Maitland to Minimbah Third Track Project
Submissions Report
Including Preferred Project Report
September 2010









Australian Rail Track Corporation

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H8R-REP-S2G-ENV-0019-0

Part B
Submissions

Part B Submissions

3. Consideration of Submissions

3.1 Number of Submissions Received

The Environmental Assessment was placed on exhibition from 9 June 2010 to 12 July 2010. During this period, the Department of Planning received a total of 54 submissions. These comprised 45 submissions from community members and nine submissions from government departments and agencies. The Hunter 8 Alliance response to the key issues raised in these submissions forms the basis of Chapter 4.

3.2 Submission Issues

Appendix A includes details on each of the non-government and government submissions. This includes:

- The government agency responsible for the submission (where appropriate).
- The suburb where the author of the non-government submission resides and/or is a landholder (where appropriate).
- The comments and/ or issues raised in the submission.
- Where the issue was addressed in the Environmental Assessment (where applicable).
- Where the issue is addressed in the Submissions Report (where applicable).

The names of those making submissions have only been provided for government agencies and organisations. The suburb of residence is the only detail provided for private submissions.

3.3 Analysis Process

All non-government submissions (including submissions from the community) have been categorised according to the key and specific issues they raised. The specific issues raised in non-government submissions, and the location of the Hunter 8 Alliance response to these issues, are provided in Appendix A.

Government agency submissions have been dealt with separately to non-government submissions due to the number of specific, technical issues that were raised. The specific issues raised in government agency submissions, and the Hunter 8 Alliance response to these issues, are provided in Appendix A.

3.3.1 Non-Government Issues

Table 3-1 summarises the issues raised in the 45 non-government submissions, listed most to least frequent based on the number of submissions that raised the issue (many submissions raised an issue multiple times).

Table 3-1 Summary of Issues from Non-Government Submissions

Type of Issue Raised	Number of issues raised in Submissions
Noise and Vibration	39
Land Use/ Property Acquisition	21
Air Quality	11
Community Consultation	10
Traffic and Access	8
Social	8
Design	8
Hydrology and Water Quality	7
Construction	6
Ecology	5
Operation	5
Environmental Management	4
Non-Indigenous Heritage	4
Visual	3
Aboriginal Heritage	1
Other Issues	11

The response to issues provided in Chapter 4 is presented based on the order of issues from Table 3-1.

3.3.2 Government Issues

Table 3-2 summarises the issues raised in the nine government submissions, listed most to least frequent based on the number of submissions that raised the issue (many submissions raised an issue multiple times).

Table 3-2 Summary of Issues from Government Submissions

Type of Issue Raised	Number of issues raised in Submissions
Noise and Vibration	3
Traffic and Access	3
Non-Indigenous Heritage	3
Construction	3
Aboriginal Heritage	1

Type of Issue Raised	Number of issues raised in Submissions
Ecology	1
Design	2
Air Quality	1
Hydrology and Water Quality	1
Land Use/ Property Acquisition	1
Cumulative Impacts	1
Groundwater	1
Visual	1

4. Response to Submission Issues

The issues raised in the submissions have been categorised as follows:

- Issue Aspect: The Issue Aspect relates to an environmental, operational or design aspect as addressed as a chapter in the Environmental Assessment. For example Noise and Vibration; or Construction.
- Summary Issue: This is a specific issue associated with the Issue Aspect. For example Concerns regarding operational rail noise under Noise and Vibration; or Proposed restrictions on construction hours under Construction.

The following sections address each of the Summary Issues and the Hunter 8 Alliance response to the issue. These have been presented in the order as listed in Table 3-1 (from most to least number of non-government submissions which addressed the issue).

4.1 Noise and Vibration

Operational Rail Noise and Vibration Impacts

Issues

With regard to operational rail noise and vibration impacts submissions raised the following issues:

1. *Concerns regarding existing rail noise and vibration.*
2. *Concerns from residences adjacent to the Project area regarding the potential for the third track and future operations to contribute to increased noise and vibration.*
3. *Concerns from residences adjacent to the existing rail corridor but outside of the Project Area regarding the potential for future operations to contribute to increased noise and vibration.*
4. *Submissions also raised the concern that the loss of vegetation would result in increased noise levels.*

Response

In regard to operational rail noise and vibration impacts:

1. Details on the existing acoustic environment surrounding the Project area, and results of noise monitoring undertaken between July and September 2009 are presented in Section 17.4 of the Environmental Assessment. The Environmental Assessment discusses both existing noise from individual rail pass-bys (Lmax) and averaged rail noise throughout the day or night (Leq,15hrs or Leq,9hrs) The Assessment did find that the IGANRIP noise targets were exceeded in some areas along the Project route, including six of the 17 noise monitoring locations along the corridor. The form of attenuation and the timing of its implementation are discussed in Section 5.9.6 of this report.
2. The purpose of the Noise and Vibration Impact Assessment undertaken as part of the Environmental Assessment was to predict the potential noise and vibration levels associated with the Project and future rail operations, and the potential impacts on sensitive receptors. This is detailed in Chapter 17 of the Environmental Assessment, which outlines the areas potentially affected by rail operations at Project opening year (2012) and 10 years after opening (2022). Potential noise and vibration impacts associated with the modifications to the Project are discussed in Section 6.7 of this report, while the

noise attenuation proposed at properties where IGANRIP is triggered is provided in Section 5.9.6 of this report.

3. Submissions from residents in areas outside of the Project area, such as at Singleton and Maitland, raised concern about the potential for future operations to contribute to increased noise and vibration. The purpose of the Environmental Assessment is to assess the potential environmental impacts associated with construction and operation of the third track. Management of issues associated with potential noise impacts at locations where the third track is not proposed would be associated with the ARTC Environment Protection Licence that applies to the rail network.
4. Vegetation of height and density such as seen in the Project area does little, if anything, to attenuate noise. While it can provide a visual barrier to a noise source, it does not provide a physical barrier to the noise generated. Therefore the loss of vegetation would not result in an increase of noise.

Adequacy of Noise and Vibration Attenuation

Issues

Submissions raised concerns regarding the proposed operational noise attenuation:

1. *They do not support the proposed operational noise management approach. Noise attenuation options need to be proposed now rather than after additional noise monitoring.*
2. *Submissions noted that some existing residences, approved developments (Anvil Creek, Service Station and Tourist Development at Belford, Heritage Green), proposed residential land uses (Farley and Lochinvar Investigation Areas) and the proposed Pacific National Provisioning Facility had not been adequately considered for noise attenuation.*
3. *There is no consideration of controls on the management of the rail users (controls on locomotives).*

Response

In regard to concerns regarding the proposed noise attenuation:

1. Section 5.9.6 of this report outlines amended Operational Noise Management Plan. This includes provision of noise attenuation to properties adjacent to the Phase 1 works where IGANRIP is predicted to be exceeded following commissioning of the third track.
2. For the specific identified locations:
   - Anvil Creek: The draft development approval (the Hunter 8 Alliance has only received the draft development approval) from Cessnock City Council issued to Greta Estates for the Anvil Creek development site states that:
3. Any further development application for the carrying out of the other stages of the concept proposal the subject of this consent (other than the Stage 1 subdivision and associated works the subject of this consent) must be accompanied by the following:
   - A revised acoustic assessment report and vibration logging survey for residential development impacted by noise and vibration from the proposed Maitland to Minimbah Third Track and the extension to the Hunter Expressway, together with a visual impact assessment report regarding any recommended acoustic barriers. The revised acoustic assessment must indicate what measures will be taken to ensure that the following LAeq levels are not exceeded:
     - In any bedroom in the building: 35dB(A) at any time between 10pm and 7am; and

- Anywhere else in the building (other than a garage, kitchen, bathroom or hallway): 40dB(A) at any time for residential development impacted by noise and vibration from these projects.

Therefore, apart from the Stage 1 subdivision and associated works, it is the requirement of Greta Estates to consider the noise and vibration generated by the Project and indicate what measures would be taken to meet the identified criteria.

- Service Station and Tourist Development at Belford: The development consent issued for the Service Station and Tourist Development requires the developer to provide noise attenuation for the existing rail and train movements. The Hunter 8 Alliance would negotiate with the developer to confirm what form of attenuation for their site is proposed and determine if any additional attenuation is required to mitigate any residual noise attributable to the third track.
- Heritage Green: The Heritage Green site has an existing development consent for a residential and golf course development, and was required to provide noise attenuation for the existing rail. The developer of the Heritage Green site currently has a new development application with Maitland City Council for the site, which would also require noise attenuation for the existing rail. The Hunter 8 Alliance would continue to negotiate with the developer of the site to confirm what form of attenuation for their site is proposed and determine if any additional attenuation is required.
- Farley and Lochinvar Investigation Areas. These areas are currently rural land under the Maitland Local Environmental Plan 1993 and, as such, the existing rural residences within these areas have been appropriately considered as sensitive receptors. In undertaking the appropriate rezoning studies, site concept plans and development applications the potential residential developers of these areas would need to take into consideration the potential noise and vibration impacts of the third track (if approved).
- Proposed Pacific National Provisioning Facility: The proposed Pacific National Provisioning Facility at Greta has been declared a Major Project under the *Environmental Planning and Assessment Act* 1979 by the Department of Planning. However, an Environmental Assessment has not been submitted for exhibition and determination, nor has one been approved. Therefore it has not been considered for noise attenuation. In any case, as the Facility would be an industrial development that would be servicing the locomotives and wagons travelling on the Main Northern Railway, under IGANRIP the Facility is not considered a sensitive receptor that requires attenuation.

Proposed Noise and Vibration Attenuation Methods

Issues

Submissions proposed a number of noise and vibration mitigation measures:

1. *Track design amendments (such as relocation of the turnout at Telarah to chainage 195.000 kilometres to avoid potential noise impacts from slowing and idling trains on the residential area of Telarah; and relocation of the existing turnout and signals at Allandale to a location closer to Greta to avoid noise impacts on residents).*
2. *Provision of an earth wall to the height of the bottom of rail wagons at Telarah (instead of the proposed noise wall).*
3. *Architectural treatment (double glazing of windows, insulation, air conditioning).*
4. *Provision of noise walls/ barriers.*
5. *Revegetation along the rail corridor.*

6. *Undertake noise monitoring prior to, during and following construction.*
7. *Vibration monitoring during construction (particularly blasting).*
8. *Ongoing maintenance of residences due to vibration impacts attributed to train movements.*
9. *Restrictions on construction hours (as previously discussed).*
10. *Dilapidation surveys of residences within 200 metres of construction before and after construction.*
11. *If properties cannot be attenuated they should be acquired.*

Response

In regard to proposed noise attenuation options:

1. A number of constraints required the end of the third track and the required turnout to be located at chainage 194.500 kilometres. These constraints include the existing track and ground surface gradient, the existing track alignment and the Wollombi Road underbridge. A key requirement is not to have fully laden trains idling on the underbridge, which would occur if the turnout was at chainage 195.000 kilometres.

   For similar reasons identified in item 1, there is limited potential to relocate the existing turnout and signals at Allandale to a location closer to Greta. Locations with appropriate existing track and ground surface gradient, and appropriate existing track alignment are limited, and there are other residences in this section of track that would be potentially impacted.
2. The height of any noise wall in relation to the noise source and recipient is a key design factor. A rail noise source will radiate outwards in all direction, rather than simply horizontally. The ability of a barrier to reduce noise is partly controlled by its height and location relative to the source and receiver. One key design aspect is to cut the line of sight between source and receiver. While the low-height barrier suggested in submissions would partly reduce noise from the wheel/rail interface, it would not attenuate noise from locomotive engines and exhausts at all. In the context of Telarah, such a low barrier is anticipated to be insufficient to meet the IGANRIP targets.
3. Architectural treatment (such as double glazing of windows, insulation and mechanical ventilation) was identified in Section 17.6 of the Environmental Assessment as a reasonable and feasible noise attenuation option at locations where IGANRIP has been triggered. As discussed in Section 5.9.6 of this report, it would be considered as an attenuation option if noise mounds and noise barriers are not considered as reasonable and feasible at a particular location/s.
4. Noise barriers and walls were identified in Section 17.6 of the Environmental Assessment as a potential noise attenuation option for those locations where IGANRIP has been triggered. Noise barriers (in the form of noise mounds) are the proposed noise attenuation option for the Project, except at the residential area of Telarah where a noise wall is proposed (as part of the Phase 2 works). If noise mounds are not reasonable or feasible at a particular location/s, a noise wall would be assessed as to whether it is reasonable or feasible.
5. Vegetation of height and density such as seen in the Project area does little, if anything to attenuate noise. While it can provide a visual barrier to a noise source, it does not provide a physical barrier to the noise generated. Therefore re-vegetation would not provide a physical noise barrier.

6. Details of the noise and vibration monitoring proposed to be undertaken during construction are provided in Section 17.6 of the Environmental Assessment. Section 17.6 of the Environmental Assessment also notes that noise and vibration monitoring is proposed following commencement of operations on the third track to confirm the noise predictions from the Environmental Assessment. The monitoring undertaken in undertaking the Environmental Assessment has allowed the Hunter 8 Alliance to understand the existing noise environment (prior to construction).
7. Vibration monitoring would be undertaken if vibration-generating activities are conducted within 30 metres of a residence as noted in Section 17.6 of the Environmental Assessment. Section 7.10.1 of the Environmental Assessment notes that, during blasting events, monitoring would be undertaken of overpressure and vibration at the nearest residences.
8. There were five areas (a total of 11 residences) where residences are located within 40 metres of the rail corridor which may require vibration control described in Section 17.6 of the Environmental Assessment. One residence located directly adjacent to the Greta Railway (and approximately 20 metres from the rail corridor) was omitted from the listed properties and would be considered when undertaking the mitigation measures (during Phase 2 works) described in Section 17.6 of the Environmental Assessment and Section 5.9.6 of this report.
9. As discussed in Section 4.3 of this report, The Hunter 8 Alliance proposes that the standard construction hours would be those applied by the NSW Government and DECCW (7:00 am to 6:00 pm Monday to Friday, 8:00 am to 1:00 pm Saturday, no works on Sunday or public holidays).

   Weekend work during normal construction hours would be limited to five hours on a Saturday. It is anticipated that blasting may be required to be undertaken during these hours on a Saturday. However, this would be undertaken following the management procedures described in Sections 17.5.2 and 17.6.1 of the Environmental Assessment. Sections 17.6.1 and 7.20.4 of the Environmental Assessment notes the procedure for undertaking construction activities outside the standard construction hours, which are included in the existing Environment Protection Licence (No 3142) and which are likely to be reflected in a new Environmental Protection Licence issued for construction of the Project.
10. Building condition surveys would be undertaken at potentially impacted dwellings prior to commencement of vibration generating works (such as pile-driving and blasting), and repeated at works completion, as discussed in Section 17.6 of the Environmental Assessment. This does not necessarily include all houses within residences within 200 metres of construction but would be based on an assessment of the potential impacts of the activity at the specific location.
11. The IGANRIP requires, (refer to Section 17.6 of the Environmental Assessment) that assessment of reasonable and feasible noise attenuation measures is to be undertaken where IGANRIP trigger level has been exceeded. Section 4.1 of this report outlines the noise attenuation measures that are proposed to be implemented prior to operation of the third track.

Adequacy of Noise and Vibration Impact Assessment

Issues

General Comments

Submissions raised concerns about the Noise and Vibration Impact Assessment.

1. *Questioned the accuracy of the existing and predicted noise levels as monitoring was not done at their property, while one submission proposed that monitoring should be undertaken at all properties along the rail corridor.*
2. *Some submissions were concerned that the train movements during the monitoring period were not representative as trains appeared to be travelling slower or at less regularity.*
3. *One submission stated that the Assessment did not appropriately consider the NSW Development Near Busy Roads and Rail Corridor Guidelines.*
4. *As noted previously, submissions proposed that some existing residences, approved developments (Stage 1 of Anvil Creek, Service Station and Tourist Development at Belford), proposed residential land uses (Farley and Lochinvar Investigation Areas) and the proposed Pacific National Provisioning Facility had not been adequately considered as sensitive receptors in the assessment.*
5. *The noise modelling was not accurate as:*
   - *The model should have considered three trains running concurrently, not two.*
   - *It uses incorrect weather data.*
   - *It should have considered the potential future use of longer trains.*
   - *Three weeks of noise monitoring should have been undertaken (one week was undertaken).*

Technical Review

Two submissions included technical reviews of the Noise and Vibration Impact Assessment by acoustic consultants. Issues raised by these reviews were:

1. *The noise catchment areas should include areas that are under investigation for future residential development. This does not imply a request for noise mitigation in these areas (as this is not required under IGANRIP). However the developers of these areas are stakeholders affected by the noise and vibration from the project, so these areas should be included in the assessment.*
2. *Logger 16 results presented in Appendix A of the GHD report include two days (11 and 12 August 2009) when daytime and night-time ambient noise levels are much lower than the other days. If trains were not operating on these days, they should be excluded from the calculation of the overall LAeq noise levels at this location.*
3. *Freight trains and coal trains passbys (especially in the Up direction) show significant differences in duration (more than 2 minutes) and LAeq. The assessment should treat these train types separately as combining them causes an under-prediction of the noise levels. The affected locations are Location 4, 8, 9, 13, 15 and 16.*
4. *Measurement Location 14 includes a passby measurement for a rail maintenance vehicle. This would not be part of the normal traffic and should be excluded from the analysis.*
5. *In Section 5.2.4, source noise levels assumed in the model are not stated.*
6. *How do the modelled train types compare with the rolling stock on the Main North Line?*
7. *Has locomotive notch setting been included in the assessment?*
8. *Have the relative heights of different noise sources (locomotive exhaust, rolling noise) been included in the assessment?*

9. *The 60 dBA noise contours in Appendix D, E and F show a significant difference in the distance the contour extends from the rail corridor to the north and the south in the Farley Investigation Area (Chainage 195.700 km to 197.650 km). This may be due to the ground topography, but the contours in this area do not show enough detail to explain the difference. Is there a bund or mound close to the rail corridor to the north that is acting as a noise barrier?*
10. *Is a facade correction included in the noise contours in Appendix E and Appendix F?*
11. *In Appendix B of the GHD Report, some vibration results are presented in intervals of 2 hours per division, others in 30 minutes per division, others in 15 or 5 minutes per division. Does the time division affect the calculation of the percentage of time vibration criteria are exceeded?*
12. *The justification for the identified 40 metres distance with a risk of exceedence of human comfort criteria is not clear The Environmental Assessment does not determine the vibration due to a typical train passby. This would give a better estimate of the existing and future VDV and how it decreases with distance from the source.*
13. *What is the existing VDV measured at each vibration monitoring location? A number of existing residences are identified as being 'at risk' of exceeding human comfort vibration goals as a result of the third track – are the human comfort goals already exceeded at these locations?*
14. *Has the offset of the third track been accounted for in predicting the 40 metres 'vibration affected' distance?*
15. *In Section 7.2.2 the description of rail dampers states that the reduction achievable depends on the rail roughness (the smoother the rail, the less attenuation). This statement is incorrect. The achievable rolling noise reduction depends on the dynamics of the wheel and rail, and could be zero if the wheel is the dominant rolling noise source.*
16. *The GHD report states that a 4.5 metres high noise barrier is proposed between chainages 194.34 km and 194.880 km (Telarah) on the Up side. The report does not state the noise benefit of this proposed mitigation or justify the reason for the proposed barrier height. The project is expected to result in exceedances of the IGANRIP trigger levels of up to 10 dB at this location, would the proposed barrier eliminate this exceedence?*
17. *In the event that monitoring confirms exceedances of the IGANRIP trigger levels at other locations, the GHD report states that the applicable mitigation options include noise barriers and architectural treatments. The predicted exceedances (up to 13 dB) suggest that this is likely. Although mitigation options are discussed in the GHD report, there is no clear statement of intent to provide mitigation to achieve a particular noise goal.*
18. *For all affected areas the impacts of the project should be described both with and without mitigation measures so that adequate consideration can be given to the acceptability or otherwise of the eventual environmental impacts.*
19. *The Assessment has incorrectly interpreted IGANRIP by adopting the higher set of trigger levels rather than the lower ones, and these adopted criteria contrast with at least three other noise goals that could have been considered (55 dB(A)LAEq, 9 hour night time criterion for new rail developments under IGANRIP; LDN 60dB(A), an internationally used noise descriptor for Day-Night Average; and 35dB(A) LAEq, 9 hour indoors as described in the State Environmental Planning Policy (Infrastructure) (Infrastructure SEPP), which the submission states equates to 45dB(A) LAEq, 9 hour outdoors).*

20. *The submission argues that due to the rural nature of the Anvil Creek property and the dose-response relationship relied upon by IGANRIP, a lower set of criteria than that used by the Assessment (as per IGANRIP) should be adopted.*
21. *Once submission believes that the calculation methodology used in the Assessment for averaging rail noise pass by events understates the noise levels by 0.0 to 0.5 dB(A).*
22. *Noise monitoring should have been undertaken on the Anvil Creek site to use in the Assessment.*
23. *The noise modelling represents noise levels at 1.5 metre above ground level and does not identify impacts on second storey or elevated locations. Heritage Green proposed two storey premises on their site, and therefore propose attenuation would be required for 1.5 metre and 4.5 metres above ground.*

Response

General Comments

1. The IGANRIP does not specify the number of locations where noise monitoring should be undertaken. Common practice with rail noise assessments is to select a number of locations representatives of the sensitive receivers along the Project route. In this context, seventeen monitoring locations were identified having regards to the location of sensitive receivers relative to the rail corridor and their spread along the Project route. A noise model of existing rail noise emissions was then calibrated against the monitoring results at these locations with an accuracy of ± 2 dB(A), which is considered acceptable. Rail noise contours shown in Appendix D of the Noise and Vibration Impact Assessment (in Appendix K of the Environmental Assessment) detail existing noise levels along the entire Project route so that all the areas currently impacted by rail noise can be readily identified. Revised rail contour plans are presented in the Noise and Vibration Study (Appendix E of this report).
2. Section 6.3 of the Noise and Vibration Impact Assessment (Appendix K of the Environmental Assessment) provides details on the ambient noise (based on existing long-term monitoring), absolute (calculated from pass-by measurements) and the modelled rail noise levels. It also presents the difference between the absolute and modelled rail levels with an acceptable level of accuracy, as mentioned above. However, it noted that at one location the difference was over 7 dB(A) (the modelled noise was higher than the measured). The Assessment concludes that the lower monitored levels are attributable to the slower speed trains had to travel at due to construction activities at the Pothana Lane bridge. The model, however, adopts the typical train movement numbers and speeds and therefore the assessment is not based on atypical train movements.
3. The NSW Development Near Busy Roads and Rail Corridor Guidelines applies to developments near busy roads and rail corridors, and establishes criteria for land use activities (including new residential developments) adjacent to existing infrastructure. This is not applicable to redevelopments of existing rail lines. The NSW Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects (IGANRIP) is the applicable guideline for such development and has been considered for the Project.
4. Consideration of the attenuation required for these areas has been addressed previously under Adequacy of Noise and Vibration Attenuation.
5. With regards to the queries regarding the accuracy of the model:

– Modelling of train movements indicates that it is unlikely that three trains would pass through a section of the rail corridor concurrently. Regardless, it should be noted that trains passing-by a particular location at the same time will shield each other to some extent so that the resulting Lmax may not be significantly higher than that of two trains. Train pass-bys (which may include two or three trains crossing at the same location at a given moment) are assessed against the Lmax trigger of the IGANRIP. The IGANRIP states that Lmax refers to the maximum noise level not exceeded for 95% of rail pass-by events. If the Lmax of three trains simultaneously passing by a given receiver was indeed significantly louder than the rest of the passbys, it is likely that it would not be captured by the IGANRIP definition of Lmax due to such event being very infrequent. Finally, receivers exceeding the Lmax trigger generally also exceed the Leq trigger (which addresses the rail noise impacts averaged over the daytime and night-time periods). As such, mitigation measures adopted for these receivers will attenuate both Lmax and Leq. .
– Climatic data for the monitoring period was sourced from the nearest Bureau of Meteorology Weather Station at Cessnock Airport. This station is located approximately 15 kilometres to the south of Branxton Railway Station. Data from such a location is considered applicable to be used for the Project. The data was used to exclude unattended noise monitoring data which may have been affected by adverse weather conditions from the analysis. All attended rail noise measurements were undertaken with consideration to the meteorological requirements of AS2377: Acoustics – Methods for the measurement of railbound vehicle noise (Standards Australia 2002).
– No advice has been provided by ARTC or the rail operators regarding lengthened trains in the future. Therefore it is deemed unnecessary to undertake models of any trains other than those consistent with those currently operating on the network.
– A minimum of one week of unattended monitoring was undertaken at each of the 17 noise monitoring locations. This is consistent with noise policies applicable in NSW, such as DECCW Industrial Noise Policy and Environmental Criteria for Road Traffic Noise.

Technical Review

1. The Noise and Vibration Impact Assessment (Appendix K of the Environmental Assessment) has considered the existing land use and zoning of the areas under investigation for residential development. Therefore it has considered the existing rural residences as potential sensitive receptors. Noise contours for the Project operations in 2012 and 2022 are provided in the Noise and Vibration Impact Assessment and can be used as a planning tool for areas under investigation by developers.
2. The Hunter 8 Alliance accepts this comment. Excluding data on the 11 and 12 August 2009 would increase the daytime and night-time Leq by approximately 0.7 dB(A). This has no appreciable consequence on the findings of the assessment.
3. The difference in Leq,15hrs or Leq,9hrs with and without freight trains is up to 0.3 dB(A), which is not significant. While levels go slightly up at locations 4, 8, 9 and 15, they actually are slightly reduced at receivers 13 and 16. While freight passby are shorter in duration, their passby Leq and Lmax do generally compare with those of coal trains. As a result of the above, it is not unreasonable to group freight and coal trains in the assessment.
4. The described event involves two trains crossing at the same time, one rail maintenance train on the Up side and one empty coal train on the Down side. Again, removal of this passby event from the analysis would have insignificant consequences on the findings of the assessment.

5. As stated in the Noise and Vibration Impact Assessment, the noise model is based on the United Kingdom's Calculation of Rail Noise (CoRN). This is one of the algorithms mentioned in the IGANRIP. CoRN uses a set of pre-determined sound profiles for various types of railbound vehicles. The modelling assumptions have been outlined in Section 5.2.4 of the Noise and Vibration Impact Assessment (Appendix K of the Environmental Assessment).
6. The modelling results have been validated against the site measurements, with acceptable accuracy. As such, the modelled train types are considered to compare suitably with the rolling stock on the Main Northern Railway.
7. Locomotive notch has not directly been included in the assessment. In terms of Leq levels, CoRN uses set speeds as detailed in Section 5.2.4 of the Noise and Vibration Impact Assessment. It should be noted that for coal trains, Leq levels tend to be dominated by the wheel/rail interface (which last for the entire duration of the passby) rather than by the locomotive notch setting. In terms of Lmax levels, the assessment is based on site measurements and whichever notch setting was used at the time by the locomotives.
8. Coal trains were modelled as source lines at railhead height and constant speed (80 kilometres per hour for unloaded train and 60 kilometres per hour for loaded trains). Speed profiles and detail of notch settings along the Project route were not available at the time of preparing the Noise and Vibration Impact Assessment (Appendix K of the Environmental Assessment), As a result, train noise sources have not been differentiated.
9. The noted difference in the noise at Farley is correct. There is an existing earth mound which acts as a noise barrier on the Up side between approximately 196.600 kilometres and 197.450 kilometres (Heritage Green), There also is a dip on the Up side between approximately 195.650 kilometres and 196.400 kilometres. These explain the differences in noise propagation between the Up and Down sides in the subject area.
10. Façade corrections are not shown on the contours but they are accounted for in the review of affected receivers (Table E-1 and E-2 of the Noise and Vibration Impact Assessment).
11. The differences in time division shown on the charts are purely a matter of presentation. All the vibration analysis is based on one minute intervals.
12. Vibration monitoring was undertaken at various locations and various distances from the track, from 25 metres to 85 metres (refer to Table 3-7 in the Noise and Vibration Impact Assessment, Appendix K of the Environmental Assessment). It was generally found that for locations beyond 50 metres from the track, there were generally no or little vibration impacts. Findings further indicated that at locations 25 metres and 35 metres from the track, train passbys would occasionally exceed the established velocity limit. Hence, 40 metres was presented as the distance within which there would be a risk for the vibration limits to be exceeded. With regards to human comfort, the methodology used in the Noise and Vibration Impact Assessment (Appendix K of the Environmental Assessment) essentially is a screening method to identify potentially affected receivers rather than a definitive study. The noise and vibration mitigation plan outlined in this report proposes to refine the assessment of vibration in the identified risk areas.
13. See issue 12 response. It is proposed that the vibration study be refined in identified risk areas as part of the noise and vibration mitigation plan.

14. The offset of the third track has been accounted for in predicting the 40 metre vibration affected distance.

15. Section 7.2.2 of the Noise and Vibration Impact Assessment clearly states that the achievable 2 to 5 dB(A) reduction by rail dampers is valid when the wheel/rail interface is the main noise source.

16. The 4.5 metre high noise barrier at Telarah is estimated to attenuate noise by 10 dB(A) in order to meet the IGANRIP levels as stated in Section 17.6 of the Environmental Assessment. The Environmental Assessment notes that a noise monitoring program would be implemented to confirm the noise reduction provided by attenuation measures.

17. Section 5.9.6 outlines the proposed amendments to the Operational Noise Management Plan. This includes provision of noise attenuation prior to commissioning of the third track to those properties where IGANRIP is predicted to be triggered.

18. The Noise and Vibration Impact Assessment (Appendix K of the Environmental Assessment) and Section 17.5 of the Environmental Assessment identify (graphically and tabulated respectively) the existing and predicted noise levels without noise mitigation. Revised predicted noise level tables and contour plans are provided in the Noise and Vibration Study (Appendix E of this report).Noise attenuation measures have been proposed (noise barriers and architectural treatments). Section 4.1 identifies the potential noise attenuation that could be achieved through the proposed attenuation option. The exact level of attenuation would be determined following a detailed survey of the residences to be attenuated and confirmation of the type/s of attenuation to be provided.

19. As previously discussed, IGANRIP is the guideline applicable to the assessment of rail infrastructure projects, and therefore the Project. However, the submission claimed that the Noise and Vibration Impact Assessment should have assessed the Project as a “new rail development” under IGANRIP. IGANRIP states that new rail development applies “where residential or noise-sensitive receivers are not subject to existing rail noise or where existing levels of rail noise are below the noise trigger levels for a new rail line development.” As the sensitive receptors “are subject to existing rail noise at or above the noise trigger levels in Table 1 in Chapter 2 for a new rail line development” the Project is categorised as “redevelopment of existing rail lines”.

    The 35dB(A) LAEq, 9 hour indoors (which the submission states equates to 45dB(A) LAEq, 9 hour outdoors)) is described in Clause 87 (Impact of rail noise or vibration on non-rail development) of the Infrastructure SEPP. Clause 87(3) states that “If the development is for the purposes of a building for residential use, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded”. Therefore criteria are to be considered by consent authorities (and therefore developers) for residential areas adjacent to the rail corridor. They are not applicable to the developer of rail infrastructure (such as the Hunter 8 Alliance).

20. The Noise and Vibration Impact Assessment has been undertaken consistent with IGANRIP and appropriately applied to the sensitive receptors adjacent to the Project. The IGANRIP does not include trigger levels for rural land and therefore the residential land use trigger levels have applied to rural residences.

21. As discussed previously, some revisions to the calculation methodology for averaging passby events would results in minor differences, up or down. Such differences are not considered to have any appreciable consequence on the findings of the assessment.

22. Noise monitoring stations were located immediately north (L8 and L9) and immediately southeast (L10) of the Anvil Creek property. The data collected from these stations were used to accurately model existing noise levels and predict 2012 and 2022 noise levels over the Anvil Creek property. Plans showing the 60dB(A) noise contours (the night time IGANRIP trigger level) with no attenuation provided is included in the Noise and Vibration Impact Assessment (Appendix K of the Environmental Assessment).

23. The vast majority of receivers along the Project route are one storey residences. As discussed previously, the Hunter 8 Alliance would continue to negotiate with the developer of the Heritage Green site to confirm what form of attenuation for their site is proposed and determine if any additional attenuation is required. This would consider two-storey dwellings where applicable.

Noise and Vibration Mitigation

Issue

The submission by the Department of Environment, Climate Change and Water noted that the extent and/ or likely impact of the proposed operational noise and vibration mitigation measures are only discussed in general terms in the Environmental Assessment. The Department of Environment, Climate Change and Water recommends that a more thorough investigation of whether additional noise mitigation measures are reasonable and feasible, and if so, whether they would result in significant noise reductions.

The Department of Environment, Climate Change and Water recommended that this investigation should include, but not be limited to, the following measures:

1. *Use of only noise attenuated locomotives on the third track.*
2. *Limiting the speed of trains using the proposed third track.*
3. *Limiting the speed of trains using the proposed third track at night.*
4. *Restricting the number of trains using the proposed third track only at night.*

Response

Section 5.9.6 provides further detail on the reasonable and feasible noise attenuation measures to be provided where noise modelling predicts that IGANRIP would be triggered with operation of the third track. With regard to the noise attenuation options proposed by DECCW, these have been considered by the Hunter 8 Alliance to assess whether they are reasonable or feasible. They have been ruled out due to the following:

1. Locomotives that operate on the ARTC network are required to comply with the specifications included in Section L6 of the ARTC Environment Protection Licence (Number 3142). Current contractual arrangements with rail operators are based on such criteria. Therefore it would not be feasible to impose this on the rail operators. Further it would not be reasonable or feasible to only impose such a restriction on trains operating on the third track.

2. The current speed limit for trains operating on the third track is 60 kilometres per hour for fully laden coal trains and 80 kilometres per hour for unloaded trains. While train speed can be restricted further it is unlikely to provide significant reductions in noise. The Calculation of Rail Noise algorithm in the UK Department of Transport Calculation of Railway Noise (1995) indicates that reducing the speed to 40 kilometres per hour would provide a noise reduction of up to 3dB(A) for fully laden trains and up to 6dB(A) for unloaded trains.

   The objectives of the Project include providing network capacity ahead of coal industry demand; and to increase line capacity to 200 million tonnes per annum. Applying restrictions to the speed of trains would limit the Project's ability to meet these objectives. The improvements to track design described in Section 17.6 of the Environmental Assessment would provide better noise attenuation than reducing the speed of trains on the third track, while allowing the Hunter 8 Alliance to meet the objectives of the Project. The noise attenuation proposed in Section 5.9.6 of is report, combined with the track design measures described in Section 17.6 of the Environmental Assessment, are considered the most reasonable and feasible.
3. The issues discussed against Point 2 also apply to the limiting of train speeds on the third track at night.
4. Applying restrictions to the number of trains using the third track at night is not considered reasonable or feasible. Applying restrictions to the number of trains travelling at night would limit the Project's ability to meet the objectives discussed against Point 2. However, the noise attenuation proposed in Section 5.10.6 in this report and Section 17.6 of the Environmental Assessment would attenuation noise consistent with IGANRIP while still allowing the Project to meet these objectives

4.2 Land Use

Impact on Property Valuations

Issues

A number of submissions raised concerns about the potential impact of the Project on the value of their properties.

Some of these submissions raised the potential of compensation for loss of property value.

Response

Compensation assessments for landowners subject to land acquisition are pursuant to the Land Acquisition (Just Terms Compensation) Act 1991 (the "Act"). Section 55 of the Act details 'Relevant matters to be considered in determining amount of compensation', In addition, Section 55(f) gives consideration to 'any increase or decrease in the value of any land of the person at the date of acquisition which adjoins or is severed from the acquired land by reason of the carrying out of, or the proposal to carry out, the public purpose for which the land was acquired'.

Concerns Regarding the Property Acquisition Negotiation Process

Issues

Submissions raised concerns about the property acquisition process, relating to the negotiation process, the availability of the property acquisition team, and the availability of information.

Response

All landowners along the Project were entitled to the same representation and opportunities with a Land Access Consultant assigned to provide a reasonable frequency of meetings with acquisition affected landowners. All landowners, pursuant to the provisions of the *Land Acquisition (Just Terms Compensation) Act* 1991, were provided the opportunity for valuation and legal representation, with reasonably incurred costs at the expense of the Hunter 8 Alliance.

The availability of information at times was dependent on various third party stakeholders and other investigations related to the land. As design and the acquisition process operated concurrently, revisions of proposed acquisition plans took place providing opportunities for the minimisation of impacts to landowners to be fully investigated. Such matters inevitably incurred the expiration of time in finalising. The Hunter 8 Alliance Property Team has remained committed to open dialogue with affected landowners and their representatives throughout the acquisition process.

Description and Consideration of Land Use in the Environmental Assessment

Issues

Submissions raised concerns regarding land uses identified in the Environmental Assessment. These include:

1. *The Anvil Creek development at Greta received development approval from Cessnock City Council. It was rezoned for residential development 5 December 2008 and received a staged development consent on 17 February 2010 of a superlot subdivision and a Master Plan that contains a range of residential, golf and tourist facilities, retail and commercial, education, viticulture, open space and village centre land uses.*
2. *While Section 14.2 of the Environmental Assessment identifies the Farley and Lochinvar Investigation Areas, the Maitland City Council submission and the Farley Investigation Area Landowners Group noted that the Environmental Assessment did not give enough consideration to the future residential development and the preliminary investigations undertaken of the Farley Investigation Area.*
3. *One submission from a resident at Winders Lane Lochinvar believed that their residence should be noted ad residential instead of rural.*
4. *Operators of an engineering and fabrication workshop at Belford adjacent to the rail corridor at Rix's Road were concerned about the impact on the business' viability due to the Project (property acquisition and construction activities).*
5. *This submission also raised concerns about the impacts from the closure of the existing Rix's Road private level crossing on an associated residence on the other side of the crossing.*

Response

The following responds to issues raised in submissions regarding land use:

1. The Hunter 8 Alliance did not become aware of the development approval issued regarding Anvil Creek until after commencement of the Environmental Assessment exhibition, despite ongoing consultation with the landholder. Therefore at the time of submission of the Environmental Assessment the Hunter 8 Alliance it was believed that the proposed development had not received approval. However the proposed Master Plan has been considered in this report. The Hunter 8 Alliance is in consultation with the landholder to gain detail of the proposed development on the site,

including the noise attenuation that would be required by any development approval for works in the vicinity of the existing rail corridor.

2. Section 14.2 of the Environmental Assessment acknowledges the Farley and Lochinvar Investigation Areas. However, these are at varying stages of investigation and the development process. While varying levels of investigations and preliminary designs have been undertaken for both areas, these areas are still currently zoned Rural under the Maitland Local Environmental Plan 1993 and have therefore been considered as rural land, with rural residences. The Hunter 8 Alliance cannot undertake a detailed assessment of the potential impacts on the future residential development of these areas until a master plan (including the proposed noise attenuation and proximity of sensitive land uses to the rail corridor) is resolved. Further, as discussed in Section 4.1, the development of the areas would have to assess the potential noise and vibration impacts from the rail corridor (with the third track) and design any development appropriately.
3. The property at Winders Lane is on property zoned rural under the Maitland Local Environmental Plan 1993. While the property contains a residential structure, it is still appropriate to consider this, and the remaining properties at Winders Lane, as rural property.
4. Extensive consultation has been undertaken by the Hunter 8 Alliance with the owners of the engineering and fabrication workshop at Belford adjacent to the rail corridor at Rix's Road. This has included discussions about partial acquisition of the property containing the workshop. As part of due diligence investigations of the property by the Property Team a number of issues were identified that affected the potential property value. However consultation is ongoing with the solicitor acting on behalf of the landholder (the solicitor directed that all consultation be directly with the solicitor) on this issue.
5. As with the response provided to Issue 4, the Hunter 8 Alliance has undertaken extensive consultation with the landholder, and negotiations are continuing with the landholder's solicitor. The proposed purchase of the rural residence property and closure of the level crossing is the preferred option for the Hunter 8 Alliance and has been discussed with the landholder and their solicitor, continues to be the option discussed with the landholder's solicitor, and is retained in the proposed Project.

4.3 Air Quality

Operational Dust and Air Quality Impacts

Issues

Submissions raised concerned regarding existing and future operational air quality impacts due to dust and locomotive emissions on existing and future rural residential and residential developments. This included concerns regarding the impacts of dust on drinking water quality (many rural residences have tank water), health and living costs (such as laundry and general cleanliness of residences).

One submission also requested clarification as to whether the predicted operational air quality emissions included in Section 16.3 of the Environmental Assessment have considered the predicted operational air quality mitigation measures.

One submission requested clarification as to whether a buffer (including vegetation) was required on their property due to air quality issues and, if so, what would be required (extent), how was such a buffer defined, and how successful would it be (any residual impacts).

Response

The predicted exceedences of the applicable DECCW air quality criteria during operation of the third track are limited to the following:

- One hour average nitrogen dioxide concentrations in 2022 within 50 metres of the rail tracks (less than 15% exceedence).
- 24 hour and annual average predicted peak incremental PM10 in 2012 within 40 metres of the track (less than 10 precent exceedence) and in 2022 within 50 metres of the track (less than 10 percent exceedence).

These predictions were calculated without consideration of the operational air quality mitigation measures described in Section 16.4 of the Environmental Assessment.

The Hunter 8 Alliance proposes to establish where possible a stand of trees or other suitable vegetation on properties adjacent to the Project. The Hunter 8 Alliance would work with adjoining landowners to provide vegetation buffers.

With regard to the provision of a buffer on the land referred to by the author of the referenced submission (the Farley Investigation Area), this land is currently zoned rural and the majority of residences on this land are outside the maximum 50 metres where exceedences were predicted.

While implementation of the mitigation measures described in Section 16.4 of the Environmental Assessment would potentially lead to compliance with the DECCW criteria, the Farley Landowners Group would be required when considering their development application to undertake an air quality assessment and provide appropriate attenuation, as it would if the third track was not constructed and had to consider the potential impacts of these train movements on the existing two tracks.

Construction Air Quality Impacts

Issues

Submissions raised concerns regarding the potential impact of construction dust on drinking water quality, health and living costs (such as laundry and general cleanliness of residences).

Response

Section 16.4 of the Environmental Assessment identifies a range of construction phase air quality mitigation measures that would be implemented to minimise potential impacts on sensitive receptors.

In the event that adverse impacts on sensitive receptors result from dust generation attributable to the Project construction activities, corrective actions would be taken to rectify the cause of the complaint.

Proposed Air Quality Mitigation Measures

Issues

One submission requested confirmation that the mitigation measures would be undertaken prior to the commencement of operation of the third track.

Submissions raised a number of potential measures to mitigate air quality impacts during construction and operation:

1. *Air quality monitoring (prior to, during and following construction).*

2. *ARTC is to prepare the Pollution Reduction Program as required by its Environment Protection Licence.*
3. *Use of coal dust suppressants (this has been trialled in Queensland).*
4. *Use of barriers around construction areas and stockpiles.*
5. *Retain native vegetation and undertake revegetation/ tree planting where possible.*
6. *Cover loads on construction vehicles.*
7. *Provision of water filters for residences with tank-supplied drinking water.*
8. *Relocation of the existing signals at Farley so that they are not adjacent to proposed residential areas.*

Response

The operational air quality mitigation measures identified in Section 16.4 of the Environmental Assessment would be implemented prior to the commencement of operations on the third track where practicable and feasible.

In regard to the proposed air quality mitigation measures:

1. Section 16.4 of the Environmental Assessment and the Statement of Commitments refers to dust and weather monitoring during construction that would allow appropriate mitigation measures to be implemented. However, monitoring prior to the commencement of construction is not anticipated to provide any benefits to controlling dust during construction. It is also not proposed to undertake any monitoring following completion of construction.
2. The ARTC has completed the first phase of the Pollution Reduction Program (Reduction of Coal Dust Emissions from Locomotive Leads) as required by the ARTC Environment Protection Licence. This phase (Submit a workplan to DECCW for approval outlining how appropriate technology will be adopted to significantly reduce coal dust emissions on the NSW ARTC rail network, in conjunction with relevant stakeholders including coal mines and locomotive operators) has been completed. The workplan is currently under review by DECCW. The commencement date for the next phase (implement the proposal as approved by the DECCW) is dependant on completion of the review by DECCW.
3. Dust (PM10) is predicted to be less than 10 percent above the DECCW criteria within 50 metres of the rail line. Therefore measures above those described in Section 16.4 and included in the Pollution Reduction Program described in point 2 are unlikely to be required to comply with the criteria.
4. Physical barriers would be constructed to act as windbreaks for the construction site or for stockpile areas where practicable Dust screens would be installed on construction site boundaries that are adjacent to sensitive receptors where practicable.
5. Existing vegetation would be retained where possible. Where clearing is required, cleared areas no longer subject to construction activities and stockpiles would be seeded with fast growing species for rapid coverage to temporarily or permanently stabilise soil, where and as soon as practicable.
6. All trucks hauling dirt, sand, soil or other loose materials (materials that could generate dust emissions or result in spillages) to and from the construction site would be covered.

7. Dust (PM10) is predicted to be less than 10 percent above the DECCW criteria within 50 metres of the rail line. The implementation of the mitigation measures described in Section 16.4 of the Environmental Assessment is likely to reduce the dust to below the criteria. Therefore it is considered unnecessary to provide water filters for residences with tank-supplied drinking water.
8. The existing signals at Farley are currently adjacent to rural properties. Any relocation is likely to relocate the turnout to existing residential areas or rural residence not currently impacted by the potential noise impacts associated with the turnout. The design of the proposed residential areas would be required to consider the turnout and potential noise impacts, including noise attenuation.

4.4 Community Consultation

Inadequate Consultation and Communication

Issues

The community consultation process implemented by the Hunter 8 Alliance was raised by a number of submissions, including:

- *Some submissions noted little or no contact prior to the Environmental Assessment exhibition.*
- *There was a concern that acquisition focussed on properties where partial or full acquisition was required.*
- *That the Environmental Assessment was not on exhibition at the locations nominated at Cessnock.*

Response

Two coordinated consultation processes have been implemented by the Hunter 8 Alliance from commencement of initial investigations, and is ongoing:

- A Stakeholder Engagement Team has been consulting with directly affected landholders, adjoining residents and landholders, and the wider community.
- The Property Team has been involved in discussing potential direct impacts on properties with landholders associated with field investigations, potential construction impacts and required property acquisition.

The community consultation that has been undertaken is described in Section 4.2 of the Environmental Assessment. Table 2-1 of this report provides further detail on the date, form and location of community consultation.

The Property Team undertook the following activities:

- Introduction of the Project to landowners and stakeholder adjoining the corridor where an acquisition was proposed.
- Ongoing liaison and negotiations with all landowners, stakeholders and their representatives from whom land was being acquired.
- Obtainment of access agreements, presentation of proposed acquisition plans, supply of project documentation.

- Preparation of compensation assessments in accordance with Land Acquisition (Just Terms Compensation) Act 1991
- Provide a point of contact for landowners from whom land was being acquired.

4.5 Traffic and Access

Construction Traffic Management

Issues

Submissions raised concerns about the potential impacts of construction traffic on:

- *Safety of other public road users.*
- *Traffic using local roads, and the provision of appropriate traffic management and control measures.*
- *Traffic and safety at intersections of local roads used by construction traffic and the New England Highway.*

The Maitland City Council submission acknowledges the proposed construction traffic management measures at the Wollombi Road and New England Highway intersection.

Response

A number of construction traffic management measures that would be implemented through a Construction Traffic Management Plan in consultation with the Roads and Traffic Authority (RTA), Maitland City Council, Cessnock City Council and Singleton Council, as described in Section 15.5 of the Environmental Assessment. This includes:

- Minimising construction traffic movements on local roads and maximising use of construction haul roads and the New England Highway.
- Development and implementation of site specific traffic control plans that depict the required traffic signage, vehicular, pedestrian and cyclist restrictions and various construction phasing scenarios.
- Provision of appropriate intersection treatments on the New England Highway to mitigate the traffic safety impacts of construction vehicles entering and leaving the New England Highway.

Further discussion on construction traffic management associated with the proposed amendments to the Project is in Section 5.7 and Section 6.6 of this report.

Access Impacts by Old North Road Bridge Demolition

Issues

One submission raised concerns about the loss of the Old North Road Bridge as an access option from their property across the Main Northern Railway. The submission also noted the potential impact that this loss of access option could have on property values and resale potential.

One submission noted that the Old North Road Bridge was regularly used by rail enthusiasts to observe and photograph trains.

Response

The decision to remove the Old North Road Bridge was done in consultation with Maitland City Council, the asset owner. The bridge is a secondary access point to the subject property, with principle access gained via the eastern portion of Old North Road. There is no evidence to suggest that the removal of the Old North Road Bridge would devalue or limit opportunities for resale. When taking a holistic view of the Project, market consideration of the improved access via the Station Lane overpass and the restriction of any future through traffic past the property may offset any perceived loss to value.

The Hunter 8 Alliance, on behalf of the ARTC, is to construct two new rail overpasses that would include safe pedestrian access. These are to be located at Hermitage Road Belford (approximately 20 kilometres to the northwest) and Station Lane Lochinvar (approximately 2.5 kilometres to the east). These would provide enthusiasts with safe access to observe and photograph trains.

Impacts on Access to Adjoining Properties

Issues

Submissions raised concerns about the potential impact of the Project on access to properties, both during and following construction. This included:

1. *One property at Branxton where they were able to access the rear of their property via an accessway adjacent to the rail corridor.*
2. *A proposed (development approved) service station and tourist development site at Belford.*
3. *The overall corridor during construction.*

Response

The following responds to issues raised in submissions regarding property access during and following construction:

1. The Project does not propose any works that would move beyond the rail corridor at this location. Therefore there would be no impacts on such access outside the rail corridor.
2. The Hunter 8 Alliance is currently constructing a road overpass to replace the existing level crossing at Hermitage Road, Belford. This road overpass was assessed under Part 5 of the Environmental Planning and Assessment Act 1979 and determined by ARTC. A number of additional approvals were required for the project, including approval from Singleton Council under section 138 of the Roads Act 1993 for the works impacting on the road corridor. This approval was received from Singleton Council on 21 July 2010. The approval does not include specific clauses relating to any design amendments required due to any access issues.
3. A range of measures to be implemented to manage construction traffic as described in Section 15.5 of the Environmental Assessment. This includes maintaining access to neighbouring land uses throughout construction unless otherwise agreed by the landowner.

Improvements to Other Transport Facilities

Issues

The submission from Maitland City Council requested that the Hunter 8 Alliance look at improvements to roads, pedestrian access and cyclist facilities at the Wollombi Road underbridge.

Response

The Project includes construction of a new road underbridge across Wollombi Road at Farley, parallel to the existing Wollombi Road underbridge. The Project does not include modification of the existing underbridge, or include any works that would alter or restrict the traffic access through the underbridge.

Improvements to Wollombi Road, including pedestrian and cyclist facilities, at the underbridge are the responsibility of Maitland City Council.

4.6 Social

Amenity and Health Impacts

Issues

Submissions raised concerns about the overall impacts of construction and operation on the surrounding residential and rural residential areas, in particular potential impacts on health, mental welfare, daily activities and the general amenity.

Response

Section 19.5 of the Environmental Assessment considers the potential impacts on the community associated with the Project, both as individual landholders, and the wider community. The social impacts of the Project are associated with a number of potential impacts during construction and operation described in the Environmental Assessment, including:

- Land acquisition.
- Noise and vibration.
- Air quality.
- Property damage.
- Drainage.
- Impacts on flora and fauna.
- Changes to property infrastructure.
- Reduced security.
- Changes to property access.
- Reduced road safety.
- Reduced transport access (road traffic, station and rail access, and pedestrian access).
- Construction employment opportunities.
- Property devaluation.
- Reduced viability of development plans.

Implementation of the mitigation measures included in the Environmental Assessment would reduce potential social impacts. The key actions include:

- Implementation of all actions contained in the Statement of Commitments.

- Implementation of the Construction Environmental Management Plan and relevant sub-plans (such as the Construction Noise and Vibration Management Plan and Construction Traffic Management Plan).
- Development and implementation of a Consultation Strategy.
- Develop the final design and construction methodology with an objective to minimise impacts on adjoining properties and minimise community impacts.
- Implementation of the Operational Noise Management Plan described in Section 6.7 of this report.

Inadequate Assessment of Social Impacts

Issues

Submissions proposed that the Environmental Assessment did not adequately consider the potential social impacts of the Project.

Response

There are a range of potential issues that could contribute to social impacts, as listed above. The potential impacts and mitigation measures associated with these issues are detailed throughout Part C of the Environmental Assessment. The Statement of Commitments commits the Hunter 8 Alliance to a number of measures that would mitigate potential impacts to the community.

Resident Safety During Construction

Issues

One submission raised concerns about safety and security during construction:

1. *Requested a guarantee that Hunter 8 Alliance would replace anything stolen from their residence prior to, during or after construction.*
2. *Concerned about the potential for construction personnel to put their family at risk.*

Response

With regard to the concerns about safety and security during construction:

1. The Hunter 8 Alliance cannot commit to the replacement of anything stolen from any residence prior to, during or after construction. In the event that a member of the Hunter 8 Alliance construction personnel were found by the NSW Police to be guilty of theft, that individual would be personally liable to any criminal or civil action taken by the NSW Police or the landholder. As with other employees and contractors, the Hunter 8 Alliance would not be responsible for such activities by its employees or contractors, but would assist the NSW Police in its enquiries.
2. The Hunter 8 Alliance places safety of the construction personnel and the community as its highest priority. In the Hunter 8 Alliance induction process, personnel and informed about their obligations when working near residences. The Hunter 8 Alliance also trusts that its personnel are law abiding citizens. However, in the event that any personnel are potentially involved in any suspicious or criminal activity, the Hunter 8 Alliance would assist the NSW Police upon request however possible.

4.7 Design

Clarification and Comment on Design Elements

Issues

Submissions requested clarification and provided comment on design details. These included:

1. *Clarification on the location of the proposed turnout at Farley.*
2. *Pacific National raised concerns regarding the impact and interaction of the third track with its proposed provisioning facility at Greta. This includes detail regarding the proposed Sawyers Creek realignment, the connection of the access and egress from the proposed facility to the Main Northern Railway, and a proposed embankment adjacent to the proposed facility.*
3. *Railcorp provided comment on the proposed alterations to the Lochinvar, Greta and Branxton Railway Stations. In particular:*
   - *Railcorp believes that the modifications to access arrangements at Lochinvar, Greta and Branxton Stations will trigger the need to comply with the Disability Discrimination Act 1992.*
   - *The Disability Standards for Accessible Public transport (CSAPT) associated with the Disability Discrimination Act 1992 requires that when a change of access to a station occurs, the station must be upgraded to comply with the standards. Railcorp requires the ARTC to work with Railcorp to meet the DSAPT and Railcorp standards.*
   - *Railcorp requires maintaining safe access to the stations during the construction period, and should be clarified prior to determination of the application.*
   - *The exact station upgrade requirements should be clarified prior to determination of the application.*
4. *Greta Estates noted that the Environmental Assessment does not show impacts/ property acquisition on their "Walkers Hill" property (located to the east of the rail corridor south of Greta Railway Station) despite the third track being located on that side of the corridor.*

Response

The following respond the design clarification requests:

1. The proposed turnout would be located at chainage 194.500 kilometres adjacent to the residential area of Telarah. However, Chapter 4 of this report describes how the Hunter 8 Alliance proposes to stage construction of the Project, which would include deferment of construction of the section of track between chainages 196.100 kilometres and 194.500 kilometres. Further details on location of turnouts resulting from the staging of construction are provided in Section 5.2 of this report.
2. The Hunter 8 Alliance and the ARTC understand the importance of the facility and have commenced negotiations with Pacific National to rationalise the land take and combine engineering works where possible. Batter maintenance and construction access have been built into the land acquisition requirements however at the request of Pacific National, the Hunter 8 Alliance are discussing alternatives for access that may provide and optimal solution for Pacific National. In addition, the ARTC are considering the potential for Pacific National to gain access to their facility via the rail corridor for Pacific National benefit.

In terms of design coordination, Pacific National has been advised that the section of the third track through Greta would be constructed in Phase 2 and this is covered in ARTC's correspondence relating to the rail access undertaking (separate to the Hunter 8 Alliance). The Hunter 8 Alliance has assisted Pacific National by regularly meeting with their project group and providing a full digital model of project data including copies of geotechnical investigations and survey.

3. The Hunter 8 Alliance is committed to working with its stakeholders to address all environmental and community concerns as a result of the proposed Maitland to Minimbah Third Track Project.

   Given the changes to phasing of the Project only Lochinvar Station would be affected by Phase 1.

   The Hunter 8 Alliance has been regularly liaising with Railcorp with regards to the proposed modifications at Lochinvar Station. The Hunter 8 Alliance is currently working with Railcorp towards an outcome that reflects the issue raised in the submission by Railcorp, such that the modifications at Lochinvar Station are agreed between Railcorp and ARTC especially relating to:

   – Maintaining continuous and safe access during construction.
   – Reinstating access in the final arrangement that satisfies Railcorp standards and its obligation to continue its implementation of its accessible Transport Action Plan for NSW

   Under the DSAPT and Action Plan the Government (Railcorp) is progressively upgrading rail infrastructure to provide accessible public transport. Negotiations with Railcorp are primarily undertaken by ARTC (a member of the Hunter 8 Alliance) and the CEO's of both organisations have recently nominated two senior managers to lead the discussions (which obviously includes stations outside the project area).

   The Hunter 8 Alliance believes that these negotiations should be allowed to continue after issuing of the Project Approval, which is consistent with the submission of both Railcorp and NSW Transport.

   Upon agreement between Railcorp and the Hunter 8 Alliance on the Lochinvar Station modifications, the agreed design would be submitted to the Department of Planning for approval (as a condition of the Minister's Conditions of Approval) prior to any works commencing on the Lochinvar Station.

   As previously discussed, modifications to Greta and Branxton Stations would be deferred as part of the Phase 2 constructions activities. The timing of Phase 2, and therefore any modifications to the stations required for construction of the third track, is to be determined.

   The Hunter 8 Alliance believes that a similar condition be applied to Phase 2 stations (Greta and Branxton) in that agreed plans (between ARTC and Railcorp) would be required to be submitted for approval before construction could begin.

4. The proposed third track would be located on the Down side between chainages 210.176 kilometres and chainage 211.716 kilometres and side between chainages 214.064 kilometres and chainage 216.360 kilometres as noted in Section 7.11 of the Environmental Assessment. Therefore works on the Up side (and therefore directly adjacent to the Walkers Hill property) would be minimal and would not require property acquisition outside the rail corridor.

Proposed Design Amendments

Issues

A number of submissions proposed potential design amendments that could improve rail operations or reduce environmental impacts. These included:

1. Extend the third track to the intersection with the North Coast Railway.

2. *Provide crossovers between lines to allow passenger trains to access the Down Main to reduce/ minimise impacts on passenger services.*
3. *Improve the grade on all tracks, not just the third track.*
4. *Reconsider the height of the third track above the existing tracks at Allandale (submission noted it is 0.5 metres above the existing two tracks).*
5. *Relocate the turnout at Telarah at chainage 195.000 kilometres to avoid potential noise impacts from slowing and idling trains on the residential area of Telarah.*
6. *Relocate the existing turnout and signals at Allandale to a location closer to Greta to avoid noise impacts on residents.*

Response

1. There are a number of constraints to the configuration of the track between Maitland and Farley contributing to the decision to tie into the Up Main at chainage 196.100 kilometres, on the Country side of Wollombi Road Bridge, including;
   - Farley cross overs.
   - East Greta line (Down side).
   - Triangle loop from the Main North to the North Coast (Up side).
   - Configuration of the crossovers in the Maitland Yard for access to the Up and Down coal tracks on the city side of Maitland.
   - Road and creek bridges in the Maitland Yard.
2. The Up and Down mains between Maitland and Minimbah are bidirectional. There are existing cross overs between the Up and Down main at Whittingham, Minimbah, Branxton, Allandale and Farley. The Down main may be used to pass slow moving trains at the line controllers' discretion.

   The third track is uni directional and is intended to be used primarily for coal trains with passenger and general freight operating on the Up main.
3. ARTC and the Hunter 8 Alliance acknowledge there would be benefits in upgrading the gradients of all tracks. However, undertaking this on the existing two tracks would result in significant disruptions to all train movements as it would require long term works that would make the two tracks inoperable, as well as restrictions on use of the third track due to construction access and safety.
4. The rail level difference from the Up Main to the Up Relief Main is approximately 50 millimetres. The rail level has been calculated to maintain existing road vertical clearances.
5. A number of conditions required the end of the third track and the required turnout to be located at chainage 194.500 kilometres, including the existing track and ground surface gradient, the existing track alignment and the Wollombi Road underbridge (preference is to not have fully laden trains idling on the underbridge, which would occur if the turnout was at chainage 195.000 kilometres).
6. For similar reasons restricting the potential relocation of the turnout to 195.000 kilometres, there is limited potential to relocate the existing turnout and signals at Allandale to a location closer to Greta. Locations with appropriate existing track and ground surface gradient, and appropriate existing track alignment are limited, and there are other residences to consider.

4.8 Surface Water

Concerns on Flooding and Drainage

Issues

Submissions raised concern regarding the impact of the Project on hydrology and the potential to increase flooding. This included a number of locations:

- *Anvil Creek (the Allandale road underpass).*
- *Belford.*
- *Sawyers Creek, other watercourses and drainage lines in the vicinity of the proposed Pacific National Provisioning Facility site.*

Maitland City Council also raised a concern about the potential impact on their drainage infrastructure.

Response

The design of drainage and bridges within the Project are described in Section 7.13 and Section 7.15 of the Environmental Assessment, including at the specified locations. Drainage and bridge infrastructure has been designed on the basis that the Project does not result in significant hydrologic change upstream or downstream of the rail corridor. Drainage infrastructure has been designed to, as a minimum, be consistent with the capacity of the existing drainage infrastructure and therefore maintain the hydrological flow through the rail corridor consistent with the existing hydrological environment. Therefore it is not anticipated to significantly alter existing flood levels or to adversely impact on operation or the structural integrity of Maitland City Council's drainage infrastructure.

The preliminary design for the realignment of Sawyers Creek in the vicinity of the proposed Pacific National Provisioning Facility site is provided in Section 7.13 of the Environmental Assessment. It has been designed so as to maintain the existing flow length, grade and power, while also allowing for reinstatement of native riparian vegetation.

The potential for hydrological changes as a result of the Project are considered in Section 18.3 of the Environmental Assessment. The assessment concluded that the Project would potentially result in a one percent or less increase in the 1% Annual Exceedence Probability (AEP) flood level.

Construction Impacts on Water Quality

Issues

Submissions raised concerns about the potential impact of construction on water quality due to erosion and sediment loss. That included concerns about water quality in receiving watercourses and farm dams.

Response

Assessment of the potential for erosion and sediment loss, and associated impacts on water quality of adjacent watercourses is included in Section 18.3 and Section 19.1.3 of the Environmental Assessment. Section 18.4 and Section 19.1.4 of the Environmental Assessment identify the proposed mitigation measures that would be implemented to minimise the potential for erosion and sediment loss, and impacts on water quality. These would be incorporated into a Spoil and Fill Management Plan that would form part of the Construction Environmental Management Plan.

Surface Water Monitoring

Issues

Surface water monitoring was proposed by submissions, including the NSW Office of Water.

Response

Implementation of a surface water quality monitoring program is proposed in Section 18.4 of the Environmental Assessment. This would include monitoring prior to the commencement of construction, as well as the monitoring of water discharged from the construction site, and water upstream and downstream of the construction areas.

4.9 Construction

Concerns Regarding Proposed Construction Hours

Issues

The following issues were raised regarding the proposed construction hours:

- *It is proposed that no works be permitted on weekends.*
- *Other submissions proposed that restrictions be placed on works on Saturdays, including no blasting on Saturday, or limitations on the type of works that can occur on a Saturday.*
- *Concerns were raised about the process for permitting works outside standard construction hours, that restrictions should be placed on what type of works could be undertaken outside standard hours, and that no such works should be permitted.*

Response

The Hunter 8 Alliance proposes that the standard construction hours would be those applied by the NSW Government and DECCW (7:00 am to 6:00 pm Monday to Friday, 8:00 am to 1:00 pm Saturday, no works on Sunday or public holidays).

Weekend work during normal construction hours would be limited to five hours on a Saturday. It is anticipated that blasting may be required to be undertaken during these hours on a Saturday. However, this would be undertaken following the management procedures described in Sections 17.5.2 and 17.6.1 of the Environmental Assessment.

Sections 17.6.1 and 7.20.4 of the Environmental Assessment notes the procedure for undertaking construction activities outside the standard construction hours, which are included in the existing Environment Protection Licence (No 3142) held by ARTC.

An application has been made by the ARTC for a new Environment Protection Licence (EPL) from DECCW addressing construction activities (including construction outside normal construction hours) for works in the ARTC rail network. It is anticipated that a variation to this EPL covering construction of the third track would be requested and the construction hours conditions applied to the Project.

Construction Compound Post-Construction Management

Issues

Maitland City Council requested information on the management of the construction compounds at Station Lane Lochinvar and Wollombi Road Farley following completion of construction.

Response

The proposed construction compounds for the Project (including those nominated in Maitland City Council's submission) are located on property to be leased by or purchased by the Hunter 8 Alliance. Negotiations are currently underway with the relevant landholders.

A number of facilities would be provided at the primary and secondary construction compounds, and would require vegetation clearance, grubbing and earthworks as noted in Section 7.19.1 of Environmental Assessment. After completion of the Project construction, the compound sites would be restored to the condition agreed with the landholder, minimising any ongoing environmental issues (such as erosion and sediment loss), and consistent with any applicable conditions of approval.

Construction Water Supply

Issues

The NSW Office of Water noted that limited detail was provided regarding the construction water supply, with a number of options provided in Section 7.19 of the Environmental Assessment.

Response

Potable water supply to the site compounds would be as follows:

- Black Creek Branxton Primary Compound - approximately 40 staff and 100 construction workers at approximately 20 litres per day equates to approximately 3000 litres per day which would be stored in a site tank and filled with water truck from off site mains supply.
- Station Lane Lochinvar Primary Compound- approximately 40 staff and 100 construction workers at approximately 20 litres per day equates to approximately 3000 litres per day which would be stored in a site tank and filled with water truck from off site mains supply.
- Hermitage Road Secondary Compound - approximately 10 staff and 50 workers at 20 litres per day equates to approximately 1000 to 1500L per day which would be stored in a site tank and filled with water truck from offsite mains supply.

Approximately one million litres per day would be required for construction water for Phase 1 of the Project. Initial investigations have indicated that there are insufficient potable water supplies to provide this volume of water for construction water.
Therefore, the Hunter 8 Alliance proposes the following potential sources of construction water:

- Utilise existing farm dams where they are located within properties acquired for the Project or an agreement has been reached with a landholder.
- Water harvested from construction phase sediment basins.
- Groundwater bores at/ near the following locations:
  - Jump Up Creek (chainage 223.800 kilometres).
  - Black Creek Primary Construction Compound (chainage 217.600 kilometres).

- Anvil Creek (chainage 208.000 kilometres).
- Station Lane Primary Construction Compound (chainage 202.750 kilometres).
- Gardiner Street Rutherford Secondary Construction Compound (chainage 198.000 kilometres).

- Extraction from Black Creek instead of groundwater extraction near this location. This may utilise an existing farm water supply pump on Black Creek.
- The Hunter 8 Alliance would also negotiate with the Hunter Water Corporation to determine if treated effluent is available from the Branxton Wastewater Treatment Plant.

The Hunter 8 Alliance would consult with the NSW Office of Water regarding approvals required under the Water Management Act 2000 regarding surface water and groundwater extraction licences once the exact location and required extraction rates have been determined.

Further Information on Construction Activities

Issues

One submission requested further information on construction activities at Wollombi Road.

Response

Extensive detail is provided in Chapter 7 of the Environmental Assessment on construction activities proposed for the area adjacent to Wollombi Road, including:

- Section 7.12: Track Construction (general details are provided).
- Section 7.15.2: Wollombi Road and Stony Creek Underbridge.
- Section 7.15.3: Stock Crossing Underpass.
- Section 7.19.1: Construction Compounds (two secondary compounds located near the Wollombi Road Underbridge.
- Section 7.10.1: Excavation Methodology (two potential blasting locations within 500 metres of the Wollombi Road underbridge).

Figure 7.1e of the Environmental Assessment shows the locations of proposed cutting, filling, proposed new underbridges and the secondary construction compounds.

As described in Section 5.1 of this report, these construction activities in the vicinity of Wollombi Road would not occur during Phase 1 of the Project, and would only occur when construction of Phase 2 becomes viable.

Construction Management at Stations

Issues

A number of submissions noted that safe and uninterrupted access needed to be maintained to the three stations during construction.

Response

Maintenance of access during construction works at the stations would be as outlined in Section 7.18 of the Environmental Assessment:

- Isolating construction areas through the use of concrete barriers constructed from pre-cast or tilt up panels and / or expanded galvanised steel mesh panels with steel framing. Such barriers would be provided around the third track construction area, as well as on the existing Down platform while the platform extension is under construction.
- Staging of construction activities and reopening of public access to areas.
- At Lochinvar Station, completion of the footbridge, new road access and parking area, as well as closure of the existing level crossing, prior to commencing the Up Relief.

A detail Construction Safety Plan would be prepared that details the staging of construction in accordance with relevant WorkCover and Railcorp requirements.

Farm Dam Management

Issue

The NSW Office of Water requested details of any farm dams requiring relocation.

One submission stated that use of farm dams during construction must have landholder approval.

Response

Section 5.3.2 of this report details properties with dams to be disturbed. The Hunter 8 Alliance is to provide landholders with appropriate compensation for the loss of these dams and for their replacement. It would be the landholder's responsibility to attain all necessary approvals prior to construction and operation of these new dams if they choose to replace the dams.

The Hunter 8 Alliance would not use water from farm dams before agreement with and approval from the landholder was granted.

4.10 Ecology

Flora and Fauna Impacts from Vegetation Clearance

Issues

A number of submissions raised concerns about the potential impacts on flora and fauna. This included:

- *Loss of habitat and overall impacts on ecological communities.*
- *Impacts on habitat connectivity and corridors and resulting habitat fragmentation.*
- *Specific issues about impacts on habitat on Anvil Creek near Allandale Road.*
- *DEWHA requested clarification on the potential impacts on the Grey-headed Flying Fox and any required potential mitigation measures.*
- *The need for any offsetting to be consistent with both the DECCW and DEWHA biodiversity offsetting guidelines.*
- *Provision of further detail on the proposed offsetting strategy*

Response

Assessment of the existing ecological environment within the Project area, the potential impact of the Project on ecology and include mitigation measures that have been incorporated into the Statement of

Commitments are included in Chapter 9 (Terrestrial Flora), Chapter 10 (Terrestrial Fauna) and Chapter 11 (Aquatic Ecology) of the Environmental Assessment. Sections 6.1and 6.2 consider the potential changes to the ecological impacts associated with the Preferred Project described in Chapter 5.

The assessment has developed a number of measures and strategies to mitigate the potential impacts on ecology, including impacts associated with loss of habitat and habitat connectivity. These are identified in Section 9.4 of the Environmental Assessment. Key measures include:

- Minimise vegetation clearance and mature tree retention wherever possible.
- Rehabilitation and replanting of native vegetation of cleared areas following completion of construction.
- Development and implementation of a Flora and Fauna Management Plan as part of the Construction Environmental Management Plan that includes strategies to mitigate impacts on native flora and fauna during construction.
- Development and implementation of a Revegetation Plan that includes strategies for protection and rehabilitation of the Slaty Red Gum and endangered ecological communities.
- Development of a Compensatory Habitat/ Offsetting Strategy that provides biodiversity offsets for native vegetation cleared for construction of the Project.

The Hunter 8 Alliance is currently preparing this strategy in consultation with key stakeholders (Department of Planning, Department of Environment, Climate Change and Water and the Federal Department of the Environment, Water, Heritage and the Arts). Further detail is provided in Section 5.11 of this report.

Noxious Weed Management

Issues

One submission raised the need to manage the noxious weed Lantana camara located at two locations at Greta (Sawyers Creek and Anvil Creek).

Response

The Flora and Fauna Management Plan would include a Weed Management Protocol that would provide measures for managing weeds cleared prior to construction and their management so as to minimise the potential for the spread of weeds.

Concerns on Ecological Assessment Methodology

Issues

Two submissions raised concerns that residents were not consulted regarding their observations of fauna, including threatened species, within and adjoining the Project area.

Response

The ecological assessments were undertaken in accordance with the Director-General's Environmental Assessment Requirements, as described in Sections 9.1.2 and 10.12 of the Environmental Assessment, including the relevant Department of Environment, Climate Change and Water (DECCW), NSW Fisheries and the Federal Department of Environment, Water, Heritage and the Arts (DEWHA) flora and fauna assessment requirements and guidelines.

The existing environment observations of the Terrestrial Fauna Assessment were generally consistent with the observations of the landholders.

Need for Compensatory Habitat Strategy and Revegetation Plan

Issues

Two submissions raised the need to prepare a Compensatory Habitat Strategy to mitigate the impacts associated with vegetation clearance.

One submission proposed that a Revegetation Plan (specifically for the Anvil Creek habitat near Allandale Road) be prepared.

Response

The Environmental Assessment includes the following mitigation measures:

- Development and implementation of a Revegetation Plan that includes strategies for protection and rehabilitation of the Slaty Red Gum and endangered ecological communities.
- Development of a Compensatory Habitat/ Offsetting Strategy that provides biodiversity offsets for native vegetation cleared for construction of the Project.

The Hunter 8 Alliance would revegetate areas disturbed within the construction impact zone. However areas outside this zone disturbed by previous activities would not be revegetated or restored by the Hunter 8 Alliance.

Construction Management of Ecological Impacts

Issues

Submissions raised the importance of for the management of ecological impacts during construction. This included:

- *Provision of training for construction personnel.*
- *Ecological monitoring during construction (and during ongoing operation).*

Response

The contents of the Construction Environmental Management Plan (CEMP) are outlined in Section 21.2 of the Environmental Assessment. The CEMP would include the environmental training requirements for construction personnel, and this would include measures related to vegetation clearance and actions to be taken in the event native fauna is encountered in the Construction Impact Zone.

A tree felling protocol would be developed and implemented to minimise harm to fauna species during the clearing of trees for the Project as noted in Section 10.4 of the Environmental Assessment. This protocol would be developed and implemented (as necessary) by an ecologist. Similarly, an ecologist would inspect any bridges and culverts to be removed or modified to inspect for roosting bats, and for fair martins and welcome swallow nests.

Detail on Biodiversity Offsetting Strategy

Issue

The DECCW submission states that the Environmental Assessment does not include details of the proposed Compensatory Habitat Strategy despite DECCW requesting this at the Adequacy Review stage. DECCW cannot recommend conditions of approval without further detail on the proposed offset strategy.

Response

A Biodiversity Offsetting Strategy is currently under development by the Hunter 8 Alliance. The Strategy is being developed in consultation with the Department of Planning, Department of Environment, Climate Change and Water and the Commonwealth Department of Environment, Water, Heritage and the Arts so that the Strategy addresses the biodiversity offsetting objectives of both the state and federal governments.

The Strategy would be implemented to offset the vegetation to be cleared for Phase 1 of the Project (approximately 13 hectares). The Strategy would be implemented for the vegetation clearance required for Phase 2 of the Project (approximately 53.2 hectares) once construction of Phase 2 is confirmed.

Table 6-1 in Section 6.1 of this report presents the vegetation clearance required for Phase 1 and Phase 2 of the Project, and the approximate area of vegetation required to offset this vegetation clearance (based on a ratio range of 5:1 to 8:1).

4.11 Operation

Operational Rail Safety Concerns

Issues

Submissions raised the concern that the increased train movements and the location of the third track could result in an increased risk of train incidents.

Response

The designs of the third track and associated infrastructure have been developed consistent with the applicable ARTC design standards. These have been developed with safety and stability of train movements as primary objectives. In addition, the design has been reviewed through a Safety in Design process to identify any potential safety issues associated with the design, both during construction (to construction personnel and the wider community) and operation. As well as its commitment to safety, there are operational and commercial reasons as to why the ARTC would require a design that minimises the potential for train derailment.

Maintain and Improve Passenger Services and Access

Issues

Submissions raised the need to maintain and improve passenger services on the rail line impacted by the Project. This included:

1. *More passenger services between Singleton and Newcastle.*
2. *Maintain and improve access to the Lochinvar, Greta and Branxton Railway Stations.*

3. *Provide passenger platforms and restore passenger services at the former Belford and Allandale Railway Stations.*

Response

1. The provision of additional passenger services is something that is not a responsibility of the Hunter 8 Alliance or the ARTC. However, as discussed in Section 5.4 of the Environmental Assessment, the improvements to freight services through reduced maintenance requirements would also provide an opportunity for increased passenger services on the Main Northern Railway.
2. A number of measures, as part of a Construction Safety Plan, would be developed and implemented to maintain safe access during construction as discussed in Section 7.18 of the Environmental Assessment.

   Section 7.17 of the Environmental Assessment identifies the extent of works proposed at Lochinvar, Greta and Branxton Stations. The proposed extent of works allows for passenger services to be provided from these stations, either at the existing platform (Lochinvar) or proposed extensions to existing platforms (Greta and Branxton). The ARTC is currently in negotiations with Railcorp on the provision of improvements to those stations.
3. The Project passes through the locations of the former Belford and Allandale Stations. These were decommissioned by Railcorp in 2005. It is understood that there is no immediate plans by Railcorp to re-establish passenger facilities at these locations. Construction and operation of the third track would not restrict the ability for passenger facilities to be constructed at these locations in the future.

Accuracy of Passenger Number Details

Issues

Submissions raised concerned about the accuracy of the passenger numbers cited in Section 15.2.4 of the Environmental Assessment. Submissions believed that the numbers provided do not reflect their personal observations or may be inaccurate due to lack of ticket sale facilities at the stations.

Response

The passenger numbers provided in Section 15.2.4 of the Environmental Assessment were provided following consultation with CityRail (the passenger services operator within the Project area).

Limits on Train Movement Numbers

Issues

One submission noted that the Environmental Assessment only considered impacts associated with predicted train movement numbers in 2012 and 2022, and not the maximum capacity. Therefore the submission proposed that train movement should be limited to those predicted for 2022.

Response

The DECCW Interim Guidelines for Assessment of Rail Infrastructure Projects (IGARNIP) requires assessment of noise based on the following:

- Existing noise levels.
- At the commencement of operations on the new infrastructure.
- Some time in the future (a minimum of ten years).

The ARTC does undertake rail traffic modelling and projections based on input from coal mine operators and other associated data. As the transportation of coal and other freight is dependant on market demand, it is difficult to make accurate predictions far into the future. Therefore coal and freight demands beyond 2022 (in 12 years time) are difficult to predict.

It is likely that train movements are likely to increase beyond those predicted for 2022. However, the ARTC would be required to comply with the requirements of the operational conditions of its Environmental Protection Licence, regardless of the increased number of train movements.

Maintaining Closure of Winders Lane Crossing

Issue

One submission proposed that the former Winders Lane level crossing (which has been closed to traffic and fenced with a gate to allow ARTC Maintenance personnel to access the rail corridor) be permanently closed, including to ARTC Maintenance personnel.

Response

The former Winders Lane level crossing would not be reopened as a level crossing. However, it would be maintained as an access point for ARTC Maintenance personnel. Due to its proximity to rail signals and the distance to other access points in either direction, Winders Lane would remain an important maintenance access point.

It should be noted that Winders Lane has not been proposed as a construction access for the Project.

4.12 Environmental Management

Construction Environmental Management and Monitoring

Issues

Submissions were concerned that adequate environmental management would be developed and implemented during construction.

Response

The Statement of Commitments that the Hunter 8 Alliance would be required to implement prior to, during and following construction have been appropriately amended based on the revisions to the Project and issues raised in this submission, and are included in Chapter 7 of this report. These have been derived from the mitigation measures listed in Part C of the Environmental Assessment following assessment of the various environmental and social issues, and amended as noted.

Section 21.2 of the Environmental Assessment provides the Table of Contents for the Construction Environmental Management Plan and an outline of what each section would address. A list of supporting sub-plans is also included.

A draft of the Construction Environmental Management Plan and the supporting sub-plans has been submitted for review by the Department of Planning concurrently with this report.

4.13 Non-Indigenous Heritage

Management of Non-Indigenous Heritage Items

Issues

Submissions noted that management and mitigation of impacts on non-indigenous heritage items was required. Submissions in particular raised concerns about impacts on the former Farley Railway Station and the Wollombi Road underbridge, the former Penfold's Winery and property "Dunoon" at Allandale and items on the former Greta Migrant Camp site.

Further information about issues raised regarding impacts on the State Heritage Register listed Greta and Branxton Railway Stations are discussed below.

Response

Section 13.2 of the Environmental Assessment identifies the non-indigenous heritage items within or adjacent to the investigation area listed under various statutory non-indigenous heritage registers.

The former Penfold's Winery and property "Dunoon" at Allandale listed under the Cessnock Local Environmental Plan 1989 was considered in the Non-Indigenous Heritage Study (Appendix H to the Environmental Assessment). As discussed further in Section 6.4 of this report, the Project avoids impacts on the former Penfold's Winery and "Dunoon" property, with the works required on this (the Down side) side of the rail corridor significantly reduced from that described in the Environmental Assessment. Therefore it is unlikely that any non-indigenous items associated with the former Penfold's Winery and property "Dunoon" would be adversely impacted by the Project.

The Cessnock Local Environmental Plan 1989 (as accessed 26 July 2010) lists the Former Greta Migrant Camp (Lot 2, DP 1036942, Lot 1, DP 416028 and Lot 21, DP 593748, Camp Road, Greta) as a locally significant heritage item. This listing is not included in the Department of Planning (Heritage Branch) website (as accessed 26 July 2010). The Hunter 8 Alliance does not propose to acquire property within the former Greta Migrant Camp property in the vicinity of the former heritage item on the site. While construction access may be required within the property (subject to landholder agreement) this would be limited to areas that avoid impacts on any non non-indigenous heritage sites.

The former Farley Railway Station is not listed under any statutory non-indigenous heritage register. However, it was considered in the Non-Indigenous Heritage Study (Appendix H of the Environmental Assessment). The station remnants would be disturbed during construction but would be subject to archival recording prior to the commencement of construction.

Allandale Fossil Area Management

Issues

Two submissions raised the Allandale Fossil Area.

One submission requested that an archaeologist be present during construction activities at the Allandale Area.

The submission from Industry and Investment NSW (I&I) supported the proposed management measures included in Section 13.4 of the Environmental Assessment.

Response

The management measures to be applied during described in Section 13.4 of the Environmental Assessment were developed after consultation with Industry and Investment, including the Industry and Investment officer responsible for the Allandale Fossil Area's listing on the Register of the National Estate.

The Hunter 8 Alliance does not propose to have an archaeologist on site during construction activities, but would provide opportunity for palaeontologists and other appropriate personnel to inspect material removed from the fossiliferous horizon.

Department of Planning (Heritage) Assessment Methodology Comments

Issues

The Department of Planning (Heritage) raised the following concerns regarding the non-indigenous heritage impact assessment of the Greta and Branxton Railway Stations:

1. *A full breakdown of the State Heritage Register listed stations, including a complete architectural assessment of all significant features and elements which highlight the exact areas of impact, including measured drawings and archival photographs.*
2. *Detailed information on proposed modifications to Greta and Branxton stations, and the impact of modifications on significance of the stations.*
3. *Policies/ measures to conserve the heritage significance.*
4. *A reassessment of the significance of the items once works are complete.*
5. *Assessment of impacts on the State Heritage Register listed Moveable Heritage Collection at Branxton.*
6. *Options to mitigate impacts on the Moveable Collection.*
7. *Consultation with a Conservation Architect and Structural Engineer on the deconstruction and reconstruction of the original brick facing platform to ensure it is rebuilt appropriately.*

Response

The following is in response to the Department of Planning (Heritage Branch) comments.

1. Appendix T of the Environmental Assessment provides preliminary design drawings of the Branxton and Greta stations that clearly show which elements of the stations would or would not be impacted. As noted, works are limited to lengthening and widening of platforms. No building would be impact.
2. As noted against issue 1, Appendix T provides drawings showing the proposed station modifications. The Non Indigenous Heritage Impact Assessment (Appendix H of the Environmental Assessment) assesses the potential significance of these modifications and proposes mitigation measures.
3. As noted against issue 2, the Non Indigenous Heritage Impact Assessment (Appendix H of the Environmental Assessment) includes mitigation measures to conserve the heritage significance of the stations.
4. The Non Indigenous Heritage Impact Assessment (Appendix H of the Environmental Assessment) includes mitigation measures that maintain the state heritage significance of the stations once the works are complete.

5. The majority of the items associated with the State Heritage Register listed Moveable Heritage Collection at Branxton are not located within the construction impact zone (either the original or the revised). As noted in Section 2.4.2.11 of the Non-Indigenous Heritage Study (Appendix H to the Environmental Assessment) the only potentially associated item was a steelyard scale on the existing Up platform at the Branxton Station, which has been secured in position with a layer of asphalt around the platform plinth, and not in an area to be impacted by the Project. The remaining items are not located at the station or within the construction impact zone.
6. As there are no proposed impacts to the Moveable Heritage Collection at Branxton no measures are required to mitigate impacts.
7. The Hunter 8 Alliance would utilise appropriate personnel such as a structural engineer and/ or a conservation architect on the deconstruction and reconstruction of the original brick facing platform at Greta and Branxton Station so that it is rebuilt appropriately.

   However, the proposed modifications to Greta and Branxton Stations would be deferred as part of the Phase 2 construction activities. The timing of Phase 2, and therefore any modifications to the stations required for construction of the third track, is undetermined.

   During the period between Phase 1 construction and the commencement of Phase 2 construction, Railcorp may have enacted modifications to the Greta and Branxton Stations through its implementation of the DSAPT and Action Plan. Therefore the Hunter 8 Alliance and ARTC propose that the following process would be implemented (as a condition of the Minister's Conditions of Approval) prior to any construction at the stations:

   – Develop designs for any station modifications (if required) in consultation with Railcorp that is consistent with the objectives of the DSAPT and Action Plan.
   – The designs would also be developed in consultation with the Department of Planning (Heritage Branch) so that the design minimises the potential impacts on the heritage significance of the stations.
   – Submit the agreed designs to the Department of Planning for approval prior to the commencement of construction.

4.14 Visual

Visual Impact of Noise Attenuation Measures

Issues

One submission noted that the potential visual impact of any noise attenuation (such as noise walls and barriers) should be considered.

Response

A 4.5 metre high noise barrier located between chainages 194.340 and 194.880 kilometres is the physical noise attenuation currently proposed in the Environmental Assessment. Submissions from residents in the vicinity of the proposed noise barrier have not included specific concerns about the visual impact of the proposed noise barrier, but the submissions have proposed an alternative noise barrier (an earth mound only to the height of the bottom of wail wagons). However, as previously discussed this would not provide noise attenuation.

As previously discussed, Section 17.6 of the Environmental Assessment proposes that noise monitoring would be undertaken at rural residences where IGANRIP is predicted to be exceeded, and noise attenuation measures would be considered if this monitoring confirms triggering of IGANRIP. When considering the potential attenuation measures, a number of issues are to be considered, including potential visual impacts.

Appropriate Visual Attenuation/ Landscaping Strategy Design

Issues

One submission noted that a landscape architect should be involved in developing a landscape strategy for the Project.

Response

A landscape architect would be involved in undertaking landscaping plans for key locations along the rail corridor. In other locations, ecologists and native vegetation specialists would be involved in restoration of native vegetation on disturbed soils.

Vegetation Management and Visual Impacts

Issues

Submissions raised the following issues regarding vegetation and visual impacts:

- *Concerned about the potential visual impact associated with the loss of vegetation.*
- *Vegetation should be provided as a visual barrier. However one submission raised the concern that as planted trees would take time to provide a barrier, a constructed barrier should be considered.*
- *One submission noted that they had previously requested the provision of trees and mulch to provide a visual barrier to the rail corridor but had been declined.*

Response

The potential visual impacts associated with the loss of vegetation due to construction of the Project are acknowledged in Section 19.6 of the Environmental Assessment. To mitigate the potential loss of native vegetation, and to utilise vegetation to improve the visual environment, the Environmental Assessment includes the following measures:

- Where possible avoid loss or damage to vegetation within the rail corridor and adjacent road reserves and private property including the protection of trees prior to construction and/or trimming of vegetation to avoid total removal. This includes vegetation that makes a significant and positive contribution to landscape character and/or provides screening to adjacent properties.
- Rehabilitation and replanting of native vegetation for areas of newly-created bare soil following construction, such as batters.
- A revegetation plan would be prepared, including strategies for protection and rehabilitation of Slaty Red Gum and endangered ecological communities that occur in the study area. The revegetation plan would also identify local native species appropriate for the revegetation of riparian areas surrounding creeks and drainage lines.
- Maintenance of screening planting following the establishment phase to ensure continual / improved visual screening over time.

4.15 Aboriginal Heritage

Concern on Extent of Aboriginal Heritage Survey

Issues

One submission was concerned that the fieldwork for the Aboriginal Heritage Impact Assessment did not have an extent beyond that included for the Environmental Assessment.

Response

The Aboriginal Heritage Impact Assessment was undertaken in accordance with the DECCW Interim Community Consultation Guidelines for Applicants, Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation, and the Part 3A EP&A Act Guideline for Aboriginal Cultural Heritage Assessment and Community Consultation.

Avoidance and Management of Aboriginal Heritage Impacts

Issues

One submission noted that construction should avoid impacts on Aboriginal heritage sites and not extend beyond the area surveyed for the Aboriginal Heritage Impact Assessment.

Response

A number of management measures for Aboriginal heritage relics are identified in Section 12.4 of the Environmental Assessment that would be detailed and implemented through an Aboriginal Heritage Management Plan. This does include measures to avoid disturbance to Aboriginal heritage relics where possible. However, where sites cannot be avoided, the Aboriginal Heritage Management Plan includes measures to involve the Aboriginal community in the inspection of such sites and salvage of relics.

The Aboriginal Heritage Impact Assessment investigation area exceeds the area currently required for construction of the Project. However, in the event that any construction activities are proposed beyond the revised construction impact zone, a supplementary environmental assessment (including Aboriginal heritage) would be required prior to any construction activities being permitted to occur.

Adequacy of Aboriginal Stakeholder Consultation and Aboriginal Heritage Impact Assessment

Issue

DECCW acknowledges the additional information provided regarding the local Aboriginal consultation process and that six of the 20 registered stakeholders provided their support for the mitigation and management measures in the Environmental Assessment. However this is not a majority of stakeholders. It is recommended that Planning satisfies itself that a majority of the registered Aboriginal stakeholders support the findings in the Environmental Assessment.

Response

Four (not six as noted by DECCW) of the 20 registered Aboriginal stakeholders responded to the invitation to comment on the Aboriginal Heritage Impact Assessment document. All four responded in favour of the report and its findings.

The Hunter 8 Alliance issued a draft of the Aboriginal Heritage Impact Assessment to all 20 registered Aboriginal stakeholder groups and invited them to provide comment, in accordance with the DECCW

Interim Community Consultation Guidelines for Applicants, Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation, and the Part 3A EP&A Act Guideline for Aboriginal Cultural Heritage Assessment and Community Consultation. The following groups responded to this invitation:

- Wanaruah Local Aboriginal land Council (two responses).
- Mindaribba Local Aboriginal land Council (two responses).
- Wonnarua Nation Aboriginal Corporation.
- Gidawa Walang.

The Hunter 8 Alliance believes that the two Local Aboriginal Land Councils and the Wonnarua Nation Aboriginal Corporation are key representatives of the local Aboriginal community, and are the groups that maintained a keen interest in the Project through ongoing involvement in the Indigenous Liaison Committee established by the Hunter 8 Alliance with the local Aboriginal community.

Further, the Hunter 8 Alliance believes it has satisfied the consultation requirements of the cited guidelines by providing the entire Aboriginal Heritage Impact Assessment document to the 20 registered stakeholders with the invitation to comment. We understand that it is not required by the guideline, or normal procedure, to request the registered stakeholders to confirm that they support the findings of the assessment. We understand that the opportunity to comment on the assessment provides the groups to confirm their support if they so choose to, or to identify their concerns or disagreement with the report. No groups have expressed concerns or disagreement with the findings of the report.

The Hunter 8 Alliance has commenced follow up communication with those stakeholders that did not make a submission to confirm whether the support the findings of the assessment, or if they have any issues with the report. Any relevant correspondence (which may include correspondence from the stakeholders or records of discussion) would be submitted to the Department of Planning upon receipt.

4.16 Groundwater

Groundwater Management Approvals

Issues

The submission from the NSW Office of Water noted the following regarding approvals required for works impacting on groundwater:

1. *Dewatering proposed during construction requires a licence under the Water Management Act 2000.*
2. *Under the Hunter Unregulated and Alluvial Water Sources 2009 Water Sharing Plan (WSP) the Hunter 8 Alliance would be required to obtain shares from the WSP to cover any water taken from the system and manage impacts according to the WSP.*
3. *No details provided on the licensing of the groundwater monitoring bores established for the Environmental Assessment.*
4. *The requirement for a licence has not been identified for dewatering for bridge construction at Stony Creek, as well as for all proposed bores, including expected annual extract volumes.*
5. *This extraction would also be required to purchase shares for the extracted volumes, which must be measured and reported.*

Response

In response to the issues raised by the NSW Office of Water regarding groundwater:

1. The Hunter 8 Alliance would be required to obtain an access licence for surface or groundwater extraction under section 56 of the *Water Management Act* 2000 as noted in Section 2.5 of the Environmental Assessment. Upon completion of detail design and confirmation of locations where dewatering is required, the Hunter 8 Alliance would consult with the NSW Office of Water to attain the access licence prior to construction.
2. When consulting with the NSW Office of Water regarding the access licence, the Hunter 8 Alliance would also discuss obtaining shares from the Water Sharing Plan to cover any water taken from the system and manage impacts according to the Plan.
3. Section 19.3.2 of the Environmental Assessment does state that "Monitoring and testing of new groundwater bores" was undertaken as part of the Groundwater Study (Appendix M of the Environmental Assessment). However this was an error. The Environmental Assessment utilises water quality data from existing groundwater bores and recommends that monitoring be undertaken prior to construction.
4. As described in Point 1, the Hunter 8 Alliance would consult with the NSW Office of Water regarding the licence upon completion of detail design and confirmation of locations where dewatering is required. This would include any dewatering required for bridge construction at Stony Creek and all proposed bores, including expected annual extract volumes.
5. As discussed in Point 2, the Hunter 8 Alliance would also discuss obtaining shares from the Water Sharing Plan to cover any water taken from the system and manage impacts according to the Plan. This would include measuring and reporting on water extraction.

Additional Groundwater Impact and Management Details

Issues

The submission from the NSW Office of Water noted the following regarding further information requirements on groundwater:

1. *Risk Assessment considered impact of temporarily lowering groundwater levels near Wollombi Road, but without reference to the Water Sharing Plan.*
2. *Insufficient detail is provided for the proposed Groundwater Monitoring Program. The NSW Office of Water has proposed approval conditions for such a program.*

Response

In response to the issues raised by the NSW Office of Water regarding groundwater impact and monitoring:

1. The Hunter 8 Alliance acknowledges that the Environmental Risk Assessment (Appendix D of the Environmental Assessment) did not reference the Water Sharing Plan when considering the Project Controls or Additional Controls when assessing the potential risks associated. As previously discussed, the Hunter 8 Alliance would obtain the necessary licences and shares prior to undertaking any dewatering on the Project, including at the Wollombi Road underbridge.
2. Section 19.3.4 of the Environmental Assessment proposes that groundwater monitoring would be undertaken prior to and during the construction phase.

4.17 Cumulative Impacts

Other Developments

Issues

Submissions raised concerns regarding a proposed ARTC Provisioning Facility located at Rutherford. The submission questioned why the facility was not included in the Environmental Assessment or discussed in consultation with landowners.

Submissions noted that details of the rail overpasses to be constructed by the Hunter 8 Alliance at Hermitage Road Belford, Nelson Street Greta, and Station Lane Lochinvar (assessed by Review of Environmental Factors under Part 5 of the Environmental Planning and Assessment Act 1979) had not been provided or not adequately considered. Details of these projects have previously been made available to the community in Hunter 8 Alliance newsletters and community drop-in days.

Response

ARTC has been investigating sites for a proposed provisioning facility, and had considered locating it at Rutherford as was noted in the 2009-2018 Hunter Valley Capacity Strategy Consultation Document (ARTC, 2009). However for a number of reasons, such as the proposed Pacific National Provisioning Facility at Greta, ARTC has suspended investigations and associated activities, including environmental assessment and approval, for a provisioning facility for the foreseeable future.

As noted, the rail overpasses to be constructed by the Hunter 8 Alliance at Hermitage Road Belford, Nelson Street Greta, and Station Lane Lochinvar have assessed by Review of Environmental Factors under Part 5 of the *Environmental Planning and Assessment Act* 1979 for determination by the ARTC. Also as noted, details of these projects have previously been made available to the community in Hunter 8 Alliance newsletters and community drop-in days. This has included advising of the approval process applicable to the overpasses and the construction program in relation to the Project. These projects have been considered as appropriate in the Environmental Assessment:

- The earthworks and filling for the overpasses have been included in hydrological modelling to assess the potential impacts on flooding and drainage.
- The amendments to the local road network and construction access through the rail corridor associated with the overpasses have been included in assessment of traffic and access impacts.
- The footprints of these projects have been included in the investigation area and construction impact zone (original and revised) to allow for integration of environmental management (as appropriate due to construction programming and overpass post-construction management activities).

4.18 Other Issues

Project Support

Three submissions registered support for the Project. Reasons included support for long-term efficiency improvements of the rail system and the competitiveness of Australia's coal industry.

The Maitland City Council submission notes its support for the proposed Station Lane overpass (a separate ARTC project to be undertaken by the Hunter 8 Alliance).

Project Objection

Issues

Two submissions registered their objection to the Project. Reasons included:

- *Noise and vibration impacts.*
- *The sale of Australia's natural resources to overseas markets at reduced prices. These markets should be responsible for building this infrastructure.*

Two submissions noted that the Project should only be approved if their key concerns could be adequately addressed (listed throughout the preceding sections in this chapter).

Response

The Hunter 8 Alliance believes that it has adequately addressed concerns regarding noise and vibration impacts (refer to Section 4.1 of this report), and the range of other issues that have been addressed.

The Hunter 8 Alliance is constructing the third track on behalf of the ARTC to improve the network capacity. While the Project was announced as part of the Federal Government's Nation Building Package, it should be noted that the ARTC derives fees from the coal companies to use the rail network.

Related Issues

Issues

One submission raised concerns regarding facilities adjacent to or within the Project area, but outside the control of the Hunter 8 Alliance:

- *Concerns regarding the closure of toilets at Greta Railway Station.*
- *Concerns regarding previous dealings with Cessnock City Council regarding Nelson Street and the Anvil Creek Bridge.*
- *Issues regarding a lack of kerb and guttering provided by Railcorp and Cessnock City Council on Nelson Street and the Greta Station car park and the associated drainage issues.*

Response

While these issues are important and could indirectly impact, or be impacted by, the Project, these relate to actions undertaken by, or issues resulting from dealings with, local and state government agencies that the Hunter 8 Alliance cannot influence.

Environmental Assessment Exhibition Period

Issues

One submission believed that the Environmental Assessment exhibition period should have been extended beyond the statutory period.

Response

The Environmental Assessment was exhibited for the minimum statutory period defined by the Environmental Planning and Assessment Act 1979. The exhibition period was determined by the Department of Planning.

Traffic Management on Minimbah Bank Third Track and Approval of Ancillary Works

Issue

One submission raised their concern about the duration of traffic management measures on the New England Highway associated with the Minimbah Bank Third Track Project. As a result, the submission requests that the Project Approval include conditions that require completion of all ancillary works prior to commissioning of the third track.

Response

The Hunter 8 Alliance acknowledges the duration that the traffic management measures have been in place along the New England Highway for construction of the Minimbah Bank Third Track Project. However, these measures are anticipated to be fully removed by October 2010.

Traffic management controls on the New England Highway would be limited to those intersections to be utilised by construction traffic (refer to Section 5.7), while traffic controls would also be applied on local roads utilised by construction traffic. However, due to the nature of the works, these are not anticipated to be of the scale of those on the New England Highway for the Minimbah Bank Third Track Project.

The Hunter 8 Alliance is committed to fulfilling the conditions of the Project Approval for the Project (if granted) and would implement them as required in consultation with the Department of Planning.

Impacts on Television Reception

Issue

One submission raised concerns about the potential impacts of operations on television reception, and the potential for provision of an aerial and cabling if impacts on reception can be attributed to train operations.

Response

The Hunter 8 Alliance does not anticipate any impacts on television reception as a result of operation of the third track. However, if it is confirmed that operations have resulted in impacts on television reception, the Hunter 8 Alliance would negotiate with the affected landholder in determining the appropriate mitigation option.