



Roads &
Maritime

Upgrade of the rail bridge and New England Highway at Gowrie Gates, Singleton

Submissions report

August 2015

Executive summary

Roads and Maritime Services together with the Australian Rail Track Corporation (ARTC) are proposing to replace the existing twin steel rail bridges carrying the Main Northern Railway Line over the New England Highway at Gowrie Gates, Singleton. The proposal would provide increased horizontal road clearance to accommodate two travel lanes with wide sealed shoulders for improved freight access and safety for all road users. The main features of the proposal include rail, road and ancillary activities which are described further below:

- New rail bridge over the New England Highway providing a minimum 5.3 metre vertical clearance
- Lowering and widening about 260 metres of the New England Highway to provide two 3.5 metre lanes
- Providing three metre wide shoulders along the New England Highway through this section to bring the road up to current road design standards
- Relaying up to 200 metres of rail track.

The benefits of the proposal would include:

- Improved access and travel times for over-dimension freight movements on the New England Highway
- Minimised disruptions to freight movements on the highway and the movement of bulk coal on the Main Northern Line
- Improved road safety for road users.

The proposal would also address objectives outlined in the *NSW 2021: A Plan to Make NSW Number One, NSW State Infrastructure Strategy, NSW Long Term Transport Master Plan* and *Hunter Regional Transport Plan*.

A review of environmental factors (REF) was carried out to assess the environmental impacts of the proposal. The REF was placed on public display between 9 June and 7 July 2015.

The REF report was placed on the Roads and Maritime website and made available for download. The public display was advertised in the Singleton Argus on Friday 12 and Friday 26 June 2015 (refer to **Appendix A**).

Community updates inviting feedback were distributed to around 2400 properties in the project area and made available to download from the Roads and Maritime website (refer to **Appendix B**).

Copies of the community update were available at the Singleton Motor Registry, Singleton Council and the regional Roads and Maritime Services office in Newcastle, with a copy of the REF report.

The local Member of Parliament (MP) issued media releases on 9 June and 3 July 2015 advising of the preferred solution and REF display, and inviting community comment (refer to **Appendix C**).

This REF submissions report summarises the issues raised and provides responses to each issue. A total of eight written submissions were received in response to the public display of the REF. Submissions were generally supportive of, or neutral towards, the upgrade proposal.

The main issues raised in the submissions related to:

- Option analysis
- Funding
- Budget

- Environmental impacts
- Traffic and transport
- Noise and vibration
- Urban design.

After consideration of the submissions received during the REF display, no changes to the proposal are required. In summary, the proposal as described in the REF meets the proposal objectives, while minimising environmental impacts and appropriately considering community issues. In addition, although the proposal would still result in environmental impacts, on balance the proposal best meets the proposal objectives and is justified.

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1 Introduction and background

1.1 Purpose

This submissions report relates to the review of environmental factors (REF) prepared for the proposed upgrade of the Main Northern Rail Bridge and the New England Highway at Gowrie Gates, Singleton (the proposal), refer to **Figure 1-1**. This report should be read in conjunction with the REF document.

The REF was placed on public display between 9 June 2015 and 7 July 2015. Submissions relating to the proposal and the REF were received by Roads and Maritime Services and Australian Rail Track Corporation (ARTC). This submissions report summarises the issues raised and provides responses to each issue (refer to **Section 2**). Based on the submissions received, no design refinements of the concept design after the display of the draft REF are required. Consequently no additional environmental assessment was required and there will be no change to the mitigation measures as proposed in the REF, which are summarised in **Section 5**.

1.2 The proposal

Roads and Maritime Services together with the Australian Rail Track Corporation (ARTC) are proposing to replace the existing twin steel rail bridges carrying the Main Northern Railway Line over the New England Highway at Gowrie Gates, Singleton. The proposal would provide increased horizontal road clearance to accommodate two travel lanes with wide sealed shoulders for improved freight access and safety for all road users. The main features of the proposal include rail, road and ancillary activities which are described further below and shown in **Figure 1-2** and **Figure 1-3**.

- The rail work components of the proposal includes replacing the existing twin steel bridges with a new single concrete rail bridge that would upgrade the crossing to the latest heavy haul standard and increase the horizontal clearance for the New England Highway Singleton Railway Underpass to a minimum of around 13 metres. Specific activities include:
 - Relocation of utilities
 - Installation of 16 precast half-through girders including post-tension works on a temporary support structure
 - Removal of western (down) rail tracks including around 160 metres on the northern side and 130 metres on the southern side of the rail bridge. Removal of rail formation/embankment materials, including ballast, capping and structural materials
 - Removal of eastern (up) rail track including around 50 metres across the rail bridge
 - Removal of existing bridge structure, bridge support and retaining structures and any waste products
 - Securing new headstocks and jacking the new bridge into place
 - Reinstating the rail tracks and formation/embankment with new materials
 - Reopening the rail track with a temporary reduced rail line speed to allow for track settlement (around 1-2 weeks)
 - After the track has settled, the temporary speed restriction would be lifted to the posted rail line speed limits for this section of track.
- The road work components of the proposal includes:
 - Excavation and reconstruction of around 300 metres of new road surface on the New England Highway
 - Provision of three metre wide shoulders along the New England Highway for the length of the proposal
 - Maintaining the 60 kilometre per hour posted speed limit
 - New road surface markings along the length of the proposal

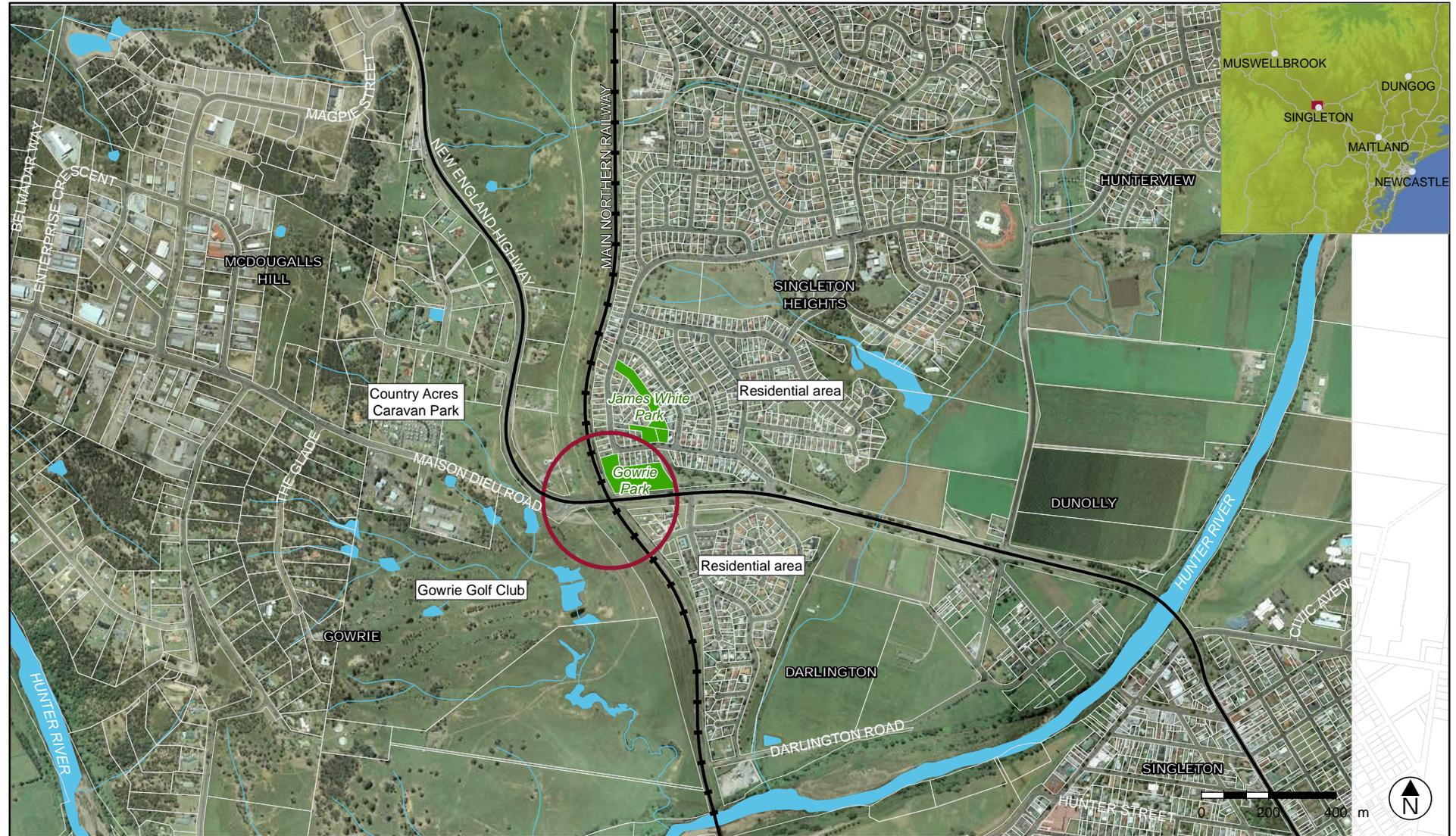
- Installation of kerb and guttering along the length of the proposal
- Relocation of about 240 metres of the shared pedestrian cycleway to a level and location that provides better visibility to the New England Highway traffic. The pathway would be part of the New England Highway Singleton Railway Underpass work and would cross underneath the new rail bridge. A pedestrian fence would be reinstated on the north side of the path to separate pedestrians and cyclists from the highway traffic
- Drainage works including construction of new road inlets and grass lined swales.
- Use of ancillary construction facilities, including construction compound site, stockpile sites, access roads, turn-around areas and hardstands for cranes and piling rigs. Ancillary activities include but are not restricted to the following:
 - Site establishment, clearing and grubbing activities including: demolition of existing kerbing under bridge; installation of roadside barriers, precast concrete and anti-gawking screens; construction of temporary staff overpass; installation of side track safety fencing; and installation of access tracks including turn-around areas within the rail corridor and next to the road corridor
 - Construction of a temporary side track about 270 metres long to the south of the New England Highway for traffic flow during the bridge replacement works. The side track would cross the existing rail track around 20 metres south of the existing rail bridge via a temporary bridge structure that would be implemented during rail possessions. Construction of the temporary side track would require clearing of around 380 square metres of exotic vegetation near Maison Dieu Road and the rail bridge
 - Temporary shoring of piling platform for piling works
 - Installation of six permanent and 10 temporary piles and support structure
 - Removal of temporary side track, removal of any excess spoil and rehabilitation of impacted construction areas
 - Demobilisation of ancillary facilities and rehabilitation of vegetated areas impacted by the proposal.

The proposal is expected to be constructed in a number of stages to minimise road and rail traffic impacts that will coincide with scheduled rail possessions, while ensuring efficient construction and minimising overall impacts on nearby residents and businesses.

The proposal is part of a broader strategy to upgrade the New England Highway and the Main Northern Railway Line. The aim of the proposal is to improve horizontal road clearance and improve the rail network reliability. The overall objectives for the proposal are to:

- Improve access for over-dimension freight movements on the New England Highway
- Minimise disruptions to freight movements on the New England Highway and the movement of bulk coal on the Main Northern Railway Line
- Improve road safety for traffic on the New England Highway
- Provide network reliability for the rail service
- Remove a long term temporary speed restriction
- Allow for safe maintenance for both road and rail after the proposal is complete
- Minimise environmental impacts.

FIGURE 1-1 THE LOCALITY



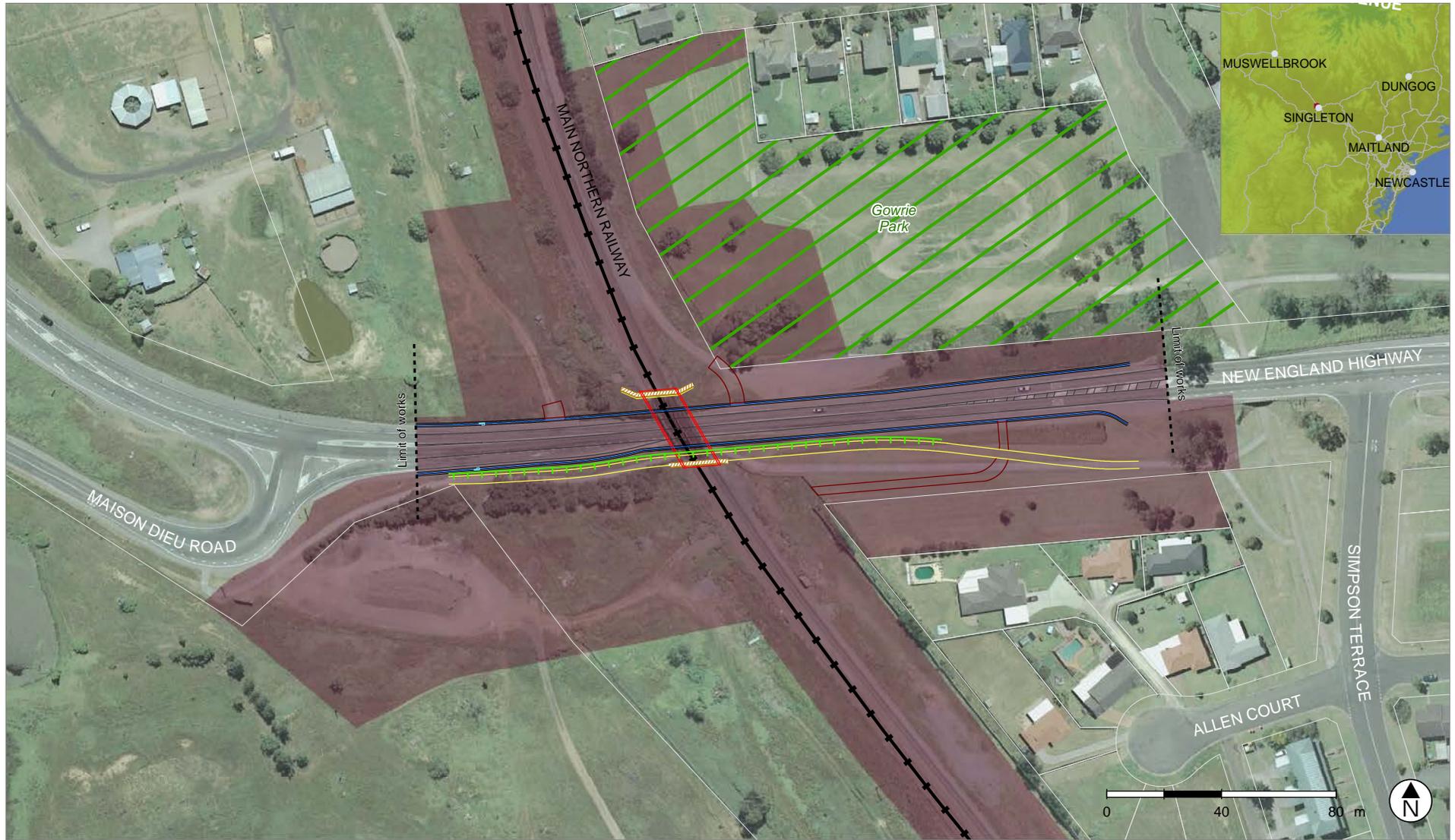
NSW SPATIAL - GIS MAP file : QB10706_GIS_SUBM_F001_r1v1_Locality

-  Railway
-  Area of interest



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FIGURE 1-2 THE PROPOSAL



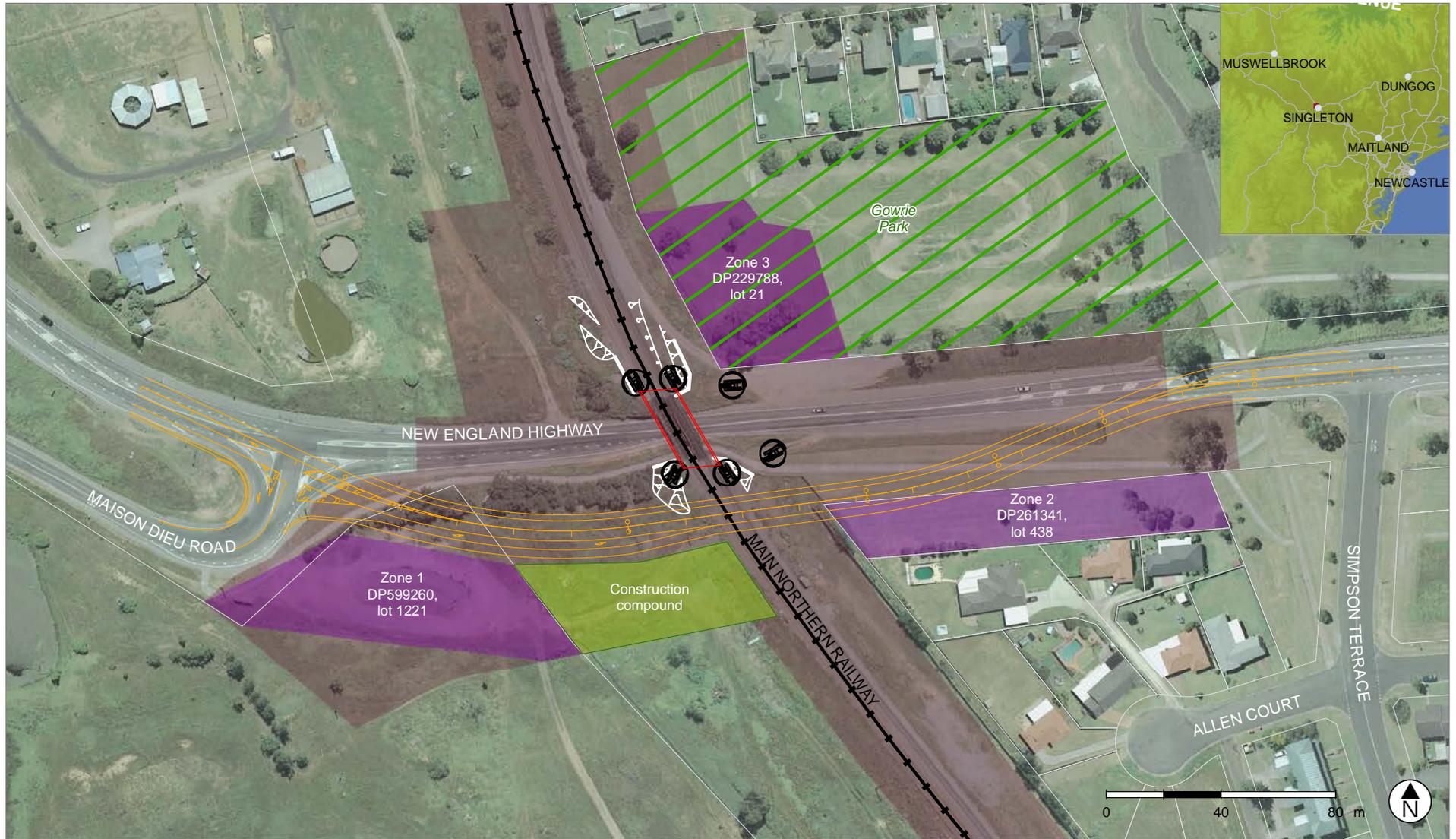
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- | | | | | |
|------------------------|---------------------|--------------|-------------------------|----------------|
| Railway | The proposal | Drainage pit | Driveway | Retaining wall |
| Park | Verge | Bridge deck | Footpath | Limit of works |
| Construction footprint | Gutter | Linemarking | Pedestrian safety fence | |



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FIGURE 1-3 ANCILLARY FACILITIES



NSW SPATIAL - GIS MAP file : QB10706_GIS_SUBM_F003_r1v1_AncillaryFacilities

-  Piling rig
-  Batter / retaining wall
-  Bridge deck
-  Temporary side track
-  Railway
-  Stockpile
-  Construction compound
-  Construction footprint
-  Park



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1.3 REF display and consultation

Roads and Maritime prepared a REF to assess the environmental impacts of the proposal. The REF was exhibited between 9 June and 7 July 2015 at three locations, as detailed in **Table 1-1**. The REF was placed on the Roads and Maritime Services website and made available for download. The exhibition locations and website link were advertised in the Singleton Argus on Friday 12 and Friday 26 June 2015 (refer to **Appendix A**).

Community updates inviting feedback were distributed to around 2400 properties in the project area and made available to download from the Roads and Maritime website (refer to **Appendix B**).

Table 1-1 Display locations

Location	Address
Singleton Motor registry	158 John Street Singleton NSW, 2330
Singleton Council	Corner of Queen St and Civic Ave, Singleton NSW 2330
Newcastle Roads and Maritime Services office	59 Darby Street, Cooks Hill, NSW 2300.

The local Member of Parliament (MP) issued media releases on 9 June and 3 July 2015 advising of the preferred solution and REF display, and inviting community comment (refer to **Appendix C**).

2 Response to issues

Roads and Maritime received eight submissions, accepted up until the 7 July 2015. **Table 2-1** lists the respondents, each respondent's allocated submission number. The table also indicates where the issues from each submission have been addressed in this report.

Table 2-1 Respondents

Respondent	Submission number	Section number where issues are addressed
Individual	1	Sections 2.6, 2.7.1 and 2.7.2
Business owner	2	Sections 2.2 and 2.6
Individual	3	Sections 2.5, 2.7.4 and 2.8
Individual	4	Sections 2.3 and 2.4
Business owner	5	Sections 2.3, 2.7.3 and 2.7.5
Business owner	6	Sections 2.3, 2.7.3 and 2.7.4
Individual	7	Sections 2.5 and 2.7.5
Individual	8	Section 2.9

2.1 Overview of issues raised

A total of eight submissions were received in response to the exhibition of the REF comprising five from the community and three from local businesses. Each submission was examined individually to understand the issues raised. The issues raised in each submission were extracted and collated, with corresponding responses to the issues provided. Where similar issues have been raised in different submissions, only one response has been provided. The issues raised and Roads and Maritime's response to these issues form the basis of this section.

Of the submissions received, concerns were raised regarding specific aspects of the proposal but no objections were received. Two submissions indicated support for the proposal, while the rest of the submissions did not offer a position on the proposal. No form letters were received.

The issues raised by public submissions from the community and local businesses related to seven categories:

- Design
- Alternative options
- Traffic and transport
- Noise and vibration
- Environmental impacts
- Access
- Urban design.

It is important to note that Roads and Maritime follows issues based decision making. This means that although preferences on options and frequency of a comment or issue are noted, Roads and Maritime examines the issues raised throughout the consultation period using a fact based assessment process.

2.2 Issue 1, support for the proposal

Submission numbers

2 – Business owner

Issue description

The respondent was supportive of the proposal and looking forward to it being approved for construction.

Response

Roads and Maritime has noted the respondent's support for the proposal. Approval for the proposal is expected later in 2015. After completion of detailed design, construction is expected to by late 2016, subject to confirmation of funding.

2.3 Issue 2, option analysis

Submission numbers

4 – Individual

5 – Business owner

6 – Business owner

Issue description

In summary, the respondents raised the following issues:

- Indicated a preference for construction of the Singleton Bypass which would remove the need for this proposal
- Questioned whether Roads and Maritime has considered other development projects such as the Singleton Bypass or the construction of a separate rail underpass between Gowrie Gates and the Hunter River to link Singleton with the new sub-division
- Preferred construction of the Singleton Bypass was completed before the proposal as they believed there would be less traffic on the New England Highway at this time.

Response

The proposal is required to improve safety along the New England Highway, improve traffic and freight efficiency for over-dimension vehicles, improve pedestrian and cyclist access and to minimise disruptions to trains on the Main Northern Railway line.

Roads and Maritime has noted the Singleton Bypass is a separate project. The funding allocated for the proposal is independent to funding for the Singleton Bypass.

Roads and Maritime recognises there is need for both projects independently and that one project does not preclude the other. Work is currently under way on the route options assessment for the Singleton Bypass which includes detailed investigations into traffic, environmental and flooding impacts, further strategic design and community consultation. Roads and Maritime expects to display corridor options for community and stakeholder feedback in the later part of 2015.

The construction of a separate rail underpass to link the new sub-division with Singleton is outside the scope of works for the proposal. In addition, it was not one of the options reviewed as building a new rail overbridge to the south of the New England Highway would not fulfil the proposal objectives. One of which is to improve traffic and freight efficiency for oversized vehicles along the New England Highway. The construction of a rail overbridge in this location would be the responsibility of negotiations between the developer, Singleton Council and ARTC.

2.4 Issue 3, concept design

Submission number

4 – Individual

Issue description

The respondent indicated support for the artist's impression of the rail bridge as shown in the community update (refer to **Appendix B**).

Response

Roads and Maritime and ARTC have noted the response.

2.5 Issue 4, funding

Submission number

3 – Individual

7 – Individual

Issue description

In summary, the respondents raised the following issue:

- Preferred money is spent on the Singleton Bypass rather than the proposal
- Did not support the allocation of funds to the upgrade of the bridge and thought the money would be better spent elsewhere. However the respondent indicated that if money was to be spent on the bridge it would be better to increase the capacity of the New England Highway and provide two lanes in each direction between Bridgeman Road to the top of McDougalls Hill.

Response

The aim of the proposal is to replace an aging bridge and provide safe access for road users and freight on the New England Highway beneath the bridge by providing widened road shoulders. Providing two lanes in each direction is outside the scope of this proposal, although the development of the Singleton Bypass would provide this capacity in the future. There is funding allocated this financial year to progress planning for this proposal and the Singleton Bypass, which is a separate project.

2.6 Issue 5, environmental impacts

Submission number

1 – Individual

2 – Business owner

Issue description

In summary, the respondents raised the following issues:

- Noted that as a resident of Gowrie, there is potential to be impacted by the proposal
- Noted impacts from the proposal are likely to be minor.

Response

Roads and Maritime and ARTC have considered impacts to residents in Gowrie as part of the publicly displayed REF.

As outlined in the REF, the proposal would result in some impacts to local residents including those in the suburb of Gowrie. Impacts may include temporary noise and vibration impacts, disruptions to traffic flow and access, and minor impacts to air quality and visual amenity during construction. A range of measures have been developed to minimise and mitigate the potential impacts of the proposal during construction, and these are summarised in Section 7 of the REF.

2.7 Issue 6, traffic, transport and access

2.7.1 Intersection of New England Highway and Maison Dieu Road

Submission numbers

1 – Individual

Issue description

The respondent noted access into Maison Dieu Road from the New England Highway southbound can be hazardous and requests Roads and Maritime modify the intersection as part of the proposal to improve safety.

Response

The intersection of the New England Highway and Maison Dieu Road is outside the scope of the proposal. The concerns about access to Maison Dieu Road southbound have been forwarded to the Roads and Maritime Network and Safety group and Singleton Council for consideration.

2.7.2 Pedestrian and cycle access along Maison Dieu Road

Submission numbers

1 – Individual

Issue description

The respondent noted Maison Dieu Road is currently used by pedestrians, cyclists and heavy vehicles though on some sections there is very little road shoulder. The respondent requests Roads and Maritime provide safe pedestrian and cycling access/facilities to the lower section of Maison Dieu Road at the same time the proposal is being constructed.

Response

Maison Dieu Road is a local road which is under the care and control of Singleton Council. Roads and Maritime has forwarded the submission to council for consideration.

2.7.3 Construction traffic

Submission numbers

5 – Business owner

6 – Business owner

Issue description

In summary, the respondents raised the following issues:

- Suggested the New England Highway is busy between 4am and 9.30am and 2.30pm and 7pm. Believes if construction of the proposal is to occur outside peak traffic hours there would only be limited time to carry out construction
- Supportive of the proposal but concerned about driver frustration/fatigue during the construction period as they believe traffic through Singleton and the proposal area is already congested.

Response

Peak traffic hours are summarised in the *Traffic and Transport Assessment* included as Appendix F of the REF. As part of the assessment, automatic traffic counters were placed on the New England Highway in both directions south of Maison Dieu Road from 17 July to 31 July 2013. These counters helped to identify the peak traffic hours for the New England Highway and associated traffic volumes.

The results of the traffic counts identified:

- The morning peak period northbound occurred between 6.30am and 7.30am with a peak traffic flow of 1450 vehicles per hour
- The morning peak period southbound occurred between 7.30am and 8.30am with a peak traffic flow of 650 vehicles per hour
- The afternoon peak period northbound occurred between 5.30pm and 6.30pm with a peak traffic flow of 600 vehicles per hour
- The afternoon peak period southbound occurred between 4pm and 5pm with a peak traffic flow of 1200 vehicles per hour.

As summarised in Section 3.3.3 of the REF, the majority of construction would generally be carried out during standard working hours, as follows:

- Monday to Friday between 7am and 6pm
- Saturday between 8am and 1pm
- There would be no work on Sundays or public holidays.

Where possible, activities with impacts on traffic flow would be minimised during peak periods. The proposed construction is expected to take place intermittently over an 18 – 24 month period which would take into consideration ARTC's annual scheduled track possession program. The rail bridge work, and some of the road work, would be carried out during four or more 72 – 96 hour ARTC rail track possessions, which would require work to be performed out of hours for the duration of the rail closure.

Roads and Maritime considers there is sufficient time to carry out construction as the majority of the work will take place during the 72 – 96 hour rail possessions and will include work after hours and at night. Any additional travel time associated with the proposed construction is expected to be minimal given the short distance over which construction activities would occur.

Roads and Maritime has noted the respondent's support for the proposal.

2.7.4 Operational traffic

Submission numbers

3 – Individual

6 – Business owner

Issue description

In summary, the respondents raised the following issues:

- Concerned about additional traffic on the New England Highway, especially through Singleton during peak hour
- Believed the REF did not identify additional traffic impacts on residents after the upgrade is completed.

Response

The proposal would not increase the capacity of the existing New England Highway as it would remain one lane in each direction. However, widening the lanes and including shoulders beneath the bridge would enable over-dimension vehicles to access the New England Highway Singleton Railway Underpass and avoid the alternative route along the Golden Highway. This would result in a slight increase in the number of over-dimension vehicles along the New England Highway, although the overall change in traffic flows is expected to be negligible and therefore the traffic impact to residents would also be minor.

The proposal is required to improve safety along the New England Highway, improve traffic and freight efficiency for over-dimension vehicles, improve pedestrian and cyclist access and to minimise disruptions to trains on the Main Northern Railway line. Any future bypass of Singleton is where significant reductions in traffic along the existing New England Highway could be expected to be seen.

2.7.5 Road safety

Submission numbers

5 – Business owner

7 – Individual

Issue description

In summary, the respondents raised concerns there had been a number of recent crashes at the New England Highway and Maison Dieu Road intersection, including one fatality. One of the respondents suggested the right turn lane into the intersection be removed to improve safety or that access be removed completely.

Response

The proposal aims to improve road safety by providing widened road shoulders along the New England Highway under the rail bridge. Modifying the New England Highway and Maison Dieu Road intersection is outside the scope of work for the proposal. The concern about access to Maison Dieu Road has been forwarded to the Roads and Maritime Network and Safety division and Singleton Council for consideration.

2.8 Issue 7, noise and vibration

Submission number

3 – Individual

Issue description

The respondent indicated they believed the REF did not identify additional traffic impacts on residents after the upgrade is completed. The respondent was particularly concerned about noise impacts from heavy vehicles travelling southbound on the New England Highway and using air brakes to slow down during the descent from McDougalls Hill to the railway bridge. It was requested that curfews and noise constraints/signage be included in the proposal to limit heavy vehicle noise impacts.

Response

As discussed in **Section 2.7.4**, the proposal would not increase the capacity of the existing New England Highway as it would remain one lane in each direction. However, widening the lanes and road shoulders beneath the bridge would allow over-dimension vehicles to access the New England Highway Singleton Railway Underpass and avoid the alternative route along the Golden Highway. This would result in a

slight increase in the number of over-dimension vehicles along the New England Highway, although the overall change in traffic flows is expected to be negligible. Consequently there are no expected traffic and noise impacts to residents from the proposal.

The *Noise and Vibration Assessment* included in Section 6.1 of the REF supports this conclusion and no assessment of either rail or road noise sources is required to be carried out under the relevant legislation. As the *Noise and Vibration Assessment* identified no change to the existing operational road noise and vibration impacts, no mitigation measures during operation are required. Curfews or noise signage would consequently not be implemented as part of the proposal.

2.9 Issue 8, urban design

Submission number

8 – Individual

Issue description

The respondent noted the urban design of bridges in the region and requested some community art be added to the bridge structure after construction was completed, to complement the Singleton Council project to beautify the town. It was suggested that some paintings or sculptures be used.

Response

Roads and Maritime do not have any specific objection to the provision of a sign or painting on the new bridge structure after construction is completed but would require any community art addition maintain the minimum road standards, especially the vertical clearance requirement of 5.3 metres.

The bridge is under the care and control of ARTC, therefore the provision of any such artwork or sign would be subject to both Singleton Council and ARTC consideration and approval. The submission has been forwarded to both Singleton Council and ARTC for consideration and any community art addition would be reviewed during detailed design.

3 Additional assessment

No additional assessment has been completed following the display of the REF.

4 Changes to proposal in REF

The design has not been changed following the display of the REF.

4.1 Revised safeguards and management measures

No additional management and mitigation measures are required in response to the submissions received on the REF for the proposal.

5 Environmental management

The REF for the proposed upgrade of the Rail Bridge and the New England Highway at Gowrie Gates, Singleton identifies the framework for environmental management and mitigation measures that Roads and Maritime will adopt to avoid or reduce environmental impacts (refer to Chapter 7 of the REF).

After consideration of the issues raised in the public submissions, the mitigation measures as included in the REF would not need to be. Should the proposal proceed, environmental management will be guided by the framework and measures outlined below.

5.1 Environmental management plans (or system)

Chapter 7 of the REF identifies a number of safeguards and management measures to minimise potential adverse environmental impacts, including social impacts which could potentially arise as a result of the proposal. Should the proposal proceed, these management measures will be incorporated into the detailed design and applied during the construction and operation of the proposal.

A Project Environmental Management Plan (PEMP) and a Contractor's Environmental Management Plan (CEMP) will be prepared to describe the safeguards and management measures. These plans will provide a framework for establishing how these measures will be implemented and who will be responsible for their implementation.

The plans will be prepared before construction of the proposal and must be reviewed and certified by environment staff, Hunter Region, before the start of any on-site work. The CEMP will be a working document, subject to ongoing change and updated as necessary to respond to specific requirements. The CEMP and PEMP will be developed in accordance with the specifications set out in the following documents:

- *QA specification G10 Traffic Management and Disability Standards for Accessible Public Transport 2010*
- *Specification D&C G36: Environmental Protection*
- *QA Specification G38: Soil and Water Management*
- *QA Specification G40: Clearing and Grubbing.*

5.2 Summary of safeguards and management measures

The environmental safeguards as summarised in the REF will be incorporated into the detailed design phase of the proposal and during construction and operation of the proposal, should it proceed. These safeguards will minimise any potential adverse impacts arising from the proposed works on the surrounding environment. As discussed above no changes to the safeguards and management measures are required based on submissions received during the display of the REF.

The general safeguards and management measures for the rail and road components of the proposal as included in the REF are summarised in **Table 5-1**. Rail and road specific mitigation measures as summarised in the REF which will also need to be implemented during construction of the rail and road components of the proposal are included in **Table 5-2** and **Table 5-3** respectively. The licences and approvals required for the proposal have been listed in **Table 5-4**.

Table 5-1 Summary of general environmental safeguards for the rail and road components of the proposal

No.	Impact	Environmental safeguards	Responsibility	Timing
General				
G-1	General	<p>Prior to the commencement of substantial construction for either road or rail infrastructure, or 12 months after REF determination, a consistency review will be undertaken for:</p> <ul style="list-style-type: none"> Any non-trivial changes in design, construction methodology or operating regime and associated additional impacts which may emerge from those assessed in the REF Any changes in the legislative approval framework to undertake the proposal from that considered at the time of REF preparation. 	Project manager	Pre-construction
G-2	General	<p>All environmental safeguards must be incorporated within the following documents:</p> <ul style="list-style-type: none"> Project Environmental Management Plan Detailed design stage Contract specifications for the proposal Contractor's Environmental Management Plan. 	Project manager	Pre-construction
G-3	General	Any work resulting from the proposal and as covered by the REF may be subject to environmental audit(s) and/or inspection(s) at any time during their duration.	Project manager and regional environmental staff	Ongoing
G-4	General	All businesses and residences likely to be affected by the proposed works must be notified at least five working days prior to the commencement of the proposed activities.	Project manager	Pre-construction
G-5	General	Environmental awareness training must be provided, by the contractor, to all field personnel and subcontractors.	Contractor	Pre-construction and during construction as required.
G-6	General	<p>Consultation would be undertaken at least five working days prior to work occurring with the following stakeholders:</p> <ul style="list-style-type: none"> Landowners whose access will be affected (access to private properties would be maintained during construction) 	Contractor	Pre-construction and during construction as required.

No.	Impact	Environmental safeguards	Responsibility	Timing
		<ul style="list-style-type: none"> Landowners whose land would be leased, to ensure their concerns are clearly understood and can be addressed wherever possible Landowners affected by construction noise impacts (to discuss noise mitigation) and out of hours work (including any night work). 		
G-7	Management of ancillary facilities and stockpile areas	<p>The location of the stockpile and storage areas within the main construction compound area and construction footprint would ideally be located:</p> <ul style="list-style-type: none"> On relatively level ground In a place accessible to construction traffic and deliveries Away from areas of ecological and heritage conservation value In areas previously disturbed within the proposal area that do not require the clearing of native vegetation Away from residential buildings or heritage items In plain view of the public to deter theft and illegal dumping Close to key construction activities to minimise transport of materials and equipment Within the area of potential impact on minimise impacts on private and public property In areas not prone to flash flooding and more than 40 metres from a watercourse Outside the drip line of trees. <p>For the road components of the proposal, the location of the stockpile and storage areas within the main construction compound area and construction footprint would also be subject to the site location criteria set out in the <i>Stockpile Site Management Procedure</i> (RTA 2011) and <i>QA specification R44-Earthworks - IC-QA-R44</i> (Roads and Maritime, 2011a). No long term stockpile areas have been included as part of the proposal. The final location of the compound, hardstand, access road, stockpile and storage sites would be determined during detailed design. Once the contractor has a preferred location for the stockpile and storage sites, they would consult with Roads and Maritime's and ARTC's</p>	Contractor	Pre-construction and during construction as required.

No.	Impact	Environmental safeguards	Responsibility	Timing
		<p>Environmental Officer before any work in those locations to determine if any additional environmental assessment is required.</p> <p>Liquid and solid waste would be removed by tanker or truck and disposed of off-site at a suitably licensed facility able to accept those wastes for storage, reuse or disposal. Fuel and chemical storage areas would be bunded and protected in accordance with the specifications set out by the Office of Environment and Heritage (OEH) and WorkCover.</p> <p>Each site would be securely fenced with temporary fencing. Signage would be erected advising the general public of access restrictions. Upon completion of construction, the temporary compound, work area and stockpile sites would be removed, cleared of all rubbish and materials, and rehabilitated.</p>		
Noise and vibration				
NV-1	Noise impacts to sensitive receivers	The nearest noise receptors would be notified of the works plan and the potential for exceedances of noise goals at least five working days or more in advance of the works occurring.	Roads and Maritime and ARTC	Pre-construction
NV-2	Noise impacts to sensitive receivers	Potentially affected residents would be consulted regularly about concerns they may have regarding noise levels, and discussing reasonable and feasible measures which are being undertaken onsite to reduce noise associated with the proposal. Notification should be ongoing to inform noise affected neighbours on the progress of the proposal and programmed dates of forward works.	Roads and Maritime and ARTC	Pre-construction
NV-3	Noise impacts to sensitive receivers	Noise complaints would be addressed promptly and feedback provided to complainants. Construction methodologies may need to be altered to reduce noise impacts at the affected locations.	Roads and Maritime and ARTC	Pre-construction
NV-4	Construction noise	Where works outside standard hours are proposed, affected receivers would be notified at least five working days ahead of time of the likely activities, noise impact and duration of these works.	Roads and Maritime and construction contractor	Pre-construction and construction
NV-5	Construction noise	Construction timetabling would minimise noise impacts where possible. This may include time and duration restrictions and respite periods	Construction contractor	Pre-construction

No.	Impact	Environmental safeguards	Responsibility	Timing
		during longer track possessions.		
NV-6	Construction noise	Ensure road plates (in particular at the temporary rail crossing) are not loose and do not generate unnecessary noise.	Construction contractor	Construction
NV-7	Construction noise	Arrange the work site to minimise the use of movement alarms on vehicles and mobile plant.	Construction contractor	Construction
NV-8	Construction noise	Where possible avoid the use of equipment or methods that generate impulsive noise, including dropping materials from a height, loading/unloading and metal on metal contact.	Construction contractor	Construction
NV-9	Construction noise	Carry out loading and unloading away from sensitive receivers wherever possible.	Construction contractor	Construction
NV-10	Construction noise	Consider noise emission levels in the selection of plant and equipment. This equipment would be operated and maintained so that noise emissions are minimised.	Construction contractor	Construction
NV-11	Construction noise	Where reasonable and feasible consider alternatives to the use of hydraulic hammers. This may include grinding or cutting techniques. Where their use is unavoidable, use noise mitigated hammers.	Construction contractor	Construction
NV-12	Construction noise	Where OH&S issues can be safely managed, consider the use of alternatives to reversing alarms such as spotters, closed circuit television monitors and 'smart' reversing alarms.	Construction contractor	Construction
NV-13	Construction noise from compound and stockpile / material laydown sites	During site planning, position parking areas, equipment and material stockpile sites away from noise sensitive locations. Where possible, stockpiling activities should be undertaken at stockpiling Zone 1 (refer to Chapter 3 of the REF) in preference to the other two stockpiling locations to reduce potential noise impacts.	Construction contractor	Pre-construction
NV-14	Construction noise from ancillary	Place compound buildings close to sensitive receivers to form a temporary noise screen from compound noise sources.	Construction contractor	Pre-construction and construction

No.	Impact	Environmental safeguards	Responsibility	Timing
	facilities			
NV-15	Construction noise from stockpile sites	Position stockpiles as far as possible from receivers on the northern edge of Allen Court. Where possible, try to maintain any noise screening effects that this stockpile may provide.	Construction contractor	Pre-construction and construction
NV-16	Night works	Undertake ongoing noise monitoring, if required, particularly during night time works, so as to proactively manage site procedures to manage potential noise issues and to determine the extent of actual noise impacts, and the effectiveness of noise management measures.	Construction contractor	Construction
Traffic and transport				
TT-1	Impacts to rail traffic from rail track possessions	The timing and duration of rail track possessions will be scheduled through consultation with ARTC and where possible occur concurrently with other track possessions. The timing and duration of rail track possessions will be considered during the consistency review once they are known closer to start of construction (refer to mitigation measure G-1). The design of the bridge will be developed during the detailed design phase to minimise the number of track possessions required during construction.	Construction contractor	Detailed design and pre-construction
TT-2	Impacts to local roads during construction	A photographic inspection will be undertaken of local roads that will be used during construction surrounding the proposal before construction in order to identify condition of the local roads. Follow-up condition surveys will be taken during and at the end of construction to identify any damage from construction vehicles during construction of the proposal. Any damage to the local roads will be repaired by ARTC and/or Roads and Maritime to that identified in the existing condition survey.	Roads and Maritime and ARTC	Pre-construction
TT-3	Impacts to property access during construction	Access to the property near the intersection of Maison Dieu Road and the New England Highway and the access point for the construction compound site would be maintained at all times throughout construction of the proposal. The access would be maintained to at least the current condition of the existing driveway, and which meets Council's rural	Construction contractor	Pre-construction

No.	Impact	Environmental safeguards	Responsibility	Timing
		driveway access standards. Details for provision of any alteration to the access for both construction and after construction is completed would be determined in consultation with the landholder.		
Landscape character, visual impact assessment and urban design				
L-1	Visual impact of the bridge	Properly formed abutment walls and slopes using sacrificial coatings to protect the surface of the abutment will be constructed to provide a more inviting path for the shared pedestrian / cycle path and enhance vandal resistance and management.	Construction contractor	Pre-construction / construction
L-2	Visual impact of the rebated wall for the shared pedestrian /cycle way	A rebated wall finish will be used to provide texture, shadow and minimise its attraction for the application of graffiti. An anti-graffiti coating will be applied to all accessible panels.	Construction contractor	Pre-construction / construction
L-3	Modification of existing landscaped areas	Areas of plantings will be used to both reinstate the areas disturbed by the works and also to lift the usability of the space.	Construction contractor	Pre-construction / construction
L-4	Modification of existing landscaped areas	Clusters of trees will be planted along the shared cycle/pedestrian path to enhance the usability of the path, assist in the integration of the bridge within the landscape and screen the abutments from receivers.	Construction contractor	Construction
L-5	Lighting	Lighting will be used during night works. The nearest sensitive receivers are located about 150 metres from the proposal area. Lights during night works will be pointed away from receivers and towards the proposal area and lighting would only be used temporarily during night works.	Construction contractor	Construction
Water quality and hydrology				
WQ-1	Site management	Construction activities will be sequenced and managed to minimise potential water quality degradation due to erosion. Management	Construction contractor	Construction

No.	Impact	Environmental safeguards	Responsibility	Timing
	erosion controls	<p>methods will include:</p> <ul style="list-style-type: none"> • Early installation of physical controls, including cross drainage to convey clean water around or through the site • Minimising the duration of exposed topsoil by retaining topsoil cover, grassed drainage lines and shrub cover on the soil surface for as long as possible • Minimising the extent of disturbed areas • Minimising stockpiling areas • Minimising the lengths of slopes through limiting the extent of excavations and the use of diversion drains to reduce water velocity over disturbed areas • Where possible, constructing working platforms from rock fill so that bare earth is not exposed • Progressive rehabilitation or sealing of work areas. 		
WQ-2	Contaminants entering receiving environments during construction	<p>The following measures will be implemented to minimise the risk of contaminants entering receiving environments:</p> <ul style="list-style-type: none"> • All fuels, chemicals and liquids will be stored and disposed of in accordance with DECC <i>Storing and Handling Liquids: Environmental Protection Participants Manual, (May 2007)</i> and stored in impervious bunded areas located a minimum of 50 metres from drainage lines or waterways • Do not refuel or maintain plant and equipment, mix cutting oil with bitumen, or carry out any other activity which may result in spillage of a chemical, fuel or lubricant at any location which drains directly to waters or environmentally sensitive areas, without the appropriate temporary bunding being provided • Plant, equipment and vehicle wash down will occur in a designated bunded area away from waterways and drainage lines • All concrete washouts will occur into a sealed receptacle or bunded concrete washout with an impermeable liner. The concrete washout must be sized to be 120% of the estimated volume of the waste that 	Construction contractor	Construction

No.	Impact	Environmental safeguards	Responsibility	Timing
		<p>will be received into the washout at any one time</p> <ul style="list-style-type: none"> Any material transported onto road surfaces will be swept and removed at the end of each working day. 		
Topography, geology, soils and contamination				
TG-1	Impact on potentially contaminated sites	<p>Additional contamination assessment will be carried out on potentially contaminated sites during detailed design to quantify risk at the properties identified to hold increased contamination risk. This would include collecting soil surface samples near the proposal and analysing for the contaminants of concern.</p> <p>If contamination is identified the CEMP will include measures to inform workers on the potential to encounter contaminated material, the procedures to be implemented in the event that contamination is discovered or suspected, and to ensure contaminants are handled appropriately.</p>	ARTC	Pre-construction
TG-2	Erosion and sedimentation leading to impacts on water quality, air quality and downstream biodiversity	<p>A Soil and Water Management Plan (SWMP) incorporating an ESCP will be developed in accordance with <i>The Blue Book - Managing Urban Stormwater: Soils and Construction</i> (Landcom, March 2004), as part of the CEMP and implemented throughout the construction period. It will include the following safeguards:</p> <ul style="list-style-type: none"> Designated exclusion zones will be identified for the storage and use of construction plant and equipment. These zones will delineate traffic areas and restrict entry and exit points to construction sites Areas of risk near the proposal, such as steep areas or highly erodible soils, will be identified and appropriate management controls implemented Temporary or permanent diversion drains will be used to divert off-site run-off around or through the construction site to minimise the volume of flow that mixes with on-site run-off Physical controls will be developed in line with the erosion and sediment control plan (ESCP), including sediment fences, sediment filters, rock check dams, level spreaders, and onsite diversion drains 	Construction contractor	Construction

No.	Impact	Environmental safeguards	Responsibility	Timing
		installed before construction and maintained during construction <ul style="list-style-type: none"> • Exposed batters will be lined, if required • A schedule for the ongoing maintenance and inspection of temporary erosion and sediment controls will be developed. 		
TG-3	Pollution as a result of sediment and other contaminants entering waterways during construction	Compound sites, ancillary facilities including the temporary side track, access roads and turn-around areas, plant and equipment will be managed within the ESCP. The following measures will be included to limit sediment and other contaminations entering receiving waterways: <ul style="list-style-type: none"> • Chemicals will be stored within a sealed or bunded area • Appropriate controls will be in place where plant is stored • Run-off from site compounds will be controlled and treated before discharging into downstream waterways • Vehicle movements will be restricted to designated pathways where feasible • Areas that will be exposed for extended periods, such as car parks and main access roads, will be stabilised where feasible. 	Construction contractor	Construction
Air quality				
AQ-1	Excessive exhaust emissions arising from construction plant and equipment	Ensure that plant and equipment operates in a proper and efficient manner by: <ul style="list-style-type: none"> • Inspecting the plant/equipment before the start of construction on site • Conduct routine servicing and maintenance, and subsequent inspections to ensure that equipment continues to operate efficiently. 	Construction contractor	Pre-construction and routinely during construction
AQ-2	Dust emissions arising from disturbed, exposed and/or non-vegetated surfaces,	Stage work to minimise to the extent practical exposed areas and stockpiles. Wherever possible, avoid completing work with a high potential to result in dust during dry conditions when winds are blowing in the direction of nearby receivers. Regular watering of exposed and disturbed areas and stockpiles, especially during dry weather conditions.	Construction contractor	Pre-construction and during construction

No.	Impact	Environmental safeguards	Responsibility	Timing
	stockpiled materials and demolitions	Avoid stockpiling of materials in the south eastern portion of the construction footprint nearest Allen Court. Remove demolition materials from site as soon as practical and avoid demolition activities during strong winds blowing from the north-west or south-west		
AQ-3	Dust emissions arising during the haulage of materials and construction vehicle movements	During construction the following measures will be implemented to minimise dust emissions to nearby sensitive receivers: <ul style="list-style-type: none"> • Ensure that loads are covered on public roads • Regularly water unsealed traffic routes and stockpile sites • Impose speed limits along unsealed routes • Where possible, restrict movements along unsealed routes. • Seal side track as soon as possible after completion of earthworks. 	Construction contractor	During construction
AQ-4	Dust emissions arising from non-vegetated surfaces	Staging of work to ensure that finished areas are revegetated as soon as possible. Regular maintenance and watering of revegetation areas to aid the establishment of adequate vegetation cover.	Construction contractor	During and post-construction
Socio-economic and land use				
SE-1	Start of construction	All residents located next to the construction works (including compound areas and stabling /maintenance areas for locomotives) will be notified at least five working days before construction starts.	ARTC (Rail infrastructure components) and Roads and Maritime (Road infrastructure components)	Pre-construction and construction
SE-2	Community	The community will be kept informed about upcoming construction activities, including through advertisements in the local media and by prominently placed advisory notices and/or variable message signs, including providing information on the: <ul style="list-style-type: none"> • Temporary reduction on the road clearance height during construction of the new rail bridge • The road diversions required as part of the construction which will 	ARTC (Rail infrastructure components) and Roads and Maritime (Road infrastructure components)	Pre-construction and construction

No.	Impact	Environmental safeguards	Responsibility	Timing
		occur during rail possessions.		
SE-3	Complaints	<p>A complaints-handling procedure and register will be included in the CEMP. Rail complaints will be directed to ARTC's enviroline on 1300 550 402 or email address: enviroline@artc.com.au and road complaints would be directed to the Roads and Maritime community information line. This information would be advertised within the published proposal information.</p> <p>A specific measure for handling noise complaints during construction of the rail and road components of the proposal are included as mitigation measures NV-17 and NV-21 respectively.</p>	ARTC (Rail infrastructure components) and Roads and Maritime (Road infrastructure components)	Pre-construction
SE-4	Access and connectivity	<p>The following measures relating to maintaining access and connectivity:</p> <ul style="list-style-type: none"> • Where necessary, construction work will occur outside of peak travel times to minimise traffic disruptions • Where possible, pedestrian and cyclist access will be maintained throughout construction • Provision of signage outlining the pedestrian and cyclist diversion routes will be displayed during construction • There will be advance notification of any construction work that affect pedestrians and cyclists • Local residents are to be notified about any new or changed construction activities which will affect access to their properties or otherwise disrupt the residents' use of their premises, at least five working days before commencing work affecting residents • The traffic management plan will include measures to minimise heavy vehicle usage and parking on local roads. Where practicable, deliveries of construction plant and materials will be undertaken outside of peak traffic periods. 	ARTC (Rail infrastructure components) and Roads and Maritime (Road infrastructure components)	Construction
SE-5	Emergency vehicle access	Access will be maintained for emergency vehicles in the vicinity of construction work. Roads and Maritime will consult with emergency services throughout construction to ensure that potential impacts are	Construction contractor	Construction

No.	Impact	Environmental safeguards	Responsibility	Timing
		identified and appropriately managed.		
SE-6	Interruptions to utility services	Residents will be informed before any interruptions to utility services that may be experienced when utilities need to be relocated.	ARTC (Rail infrastructure components) and Roads and Maritime (Road infrastructure components)	Construction
SE-7	Impacts to sensitive receivers from lighting during night works	Lights during night works would be pointed away from receivers and towards the proposal area. Lighting would only be used temporarily during night works.	ARTC (Rail infrastructure components) and Roads and Maritime (Road infrastructure components)	Construction
Waste and resource management				
WR-1	Generation of construction waste	The generation of construction waste is to be managed under the principles of avoiding unnecessary resource consumption, resource recovery, and lastly disposal (in accordance with the <i>Waste Avoidance and Resource Recovery Act 2001</i>).	Construction contractor	Construction
WR-2	Generation of construction waste	The construction contractor will regularly address housekeeping at the construction site. This will include collection and sorting of recycling, general waste and green waste. Waste will be disposed regularly at a licensed waste facility.	Construction contractor	Construction
WR-3	Construction waste from the demolition of existing structures	The demolition of any structure will be undertaken in accordance with Australian Standard AS2601: The demolition of structures. Before the demolition of any structures, an inspection will occur to assess the potential for the presence of hazardous materials. If hazardous materials are found on site, measures to protect the health of workers and the general community will be developed.	Construction contractor	Construction
Cumulative environmental impacts				
CE-1	Cumulative traffic, biodiversity,	To minimise potential impacts during construction, the construction timetable for the upgrades will be co-ordinated to minimise disruption to motorists. This will allow construction to be carried out on a section-by-	Roads and Maritime	Detailed design, pre-construction

No.	Impact	Environmental safeguards	Responsibility	Timing
	noise and air quality impacts due to construction of multiple projects	section basis. This approach will ensure that negative cumulative impacts on both the function of the New England Highway and the surrounding environment will be minimised where possible.		

Table 5-2 Summary of rail specific environmental safeguards for the rail components of the proposal

No.	Impact	Environmental safeguards	Responsibility	Timing
Noise and vibration				
NV-17	Noise impacts to sensitive receivers	When construction activities are undertaken during the scheduled rail possessions a 24 hour contact would be provided as part of community consultation to potentially noise affected parties. This consultation would be provided at least five working days prior to construction activities commencing. During general construction activities, any complaints or queries regarding construction of the rail components of the proposal would be directed towards ARTC's 24 hour enviroline on 1300 550 402 and email address is enviroline@artc.com.au. The enviroline would not be manned 24 hours however; messages can be left and would be checked at the start of each business day. This information would be advertised within the published proposal information (refer further to mitigation measure SE-3).	ARTC	Pre-construction
NV-18	Construction noise	A Noise and Vibration Management Plan (NVMP) would be prepared as part of the CEMP in accordance with: <ul style="list-style-type: none"> • Section 6 Work practices of the ICNG • Section 6 Standard mitigation measures and monitoring requirements of the CNS • Section O4 of ARTC's EPL #3142. 	Construction contractor	Pre-construction and construction
NV-19	Construction noise	Where possible, avoid the dumping of ballast during night time hours.	Construction contractor	Construction
NV-20	Construction noise	Where safety can be acceptably managed using other methods, it is recommended that rail detonators are not used. If they must be used, this should be done in accordance with ARTC specifications.	Construction contractor	Construction
Traffic and transport				
TT-4	Impacts to traffic flow and property	A detailed traffic management plan (TMP) will be prepared during the detailed design phase. The TMP will be prepared in accordance with The TMP for the rail components of the proposal will be developed and	Construction contractor	Pre-construction

No.	Impact	Environmental safeguards	Responsibility	Timing
	access during construction	<p>undertaken in accordance with the requirements of the Road Occupancy License and will include guidelines, general requirements and procedures to be used when activities or areas of work have a potential impact on existing traffic arrangements. The TMP may be submitted in stages to reflect the progress of work and will:</p> <ul style="list-style-type: none"> • Consider other developments that may also be under construction, to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic • Make provision for consultation with relevant local government authorities, emergency services, the community and transport service providers, as appropriate. Consultation would be in accordance with the consultation strategy for the proposal and would be undertaken at least five days prior to construction starting. • Provide details on the strategy for informing oversized vehicles of the temporary reduction in vertical clearance of the New England Highway underneath the Singleton Railway Underpass and the need to take the alternate route, refer to Figure 1-2 of the REF. • Provide measures for preventing oversized vehicles from colliding with the rail bridge during construction of the proposal when there will be temporary reduction in vertical clearance of the New England Highway underneath the Singleton Railway Underpass. • Provide measures for managing pedestrians and cyclists during all stages of construction of the proposal. 		
TT-5	Impacts to traffic flow and property access during construction	A vehicle movement plan (VMP) and appropriate haulage routes will be developed to ensure that traffic associated with the proposal can manoeuvre safely into and out of traffic streams and work areas.	Construction contractor	Pre-construction
TT-6	Impacts to rail traffic and construction traffic during	<p>During construction of the rail components of the proposal, temporary barriers will be installed along the Main Northern Railway Line to prevent construction traffic accessing the rail line.</p> <p>A rail safety officer will also be present at all times during construction in</p>	Construction contractor	Pre-construction

No.	Impact	Environmental safeguards	Responsibility	Timing
	construction	the rail corridor.		
Flora and fauna				
B-1	Impact on and fauna	<p>Flora and fauna mitigation measures will be included within the Construction Environmental Management Plan (CEMP). The CEMP will include a clearing procedure which will include:</p> <ul style="list-style-type: none"> • The process for pre-clearing surveys which involves identification of fauna habitat (e.g. hollow-bearing trees). If fauna habitat is present then staged habitat removal is conducted (i.e. habitat trees are left for at least 24 hours after clearing all other vegetation and cleared in the presence of a qualified ecologist). • A procedure for dealing with unexpected threatened species finds on site • Identifying, defining and managing exclusion zones for construction sites, including temporary fencing requirements, to avoid damage to vegetation. Maps of exclusion zones will be provided including the required fencing type for the zones. • A process for fauna handling including a requirement to contact a local vet and wildlife handler before vegetation clearance to ensure they will be willing to treat any fauna injuries that may occur during clearing and other construction activities. It is also recommended that a qualified ecologist is on site for any habitat clearing. • Provision for the education of all construction personnel with regards to the importance of clearing limits, exclusion zones and remnants/individual trees of value. 	Construction contractor	Pre-construction and during construction
B-2	Potential vegetation disturbance includes tree removal, lopping and	<p>Vegetation removal to be in accordance with the following:</p> <ul style="list-style-type: none"> • Vegetation disturbance will be minimised to the greatest degree practical. • Pre-clearing surveys will be undertaken prior to any clearing taking place. • Overstorey vegetation (trees) will not be removed except if necessary • Habitat trees will be felled as carefully as possible to avoid injury to 	Construction contractor	Construction

No.	Impact	Environmental safeguards	Responsibility	Timing
	trimming.	<p>any fauna potentially remaining in the trees. Habitat trees will be inspected by an ecologist once felled.</p> <ul style="list-style-type: none"> • If a tree(s) requires removal, replacement tree(s) will need to be re-established in a suitable position away from the rail line and electrical easements. • If pruning is required appropriate tools will be used (chainsaws and not heavy machinery) and three-cut methods should be employed to minimise injury to bark. • Disturbance of understorey vegetation will be avoided and vehicle access will be kept to existing tracks and cleared areas. 		
B-3	Impacts to retained vegetation	<p>Existing trees, plants, and other vegetation that are to remain within or adjacent to the proposal are to be preserved using every precaution necessary to prevent damage or injury.</p> <p>Areas of retained vegetation are to be identified and protected as exclusion zones and the appropriate exclusion fencing type is to be installed. Exclusion zones should be clearly identified on a map.</p>	Construction Contractor	Construction
B-4	Controlling the spread of noxious weeds	<p>Weed management strategies will be developed as part of the CEMP.</p> <p>Noxious weeds will be disposed of to a licensed waste facility.</p>	Construction contractor	Construction
Water quality and hydrology				
WQ-3	Pollution as a result of sediment entering waterways during construction	<p>A Soil and Water Management Plan (SWMP) will be developed in accordance with the <i>Managing Urban Stormwater – Soils and Construction, Volumes 1 and 2D</i> (Landcom, 2004 and DECCW, 2008).</p> <p>The SWMP will include, but not be limited to procedures for controlling the following standard activities:</p> <ul style="list-style-type: none"> • Mud and litter transfer. • Maintenance and cleaning of sediment controls • Soil and stockpile management • Chemical water quality controls 	Construction contractor	Pre-construction

No.	Impact	Environmental safeguards	Responsibility	Timing
		<ul style="list-style-type: none"> Maintenance regimes for all controls Water quality monitoring method and checklists. <p>The SWMP will include a preliminary erosion and sediment control plan (ESCP) which will identify the erosion and sediment control measures that will be implemented on site.</p> <ul style="list-style-type: none"> Progressive ESCPs will be developed throughout construction to reflect the changes in activities and risk throughout the construction process. The plan will include diagrams of erosion and sediment control techniques and details of when and where these measures will be applied. 		
WQ-4	Pollution as a result of sediment entering waterways during construction	<p>During the detailed design stage an Erosion and Sediment Management Report will be developed which will inform the SWMP.</p> <p>The construction contractor will undertake regular inspections throughout the construction phase of the proposal to ensure the mitigation measures included in the SWMP are implemented.</p>	Construction contractor	<p>Detailed design</p> <p>Construction</p>
WQ-5	Accidental spill / contamination of the surrounding environment during construction	<p>A site specific emergency spill plan will be developed by the construction contractor, and will include site specific spill management measures in accordance with ARTC procedures.</p> <p>Should a spill occur during construction, the emergency spill plan will be implemented and the incident will be managed in accordance with ARTC procedures and ARTC's EPL requirements.</p> <p>Emergency spill kits will be kept at areas identified as having the highest spill risk at all times during construction.</p>	Construction contractor	Construction
Topography, geology, soils and contamination				
TG-4	Land contamination during construction	<p>To avoid or limit the impact of contamination during construction:</p> <ul style="list-style-type: none"> Standard contingency measures will be carried out in accordance with the <i>OEH Waste Classification Guidelines</i> (December 2009) and will be incorporated into the CEMP. 	Construction contractor	Construction

No.	Impact	Environmental safeguards	Responsibility	Timing
		<ul style="list-style-type: none"> Any material remaining on site to be tested to ensure it meets the NEPM guidelines for industrial reuse. Any contaminated waste that cannot be retained in the rail corridor will be classified according to the <i>Waste Classification Guidelines</i>. Wastes will be disposed to a licensed disposal facility or re-used in construction, as appropriate in accordance with <i>Waste Classification Guidelines</i>. 		
Aboriginal heritage				
AH-1	Unexpected heritage find during construction	If unexpected heritage item/s, archaeological remains or potential relics are uncovered during the rail component of the work, all work will stop in the vicinity of the material/find and the ARTC Environmental Representative is to be contacted immediately. The ARTC Project Manager will inform OEH in accordance with Section 89A of the NP&W Act. Works would not recommence until the significance of the heritage item is determined and approval pathways are confirmed.	ARTC and the construction Contractor	Pre-construction and construction
Non-Aboriginal heritage				
NH-1	Unexpected heritage find during construction	<p>An unexpected find procedure would be prepared and implemented for the proposal, including:</p> <ul style="list-style-type: none"> Stop work and notification procedures Communication protocol for the construction crew, ARTC, Heritage Division of OEH and other parties, where required Procedure for additional assessment, consultation, recording and management Application of mitigation measures Resumption of work. 	ARTC and Construction Contractor	Pre-construction and construction
Waste and resource management				
WR-4	Generation of construction waste	The construction contractor will prepare a waste management plan and a waste management register in accordance with the ARTC's environmental management plan and EPL requirements. The plan will include the process for managing excess material.	Construction contractor	Pre-construction

No.	Impact	Environmental safeguards	Responsibility	Timing
WR-5	Generation of construction waste	A pre and post construction land condition assessment for site facilities must be undertaken to ensure no unauthorised wastes attributed to the activity are left behind.	Construction contractor	Pre and post construction
WR-6	Management of construction waste	During construction of the proposal, the treatment, storage, processing, reprocessing, transport and disposal of waste will be carried out in with <i>OEH Waste Classification Guidelines</i> (December 2009) Any material remaining on site to be tested to ensure it meets NEPM guidelines for industrial reuse.	Construction contractor	Construction

Table 5-3 Summary of road specific environmental safeguards for the road components of the proposal

No.	Impact	Environmental safeguards	Responsibility	Timing
General				
G-3	General	The environmental contract specification must be forwarded to the Roads and Maritime Services Regional Environmental Manager for review at least 10 working days prior to the tender stage. A contractual hold point must be maintained until the CEMP is reviewed by the Roads and Maritime Services Regional Environmental Manager or their nominee.	Project manager and regional environment staff	Pre-construction
G-4	General	The Roads and Maritime Services Project Manager must notify the Roads and Maritime Services Regional Environmental Manager at least five working days prior to work commencing.	Project manager	Pre-construction
Noise and vibration				
NV-21	Noise impacts to sensitive receivers	When construction activities are undertaken during the scheduled rail possessions a 24 hour contact would be provided as part of community consultation to potentially noise affected parties. This consultation would be provided at least five working days prior to construction activities commencing. Any general complaints or queries regarding construction of the road components of the proposal would be directed towards Roads and Maritime Services 24 hour complaints line. This information would be advertised within the published proposal information (refer further to mitigation measure SE-3).	Roads and Maritime	Pre-construction
NV-22	Construction noise	A Noise and Vibration Management Plan (NVMP) would be prepared as part of the CEMP in accordance with: <ul style="list-style-type: none"> • Section 6 Work practices of the ICNG • Section 6 Standard mitigation measures and monitoring requirements of the CNS • Section 9 Managing construction noise and vibration impacts and Practice note vii Roadworks outside of normal working hours of the 	Construction contractor	Pre-construction and construction

No.	Impact	Environmental safeguards	Responsibility	Timing
		Environmental Noise Management Manual (ENMM).		
Traffic and transport				
TT-7	Impacts to traffic flow and property access during construction	<p>A detailed traffic management plan (TMP) will be prepared during the detailed design phase. The TMP will be prepared in accordance with the Roads and Maritime <i>Guide to Traffic Control at Work Sites and Roads and Maritime QA Specification G10 Traffic Management</i> and will include guidelines, general requirements and procedures to be used when activities or areas of work have a potential impact on existing traffic arrangements. The TMP may be submitted in stages to reflect the progress of work and will:</p> <ul style="list-style-type: none"> • Consider other developments that may also be under construction, to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic • Make provision for consultation with relevant local government authorities, emergency services, the community and transport service providers, as appropriate. Consultation would be in accordance with the consultation strategy for the proposal. • Provide details on the strategy for informing oversized vehicles of the temporary reduction in vertical clearance of the New England Highway underneath the Singleton Railway Underpass and the need to take the alternate route, refer to Figure 1-2 of the REF. • Provide measures for preventing oversized vehicles from colliding with the rail bridge during construction of the proposal when there will be temporary reduction in vertical clearance of the New England Highway underneath the Singleton Railway Underpass. • Provide measures for managing pedestrians and cyclists during all stages of construction of the proposal. 	Construction contractor	Pre-construction
TT-8	Impacts to traffic flow and property access during	Traffic control plans (TCPs) will be prepared for the appropriate stage of work in accordance with the Roads and Maritime <i>Traffic Control at Worksites Manual</i> and Roads and Maritime <i>QA Specification G10 Traffic Management</i> .	Construction contractor	Pre-construction, construction

No.	Impact	Environmental safeguards	Responsibility	Timing
	construction			
TT-9	Impacts to traffic flow and property access during construction	A vehicle movement plan (VMP) and appropriate haulage routes will be developed in accordance with Roads and Maritime <i>QA Specification G10 Traffic Management</i> , to ensure that traffic associated with the works manoeuvre safely into and out of traffic streams and work areas.	Construction contractor	Pre-construction
Flora and fauna				
B-5	Impact on flora and fauna	<p>Flora and fauna mitigation measures will be included within the Construction Environmental Management Plan (CEMP) in accordance with the Roads and Maritime <i>Biodiversity Guidelines: Protecting and managing biodiversity on RTA projects</i> (RTA 2011) (Biodiversity Guidelines) and Section 4.8 of <i>QA Specification G36 Environment Protection</i>. The CEMP will include a clearing procedure which will include:</p> <ul style="list-style-type: none"> • The process for pre-clearing surveys in accordance with Guide 1 of the Biodiversity Guidelines • A procedure for dealing with unexpected threatened species finds on site • Identifying, defining and managing exclusion zones for construction sites, including temporary fencing requirements, to avoid damage to vegetation. Maps of exclusion zones will be provided and developed in accordance with Guide 2 of the Biodiversity Guidelines • A process for fauna handling in accordance with Guide 9 of the Biodiversity Guidelines including a requirement to contact a local vet and wildlife handler before vegetation clearance to ensure they will be willing to treat any fauna injuries that may occur during clearing and other construction activities • Provision for the education of all construction personnel with regards to the importance of clearing limits, exclusion zones and remnants/individual trees of value. 	Construction contractor	Pre-construction and during construction

No.	Impact	Environmental safeguards	Responsibility	Timing
B-6	Potential vegetation disturbance includes tree removal, lopping and trimming.	Vegetation removal to be in accordance with <i>Roads and Maritime Services Specification G40 Clearing and Grubbing</i> and the following: <ul style="list-style-type: none"> • Vegetation disturbance will be minimised to the greatest degree practical. • Overstorey vegetation (trees) will not be removed except if necessary in accordance with Guide 4 of the Roads and Maritime Biodiversity Guidelines • If a tree(s) requires removal, replacement tree(s) will need to be re-established in a suitable position away from the rail line and electrical easements (Guide 3 of the Roads and Maritime Biodiversity Guidelines). • Disturbance of understorey vegetation will be avoided and vehicle access will be kept to existing tracks and cleared areas. 	Construction contractor	Construction
B-7	Impacts to retained vegetation	Existing trees, plants, and other vegetation that are to remain within or adjacent to the proposal will be preserved using every precaution necessary to prevent damage or injury. Areas of retained vegetation are to be identified and protected as exclusion zones in accordance with the Biodiversity Guidelines.	Construction Contractor	Construction
B-8	Controlling the spread of noxious weeds	Weed management strategies will be developed as part of the CEMP in accordance with <i>Roads and Maritime Biodiversity Guidelines (Guide 6: Weed Management)</i> . Noxious weeds will be disposed of to a licensed waste facility.	Construction contractor	Construction
Water quality and hydrology				
WQ-6	Pollution as a result of sediment entering waterways during construction	A Soil and Water Management Plan (SWMP) will be developed in accordance with the <i>Managing Urban Stormwater – Soils and Construction, Volumes 1 and 2D</i> (Landcom, 2004 and DECCW, 2008) and <i>RTA Road Design Guideline: Section 8 Erosion and Sedimentation</i> (RTA 2003) and <i>QA Specification G38 Soil and Water Management (SWMP)</i> (Roads and Maritime, 2011c). The SWMP will include, but not be limited to procedures for controlling the	Construction contractor	Pre-construction

No.	Impact	Environmental safeguards	Responsibility	Timing
		<p>following standard activities:</p> <ul style="list-style-type: none"> • Mud and litter transfer • Maintenance and cleaning of sediment controls • Soil and stockpile management (in accordance with <i>Roads and Maritime Stockpile Site Management Guideline</i> (RTA 2011f)) • Chemical water quality controls • Maintenance regimes for all controls • Water quality monitoring method and checklists. <p>The SWMP will include a preliminary erosion and sediment control plan (ESCP) which will identify the erosion and sediment control measures that will be implemented on site.</p> <ul style="list-style-type: none"> • Progressive ESCPs will be developed throughout construction to reflect the changes in activities and risk throughout the construction process. The plan will include diagrams of erosion and sediment control techniques and details of when and where these measures will be applied. 		
WQ-7	Pollution as a result of sediment entering waterways during construction	<p>During the Detailed Design stage an Erosion and Sediment Management Report will be developed which will inform the SWMP.</p> <p>The construction contractor will undertake regular inspections throughout the construction phase of the proposal to ensure the mitigation measures included in the SWMP are implemented.</p>	<p>Roads and Maritime</p> <p>Construction contractor</p>	<p>Detailed design</p> <p>Construction</p>
WQ-8	Pollution of downstream waterways due to maintenance practices during	<p>Roads and Maritime's standard maintenance controls will be applied in a manner that will minimise any potential water pollution due to maintenance practices (such as herbicide use, mowing, and road surface cleaning).</p>	<p>Roads and Maritime</p>	<p>Detailed design and operation</p>

No.	Impact	Environmental safeguards	Responsibility	Timing
	operation			
WQ-9	Accidental spill / contamination of the surrounding environment during construction	<p>A site specific emergency spill plan will be developed, and include spill management measures in accordance with the <i>Roads and Maritime Code of Practice for Water Management and Bunding and Liquid Chemical Storage, Handling and Spill Management</i> (DEC 2005b).</p> <p>Should a spill occur during construction, the emergency spill plan will be implemented and the incident will be managed in accordance with the Roads and Maritime “<i>Environmental Incident and Classification and Reporting procedure</i>”</p> <ul style="list-style-type: none"> Emergency spill kits will be kept at areas identified as having the highest spill risk at all times during construction. 	Construction contractor	Construction
Topography, geology, soils and contamination				
TG-5	Land contamination during construction	<p>To avoid or limit the impact of contamination during construction:</p> <ul style="list-style-type: none"> Standard contingency measures (including for unknown contaminants identified as part a Phase 2 contamination assessment) will be carried out in accordance with the <i>QA G36 Environment protection</i> and will be incorporated into the CEMP. All potentially contaminated wastes generated during construction will be classified according to the <i>OEH Waste Classification Guidelines (Parts 1 and 2 December 2009)</i>. Wastes will be disposed to a licensed disposal facility or re-used in construction, as appropriate. All road base/bitumen excavated during roadwork will be re-used in construction, as appropriate or disposed of in accordance with the <i>Waste Classification Guidelines: Parts 1 and 2 (OEH, 2009)</i>. 	Construction contractor	Construction
Aboriginal heritage				
AH-2	Finding unexpected artefacts	<p>In the event of an unexpected find of an Aboriginal heritage item (or suspected item) during the road component of the work:</p> <ul style="list-style-type: none"> Work will cease in the affected area and Roads and Maritime’s Environmental Officer and Roads and Maritime’ Senior Environmental 	Roads and Maritime Services and the construction contractor	Pre-construction, construction

No.	Impact	Environmental safeguards	Responsibility	Timing
		<p>Specialist for Aboriginal Heritage will be contacted on advice on how to proceed.</p> <ul style="list-style-type: none"> The Roads and Maritime Services <i>Unexpected Archaeological Finds Procedure</i> will be followed. 		
Non-Aboriginal heritage				
NH-2	Unexpected heritage find during construction	If unexpected heritage item/s, archaeological remains or potential relics are uncovered during the road component of the work, all work will stop in the vicinity of the material/find and the Roads and Maritime Standard <i>Management Procedure – Unexpected Archaeological Finds 2012</i> will be followed.	Roads and Maritime, Construction Contractor	Pre-construction and construction
Waste and resource management				
WR-7	Generation of construction waste	The construction contractor will prepare a waste management plan and a waste management register in accordance with the requirements of Roads and Maritime's <i>QA Specification G36 – Environmental Protection (Management System)</i> . The plan will include the process for managing excess material.	Construction contractor	Pre-construction
WR-8	Generation of construction waste	A pre and post construction land condition assessment for site facilities must be undertaken in accordance with <i>QA Specification G36 Environment Protection</i> to ensure no unauthorised wastes attributed to the activity are left behind.	Construction contractor	Pre and post construction
WR-9	Generation of construction waste	Minimise disturbance of asphalt containing coal tar during detailed design and construction. Any coal tar requiring removal will be handled following appropriate guidelines and disposed of offsite at an appropriate facility.	Construction contractor	Construction
WR-10	Generation of construction waste	All waste generated will be disposed of by an appropriately licensed waste disposal contractor at an approved facility. The nearest landfill facility is the Singleton Waste Depot located about 3.8 kilometres west of the proposal.	Construction contractor	Construction
WR-11	Waste generation	Green waste from maintenance activities will be disposed of appropriately or re-used where practicable	Roads and Maritime	Operation

No.	Impact	Environmental safeguards	Responsibility	Timing
	during operation	Wastes such as oils and greases will be disposed of to an appropriate licensed facility.		

Table 5-4: Summary of licensing and approval required

Requirement	Timing
In accordance with Section 138 of the <i>Roads Act 1993</i> , a road occupancy licence will need to be obtained from Roads and Maritime for construction work within the road corridor.	Before construction within the road reserve.
The proposal will also have to operate under the conditions of the POEO Act which is the primary piece of legislation regulating pollution control and waste disposal in NSW and is administered by the EPA. Under Section 48 of the POEO Act, scheduled activities (as defined in Schedule 1 of the Act) require an EPL. An EPL (Licence Number 3142) is held by ARTC. The EPL authorises the carrying out of the scheduled activities - i.e. railway systems – on licensed “premises”, which includes the land and infrastructure comprising the Main Northern Railway Line. No changes to the EPL is required as part of this proposal, however it will have to abide by the conditions contained within it.	Before construction within the rail reserve.

6 References

Department of the Environment and Climate Change (DECC) (2007) *Storing and Handling Liquids: Environmental Protection Participants Manual*

Department of the Environment and Climate Change (DECC) (2009) *Interim Construction Noise Guideline (ICNG)*.

Department of the Environment and Conservation (DEC) (2005) *Code of Practice for Water Management and Bunding and Liquid Chemical Storage, Handling and Spill*.

Landcom (2004) *The Blue Book - Managing Urban Stormwater: Soils and Construction*.

Office of Environment and Heritage (2009) *Waste Classification Guidelines*.

Roads and Maritime Services (2011) *QA specification R44-Earthworks - IC-QA-R44*.

Roads and Maritime Services (2012) *Unexpected Archaeological Finds Procedure*.

Roads and Traffic Authority (2001) *Environmental Noise Management Manual (ENMM) Practice Note vii – Roadworks outside normal working hours*.

Roads and Traffic Authority (2011) *Biodiversity Guidelines: Protecting and managing biodiversity on RTA projects*.

Roads and Traffic Authority (2010) *QA specification G10 Traffic*.

Roads and Traffic Authority (2010) *QA Specification G36: Environmental Protection (Management System)*.

Roads and Traffic Authority (2010) *QA Specification G38: Soil and Water Management*.

Roads and Traffic Authority (2010) *QA Specification G40: Clearing and Grubbing*.

Roads and Traffic Authority (2011) *Stockpile Site Management Procedure*.

Appendix A: Advertisement



Transport
**Roads & Maritime
Services**

New England Highway and rail bridge upgrade at Gowrie Gates

Roads and Maritime Services together with the Australian Rail Track Corporation (ARTC) are planning an upgrade of the Singleton railway underpass to improve road and rail freight access through the Hunter Valley.

A review of environmental factors has been carried out to identify potential impacts of the proposal and improvement measures to be implemented.

The review of environmental factors and a community update are available to view at rms.nsw.gov.au or on display at the Newcastle Roads and Maritime Regional Office, Singleton Motor Registry and Singleton Council.

Feedback on the review of environmental factors is invited by Tuesday 7 July 2015. Your feedback will be considered before finalising project planning.

Z04176

**For more information contact
Joel Rosendahl on (02) 4924 0293,
Joel.Rosendahl@rms.nsw.gov.au
or visit rms.nsw.gov.au**

Appendix B: Community update



New England Highway and rail bridge upgrade at Gowrie Gates

Roads and Maritime Services together with the Australian Rail Track Corporation (ARTC) are planning an upgrade of the Singleton railway underpass. The widened underpass would improve road and rail freight access through the Hunter Valley. This community update includes information on the preferred solution and the review of environmental factors.

A review of environmental factors has been carried out to identify potential impacts of the proposal and mitigation measures to be implemented.

Stakeholders and the community are invited to comment on the review of environmental factors by **7 July 2015**. Roads and Maritime will consider feedback before finalising project planning.

Background

The New England Highway through Singleton is part of the National Land Transport Network and is the main arterial connection between Newcastle and the Upper Hunter. The Main Northern Railway bridge over the highway

north of Singleton at Gowrie Gates restricts access for wide load heavy vehicles.

Roads and Maritime, together with ARTC, are planning to replace the rail bridge to provide increased horizontal clearance to accommodate two travel lanes with wide sealed shoulders and facilities for pedestrians and cyclists.

The proposed upgrade would provide for continued light and heavy vehicle access to Singleton. Freight access would still be required if a future bypass of the town is built.

The NSW Government allocated \$500,000 in 2014–15 to progress planning for the upgrade, which would benefit the local and wider community.

The proposal

Key features of the proposed upgrade include:

- New rail bridge over the New England Highway providing a minimum 5.3 metre vertical clearance
- Rebuilding and widening about 260 metres of the New England Highway to provide two 3.5 metre lanes
- Providing three metre shoulders along the New England Highway through this section to bring the road up to current road safety standards
- Relaying up to 200 metres of rail track.

Benefits

Key benefits of the proposed upgrade include:

- Improve access and travel times for over-dimension freight movements on the New England Highway
- Minimise disruptions to freight movements on the highway and the movement of bulk coal on the Main Northern Line
- Improve road safety for road users.

Review of environmental factors

Roads and Maritime and ARTC have carried out a review of environmental factors to assess the potential environmental impacts of the proposal and identify activities to manage and mitigate these impacts.

The review of environmental factors was carried out in consultation with a range of key stakeholders and technical specialists.

The investigations found the proposal is unlikely to have a significant impact on the environment with the implementation of a range of environmental mitigation and management measures.

Key considerations for assessment

The following key areas of potential impact have been assessed by the environmental investigations. The review of environmental factors describes these potential impacts and measures to minimise them.

Noise and vibration

Noise and vibration from the proposed work have been assessed as low impact to nearby residents.

Safeguards and management measures would be implemented to address potential noise and vibration impacts as a result of the proposal's construction.

Most of the proposed work would be carried out in standard hours between 7am and 6pm on Monday to Friday and 8am to 1pm on Saturday. Some work would need to be performed outside of standard hours and include night work to minimise traffic and rail disruptions while ensuring the safety of workers. Most of the night work would be carried out during scheduled rail possessions of up to 96 hours in duration. Night work during these possessions is essential to build the new rail bridge.

There are no expected changes to noise and vibration during operation of the proposal.

Biodiversity

The proposal has been designed to avoid native vegetation clearing where possible and direct impacts to native biodiversity are not expected.

The proposal would require removal of some of the planted vegetation along the New England Highway to the south-west of the railway underpass to allow the temporary side road to be built.

A detailed biodiversity impact assessment has identified the presence of the vulnerable species Grey-headed Flying Fox and migratory species Rainbow Bee-eater. Some removal of native planted vegetation is required however the proposal has been assessed as unlikely to result in a significant impact.

Visual impacts

Visual impacts would occur during construction and operation. During construction, the visual impacts include the presence of construction equipment. During operation, the proposal would result in permanent changes to the New England Highway streetscape. The main changes would be those associated with the new bridge, new infrastructure (such as signage and rail signals) and the removal of vegetation. The proposal has been assessed to have a low to moderate visual impact.

Traffic and transport

There is potential for travel delays during construction which may affect commuter, bus and heavy vehicle traffic. Construction is anticipated to be implemented in separate stages to minimise impacts to traffic and residents.

Proposed construction

The proposal would be carried out in stages. During construction the bridge would have a temporary reduced vertical clearance of no less than 4.9 metres. One lane of traffic in each direction would be maintained during peak periods. A reduced speed limit would be implemented for traffic through the construction zone. Traffic may operate under alternating conditions during night work. Track work would only be carried out during scheduled rail possessions to minimise disruption to the Main Northern Railway.

Temporary road

The proposal would require construction of a temporary road about 270 metres long to the

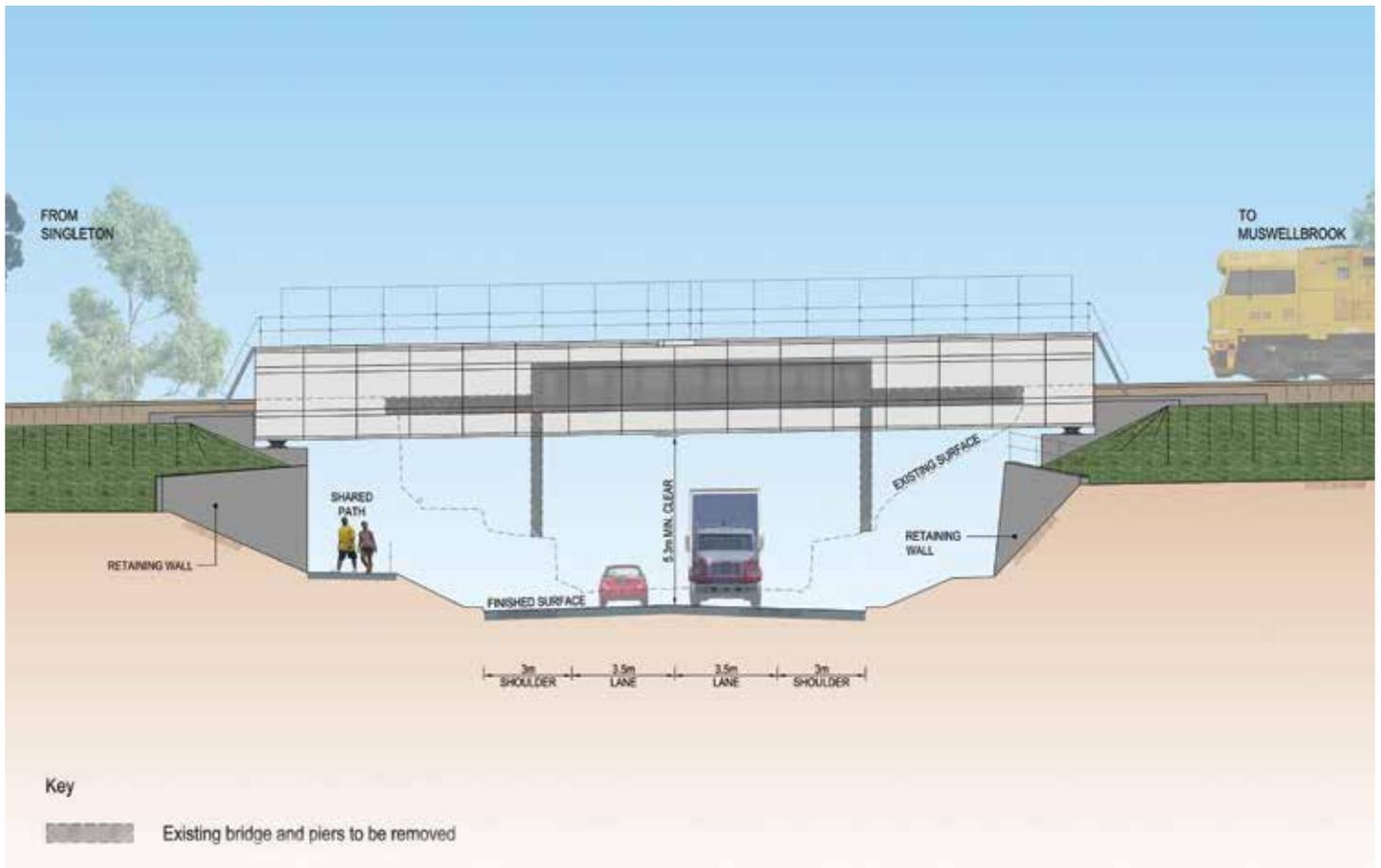
south of the highway. The temporary road would avoid a 34 kilometre detour. It would cross the existing rail track around 20 metres south of the existing rail bridge via a temporary bridge structure which would be constructed during rail possessions. The temporary road would only be used during the rail possessions.

Involving the community and stakeholders

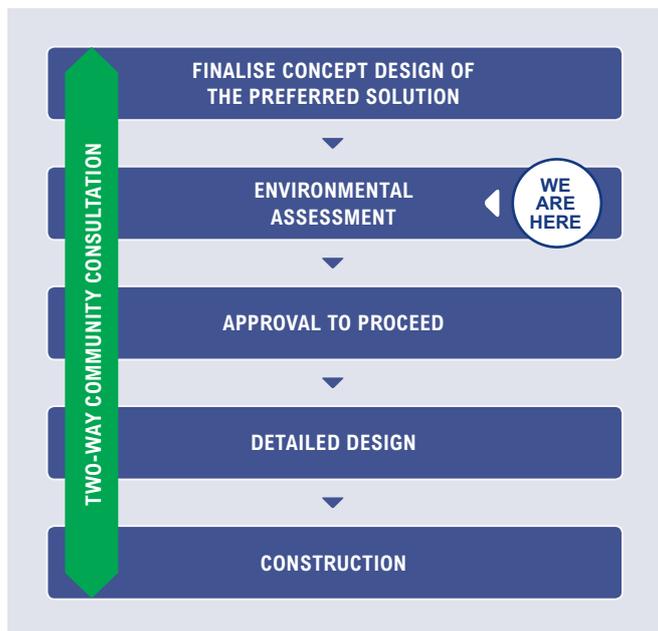
Roads and Maritime, together with ARTC, is working with the community and stakeholders during the planning process to identify issues and minimise potential impacts of the proposed upgrade and construction activities.

Stakeholders and the community are invited to comment on the review of environmental factors by **7 July 2015**.

Roads and Maritime and ARTC will consider the feedback received when finalising project planning.



Next steps



Please send us your feedback by:

Phoning: Joel Rosendahl, Project Development Manager on (02) 4924 0293 (during business hours)

Emailing: Joel.Rosendahl@rms.nsw.gov.au

Writing to: Joel Rosendahl,
Project Development Manager
Roads and Maritime Services
Locked Bag 2030,
NEWCASTLE NSW 2300

Visit a display

Stakeholders and the community are invited to view the draft review of environmental factors and collect a community update until 7 July 2015 at the following locations, Monday to Friday from 9am to 4pm:

- Roads and Maritime Services Regional Office
59 Darby Street, Newcastle
- Singleton Motor Registry
158 John Street, Singleton
- Singleton Council
Corner Queen Street and Civic Avenue, Singleton

Comments on the review of environmental factors are invited by **7 July 2015**.

Information is also available on the website at rms.nsw.gov.au

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Appendix C: Media releases

9 June, 2015

HAVE A SAY ON REVIEW OF ENVIRONMENTAL FACTORS FOR SINGLETON RAILWAY UNDERPASS

Michael Johnsen MP Member for Upper Hunter is pleased to announce that community members are invited to get involved in the next stage of planning for the widening of the Singleton railway underpass by commenting on the review of environmental factors (REF) for the project.

Mr. Johnsen said Roads and Maritime Services invites community feedback to the REF which details the planned upgrade and proposed mitigation measures designed to reduce environmental impacts.

“Roads and Maritime together with the Australian Rail Track Corporation (ARTC) are planning to upgrade the Singleton railway underpass locally referred to as the Gowrie Gates,” Mr Johnsen said.

“The New England Highway through Singleton is part of the National Land Transport Network and is the main link connecting Newcastle to the Upper Hunter.

“The Main Northern Railway overpass of the highway at Gowrie Gates currently restricts access for over width vehicles.

“The widened underpass would improve road and rail freight access through the Hunter Valley.”

Mr. Johnsen said the proposed upgrade aims to provide continued light and heavy vehicle access to Singleton. Heavy vehicle access would still be required when a bypass of the town is built in the future.

“The NSW Government has allocated \$500,000 this year to progress planning for the upgrade and the proposal and REF is now on display for community feedback,” Mr. Johnsen said.

“The proposal includes replacing the rail bridge to provide increased highway width and to minimise disruptions to trains on the Main Northern Railway Line.

“The widening work would allow two travel lanes with wide sealed shoulders and facilities for pedestrians and cyclists.

“To minimise impact on road users while the upgrade is completed, Roads and Maritime is proposing to build a temporary road about 20 metres south of the existing rail bridge to be used for short durations during scheduled rail track possessions.

“The temporary road would aim to ensure motorists avoid a lengthy detour during rail track possessions.

“Members of the community can view the REF and collect a community update from the Roads and Maritime Services regional office, Singleton Motor Registry and Singleton Council until 7 July this year,” Mr. Johnsen said

For more information please visit www.rms.nsw.gov.au
..ends...

3 JULY 2015

HAVE YOUR SAY ON PLANS FOR SINGLETON RAILWAY UNDERPASS

Michael Johnsen, Member for Upper Hunter is reminding community members to provide feedback on plans progressing for the widening of the Singleton railway underpass with feedback to the review of environmental factors (REF) due by Tuesday 7 July.

"I would invite and encourage the members of our Singleton community to give feedback to the REF which details the planned upgrade and proposed mitigation measures designed to reduce environmental impacts," Michael said.

"Roads and Maritime together with the Australian Rail Track Corporation (ARTC) plan to upgrade the Singleton railway underpass, locally referred to as the Gowrie Gates.

"The New England Highway through Singleton forms part of the National Land Transport Network connecting Newcastle with the Upper Hunter.

"The Main Northern Railway Bridge over the highway restricts access for wide load heavy vehicles so a widened underpass on the New England Highway is in planning to improve road and rail freight access through the Hunter Valley."

Michael said the proposed upgrade would provide continued light and heavy vehicle access through Singleton as a bypass of the town is built in the future.

"The NSW Government has allocated \$500,000 this year to progress planning for the upgrade and the proposal and REF is now on display for community feedback," Michael said.

"The proposal includes replacing the rail bridge to provide increased highway width and minimise disruptions to trains on the Main Northern Railway Line.

"Widening work would allow for two travel lanes with wide sealed shoulders to improve safety for pedestrians and cyclists.

"Roads and Maritime is also proposing to build a temporary road about 20 metres south of the existing rail bridge to be used for short durations during scheduled rail track possessions to reduce the impact to road users.

"The temporary road would aim to ensure motorists avoid a lengthy detour during rail track possessions.

"Residents can visit www.rms.nsw.gov.au for more information.

"Residents of our community are reminded to view the REF and collect a community update from the Roads and Maritime Services regional office, Singleton Motor Registry or Singleton Council until 7 July," Michael Johnsen said.

ENDS



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