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Executive summary

Background

Roads and Maritime Services (Roads and Maritime) has undertaken an extensive assessment of options for a second road over rail bridge in Gunnedah.

The Abbott Street Bridge on the Oxley Highway is a Higher Mass Limit (HML) deficient bridge, restricting the transport network through Gunnedah. The provision of a second road over rail bridge would remove a missing link in the HML network at Gunnedah, creating an unrestricted route for HML freight vehicles between the New England Highway and Newell Highway.

With major coal developments in the Gunnedah basin, the length and frequency of coal trains has been increasing, causing extended delays at the New Street level crossing. With delays expected to increase in the future, Roads and Maritime and the Gunnedah Shire Council are committed to identifying a grade separated crossing that would improve local and through traffic efficiency.

Developing and assessing concept options

A range of technical, environmental and social investigations were undertaken to develop and assess concept options for the second road over rail bridge. Community and key stakeholders were engaged throughout the process and formally invited to provide feedback on multiple occasions.

In August 2014, Roads and Maritime announced Option C (Refined) as the recommended option for a second road over rail bridge in Gunnedah and invited community feedback. The recommended option is detailed in the Recommended Option Report (Roads and Maritime, 2014).

Preferred option

Roads and Maritime has now considered community feedback on the recommended option and the findings of technical engineering, social and environmental investigations and confirmed Option C (Refined) is the preferred option.

Option C (Refined) extends from an upgraded roundabout at the Oxley Highway to a new bridge over the rail line west of the Gunnedah Maize Mill and then joins Warrabungle Street with a new roundabout at the intersection of Conadilly and Warrabungle Streets. Access to Barber Street would be provided via a new intersection from the preferred route. The existing New Street level crossing would be permanently closed as part of the project. Section 5 of this report further explains the preferred option and figure 5.1 shows a map of the new route.
Next steps

The next steps are to finalise the concept design for the preferred option, seek the relevant environmental approvals, and undertake detailed design and construction.
**Glossary of terms**

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Alignment</td>
<td>Design term referring to the spatial position of a proposed road both horizontally and vertically.</td>
</tr>
<tr>
<td>ARTC</td>
<td>Australian Rail Track Corporation</td>
</tr>
<tr>
<td>HML</td>
<td>Higher Mass Limits, a nationally agreed scheme that permits approved heavy vehicles to operate with additional mass on certain types of axle groups, on a restricted road network and subject to specified conditions.</td>
</tr>
<tr>
<td>Roads and Maritime</td>
<td>NSW Roads and Maritime Services</td>
</tr>
<tr>
<td>TfNSW</td>
<td>Transport for New South Wales</td>
</tr>
<tr>
<td>WHS</td>
<td>Work health and safety</td>
</tr>
</tbody>
</table>
1 Introduction

1.1 Project background

Roads and Maritime Services (Roads and Maritime) has been developing and assessing options for the Gunnedah second road over rail bridge project.

Gunnedah is situated in northern NSW, 80 kilometres west of Tamworth. The town is bisected by the Hunter Valley Rail Corridor, which separates the town centre and business district in the north from the growing residential areas in the south. The Dr P.H Stanley Bridge on Abbott Street (Oxley Highway), known locally and referred to in this report as the Abbott Street Bridge, is currently the only grade separated crossing of the railway line in Gunnedah.

The Abbott Street Bridge was constructed in 1941 and is not able to cater for HML freight vehicles, restricting the transport network through Gunnedah. Bloomfield Street and Boundary Road are currently used as the heavy vehicle route for vehicles travelling through Gunnedah. When coal trains pass through town local and through traffic is delayed at the New Street level crossing. Gunnedah Shire Council has sought to solve this problem for many years, including representations to the NSW Government.

The provision of a second road over rail bridge in Gunnedah would remove a missing link in the HML network at Gunnedah, creating an unrestricted link for HML freight vehicles between the New England Highway and Newell Highway.

With major coal development in the Gunnedah basin, the length and frequency of coal trains has been increasing, causing extended delays at the town’s level crossings. With delays expected to continue and increase in the future, Roads and Maritime and the Gunnedah Shire Council are committed to identifying a grade separated crossing that would improve local and through traffic efficiency.

1.2 Purpose of the report

The purpose of this Preferred Option Report is to:

- Summarise the development and assessment of concept options for the new route
- Summarise consultation undertaken with the community
- Explain the preferred option
- Outline the next steps for the project.

This report builds on the work documented in the Preliminary Concept Options Report (Roads and Maritime, 2013) and the Recommended Option Report (Roads and Maritime, 2014).
1.3 Assumptions and limitations

The designs presented in this report have been developed to a strategic concept level for the purposes of carrying out a comparative assessment. The preferred option would be refined during the concept design phase, based on further investigations.
2 Project strategic context, need and objectives

2.1 Strategic context

The overarching policies and strategic documents relevant to the second road over rail bridge are described in detail as part of the Preliminary Concept Options Report (Roads and Maritime, 2013). Key documents directly relevant to this project have been listed below:

- NSW 2021: A Plan to Make NSW Number One (NSW Government, 2011)
- NSW Long Term Transport Master Plan (TfNSW, September 2012)
- Bridges for the Bush Initiative (NSW Government, 2012)
- Gunnedah Community Strategic Plan 2012-2022 (Gunnedah Shire Council, 2011)

Bridges for the Bush program

The Bridges for the Bush program is a NSW Government commitment to improve road freight productivity by replacing or upgrading bridges over five years at 17 key locations in regional NSW (figure 2.1, also available at www.rms.gov.au).

The program will enhance freight productivity in country NSW and includes replacing or upgrading five key priority HML deficient bridges on State managed roads and 12 timber truss bridges on State, regional and local roads. It is an investment in critical infrastructure to remove a number of significant freight pinch points or bottlenecks on the State road network and to improve the safety and reliability of some old bridge structures. The replacement or upgrade of five HML deficient bridges alone would remove 8000 heavy vehicle trips from the freight task each year.

The provision of a second road over rail bridge in Gunnedah would remove a missing link in the HML network, creating an unrestricted route for HML freight vehicles between the New England Highway and Newell Highway.
Figure 2.1: Bridges for the Bush program

Gunnedah second road over rail bridge

Preferred Option Report
NSW Strategic Land Use Plan – New England North West

Strategic Land Use Plan – New England North West (NSW Government 2012) highlights that a major driver for the project in its current location is the predicted economic growth within the New England north west region. Gunnedah provides infrastructure, such as roads, that connect the region, particularly areas where the mining industry is growing. The township also has an important role to play in providing social and housing services.

The provision of the Gunnedah second road over rail bridge would support this Strategic Land Use Plan for the Gunnedah locality.

ARTC 2014-2022 Hunter Valley Corridor Capacity Strategy (July 2014)

ARTC 2013-2022 Hunter Valley Corridor Capacity Strategy (ARTC June 2013) is the latest edition of ARTC’s annual planned infrastructure enhancement strategies. ARTC has been releasing annual strategy updates that set out how it will ensure that rail corridor capacity in the Hunter Valley stays ahead of coal demand. This edition, predicts that export coal volumes would rise from 158 million tonnes per annum in 2014 to 204 million tonnes per annum in 2018.

The provision of the second Gunnedah road over rail bridge seeks to assist ARTC in addressing the impacts of increasing coal rail transport demand.

2.2 The need for a grade separated crossing

HML traffic

The Abbott Street Bridge is currently the only grade separated crossing of the railway line in Gunnedah, and does not cater for use by HML traffic.

Bloomfield Street and Boundary Road are currently used as a heavy vehicle bypass for heavy vehicles travelling on the Oxley Highway and Kamilaroi Highway through Gunnedah. The New Street level crossing also carries local traffic between Gunnedah’s central business district to the north of the railway and the residential areas south of the line.

All oversized heavy vehicles (excluding HML freight vehicles) currently using the local road network are individually permitted by Gunnedah Shire Council.

New Street level crossing

The increased length and frequency of freight trains due to major coal developments in the Gunnedah Basin, has led to frequent extended closures of the New Street level crossing for train passage, causing significant delays for motorists and pedestrians.

In March 2014, Roads and Maritime confirmed with Transport for NSW Freight Division and ARTC, that the project’s road over rail bridge would replace the existing level crossing at New Street. The level crossing would be closed to vehicular traffic, pedestrians and cyclists when the new bridge is open to traffic.
The key advantages of closing the level crossing are improved safety for motorists and pedestrians and improved transport efficiency. The disadvantage of closing the level crossing is a potential business impact on Barber Street businesses due to the removal of this direct access for motorists, pedestrians and cyclists. This impact has been addressed by the preferred option, please refer to Section 5 of this report.

Figure 2.2 summarises the existing road and rail network in Gunnedah.
Figure 2.2: Existing road and rail network in Gunnedah

Gunnedah second road over rail bridge

Preferred Option Report
2.3 Project purpose and objectives

Project purpose

The purpose of the concept stage of the project is to identify and select a preferred option for a second grade separated crossing of the existing railway line in the vicinity of the New Street level crossing in Gunnedah.

Project objectives

The primary objectives for the project have been established by Roads and Maritime and Gunnedah Shire Council in collaboration with key stakeholders. They are:

- Provide a grade separated HML route through Gunnedah
- Improve local traffic efficiency
- Improve road safety
- Improve road transport productivity, efficiency and reliability of travel
- Minimise the impact on the natural, cultural and built environment
- Provide value for money.

Supporting objectives

To assist in achieving these project objectives, the following supporting objectives have been developed:

- Provide a grade separated HML route through Gunnedah
  - Provide a compliant engineering design
  - Provide a grade separation with minimum complexity in construction, including site access and staging work
  - Provide a design which requires minimum ongoing operation/maintenance works and minimises the work health and safety (WHS) risk for maintenance personnel
  - Provide a HML route through Gunnedah by agreement with Gunnedah Shire Council.
- Improve local traffic efficiency/transport productivity and reliability
  - Increase network capacity
  - Improve traffic flow
  - Reduce traffic durations/delay.
• Improve road safety
  o Minimise vehicle conflict points
  o Provide suitable and safe pedestrian and cycle routes
  o Increase HML vehicle access by 660 kilometres
  o Remove New Street level crossing, improving road and rail safety for vehicles, pedestrians and cyclists.

• Minimise the impact on the natural, cultural and built environment
  o Minimise visual impact
  o Minimise ecological impact
  o Minimise impact on heritage
  o Minimise noise and air quality impact
  o Minimise impact on drainage/water quality/flooding
  o Minimise impact on property
  o Minimise impact on social environment.

• Provide value for money
  o Provide a design that is affordable and within the budget for the project
  o Provide a justifiable benefit/cost ratio for the life of the structure.
3 Concept options development

This section of the report describes the development and assessment of concept options for the new route that led to the identification of the preferred option.

3.1 Study area announcement

In December 2012, Roads and Maritime announced the study area for the project (figure 1.1). This area was identified because it best met the project objectives. In particular, the provision of a grade separated HML route through Gunnedah because of the area’s ability to connect the Oxley and Kamilaroi Highways for HML use and its potential to improve local road safety and traffic efficiency due to its proximity to the New Street level crossing.

Figure 3.1: Map of study area and surrounding streets in Gunnedah

Preliminary technical and environmental investigations were carried out to identify the likely constraints and opportunities within the study area. These included:
• The Gunnedah Maize Mill (also known as Meggitts Flour Mill) is located in the middle of the study area
• Blackjack Creek is an identified floodplain that becomes inundated during large storms and backwater flooding from the Namoi River
• Vegetation mapped as NSW listed endangered ecological community, White Box, Yellow Box, Blakely’s red gum woodland, as well as potential koala migration corridors are located within the study area
• Lack of pedestrian and cyclist connectivity between residential areas south of the railway line and the business district north of the railway line
• ARTC vertical and horizontal clearance requirements for single and double stacking
• Visual and spatial relationship between Pensioner’s Hill, the floodplain and built vertical elements are features that characterise the town.

3.2 Preliminary concept options

A total of 19 preliminary concept options were developed, using a wide range of alignments across the study area and a combination of inputs from the broader project team, community suggestions, Roads and Maritime and other key stakeholders.

These preliminary concept options were divided into three general road corridors based on their horizontal alignment:

• New Street – options using the same alignment as the existing level crossing
• Behind Mill – options to the west of the heritage listed Gunnedah Maize Mill
• Farrar Road – options via Farrar Rd instead of directly connecting to the Oxley Highway.

An initial review of the 19 options identified several that either did not meet the minimum design requirements or the objectives of the project. Figure 3.2 shows the initial 19 options. Please refer to the Preliminary Concept Options Report (Roads and Maritime, 2013) for further detail on the assessment of these 19 options.

Nine options were retained from the initial review for assessment at an internal technical workshop held in February 2013 (figure 3.3). The objective of the workshop was to confirm and agree on a shortlist of up to four options to take forward to the next stage of the project. This workshop was attended by representatives from the project team, Roads and Maritime, Transport for NSW and Gunnedah Shire Council. The assessment of these options considered the project objectives and the key constraints of the study area identified above. Please refer to the Preliminary Concept Options Report (Roads and Maritime, 2013) for further detail on the workshop assessment process.
Figure 3.2: Initial 19 preliminary options for the new route
Figure 3.3: Nine preliminary options assessed at internal technical workshop
3.3 Shortlisted options

Following the internal technical workshop, three options were shortlisted to be taken forward for further investigation and consultation. These options are described below and illustrated in figure 3.4.

**Option A:** A new bridge in place of the New Street level crossing. The bridge would span from just south of Barber Street to the Oxley Highway roundabout, which would be raised.

**Option B:** A new bridge west of the Mill to connect the Oxley Highway roundabout with Warrabungle Street, north of the Barber Street intersection. The route alignment would run close to the railway on its south side creating a highly skewed crossing of the rail line.

**Option C:** A new bridge west of the Mill to connect the Oxley Highway roundabout with Warrabungle Street. The bridge alignment would start on View Street and make a wide arc west of the Mill. A new roundabout would be constructed on the Oxley Highway and the existing roundabout removed.

Roads and Maritime displayed these options for community comment in 2013. During this time feedback was received from local residents, local businesses, Gunnedah Shire Council and NSW Member for Tamworth about the potentially negative impacts the closure of the New Street level crossing would have on Barber Street businesses.

Following consideration of community and stakeholder feedback on the three options, each option was further developed and assessed against project objectives. This included undertaking a business impact assessment to identify what impact the closure of the New Street level crossing would have on Barber Street businesses.

During this process it was determined that:

- Option A had significant constructability challenges and the requirement for very steep grades to maintain the required clearances over the railway line were identified
- Option B had design and constructability challenges associated with its alignment over the rail line and, located within heritage buffer zone for Gunnedah Maize Mill and did not provide a direct access to Barber Street
- Option C performed strongest against constructability and visual impact criteria however did not provide a direct access to Barber Street
- The closure of the New Street level crossing would have an impact on Barber Street businesses, with business from this area being redistributed within the Gunnedah central businesses district.

As a result, Option C (Refined) was developed to utilise the existing Oxley Highway roundabout to achieve the project objectives and reduce the project footprint. An intersection was also designed to provide direct access to Barber Street to mitigate the impact of the level crossing closure on Barber Street businesses. Refer to section 3.4 and the *Recommended Option Report* (Roads and Maritime, 2014) for more information on the identification of Option C (Refined).
Figure 3.4: Preliminary options displayed for community comment in May 2013
3.4 Recommended option

In August 2014, Option C (Refined) was announced as the recommended option. Option C (Refined) extends from an upgraded roundabout at the Oxley Highway to a new bridge over the rail line west of the Gunnedah Maize Mill, then joining Warrabungle Street with a new roundabout at the intersection of Conadilly Street.

Option C (Refined) also provides a direct access to Barber Street. As discussed in Section 3.3, the inclusion of the connection to Barber Street is the result of feedback from the community and key stakeholders during the 2013 consultation period. Land acquisition in Barber Street is required to provide sufficient space to build the Barber Street intersection.

To provide the community with the opportunity to comment on the Barber Street Intersection, Roads and Maritime displayed Option C (Refined) as a recommended option. Section 4 of this report summarises the feedback received on the recommended option.

The recommended option is detailed in the *Recommended Option Report* (Roads and Maritime, 2014) and is available on the Roads and Maritime website.

Figure 3.5 shows the recommended option displayed to the community in August 2014.
Figure 3.5: Recommended option displayed to the community in August 2014
4 Community involvement and feedback

This section describes the community involvement and consultation activities undertaken throughout the concept options development process and how the feedback gathered was considered to determine the preferred option.

4.1 Community involvement to date

Three separate community consultation periods have been undertaken for the Gunnedah second road over rail bridge project:

- In December 2012, the project was announced, the study area was displayed and the community was asked to provide early feedback. The consultation process undertaken and the feedback received was summarised in the Early Feedback Summary (Roads and Maritime, 2012).

- In May 2013, the Preliminary Concept Options Report (Roads and Maritime, May 2013) was published and the community was asked to comment on preliminary options — A, B and C. The consultation process undertaken and the feedback received was summarised in the Community Submissions Report (Roads and Maritime, 2013).

- In August 2014, the Recommended Option Report (Roads and Maritime, August 2014) was published and the community was asked to comment on the recommended option – Option C (Refined). The consultation process undertaken and the feedback received is summarised in section 4.3 and 4.4 below and detailed in the Community Submissions Report (Roads and Maritime, 2014).

At each stage of the project, Roads and Maritime, and the Minister for Roads and Freight considered community and stakeholder feedback along with technical engineering, social and environmental investigations before the project moved to the next stage.

4.2 Gunnedah Shire Council

Gunnedah Shire Council is an active stakeholder in the project and the public participation process. Council representatives have been integrated within the project team attending internal workshops and face-to-face meetings held to ensure key concerns and requirements were considered. Council representatives have also been present at community consultation events throughout the project.

In response to community feedback and representations, at its Council Meeting on 19 June 2013, the Gunnedah Shire Council supported the New Street level crossing remaining open or, vehicular access being provided to Barber Street as part of the project to ensure ongoing access into the Barber Street business precinct, per its resolution below:

“That Council indicate to Roads and Maritime and the NSW Member for Tamworth

1. That any second overpass in the vicinity of the heritage Mill site must either:
a) provide vehicular access / egress to and from Barber Street or
b) ensure that the New Street level crossing remains operational.”

4.3 Consultation on the recommended option

The recommended option — Option C (Refined) — was displayed for community comment over a four week period from Monday 18 August to Friday 12 September 2014.

Roads and Maritime advised the community about the recommended option and their opportunities to provide feedback by:

- Distributing a community update including the details of planned community drop-in sessions to every address in Gunnedah (carried out by Australia Post)
- Displaying the community update and Recommended Option Report (Roads and Maritime, 2014) at the Gunnedah Shire Council office, Gunnedah Shire Library and Gunnedah Motor Registry
- Advertising the community drop-in sessions in the Namoi Valley Independent and The Northern Daily Leader newspapers
- Updating the Roads and Maritime website with the details about the community drop-in sessions and a downloadable copy of the community update
- Emailing the project distribution list (comprising of people in the study area or those who have registered for project updates) with a link to the website
- Posting a personally addressed copy of the community update to all property owners in the study area and all who have previously expressed an interest in the project
- Disseminating a joint media release by the NSW Minister for Roads and Freight, the Honourable Duncan Gay and the NSW Member for Tamworth
- Meeting face-to-face with affected property owners.

A number of media articles in the Namoi Valley Independent reported the announcement of the recommended option. These articles also conveyed the details of the community drop-sessions and other mechanisms through which the community could provide feedback to the project team.

During the consultation period, the community could provide feedback to the project team by:

- Visiting the project display in the Roads and Maritime stall at AgQuip Field Days from 19 – 21 August 2014
- Attending the two community drop-in sessions at Gunnedah Town Hall held on:
  - Wednesday 27 August 2014 (4 – 7pm)
  - Thursday 28 August 2014 (9 am – 12pm)
• Submitting feedback forms or written submissions via email or post.

Figure 4.1 and 4.2 show photos of the project team discussing the recommended option with members of the community at the drop-in sessions at the Gunnedah Town Hall.

The community could also contact the project team at any time by:

• Phone: 1800 029 585 (toll free)
• Email: secondroadoverrailbridge@kbr.com
• Post: Gunnedah second road over rail bridge project
  Reply Paid 633
  Brisbane QLD 4001.
4.4 Community feedback on the recommended option

AgQuip Field Days

The project team attended the AgQuip Field Days in Gunnedah from 19 – 21 August 2014. The recommended option was displayed in the Roads and Maritime stall (figure 4.3 and figure 4.4).

Of the hundreds of visitors to the stall during the three days, the team spoke with 121 people specifically about the project and the recommended option. This included local Gunnedah residents, visitors, those who regularly travelled through Gunnedah and other stakeholders. The majority of comments received about the project and the recommended option were supportive.

The team’s attendance at AgQuip and the announcement of the recommended option was also covered by Namoi Valley Independent (local newspaper), Channel Seven (Prime) and NBN News. The Mayor of Gunnedah, Owen Hasler and the NSW Member for Tamworth, Kevin Anderson attended the stall for press interviews (figure 4.5 and figure 4.6).

Figure 4.3: Roads and Maritime stall at AgQuip

Figure 4.4: Roads and Maritime project team talking to AgQuip attendees about recommended option

Figure 4.5: Kevin Anderson, NSW Member for Tamworth, Mayor Owen Hasler and Gunnedah Shire Council General Manager Eric Groth

Figure 4.6: Mayor Owen Hasler being interviewed at AgQuip by the Prime News team
Community feedback

During the consultation period for the recommended option, 51 submissions were received comprising of 44 feedback forms, four emails, four letters and one petition. Where identical responses were received in duplicate from the same person, it was counted and analysed as one submission. Where an individual provided the information through multiple mechanisms (e.g. feedback form and separate letter), it was counted and analysed as one submission.

One of the 51 submissions received was from Gunnedah Shire Council expressing its support for the recommended option as resolved in the Council meeting on 27 August 2014. The resolution in the meeting was:

“That Council write to Roads and Maritime indicating our support of refined Option C proposal for the second road over rail bridge”.

The petition received was counted and analysed as one submission. The petition’s 64 signatories expressed their opposition to the acquisition of two residential properties in Barber Street as part of Option C (Refined). Seven of the individuals who signed the petition also submitted feedback to the project via email or feedback forms.

Key topics raised in submissions

The top five topics raised in the submissions are discussed below and the summarised comments and responses are provided. The top five topics were:

- Land acquisition
- Alternative route options
- Intersection design: Barber Street
- Business/service patronage
- Consultation process.

The Community Submission Report (Roads and Maritime, 2014) details Roads and Maritime’s response to each comment.

Land acquisition

Land acquisition in Barber Street is required to build an intersection that provides safe access between the new route and Barber Street. One of the project aims is to limit the impact on affected properties and the intersection has been designed with this aim in mind. However, to accommodate the intersection’s design and safety requirements (including B-Double heavy vehicle compliance) and the constraints of the site the following land acquisitions are necessary:

- Minimal acquisition of land from Marcroft Park Caravan Park
- minimal acquisition and possible offset arrangement with Gunnedah Maize Mill
- Acquisition of two residential properties in Barber Street.
In accordance with the *Land Acquisition Information Guide* (Roads and Maritime, 2014) all land acquisition undertaken by Roads and Maritime is governed by the *Land Acquisition (Just Terms Compensation) Act 1991* together with the *Roads Act 1993*. Roads and Maritime will continue to liaise directly with the affected land owners as the project progresses.

The topic of land acquisition was raised in 20 submissions (19 individual respondents and one petition with 64 signatories). Table 4.1 outlines the summarised comments received and Road and Maritime’s response to each.

**Table 4.1: Summarised feedback and project responses about land acquisition**

<table>
<thead>
<tr>
<th>Summary of feedback</th>
<th>Project responses</th>
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<tbody>
<tr>
<td>Opposed to Option C (Refined) because of potential acquisition of two affected</td>
<td>Land acquisition in Barber Street is required to build an intersection that provides safe access between the new route and Barber Street. This</td>
</tr>
<tr>
<td>properties in Barber Street.</td>
<td>intersection location is to ensure a safe grade is maintained for heavy vehicles to turn right into Barber Street.</td>
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<tr>
<td>Consider widening the entry of the new route to Barber Street in the direction of</td>
<td></td>
</tr>
<tr>
<td>Blackjack Creek to avoid properties needing to be acquired.</td>
<td></td>
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<tr>
<td>Suggestion that there is adequate space at the western end of Barber Street for an</td>
<td>Roads and Maritime has now announced the preferred option (as documented in this report). The next step is to finalise the concept design for the</td>
</tr>
<tr>
<td>intersection without needing to acquire houses.</td>
<td>preferred option, seek the relevant environmental approvals, and undertake detailed design and construction.</td>
</tr>
<tr>
<td>Affected property owners should be compensated for potential financial hardships</td>
<td>One of the objectives of the project is to provide value for money. Considerable effort and time was spent by the project team during the concept</td>
</tr>
<tr>
<td>incurred until a final decision is made about the project and the route location.</td>
<td>options stage to reduce costs and limit impacts on properties. As part of this, Option C (Refined) went through a value management process including</td>
</tr>
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<td></td>
<td>consideration of potential costs. During this process, it was identified that Option C (Refined) better met the project objectives than other</td>
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<tr>
<td></td>
<td>options including value for money as well as engineering, environmental and social assessment criteria. The project team have tried to avoid</td>
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<td></td>
<td>impacts on private property as much as possible while still meeting the project objectives.</td>
</tr>
<tr>
<td>Keep costs down don’t resume properties on Barber Street.</td>
<td>Land acquisition in Barber Street is required to build an intersection that provides safe access between the new route and Barber Street.</td>
</tr>
</tbody>
</table>
Summary of feedback | Project responses
---|---
Suggest that at the Warrabungle Street and Conadilly Street roundabout, four properties should be acquired (one on each corner) to ensure there is enough room to accommodate heavy vehicles. | The current strategic concept design for the proposed roundabout at Conadilly Street and Warrabungle Street has been designed to accommodate access for B-Doubles as a key component of facilitating a HML route through Gunnedah. These designs will be further refined as the project moves into the full concept design and detailed design stages.

Is reinstating the rail access into Gunnedah Maize Mill possible when New Street level crossing is closed? | This is a matter for ARTC and Gunnedah Maize Mill.

Alternative route options

Alternative options to Option C (Refined) were suggested for the new route in 16 submissions; all of these alternatives had been previously considered and not progressed by the project team for the reasons outlined in the *Preliminary Concept Options Report* (Roads and Maritime, 2013) and the *Recommended Option Report* (Roads and Maritime, 2014). Suggested alternatives included:

- Two submissions suggested changing the route to Farrar Road
- One submission suggested taking the new route parallel to Stockman Close rather than connecting in with Warrabungle Street
- Two submissions suggested changing the route so it could connect with Tempest Street
- Eleven submissions stated they preferred the original Option C that was presented to the community in May 2013.

Table 4.2 outlines the summarised comments received and Road and Maritime's response to each.
Table 4.2: Summarised feedback and project responses about alternative route options

<table>
<thead>
<tr>
<th>Summary of feedback</th>
<th>Project responses</th>
</tr>
</thead>
</table>
| Consider changing the route to Farrar Road so that highway traffic use this road to get between Oxley-Kamilaroi Highway and Warrabungle Street. | The option to have the new route start from Farrar Road, go over the railway and connect in to Warrabungle Street was considered by the project team in the concept options development. This option was not progressed by Roads and Maritime for the following reasons:  
  ➢ It is outside project study area  
  ➢ It does not satisfy the key objective to improve traffic efficiency within the study area  
  ➢ It is not suitable for reclassification as a State Road due to direct access from industrial/commercial premises and unacceptable traffic conflicts  
  ➢ Farrar Road is narrow and steep in its approach to the Oxley Highway which is problematic for B-Double operation.  
  A full review of this option and the reasons why it was not progressed is available in the Preliminary Concept Options Report (Roads and Maritime, 2013) accessible from the Roads and Maritime website. |
| Consider changing the route so that it connects Tempest Street and South Street (with a roundabout at South Street). This would provide access for people living in Wandobah Road. | This option was considered in the concept options assessment but not progressed due to the excessive grades required to cross over the railway line. A full review of this option and the reasons it was not progressed is available in the Preliminary Concept Options Report (Roads and Maritime, 2013) accessible from the Roads and Maritime website. |
| Consider changing the route so that its runs parallel to Stockman Close, rather than connecting with Warrabungle Street. | A similar option to this was considered by the project team as part of the initial concept options development. This option was not progressed as it would create significant access restrictions to residential properties on Stockman Close. A full review of this option and the reasons it was not progressed is available in the Preliminary Concept Options Report (Roads and Maritime, 2013) accessible from the Roads and Maritime website. |
Summary of feedback

Prefer the original Option C, as presented to the community in 2013.

Project responses

The original Option C did not have the intersection into Barber Street that Option C (Refined) provides and has a slightly different alignment. The need for the Barber Street intersection and the access it provided into Barber Street was identified during community consultation in May 2013. Local residents, local businesses, Gunnedah Shire Council and the NSW Member for Tamworth were concerned the New Street level crossing could potentially cause negative impacts on Barber Street businesses. Results of a business impact assessment revealed there would be an impact on Barber Street businesses, with business from the area being redistributed within the Gunnedah Central Business district. The assessment found that a direct connection for the new route to Barber Street would mitigate this impact. As such, Roads and Maritime put forward the option as recommended and invited community feedback before the project progressed.

Intersection design: Barber Street

The recommended option provides direct access into Barber Street via an intersection where the new route alignment meets Warrabungle Street. The intersection allows for northward and southward vehicle movements in and out of Barber Street. It has also been designed to safely accommodate B-Double heavy vehicles. The design and location of the intersection has been dictated by a number of design constraints including: road gradients, safe turning requirements, lines of vision, and property accesses.

The need for this intersection and the access it provides into Barber Street was identified during community consultation in May 2013. Local residents, local businesses, Gunnedah Shire Council and the NSW Member for Tamworth were concerned the closure of the New Street level crossing could potentially cause negative impacts to Barber Street businesses. Results of a business impact assessment revealed there would likely be an impact on Barber Street businesses, with business from this area being redistributed within the Gunnedah central business district. The assessment found a direct connection from the new route to Barber Street would mitigate this impact. Option C (Refined) provides this connection to Barber Street, but also has additional impacts on private property not previously identified during 2013 consultation period. As such, Roads and Maritime initially put forward Option C (Refined) as the recommended option and invited community feedback before the project progressed.

The topic of intersection design (Barber Street) was raised in 11 submissions. Table 4.3 outlines the summarised comments received and Road and Maritime’s response to each.
<table>
<thead>
<tr>
<th>Summary of feedback</th>
<th>Project responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider having a roundabout rather than a T-intersection from Warrabungle Street into Barber Street.</td>
<td>A new intersection is proposed where the new route meets Warrabungle Street to safely accommodate access into Barber Street. A larger area is required to build a compliant roundabout in this area and would have considerable impacts on Blackjack Creek. It was also not considered suitable because of grade constraints, further property impact, and traffic and safety implications.</td>
</tr>
<tr>
<td>Instead of Option C (Refined), consider a roundabout at the intersection of Rosemary Street and Conadilly Street to provide access to Barber Street.</td>
<td>During community consultation in May 2013, feedback from the local residents, local businesses, Gunnedah Shire Council and the NSW Member for Tamworth concern about the potential negative impact on Barber Street as a result of the closure of the New Street level crossing. Results of an economic impact assessment revealed there would likely be an impact on Barber Street, with business from this area being redistributed within the Gunnedah Central Business district. It was determined that providing a direct connection from the new route to Barber Street would mitigate this business impact.</td>
</tr>
<tr>
<td>Consider widening the entry of the new route to Barber Street in the direction of Blackjack Creek to avoid properties needing to be acquired.</td>
<td>The recommended option provides direct access into Barber Street via an intersection where the new route meets Warrabungle Street. The intersection allows for northward and southward vehicle movements in and out of Barber Street. It has also been designed to safely accommodate B-Double heavy vehicles. A number of road safety reviews have been completed by the project team as part of the concept options development.</td>
</tr>
<tr>
<td>Suggest instead of Barber Street intersection that Rosemary Street could be made the through road with Barber being fitted out with stop signs to keep the traffic flow.</td>
<td>Option C (Refined) recommends an intersection where the new route meets Warrabungle Street to safely accommodate access into Barber Street.</td>
</tr>
<tr>
<td>I have safety concerns with Option C (Refined) and the vehicle access into Barber Street, particularly for heavy vehicles.</td>
<td>Land acquisition in Barber Street is required to build an intersection that provides safe access between the new route and Barber Street.</td>
</tr>
<tr>
<td>It is important that access to Barber Street, as presented as part Option C (Refined), be easy for local traffic to use so that it is still used by passing traffic for businesses on Barber Street and traffic is not redistributed to Conadilly Street.</td>
<td></td>
</tr>
</tbody>
</table>
Summary of feedback | Project responses
--- | ---
The new intersection to access Barber Street looks like it will work and businesses will not lose trade. | Noted.
It is crucial for there to be access from the new route to Barber Street. | Noted.

Business/service patronage

The topic of business/service patronage was raised in nine submissions. Six of the submissions indicated access from the new route was important for businesses in Barber Street and three submissions indicated this was not the case. As discussed above, business impacts potentially caused by closing the New Street level crossing were a key feature of community feedback received during May 2013. Option C (Refined) was developed to accommodate access into Barber Street to mitigate this impact.

Table 4.4 outlines the summarised comments received and Road and Maritime’s response to each.

Table 4.4: Summarised feedback and project responses about business/service patronage

<table>
<thead>
<tr>
<th>Summary of feedback</th>
<th>Project responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissatisfied that providing access from the new route to Barber Street to limit impacts on the few businesses in this area has been made a priority as the businesses in question are established, don’t rely on passing trade and can be accessed from Rosemary Street, Chandos Street and Tempest Street.</td>
<td>During community consultation in May 2013, feedback from the local residents, local businesses, Gunnedah Shire Council and the NSW Member for Tamworth highlighted the concern about the potential negative impact on Barber Street as a result of the closure of the New Street level crossing. An economic impact assessment was undertaken and revealed there would be an impact on Barber Street, with business in this area being redistributed within the Gunnedah Central Business district. It was determined that providing a direct connection from the new route to Barber Street would mitigate this impact. Option C (Refined) provides this access to Barber Street, but also has additional impacts on private property not previously identified during 2013 consultation period. As such, Roads and Maritime put forward the option as recommended and invited community feedback before the project progressed.</td>
</tr>
<tr>
<td>Important for businesses to maintain local access to Barber Street from the new route.</td>
<td></td>
</tr>
<tr>
<td>Option C (Refined) is a great outcome for businesses. The access from the new bridge to Barber Street looks like it will work and businesses should not loose trade.</td>
<td></td>
</tr>
<tr>
<td>Businesses and property owners can start to develop this area now there is clear access to Barber Street</td>
<td></td>
</tr>
</tbody>
</table>
Consultation process

The topic of consultation process was raised in eight submissions; in particular opinions were expressed about the affected property owners in Barber Street not being appropriately consulted about the recommended option.

As discussed above, property acquisitions are required to build a safe intersection into Barber Street. The inclusion of this intersection is the result of feedback from the community and key stakeholders during the 2013 community feedback period. To provide the community with the opportunity to comment on its inclusion Roads and Maritime introduced an additional consultation step. Option C (Refined) was presented as a recommended option for community comment.

Table 4.5 outlines the summarised comments received and Road and Maritime’s response to each.

Table 4.5: Summarised feedback and project responses about the consultation process

<table>
<thead>
<tr>
<th>Summary of feedback</th>
<th>Project responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived lack of consultation with the community and provision of information to affected property owners, particularly those in Barber Street.</td>
<td>As part of consultation for the recommended option, the project team met face-to-face with affected property owners on Thursday 14 and Friday 15 August 2014 (the week before the formal announcement of the recommended option). At these meetings, the team advised affected property owners of the recommended route, its potential impacts on their properties and how to submit feedback. The project team encouraged affected property owners to make written submissions using the provided feedback forms or other means to convey their views on Option C (Refined). Affected property owners were also made aware that the project team would be at the AgQuip Field Days and the community drop-in sessions, as well as available for further face-to-face meetings if the property owners had further questions. The property owners were advised that the feedback received during the consultation period would be collated in a Community Submissions Report and provided to the Minister for Roads and Freight for consideration before a final decision on the route was made. Roads and Maritime will continue to consult directly with affected property owners as the project progresses.</td>
</tr>
</tbody>
</table>

Thank-you for sharing your time and expertise at the community drop in sessions. | The project team appreciates your feedback. |
Feedback received outside the community feedback period

Roads and Maritime received 12 submissions after the community feedback period (18 August – 12 September 2014) closed. These submissions have not been included in the feedback analysis sections of the the *Community Submissions Report* (Roads and Maritime, 2014). Table 4.6 summarises the feedback from the late submissions and provides responses from Roads and Maritime.

Table 4.6: Summary of feedback from late submissions

<table>
<thead>
<tr>
<th>Summary of feedback</th>
<th>Project responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support Option C (Refined) because it provides access to Barber Street which is essential for the businesses in the area</td>
<td>The preferred option provides direct access to Barber Street through an intersection where the new route connects with Warrabungle Street.</td>
</tr>
<tr>
<td>If there was no direct access to Barber Street from the new route there would be a significant impact on business viability in the area and cause job loss</td>
<td>During community consultation in May 2013, feedback from the local residents, local businesses, Gunnedah Shire Council and the NSW Member for Tamworth highlighted the concern about the potential negative impact on Barber Street as a result of the closure of the New Street level crossing. An economic impact assessment was undertaken and revealed there would be an impact on Barber Street, with business in this area being redistributed within the Gunnedah central business district. It was determined that providing a direct connect from the new route to Barber Street would mitigate this option.</td>
</tr>
<tr>
<td>Please keep the New Street level crossing open as well as an access to Barber Street from the new route.</td>
<td>The new route is a replacement for the existing New Street level crossing. Requests for the New Street level crossing to remain open were thoroughly investigated by the project team. However to meet the objectives of this project to improve safety and traffic efficiency, the level crossing will be permanently closed.</td>
</tr>
<tr>
<td>Would like property owners whose homes may be acquired to be properly compensated.</td>
<td>All land acquisition undertaken by Roads and Maritime is governed by the <em>Land Acquisition (Just Terms Compensation) Act</em> 1991 together with the Roads Act 1993. Roads and Maritime will continue to liaise directly with any affected landowners as the project progresses.</td>
</tr>
</tbody>
</table>
4.5 Continuing community involvement

Roads and Maritime would like to thank the community of Gunnedah for their involvement in the strategic concept options process and the identification of a preferred option.

Roads and Maritime will continue to keep the community and affected stakeholders informed as the project progresses. The next steps for the project are explained in Section 6.
5 Preferred option

Roads and Maritime has confirmed Option C (Refined) as the preferred option for a second road over rail bridge in Gunnedah. Option C (Refined) extends from an upgraded roundabout at the Oxley Highway to a new bridge over the rail line west of the Gunnedah Maize Mill then joining Warrabungle Street with a new roundabout at the intersection of Conadilly Street. Access to Barber Street would be maintained via a new intersection. Figure 5.1 shows a map of the preferred option.

The preferred option would replace the New Street level crossing which would be closed to vehicular traffic, pedestrians and cyclists when the new bridge is open to traffic.

The identification of the preferred option has taken into consideration the results of all the technical assessments undertaken throughout the concept options assessment stages as well as feedback from key stakeholders and the Gunnedah community.

5.1 Benefits of the preferred option

The preferred option meets the key project objectives as it would:

- Facilitate HML access through Gunnedah
- Significantly improve vehicle, pedestrian and cyclist traffic safety
- Provide uninterrupted access to the Barber Street business precinct minimising impacts on businesses
- Reduce local traffic disruption due to increasing train length and frequency.

The preferred option takes into consideration the environment, community and other constraints of the study area and it:

- Minimises environmental effects by reducing the project footprint in the vicinity of the Oxley Highway and avoiding core koala habitat in Wandobah reserve
- Enhances the connectivity for koala movement through a wide bridge opening
- Minimises Blackjack Creek flooding effects by reducing construction within and over Blackjack Creek and the drainage channels south of the Oxley Highway
- Optimises constructability by improving the curve of the bridge and providing greater railway clearance for the future duplicated rail line
- Maximises structural efficiency by minimising impacts on existing infrastructure including Oxley Highway roundabout, View Street connection and the existing culvert across Blackjack Creek
- Minimises the business impact to the Barber Street precinct.
Figure 5.1: Preferred Option C (Refined)
HML road classification

To meet the project objective to provide HML continuity through Gunnedah, Roads and Maritime and Gunnedah Shire Council are finalising a road reclassification agreement as part of the project.

The preferred option — Option C (Refined) — from Oxley Highway via Warrabungle Street to Conadilly Street (Kamilaroi Highway) will become a State Road. This will provide a new link between the Oxley and Kamilaroi Highways. For further information on the road classification agreements with Gunnedah Shire Council, please refer to the Recommended Option Report (Roads and Maritime, 2014).
5.2 Barber Street intersection

The preferred option provides direct access to Barber Street through an intersection just north of the Gunnedah Maize Mill (figure 5.2). The intersection allows for north bound and south bound traffic to move in and out of Barber Street from the new bridge. It will have a dedicated right turning lane for traffic turning into Barber Street. The location of the intersection is dictated by a number of design constraints to ensure it is safe for heavy vehicles to access Barber Street. Please refer to the Recommended Option Report (Roads and Maritime, 2014) for further detail on the strategic concept design for the Barber Street intersection.

Figure 5.2: Barber Street Intersection
5.3 Conadilly Street and Warrabungle Street roundabout

The preferred option includes a new roundabout at the intersection of Conadilly Street and Warrabungle Street (figure 5.3). The proposed roundabout at Conadilly and Warrabungle Streets has been designed to accommodate B-Doubles as part of facilitating a HML route through Gunnedah. Please refer to the *Recommended Option Report* (Roads and Maritime, 2014) for further detail on the strategic concept design of this roundabout.

![Roundabout at Conadilly Street and Warrabungle Street](image)

*Figure 5.3: Roundabout at Conadilly Street and Warrabungle Street*
6 Next steps

Based on the strategic concept design now developed for the preferred option, an environmental assessment and full concept design will be prepared for the preferred option. When completed, the environmental assessment and concept design will be displayed for community comment. The project would then move to detailed design and construction.

The project process is shown in the flowchart in figure 6.1 below.

![Project development flowchart](image-url)

**Figure 6.1: Project development flowchart**
For more information please visit the Road and Maritime website at www.rms.nsw.gov.au.

The community can contact the project team any time by:

**Phone:** 1800 029 585 (toll free)

**Email:** secondroadoverrailbridge@kbr.com

**Post:** Gunnedah second road over rail bridge project

ENDS