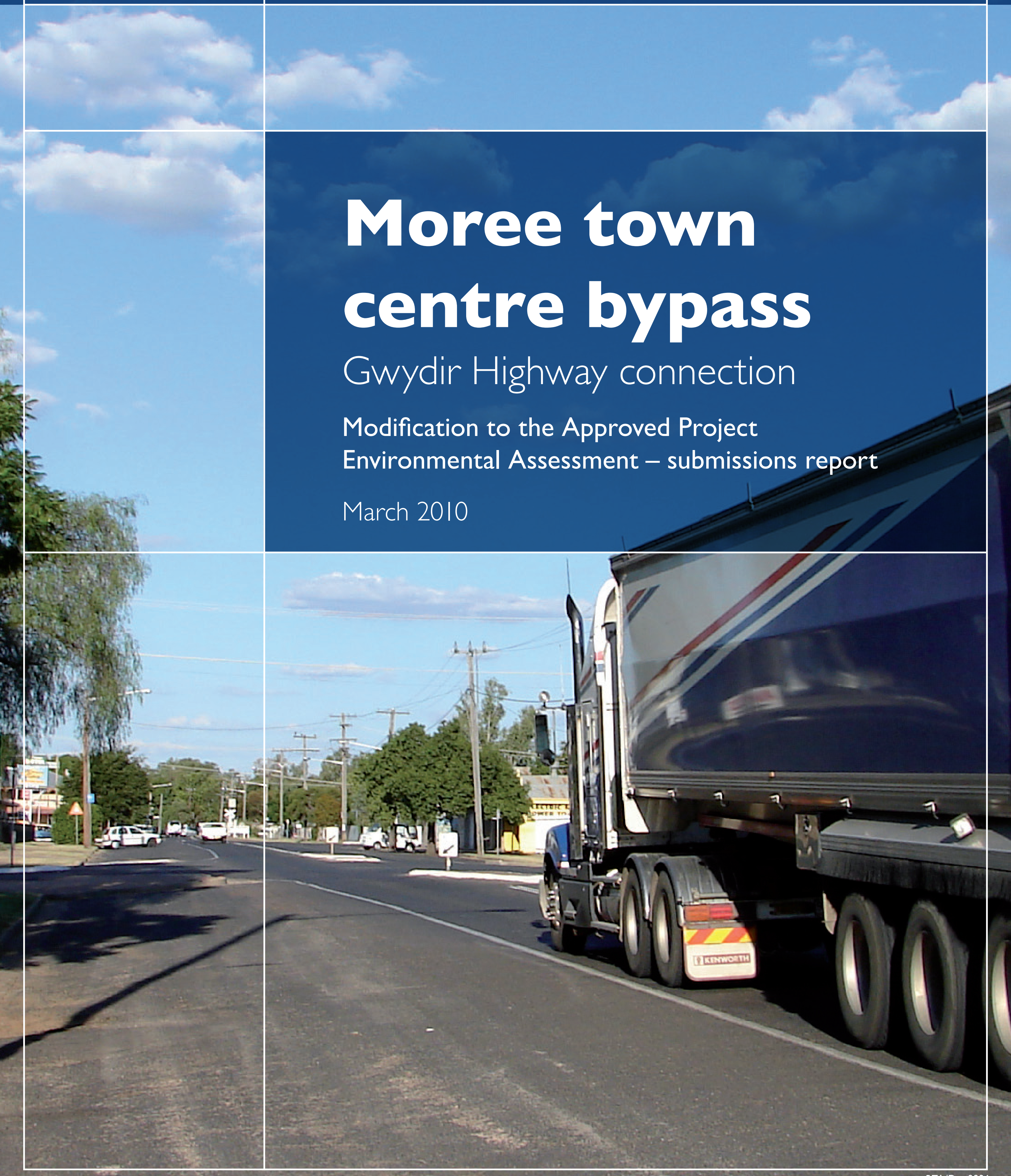
RTA

Moree town centre bypass

Gwydir Highway connection

Modification to the Approved Project
Environmental Assessment – submissions report

March 2010



RTA/Dev 2236

Contents

1 Introduction and background

1.1 The project

In 2004, the NSW Roads and Traffic Authority (RTA) received approval to construct and operate the Moree town centre bypass. The Moree town centre bypass realigns the existing Newell Highway around the eastern side of the Moree town centre via a new 4.4 km length of two-lane road and a new bridge over the Mehi River.

The northern section of the Moree town centre bypass has been completed, with the exception of the northern intersection, and includes the new bridge over the Mehi River and the new road north of the Mehi River. The RTA is proceeding with construction between the new bridge over the Mehi River and the Gwydir Highway. The construction of the southern section (from the Gwydir Highway to Bullus Drive) has been delayed due to issues associated with the acquisition of contaminated land required for road works between Gosport Street and the rail corridor.

The NSW Department of Environment, Climate Change and Water (DECCW) has determined that some of this contamination poses a significant risk of harm to human health and the environment. The responsible parties have begun remediation work and DECCW is continuing to investigate contamination and to monitor remediation of this area.

To remove traffic from the Moree town centre, the RTA proposes to provide a connection to enable staged opening of the bypass while the contamination issues are resolved. The modification to the approved project is referred to as the Gwydir Highway connection. The Gwydir Highway connection would allow vehicles to use the completed northern section of the bypass and then travel along the Gwydir Highway (Alice Street), before reconnecting to the existing Newell Highway (Frome Street) at the Newell/Gwydir Highway roundabout (refer to Figure 1).

The RTA is seeking the proposed modification as the proposal is not considered to be consistent with the current approval. The proposed modification would enable use of the completed portion of the bypass and would achieve the primary objective of diverting heavy vehicle traffic from the central business district of Moree while the contaminated land issues are resolved.

1.2 Statutory context

The Moree town centre bypass project was approved by the Minister for Planning under Division 4 of Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) on 20 July 2004. As the project was considered likely to have a significant environmental impact, an environmental impact statement was required.

Since approval of the Moree town centre bypass project, Part 3A has been introduced into the EP&A Act. Part 3A applies to the assessment of major projects, including those Part 5 projects that would have previously required an environmental impact statement. Any proposed changes to a project approved via an environmental impact statement must now be considered in terms of Part 3A.

Accordingly, the RTA is seeking a modification to the Minister's approval under Section 75W of Part 3A of the EP&A Act. An environmental assessment for the modification was prepared and exhibited in late 2009 (refer to Section 1.3 below). In accordance with Section 75H(6) of the EP&A Act, the Director-General has required the RTA to address the issues raised following exhibition of the environmental assessment for the modification.

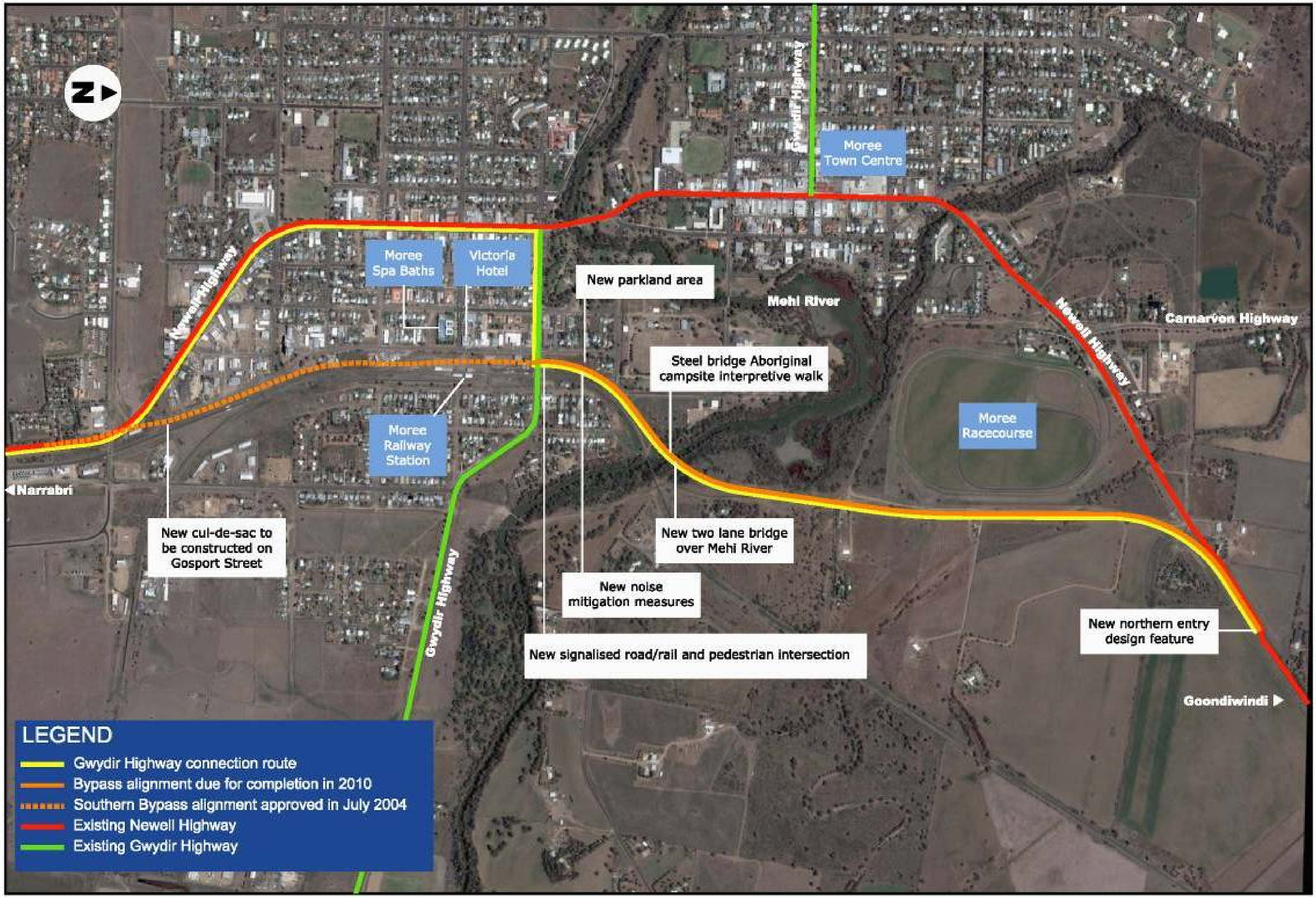


Figure 1: Overview of the approved bypass route and the proposed Gwydir Highway connection route.

1.3 Environmental assessment modification exhibition

The Moree town centre bypass: Gwydir Highway connection, Modification to the Approved Project Environmental Assessment (EA modification) was exhibited for 30 days from 14 October 2009 to 16 November 2009 (inclusive). The Department of Planning publicly notified the exhibition of the EA modification by placing an advertisement in the Moree Champion on 27 October 2009. In addition, the RTA provided notification through a media release distributed to local and state media on 9 October 2009, and letters to local residents, distributed by mail between 12 October and 14 October 2009.

The EA modification was exhibited at the following locations:

- Department of Planning Information Centre – 22-33 Bridge, Sydney.
- Moree Plains Shire Council – 21 Auburn Street, Moree.
- RTA Moree project office – 2/68 Heber Street, Moree.

During the public display period, the RTA hosted a drop-in session at the RTA Moree project office for community liaison group members and Moree Plains Shire councillors on 28 October 2009. Approximately eight community liaison group members, including two councillors, attended the session. Drop-in sessions for the general public were held at the RTA Moree project office on Friday 6 November and Saturday 7 November 2009. Approximately 50 people attended these sessions. The sessions for the general public were publicised via flyers that were distributed by mail between 26 and 28 October 2009. The purpose of the sessions was to give local residents the opportunity to ask the project team any questions regarding the proposed modification.

1.4 Purpose of this report

During the exhibition of the EA modification, 15 submissions were made. The Director-General of the Department of Planning provided copies of the submissions to the RTA. In accordance with Section 75H(6) of the EP&A Act, the Director-General required the RTA to address the issues raised and produce a submissions report.

This submissions report identifies the issues raised in response to exhibition of the EA modification and provides the RTA's responses to those issues (Chapter 2).

2 Response to issues

2.1 Respondents

A total of 15 submissions were received in response to the exhibition of the EA modification. Of these submissions, seven were received from six local businesses (ie one was a duplicate), six from individual community members, one from DECCW and one from Moree Plains Shire Council.

Each of these submissions has been examined to understand the issues raised. The issues have been extracted and collated and corresponding responses to each of the issues have been provided. Where similar issues have been raised in different submissions, only one response has been provided. The issues raised and the RTA's response to these issues forms the basis of this chapter.

Table 2.1 lists each submission by number and indicates which section of the report addresses the issues raised in the submission.

Table 2.1 List of respondents

Respondent	Submission no.	Report section where issues are addressed
Local business	1	2.4; 2.6.3; 2.7.1; 2.7.4; 2.7.5; 2.9; 2.10; 2.12.1; 2.12.2
Individual	2	2.7.2; 2.7.5
Individual	3	2.3; 2.4; 2.7.3; 2.7.4; 2.7.5
Individual	4	2.3; 2.7.2
Local business	5	2.6.3; 2.7.2; 2.7.4; 2.11
Individual	6	2.3; 2.7.2; 2.7.4; 2.7.5; 2.7.6
Local business	7	2.6.3; 2.7.2; 2.7.4; 2.7.5; 2.7.6; 2.8.1; 2.12.1
Individual	8	2.3; 2.4; 2.5; 2.6.3; 2.7.2; 2.7.3; 2.7.4; 2.7.5; 2.11
Local business	9	Duplicate of submission 5
Individual	10	2.6.1; 2.6.3
Local business	11	2.6.4; 2.7.1; 2.7.4; 2.7.5; 2.8.2
Local business	12	2.7.4; 2.7.5; 2.7.6
Moree Plains Shire Council	13	2.4; 2.7.1; 2.7.3; 2.7.4; 2.7.5; 2.7.6; 2.9; 2.12.2
Local business	14	2.3; 2.7.2; 2.7.4; 2.7.5; 2.7.6
DECCW	15	2.3; 2.4; 2.6.1; 2.6.2; 2.6.3

2.2 Overview of the issues raised

There were 10 broad categories of issues raised in the submissions to the EA modification. These are:

- The need for the modification.
- The length of time the Gwydir Highway connection will be in use.
- Consultation.
- Noise and vibration impacts.
- Traffic and transport impacts.
- Construction impacts.
- Economic impact and social benefits.
- Contamination issues.

- Operational air quality.
- Visual amenity.

DECCW's submission, focused on land contamination and noise and vibration impacts. It made recommendations for management of noise and vibration impacts.

Moree Plains Shire Council's submission objected to the Gwydir Highway connection. The objection was based on a number of concerns, including that the Gwydir Highway connection may become the permanent route for the highway and issues regarding the potential impact of the proposal on local traffic and transport, including pedestrian access.

The main issues raised in submissions from individuals and local businesses pertained to traffic and transport, particularly pedestrian access, vehicular access/parking and business impacts. Operational noise was another issue, especially for the two motels that made submissions.

2.3 Need and justification for the modification

Submission numbers

3 – Individual
4 - Individual
6 – Individual
8 – Individual
14 – Local business
15 – DECCW

Issue description

DECCW indicated that the land transfer issues could be resolved and work expedited on the southern section of the bypass.

Five submissions from individuals and a local business raised the following issues in relation to the project need and justification:

- The Gwydir Highway connection would not have the same traffic flow and environmental benefits as the Moree town centre bypass route.
- The funds to construct the Gwydir Highway connection would be better spent in another manner, such as upgrading Gosport Street until the southern section of the bypass can be built or speeding up the construction of the southern section of the bypass.

Response

The northern section of the Moree town centre bypass has been completed, with the exception of the northern intersection. The construction of the southern section (from the Gwydir Highway to Bullus Drive) has been delayed due to contaminated land near the Gosport Street fuel depots. This land is required for construction of the southern section. To avoid incurring remediation costs, the RTA will not acquire this land until remediation liabilities have been resolved. RTA is consulting with DECCW to resolve the remediation liabilities delaying land acquisition. Section 2.4 of this report, discusses the timing of the southern section of the Moree town centre bypass.

The Gwydir Highway connection would allow staged opening of the Moree town centre bypass while contamination liabilities are resolved. The operation of the northern section in advance of the southern section would achieve the primary project objective of diverting heavy vehicle traffic from the central business district of Moree.

Although the full benefits of the Moree town centre bypass route will only be realised when the southern section is in operation, the Gwydir Highway connection would provide numerous improvements to traffic flows and the environment when compared to the existing road network. These improvements would include the removal of heavy vehicles from Balo Street and the Moree town centre plus a reduction in travel times and accident rates.

The RTA investigated a number of alternatives for connection of the Moree town centre bypass using the completed northern section. This included consideration of an option that diverted onto Gosport Street between Jones Street and Anne Street known as the EIS hybrid alignment. The EIS hybrid alignment was not found to be the preferred option for a variety of reasons including:

- Increased construction costs (more than $1 million in excess of the Gwydir Highway connection).
- Significant amounts of the connection works would become redundant in the future when the southern section is completed.
- The need for noise mitigation measures to existing premises along Gosport Street.

The EA modification found that the Gwydir Highway connection would be the most cost effective of the alternatives considered. It would enable use of the completed portion of the bypass and would achieve the primary objective of diverting heavy vehicle traffic from the central business district of Moree while the contaminated land issues are resolved.

The Gwydir Highway connection works that are not required for the final Moree town centre bypass include pavement improvements and works on the Frome Street/Gwydir Highway (Alice Street) roundabout. These works would remain as an asset to the road network once the southern section of the Moree town centre bypass has been completed.

2.4 Length of time the Gwydir Highway connection will be in use

Submission numbers

1 – Local business
3 – Individual
8 – Individual
13 – Moree Plains Shire Council
15 – DECCW

Issue description

Four submissions, from individuals, a local business and Moree Plains Shire Council, raised concerns that the Gwydir Highway connection would become the permanent bypass route. This concern was noted in DECCW's submission.

Moree Plains Shire Council stated that any conditional approval for the Gwydir Highway connection should be limited to an operational life of three years.

Response

The Gwydir Highway connection has not been developed to be an alternative to the approved Moree town bypass route. It is proposed for the purpose of providing a connection between the completed northern section of the bypass and the existing Newell Highway while liability issues associated with the acquisition of contaminated land are resolved for the southern section.

It is the RTA's intention to proceed with construction of the southern section of the bypass when the contamination liabilities have been resolved and adequate funding has been secured to facilitate the completion of the remaining works. It is not possible to predict the time required to achieve this, and it should therefore be recognised that the length of operation of the Gwydir Highway connection may ultimately exceed three years.

2.5 Consultation

Submission number

8 – Individual

Issue description

One submission noted the decreasing frequency of community liaison group meetings across the life of the broader Moree town centre bypass project.

Response

There has been a total of 25 community liaison group meetings since the original EIS was approved in 2004. The meetings are scheduled to consult with the community liaison group members and to provide updated project information whenever needed. The design development phase of the project involved significant community liaison group input and is now generally complete. Accordingly, the recent community liaison group meetings have been scheduled to coincide with the timing of specific activities and the availability of new information.

Since April 2008, seven community liaison group meetings have been held and included discussions about the Gwydir Highway connection. The RTA will continue to hold community liaison group meetings as necessary.

2.6 Noise and vibration

2.6.1 Construction noise

Submission numbers

10 – Individual
15 – DECCW

Issue description

DECCW made the following points in relation to construction noise:

- Predicted construction noise levels at sensitive receivers are around 81-88 dBA. This exceeds the highly noise affected criterion of 75 dBA identified in the DECC *Interim Construction Noise Guideline*.
- All reasonable and feasible mitigation measures to minimise noise impacts should be assessed for incorporation into construction noise management plans, including the mitigation measures identified in Section 5 of the RTA's Environmental Noise Management Manual.

A submission from an individual requested that property upgrade measures be undertaken prior to the start of construction works.

Response

The RTA prepared a noise and vibration assessment for the EA modification in May 2009 (RTA 2009). The assessment of construction noise impacts was undertaken in accordance with the DECC *Environmental Noise Control Manual* (EPA 2004). In July 2009 DECCW released the *Interim Construction Noise Guideline* which introduced new criteria for construction noise assessment.

Condition of approval number 26 for the Moree town centre bypass project would apply to the Gwydir Highway connection. It requires that a noise and vibration management sub-plan be prepared as part of the construction environmental management plan (CEMP). This sub-plan was previously prepared for the Moree town centre bypass. It would be reviewed and revised, where required, to address the specific requirements related to the Gwydir Highway connection, including the location of sensitive receivers, safeguards and management measures, noise and vibration monitoring, reporting and response procedures.

Once a construction methodology for the works has been developed, specific mitigation of construction noise impacts would be resolved to satisfy the CEMP requirements and to be in accordance with the *DECC Interim Construction Noise Guideline* (eg including section 4.1.1 of this guideline) and section 5 of the *RTA Environmental Noise Management Manual.* Due to the proximity of the works to sensitive receivers, such as dwellings and commercial operations (eg motels), the noise mitigation measures would be managed in consultation with the affected residents to ensure issues such as access are also appropriately addressed.

All feasible and reasonable mitigation measures would be considered for construction including:

- Early installation of any proposed architectural treatments (eg property upgrade measures).
- Respite periods during extended works in any one location.
- Temporary screening where noisy works are immediately adjacent to dwellings.
- Publicising the project hotline, for example to report complaints regarding noise.

2.6.2 Construction vibration

Submission number

15 – DECCW

Issue description

DECCW noted that the conditions of consent should confirm the commitment to undertaking a vibration assessment once a construction methodology has been established and that a condition survey and/or monitoring would form part of this assessment.

Response

Condition of approval number 26 for the Moree town centre bypass project would apply to the Gwydir Highway connection. It requires that a noise and vibration management sub-plan be prepared as part of the CEMP. Where there is potential for vibration impacts to occur, a condition survey and/or monitoring of vibration impacts would be conducted.

2.6.3 Operational noise

Submission numbers

1 – Local business

5 – Local business
7 – Local business
8 – Individual
10 – Individual
15 – DECCW

Issue description

Five submissions from individuals and local businesses expressed concerns that the project would result in increased operational noise levels throughout the corridor, particularly at dwellings and commercial operations. Some of these submissions raised the issue that increased noise would result from additional traffic including heavy vehicles and from braking including at the roundabout.

One submission from an individual stated that adequate amelioration measures should be implemented along Alice Street.

DECCW made several comments relating to operational noise, including:

- The level of acoustic reductions possible is uncertain along with the willingness of affected receptors to participate.
- If the proposed Gwydir Highway connection is operational for an extended period, an audit should be undertaken within an appropriate timeframe to assess the effectiveness of the architectural acoustic treatment at sensitive receivers.
- The land transfer issues delaying the southern bypass construction could be readily resolved and work expedited on the southern bypass. This would minimise noise impacts on the sensitive receivers predicted to be significantly affected by the Gwydir Highway connection.

Response

The RTA prepared a noise and vibration assessment for the EA modification in May 2009 (RTA 2009) which identified the likely operational noise impacts and provided recommendations. The assessment identified that the Gwydir Highway (Alice Street) would experience an increase in noise levels. During the $L_{Aeq\ 9hr}$ night time, which is the critical assessment period, the increase would be around 9 db(A) above the existing noise levels. This would result in noise levels above the 60 dB(A) acute noise level criterion. Both day time and night noise levels are expected to be in the acute range however the increase in night time noise levels would be more significant than the day time. In accordance with RTA policy, sensitive receivers that are affected by noise impacts from the Gwydir Highway connection would be considered for mitigation measures. A range of additional mitigation and management strategies to reduce noise impacts are identified in Section 6.5 of the EA modification.

Vehicles slowing to turn the corner at the Newell and Gwydir Highway roundabout may affect the occurrence of maximum noise levels in the vicinity of the roundabout. The maximum noise impacts would be used to prioritise and rank mitigation strategies. Refer to Section 6.5 of the EA modification for further detail on the noise assessment.

The acoustic reduction possible using architectural treatments is based on data from the US Department of Transportation – Federal Highway Agency (FHWA). This data indicates that up to a 10 dB(A) reduction in noise levels is possible when elements such as windows, doors and ceiling insulation are upgraded (refer to Table 2.2 below). In addition, smaller noise reductions may also be obtained through more simple means such as sealing cracks and openings of affected facades.

Table 2.2: Relative aspects of noise reduction modifications to external walls (*Insulation of Buildings against Highway Noise FHWA-TS-77-202*)

Noise reduction modification	Increase in noise reduction of structure	Initial modification cost	Additional ventilation required	Heating and air conditioning energy savings
SEAL LEAKS Seal all cracks, openings, leaks with caulk, tape, weather-stripping around door, window, wall joint seams. Provide acoustic baffles for chimneys, ventilators, etc.	Up to 4 dB	Low	High	High
SMALL ELEMENT MODIFICATION For windows, doors, air conditioners, ventilators, install new elements with upgraded Exterior Wall Noise Rating comparable to that of wall structure.	Up to 10 dB over sealing of cracks; typically, 4 to 7 dB.	Moderate	None	Moderate
WALL PANEL MODIFICATION Construction changes to walls, roof, including stud space insulation and resilient mounting of interior surface.	Up to 10 dB over small element modifications; higher for more extensive modifications.	High	None	Moderate

The RTA would consult with affected receivers to offer acoustic treatment options as identified in the CEMP and in accordance with the *RTA Environmental Noise Management Manual*. The feasibility of treatments to individual dwellings would be dependent on the condition and type of the building's facade and may comprise of one or more of the following noise reduction techniques:

- Seal exterior wall penetrations.
- Caulk windows, window frames.
- Apply weather strip to exterior doors and interior operable window frames.
- Air-condition the living areas and sleeping quarters (allows windows to be closed).
- Install replacement windows or doors.
- Insulate walls.
- Floor treatments (generally older houses).

Condition of approval number 37 for the Moree town centre bypass project would apply to the Gwydir Highway connection. In accordance with this condition, the RTA would conduct external noise monitoring to assess the adequacy of the implemented traffic noise mitigation measures, including any architectural treatments, six to 12 months after opening. Additional internal noise monitoring would be considered where the external noise monitoring indicates a clear trend that traffic noise levels exceed those predicted. In this case all further feasible and reasonable measures would be investigated and implemented in consultation with all of the affected property owners. However the RTA cannot force property owners to participate.

Section 2.4 of this report discusses the timing of the southern section of the Moree town centre bypass. Once construction of the southern section of the bypass has been completed, the traffic volumes and associated noise impacts on Alice Street associated with the Gwydir Highway connection would decrease.

2.6.4 Operational vibration

Submission numbers

11 – Local business

Issue description

One submission expressed concern that the vibration from heavy vehicle traffic would impact on the structural integrity of older buildings along Alice Street.

Response

Vibration from heavy vehicles is generally caused by a vehicle's suspension reacting to a road surface in poor repair. The Gwydir Highway connection would include an upgraded road surface, which would minimise the potential for development of vibration impacts from road traffic. In addition, the 50 km/h speed limit at this location would prevent the generation of pressure pulse from heavy vehicles that can cause airborne vibration impacts.

It should also be noted that the Gwydir Highway (Alice Street) is already a heavy vehicle route.

2.7 Traffic and transport

2.7.1 Redistribution of traffic

Submission numbers

1 – Local business
11 – Local business
13 – Moree Plains Shire Council

Issue description

Two submissions from local businesses raised concerns that the community would be negatively impacted by increased heavy vehicle traffic using Alice Street, Tycannah Street and Edward Street.

Moree Plains Shire Council raised concerns that:

- An increased number of heavy vehicles may use local roads, particularly in the Gosport Street and Frome Street precinct.
- The movement of heavy vehicles in Balo Street may not reduce to the extent required by the initial development approval. Heavy vehicles may find it easier/quicker to continue to use the current route, thereby not bypassing the town centre.

Response

The RTA prepared a traffic and transport assessment for the EA modification in May 2009 (RTA 2009). The assessment found that heavy vehicle traffic would increase on the Gwydir Highway (Alice Street) and predicted that heavy vehicle volumes would be reduced on Balo Street between the Gwydir Highway (Alice Street) and the northern extent of the bypass. The heavy vehicle traffic volumes on Tycannah Street and Edward Street are not predicted to change significantly during operation of the Gwydir Highway connection.

The Gwydir Highway connection has been developed to include a number of measures that would prevent or discourage undesirable changes to the traffic on local streets. These are described fully in the traffic and transport assessment and would include a two phase strategy.

The phase one measures would be implemented as part of the Gwydir Highway connection works. These would include a change to the priority arrangements along Warialda Street so that north-south traffic must give way to east-west traffic, making this local street diversion a less attractive option for heavy vehicles. Weight restriction signage would prevent most heavy vehicles from using Warialda Street or Dover Street with the exception of those making deliveries in that area. To prevent heavy vehicles using Gosport Street as a short-cut, a cul-de-sac would be constructed on Gosport Street at its intersection with Frome Street. This cul-de-sac would allow northbound movements into Gosport Street only.

The EA modification outlines that following implementation of phase one traffic management measures, the RTA would monitor complaints from residents with regard to heavy vehicle traffic in the residential areas and would undertake classified traffic counts on local roads to assess any increase in heavy vehicle traffic through the area. If these counts confirm a significant increase (eg total increase greater than 50 per cent) in legal heavy vehicle through traffic, then phase two traffic measure would be implemented. The nomination of specific treatments would depend on the nature of the problem, and would be determined in consultation with council and the community.

The existing road train routes on Frome Street, Alice Street, Tycannah Street and Edward Street would be retained during the operation of the Gwydir Highway connection. The approved routes are clearly specified on all over-dimensional load permits and it is the responsibility of heavy vehicle operators to stay on these approved routes. All other existing heavy vehicle routes would be retained, except on Balo Street as described below.

The existing B-double and road train status of Balo Street, between Alice Street and Gwydir Street, would be removed. This would significantly reduce articulated heavy vehicle activity in Balo Street and the Moree town centre.

Conditions of Approval numbers 57 and 58 for the Moree town centre bypass project would apply to the Gwydir Highway connection. In accordance with these conditions, the RTA would conduct full classified traffic counts before and after the opening of the Gwydir Highway connection to traffic. Some trucks are not restricted by the heavy vehicle route designations and may continue to use Balo Street. Should the monitoring indicate that articulated heavy vehicle traffic levels within the Moree town centre have not reduced to the levels shown in the conditions of approval (about 95 per cent reduction from current numbers) the RTA will develop and implement further measures in consultation with council to achieve the reduction to the required levels. Options to be considered may include:

- Weight restrictions.
- Reduced speed limit such as to 40 km/h in a high pedestrian activity area.
- Raised pedestrian crossings through the shopping centre.

2.7.2 Vehicle safety

Submission numbers

2 – Individual
4 – Individual
5 – Local business
6 – Individual
7 – Local business
8 – Individual
14 – Local business

Issue description

Seven submissions raised concerns that the project would have a negative impact on vehicle safety. Concerns included the following:

- Increased traffic and trucks turning east at the Alice Street roundabout will increase the likelihood of crashes.
- The roundabout should be designed to ensure road trains won't damage their tyres. Road train operators should be consulted about the roundabout design.
- Heavy vehicle restrictions in Gosport Street will increase the safety risk for trucks servicing businesses in east Moree as the alternative exit, Thompson Avenue, is very narrow.
- Increased traffic and the lack of traffic lights or roundabout at the Alice Street/Warialda Street intersection will cause an increase in crashes.
- Increased traffic volumes along Warialda Street would create unsafe conditions for parking and cars passing in the opposite direction.
- Additional traffic on Alice Street may cause a dangerous situation when traffic is backed up to make way for trains crossing.
- There won't be safe access to the Caltex depot in Gosport Street.

Response

The traffic and transport assessment for the EA modification found that the total traffic volumes at the Frome St/Gwydir Highway roundabout (the Frome Street/Alice Street roundabout) would be generally unchanged however, the individual turning movement volumes would vary by increasing the traffic, including trucks, turning east at the Alice Street roundabout. The assessment included thorough traffic modelling and analysis of this change and predicted that the bypass/Alice Street intersection would operate at a level of service "B". As outlined in Table 2.3 below, level of service "B" provides for good operation with acceptable delays and spare capacity. The accident rate at the roundabout is not predicted to increase during operation of the Gwydir Highway connection.

The Frome Street/Alice Street roundabout has been designed in accordance with RTA road design standards to cater for B-triple and double road trains, as well as smaller vehicles. There would be no abnormal damage to vehicles or their tyres during proper use of the roundabout. Therefore no consultation on the design of the roundabout is required.

Thompson Avenue is currently classified as an approved B-double route and is therefore deemed to provide safe access to Gosport Street. Traffic counts indicate that the increased number of heavy vehicles using Thompson Avenue would be in the order of less than five per day. No impact on safety is expected as a result of this increase. It should also be noted that Gosport Street south of Thompson Street is not currently an approved heavy vehicle route.

Table 2.3: Level of service criteria

Level of service	Average delay (seconds vehicle)	Traffic signals, roundabout	Give way and stop signs
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity and accident study required
E	57 to 70	At capacity; at signals incidents will cause excessive delays	At capacity, requires other control mode
F	More than 70	Roundabouts require other control mode	

The intersections along Alice Street, between Frome Street and the bypass, Warialda Street, have all been designed in accordance with RTA road design standards. The design process included surveys of the traffic volumes and analysis of the anticipated performance of each intersection during the operation of the Gwydir Highway connection.

The intersection designs provide for a protected right turn lane at each intersection which is a significant safety improvement compared to the current Gwydir Highway configuration, which requires turning vehicles to stop in the Gwydir Highway through travel lanes. The accident rate at the intersections along the Gwydir Highway is not predicted to increase. Therefore, traffic lights or a roundabout are not warranted at the Alice Street/Warialda Street intersection.

As described in Section 2.7.1, the Gwydir Highway connection has been developed to include a number of measures that would prevent or discourage undesirable changes to the traffic and therefore vehicle safety on local streets. There would be a minor redistribution of traffic on some local streets including Warialda Street north of the Gwydir Highway. Redistribution of traffic would not affect the narrow end of Warialda Street, south of the Gwydir Highway. The functionality and therefore safety of the existing local road infrastructure including for parking and passing of cars along Warialda Street is not expected to change during operation of the Gwydir Highway connection.

The traffic lights at the intersection of the Gwydir Highway and the Moree town centre bypass would be phased to allow road vehicle movements between the bypass and Alice Street west of the bypass intersection to occur when the rail level crossing operates. All road traffic across the rail level crossing and the left-hand turn for southbound vehicles using the bypass, would be stopped when the rail level crossing operates. The combined operation of the rail level crossing and road traffic lights has been analysed closely by both the RTA and rail authorities and is predicted to operate at a level of service "B". The rail level crossing was also the subjected to a safety risk assessment and found to be acceptable.

As described in Section 2.7.1, the Gwydir Highway connection has been developed to include a number of measures that would prevent or discourage undesirable changes to the traffic on local streets. The Gwydir Highway connection will provide safe access to Gosport Street south of the Gwydir Highway via the existing left hand turn provision and a new right hand turn bay. This will allow continued safe access to businesses on Gosport Street including the Caltex depot.

2.7.3 Traffic efficiency

Submission numbers

3 – Individual
8 – Individual
13 – Moree Plains Shire Council

Issue description

Three submissions, including one from Moree Plains Shire Council, raised concerns regarding the impact that the following changes would have on traffic flow:

- Traffic slowing to turn right from Frome Street into Alice Street will cause traffic to back up.
- Two 90 degree turns in the route will negatively impact traffic flow.
- Wide-load vehicles using the Gwydir Highway connection, instead of the route through Gwydir Street, Edward Street and Jones Avenue.

Response

Intersection modelling for the proposal indicates that the traffic generated by the Gwydir Highway connection would have very little impact on the operation of the intersection of the Gwydir Highway (Alice Street) and Frome Street, with the level of service remaining at "A" ie good operation (refer to table 2.3) for both the morning and the afternoon peaks. There would be no change in average delay at the intersection eg average delay would remain at less than 14 seconds (refer to table 2.3).

The intersections at Alice Street and Frome St and Alice Street and the bypass have been designed for heavy vehicle turning paths to reduce the impact on traffic efficiency. The existing routes for wide loads would be retained during operation of the Gwydir Highway connection.

2.7.4 Business impacts

Submission numbers

1 – Local business
3 – Individual
5 – Local business
6 – Individual
7 – Local business
8 – Individual
11 – Local business
12 – Local business
13 – Moree Plains Shire Council
14 – Local business

Issue description

Multiple submissions raised concerns that the project would negatively impact on businesses. The issues raised were about reduced parking and pedestrian access, change to local access including access to the railway station for picking up and dropping off customers, restricted traffic movements on the approaches to and from the Gwydir Highway connection, the changed route, increased traffic and noise and dust during construction.

The following design suggestions were made to mitigate the changes:

- Construct a car park on the eastern side of Gosport Street, to service the Moree Spa Baths and Cascade complex.
- Remove a section of landscaping on either side of the road, closest to Alice Street, to provide off-street car parking.
- Install a pedestrian crossing or traffic lights on Alice Street.
- Remove the footpath and verge along Warialda Street to accommodate more parking.
- Install a right-hand turn slip lane from Alice Street into Gosport Street or a roundabout at the Alice Street/Gosport Street intersection.

Response

The conversion to parallel parking on the Gwydir Highway (Alice Street) would result in an overall reduction in the number of available spaces from approximately 125 spaces to approximately 75 spaces. However, the traffic and transport assessment found that parking demand on Alice Street, Warialda Street, Dover Street and Gosport Street is very low. Demand for parking in Alice Street would only exceed supply in exceptional circumstances (for instance, during the monthly markets at Jellicoe Park). During these times sufficient parking spaces would be available in streets off Alice Street. At all other times, the proposed parking would be sufficient. There would be no change to parking provision in Warialda Street, River Street, Gosport Street and Dover Street. In light of these considerations there would be no need to provide a car park or to remove landscaping or the footpath/verge to provide additional off-street parking

The construction of a car park along Gosport Street is not part of the proposal as parking in this area is not affected. However the RTA would not oppose the construction of a car park by Moree Plains Shire Council provided the location did not impede future construction of the southern section of the bypass.

The majority of the issues raised regarding business impacts have been addressed in sections 2.6, 2.7.1, 2.7.3, 2.7.5, 2.7.6, 2.8 and 2.9 of this submissions report.

2.7.5 Pedestrians

Submission numbers

1 – Local business
2 – Individual
3 – Individual
6 – Individual
7 – Local business
8 – Individual
11 – Local business
12 – Local business
13 – Moree Plains Shire Council
14 – Local business

Issue description

Multiple submissions expressed concerns about safe pedestrian access across Alice Street. Concerns were raised about safe access to Jellicoe Park, Moree Spa Baths, Moree Spa Motor Inn, Moree Family Day Care, the railway station and east Moree.

One submission suggested that a pedestrian crossing or traffic lights be installed on Alice Street.

One submission requested clarification as to why three at-grade pedestrian refuges are proposed when the RTA previously advised that these are not permitted on highways.

Response

To improve safety for pedestrians, kerb extensions and pedestrian refuges would be provided on the Gwydir Highway (Alice Street) to minimise the distances that pedestrians are required to cross. The sight distance along Alice Street is very good, due to the straight alignment, and vehicle speeds would be relatively low (the posted speed limit is 50 km/hr) due to the proximity of the Alice Street bypass and Alice Street/Frome Street intersections. These would also help to ameliorate pedestrian safety risks.

Currently around 5400 vehicles use Alice Street on an average day. It is expected that in 2010 with the Gwydir Highway connection open, the volume would increase to over 6700 vehicles per day. The volume in peak traffic periods would be around 520 vehicles per hour (two-way). Australian Standard 1742.10 covers pedestrian control and protection. It states that pedestrian crossings should generally not be installed unless pedestrian volumes are greater than 60 in two separate one-hour periods on a typical weekday, and at least 600 vehicles pass the site in those same hours. If a pedestrian crossing is under-used, drivers may become complacent and assume no one uses the crossing, putting the safety of those pedestrians who do use the crossing at risk. In accordance with these requirements of the Australian Standard, no pedestrian crossing is proposed on Alice Street except at the intersection of the Gwydir Highway connection and the bypass where there would be traffic lights. A signalised crossing facility with pedestrian phases would be provided at this location.

There is no RTA standard or policy preventing the use of at-grade pedestrian refuges on highways.

2.7.6 Access

Submission numbers

6 – Individual
7 – Local business
12 – Local business
13 – Moree Plains Shire Council
14 – Local business

Issue description

Five submissions, including from Moree Plains Shire Council, raised concerns about the impact on local access arrangements. Specific issues included:

- Restrictions to emergency vehicle access caused by traffic controls and heavy traffic along Alice Street and Frome Street.
- Heavy vehicle restrictions in Gosport Street.
- Reduced access to the railway station.
- Reduced access to Alice Street and Gosport Street, due to lack of traffic control measures (ie lights and/or roundabout).
- Lack of right-hand turn to the east at Gosport Street and Alice Street.
- Lack of right-hand turn from Alice Street to Gosport Street to the north.
- Lack of access to Gosport Street from Frome Street.
- Restricted movements on the approaches to the Gwydir Highway connection.

One submission suggested the addition of a right-hand turn slip lane from Alice Street into Gosport Street or a roundabout at the Alice Street/Gosport Street intersection.

Response

The proposed traffic controls along the Gwydir Highway (Alice Street) would cater for emergency vehicles access. Opening of the northern section of the bypass and Gwydir Highway connection would also improve emergency vehicle access from the north by allowing them to bypass the town centre.

The existing heavy vehicle restrictions in Gosport Street would not be changed. The existing right-hand turn out of Gosport Street on to Alice Street would be denied due to safety issues associated with the close proximity of the signalised intersection to the east of the Gosport Street/Alice Street intersection. This movement would be accommodated at Warialda Street, except for heavy vehicles which would be required to use Thompson Avenue and Frome Street.

Access to the Moree rail station would be retained, although some specific routes would be altered due to the proposed traffic management measures. Movements on Gosport Street crossing Alice Street would be banned due to safety issues associated with the close proximity of the Alice Street/bypass intersection. Vehicles would be directed through use of signage to the rail station via Warialda Street. This would have a minor impact on some businesses by increasing the travel distance by around 500 m and therefore increasing the travel time.

As described in Section 2.7.2, the intersections along Alice Street, between Frome Street and the bypass, have all been designed in accordance with RTA road design standards and traffic lights and/or roundabouts are not required. Protected right turn lanes would be provided at these intersections.

The right-hand turn from Alice Street into Gosport Street to the north would also be banned due to safety issues associated with the close proximity of the signalised intersection to the east of the Gosport Street/Alice Street intersection. Signposting would be installed informing drivers of the alternative access via Warialda Street and River Street. This route would service the childcare centre and Moree Spa Motor Inn.

A cul-de-sac would be constructed on Gosport Street at its intersection with Frome Street which would allow northbound movements only via a one-way road. Vehicle access to Gosport Street from Frome Street would be via Joyce Avenue or Warialda Street and Jones Avenue.

Apart from as outlined above, there would be no restricted movements on the approaches to the Gwydir Highway connection.

2.8 Construction impacts

2.8.1 Air quality

Submission number

7 – Local business

Issue description

One submission raised concerns regarding increased dust from construction and the impact this would have on cleaning costs for motels.

Response

Dust from construction would mainly be associated with excavation works during pavement reconstruction of the Gwydir Highway and roundabout, adjustment of existing services and new road signage. Dust emissions are expected to be minor and localised. During construction, standard dust-control measures would be used including dampening unsealed roads and stockpiles, covering truck loads transporting spoil and fill and avoiding dust generating work during windy conditions.

In accordance with the 2002 EIS and 2003 Representations Report, the RTA has prepared a dust management sub-plan as part of the CEMP. This sub-plan would apply to the Gwydir Highway connection and would be reviewed and revised where required. It would include potential sources of dust, management objectives and a monitoring program to assess compliance with the additional mitigation and management measures identified in the EA modification.

A complaints management system would be established as part of the CEMP. This system would ensure the timely implementation of dust controls in response to any complaints related to air quality.

2.8.2 Timeframe

Submission number

11 – Local business

Issue description

One submission enquired about the timeframe for construction and the hours of construction.

Response

Subject to approval, construction of the Gwydir Highway connection is planned to commence in 2010 and would take approximately three months to complete.

Condition of approval number 27 for the Moree town centre bypass project would apply to the Gwydir Highway connection. In accordance with this condition the working hours would be Monday to Friday 7am to 6pm and Saturday 8am to 1pm and at no time on Sundays or public holidays. In accordance with condition of approval number 27, works may be undertaken outside these hours where:

- The delivery of materials is required outside these hours by the police or other authorities for safety reasons.
- It is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.
- The work is identified in the construction noise and vibration management sub-plan and approved as part of the CEMP.

Local residents would be informed of the timing and duration any out of hours work at least 48 hours before that work commences.

2.9 Economic impact and social benefits

Submission numbers

1 – Local business
13 – Moree Plains Shire Council

Issue description

Two submissions related to the proposal's impact on economic development and social benefits. A submission from a local business stated that the delayed and changed route was holding back economic development.

Moree Plains Shire Council expressed concern that the Gwydir Highway connection may become permanent and the community will not realise the full economic and social benefits of completing the project in its entirety.

Response

The Gwydir Highway connection would achieve a primary objective of the bypass by directing heavy vehicle traffic away from the central business district of Moree. This would increase the social benefits and amenity in the town centre and deliver certainty for businesses in the area that would be bypassed. Although some residents and businesses along the Gwydir Highway connection route may experience some decrease in amenity, the impacts would be managed through mitigation measures for issues including noise and for traffic and transport. The increased traffic along the Gwydir Highway connection may also provide passing trade opportunities for businesses along the route.

The Gwydir Highway connection would allow operation of the northern section of the Moree town centre bypass which has already been built. In addition to providing the social and economic benefits of bypassing the Moree town centre, it would enable beneficial use of the infrastructure which has already been constructed until the full bypass can be completed.'

The RTA acknowledges that the full economic and social benefits would not be realised until the southern section of the bypass is completed. Section 2.4 of this report discusses the timing of construction of the southern section of the Moree town centre bypass.

2.10 Contamination

Submission number

1 – Local business

Issue description

One submission expressed concern that the Gwydir Highway connection may cause delay of remediation of Gosport Street, delaying the resolution of pollution issues.

Response

The RTA has been advised that the construction of the southern section alignment would not impede remediation of the contaminated groundwater. However, under the *Contaminated Land Management Act 1997*, the RTA risks becoming liable for remediation costs should it become the owner of contaminated land. The RTA cannot buy land if there is a risk that it will be responsible for the expense of the decontamination.

Voluntary remediation proposals for the remaining ground-water remediation are being negotiated between DECCW and the relevant fuel companies responsible for the contamination. Once these proposals have been finalised, the RTA will be in a position to purchase the land without the risk of becoming liable for remediation of contamination. The RTA owns the entire southern section road corridor except for the area affected by contamination.

The Gwydir Highway connection would not delay the decontamination process currently being managed by DECCW.

2.11 Operational air quality

Submission numbers

5 – Local business
8 – Individual

Issue description

Two submissions expressed concern regarding the impact of increased heavy vehicle traffic on air quality in Moree.

Response

The opening of the Gwydir Highway connection would not increase the number of heavy vehicles travelling through Moree. Therefore no impact on the overall air quality in the town is likely. The proposed Gwydir Highway connection would result in an increase in vehicle emissions along the affected section of the Gwydir Highway due to the higher volume of traffic travelling along the existing road. However this would be offset by an improvement of air quality along Balo Street. Vehicle emissions are unlikely to have a significant effect on the local air quality, given that the Gwydir Highway is an existing road and the anticipated increase in traffic would be limited.

Condition of approval number 11 for the Moree town centre bypass project would apply to the Gwydir Highway connection. In accordance with this condition, an Environmental Impact Audit Report - Operation, would be prepared and submitted to the Director-General of the Department of Planning within 24 months of the Gwydir Highway connection becoming operational and at any additional periods that the Director-General may require. The audit report would compare the operation impact predictions made in the environmental assessment documentation against the actual impacts and assess the effectiveness of implemented mitigation measures and safeguards. The RTA may be required to implement additional controls as a result of the findings of these audit reports.

2.12 Visual amenity

2.12.1 Existing visual amenity

Submission numbers

1 – Local business
7 – Local business

Issue description

One submission raised concern regarding vandalism and the general state of disrepair around the railway station and tennis courts that has come about because of project delays.

One submission expressed dissatisfaction with dirt mounds installed to act as sound barriers.

Response

The RTA and the Australian Rail Track Corporation have resolved the acquisition issues regarding the rail goods yard area. Demolition works in this area and around the tennis courts have been completed. The RTA will maintain its land in this area in a clean and tidy state, and will consult further with council in the event that vandalism or related issues are identified in the future.

Noise mounds have been constructed as set out in the 2002 EIS, 2005 Review of Environmental Factors and Operational Noise Management Plan. The construction of these mounds is under the existing approval and is not affected by the proposed Gwydir Highway connection. Landscaping and revegetation of these mounds, which will occur in 2010 following completion of the road construction works, would improve the existing visual amenity.

2.12.2 Visual amenity impacts

Submission numbers

1 – Local business
13 – Moree Plains Shire Council

Issue description

One submission noted that no allowance has been made to improve the visual amenity of the project.

Moree Plains Shire Council expressed concern that the ongoing maintenance of all RTA owned/controlled land in the Gosport Street corridor may not be to a level that satisfies reasonable community expectations.

Response

Urban design and landscaping works would be undertaken along the bypass route north of Alice Street, in accordance with the approved urban design and landscaping design. The existing urban and landscaping character of Alice Street would be retained.

Demolition works in the areas around the tennis courts and railway station have been completed. The RTA will maintain its land in this area in a clean and tidy state.

3 Project changes and amendments to the conditions of approval

3.1 Changes to the project

After consideration of the issues raised in the public submissions, no further changes to the Moree town centre bypass, as described in the EA modification, are proposed.

3.2 Amendments to the conditions of approval

After consideration of the issues raised in the public submissions, no further changes to the proposed conditions of approval in the EA modification are proposed.

The proposed conditions of approval are provided in Appendix A of this report.

4 References

Department of Environment, Climate Change and Water (DECCW) 2009, *Interim Construction Noise Guideline*, July 2009.

NSW Environmental Protection Authority 1994, *Environment Noise Control Manual*.

Roads and Traffic Authority (RTA) 2009, *Moree town centre bypass, Gwydir Highway connection, Modification to the Approved Project Environmental Assessment*, October 2009.

Roads and Traffic Authority (RTA) on behalf of the Commonwealth Department of Transport and Regional Services (DOTARS) 2005, *The Newell Highway Bypass of the Moree Town Centre, Alignment Option 4: Review of Environmental Factors*.

Roads and Traffic Authority (RTA), Newell Highway Bypass of Moree Town Centre, Representations Report, 2003.

Roads and Traffic Authority (RTA) on behalf of the Commonwealth Department of Transport and Regional Services (DOTARS) 2002, *Proposed Newell Highway Bypass of the Moree Town Centre: Environmental Impact Statement (EIS)*.

Roads and Traffic Authority (RTA) 2002, *Guide to Traffic Generating Developments*.

U.S. Department of Transportation Federal Highway Administration n.d., *Insulation of Buildings against Highway Noise*.

Appendix A – Existing conditions of approval and proposed amendments

Activity Approval

Section 115B of the *Environmental Planning & Assessment Act 1979*

I, the Minister Assisting the Minister for Infrastructure and planning (Planning Administration) approve under s.115B of the *Environmental Planning and Assessment Act 1979* the Activity referred to in Schedule 1, subject to the conditions in Schedule 2.

Diane Beamer MP
Minister Assisting the Minister
for Infrastructure and Planning
(Planning Administration)

Dated this 20 day of July 2004 S01/00191

SCHEDULE 1: DESCRIPTION OF ACTIVITY

The Activity is the Newell Highway bypass of Moree Town Centre as described in the:

1. environmental impact statement (EIS) for the Proposed Newell Highway bypass of Moree Town Centre prepared by egis Consulting dated, August 2003; as modified by the

2. Representations Report for the Newell Highway bypass of Moree town Centre prepared by the Roads and Traffic Authority (RTA), dated October 2003.

The Activity does not include any remediation works required on land previously zoned as Special Uses (Railway) under the *Moree Plains Local Environmental Plan (LEP) 1995*

SCHEDULE 2: CONDITIONS OF APPROVAL – NEWELL HIGHWAY BYPASS OF MOREE TOWN CENTRE

TABLE OF CONTENTS

ABBREVIATIONS

ARI	Average Recurrence Interval
CLG	Community Liaison Group
CEMP	Construction Environmental Management Plan
dB(A)	Decibel, "A" weighted scale
DEC	Department of Environment and Conservation
DIPNR	Department of Infrastructure, Planning and Natural Resources
ECRTN	Environmental Criteria for Road Traffic Noise (EPA 1999)
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMR	Environmental Management Representative
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPA	Former Environmental Protection Authority (now. Department of Environment and Conservation).
L_{A90}	The noise level exceeded for 90% of a monitoring period, also referred to as the background noise level
$L_{Aeq\ (9hour)}$	Equivalent continuous (constant) sound. pressure level over a 9 hour period from 10pm to 7am
$L_{Aeq\ (15\ hour)}$	Equivalent continuous (constant) sound pressure level over a 15 hour period from 7am to 10pm
$L_{Aeq\ (15\ mins)}$	Equivalent sound pressure level over a 15 minute interval
LA1 (1 minute)	Sound pressure level exceeded for 1 per cent of the time measured over a 1 minute interval
$L_{A10\ (15\ mins)}$	Sound pressure level exceeded for 10 per cent of the time over a 15 minute period
OEMP	Operation Environmental Management Plan
PAD	Potential Archaeological Deposit
RTA	Roads and Traffic Authority

DEFINITIONS

Activity	The activity described in Schedule 1 of this Approval.
Affected Landowner	Property owner identified in any of the EIS, Representations Report or CEMP to require a mitigation measure to ameliorate an identified impact to their property.
Ancillary Facility	Temporary facility for Construction such as office and amenities compound, concrete batch plant, materials storage compound.
Approved Activity Area	The footprint of the Activity covered by the Conditions of Approval.
Carbeen Open Forest	Areas identified in the EIS as the endangered ecological community 'Carbeen Open Forest in the Darling Riverine Plains and Brigalow

	Belt South Bioregions' under the Threatened Species Conservation Act 1995.
Conditions of Approval	The Minister's Conditions of Approval for the Activity
Construction	Includes all work in respect of the Activity **other than** survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys, minor clearing (except where threatened species, populations or ecological communities would be affected), establishing site compounds (in locations meeting the criteria of the Conditions), or other activities certified by the EMR to have minimal environmental impact (e.g. minor access roads, minor adjustments to services/utilities, etc.).
Definition of times	Daytime is 7am to 6pm Monday to Saturday, and 8am to 6pm Sundays and Public Holidays Evening is 6pm to 10pm Night-time is 10pm to 7am Monday to Saturday, and 10pm to 8am Sundays and Public Holidays
Department, the	Department of Infrastructure, Planning and Natural Resources
Director General, the	Director General of the Department or delegate
Director General's Agreement	A written advice from the Director General (or delegate).
Director General's Approval	A written approval from the Director General (or delegate). Where the Director General's Approval is required under a Condition the Director General will endeavour to provide a response within one month of receiving an approval request. The Director General may ask for additional information if the approval request is considered incomplete. When further information is requested the time taken for the Proponent to respond in writing will be added to the one month period.
Director General's Report	The report provided to the Minister by the Director General of the Department under section 115C of the *Environmental Planning and Assessment Act 1979*.
EIS	Means the environmental impact statement (EIS) for the Proposed Newell Highway bypass of Moree Town Centre prepared by egis Consulting dated, August 2003
GHC	Means the Gwydir Highway Connection as described in the Modification EA
GHC Conditions	Means the conditions in Schedule 3
Minister, the	Minister for Infrastructure and Planning.
Modification EA	The Modification to the Approved Project Environmental Assessment - Moree Town Centre Bypass, Gwydir Highway Connection prepared by Sinclair Knight Mertz dated April 2009.

Operation	Means the Operation of the Activity, but **does not** include commissioning trials of equipment or temporary use of parts of the Activity during Construction.
Proponent	Roads and Traffic Authority (RTA)
Publicly Available	Available for inspection by a member of the general public (for example available on an internet site or at a display centre)
Reasonable and Feasible	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. **Feasible** relates to engineering considerations and what is practical to build. **Reasonable** relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and nature and extent of potential improvements. This definition is consistent with the ECRTN.
Relevant Aboriginal Groups	Moree Local Aboriginal Land Council
Relevant Councils	Moree Plains Shire Council
Relevant Government Departments	A government authority with a licensing or approval role for the Activity's construction or operation. These would generally be one or more of NSW Agriculture, the DEC, NSW Fisheries, the Heritage Office, the DIPNR.
Representations Report	Representations Report for the Newell Highway bypass of Moree Town Centre. prepared by the Roads and Traffic Authority (RTA), dated October 2003.
River	Has the meaning given under the *Water Management Act 2002*. In summary this is "any watercourse, whether perennial or intermittent and whether comprising a natural channel or a natural channel artificially improved". A detailed description of river or waterway types is available in the classification provided in the NSW Fisheries Guideline *Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings* (February 2004)
Sensitive Receiver	Residence, education institution (e.g. school, TAFE college), health care facility (e.g. nursing home, hospital) and religious facility (e.g. church)
Stage 1 of the Activity	That part of the Moree Bypass north of the Gwydir Highway (also known as Alice Street)
Stage 2 of the Activity	That part of the Moree Bypass south of the Gwydir Highway (also known as Alice Street), being that part not already included in Stage 1
Structure	Any fixed, artificial object including residence, farm shed, fence, dam, cable support structure, etc.
Town Centre	The commercial zoned area on either side of Balo Street and Frome Street (north) between the Mehi River Bridge and the Broadwater

Bridge

ADMINISTRATIVE CONDITIONS

The Activity

1. The Activity must be carried out consistent with:

   (a) the procedures, safeguards and mitigation measures identified in the EIS, as modified by the Representations Report; and

   (b) these Conditions.

   These Conditions prevail in the event of any inconsistency with the requirements for the Construction and Operation of the Activity arising out of the documents described in (a) above.

2. These Conditions of Approval do not relieve the Proponent of the obligation to obtain all other approvals and licences required under any other Act. The Proponent must comply with the terms and conditions of such approvals and licences.

Compliance

General

3. The Proponent must notify in writing the Director General, Relevant Government Departments and Relevant Councils of the start of the Activity's Construction and Operation. Such notification must be provided at least four weeks before the relevant start date unless otherwise agreed to by the Director General.

4. It is the responsibility of the Proponent to ensure compliance with all of these Conditions and to implement any measures arising from these Conditions of Approval.

5. The Proponent must comply with any requirements of the Director General arising from the Department's assessment of:

   (a) any reports, plans or correspondence that are submitted to satisfy these Conditions of Approval; and

   (b) the implementation of any actions or measures contained in such reports, plans or correspondence.

Staging Report

6. The Proponent may elect to construct the Activity in discrete work packages or defined stages provided that such stages or work packages are consistent with these Conditions of Approval. Where discrete work packages or defined stages are proposed, the Proponent must submit a Staging Report to the Director General at least four weeks before Construction commences (or within any other time agreed to by the Director General). The Staging Report must:

   (a) describe the work packages or defined stages; and

(b) identify how the Conditions will be addressed in each work package or defined stage.

Staged Opening

6a The Proponent may elect to open that portion of the Activity north of the Gwydir Highway (Alice Street) (**Stage 1**) prior to completion of Stage 2 of the Activity.

6b If the Proponent elects to open Stage 1 prior to completing Stage 2 of the Moree Bypass, the RTA will implement the Gwydir Highway Connection (GHC) in accordance with:

(c) the Modification to the Approved Project Environmental Assessment - Moree Town Centre Bypass, Gwydir Highway Connection prepared by Sinclair Knight Mertz dated January 2009 (**Modification EA**); and

(d) the additional conditions in Schedule 3 (the **GHC Conditions**).

The proponent shall only be required to comply with the additional conditions in Schedule 3 (the **GHC Conditions**) if it elects to open Stage 1 of the Activity prior to completion of Stage 2 of the Activity.

Pre-Construction Compliance Report

7. The Proponent must submit a Pre-Construction Compliance Report to the Director General at least four weeks before Construction commences (or within any other time agreed to by the Director General).

The Pre-Construction Compliance Report must include:

(a) details of how the Conditions of Approval required to be addressed before Construction were complied with;

(b) the date of compliance with each condition, including dates of submission of any required reports and/or approval dates; and

(c) details of any approvals or licences required to be issued by Relevant Government Departments before Construction commences.

Pre-Operation Compliance Report

8. The Proponent must submit a Pre-Operation Compliance Report to the Director General at least four weeks before Operation commences (or within any other time agreed to by the Director General).

The Pre-Operation Compliance Report must include:

(a) details of how the Conditions of Approval required to be addressed before Operation were complied with;

(b) the date of compliance with each condition, including dates of submission of any required reports and/or approval dates; and

(c) details of any approvals or licences issued by Relevant Government Departments for the Activity's Operation.

Construction Compliance Reports

9. The Proponent must provide the Director General, Relevant Councils and any other government department nominated by the Director General with Construction Compliance Reports. The EMR must review the Construction Compliance Reports before they are submitted to the Director General and bring to the Director General's attention any shortcomings.

The first Construction Compliance Report must report on the first six months of construction and be submitted a maximum six weeks after expiry of that period and subsequent reports at intervals of a maximum six months thereafter (or at any other time interval agreed to by the Director General) for the duration of Construction.

The Construction Compliance Reports must include information on:

(a) compliance with the CEMP and the Conditions of Approval;

(b) compliance with any approvals or licences issued by Relevant Government Departments for the Construction phase of the Activity;

(c) the implementation and effectiveness of environmental controls. The assessment of effectiveness should be based on a comparison of actual impacts against performance criteria identified in the CEMP;

(d) environmental monitoring results, presented as a results summary and analysis;

(e) the number and details of any complaints, including a summary of main areas of complaint, action taken, response given and intended strategies to reduce complaints of a similar nature;

(f) details of any review and amendments to the CEMP resulting from Construction during the six months; and

(g) any other matter relating to compliance with the Conditions of Approval or as requested by the Director General.

The Construction Compliance Reports must also be made Publicly Available.

Environmental Impact Audits

Environmental Impact Audit Report - Construction

10. An Environmental Impact Audit Report - Construction must be prepared and submitted to the Director General a maximum three months after the Activity begins Operation. The Environmental Impact Audit Report - Construction must also be submitted to other government departments upon the request of the Director General.

The Environmental Impact Audit Report - Construction must:

(a) identify the major environmental controls. used during Construction and assess their effectiveness;

(b) summarise the main environmental management plans and processes implemented during Construction and assess their effectiveness;

(c) identify any innovations in Construction methodology used to improve environmental management; and

(d) discuss the lessons learnt during Construction, including recommendations for future projects.

Environmental Impact Audit Report - Operation

11. An Environmental Impact Audit Report - Operation must be submitted to the Director General a maximum 24 months after the Activity begins Operation and at any additional periods that the Director General may require. The Environmental Impact Audit Report - Operation must also be submitted to other government departments upon the request of the Director General.

The Environmental Impact Audit Report - Operation must:

(a) be certified by an independent person at the Proponent's expense. The certifier must be advised to the Director General before the Environmental Impact Audit Report - Operation is prepared;

(b) compare the Operation impact predictions made in the EIS, Representations Report and any supplementary studies with the actual impacts;

(c) assess the effectiveness of implemented mitigation measures and safeguards;

(d) assess compliance with the systems for operational maintenance and monitoring;

(e) discuss the results of ,consultation with the local community particularly any feedback or complaints; and

(f) be made Publicly Available.

ENVIRONMENTAL MANAGEMENT

Environmental Management Representative

12. The Proponent must request the Director General's Approval for the appointment of an Environmental Management Representative (EMR) at least three months before Construction commences (or within any other time agreed to by the Director General). In its request the Proponent must provide the following information, the:

(a) qualifications and experience of the EMR including demonstration of relevant Australian standards for environmental auditors;

(b) role and responsibility of the EMR;

(c) authority and independence (from the Proponent or its contractors) of the EMR including details of the Proponent's internal reporting structure; and

(d) resourcing of the EMR role.

The EMR must be available:

(i) for sufficient time to undertake the EMR role. This timing shall be agreed between the Proponent and the EMR and advised to the Department in the request for approval;

(ii) at any other time requested by the Department; and

(iii) during any Construction activities identified in the CEMP to require the EMR's attendance.

13. The Director General may at anytime immediately revoke the approval of an EMR appointment by providing written notice to the Proponent. Interim arrangements for EMR responsibility following the cancellation notice must be approved by the Director General.

14. The EMR is authorised to:

(a) consider and advise the Department and the Proponent on matters specified in these Conditions of Approval and compliance with such;

(b) determine whether work falls within the definition of Construction where clarification is requested by the Proponent;

(c) certify the CEMP;

(d) certify the OEMP (if required);

(e) review the Proponent's induction and training program for Construction personnel and monitor its implementation;

(f) periodically monitor the Proponent's activities to evaluate compliance with the CEMP. Periodic monitoring must involve site inspections of active work sites at least fortnightly;

(g) provide a written report to the Proponent of non-compliance with the CEMP. Non compliance must be managed as identified in the CEMP;

(h) direct the Proponent to stop work immediately if, in the view of the EMR, an unacceptable impact on the environment is occurring or is likely to occur. The stop work notice may be limited to specific activities causing an impact where the EMR can easily identify those activities. The EMR may also require that the Proponent initiate reasonable actions to avoid or minimise adverse impacts;

(i) review corrective and preventative actions to ensure the implementation of recommendations made from audits and site inspections;

(j) certify that minor revisions to the CEMP are consistent with the approved CEMP; and

(k) provide regular (as agreed with the Department) reports to the Department on matters relevant to carrying out the EMR role including notifying the Director General of any stop work notices.

The EMR must immediately advise the Proponent and the Director General of any incidents relevant to these Conditions resulting from the Construction or Operation of the Activity that were not dealt with expediently or adequately by the Proponent.

Construction Environmental Management Plan

15. A Construction Environmental Management Plan (CEMP) must be prepared and implemented in accordance with these Conditions of Approval and all relevant Acts and Regulations. The Proponent must obtain the Director General's Approval for the CEMP before Construction commences or within any other time agreed to by the Director General. The CEMP must be certified by the EMR to comply with the Conditions of Approval before the Proponent seeks the Director General's approval for the CEMP.

    The Proponent must ensure that the mitigation measures identified in the EIS, Representations Report and in these Conditions are incorporated into the CEMP.

    The CEMP must:

    (a) identify the Construction activities associated with the Activity including Construction sites and the staging and timing of proposed works;

    (b) cover any relevant environmental elements identified by the Proponent, or its contractor, from their environmental due diligence investigations;

    (c) contain the Construction Sub Plans required by the Conditions of Approval;

    (d) be prepared following consultation with Relevant Government Departments and Relevant Councils;

    (e) be Publicly Available;

    (f) include a community consultation and notification strategy (including local community, Relevant Government Departments, Relevant Councils), and complaint handling procedures;

    (g) include environmental management details such as:

        (i) identification of statutory obligations which the Proponent is required to fulfil during Construction, including all approvals and licences;

        (ii) an environmental management structure indicating the responsibility, authority and accountability for personnel relevant to the CEMP;

        (iii) the role of the EMR and activities requiring EMR attendance;

        (iv) details of the Construction personnel induction and training program;

        (v) emergency response procedures;

    (h) include implementation details such as:

        (i) identification of relevant environmental elements;

        (ii) measures to avoid and/or control environmental impacts;

        (iii) the tools to be used to implement the CEMP such as plans, schedules and work instructions;

(i) include monitoring and review details such as:

   (i) performance criteria;

   (ii) performance criteria monitoring methods for all environmental elements;

   (iii) auditing and corrective actions procedures;

   (iv) CEMP review procedures.

Operation Environmental Management Plan

16. An Operation Environmental Management Plan (OEMP) must be prepared and implemented in accordance with these Conditions and all relevant Acts and Regulations. The Proponent must submit the OEMP to the Director General before Operation commences or within any other time agreed to by the Director General. The OEMP must be certified by the EMR to comply with the Conditions of Approval.

    The OEMP must:

    (a) identify the Operation activities;

    (b) include the Operation Sub Plans required under these Conditions of Approval;

    (c) be prepared in consultation with Relevant Government Departments and Relevant Councils;

    (d) cover any relevant environmental elements identified by the Proponent either from its environmental due diligence investigations or 'required to satisfy any other licence or approval;

    (e) be made Publicly Available;

    (f) include environmental management details such as:

       (i) identification of statutory obligations which the Proponent is required to fulfil during the Activity's Operation, including all approvals and licences;

       (ii) an environmental management structure indicating the responsibility, authority and accountability for personnel relevant to the OEMP;

       (iii) details of a personnel induction and training program;

       (iv) emergency response procedures;

    (g) include implementation details such as:

       (i) identification of relevant environmental elements;

       (ii) measures to avoid and/or control environmental impacts;

       (iii) the tools to be used to implement the OEMP such as plans, schedules and work instructions;

(h) include monitoring and review details such as:

   (i) performance criteria;

   (ii) performance criteria monitoring methods for all environmental elements;

   (iii) auditing and corrective actions procedures;

   (iv) OEMP review procedures.

If the Proponent has an Operation Environmental Management Plan (or similar system) for its other activities which is applicable to this Activity then that system may be proposed as the OEMP. Details of the existing system must be provided to the Director General demonstrating its application to this Activity.

COMMUNICATION AND CONSULTATION

Advice of Construction Activities

17. Before Construction commences, and then at maximum three monthly intervals, the Proponent must advertise in relevant newspapers the: nature of the works proposed for the next three months; areas in which these works are proposed; Construction hours; and a contact telephone number.

    The Proponent must ensure that the local community and businesses are advised of Construction activities that could cause disruption. Methods to disseminate this information must be identified in the CEMP. Information to be provided must include:

    (a) details of any traffic disruptions and controls;

    (b) construction of temporary detours; and

    (c) work approved to be undertaken outside the normal Construction hours, in particular noisy works, before such works are undertaken.

18. The Proponent must establish an Activity internet site before construction commences and maintain the internet site until 12 months after opening the Activity. This internet site must contain:

    (a) periodic updates of work progress, consultation activities and planned work schedules. The site must indicate the date of the last update and the frequency of the Internet site updates;

    (b) a description of relevant approval authorities and their areas of responsibility;

    (c) a list of reports and plans that are publicly available under this Approval and details of how these can be accessed;

    (d) meeting notes of community liaison group meetings;

    (e) contact names and phone numbers of the Activity communications staff; and

    (f) the 24 hour toll-free complaints contact telephone number.

Updates of work progress, construction activities and planned work schedules must be provided where significant changes in noise or traffic impacts are expected.

Community Liaison Group

19. A Community Liaison Group (CLG) must be formed and hold its first meeting before Construction commences. The CLG must include the EMR and representatives from the Proponent and its contractor. Community representatives should be identified and selected from relevant community and business groups, individual members of the community adjoining the Activity and representatives from Relevant Councils. The Director General must be advised of the CLG membership following its formation.

The Proponent must, at its own expense:

(a) nominate a chairperson for the CLG. The chairperson must be independent of the Proponent;

(b) nominate two (2) representatives to attend all CLG meetings;

(c) provide to the CLG regular information on the progress of work and monitoring results;

(d) promptly provide to the CLG such other information as the Chair of the CLG may reasonably request concerning the environmental performance of the Activity;

(e) provide access for site inspections by the CLG;

(f) provide meeting facilities for the CLG, and take meeting notes of CLG meetings. These meeting notes, once endorsed by the Chair, must be available to CLG members within 14 days of the meeting;

(g) where reasonably required by the Chair, arrange consultant(s) to explain technical information to the CLG; and

(h) where reasonably required by the Chair, invite representatives from relevant Government departments or other individuals to attend CLG meetings.

Issues for discussion may include, but not be limited to detailed design, the CEMP, Construction activities and any other issue considered relevant by the CLG.

The CLG may make comments and recommendations about the design and implementation of the Activity, which must be considered by the Proponent. The Proponent must report back to the CLG on its considerations. In the event of any dispute between the CLG and the Proponent, the Proponent's decision is final provided it is consistent with these Conditions of Approval.

20. The Proponent must consult all Affected Landowners regarding the implementation of mitigation measures identified in the EIS or Representations Report (as relevant) and the CEMP. Mitigation measures should be implemented according to a program discussed with the Affected Landowner and the Proponent if consistent with the Conditions of Approval.

Complaints Management System

21. The Proponent must implement a Complaints Management System before Construction commences. The System must include:

    (a) the name and contact details of the person(s) responsible for implementing and maintaining the Complaints Management System;

    (b) adequate resources including people, communication facilities, transport etc.;

    (c) a 24 hour, toll free telephone number listed with a telephone company and advertised. This telephone number must enable any member of the public to reach a person who can arrange a response to their complaint;

    (d) a system to receive, record, track and respond to complaints within the specified timeframe. When a complaint cannot be responded to immediately, a follow-up verbal response on what action is proposed must be provided to the complainant within two hours during night-time works and 24 hours at other times;

    (e) a process for the provision of a written response to the complainant within 10 days, if the complaint cannot be resolved by the initial or follow-up verbal response; and

    (f) a mediation system for complaints unable to be resolved. Where external or independent mediation is required the mediator must be approved by the Director General.

    Information on all complaints received, including the means by which they were addressed and whether resolution was reached with or without mediation, must be included in the Construction Compliance Reports and must be made available to the Director General on request.

FLORA AND FAUNA

Construction

22. A Flora and Fauna Management Sub Plan must be prepared as part of the CEMP. The Sub Plan must be prepared in consultation with DEC and Relevant Councils and include:

    (a) methods to reduce and manage impacts on flora and fauna species (terrestrial and aquatic) and their habitat which may be directly or indirectly affected by the Activity;

    (b) performance goals against which to measure the success of the methods;

    (c) ecological details including:

        (i) any necessary licences required from DEC;

        (ii) plans showing: vegetation communities highlighting important fauna habitat areas and threatened species locations; areas to be cleared; and a clearing program. The plan must cover the Approved Activity Area and extend to vegetation in adjoining areas where this is both contiguous with the Construction footprint and contains important fauna habitat areas and/or threatened species;

(iii) procedures for vegetation clearing and soil management during Construction;

(iv) strategies for minimising vegetation clearance within the Approved Activity Area and protection of vegetated areas outside that area;

(v) methods to ensure topsoils, and where relevant subsoils, are stripped, stored and placed back in their original sequence;

(vi) a habitat tree management program including fauna recovery procedures, potential for relocation of hollow bearing trees, compensatory management measures (such as replacement of lost hollows with nesting boxes);

(vii) where possible, strategies for re-using in rehabilitation works individuals or populations of any threatened plant species that would be otherwise be destroyed by the Activity;

(d) a Weed Management Plan including:

(i) weed identification;

(ii) weed eradication methods and protocols for the use of herbicides;

(iii) methods to treat and re-use weed infested topsoil;

(iv) strategies to control seed invasion (such as vehicle wash down);

(e) a program for reporting on the effectiveness of terrestrial and aquatic flora and fauna management measures against performance goals. Management methods must be reviewed where found to be ineffective.

23. Cleared vegetation must not be bulldozed into adjacent bushland.

24. The Proponent must ensure that vegetation disturbance below the bridge deck, between the piers, is consistent with Figure 9.7 of the EIS.

25. If during the course of Construction, the Proponent becomes aware of the presence of threatened species not identified and assessed in the EIS or Representations Report and which are likely to be affected, the Proponent must:

(a) immediately cease all work likely to affect the threatened species;

(b) inform the Director General of the DEC and/or Director of NSW Fisheries as relevant; and

(c) not recommence work likely to affect the threatened species until receiving advice from the DEC and/or NSW Fisheries to do so.

NOISE AND VIBRATION

Construction Noise and Vibration Management Sub Plan

26. A Construction Noise and Vibration Management Sub Plan must be prepared as part of the CEMP. The Sub Plan must be prepared in consultation with the Relevant Councils and the CLG and include:

   (a) education of Construction personnel about noise minimisation.

   (b) identification of each Construction site and Ancillary Facility;

   (c) identification of the specific activities that will be carried out and associated noise sources for each Construction site and Ancillary Facility;

   (d) identification of all potentially affected Sensitive Receivers;

   (e) the Construction noise objective specified in the Conditions of Approval;

   (f) the Construction vibration criteria specified in the Conditions of Approval;

   (g) determination of appropriate noise and vibration objectives for each identified Sensitive Receiver;

   (h) noise and vibration monitoring, reporting and response procedures;

   (i) assessment of potential noise and vibration from the proposed Construction methods including noise from Construction vehicles and any traffic diversions;

   (j) analysis of reasonable and feasible noise mitigation measures such as;

      (i) maximising the offset distance between noisy plant items and Sensitive Receivers;

      (ii) Construction timetabling, in particular for works outside standard hours, to minimise noise impacts. This may include time and duration restrictions and respite periods;

      (iii) avoiding using noisy plant simultaneously and/or close together, adjacent to Sensitive Receivers;

      (iv) orienting equipment away from Sensitive Receivers; •

      (v) carrying out loading and unloading away from Sensitive Receivers;

      (vi) use of dampened tips on rock breakers;

      (vii) use of portable enclosures around mobile and fixed plant where noise impacts are likely to exceed noise objectives;

      (viii) using noise source controls, such as the use of residential class mufflers, to reduce noise from all plant and equipment including bulldozers, cranes, graders, excavators and trucks;

      (ix) selection of plant and equipment based on noise emission levels;

(x) use of alternative Construction methods;

(xi) alternative arrangements with Affected Landowners (or residents of such properties) such as temporary relocation;

(xii) selecting site access points and roads as far as possible away from Sensitive Receivers; and

(xiii) use of alternatives to reversing alarms such as spotters, closed circuit television monitors and 'smart' reversing alarms;

(k) a description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise and vibration during Construction;

(l) justification for any activities outside the Construction hours specified in the Conditions of Approval. This includes identifying areas where Construction noise would not be audible at any Sensitive Receiver;

(m) procedures for notifying residents of Construction activities that are likely to affect their noise and vibration amenity; and

contingency plans to be implemented in the event of non-compliances and/or noise complaints.

Construction Hours

27. Construction must be restricted to between the hours of 7:00 am to 6:00 pm (Monday to Friday), 8:00 am to 1:00 pm (Saturday) and at no time on Sundays and public holidays.

Works may be undertaken outside these hours where:

(a) the delivery of materials is required outside these hours by the Police or other authorities for safety reasons;

(b) it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or

(c) the work is identified in the Construction Noise and Vibration Management Sub Plan and approved as part of the CEMP.

Local residents should be informed of the timing and duration of work approved under item (c) at least 48 hours before that work commences.

Construction Noise Objective

28. The Construction noise objective for the Activity is to manage noise from Construction activities (as measured by a $L_{A10\ (15minute)}$ descriptor) so it does not exceed the background L_{A90} noise level by more than 10 dB(A).

Background noise levels are those identified in the EIS or Representations Report or otherwise identified in the Construction Noise and Vibration Management Sub Plan.

Any activities that have the potential for noise emissions that exceed the objective must be identified and managed in accordance with the Construction

Noise and Vibration Management Sub Plan. The Proponent must implement all Reasonable and Feasible noise mitigation and management measures with the aim of achieving the Construction noise objective.

If the noise from a Construction activity is substantially tonal or impulsive in nature (as described in Chapter 4 of the *NSW Industrial Noise Policy)*, 5dB(A) must be added to the measured Construction noise level when comparing the measured noise with the Construction noise objective.

Construction Noise Management

29. The Proponent must ensure that public address systems used at any Construction site are not used outside the Construction hours detailed in the Conditions of Approval unless otherwise approved through the Construction Noise and Vibration 'Management Sub Plan. Public address systems must be designed to minimise noise spillage off-site (for example by using directional speakers, volume control with background noise adjustments, locating and pointing speakers away from Sensitive Receivers etc.).

30. The Proponent must schedule rock breaking, rock hammering, sheet piling, pile driving and any similar activity only between the following hours unless otherwise approved in the Construction Noise and Vibration Management Sub Plan:

    (a) 9 am to 12 pm and 2 pm to 5 pm, Monday to Friday; and

    (b) 9 am to 12 pm, Saturday.

31. The Proponent must ensure that wherever reasonable and feasible, and where Sensitive Receivers may be affected, piling activities are completed using bored piles. If driven piles are required they must only be installed where approved in the Construction Noise and Vibration Management Sub Plan.

32. The Proponent must consult with Affected Landowners and, where feasible, erect Operation noise mitigation measures at the start of Construction (or at other times during Construction) to minimise Construction noise impacts.

33. The Proponent must consult with education institutions and minimise the impact of noise generating Construction works in their vicinity. The Proponent must ensure that Construction works audible at an institution are not timetabled during important events, such as major examination periods, unless arrangements acceptable to the affected institutions are made at no cost to the affected institutions.

Vibration Criteria

34. Vibration caused by Construction and received at any residence or Structure outside the Approved Activity Area boundaries must:

    (a) for structural damage vibration be limited to German Standard DIN 4150 Part 3 *Structural Vibration in Buildings*. *Effects on Structures*; and

    (b) for human exposure to vibration be limited to the evaluation criteria presented in British Standard BS 6472- *Guide to Evaluate Human Exposure to Vibration in Buildings* (1Hz to 80 Hz) for low probability of adverse comment.

These limits apply unless otherwise approved in the Construction Noise and Vibration Management Sub Plan.

Operation Noise Management

Operational Noise Criteria

35. Operational traffic noise must aim to achieve the operational noise criteria below, unless otherwise agreed to by the Director General through the Operational Noise Management Report:

(a) for new freeway or arterial road sections as defined in Section 6.4 of the EIS:

(i) $L_{Aeq15\ hour}$ 55 dB(A) (7:00 am to 10:00 pm);

(ii) $L_{Aeq9\ hour}$ 50 dB(A) (10:00 pm to 7:00 am);

(b) for redevelopment of an existing freeway or arterial road as defined in Section 6.4 of the EIS:

(i) $L_{Aeq15\ hour}$ 60 dB(A) (7:00 am to 10:00 pm); and

(ii) $L_{Aeq9\ hour}$ 55 dB(A) (10:00 pm to 7:00 am).

Operational Noise Management Report

36. The Proponent must prepare an *Operational Noise Management Report* detailing its investigation of Reasonable and Feasible Operation noise mitigation methods. The Proponent must obtain the approval of the Director General for the Report before Construction commences or within any other time agreed to by the Director General. The report and investigation must be conducted in accordance with the NSW Government's *Environmental Criteria for Road Traffic Noise* and the RTA's *Environmental Noise Management Manual*. The report must include:

(a) Identification of operational noise criteria in accordance with the Conditions of Approval;

(b) predictions of noise levels at all Sensitive Receivers;

(c) details of specific physical and managerial measures that could be used to control Operation noise from the Activity;

(d) details of Reasonable and Feasible noise mitigation measures. To assist in selecting noise mitigation options for road traffic noise an analysis for the entire Activity must be undertaken in accordance with Practice Note IV of the RTA *Environmental Noise Management Manual*. The importance applied to aesthetic impacts (visual, shadowing etc.) and noise mitigation along the Activity must be determined in consultation with the CLG and owners of directly affected land;

(e) the urban design issues relating to noise control measures;

(f) identification of which noise mitigation measures will be implemented, including their location, type and when they are to be implemented; and

(g) details of noise monitoring, reporting and complaint response procedures.

Operational Noise Monitoring

37. Monitoring of Operational noise must be undertaken in accordance with Practice Note VIII of the RTA's *Environmental Noise Management Manual*. The Proponent must assess the adequacy of the implemented traffic noise mitigation measures between six months and one year after opening the Activity. Should the assessment indicate traffic noise levels exceeding those predicted in the Operation Noise Management Report, the Proponent must:

    (a) immediately advise the Director General; and

    (b) investigate and implement further Reasonable and Feasible mitigation measures in accordance with the NSW Government's *Environmental Criteria for Road Traffic Noise* and RTA's *Environmental Noise Management Manual*. The selection of these measures must be undertaken in consultation with Affected Landowners and/or occupiers and be consistent with the Operation Noise Management Report.

PHYSICAL ISSUES

Soil and Water Management

Soil and Water Quality Management Sub Plan

38. A Soil and Water Management Sub Plan must be prepared as part of the CEMP. The Sub Plan must be prepared in consultation with Relevant Government Departments and Relevant Councils. The Sub Plan must:

    (a) where relevant, be consistent with the Department of Housing's guideline *Managing Urban Stormwater - Soils and Construction*, the RTA's *Guidelines for the Control of Erosion and Sedimentation in Roadworks* and the DIPNR *Constructed Wetlands Manual*;

    (b) identify the Construction activities that could cause soil erosion or discharge sediment or water pollutants from the site;

    (c) describe management methods to minimise soil erosion or discharge of sediment or water pollutants from the site including a strategy to minimise the area of bare surfaces during Construction (such as progressive site rehabilitation and protecting slopes with geotextile fabric), including strategies to address the properties of the 'Moree black soils';

    (d) describe the location and capacity of erosion and sediment control measures;

    (e) identify the timing and conditions under which Construction stage controls will be decommissioned;

    (f) include contingency plans to be implemented for events such as fuel spills; and

    (g) identify how the effectiveness of the sediment and erosion control system will be monitored, reviewed and updated.

Construction

39. An appropriately qualified soil scientist must be consulted according to a schedule identified in the Soil and Water Management Sub Plan to:

    (a) undertake inspections of temporary and permanent erosion and sedimentation control devices;

    (b) ensure that the most appropriate controls are being implemented;

    (c) check that controls are being maintained in an efficient condition; and

    (d) check that controls meet the requirements of any relevant approval/licence condition(s).

    The results of these inspections and any follow-up actions must be reported in the Construction Compliance Reports required by the Conditions of Approval.

40. The Proponent must provide appropriate detention systems for containment of spills and materials consistent with the RTA's *Code of Practice for Water Management - Road Development and Management*.

Operation

41. All Operation stage controls for stormwater drainage and water pollution must be located, designed, constructed, operated and maintained to meet the requirements of Relevant Government Departments and Relevant Councils. All controls, including wetland filters, grass filter strips and gross pollutant traps must be inspected regularly and maintained in a functional condition for the life of the Activity.

Bridge and Culvert Design

42. The Proponent must consult with DIPNR, DEC and NSW Fisheries regarding the design and construction of bridges and culverts. In undertaking bridge design and construction, the Proponent must:

    (a) investigate designing bridge structures suitable for fauna use in consultation with the DEC;

    (b) not construct earth or rock fill platforms for driving piles unless otherwise agreed by NSW Fisheries;

    (c) not include street lighting that may disturb fauna movements of nocturnal species along the Mehi River;

    (d) ensure that no temporary or permanent barriers to fish passage are erected across the Mehi River;

    (e) locate bridge abutments located away from the edge of a river unless otherwise agreed by NSW Fisheries;

    (f) ensure that there is no drop or 'waterfall' effect at the discharge from a structure;

(g) set the base of culverts into (rather than on) the floodplain so that natural sediments can cover the bottom, providing a less alien habitat for fish passage; and

(h) provide a low flow channel' in the main flow cell of a box culvert to facilitate fish passage during periods of low flow in important (as defined by NSW Fisheries Guidelines) fish streams.

Flooding

43. The Proponent must endeavour to resolve amicably any dispute between itself and any landowner about alterations to flooding characteristics caused by the Activity. If the parties cannot reach a mutually satisfactory resolution then the dispute resolution requirements of the Conditions of Approval (the complaints management system) shall apply.

Spoil and Fill Management

44. A Spoil and Fill Management Sub Plan must be prepared as part of the CEMP. The Sub Plan must include:

(a) details of the movement of site generated spoil and fill within the Activity;

(b) the source of imported fill material and where it will be stockpiled and used; and

(c) methods to re-use or dispose excess or unsuitable spoil material including volumes and disposal sites.

45. All material excavated from the Construction must be re-used or recycled unless otherwise approved in the Spoil and Fill Management Sub Plan. The Proponent must ensure that the re-use of material generated from Construction is maximised in preference to importing fill.

Air Quality

46. A Dust Management Sub Plan must be prepared as part of the CEMP. The Sub Plan must identify:

(a) potential sources of dust;

(b) dust management objectives consistent with EPA guidelines;

(c) a monitoring program to assess compliance with the identified objectives;

(d) mitigation measures to be implemented, including measures during weather conditions where high level dust episodes are probable (such as strong winds on hot, sunny days); and

(e) a progressive revegetation strategy for exposed surfaces with the aim of minimising exposed surfaces.

47. Construction vehicles using public roads must be maintained to prevent any loss of load, whether dust, liquid or soils. Facilities must be provided at exit points of all Construction sites/compounds to minimise tracking mud, dirt or other material onto a public road or footpath.- In the event of any spillage, the Proponent must remove the spilled material as soon as practicable within the working day of the spillage.

48. The Proponent must ensure that all Construction plant and equipment are:

(a) maintained in a proper and efficient condition; and

(b) operated in a proper and efficient manner.

Greenhouse Gases and Sustainable Energy

49. The Proponent must promote the reduction of greenhouse gases during Construction by adopting energy efficient work practices including:

(a) developing and implementing procedures to minimise energy use;

(b) conducting awareness programs as part of induction for all site personnel regarding energy conservation methods; and

(c) conducting regular energy audits during the Activity to identify and address energy waste.

50. The Proponent must use electrical energy derived from a renewable energy source accredited by SEDA for the supply of at least 50% of the electrical energy requirements for the Activity's Construction. Power consumption (green power or other) must be reported in the Construction Compliance Reports.

SOCIAL AND ECONOMIC ISSUES

Property Damage and Access

51. Subject to landowner agreement, building condition surveys must be conducted on all Structures within:

(a) 200 metres of blasting;

(b) 30 metres of the Activity; or

(c) any other locations identified by the EMR.

Building condition surveys must be undertaken at least 30 days before Construction occurs within the distance limits described in this condition.

The owners of all properties on which building condition surveys are to be conducted must be advised at least 14 days before the survey of its scope and methodology and of the process for making a property damage claim. A copy of the survey must be given to each affected owner at least three weeks before Construction that could affect the property commences. A register of all properties surveyed must be maintained by the Proponent indicating whether the owner accepted or refused the offer. A copy of the register must be provided to the Director General upon request.

52. Building condition surveys need not be undertaken if a risk assessment indicates structures will not be affected. The risk assessment must be undertaken before Construction commences by geotechnical and construction engineering experts with appropriate registration on the National Professional Engineers Register.

53. Any property damage caused directly or indirectly by the Activity's construction (including vibration and groundwater changes) must be rectified at no cost to the owner(s).

54. Where a licensed bore, dam or other property water supply is adversely affected by the Activity the Proponent must reinstate a water supply of equivalent quality and quantity. Alternatively the Proponent may negotiate compensation for the loss with the landowner.

55. The Proponent must ensure that access to properties is maintained throughout Construction. The Proponent must ensure that any legal property access affected by the Activity is reinstated to an equivalent standard or that alternative arrangements are negotiated with the relevant landowner(s).

Traffic

56. Road dilapidation reports must be prepared for all roads likely to be used by Construction traffic before Construction commences and after Construction is complete. Copies of the reports must be provided to the Relevant Councils. Any damage resulting from Construction, except that resulting from normal wear and tear, must be repaired at the Proponent's cost.

    Nothing in this Condition shall be taken as restricting the Proponent from negotiating an alternative arrangement for road damage with the Relevant Councils.

57. The Proponent must undertake full classified traffic counts in the Moree Town Centre (at the locations described in Attachment 1) and on Alice Street (west of the rail line) before the opening of the Activity to traffic; and then six months and twelve months from opening the Activity to traffic. Monitoring must be undertaken for a minimum of one week outside of school holidays, cotton and wheat harvests. The results of monitoring must be compared to levels predicted in Attachment 1. The results must be forwarded to the Department within one month of each monitoring period and be made publicly available.

58. Should the monitoring required as part of Condition 57 indicate actual articulated heavy vehicle traffic levels within the town centre are above those shown in Attachment 1, the Proponent must develop and implement measures, in consultation with Moree Plains Shire Council, that aim to achieve the predicted outcomes to the satisfaction of the Director General.

59. During detailed design of the Gwydir Highway/Bypass/railway crossing intersection, the Proponent must consider and document consideration of the recommendations of the Australian Transport Safety Bureau Investigation report into the Salisbury Interchange Level Crossing Accident (Report No. 2002/002). A copy of the document must be submitted to the Director General.

60. A Construction Traffic Management Sub Plan must be prepared as part of the CEMP. The Sub Plan must be prepared in consultation with the Relevant Councils and include:

    (a) identification of all public roads to be used by Construction traffic, in particular roads proposed to transport large quantities of Construction materials. The timing and duration of road usage must be stated; •

    (b) management methods to ensure Construction traffic uses identified roads;

    (c) identification of all public roads that may be partially or completely closed during Construction and the timing and duration of these closures.

Consideration must be given to programming Construction works to minimise road closures during peak hours and/or holiday periods;

(d) impacts on existing traffic (including pedestrians, vehicles, cyclists and disabled persons);

(e) temporary traffic arrangements including property access;

(f) access to Construction sites including entry and exit locations and measures to prevent vehicles queuing on public roads;

(g) a response plan for any Construction traffic incident; and

(h) monitoring, review and amendment mechanisms.

61. All sections of State Highway transferred to a Relevant Council must:

(a) be provided to a standard negotiated with the Relevant Council; and

(b) have a negotiated arrangement covering maintenance costs.

Urban Design and Landscaping

Pre-Construction Report

62. The Proponent must prepare an *Urban Design and Landscape Report* in consultation with Relevant Councils and the CLG before Construction commences. The Report must present an integrated urban design for the Activity, applying design principles established in the EIS and Representations Report. The Proponent must obtain the approval of the Director General for the Report before Construction commences or within any other time agreed to by the Director General. The Report must:

(a) identify the location and type of existing vegetation and proposed landscaped areas;

(b) describe built elements including retaining walls, bridges and noise walls;

(c) describe pedestrian and cyclist elements including footpath location, paving types and pedestrian crossings;

(d) describe fixtures such as seating, lighting, fencing and signs;

(e) be consistent with the Moree Township Street Tree Planting Sketch Plan and any other relevant Council policies or plans. The Proponent must justify in the report any inconsistency with relevant plans or policies in consultation with Relevant Councils;

(f) describe signage and gateway treatments at the new Frome Street/Gosport Street intersection and the intersection of the Activity with the Old Newell Highway (Boggabilla Road);

(g) include graphics for key elements such as sections, sketches, perspective views etc.;

(h) be integrated with and include:

(i) a Heritage Precinct Strategy (Condition 63);

(ii) an Indigenous Heritage Strategy (Condition 64);

(iii) a Pedestrian Access Strategy (Condition 65);

(iv) a Revegetation Strategy (Condition 66); and

(v) a Local Streets Strategy (Condition 67).

Heritage Precinct Strategy

63. The Proponent must prepare a **Heritage Precinct Strategy** as part of the *Urban Design and Landscape Report*. The Strategy must define the boundaries of the Heritage Precinct and identify:

(a) landscaping and urban design elements;

(b) signage and/or interpretive information; and

(c) integration with pedestrian routes.

Indigenous Heritage Strategy

64. The Proponent must prepare an **Indigenous Heritage Strategy** in consultation with Local Aboriginal Groups as part of the *Urban Design and Landscape Report*. The Strategy must identify:

(a) the proposed landscaping elements for the Steel Camp area;

(b) signage and/or interpretive information;

(c) an implementation strategy detailing funding for maintenance and ongoing consultation with Relevant Councils and Relevant Aboriginal Groups.

Pedestrian Access Strategy

65. The Proponent must prepare a **Pedestrian Access Strategy** as part of the *Urban Design and Landscape Report*. The Strategy must identify and describe:

(a) key origins and destinations;

(b) the formal and informal pedestrian routes in the vicinity of the Activity and use of these routes;

(c) the pedestrian facilities to be provided as part of the Activity and how they relate to key origin and destinations; and

(d) pedestrian safety and crime prevention measures.

Revegetation Strategy

66. The Proponent must prepare a **Revegetation Strategy** as part of the Urban Design and Landscape Report. The Strategy must be prepared by a suitably qualified ecologist or experienced bush regenerator and include:

(a) principles for revegetation and restoration of riparian vegetation and Carbeen Open Forest;

(b) identification of the locally native species to be used in rehabilitation and landscaping works, including flora species suitable as a food resource for threatened fauna species;

(c) the source of all seed or tubestock to be used in revegetation works including the identification of seed sources within the Approved Activity Area. Seed of locally native species within the Approved Activity Area should be collected before Construction commences to provide seed stock for revegetation;

(d) methods to re-use topsoil and cleared vegetation; and

(e) a program for the active management and maintenance of all preserved, planted and rehabilitated vegetation (including aquatic vegetation) including watering regimes, fencing, replacement of vegetation that may have died and weed management.

Local Streets Strategy

67. The Proponent must prepare a **Local Streets Strategy** as part of the *Urban Design and Landscape Report*. The Strategy must:

(a) investigate landscaping and urban design elements consistent with the existing street beautification program on Frome Street and Balo Street to be implemented prior to being transferred to a Relevant Council;

(b) describe landscaping elements required on local streets that intersect with the Activity between the Southern Interchange and the Northern Interchange to ensure the Activity is integrated with landscaping and urban design being undertaken by Relevant Councils.

Operation

68. Landscape or rehabilitation works which, following Construction, are not the responsibility of the Proponent must be monitored and maintained by a landscape specialist at the Proponent's expense for a period of three years following completion of any landscaping stage or as otherwise identified in the *Urban Design and Landscape Report*. The Proponent must implement any required remedial measures to maintain landscaping works to the design standard established in the *Urban Design and Landscape Report*.

69. Any landscaping within the road reserve must be maintained by the Proponent to its design standard for the life of the Activity.

Heritage (Construction)

70. An Indigenous Heritage Management Sub Plan must be prepared as part of the CEMP. The Sub Plan must be prepared in consultation with all Relevant Aboriginal Groups and the DEC and include:

(a) details of any archaeological investigations to be undertaken and any associated licences or approvals required;

(b) an education program for all personnel on their obligations for Aboriginal cultural materials; and

(c) procedures to be implemented if previously unidentified Aboriginal objects are discovered during Construction.

71. A Heritage Management Sub Plan must be prepared as part of the CEMP. The Sub Plan must be prepared in consultation with the Heritage Office and Relevant Councils and include:

(a) description of heritage items in the vicinity of the Activity;

(b) details of any licences or approvals required;

(c) details of management measures to be implemented to prevent Construction impacts on heritage items and sites including the Moree Spa Baths and Victoria Hotel;

(d) procedures to be implemented if previously unidentified historical relics are discovered during Construction; and

(e) an education program for all personnel on their obligations for historic relics.

Business and Tourism

72. No commercial advertising must be allowed within the road reserve during Construction or Operation.

MISCELLANEOUS REQUIREMENTS

Hazards and Risk Management

73. As part of the Construction and Operational EMPs, the Proponent must prepare and implement Hazards and Risk Management Sub Plan(s). These Sub Plans must include:

(a) details of the hazards and risks associated with the Activity; and

(b) pro-active and reactive mitigation measures including contingency plans to be implemented in the event an identified hazard occurs.

Contaminated Land

74. A Contamination Investigation Report must be prepared in consultation with the DEC and Relevant Councils to determine the nature, extent and degree of any contamination within the Approved Activity Area. The Report must:

(a) be prepared in accordance with the EPA Guideline *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes*; and

(b) include a contingency plan to be implemented in the case of the unanticipated discovery of contaminated material during Construction.

Waste Management and Recycling

75. As part of the Construction and Operational EMPs the Proponent must prepare Waste Management and Reuse Sub Plan(s). The Sub Plans must address the management of wastes during the Construction and Operation stages respectively in accordance with the NSW Government's Waste Reduction and Purchasing Policy. The Sub Plan(s) must identify requirements for:

(a) the application of the waste minimisation hierarchy principles of avoid-reduce-reuse-recycle-dispose;

(b) waste handling and storage;

(c) disposal of wastes. Specific details must be provided for cleared vegetation, contaminated materials, glass, metals and plastics, hydrocarbons (lubricants and fuels) and sanitary wastes;

(d) any waste material that is unable to be re-used, re-processed or recycled must be disposed at a facility licensed by the DEC to receive that type of waste; and

(e) implementation of energy conservation best practice.

Utilities and Services

76. Alterations to utilities and services must be determined by negotiation between the Proponent and the service providers. The Proponent in consultation with service providers must ensure that disruption to services resulting from the Activity are minimised and advised to customers.

Location of Ancillary Facilities

77. The sites for Ancillary Facilities, such as construction compounds and temporary concrete batching plants, must satisfy the following criteria unless otherwise identified in the CEMP:

(a) be located within the Approved Activity Area;

(b) have ready access to the road network;

(c) be located to minimise the need for heavy vehicles to travel through residential areas;

(d) be sited on relatively level land;

(e) be separated from nearest residences by at least 200 m (or at least 250 m for a temporary concrete batching plant);

(f) not be located within 100 m of a river;

(g) be located above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented;

(h) have low conservation significance for flora, fauna or heritage and must not require vegetation clearing beyond that already required for the Activity; and

(i) not affect the land use of adjacent properties.

The location of the Ancillary Facilities must be identified in the CEMP and must include an analysis against the above criteria.

SCHEDULE 3: GWYDIR HIGHWAY CONNECTION - CONDITIONS OF APPROVAL

Note: refer to Schedule 2 condition no. 6

ADMINISTRATIVE CONDITIONS

1. The Abbreviations and Definitions in Schedule 2 apply to these GHC Conditions in Schedule 3.

The GHC

2. The GHC must be carried out consistent with:

   (a) the procedures, safeguards and mitigation measures identified in the Modification EA; and

   (b) these conditions.

   These conditions prevail in the event of any inconsistency with the requirements for the construction and operation of the Activity arising out of the documents described in (a) above.

3. These Conditions of Approval do not relieve the Proponent of the obligation to obtain all other approvals and licences required under any other Act. The Proponent must comply with the terms and conditions of such approvals and licences.

Compliance

General

4. The Proponent must notify in writing the Director General, relevant government departments and relevant local councils of the start of the construction and operation of the GHC. Such notification must be provided at least four weeks before the relevant start date unless otherwise agreed to by the Director General.

5. It is the responsibility of the Proponent to ensure compliance with all of the conditions in this Schedule 3 and to implement any measures arising from the conditions in this Schedule 3.

6. The Proponent must comply with any requirements of the Director General arising from the Department's assessment of:

   (a) any reports, plans or correspondence that are submitted to satisfy these conditions; and

   (b) the implementation of any actions or measures contained in such reports, plans or correspondence.

Addendum to the Pre-Construction Compliance Report

7. The Proponent must submit an Addendum to the Pre-Construction Compliance Report (required in Condition 9 of the conditions in Schedule 2) to the Director General at least four weeks before construction of the GHC commences (or within any other time agreed to by the Director General).

The Addendum to the Pre-Construction Compliance Report must include:

(a) details of how the GHC conditions required to be addressed before construction of the GHC were complied with;

(b) the date of compliance with each condition, including dates of submission of any required reports and/or approval dates; and

(c) details of any approvals or licences required to be issued by relevant government departments before construction of the GHC commences.

Construction Compliance Reports

8. The Proponent must provide the Director General, relevant local councils and any other government department nominated by the Director General with a Construction Compliance Report on completion of the construction of the GHC. The Environmental Management Representative (EMR) must review the Construction Compliance Report before it is submitted to the Director General and bring to the Director General's attention any shortcomings.

The Construction Compliance Report for the GHC should address as relevant those of the matters listed in Condition 9 in Schedule 2 as are relevant to the GHC.

ENVIRONMENTAL MANAGEMENT

Environmental Management Representative

9. The EMR appointed to for the purposes of the conditions in Schedule 2 is to also be the EMR and have the same roles and obligations for the purposes of the GHC in this Schedule 3.

Construction Environmental Management Plan

10. A Construction Environmental Management Plan for the GHC (the **GHC CEMP**) must be prepared and implemented in accordance with these GHC conditions and all relevant Acts and Regulations. The Proponent must obtain the Director General's Approval for the GHC CEMP before construction commences or within any other time agreed to by the Director General. The GHC CEMP must be certified by the EMR to comply with these GHC conditions before the Proponent seeks the Director General's approval.

The Proponent must ensure that the mitigation measures identified in the Modification EA and in these GHC conditions are incorporated into the GHC CEMP.

The GHC CEMP should address those of the matters identified in Condition 15 in Schedule 2 as are relevant to the GHC.

COMMUNICATION AND CONSULTATION

Advice of Construction Activities

11. At least 2 weeks before construction of the GHC commences, the Proponent must advertise in relevant newspapers the: nature of the works proposed; areas in which these works are proposed; construction hours; and a contact telephone number.

    The Proponent must ensure that the local community and businesses are advised of construction activities that could cause disruption. Methods to disseminate this information must be identified in the GHC CEMP. Information to be provided must include:

    (a) details of any traffic disruptions and controls;

    (b) construction of temporary detours; and

    (c) work approved to be undertaken outside the normal construction hours, in particular noisy works, before such works are undertaken.

12. The internet site required by Condition 18 in Schedule 2 must be modified to include as relevant information in relation to the GHC,

Complaints Management System

13. The Complaints Management System implemented as part of Condition 21 in Schedule 2 must be extended before construction commences to apply to the GHC.

NOISE AND VIBRATION

Operational Noise Management

14. The Proponent must implement the operational noise measures outlined in the Modification EA, including those identified in section 6.5.

Operational Noise Monitoring

15. Monitoring of operational noise must be undertaken in accordance with Practice Note VIII of the RTA's *Environmental Noise Management Manual*. The Proponent must assess the adequacy of the implemented traffic noise mitigation measures between six months and one year after opening the GHC. Should the assessment indicate traffic noise levels exceeding those predicted in the Modification EA, the Proponent must:

    (a) immediately advise the Director General; and

    (b) investigate and implement further reasonable and feasible mitigation measures in accordance with the NSW Government's *Environmental Criteria for Road Traffic Noise* and RTA's *Environmental Noise Management Manual*. The selection of these measures must be undertaken in consultation with affected landowners and/or occupiers and be consistent with the Modification EA.

SOCIAL AND ECONOMIC ISSUES

Property Damage and Access

16. Unless a building condition survey has already been prepared under Condition 51 of Schedule 2, building condition surveys must be conducted subject to landowner agreement on all Structures within:

    (a) 30 metres of the GHC; or

    (b) any other locations identified by the EMR.

    Building condition surveys must be undertaken at least 30 days before construction of the GHC occurs within the distance limits described in this condition.

    The owners of all properties on which building condition surveys are to be conducted must be advised at least 14 days before the survey of its scope and methodology and of the process for making a property damage claim. A copy of the survey must be given to each affected owner at least three weeks before construction that could affect the property commences. A register of all properties surveyed must be maintained by the Proponent indicating whether the owner accepted or refused the offer. A copy of the register must be provided to the Director General upon request.

Traffic

17. The Proponent shall implement the traffic measures outlined in the Modification EA, including those identified in section 6.6.

Attachment 1 – Predicted total daily traffic volumes within the Moree Town Centre

PREDICTED TOTAL DAILY TRAFFIC VOLUMES WITHIN THE MOREE TOWN CENTRE (Vehicles per day)								
Balo Street - North of Heber Street								
	Without Bypass				With Bypass			
Year	2005	2010	2015	2020	2005	2010	2015	2020
Cars & Rigid Trucks	10890	11755	12546	13262	8375	8875	9252	9497
Articulated Heavy Vehicles	1448	1631	1839	2072	81	87	95	103
Total	12338	13386	14385	15334	8456	8962	9347	9600
Balo Street - South of Heber Street								
	Without Bypass				With Bypass			
Year	2005	2010	2015	2020	2005	2010	2015	2020
Cars & Rigid Trucks	16856	18603	20275	21874	14589	16005	17302	18473
Articulated Heavy Vehicles	1448	1631	1839	2072	81	87	95	103
Total	18304	20234	22114	23946	14670	16092	17397	18576

Notes: Heber Street is the Gwydir Highway west of Moree

Balo Street is the existing Newell Highway through Moree Town Centre