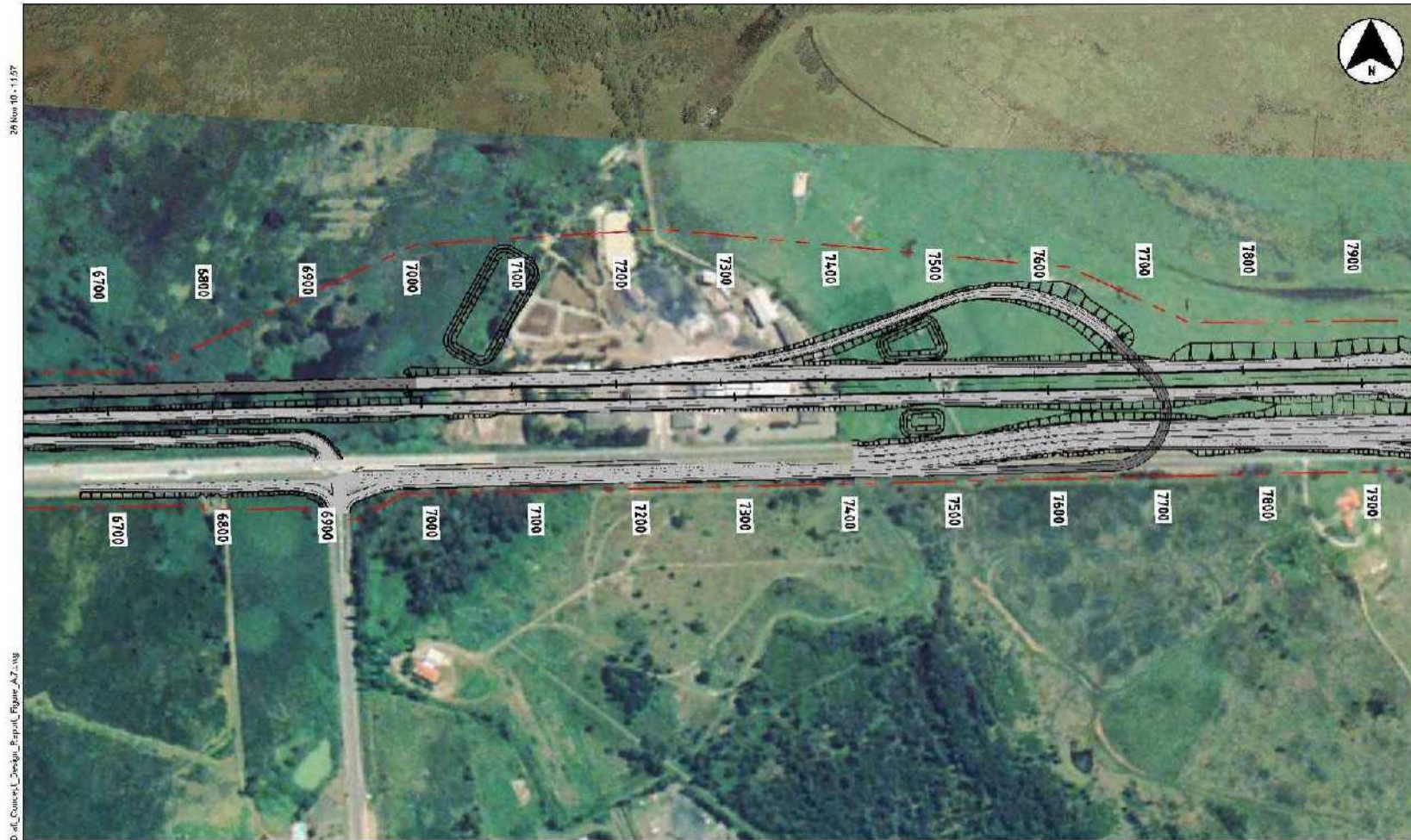


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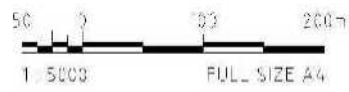


NSW ROADS AND TRAFFIC AUTHORITY
F3 TO RAYMOND TERRACE
CONCEPT DESIGN LAYOUT
Figure A.6



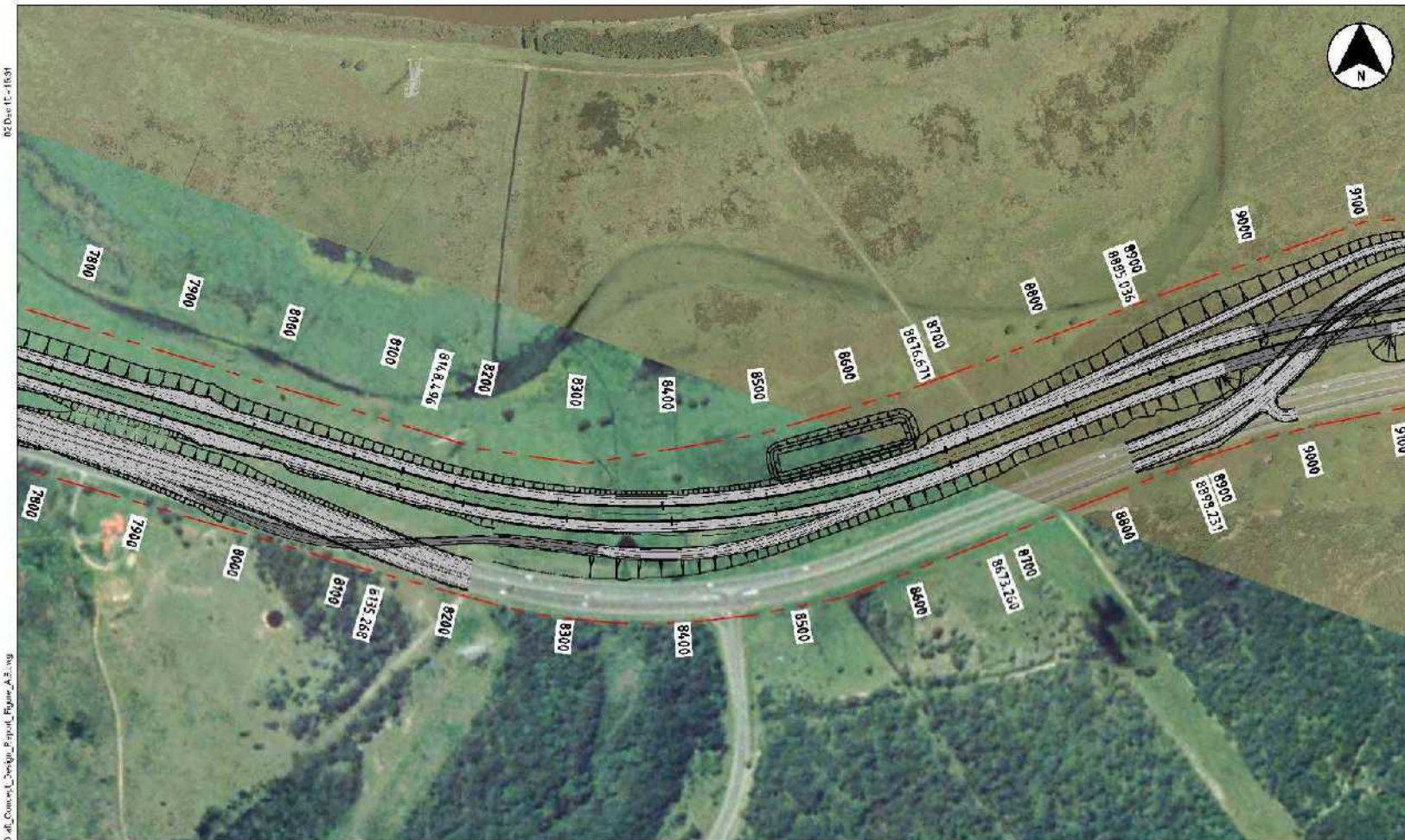
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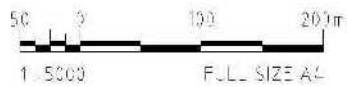
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F3 TO RAYMOND TERRACE
CONCEPT DESIGN LAYOUT

Figure A.7



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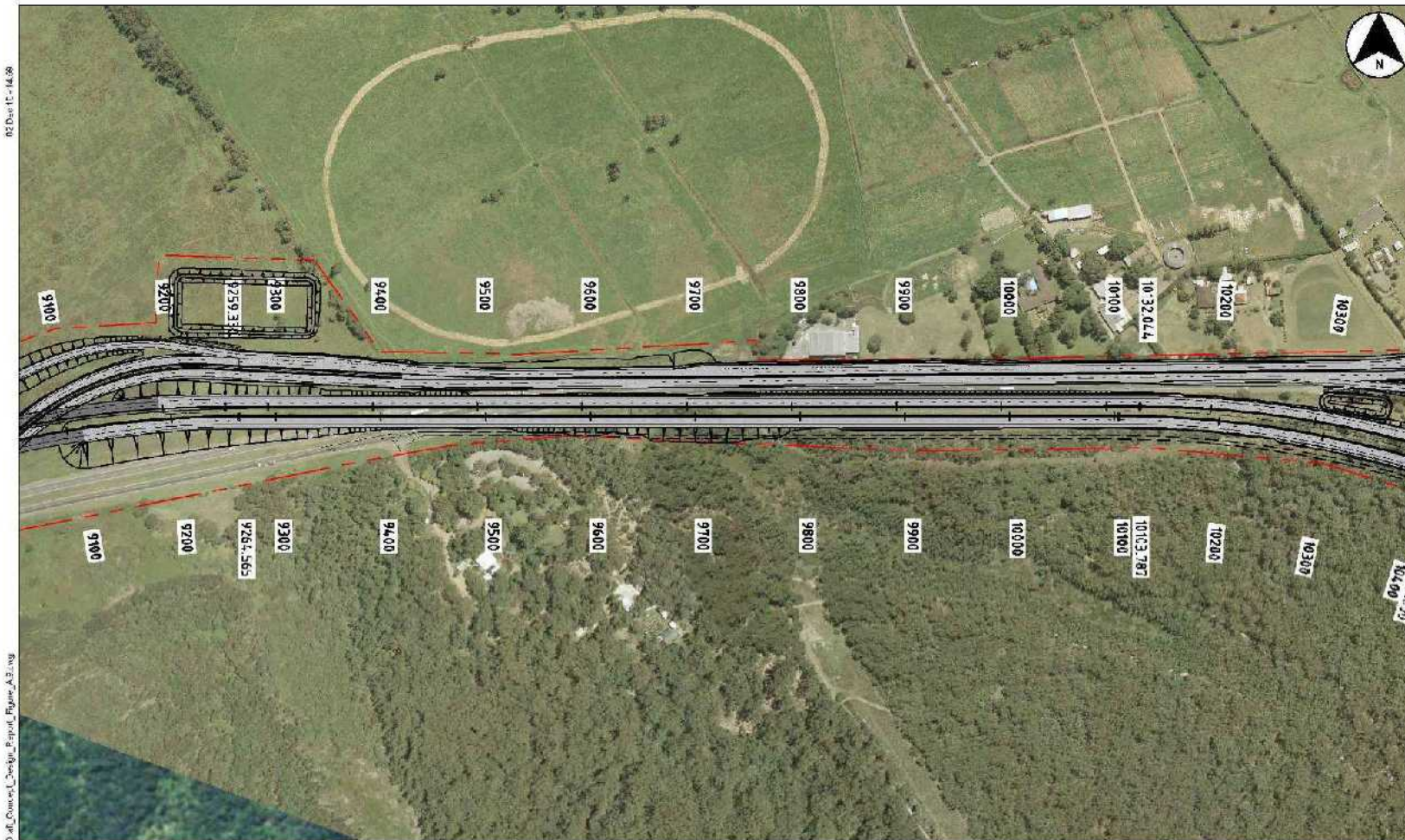
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NOTE: ALIGNMENT AS PER OPTION 1 AS
DETAILED IN FIGURE C1 APPENDIX C

NSW ROADS AND TRAFFIC AUTHORITY
F3 TO RAYMOND TERRACE
CONCEPT DESIGN LAYOUT

Figure A.8



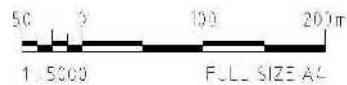
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NOTE: ALIGNMENT AS PER OPTION 1 AS
 DETAILED IN FIGURE C1 APPENDIX C

NSW ROADS AND TRAFFIC AUTHORITY
 F3 TO RAYMOND TERRACE
 CONCEPT DESIGN LAYOUT

Figure A.9



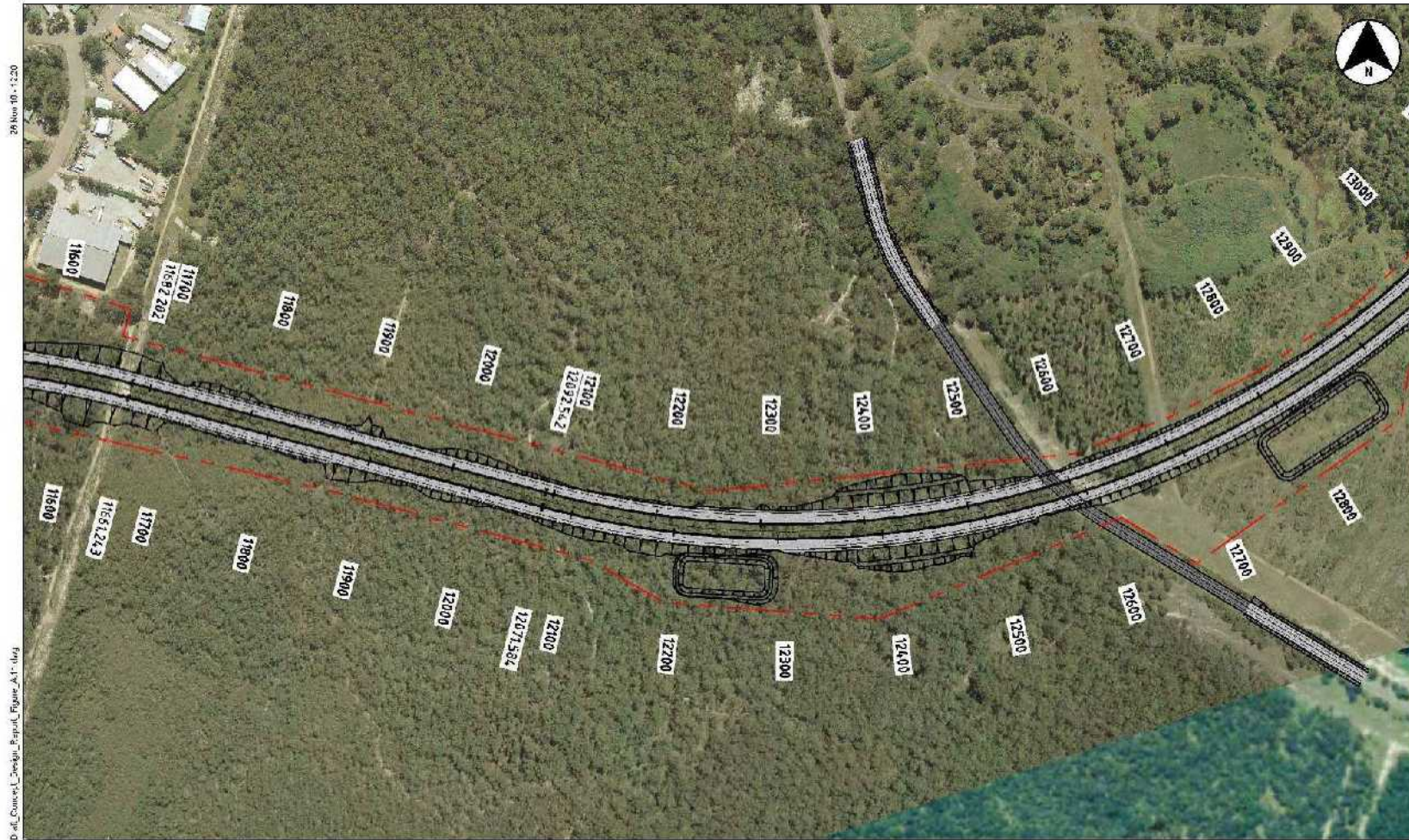


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NSW ROADS AND TRAFFIC AUTHORITY
F3 TO RAYMOND TERRACE
CONCEPT DESIGN LAYOUT
Figure A.10



NSW ROADS AND TRAFFIC AUTHORITY
F3 TO RAYMOND TERRACE
CONCEPT DESIGN LAYOUT

Figure A.11

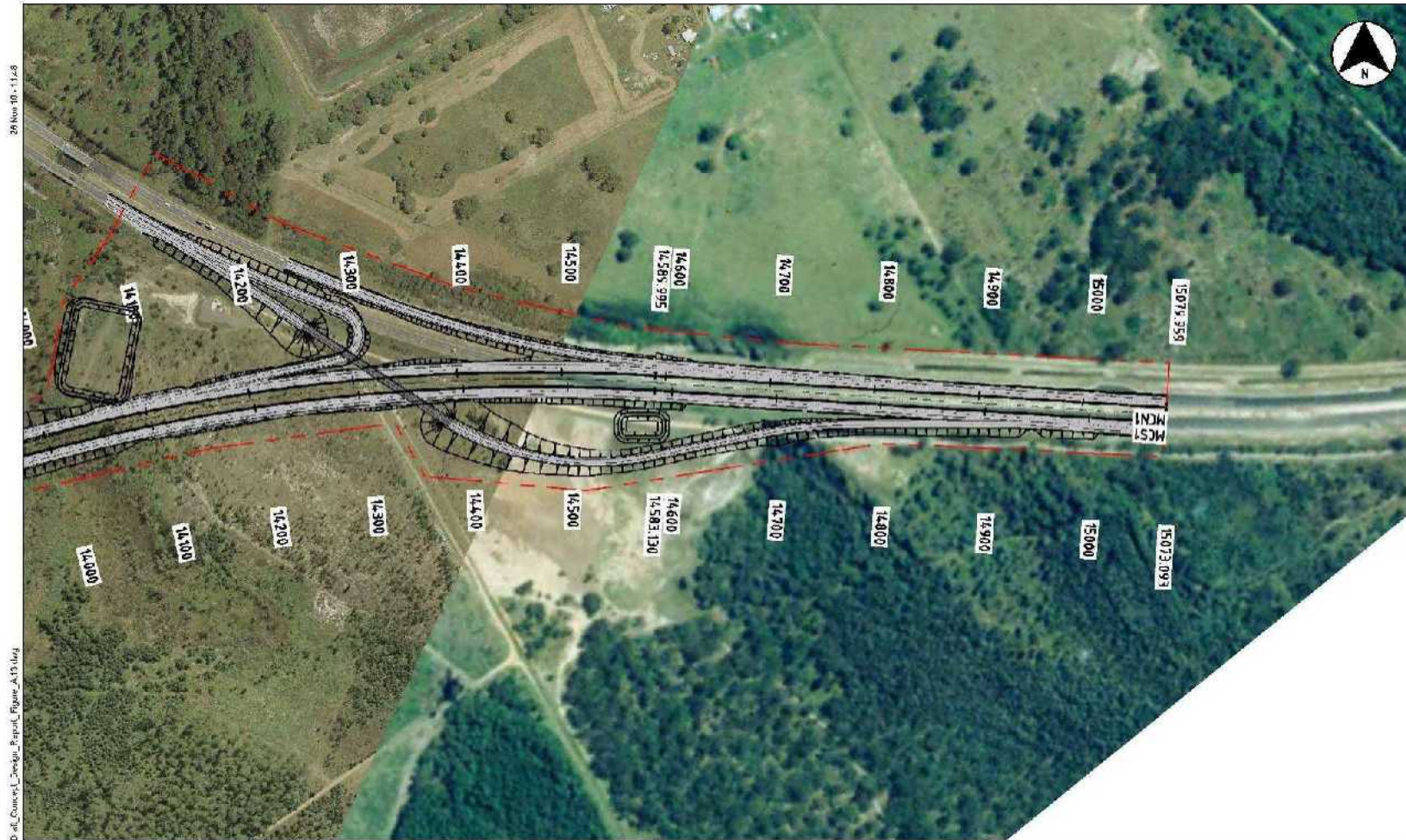


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NSW ROADS AND TRAFFIC AUTHORITY
F3 TO RAYMOND TERRACE
CONCEPT DESIGN LAYOUT
Figure A.12



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NSW ROADS AND TRAFFIC AUTHORITY
F3 TO RAYMOND TERRACE
CONCEPT DESIGN LAYOUT

Figure A.13

Appendix B: Register of submitters and issues raised

Number	Description of issue
1	Flora and Fauna
2	Water quality
3	Flooding
4	Interchanges
5	Traffic and transport
6	Services
7	Land impacts
8	Noise / noise walls / air quality
9	Access
10	Economic
11	Rest stop / service centre
12	Compensation
13	Costs and funding
14	Signage
15	Consultation

Respondent	Representation	Submitter reference	Issue category raised
1		C147	4
2		C148	4
3		C79	4
4	Macquarie Generation	C21	9
5		C117	4
6		C39	4
7		C155	4
8	Member for Port Stephens	C60	4

Respondent	Representation	Submitter reference	Issue category raised
9		C51	7
10	Maitland City Council - Mayor's Office	C70	4
11	President - First New Lambton Heights Garden Club	C125	4
12	Department of Environment and Climate Change (DECC)	S8	1
13	Port Stephens Council	S1	5
14		C99	4
15	Hon. Secretary - Hunter Bird Observers Club Inc.	C127	4
16	Company Secretary - Whiteley Corporation	C43	9
17	General Manager - Raymond Terrace Bowling Club	C72	4
18		C48	9, 4
19	Hunter-Central Rivers Catchment Management Authority	C78	3
20	Heatherbrae Pies	C34	10, 11, 4, 14
21	The University of Newcastle	C83	4
22	Coal and Allied	C152	9
23		C9	14
24	QRNational	S15	7

Respondent	Representation	Submitter reference	Issue category raised
25	NSW Department of Primary Industries	S13	1, 7
26	Botanic Gardens Trust	C76	8, 4
27	Hunter-Central Rivers - Catchment Management Authority	S7	1
28		C30	4
29	Wallis Creek Watergarden	C123	4
30	President - Hunter Valley Branch - Amateur Beekeepers Association of NSW (Inc)	C126	4
31	Southern Cross Care (NSW & ACT) Inc	C112	4
32	President - Nelson Bay Garden Club Inc	C121	4
33		C130	4
34		C1	4
35	Miller's Forest Progress Association	C22	3
36	Millers Forest Progress Association Inc.	C45	3
37		C151	4
38		C84	4
39		C106	4
40	Property and Agreements Manager, BP Australia Pty Ltd	C35	11, 14
41	Southern Cross Care	C113	4

Respondent	Representation	Submitter reference	Issue category raised
42		C100	4
43	Hunter Region Botanic Gardens	C6	4
44	Education and Guide Co-ordinator - Hunter Region Botanical Gardens	C8	4
45		C105	4
46	Newcastle City Council	S9	4
47	Newcastle City Council	S6	1, 3, 4, 5
48	Heatherbrae residents	C18	4
49		C104	4
50		C31	4
51		C91	4
52		C97	4
53		C95	4
54		C103	4
55		C131	4
56	Beresford-Tarro-Hexham Community Forum	C134	3, 5, 7, 8
57		C110	4
58	Tomago Aluminium	C54	4
59	Tomago Aluminium	C56	4, 15
60	Hunter Water Corporation	S3	6
61	State MPs office	C3	13

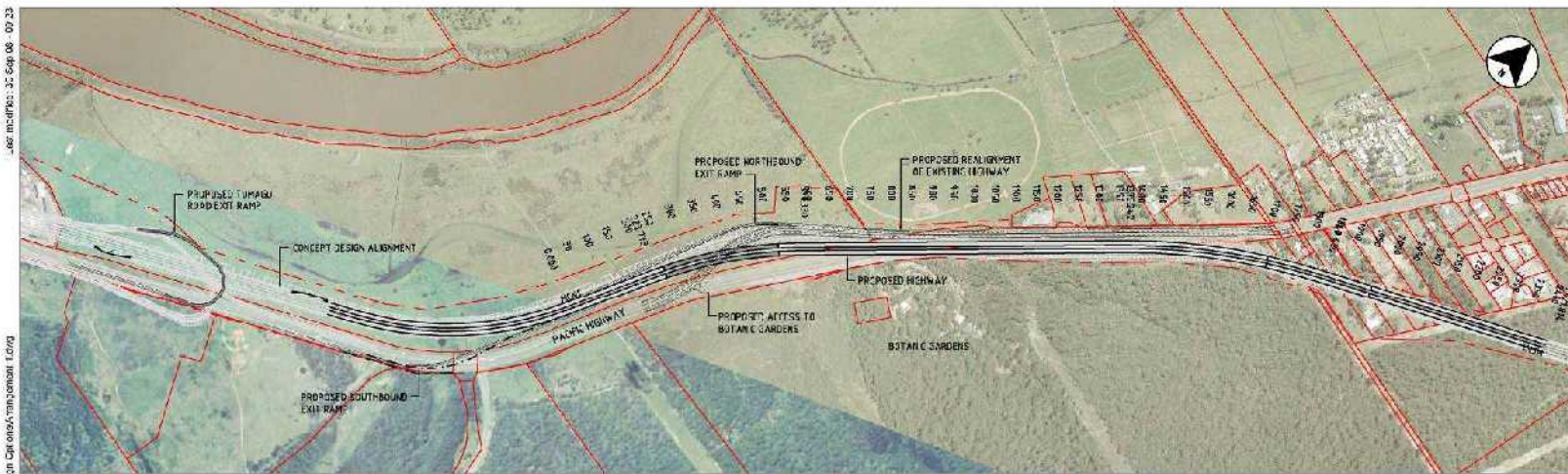
Respondent	Representation	Submitter reference	Issue category raised
62	Member for Newcastle	C61	4
63	Hungry Jacks at Beresford, Hexham and Heatherbrae	C29	4, 11, 14
64		C42	4
65		C87	4
66	Weathertex Factory owner	C135	4, 7, 9, 11
67	Botanic Gardens Australia and New Zealand Inc/Royal Botanic Gardens Melbourne	C77	4
68	Member for Charlestown	C64	4
69		C93	4, 7
70		C32	4
71	Hunter Buses	C153	5
72		C115	4
73	Subway Heatherbrae	C37	4, 10
74	Proprietor - Newcastle Wildflower Nursery	C122	4
75		C111	4
76	Hunter Region Botanic Gardens (HRBC)	C47	4, 7, 8
77	Hunter Wetland Centre Australia	C82	4
78	Cutcher & Neale - Auditors and Accountants for HRBG	C71	4

Respondent	Representation	Submitter reference	Issue category raised
79		C24	4
80		C52	5
81		C75	4
82	Member for Ballina, Shadow Minister for Tourism, Shadow Minister for the North Coast	C65	4
83		C116	4
84	The University of Newcastle	C81	4
85		C132	4
86	Member for Lake Macquarie	C62	4
87		C98	4
88		C107	4
89	Hunter Water	S10	2, 7
90		C92	4
91		C53, C94	4
92		C12	4
93		C108	4
94	Rio Tinto Coal Australia Pty Ltd	C44	9
95		C96	4
96		C137	7
97	Flagship Poll Herefords	C26	4

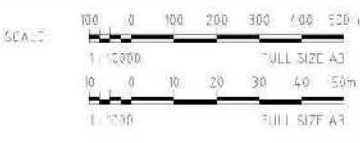
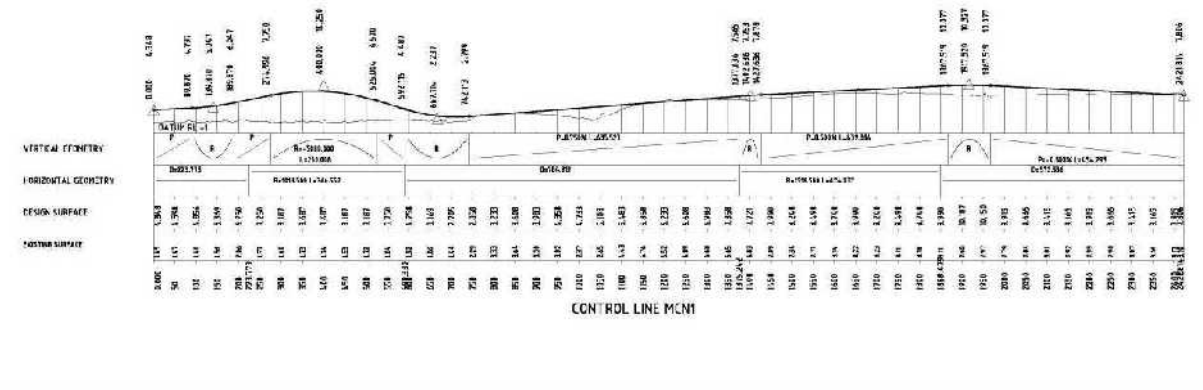
Respondent	Representation	Submitter reference	Issue category raised
98	Mistletoe - Hunter Valley Wines	C74	4
99		C58	15
100		C124	4
101		C56	4, 15
102	Member for Upper Hunter	C66	4
103		C38	4
104	Mayor of Port Stephens Council	C67	4
105		C109	4
106		C120	4
107		C90	4
108	President - Hunter Koala Preservation Society	C46	1
109	Distinctive Accessories	C118	4
110	Member for Maitland	C63	4
111	Newcastle Chainsaws and Mowers	C114	4
112		C101	4
113		C128	4
114		C25	4
115		C73	4
116		C102	4
117		C89	4

Respondent	Representation	Submitter reference	Issue category raised
118	Hon. Secretary - Australia Plants Society - Newcastle Group	C119	4
119	Hunter Water Corporation	S14	4

Appendix C: Alternative alignments for the southbound (SB) off ramp near the HRBG

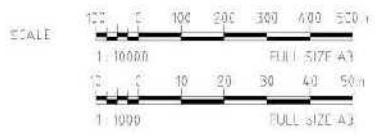
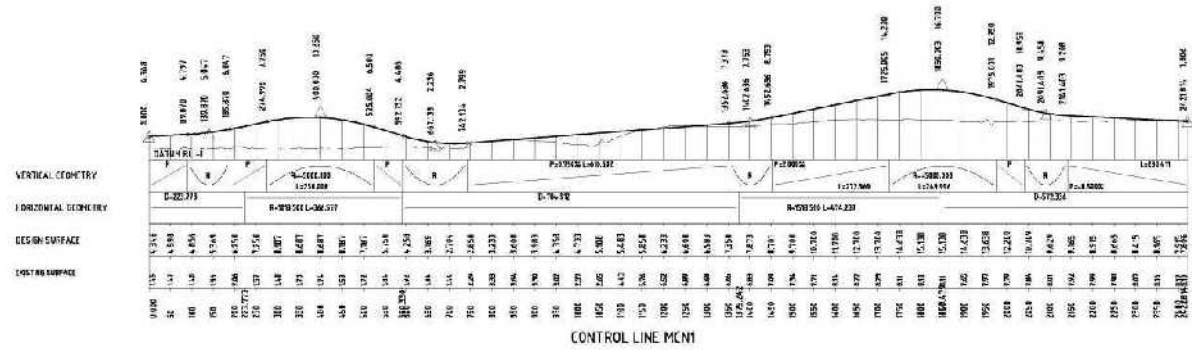
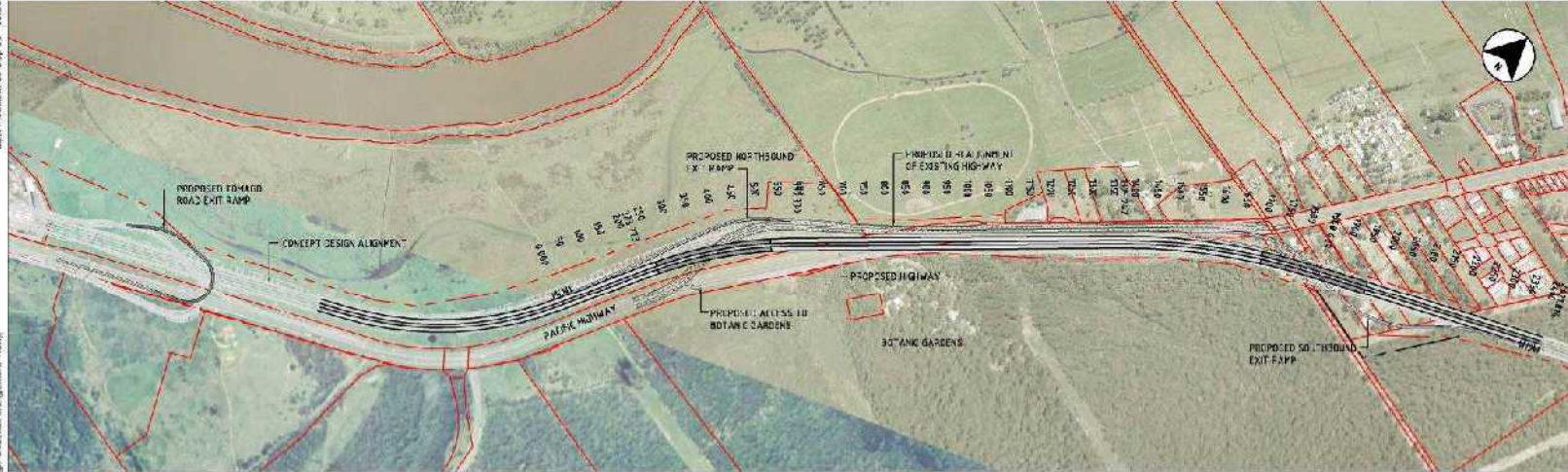


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NSW ROADS AND TRAFFIC AUTHORITY
F3 TO RAYMOND TERRACE
CONCEPT DESIGN LAYOUT
Figure C1 - Botanic Gardens Option 1

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NSW ROADS AND TRAFFIC AUTHORITY
 F3 TO RAYMOND TERRACE
 CONCEPT DESIGN LAYOUT
 Figure C2 - Botanic Gardens Option 2