Appendix A

Summary of JRYUP EIS Submissions

Reference	Summary of Comment	Response
NRW 1	Proposed diversions on Elizabeth and Willy Creeks A water licence to interfere with the flow of water and a development permit will be required under the provisions of the Water Act 2000 and Integrated Planning Act 1997 (IPA) for the proposed stream diversions within Elizabeth Creek and Willy Creek as outlined in Sections 7.2.4 and 7.2.5 of the EIS.	Noted
NRW 2	A Guideline for the authorisation of watercourse diversions is attached. While this guideline was developed for the Mining Industry, information and planning within the guideline should be used as a guide for information that may be required to assess a watercourse diversion application.	Noted – Connell Hatch has been sent the guideline
NRW 3	Further information regarding the proposed diversion is required to be provided before the submission of an application.	Noted
	Proposed crossings within Elizabeth and Willy Creeks	
NRW 4	The EIS does not contain sufficient information to identify the quantity of new railway crossings, their location, or their design (including the proposed Rip-Rap and scour protection of the crossings) for Elizabeth and Willy Creeks.	Refer Section 2.2
NRW 5	The Water Amendment Regulation (No.]) 2007 approved on 22/03/2007 gave effect to the Guideline Activities in a watercourse, lake or spring carried out by an entity. Entities listed under section 2 of the Guideline are provided an exemption under section 49-51 of the Regulation from requiring a riverine protection permit to carry out activities (such as destroying vegetation, excavating or placing fill) within a watercourse.	Noted
NRW 6	Queensland Rail would be considered an Entity under the Guideline (Section 2 paragraph 1), and as such would need to adhere to this guideline when working within the 'watercourse'. However, due to the provision of insufficient information it is not possible to determine if the guideline would be applicable for this project. Although proposed works may be assessed against these guidelines in part, given the magnitude of the project, licensing/permitting may still be required under the Water Act 2000.	Noted – This issue will be addressed during detailed design and relevant applications
	Options during construction for the movement of fill	
NRW 7	It is noted that a number of options are considered within the EIS for moving a large volume of fill from north of Elizabeth Creek to South of Willy Creek. Although temporary, the proposed options would have varying impacts on the watercourses. Further information is required in order to determine the relevant authorities required under the Water Act 2000 or the Integrated Planning Act 1997	Refer Section 2.2
	Implications for water supply during project	
NRW 8	Proposed water sources during the project have been identified as a combination of existing groundwater bores, proposed new bores and local farm dams.	Noted
NRW 9	The EIS does not specify the volumes of water that will be required. It is important to note that the project area located within the Pioneer Declared Subartesian Area, and as such, access to groundwater within the project area is subject to the provisions of the Water Act 2000.	Refer Section 2.13

Reference	Summary of Comment	Response
NRW 10	Access to existing or proposed groundwater bores for the purposes of supplying water during construction would require either a Water Licence or a Water Permit under the Water Act 2000. Any bores, either existing or proposed, would also require development approval under the WA. The EIS does not identify any existing bores intended to be used for the project or the location, aquifer etc. of new bores proposed for the project.	Relevant approvals to be obtained if required
NRW 11	Sufficient information has not been supplied to determine the viability of groundwater as a source of water or the impacts use of groundwater will have on existing users of the resource.	Aquifer tests to be undertaken prior to construction
NRW 12	If existing local farm dams are located on watercourses, use of impounded water would also require Water Licences or Water Permits under the Water Act 2000. More detail of proposed water sources during construction of the project is required to determine exactly what approval processes are required.	Relevant approvals to be obtained if required
	Groundwater Impacts	
NRW 13	The EIS has identified that other works may affect groundwater resources (such as excavations). Insufficient information has been provided regarding the impact on the groundwater resource to be able to determine any legislative requirements under the Water Act 2000 or the Integrated Planning Act 1997.	Additional groundwater monitoring to occur prior to construction
	Water quality	
NRW 14	As part of the Mackay Whitsunday Healthy Waterways program, NRW have been undertaking monthly baseline water quality monitoring (sediment, nutrients, herbicides) within Plane Creek for the period July 2006 - June 2008, upstream of the project area to develop local water quality guidelines. NRW have also undertaken event water quality monitoring during the 2004/05, 05/06 and 06/07 wet seasons for the same parameters. This data is available upon request from NRW.	Refer Section 7.3
	Terrestrial Flora	
	As stated in sections 4.11.7 and 6.6.3, a permit to clear vegetation on freehold land that is identified as a Regional Ecosystem will be required. In order to adequately assess the clearing of vegetation as a result of this project, NRW requires:	
NRW 15	• A detailed spatial plan of the proposed clearing application area.	To be addressed in application
NRW 16	• Specific details on the method of clearing.	Refer Section 2.3
NRW 17	• Detailed evidence of how clearing meets ALL the Performance Requirements in Part S of the Regional Vegetation Management Code: Coastal Bioregions, 20 November 2006.	To be addressed in application
NRW 18	An initial assessment of the EIS and the current footprint has revealed that there may be particular issues in relation to the following Performance Requirements;	To be addressed in application
NRW 19	• Performance Requirement S.3. This application will involve the clearing of native vegetation, in and within the distances stipulated by the Code, associated with watercourses. Please provide detailed evidence on how the application will meet the Acceptable Solution or meet the Performance Requirement itself.	To be addressed in application

Reference	Summary of Comment	Response
NRW 20	• Performance Requirement S.6. This application involves the clearing of vegetation that is in excess of 2 hectares or 10 metres in width. For clearing areas in excess of 2 hectares or 10 metres width, clearing of this size must not occur in a discharge area or within 200 metres of a discharge area or contribute to waterlogging or the salinisation of ground water, surface water or soil. Please provide detailed evidence on how the application will meet the Acceptable Solution or meet the Performance Requirement itself.	To be addressed in application
NRW 21	• Performance Requirement S.7. This application involves the clearing of Endangered or Of Concern Regional Ecosystems. Please provide detailed evidence to show how the application will only clear in Endangered or Of Concern Regional Ecosystems listed in Table 2 of the Code or maintain the current extent of Endangered or Of Concern Regional Ecosystems.	To be addressed in application
NRW 22	Note: words underlined in this document refer to words of significance described in the dictionary of the Regional Vegetation Management Code: Coastal Bioregions, 20 November 2006.	Noted
NRW 23	The vegetation offset policy is Policy for Vegetation Management Offsets; 20 November 2006 may be of assistance in addressing the PR of the code. This policy is available at: http://www.nrw.qld.gov. au/vegetation/legislation.html	Noted
NRW 24	NRW recommend that you discuss the clearing of vegetation with local staff prior to the preparation of an EIS. Please contact Grant Paterson on (07) 4967 0745 to arrange appointment.	Noted
	Land Tenure	
NRW 25	NRW has advised the proponent of a number of issues that need to be addressed in relation to tenure. These have been identified in an email addressed to Warren Oates	Noted
NRW 26	Queensland Rail and include issues relating to road openings and closures, access and road network integrity. NRW have also advised that Native Title could be an issue that needs to be addressed in relation to the acquisition of part of Unallocated State land described as Lot 100 on USL39250. It is acknowledged that these issues will be determined outside of the EIS process.	Noted
	Acid Sulfate Soils	
NRW 27	No information has been provided in the EIS in relation to Acid Sulfate Soils (ASS).	Refer Appendix F
NRW 28	The proposed corridor is likely to contain Acid Sulfate Soils at some locations, in particular tidal creeks and/or land <5m AHD.	Refer Appendix F
NRW 29	Mitigation measures for the Construction Phase (section 5.5.2) states that ASS soil handling and management measures will be developed in the EMP and implemented prior to commencement of construction. The EMP must outline how Outcome 1 of SPP2/02 Planning and Managing Development Involving Acid Sulfate Soils will be achieved. The information in both the ASS investigation report and any proposed management strategy should be in accordance with the relevant parts of Sections 6 to 10 of SPP2/02 and associated guideline. It is further noted (section 6.5.3) that an ASS investigation was planned for August and September 2007, which will result in an ASS management plan to be implemented during construction. NRW would like to review the ASS management plan and EMP once the ASS investigation has been undertaken and the EMP developed.	Refer Appendix F
DOC 1	The following minor comments are made with respect to the analysis of the socio-economic environment (chapter 15).	

Reference	Summary of Comment	Response
DOC 2	Page 15-6, Table 15.2: the population of Mackay SD in 2001 was around 137,000, as depicted in Table 15.3. The figures provided in this column are incorrect.	Refer Section 15.3.1
DOC 3	In the subsequent second paragraph beneath Table 15.2, the population in Mackay SD increased by 14.3%, not 94.3%, between 2001 and 2006.	Refer Section 15.3.1
DOC 4	Page 15-13, paragraph 4: in brackets at the end, it is understood the percentage for Sarina SLA should be 26.7%, based on the figure in the first paragraph beneath the heading 'Rental accommodation and .housing costs'.	Refer Section 15.3.2
DOC 5	Page 15-14, Table 15.9: the figures quoted are those from the 2006 Census QuickStats. Quickstats includes all tenancies, including caravan parks and subsidised rents. By contrast, the Residential Tenancies Authority of Queensland estimated the median weekly rent of a single-bedroom flat/unit in Mackay City at $170 at June 2006, and $200 at June 2007. For a 2-bedroom flat/unit, the median rent was $250 at June 2007, and for a 3-bedroom house, the median rent was $350 at June 2007. The RTA does not publish an equivalent figure for Queensland, but median weekly rents for flats/units were roughly $40 to $50 lower in Mackay than in Brisbane, and for houses were roughly $35 higher in Mackay than in Brisbane at June 2007. (Source: http://www.rta.qld.gov.au/March_quarter_2007_1.cfm) Based on these figures, the Department suggests that market rents are significantly higher than those indicated in the EIS.	Refer Section 15.3.3
DOC 6	Page 15-16, Table 15.10: the Department agrees with the median house prices provided in the table. Median house prices in Mackay were roughly 9% higher in Mackay than in Brisbane at June 2007. (Source: REIQ, as published in The Sunday Mail, 9 September 2007)	Noted
DOC 7	Page 15-21, Table 15.13: it is understood that the equivalent data from the 2006 Census is due for release at the end of October 2007.	Refer Section 15.3.4
DOC 8	The Department notes the intent of the proponent to erect a temporary accommodation village on unused land owned by the Sarina Golf Club adjacent to the existing Jilalan Rail Yards. The Departments acknowledges that the need for this facility as alternative accommodation places are not available and the proponent is expecting to source the majority of their construction workforce from outside Sarina Shire. However, the Department is of the opinion, based on current information, that the proposed site is not suitable for permanent accommodation such as a caravan park or residential accommodation - for reasons of its close proximity to an industrial area, the effects of noise and light on the amenity of the area, the difficulty of supplying services to the area, the undesirability of dispersing urban growth around Sarina township unnecessarily, and difficulties in traffic management.	Agree – refer Section 15.2
DOC 9	The Department further concurs that the accommodation village should not be issued with a liquor licence, as residents can access supplies and services from existing sources at the nearby Sarina Golf Club and Sarina township.	Agree – refer Section 15.2
DOIP 1	Skilled labour shortages and housing affordability are correctly identified as problems within the local area that are likely to worsen as a result of the project, at least during the construction phase. In light of Sarina's higher than average unemployment levels, it is commendable that local job seekers will be targeted for employment, and utilisation of local employment firms and training providers to facilitate this have been identified within the mitigation measures. It is also correctly noted that a large number of workers will most likely have to be brought in from outside the region.	Noted
DOIP 2	Accommodation of the additional workers within the locality will put additional pressure on the local housing market. In general, the review of the accommodation issue is addressed in adequate detail in the draft EIS. However, there are two minor points that need to be brought to your attention:	

Reference	Summary of Comment	Response
DOIP 3	1. On page 15-47, housing affordability, first dot point, the 2006 median house prices for Sarina Shire and Mackay are said to be $165 and $160 respectively. This is most likely a typographical error and may be median rents	Refer Section 15.3.3
DOIP 4	2. The last paragraph in 15.4.3 Proposed construction accommodation village states that the facility might be "used for other purposes post-construction", It would be advisable to add additional wording such as "subject to local government planning approval" so as to avoid any perceived support by Council for any use post-construction.	Refer Section 15.2
	General comments	
DPIF 1	The infrastructure proposed in the EIS will cross Elizabeth and Willy Creeks and has the potential to significantly limit fish movement, particularly where infrastructure is required within the creek itself, or where light levels are severely restricted. To limit these impacts the DPI&F recommends bridged structures rather than pipes or culverts, and designs which allow natural light to penetrate to most areas of the creek.	This issue will be addressed during detailed design and relevant applications
DPIF 2	The proposed high flow path between the two creeks also has the potential to alter stream flows and fish movement. The capacity of Willy Creek to accommodate the additional flows without exacerbating flooding impacts should be determined and, if necessary, addressed.	This issue will be addressed during detailed design and relevant applications
DPIF 3	The alignment of the rail infrastructure to the north adjacent to Plane Creek will impinge on tidal lands and result in the destruction of marine plants protected under the *Fisheries Act 1994.* While this alignment impacts on fish habitats, the DPI&F believes this impact is significantly less than, and preferred to, the original proposal to re-align or divert Plane Creek.	This issue will be addressed during detailed design and relevant applications
DPIF 4	Specific comments on each of these impacts, and further information required by the DPI&F to assess and make recommendations to the Coordinator-General are provided below.	Noted
	Infrastructure across - Elizabeth Creek	
	Impacts	
DPIF 5	The restriction of low flow conditions to a set of pipes may pose a number of problems to fish movement along Elizabeth Creek, increased flow velocities combined with long, dark expanses of piped waterway will pose both a physical and psychological barrier to fish passage.	This issue will be addressed during detailed design and relevant applications
DPIF 6	Rock lining sections of the creek bed will also remove any existing instream structures currently utilised as fish habitat and will reduce habitat diversity within the stream bed.	This issue will be addressed during detailed design and relevant applications
	Further information	
DPIF 7	More information is required on the proposed pipe configuration for base flows within Elizabeth Creek	This issue will be addressed during detailed design and relevant applications
DPIF 8	Details of measures which counteract the impacts that high flow velocities may have on fish movements expected within Willy Creek after rock lining has been completed.	This issue will be addressed during detailed design and relevant applications
	Recommendations	
DPIF 9	See below for general comments for the design of waterway barriers	This issue will be addressed during detailed design and relevant applications

Reference	Summary of Comment	Response
DPIF 10	Flows in excess of 1 m/s may constitute a barrier to fish movement as they are unable to swim against these flows for any extended period of time. Measures such as refuge pools or rock ridges may be incorporated into the design to help ameliorate these problems.	This issue will be addressed during detailed design and relevant applications
	Infrastructure across Willy Creek	
	Impacts	
DPIF 11	The rock lining of Willy Creek and the diversion of high flows from Elizabeth Creek in this creek may cause flow velocities within the creek bed to become a barrier to fish movement. Flows in excess of 1 ms may constitute a barrier to fish movement as most species of native fish are unable to swim against these types of flows for any extended period of time.	This issue will be addressed during detailed design and relevant applications
DPIF 12	Rock lining the creek beds will remove any existing instream structures currently utilised as fish habitat and will reduce habitat diversity within the stream bed.	This issue will be addressed during detailed design and relevant applications
DPIF 13	Any structures within the bed of the creek may pose a physical barrier to fish movement and need to be assessed.	This issue will be addressed during detailed design and relevant applications
	Further Information	
DPIF 14	Details of measures which counteract the impacts that high flow velocities may have on fish movements expected within Willy Creek after rock lining has been completed.	This issue will be addressed during detailed design and relevant applications
DPIF 15	Details of the arch structure proposed for the crossing of Willy Creek.	This issue will be addressed during detailed design and relevant applications
	Recommendations	
DPIF 16	DPI&F support the proposed plan to utilise arch structures to provide access over Willy Creek. Providing no infrastructure is placed within the bed of the creek, arches should not pose any significant barrier to fish movement and are preferred over pipes or culverts.	Noted
DPIF 17	Rock lining the creek beds will also remove any existing instream structures currently utilised as fish habitat and will reduce habitat diversity within the stream bed. Measures such as refuge pools or rock ridges may be incorporated into the design to help ameliorate these problems.	Noted
	High flow bypass from Elizabeth to Willy Creek	
	Recommendations	
DPIF 18	As an offset to the permanent disturbance to marine plants and the impacts the project will have on the fisheries values within the two creeks, DPI&F recommends that 2-3 refuge pools be included into the design for the high flow bypass channel between Elizabeth and Willy creeks. Final designs for the refuge pools can be obtained from DPI&F but in general they should be 50 m long. 15-20 metres wide and at least 3 m deep. These pools should provide sufficient respite for fish in high flow events and provide adequate reserves of water for refuge areas during the dry season.	Noted
DPIF 19	The riparian zone around the channel should also be actively planted with native vegetation to help mimic a natural stream ecosystem. Native macrophtyes (such as lilies and sedges) should be introduced into the refuge pools to help inhibit the infestation of exotic weeds and terrestrial grasses (eg hymenachne, para grass and guinea grass) and provide habitat for fish.	Noted

Reference	Summary of Comment	Response
	Further Information Requested - Waterway Barrier Works	
DPIF 20	Additional information is still required on the nature and extent of the waterway crossings proposed for the project. This information is critical to the accurate assessment of the impacts these modifications may have on fish movement within Elizabeth and Willy Creeks. DPI&F requests that the applicant supply details of the crossings that include:	This issue will be addressed during detailed design and relevant applications
	• Type of crossing (e.g. bridge, arch, culvert, etc)	
	• Detailed designs of the barrier itself and a brief outline of the methods to be used during construction.	
	• Details of how the proposed work provides for adequate fish passage	
DPIF 21	This information is also required for any temporary water way barriers (e.g. causeways. working platforms, etc) that will be required to construct the permanent structures.	This issue will be addressed during detailed design and relevant applications
	Recommendations	
	Some other considerations which need to be taken into account when constructing waterway barriers include:	
DPIF 23	• Ideally, the flow area through a culvert should be at least equal to the normal channel area below the top deck	To be discussed with DPIF during the detailed design phase
DPIF 24	• Smooth bed and wall culverts do not provide ideal fish passage conditions. A smooth bed culvert does not allow adequate development of the essential boundary layer to allow fish passage	To be discussed with DPIF during the detailed design phase
DPIF 25	• Natural bed conditions need to exist in wet cells. It may be necessary to establish a separate wet cell that is excluded from regular de-silting maintenance activities	To be discussed with DPIF during the detailed design phase
DPIF 26	• Side baffles should be considered to allow passage on moderate flows	To be discussed with DPIF during the detailed design phase
DPIF 27	• To avoid hydraulic jump problems at the culvert entrance and enhance fish passage, the wet cells should be recessed into the channel bed	To be discussed with DPIF during the detailed design phase
DPIF 28	• Low flow channels can be formed in wet cells to increase flow depth, it is usually preferable to achieve the required minimum flow depth of 0.2 to 0.5 m by recessing the cell into the channel bed	To be discussed with DPIF during the detailed design phase
DPIF 29	• Skylights need to be introduced to long culverts	To be discussed with DPIF during the detailed design phase
	Marine Plants	
DPIF 30	Queensland Rail have provided DPI&F with a preliminary plan (see attached) outlining the area of possible disturbance to marine plants. To fully assess the impacts the proposed development may have on fisheries habitat and productivity, the DPI&F require that the exact location and species of marine plants to be disturbed be provided. This information is also used to feed into other project databases such as the State of the Environment report.	To be addressed in the relevant application
	In the interim, DPI&F recommend that the marine plants present in the riparian zone of Plane Creek remain undisturbed. DPI&F also recommend that the following conditions be included within the Coordinator-General's report to cover this disturbance of marine plants:	

Reference	Summary of Comment	Response
DPIF 31	• The disturbance of marine plants is to be restricted to within the area shown as "Marine Plant Vegetation: Proposed Clearing" on the plan provided. All marine plants within the riparian zone of Plane Creek are to remain undisturbed.	Noted. The marine plants that require removal will be contained in the relevant application (refer Appendix G)
DPIF 32	• Any areas of marine plants to be disturbed for the construction of the rail way line are to be clearly marked (e.g. with corner pegs) to allow for ease of identification.	Noted
DES 1	Appendix D/ EIS Consultation Report/2.1 Government Consultation (Page 3) DES has been omitted from the list of government agencies consulted during the EIS process thus; inclusion in the listing is requested.	Noted
DES 2	Appendix D/ EIS Consultation Report/4.2 Key Agency Issues (Page 10) The proponent is commended for committing to consult with DES regarding flood hazard during the detailed design phase. However natural hazards bushfire and landslide are not mentioned in this section, nor is the DES recommendation for emergency responder consultation. DES recommends that the proponent consult with DES regarding this matter.	Noted. DES will be consulted as part of the preparation of the Emergency Response Plan Included in revised EMP. Refer Section 5.3 (Slope stability)
DES 3	Appendix A/Summary of Key Issues Table (Pages i-vii) Previous recommendations regarding the Draft Terms of Reference (ToR) are included in the Final ToR however they are not addressed within Appendix A, with reference to the applicable sections of the EIS. DES recommends the proponent complete this task before DES provides further comment.	Refer EIS Appendix A2
DES 4	Appendix F/Compliance with Relevant State, Regional and Local Policies 1.3.3 Project Compliance *"The Project will comply with the requirements of the SPP 1/03 due to the overriding need for the Project in terms of community and economic benefits (refer to EIS Chapters 1 and 16) furthermore JRYUP will address the SPP by implementing mitigation measures during the construction and operational phases."*	Refer Appendix H (CEMP) for Construction Operational EMP to be prepared prior to operation
DES 5	DES requests further detail regarding the mitigation measures to be implemented during the construction and operational phases. DES comments referenced in the final ToR suggest mitigation treatments can be found in the SPP 1/03 Guideline.	Noted. DES will be consulted as part of the preparation of the Emergency Response Plan
DES 6	EIS/Section 17 Environmental Management Plan/17.14.2 Mitigation Measures/Construction/Management System Measures (Page 17-24) "Prepare and implement bushfire management measures (as part of site emergency procedures)…." DES requests further information regarding the bushfire management measures to be implemented and how these will achieve compliance with Outcome 3 of State Planning Policy 1/03 (SPP 1/03). Further information can be found within SPP 1/03/Appendix 9/Specific Outcome 2 (Page 71)	Refer Appendix H (CEMP) and Emergency Response Plan Refer Section 5.3 (Slope stability)
DES 7	EIS/Section 5 Topography, Geology and Soils/5.2.1 Topography and Landform (Page 5 – 1) The first paragraph of this section states that topography within and surrounding the site includes gently inclined to steep slopes. DES requests further information regarding the % slope findings within and surrounding the site as they have not been included within Section 5. If site and surrounds have instances of 15% slope or greater, the proponent should detail measures proposed to comply with Outcome 3 of State Planning Policy 1/03. Further information can be found within SPP 1/03/Appendix 9/Specific Outcome 3 (Page 71)	This issue is to be addressed during the geotechnical assessment undertaken as part of the detailed design

Reference	Summary of Comment	Response
EPA 1	1. Hydrology/hydraulics and surface water quality Issue 1.1: Section 7.2.3 - Plane Creek No mitigation measures are recommended in the EIS for Plane Creek unlike the other creeks, however a buffer zone of riparian vegetation would provide some protection from sediment loads and nutrients that may result from construction activities. This is relevant at the north *end* of the development where the project area boundary is coincident with the eastern bank of Plane creek.	
	Recommendation 1.1	
	The EIS should include a commitment to maintain a minimum riparian buffer zone of 20m from the bank of Plane Creek, to construction or operation activities for the Jilalan Rail Yard Upgrade.	Refer Section 6.4 and Appendix G
EPA 2	Issue 1.2: Section 7.2.4 Elizabeth Creek	
	The EIS identifies four potential options to be considered for the proposed upgrade to traverse Elizabeth Creek, however does not identify which one of the options is preferred. To reduce impact on the remnant riparian vegetation and creek ecosystem option 4 recommends *"Implement bridge structures for each required crossing with associated culverts and all other areas remaining as natural channel. All flows* will *continue along the existing creek line."*	
	Recommendation 1.2	
	The EIS should identify and justify which of the options to traverse Elizabeth Creek will be used. Detailed maps/diagrams showing the position of the bridges, vegetation to be cleared and revegetation areas should be included in the justification.	Refer Section 2.2 – Further details will be included in the relevant applications
EPA 3	Issue 1.3: Section 7.2.4 - Elizabeth Creek	
	On page 7-5, a number of options have been described for transporting a large volume of fill from north of Elizabeth Creek to south of Willy Creek Namely, completely close Elizabeth Creek and divert flows to Willy Creek; allow base flows to pass through a pipe and discharge to natural creek channel east of proposed rail structures; allow flows to pass though box culverts and discharge to natural creek channel; or all other areas remaining as natural channel. The first two options will produce unacceptable impacts on aquatic ecosystems, especially the first option of destroying environmental flow to Elizabeth Creek. The latter two options, using box culverts or bridge structures, have less impact on the aquatic environment and although the bridge structure would be most desirable, some consideration of operational requirements can be made. Additionally, no time period has been provided in the EIS for this temporary arrangement.	
	Recommendation 1.3	
	The EIS should exclude completely closing Elizabeth Creek and diverting flows to Willy Creek and allowing base flows to pass through via pipe and discharge to natural channel as options for moving this large volume of fill during construction. Additionally if these measures during the construction phase are appreciably different than those present during the operation phase, the time that these specific earthworks will be required should be included in the EIS.	Refer Section 2.2
EPA 4	Issue 1.4: *Section* 7.2.5 - Willy *Creek*	
	The EIS identifies that a 27m wide rock lined channel will be excavated to replace the natural channel. There is no discussion and justification of why important remnant riparian vegetation is to be removed and replaced with a rock lined channel. The proposed channel is also not supported with detailed diagrams of the works.	

Reference	Summary of Comment	Response
	Recommendation 1.4	
	The *EIS* should discuss options available to *"minimise the clearing of riparian vegetation and minimise disruption to the creek channel" from* 6.7, *I Vegetation clearing and earthworks. The* preferred option should then be identified and described with detailed supporting diagrams of the proposed works and mitigation measures that will be implemented.	Refer Section 2.2
EPA 5	Issue 1.5: *Section* 7.7.2 - Results of *Water* Quality *Sampling*	
	Section *7.7.2* states that table 7.4, 7.5 and 7.6 contain the median of data from Connell Hatch and incorporated relevant data from QR and CSR monitoring sites. However no information is provided regarding the time period over which this sampling was performed or the total number of samples for which the given value is the median.	
	The single measurement performed in June 2007 is inadequate to provide background information on the water quality of the site prior to development. If other results taken at other sampling times are included in the data set then the dates of sampling need to be listed. If water quality data is used from CSR or QR monitoring, the sites that these samples were collected from also needs to be included on figure 7.1. If the background water quality monitoring is inadequate further monitoring will be requested.	
	Recommendation 1.5	
	The EIS should include more information on the water quality monitoring results, including: the number of samples taken for each analyte and how many were sampled by Connell Hatch, as opposed to those incorporated from QR or CSR sources. The sampling sites of the data provided by QR and CSR should be indicated on Figure 7.1. Ideally the number of the sampling site shown on Figure 7.1 should be included in Tables 7.3 to 7.6.	Refer Section 7.3
EPA 6	Issue 1.6: Lack of comprehensive water quality monitoring in the Environmental Impact Statement	
	A single dry season sampling and a single wet season sampling (which is only proposed at this stage) is insufficient to determine background water quality for the project site. This does not provide adequate information to characterise the existing environment prior to the project development.	
	Recommendation 1.6	
	The proponent should perform more background water quality monitoring and supply the EPA with the results of this monitoring. The existing Connell Hatch water quality monitoring locations (1 -6) would be adequate, with 3 sites upstream and 3 sites downstream from the proposed development. A suggested sampling frequency could be, for example, every two months until construction begins.	Refer Section 7.3.3 and Appendix H (CEMP)
EPA 7	Issue 1.7: Section 17.9 Mitigation Measures & 17.9.2 Construction Phase	
	Sedimentation and Run-off	
	The EIS provides insufficient detail regarding stormwater management. The statement that issues relating to stormwater will be addressed via an Erosion and Sediment Control Plan (section 7.9.1) is inadequate. A large construction site in a tropical area such as this has great potential for high sediment containing stormwater to impact on the surrounding aquatic ecosystem.	

Reference	Summary of Comment	Response
	Recommendation 1.7	
	The *EIS* should contain further details of the storm water management. Uncontaminated storm water during the construction phase should be diverted to sediment ponds where settling can occur. This water should be contained and all dry weather release of this water should be prohibited. This stomata may be released with a certain period of a rainfall event, e.g. 24 hours as long as monitoring for TSS is performed at the time of the release. These conditions would apply during both construction and operation phases.	Refer Section 7.2 and Appendix H (CEMP)
EPA 8	Issue 1.8: Road and Rail Drainage	
	The EIS states that the design of bridges or culverts should, where possible endeavour to retain the natural morphology of the waterway to maintain the natural flow and water quality of the waterway. Additionally, controls need to be in place to ensure disturbance of the natural waterway isn't caused by stormwater draining from the immediate vicinity of the bridge or culvert at high flow rates and scouring the bed of the water course. Elsewhere in the EIS it states that channels near culverts will be rock-lined. This may just result in intense scouring of the creek bed immediately adjacent to the rock lining. This may require active diversion of the stormwater in the region of the culvert to sediment ponds or basins to ensure that timing and flow rate discharge can be controlled. This also applies to stormwater collected via the 'Jump ups' located in the Rail Ballast.	
	Recommendation 1.8	
	The proponent needs to provide details of the measures which are intended to prevent high velocity stormwater discharging into any of the creeks and causing scouring - particularly in the vicinity of bridges or culverts. These conditions would apply during both construction and operation phases.	Refer Section 2.4.This issue will be further addressed during detailed design and relevant applications
EPA 9	Issue 1.9: Stormwater Management	
	The EIS does not adequately describe the proposed stormwater management at the upgraded and new maintenance and provisioning facilities.	
	Recommendations 1.9	
	The EIS should describe and provide plans of the proposed stormwater management system to be implemented including details on the separation of uncontaminated and contaminated stormwater as well as how contaminated stormwater will be collected and managed on site to ensure a discharge does not occur.	Refer Section 2.5
EPA 10	Issue 1.10: Section 17.9.3 -Surface Water Monitoring	
	The EIS provides no information on when the event based sampling will be triggered or the location of the *In situ* water quality monitoring device. For example, if measurements are to be taken following each rainfall event during construction, this should be stated. If they are to be taken following a rainfall event of a certain threshold, the threshold needs to be specified. Additionally, the time following the event within which the sampling will be performed also needs to be presented. In order to assess this development the EPA would require contingency plans if the monitored water quality exceeded the water quality objectives (ANZECC 2000 and QWQG 2006).	

Reference	Summary of Comment	Response
	Recommendation 1.10	
	A definition of the event criteria used to trigger sampling should be included in the EIS and the location and number of the *In situ* water quality monitoring should be presented. A contingency plan should be enacted if the monitored In *situ* water quality parameters exceed the water quality objectives presented in Table 7.2 (this may be presented in the Environmental Management Plan).	Refer Appendix H (CEMP)
EPA 11	2. Nature Conservation Issue 2.1: Section 67.1 - Design Phase, Vegetation Clearing and Earthworks	
	The EIS states that *"where possible, minimise the disturbance to marine plants within the Plane Creek area and wetland vegetation in order to retain their ecological value and their buffering abilities."*This is a good point but doesn't commit or identify the areas where this needs to occur.	
	Recommendation 2.1	
	This statement should be rephrased to something like: disturbance will be minimised on all remnant vegetation not in the footprint of the upgrade. Marine and wetland vegetation will be avoided as far as practicable if not in the footprint of the proposed upgrade. This recommendation also applies to the EMP section 17.14.2.	Agree – refer Sections 6.2 and 17.14.2
EPA 12	Issue 2.2: Section 67.2 - Design Phase, Conservation and Protection Measures.	
	The EIS identifies various points including:	
	• Finding opportunities for offsetting removal of remnant vegetation within the project area in areas adjacent to the project. .;	
	• Including opportunities to widen the remaining riparian vegetation within the project area to a minimum of 20 m on each bank. .;	
	• Define areas to be rehabilitated and/or revegetated as part of the design. .	
	However, none of these points are addressed in the EIS thereby making comments on the impact of the project on biodiversity impossible.	
	Recommendation 2.2	
	Proposed offset areas and revegetation areas along with supporting mapping and/or diagrams detailing these areas should all be included in the EIS.	Refer Section 6.6
EPA 13	Issue 2.3: Section 6.7.2 - Construction Phase., Management System Measures	
	Dot Point 4 in this section commits to: 'prepare and implement an Erosion and Sediment Control Plan in order to protect all waterways within the project area from reduced water quality as a result of increased sediment and nutrient loads. 'However sediment loads into saltpans and marine vegetation and wetlands also need to be considered.	
	Recommendation 2.3	
	This dot point should be rephrased to include marine and freshwater wetlands.	Refer Section 6.2 and Appendix H (CEMP)

Reference	Summary of Comment	Response
EPA 14	3. Noise Issue 3.1: Section 17.13.2 - Mitigation measures	
	It is stated that the accuracy of modelling predictions will be investigated during the detailed design stage and monitoring of noise levels will be carried out for a 48 hour period. If exceedances of the QR noise criteria are then identified, mitigation measures will need to be investigated, as required.	
	Recommendation 3.1	
	The wording should be changed to state that "If exceedances of the QR noise criteria are then identified, mitigation measures will be investigated, as required."	Agree. Refer Section 17.13.2
EPA 15	4. Waste Issue 4.1: Wastewater Treatment Facilities	
	The EIS does not adequately address the wastewater treatment measures required. The EIS states that a new upgraded pollution treatment plant will be installed. Section 11.6.2, Page 11-12, states that details of the second plant will be very similar to the	
	Existing facility as described in Section 11.3.5. This section does not exist in the EIS.	
	Recommendation 4.1	
	The EIS should describe the location and design of any upgraded or new pollution treatment systems to be installed. The information should also include a discussion of the expected treatment quality and quantity as well as any proposed discharge points. The EIS should state that the contaminated water from wagon and locomotive wash down facilities will be treated and re-used on site, providing it meets adequate guidelines for re-use. No process water is to be discharged to the aquatic ecosystem. These conditions would apply during both construction and operation phases.	Refer Section 2.6
EPA 16	Issue 4.2: Sewage Treatment Facilities	
	The EIS does not adequately address the proposed sewage treatment requirements during both the construction and operational phase of the project. The existing authorised release points and water quality limits are not relevant to the new development. The preferred situation would be for the sewage treatment plant to treat to standard that allows reuse on site or disposal to land via irrigation or absorption rather than discharged to water. The EPA does not consider installation of storage and pump out facility as an appropriate option.	
	Recommendation 42	
	The *EIS* should describe the type and location of any new sewage treatment plant or details of upgrades required to the existing facility. This information should include expected flow rates, expected effluent treatment quality and management of treated effluent on site (including reuse options).	Refer Section 2.7
EPA 17	5. Coastal Issue 5.1: Section 1.7.1 - Relevant approvals legislation policy and planning requirements.	
	The EIS identifies in Table 1.3 the various key project approvals, but fails to list approval requirements under the *Coastal Protection and Management Act 1995.*	

Reference	Summary of Comment	Response
	Recommendation 5.1	
	The EIS should include a row in Table 1.3 which identifies potential approvals required under the *Coastal Protection and Management Act 1995 and integrated Planning Act 1997* for Tidal Works and Operational Works on State Coastal Land.	Refer Section 18.1
EPA 18	Issue 5.2: Section 4.9 - Draft Mackay-Whitsunday Regional Coastal Management Plan	
	The EIS identifies in Section 4 that the Draft Mackay-Whitsunday Regional Coastal Management Plan has been assessed to determine whether the project will substantively comply with local, regional and State planning objectives. The Draft Mackay-Whitsunday Regional Coastal Management Plan is presently in Draft form Section 41 of the *Coastal Protection and Management Act 1995* states that *"A final regional plan does not have effect until it is approved by the Governor in Council".*	
	Recommendation 5.2	
	The EIS should instead refer to the State Coastal Management Plan - Queensland's Coastal Policy.	Noted. Refer EIS Appendix F
EPA 19	Issue 5.3: Identification of the project area in relation to the Draft Mackay-Whitsunday Coastal Management District.	
	The EIS identifies the project area in relation to the Draft Mackay-Whitsunday Coastal Management District which is currently in Draft form. Until such time as the Coastal Management District in the Mackay Whitsunday region is declared under Section 54 of the *Coastal Protection and Management Act 1995,* the *Coastal* Management District is designated by the erosion prone area.	
	Recommendation 5.3	
	The project site should be mapped in relation to the erosion prone area. In this instance the erosion prone area is defined as:	
	• the plan position of Highest Astronomical Tide; or	Refer Section 4.3 (Figure 4.1)
	• a line measured 40 metres landward from the plan position of Mean High Water Spring tide;	Refer Section 4.3 (Figure 4.1)
	whichever provides the greater erosion prone area width	
EPA 20	Issue 5.4: Section 4.9 Table 4.7 - Compliance with Section 2.1 coastal use and development	
	The "Application to Project" column for item 2.1.3 Coastal Dependent Land Uses states, *"Not applicable. The JRYUP does not adjoin the foreshore." The* definition of "foreshore" in the *Coastal Protection and Management Act 1995* means *"the land lying between high water mark and low water mark as* is *ordinarily covered and uncovered by the flow and ebb of the tide at spring tides".* The area of the project adjoining Plane Creek is considered to be influenced by spring tides and is therefore "foreshore".	
	Recommendation 5.4	
	The *EIS* should be re-evaluated to consider Policy 2.1.3 of the State Coastal Plan.	Refer Section 4.2.1

Reference	Summary of Comment	Response
EPA 21	Issue 5.5: Section 4.9 Heading of Tables 4.8 and 4.9.	
	The heading of table 4.8 relates to Section 2.2 Physical coastal processes of the State Coastal Plan, but is listed as Policy 2.2.4 which specifically relates to Coastal hazards. The heading of table 4.9 relates to Policy 2.2.4 Coastal Hazards, but contains elements of both Section 2.2 Physical coastal processes and Section 2.3 Public access to the coast.	
	Recommendation 5.5	
	The table heading should be changed to reflect the broader policy elements of the State Coastal Plan.	Refer Sections 4.2.2 and 4.2.3
EPA 22	Issue 5.6: Section 4.9 Table 4.8 -Compliance with Section 2.2.4 Physical coastal processes.	
	The "Application to Project" column for item 2.2.2 Erosion Prone Areas states, *"Not applicable. The project is not located in an Erosion Prone Area." An* area may be declared an "erosion prone area" under Section 70 of the *Coastal Protection and Management Act 1995* if the chief executive is satisfied *"the area may be subject to erosion or tidal inundation".* The area adjoining Plane Creek is subject to tidal inundation, and is therefore contained within the erosion prone area. In this instance the erosion prone area is defined as:	
	• The plan position of Highest Astronomical Tide; or	
	• A line measured 40 metres landward from the plan position of Mean High Water Spring tide;	
	• Whichever provides the greater erosion prone area width.	
	Recommendation 5.6	
	The EIS should be re-evaluated to consider Policy 2.2.2 of the State Coastal Plan.	Refer Sections 4.2.2 and 4.3
EPA 23	Issue 5.7: Section 4.9 Table 4.10 – Compliance with Section 2.4 water quality	
	The "Application to Project" column for item 2.4.1 Water Quality Management states, *"Not applicable. The JRYUP is located outside of the coastal zone."* The definition of "coastal zone" in Section 15 of the *Coastal Protection and Management Act I995 is* given as *"(a) coastal waters; or* (b) *all areas to the landward side of coastal waters in which there are physical features, ecological or natural processes or human activities that affect, or potentially affect, the coast or coastal resources".* "Coastal *Waters" is* defined in Section 13 as *"Queensland waters to the limit of the highest astronomical tide"* The area of the project adjoining Plane Creek is considered to be within the "coastal zone".	
	Recommendation 5.7	
	The EIS should be re-evaluated to consider Policy 2.4.1 of the State Coastal Plan.	Refer Section 4.2.4
EPA 24	Issue 5.8: Section 4.9 Table 4.14 -Application of Section 2.8 Conserving nature	
	The "Application to Project" column for item 2.8.2 Coastal wetlands states, *"Not applicable. The project area is not within 100m of a wetland."* Plane Creek is mapped as an estuarine referable wetland, hence the area of the project adjoining Plane Creek is considered to be within 100 metres of a wetland.	
	Recommendation 5.8	
	The EIS should be re-evaluated to consider Policy 2.8.2 of the State Coastal Plan.	Refer Section 4.2.5

Reference	Summary of Comment	Response
	6. Environmentally Relevant Activities	
EPA 25	Issue 6.1: Section 4.1 1.3 Table 4.15 Construction ERAs required for the Project The EIS mentions that wash down facilities will be required during the construction phase. It is also likely that machinery servicing will to be undertaken on site. Operating a motor vehicle workshop either as a fixed or on a mobile and temporary basis is an Environmentally Relevant Activity (ERA). Table 4.1 5 does not make reference to ERA 28 - motor vehicle workshop.	
	Recommendation 6.1	
	All of the relevant ERAs to be undertaken as part of both the construction and operational phases of the project are clearly identified in the EIS.	Refer Section 4.3
	Environmental Management Documents	
EPA 26	Recommendations and any proposed *changes* to the EIS should be incorporated, where necessary, into the relevant environmental management documents.	Noted
QH 1	2.8 Water supply and management The EIS indicates that construction water will be sourced largely from non-potable sources including recycled grey water and recycled water from project sewage treatment plants. The use of any recycled water should comply with the requirements of the *Queensland Water Recycling Guidelines* (available from http://www.nrw.qld.gov.au/compliance/wic/guidelines_recycle.html), Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1) (available from http://www.ephc.gov.au/epha/water_recycling.html) and Workplace Health and Safety Act 1995.	Noted
QH 2	9. Air environment, 9.4 Potential construction impacts The EIS indicates that dust may be a problem during the construction phase and that mitigation measures will be implemented to manage the impacts of dust. One critical element of any mitigation strategy is a good complaint handling process with clearly defined responsibilities for investigating and responding to any complaints within reasonable timeframes.	Noted – Refer Appendix H (CEMP)
QH 3	10. Noise and Vibration 10.8 Mitigation measures The EIS indicates that noise and vibration may be a problem during the construction phase and outlines a number of strategies to manage the noise and vibration impacts. Community consultation and complaint resolution procedures will be critical to the successful management of the noise and vibration impacts.	Noted – Refer Appendix H (CEMP)
QH 4	15.2.2 Community infrastructure and services – Health It is recommended that the proponent consults closely with the Mackay Health Service District to determine if the available health services are sufficient to meet the needs of the project.	Noted

Reference	Summary of Comment	Response
QH 5	16.2.6 Disease vectors Mosquito management needs to be carefully planned and adequately resourced, both in terms of financial support and technical support. Those personnel involved in mosquito control need to be suitably trained or already have the appropriate level of skills to locate areas where mosquitoes are breeding and develop and implement suitable control/eradication strategies. Assistance with the development of the Mosquito Management Plan can be obtained from the Mackay Population Health Unit, phone (07) 4968 6611.	Noted – To be included in EMPs
QH 6	The eradication of mosquito breeding sites is also required by Section 2N of the *Public Health Regulation 2005.*	Noted
QPS 1	1. It is acknowledged that Queensland Rail is investing in considerable improvements to existing infrastructure to mitigate any negative impact this project has on the local community. It has to be assumed that the construction will result in large increases in traffic movements and that Armstrong Beach Road, which runs between the Bruce Highway and Gurnetts Road, will be subject to the majority of traffic movements.	Noted
QPS 2	2. The EIS states that the existing intersection of the Bruce Highway and Armstrong Beach Road 'is well channelised and delineated, and alterations to horizontal and vertical geometry are considered unlikely to be required'.	Noted
QPS 3	3. Following discussions with the Sarina Shire Council and Officer in Charge Sergeant David Parnell it is submitted that the safety of road users could be compromised if changes to the current configuration of the intersection of Armstrong Beach Road and the Bruce Highway are not made. This view has been expressed to the Queensland Rail Project Team and they stated that "it would be considered".	Noted
QPS 4	4. The speed limit of the intersection is currently 70km/h. This speed zone commences approximately 150 metres south of the intersection. The nature of the intersection is that motorists travelling north on the Bruce Highway have a limited view of traffic entering from Armstrong Beach Road because of the steep access to the intersection and the curvature of the Bruce Highway.	Noted
QPS 5	5. Anecdotal evidence suggests that the majority of motorists do not slow down to the required speed limit until they reach the intersection. Policy dictates that speed enforcement cannot be conducted within 300 metres of the speed reduction sign on the down side. The movement of large trucks through this intersection has the potential of creating significant potential for serious traffic incidents.	Refer Section 12.2.2
QPS 6	6. It is submitted that the speed reduction sign (70 km/h) needs to be moved a minimum of another 150 metres 'further south of the intersection of Armstrong Beach and the Bruce Highway (total of 300 metres). This gives motorists time to reduce the speed of their vehicle to 70kmIh prior to entering the intersection. It also enables police to enforce this speed limit.	Speed sign will be moved subject to approval from DMR
QPS 7	7. It is also submitted that consideration be given to widening the shoulders of the Bruce Highway in the vicinity of the Armstrong Beach intersection to ensure the safe passage of vehicles through the intersection.	Refer Section 12.2.2
SSC 1	a) The need for analysis of any buffers required and the identification of incompatible future land uses on adjoining land parcels, including details of any proposed amendments to the current Planning Scheme that should be considered or relevant property notifications.	This is a local government responsibility and future MCU applications will be assessed on their merits
SSC 2	b) The noise and dust monitoring processes that should apply to this project should be the same as the current practices that Queensland Rail have accepted for the DBCT Rail Loop Triplication Project.	Refer Sections 9.3 (dust monitoring) and 10.3 (noise)

Reference	Summary of Comment	Response
SSC 3	c) The air quality and noise modelling should have had regard to the proposed location of the construction workforce accommodation village given that with the exception of 'Residential Dwelling 28' it will be the closest development of a residential nature that will be impacted on during the construction process.	Refer Sections 9.2 (air quality) and 10.2 (noise). The construction work force accommodation village is part of a separate development application.
SSC 4	d) All noise and dust complaints to be handled by Queensland Rail directly. In the event that noise and dust complaints are received by the local authority, such complaints are to be referred to Queensland Rail and the Environmental Protection Agency for actioning/investigation as required (i.e. duties are not to be devolved to the local authority).	Agree. This will be addressed in the Project Communication Plan.
	e) The EIS documentation provided to date has not addressed the following issues:	
SSC 5	• the capability of Armstrong Beach Road to handle heavy vehicle use;	Refer Section 2.8
SSC 6	• the downstream impacts on the residential dwellings within the Willy Creek & Elizabeth Creek catchments; and	Refer Section 2.9
SSC 7	• the rolling time delays.	Refer Section 2.10
	From discussions with Queensland Rail it is understood that these issues are the subject of investigation/analysis still, thus Council requests such information be provided to Council to enable due assessment of the potential impacts on the community prior to any final determination on the project being made.	
SSC 8	f) An assessment of the impacts of the construction traffic (including construction workforce accommodation village traffic) on Council's road network is required as there could be significant impact on Council roads. In this regard should there be significant impact to Council's roads, Council requires a commitment from Queensland Rail that any damage will be repaired by Queensland Rail at no cost to Council.	Refer Section 2.11
SSC 9	g) The sections of Gurnetts Road that are adjacent to existing residential dwellings should be bitumen sealed in order to mitigate associated impacts on the occupants.	Refer Sections 2.12.1 and 12.2.3
SSC 10	h) The section of Smyths Road from the Plane Creek crossing to just east of the existing rail embankment should be reconstructed to a bitumen seal standard and the Plane Creek crossing on Smyths Road should be renewed to the same level of immunity but to a two-lane capacity, with the associated works to provide for the passage of fish upstream. These requirements are based on the increased traffic volume numbers on this road (particularly by Queensland Rail maintenance personnel), the realignment works that are proposed and the need to maintain adequate underpass clearance levels.	Refer Sections 2.12.2 and 12.2.3
SSC 11	i) The section of Smyths Road from Armstrong Beach Road to the first culvert to the north should be constructed to a bitumen seal standard to minimise ongoing maintenance on the steep section.	Refer Section 2.12.3
SSC 12	j) The section of Gurnetts Road from Armstrong Beach Road to the end of the existing sealed section, or the access point into the yard, should be constructed to a bitumen seal standard.	Refer Sections 2.12.1 and 12.2.3
SSC 13	k) Oonooie Road and the section of intersection with Gurnetts Road should be constructed to a bitumen seal standard.	Refer Sections 2.12.3 and 12.2.3
SSC 14	l) Queensland Rail's commitments in relation to 'traffic impacts' needs to extend to upgrading all Council roads impacted on by the project and not just Oonooie Road.	Refer Sections 2.12 and 12.2.3
SSC 15	m) An assessment of the impacts of new lighting in the project area on road traffic using Council's road network is required to be addressed. The basis for this requirement is that the glare from such lighting can impact on visibility of driven and the current lighting infrastructure at Jilalan has been an issue in the past.	Refer EIS Chapter 14

Reference	Summary of Comment	Response
SSC 16	n) An assessment of the need for potable water from Council's network and the impacts of such needs to be addressed, with the provision of new infrastructure to ensure that there are no impacts on service to existing and future users at Armstrong Beach.	Refer Section 2.13
	o) The requirement for a set down/observation area and interpretive signage given the State significance of the project, it's potential as a tourist attraction for the region and the potential to assist with mitigating the social and community impacts of the project. Sites that have initially been identified by Council as being suitable for consideration include:	QR to liaise with Sarina Shire Council and Mackay Tourism on this issue which is considered outside the scope of the EIS process
SSC 17	• the proposed workforce accommodation site given extensive earthworks and car parking works that are proposed to facilitate the development; or	
SSC 18	• the Armstrong Beach Road bridge structure that is proposed to be removed.	
SSC 19	p) With regards to the ongoing financial impacts on Council of the proposed alternations to the road infrastructure occasioned by the project (i.e. rail safety requirements - not the ownership and general maintenance of the road surface), Queensland Rail should enter into an Infrastructure Maintenance Agreement with Council (and other parties where relevant).	QR to liaise with Council on this issue which is considered outside the scope of the EIS process
SSC 20	q) The construction workforce accommodation proposal is identified as an approval that is independent of the EIS process on the basis that the EIS determination provides direction on all associated approvals and the Assessment Managers for each approval can not contradict any conditions that are set via the EIS process.	Refer Section 4.5
SSC 21	r) The Coordinator-General recognises that Council is cognisant of the social impacts of the construction workforce accommodation village proposal on the community and will be ensuing that such issues are paramount in Council's consideration of such application.	Noted
SSC 22	s) The Coordinator-General's Office and Council's Planning Services should liaise regularly regarding the construction workforce accommodation application and associated impacts given the co-relationship with the EIS determination.	Noted
DMR	Issue of concern: Pavement and Road Use Impacts Main Roads is concerned that the proponent (QR) has not fully outlined the nature and extent of the project's impact on roads and suggested mitigation measures. Section 12 (Transport) of the Environmental Impact Statement provides a percentage figure of increased traffic at Bruce Highway/Armstrong Beach Road intersection during construction. However, no information is offered on anticipated pavement impacts, nor is there any analysis given on operational traffic impacts. Given this absence, Main Roads recommends the following actions be taken:	
DMR	Recommendation The proponent is to prepare a revised Road Impact Assessment and Road-use Management Plan that will:	
DMR 1	1. Identify the impacts of the project on the performance of Bruce Highway intersections of Oonooie Road and Armstrong Beach Road, both for construction and operational phases.	Refer Section 12
DMR 2	2. Identify any road pavement impacts using ESA analysis at key intersections (Bruce Highway and Armstrong Beach Road) as outlined in Main Road's "Guide for Assessment of Road Impacts of Development Proposals" (2006).	Refer Section 12

Reference	Summary of Comment	Response
DMR 3	3. Provide mitigation strategies to address any significant impacts on road pavement and intersection performance. Strategies may include infrastructure maintenance, upgrades and monitoring mechanisms. Should work or activities in a State-controlled road be required, a section 50 approval will need to be applied for under the Transport Infrastructure Ac 1994. Depending on the scope and complexity of any impact mitigation requirements, an infrastructure agreement may be entered into to formalise arrangements.	Refer Section 12
QT1	Executive Summary (Page 9, Dot-point 7) The project will cause the removal of approximately 10.1 ha of terrestrial vegetation. This is to be mitigated by "Supplementary planing which may be possible along the remaining riparian vegetation along Elizabeth and Willy Creeks." As this involves a spelling error, ***planing*** should be changed to ***planting***. Requested Amendment Change planing to planting.	Refer Section 18.1
QT2	Introduction 1.4 Alternatives to the Project (Pages 1-10 to 1-12.) Table 1.1 provides a Summary of Jilalan Rail Yard Upgrade Options Analysis. Option 4 is designated as the preferred option. It provides a comparably lower cost than option 1. It delivers earlier practical completion on key sub-components. It has a track and infrastructure lay-out that allows for future expansion. It delivers the highest health and safety benefits, removing a number of construction and operational related hazards present in the other options. Requested Amendment No change. The preferred option, Option 4, is supported.	Noted
QT3	Description of the project 2.1.6 Oonooie Road realignment and overpass (Page 2-3) Due to the increasing trains per day, it is proposed to replace the existing Oonooie Road open level crossing with an overpass over the Goonyella Branch Line. Future rail system expansion is expected to increase train movements by 57%, from 52 to 82 train movements per day. The road realignment and overpass will eliminate disruption to CSR vehicular traffic and local cane harvesting operations from rail traffic on the operating Goonyella Branch Line. In addition to eliminating vehicle queuing and traffic disruption it will also eliminate the safety risks associated with the level crossing. It will also remove risks to rail operations from road vehicle crossing this strategic rail corridor. Requested Amendment No change. Oonooie Road realignment and overpass provision is supported.	Noted
QT4	2.1.10 Smyths Road grade separation (Page 2-3) Replacement of the existing Smyths Road open level crossing with a grade separated structure (as the increase in train numbers will significantly affect this crossing), is supported. Requested Amendment No change. Smyths Road grade separation is supported.	Noted

Reference	Summary of Comment	Response
QT5	2.13 Air and noise emissions (Page 2-17) This section indicates that QR is currently undertaking a Coal Loss Environmental Evaluation which includes identifying strategies to reduce the risk of coal loss from loaded coal wagons in Central Queensland. This description is somewhat misleading. While loss of coal to the track is one of the issues, the main issue creating sensitivity is coal dust emissions during transit. It is recommended that the statement be amended to read: "QR is currently undertaking a Coal Loss Environmental Evaluation which includes identifying strategies to reduce *coal dust emissions and* the risk of coal loss from loaded coal wagons in Central Queensland. Requested Amendment Amend the statement be amended to read: "QR is currently undertaking a Coal Loss Environmental Evaluation which includes identifying strategies to reduce coal dust emissions and the risk of coal loss from loaded coal wagons in Central Queensland.	Refer Section 9.3
QT6	9 Air environment 9.5.4 Particulate matter as PM10 and TSP (Page 9-14) Dispersion modelling shows (per Table 9.7) that predicted maximum concentrations at sensitive receptor sites (residences) of fine particles (PM10 – less than 10 microns in diameter) and Total Suspended Particulates (TSP) will be at levels ranging from 29% and 59% below the standards for PM10 (24 hr average) and PM10 Annual average, respectively. For TSP maximum concentrations at sensitive receptor sites will be approximately 54% below the standard. This modelling shows that compliance with PM10 and TSP standards will be by a significant margin.	Noted
QT7	9 Air environment 9.5.5 Dust deposition (Page 9-15) Table 9.8 shows that the maximum dust deposition rate predicted at nearby residences will be 38.1mg/m2/day. This is approximately 68% below the Environmental Protection Policy (EPP) Air goal - a high level of compliance with this goal.	Noted
QT8	9.7 Mitigation measures 9.7.1 Construction phase 9.7.2 Operations phase Proposed measures to control dust during the construction and operational phases of the project are appropriate.	Noted
QT9	10.7 Operational noise assessment – rail operations (Page 10-14) Modelling of LAeq (24hour) and single event maximum sound levels shows that the proposed future rail operations will be in compliance with relevant noise standards.	Noted

Reference	Summary of Comment	Response
QT10	12 Transport 12.3 Potential construction impacts 12.4 Potential operational impacts (Pages 12.1 to 12-11 Potential construction and operational impacts of the development are adequately described. The proposed Mitigation measures are appropriate and are designed to improve road and rail safety at the approaches to the site. Existing conflict points between road and rail are to be removed by grade separation. Road network impacts are to be further mitigated by construction of internal haul roads. Access to the project will be regulated by signage, gates and fencing where practicable.	Noted
QT11	17 Environmental Management Plan 17.7 Transport and traffic The Transport and traffic components of the EMP include the preparation of a Traffic Management Plan to minimise disruption to existing public roads and traffic flows. This is appropriate.	Noted
DH1	Of concern to this department is that five other major projects focused at the Hay Point and Dalryrnple Bay coal terminal and upgrades to the Goonyella rail system, expecting to provide employment for 800 people for up to three years, may be proceeding almost simultaneously with the Jilalan Rail Yard Upgrade Project. Bearing this in mind, it is requested that, when the Coordinator-General delivers his report on the Environmental Impact Statement for the Jilalan Rail Yard Upgrade Project, the cumulative impact of all major projects in Sarina Shire and Mackay be taken into consideration. If it is found that the capacity of the local accommodation and housing market is unable to meet the needs of the combined workforces, the department proposes that an Accommodation Management Strategy and an Infrastructure Working Group be developed by the Department of Infrastructure and Planning, as is being done for Gladstone.	Refer Section 15.2

Key:

Reference	Submitter Name
DES	Queensland Department of Emergency Services
DH	Queensland Department of Housing
DMR	Queensland Department of Main Roads
DOC	Queensland Department of Communities
DOIP	Queensland Department of Infrastructure and Planning
DPIF	Queensland Department of Primary Industries and Fisheries
EPA	Queensland Environmental Protection Agency
NRW	Queensland Department of Natural Resources and Water
QH	Queensland Health
QPS	Queensland Police Service
QT	Queensland Transport
SSC	Sarina Shire Council