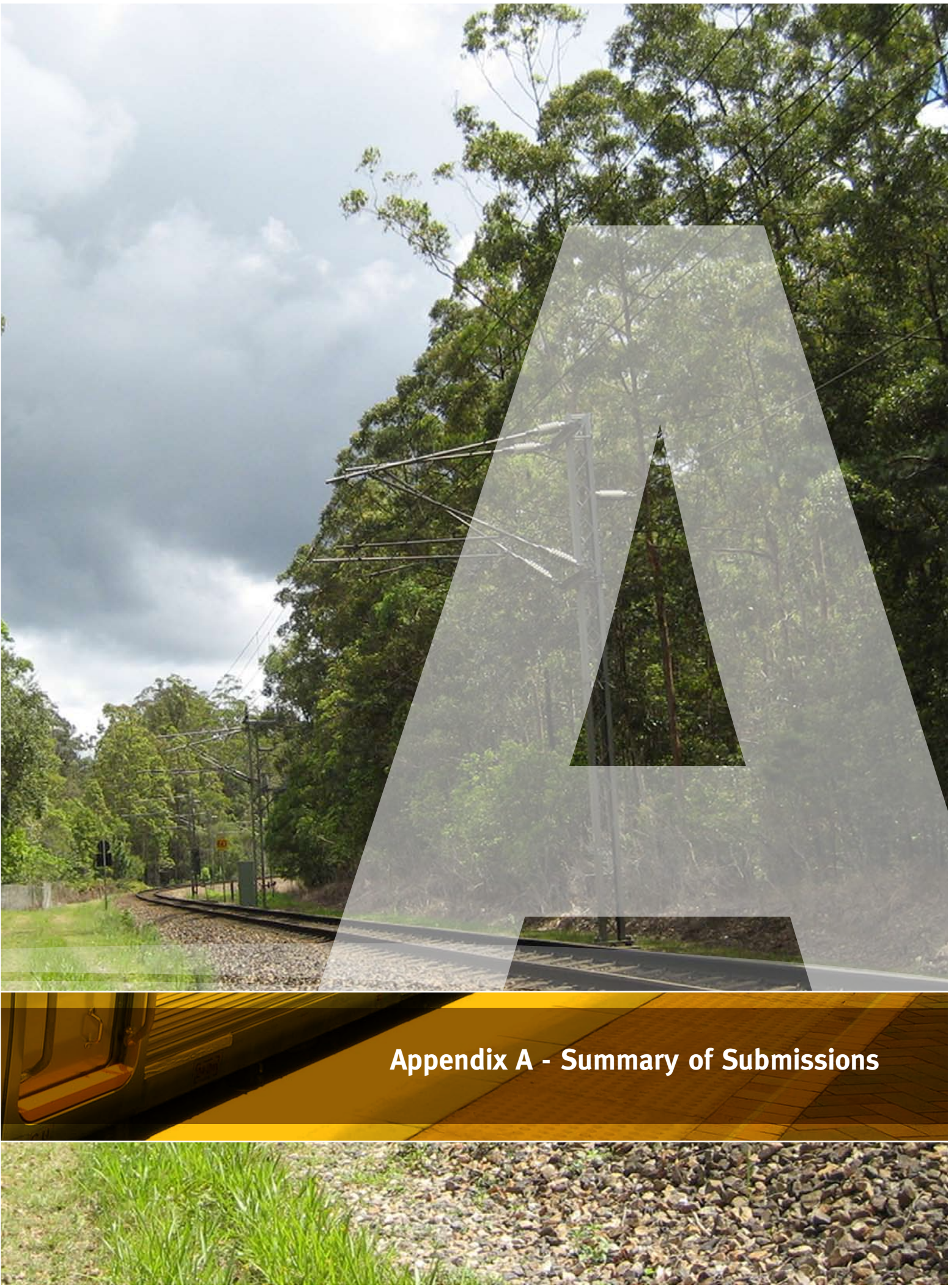

Appendix A - Summary of Submissions

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Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
private 1	1.1	Submitter does not believe a study was required (waste of time and money).	The scoping study, route selection report contains the project justification. This is also discussed in Chapter 1 of the EIS.	Scoping Study and Route Selection Report contains project justification.
private 2	2.1	Submitter supports the proposed two track arrangements.	Not included in SEIS beyond the summary table.	NA
	2.2	Drainage should be adequately designed to avoid damage to property.	Reference to drainage and design process included in section 4.13.1 of the SEIS.	4.13.1
	2.3	Achievement of good taxpayer outcomes.	Additional statement included around contractual conditions and coordinator general conditions in section 4.1 of the SEIS.	4.1
private 3	3.1	The land mass in the general basin of the township of Mooloolah is in a relatively stable and flat area, as compared to the adjacent hills on both sides of the town, although some distance away.	No response required, as this statement is a general description of the town's topography.	4.20.2
	3.2	The township is accessed by Mooloolah Connection Rd from the East (Steve Irwin Way) as it crosses over the existing railway. From population impacts a multiplying effect causes traffic congestion for long periods, more congestion occurs when the crossing is opened, frustrations and the inherent danger to both vehicular and pedestrian traffic.	Clarification provided on the final option for the Mooloolah OLC.	4.20.2
	3.3	Removal of existing Mooloolah Connection Road open level rail crossing to improve congestion, safety and subsequent disruption to business.	clarification of final option for the Mooloolah OLC.	4.2.1.1
	3.4	The existing railway crossing effectively divided the township of Mooloolah, so that business interests are divided or separated by the line. It becomes a hassle to cross over at particular times during business hours. It creates an "us and them" mentality with some people, which is not in keeping with the ambience of the town.	The EIS and SEIS discuss access provisions.	4.20.2.1
	3.4a	The submitted seeks an answer to why the railway cannot be graded below the road through Mooloolah. They also suggest that this approach should have been adopted in Beerwah.	The EIS discusses the various solutions considered for the crossing in Mooloolah, including lowering of the road. However the proximity of the Mooloolah River, and the grade at which the railway can rise, meant that this solution was not feasible.	Addressed in EIS
	3.5	There numerous examples of risks from the disruption to traffic flow by the railway. The hazard is the railway crossing and the risk is thus having to navigate that hazard.	The EIS contains a hazard and risk assessment. it is not possible at this point in time to develop the safety management plan and a emergency management plan. The requirements for these are outlined in table 19.4.1 and section 19.5.1 of the EIS. This is something that would be developed as part of the construction contractor's documentation.	Addressed in EIS, section 19.4 and 19.5
private 4	4.1	The submitted requests further detail about the EIS contributors and their qualifications.	This has been included in Appendix B.	Appendix B
	4.2	Use of old railway corridor for equestrian trails may cause environmental damage such as spread of noxious weeds and damage to paths.	The potential for weed spread is considered further in the SEIS.	4.3.2
	4.3	The submitter is concerned that as the construction of the Project is anticipated to be ongoing for a number of years, the severity of impacts assessed are understated.	Further detail about the management of construction impacts is discussed in section 4.21.1.	4.21.1

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	4.4	Submission 4 suggests that the residual visual impact on local topography will be extremely adverse for some existing properties, rather than moderate adverse as was assessed in the EIS.	Visual amenity is a subjective issue and different opinions about significance of impacts are hard to avoid. The project team has endeavoured to justify its approach to impact assessment by developing significance criteria documented in section 6.2.3 and table 6.2.3 of the EIS, supported by the information in tables 6.2.2a and 6.2.2b. The approach to the visual assessment for the EIS was based on a representative sample of viewpoints. The assessment as moderate adverse is therefore considered appropriate as an overall assessment of impact from the viewpoints assessed.	4.5.1
	4.5	The submitter questions whether Neill Road will be utilised for construction purposes, particularly as there will be cuttings, embankments and bridges to be constructed.	Neill Road was listed in the construction routes anticipated to be used . Table 7.6.5 of the EIS notes the extent of construction and early works that will be occurring to Neil Road. The SEIS now contains a list of all roads construction traffic may potentially use.	4.6.1
	4.6	What action will the Project Manager be taking to ensure that no corners will be cut?	Further detail about the processes for construction management are included in the SEIS.	4.21.1
	4.7	The impact assessment implies that the new stations at Eudlo, Mooloolah, Palmwoods & Woombye are not to have pedestrian lifts for crossing from one platform to the other. The submitter is concerned about the visual impact of overhead structures at Mooloolah.	Pedestrian lifts will be included at all stations to comply with DDA requirements.	4.3.1.1
	4.8	Connections/changes at Caboolture can slow travel time, and services are often already full. There is a totally unsatisfactory level of service for the Sunshine Coast means that even the present delays in completing this project are unacceptable to the public.	The objective of this project is to address these issues, combined with other service enhancements across the network.	4.2.1.4
	4.9	Submitter 4 suggests that as the current trains cannot achieve the design speeds, the environmental and community impacts of the 160km/hr corridor cannot be justified.	The 160km/hr design standard is the desirable maximum design speed, with 80km'hr the minimum, in constrained areas. The design standards for this project were established between TMR and QR. To design for lower speeds would limit the future opportunities to run faster services, and would still have environmental and community impacts.	4.2.2.3
	4.10	The proposed 45 city Train services a day appears unachievable.	The operational modelling was undertaken to determine whether the capacity of the two track solution could cater for future growth in the corridor, and comply with a 30 minute off peak and 15 minute peak service provision.	4.2.2.4
	4.10a	Passing loops should be considered as an alternative option.	This solution would not address the vertical and horizontal alignment constraints of the current track, resulting in similar issues as discussed for the upgrade of the existing track, in section 1.6.2 of the EIS.	4.2.2.5
	4.11	Construction should commence earlier.	It is considered likely that the Project would be constructed in stages. No construction plan or program has been endorsed by government at the time of writing of the EIS or this SEIS; however Section 2.5 of the EIS provides an outline of possible construction staging, in order to meet the planned operational timeframe of 2026. To meet this timeframe, detailed design would need to commence by 2018, with construction to commence by 2020.	4.1.3

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	4.12	Impact on the property prices adjacent to the railway corridor will be adverse.	This complex issue, needs to take into account market activity and land supply issues in the area. The EIS executive summary notes in the longer term, accessibility to reliable public transport is likely to have a beneficial effect on property values, this is a general statement about the townships rather than individual properties.	4.7.2
	4.13	Submitter questions whether the Project will create a reduction in road accidents, social connectivity and social exclusion.	These benefits of the Project are further outlined in Chapter 8 of the EIS, Economic Development. A reduction in road accidents is a potential benefit of the Project, given that the Project will contribute to more efficient public transport in the region and in conjunction with other public transport networks will reduce reliance on private vehicle transport. Improved public transport also contributes to social connectivity by allowing greater ease of movement between centres and there is the potential for social connectivity to be enhanced through the provision of affordable housing in close proximity to the rail stations. Such development would need to be sensitive to existing character of the townships. A reduction in social exclusion is described in Chapter 8 as a possible benefit of the Project through a focus on local benefits, including employment, training, and local sourcing of inputs.	4.7.1
	4.14	The submitted questions the state government, and in particular QR's commitment to weed control, and does not believe that the EIS will ensure that weed control is managed in future as part of this Project.	Additional information about weed control measures is included in the SEIS and EMP.	4.10.2
	4.15	the submitter questions whether the EIS team has visited the Project site to determine where existing noise control measures are.	The EIS team conducted on site monitoring across the Project area, and also surveyed/ visited the Project corridor many times during the preparation of the EIS.	NA
	4.16	The submitted questions why the Indian mynah bird was not mentioned as a pest species present in the EIS. They have reported it to Caloundra City Council previously, but have not observed any action occurring.	As the Indian mynah bird is vagile, it may not have been identified during survey work. Pest control is not limited to the species listed in the EIS, and the SEIS now makes reference to state and local pest guidance. Further definition of management requirements will be developed in future stages of the Project, however in some cases pest control of vagile species will be beyond the scope of the Project's construction and operation.	4.10.2
	4.17	Impact of train noise and vibration on properties is not adequately addressed in the EIS.	The assessments undertaken in the EIS comply with the terms of reference and standard practice. Further discussion of this is included in the SEIS.	4.14
	4.18	Impact of train noise and vibration on properties is not adequately addressed.	operational rail noise is further discussed in the SEIS.	4.14
	4.19	Meteorological conditions from the Caloundra weather station are not suitable for use in the Mooloolah Valley.	A comparison of the Nambour and Caloundra data is included in the SEIS. These are the two closest monitoring locations in the area.	4.15.1

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	4.20	To suggest that a major consumer like QR source it power from lower carbon energy sources is a pie in the sky statement, and must be considered "window dressing" for this EIS. Their power has to come from the grid and supplies to this network are a very long way from being low carbon.	Technologies including solar and wind power are available currently and could feasibly be used to provide some energy for train propulsion. They are unlikely to provide 100% of energy required cost effectively at present. By the time the Project is completed however, it is likely that renewable energy options will be more widely available at a reasonable cost.	4.16.1
	4.21	The submitter suggests that the Travel Smart program should include improved facilities on trains to include toilets, and for trains with toilets, improved hygiene standards.	This is not relevant to the Project, it is an operational issue for translink/ QR. Not appropriate to note in the EIS or SEIS.	NA
	4.22	P53 - the third paragraph of 'Changes in Rainfall' and the first one in 'Extreme Climatic Events appear to be at odds.	This is clarified in the SEIS.	4.16.2
	4.23	A range of climate change predictions would be more appropriate than use of exact figures.	This is clarified in the SEIS.	4.16.2
private 5	5.2	The submitter believes they are a major stakeholder in the Mooloolah area, as they provide the town with the majority of commercial properties. They note that township is representative of the diverse qualities of the Sunshine Coast hinterland region, and that elements of the town are recognised in the Caloundra City Plan and require preservation.	This is a general statement, that is acknowledged in the SEIS.	4.20.2.2
	5.3	Throughout the past two decades we have created a strong relationship with the Mooloolah Township and have consistently acted in a manner to serve the best interest of the modest community and its surrounding catchment region. During our association, both the township and its surrounding catchment region have and continue to experience significant growth where the Mooloolah town centre has served as the catalyst.	As above.	4.20.2.2
	5.4	Mooloolah resides as a historic, hinterland township that has developed around the traversing rail line where the central hub of the township has come to exist. Commercial development in the precinct has occurred in a compact manner and maintains a distinct and uniform style. Residential suburbs have branched from this central precinct and have been given the opportunity prospered and develop a sense of independence. It is due to these characteristics that the railway upgrade proposal has been confronted with adamant disapproval by the Mooloolah community who for several years have faced the prospect of losing both their livelihoods and lifestyles from the impacts that would be exerted by the railway proposal. The fragility of the situation is recognised by the EIS which identifies the Mooloolah town centre as a Special Study Area where special considerations and mitigation measures will become implemented when the upgrade is employed and becomes operational.	This is a statement, not addressed in the SEIS directly.	NA

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	5.5	The submitted notes that with the proposed infrastructure improvements, there is the potential for increased tourism potential, and therefore the higher volume of visitors will require the provision of infrastructure to support the tourism trade.	Future land use and infrastructure requirements in Mooloolah and other town areas will be addressed through town planning actions, involving council, TMR and the community.	4.3.3
	5.6	The submitter notes their development application has not been approved, and outlines the support they have identified for the proposal.	This is not applicable to the Project, and TMR has been liaising directly with this submitter.	NA
	5.7	The submitter notes their development application has not been approved, and outlines the support they have identified for the proposal.	This is not applicable to the Project, and TMR has been liaising directly with this submitter.	NA
	5.80	The submitter notes their development application has not been approved, and outlines the support they have identified for the proposal.	This is not applicable to the Project, and TMR has been liaising directly with this submitter.	NA
	5.90	The submitter notes that the timeframes for the proposed grade separation at Mooloolah are not defined, and that the final design will be subject to refinements after public comments are received.	The timeframe for the proposed grade separation is to be determined, and the proposed design included in the EIS may be revised during future stages of design and consultation with council and the community.	4.20.2
	5.12	The grade separation option included in the EIS impacts upon the submitters proposed development site.	TMR has been liaising directly with the submitter, and no additional information is included in the SEIS.	NA
	5.13	The submitter is concerned about the road layout associated with the proposed grade separation option, particularly with regard to access to commercial property.	The SEIS reviews the access arrangements associated with the grade separation option at Mooloolah.	4.20.2
	5.14	The submitter is concerned about the road layout associated with the proposed grade separation option, particularly with regard to the impact to private property, as opposed to 'government owned' property.	The SEIS reviews the access arrangements associated with the grade separation option at Mooloolah, however it is not appropriate to discuss government owned property in this context.	4.20.2
	5.15	The submitter is concerned about the road layout associated with the proposed grade separation option, particularly with regard to the impact to their development site.	The SEIS reviews the road layout proposed in the SEIS.	4.20.2
	5.16	Solution of Mooloolah access option proposed and justification provided.	TMR has conducted a thorough review of the submitter's proposed solution, and has incorporated the findings of this into the SEIS.	4.20.2
	5.17	The submitter indicates their commitment to working with TMR towards the development of a solution that is 'justifiable, equitable, viable and achievable'.	This is noted.	
	5.18	The solution provided by the submitter extends upon alternatives 2 and 3 on pages 690 and 691 of the EIS document depicted below for comparison. This ensures that no new elements or provisions will be introduced by the proposed solution and that relevant engineering and traffic dynamics considerations will remain constant. Both of the options provided have been designed to achieve the same objective; however neither addresses the concerns presented by this submitter regarding the impacts that will be exerted upon development sites within the township.	The SEIS provides a review of the proposed solution.	4.20.2

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	5.19	The proposed solution presents a round-about scenario where traffic become dispersed and is not directed in a singular direction. Figures provided by the submitter show a general depiction of what the precinct would consist of. If this situation were to occur the entry or gateway to Mooloolah would be a vibrant and active shopping and dining precinct where the train station and commercial facilities will become integrated into a primary activity hub.	The SEIS provides a review of the proposed solution.	4.20.2
	5.20	The solution suggested facilitates a superior option for the following reasons- • The development site will remain uninterrupted. This will enable the application for the site to progress so that a highest and best use for the parcel can be achieved. This will result in the provision of a benchmark venue for the Mooloolah community and the surrounding catchment region. • The round-about scenario facilitates a flowing traffic movement. The designated commercial properties and complex's will be enabled to receive the benefits provided by passing traffic movements which provides the vital elements of exposure and access upon which commercial activities thrive and depend on. • The solution incorporates elements from options 2 and 3 in the EIS and therefore satisfies relevant engineering provisions. • The solution proposed enhances the achievement and compliments the 'Land reuse concept' for the precinct in Mooloolah which is identified on page 696 of the EIS.	The SEIS provides a review of the proposed solution.	4.20.2

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	5.21	The submitter's proposed solution maintains legible movement networks to the train station and car park. The proposal enables efficient utilisation of land available. The solution provided facilitates the whole resumption of only one (1) privately owned commercial property (that is to be resumed in option 3) and the partial of another as compared to option three in the EIS which designates the resumption of 3 privately owned commercial properties. This will reduce the impacts upon the economic and social systems of the township if this scenario were to be implemented where significant portions of this precinct will be enabled to continue to function. The scenario utilises QT owned land which has recently been acquired through the resumption process. An attractive entry and gateway to the township can be provided whereby the island in the middle of the round-about could be enhanced through the planting of native plants with a statue in the centre depicting the township's heritage as a central feature. The solution provided, if required, would create a vibrant and active shopping and dining precinct where the train station and commercial facilities will become integrated into a primary activity hub. This is not facilitated by any of the options proposed in the EIS. The proposal does not introduce new elements that may impact upon the visual amenity of the grade separation if it were implemented. As documented by the recently released EIS, the open level crossing through Mooloolah will be retained, which is essential towards ensuring that the township maintains its functionality, sense of character and historic elements which make it a desirable living environment.	TMR has conducted a thorough review of the submitter's proposed solution, and has incorporated the findings of this into the SEIS.	4.20.2
	5.22	Despite the invasive nature of the proposed grade separation as documented in the EIS, the solution provided by this submission is sensitive to the existing structure of the Mooloolah Township and it's characteristics that contribute towards it being a regional, Hinterland Township. The solution addresses the primary concerns outlined by this submission including impediment upon the development site and exposure of passing traffic to existing commercial complexes. It also addresses larger concerns including the functionality of one of Mooloolah's primary economic and social hubs and provides a scenario that is sympathetic to the regional setting.	The SEIS provides a review of the proposed solution.	4.20.2

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	5.23	The modifications proposed by this submission are based on and have been procured through- • A significant understanding of the township including its character, dynamics and unique characteristics • Community consultation and endorsement for the development application identified in this submission. • The requirement for Mooloolah to experience continued and appropriate growth which should not be dismissed by uncertain circumstances that may never even eventuate • A significant association with the township • The preservation of vested interests in the township • The preservation of the social and economic functionality of the township both now and in the future.	The SEIS provides a review of the proposed solution.	4.20.2
	5.24	The solution proposed enhances the achievement and compliments the 'Land reuse concept' for the precinct in Mooloolah which is identified on page 696 of the EIS.	The SEIS provides a review of the proposed solution.	4.20.2
	5.25	It is perceived that when implemented, the development will exists as an iconic venue for the township and provide the area with a further element of independence and identity. The venue will provide essential economic stimulus for the township and surrounding region which has not experienced significant commercial expansion for close to a decade. With current provisions to retain the open level crossing to Mooloolah, the development when realised will provide a welcoming gateway to not only the Mooloolah Township but also to the Sunshine Coast Hinterland region.	This statement summarises the intent of the submitter.	4.20.2
	5.26	The road grade separation proposal for Mooloolah, however undesirable it might be, may be required in the distant future and due to this acknowledgement, careful consideration must be given to ensure that present and future growth in the region is not stalled by provisions dedicated to serving extreme and uncertain circumstances. The road grade separation contingency must maintain elements that efficiently utilise the land available which includes minimising impacts and impediment upon the land outlined in this submission. We urge the respected Coordinator General and Queensland Transport department to carefully consider the alternatives provided by this submission which maintains the ultimate objective of producing a result that is equitable for the requirements of both the Mooloolah community and the Governing Bodies of the Project. The wellbeing of the Mooloolah community must not be overlooked and if this is to be ensured, the alternatives provided by this report must be incorporated.	This is a general statement, but is noted in the SEIS.	4.20.2

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private 6	6.1	Tunnel design should allow for future provision e.g. stacked freight containers and sufficient width.	The ability to use double stacked containers for freight is currently limited by the electrification of the network. However, the SEIS notes that the internal dimensions of the tunnels should be reviewed in future stages of design.	4.2.2.1
	6.2	Further investigation into the suitability of rock for use as ballast could be undertaken.	Geotechnical investigations will be undertaken in future stages of the Project, which may identify local sources of suitable ballast.	4.2.2.6
	6.3	Investigate the use of excess spoil in wider batter slopes. Also consider stockpiling excavated material and using to reinstate the existing railway to natural levels.	Further testing of spoil material will be required to determine the quality of this spoil and its potential reuse. This is addressed in the SEIS.	4.2.2.6
	6.5	Consider land bridges to facilitate wildlife movement.	This is discussed in the SEIS.	4.11.1.1
	6.4	Investigate the possibility of using old rail tunnels for maintenance access.	The current tunnels which are not required when the proposed scheme is built will be assessed to see if they are structurally sound to continue and the appropriate use/ purpose will be assessed. They will have limited capacity to be used for maintenance for the new railway alignment as they will be at a different level and the portals will not be in similar locations. The heritage significance of these tunnels should also be considered in any future use.	4.2.2.7
private 7	7.1	The submitter has three matters of concern relating to the EIS; 1) There are contradictions between the EIS, Executive Summary and plans. 2) The EIS is not in keeping with indications given or discussed at the previous information session in September 2008. 3) The EIS fails to adequately address community impacts and safety concerns.	See below for responses.	3.5.1.1
	7.2	Between the Executive Summary, EIS and drawings the information is contradictory and in total confusion for the proposed action Eudlo School Road. At a meeting in September 2008 the Study team showed images of the railway going through a 'cut and cover' tunnel at this location, this gave residents a degree of satisfaction that the visual amenity of Eudlo would not be adversely affected. The Executive Summary and EIS detail the 'cut and cover' tunnel, though the plans tell a different story. And at the information session I was told that the plans were what was to be constructed.	There was an inconsistency in the EIS, between the drawings and the environmental assessment. The EIS indicates a 'cut and cover' tunnel would be provided at Eudlo School Road to preserve visual amenity. The consultation process presented a overpass design which was not preferred by members of the community. This has been addressed in the SEIS.	4.6.1, 3.5.11
	7.3	EIS does not adequately address concerns regarding vehicle movements associated with construction spoil, in particular the suitability of the existing road network and impact of the vehicle movements on the road network.	This is addressed in the SEIS and is an important point. Further work will be required to address this issue, and determine the extent of enabling road works to allow construction traffic to utilise the road network.	4.2.2.6
	7.4	The EIS should contain a stronger commitment to local resident's preference for a heritage style station.	This is addressed in the SEIS, and is also an important point. This is consistent with other feedback received during the consultation process.	4.3.1

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	7.5	Design of Eudlo Station and car park requires clarification. The submitter suggests that a combined vehicle and pedestrian access is constructed through Federation Walk, thus addressing a number of access and security/ visibility concerns. Importantly the submission notes that with a sensitive approach to construction, the vegetation loss through Federation Walk could be minimised, and the decommissioning of the old track and station opens up a new area that could be used for revegetation.	This is addressed in the SEIS and may require further consideration during future stages of design.	4.3.1, 4.20.3.2, 4.20.3.3
private 8	8.1	The Project is based on planning documents that will be outdated by the time the Project commences.	This is noted in the SEIS.	4.3.3
	8.2	Emphasis is on linking Brisbane and Sunshine Coast. There is a need to also link hinterland to coastal communities via improved public transport connections, rather than Brisbane only.	Reference to the strategic priorities of the Translink Network plan were included in the EIS, and are re-iterated in the SEIS.	4.6.4
	8.3	Local concerns regarding visual impact on Mooloolah and Palmwoods are not adequately addressed, particularly the Palmwoods Duck Pond. Concerns about the levels of significance stated in the EIS.	The EIS process sets out the significance criteria used for the assessments. A local level of significance does not dismiss the issue.	4.20.6.2
	8.4	The Palmwoods Duck Pond has historical environmental and social significance well beyond a local level. This is the most important focal point for social gatherings and forms a significant entry statement to the town of Palmwoods. The solution proposed is a total blight on the visual amenity and deemed “high adverse” in the EIS. The EIS suggests there is no acceptable alternative to the elevated structure constructed approx 12 m above the park.	This is addressed in the SEIS.	4.20.6.2
	8.5	Further description of the rail design solution through Mooloolah Town Centre is required.	This is addressed in the SEIS.	4.20.2
	8.6	Confirmation on whether vegetation clearance is required for power supply for the tunnel. This may also pose a health risk for nearby residences. Approach to protection of Pinch Lane is supported and congratulated.	Electrical supply is expected to run in the tunnels. However ventilation requirements are yet to be determined, and this is identified in the SEIS. Work in future stages of design will be required on this issue, with consideration of the particular sensitivity of the area.	4.10.3
	8.7	The statement that home-based work trips will reduce over time contradicts the argument under economic benefits.	Whilst the proportion of long distance home-based work trips may reduce, they will still represent a portion of the total trips on the line, and the improved service along the rail corridor will facilitate these trips.	4.6.5
	8.8	The restriction of motorised trail bikes from the disbanded corridor should be further addressed to prevent disturbance of residents. The removal of fencing during decommissioning may encourage users of the trail to enter adjoining lands in an uncontrolled way.	The issue of fencing, safety and security is addressed in the SEIS.	4.3.2

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	8.9	The economic benefits of this Project appear questionable (by its own admission - 8.5.1) in order to justify the Project and associated costs in its present form. The real issue appears to be freight component with the benefits to local communities "hyped up" to justify the current location. The purpose of assessing economic impacts is to examine how the Project affects the economy of the study area, towns in the hinterland.	The EIS has supplied an appropriate level of detail, given the lead times and uncertainties in the lead up to the construction and operation of this Project. Future economic analysis will be required in future stages of the process, to quantify benefits, for freight transport and the local community.	4.1.1
	8.10	The EIS suggests the new rail corridor will encourage businesses to spring up along the corridor but fails to supply any meaningful data to support this (8.5.1).	As above.	4.1.1 , 4.7.4
	8.11	The EIS admits difficultly in obtaining detailed information on all expenditures associated with the Project. It also admits that benefits outlined in the EIS can be overstated, particularly regarding things like labour generation.	As above.	4.7.5
	8.12	Clarification required as to whether employment will be 'new jobs' or 'transfers'. Clarify why workers accommodation is required when workers are most likely to be local. Argument under "housing impacts" suggest a housing demand to accommodate workers, but if the workers are predominately from the sunshine coast local area, where is the demand?	As above.	4.7.3
	8.13	The data relied on and the findings are, by their own admission, subjective. The Executive Summary (Section 8 Employment Impacts) highlights the benefits under "Other economic impacts". These include the reduced use of motor vehicles, reduction in road accidents, higher patronage of public transport, etc. The assumptions is that the rail service will satisfy the commuting needs of all these people in a north/south linear direction only. The major need of access towards the coast from the hinterland is not satisfied. Brisbane as the desirable destination is not proven.	Brisbane is not intended to be the desired destination, and the assumption is not focused on north south movements, but also intra-regional movements. The Translink Network plan aims to address these factors.	4.1.1
	8.14	This section highlights "the potential to contribute to the achievement of well connected communities by increasing the efficiency and frequency of services between centres on the Sunshine Coast".	Again, reference to the TransLink network plan.	4.1.1, 4.6.4
	8.15	The intensification of activity around rail stations conflicts with the rural lifestyle of the community.	The SEIS refers to the SEQRP and urban footprint and rural areas.	4.3.5
	8.16	Confirmation regarding responsibility for the provision of cycle and pedestrian links.	The SEIS identifies the need for responsibility for maintaining these assets, noting that generally it is the local government.	4.6.6
	8.17	What design measures have been implemented regarding the potential impact of train headlights at night and disturbance for residents?	An assessment of this is noted for consideration in future stages of design.	4.5.4

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	8.18	Pinch Lane has been identified in the EIS as of stage significance as a wildlife corridor - little info is provided in the EIS to satisfy this requirement. It is essential for the wildlife corridor to function properly by completely precluding trail users from this area.	The SEIS discusses fencing and wildlife corridors.	4.10.14, 4.3.2
	8.19	Prior to fencing the existing corridor, trail bikes used the area causing erosion, weed transfer and major noise disturbance both to residents and fauna. The EIS decommissioning of the existing corridor by removal of fencing will result in this happening again.	See above.	4.10.14, 4.3.2
	8.20	There is a need to preclude public access from this tunnel based on safety issues.	Tunnel access and safety is discussed in the SEIS.	4.3.2
	8.21	As residents directly impacted by the proposal and residing within this corridor, our observations over the pas 30 years on the management of the existing rail corridor lead us to seriously question the strength and commitment of mitigation recommendations under Q Rail control. Similar recommendations and undertakings relating to nearby projects have left most residents totally unimpressed with the management of the construction process and the end result.	Construction management is a key issue for this Project, and is discussed in the SEIS. This will be further enforced by conditions and future construction management planning.	4.21
	8.22	Impact of construction on residents and appropriate communication/feedback mechanisms. Management of weeds during both construction and operation needs to be adequately addressed. Also enforcement of waste collection and disposal.	The issue of weeds and weed control during construction and operation is discussed in the SEIS.	4.21
	8.23	In the Decommissioning section of the EIS, the removal of fencing allows the bike and horse users and walking public to wander unchecked on to private land adjoining the current corridor. This is totally unsatisfactory outcome for bordering landowners. Retaining the existing fence and providing access point for pedestrians but prohibitive to motorised trail bikes would be a more acceptable solution.	The issue of fencing and access control is discussed in the SEIS. This will be an important consideration in the future planning for the decommissioned corridor.	4.3.2
	8.24	Clarify what impact 'tunnel ventilation plant' will have on neighbouring properties. Also clarify how the requirement to use quiet equipment will be enforced during construction.	The SEIS notes that tunnel ventilation plant requirements will be determined in future stages of the design process.	4.10.3
	8.25	Clarify impact of QR locomotives on air quality and emission controls.	As part of continuous improvement, QR currently has a program underway for the replacement of older diesel-electric locomotives with newer, lower emission units. This program requires that the specifications of all new diesel-electric locomotives must meet United States Environmental Protection Agency Tier 2 emission standards for locomotives.	4.15.4
	8.26	Clarify remedial measures to be employed to ensure dust particles generated by construction do not pollute water tanks of nearby properties.	This is discussed in the SEIS.	4.15.2
	8.27	Concern over waste disposal practices of prior projects in the area- how will this project manage this issue?	This is discussed in the SEIS.	4.21

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Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	8.28	EIS suggests that clearing of Pinch Lane may be required to manage bushfire risk which conflicts with ecological status.	This is discussed in the SEIS.	4.18.1
	8.29	Storage of dangerous goods and explosives on site should not occur in proximity to property. The stockpiling of mulch/woodchip could be a fire risk.	This is discussed in the SEIS.	4.18.2
	8.30	Storage of dangerous goods and explosives on site should not occur in proximity to property. The stockpiling of mulch/woodchip could be a fire risk.	This is discussed in the SEIS.	4.18.2
	8.31	The wildlife corridor in this location is significant at a State level, because it is one of the largest bands of intact vegetation in the State. The EIS recommendations for this site are supported and the approach to the solution has been congratulated.	This is noted in the EIS.	NA
	8.32	Unknown location of the power supply. An overground location would necessitate the clearing of a permanent vegetation tree corridor as well as rendering our house uninhabitable.	electrical supply is expected to run in the tunnels. However ventilation requirements are yet to be determined, and this is identified in the SEIS. Work in future stages of design will be required on this issue, with consideration of the particular sensitivity of the area.	4.10.3
Department of Employment, Economic Development and Innovation 9	9.1	The impact on agribusinesses is acknowledged. The mitigation measures identified in the EIS are fully supported. It is recommended that the Proponent continues to engage with affected land owners and peak industry bodies. Fair and adequate compensation should be provided for unavoidable impacts.	This is discussed in the SEIS.	4.3.3
		The areas of highest potential impact include the following properties: - a large grazing area between the Mooloolah River and Neil Road, Mooloolah, where the rail corridor bisects the property - properties along Spackman Lane north of Palmwoods, which includes horticulture operations, although the cropping areas don't appear to be directly affected - properties north of Victory Park, Woombye, including Birdwood nursery.	This is discussed in the SEIS.	This is noted in the EIS.
	9.2	DEEDI recommends the Proponent continues to engage and negotiate with affected land owners to ensure that all measures to avoid impacts to rural operations have been considered. Where impacts are unavoidable, fair and adequate compensation must be offered.	This is noted in the SEIS.	4.3.3
	9.3	Rail freight through the area does not service the local agricultural industry. Consideration to be given to accommodating the transport of local freight where this is beneficial to the local regional. Assist development of agriculture and agribusiness in the regional. Consideration give to the use of surplus rail land as a location to see agricultural goods.	This has not been assessed as part of the EIS, though future land use and planning activities do not rule out this consideration.	4.3.3

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	9.4	In addition to the weed and pest species mentioned in the EIS, a number of other declared species are also found in the region and pose a bio-security risk. It is recommended: appropriate authority is notified of the presence of Class 1 weed; Provide species lists of all terrestrial and aquatic flora surveyed to Bio-security Queensland for assessment of declared species (and as an Appendix to the EIS); Prepare weed and pest management plans for relevant species; Prepare a fire ant risk management plan	These issues are noted in the SEIS and will be pursued through future stages of the design process.	4.10.1, 4.10.2
	9.5	Use of Biosecurity Qld's Annual Pest Distribution Survey 2008 data and predictable pest maps on DEED website should be utilised in conjunction with QLD Herbarium naturalised flora data for the Project.	This is included in the SEIS	4.10.2
	9.6	The EIS states that the Senegal Tea Plant is not a declared weed. This is incorrect.	A correction has been made and documented in the SEIS.	3.5
	9.7	Other declared plants that are not mentioned as present in the corridor (based on the EIS) yet these species are present in the local government area impacted by the Project.	The list provided with the submission is included in the SEIS, along with comment to note that other species may be present or become present over time.	4.10.2
	9.8	Section 12 highlights the pest animals of concern for the Project. Although the species describe are important to focus preventative and control efforts on, there are other pest animal species that should be considered across the whole of the DTMR rail corridor.	The wording in the SEIS reflects this.	4.10.2
	9.9	Fire ants are a notifiable pest under the Plant Protection Act 1989. These ants are not present in the corridor, however are a potential Biosecurity risk to this region and consequently mitigation of spread and raising awareness of these species will reduce the threat. 1. A Pest Animal Management Plan should be developed for all declared pest animal species of concern and potential pest animal species listed in Sec 12 of the EIS. 2. A risk management plan should be in place for Fire Ants.	This is noted in the SEIS.	4.10.2
	9.10	There is one local government area within the rail corridor. The Act specifically requires local governments to coordinate the development, implementation and periodic review of pest management plans for their areas as part of an integrated planning framework for managing pest plants and animals across the state. Local governments can also declare and prioritise under their local laws pest species not listed in the Act and these species are often included in the LGA Pest Management Plan.	This is noted in the SEIS.	4.10.2
	9.11	Parklands Blue Metal resource area is identified as the closest source of ballast material. There are several sites closer that should be noted in the EIS.	This is noted in the SEIS.	4.2.2.8

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Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	9.12	While the EIS has indicated the presence of the granted Gatton to Gympie petroleum pipeline easement and highlights the need for consultation with the pipeline licence holder, Part 3 and Part 20 of the EIS (see other comments below) should incorporate specific provisions of the Petroleum and Gas (Production and Safety) Act 2004 (P&G Act) concerning construction on pipeline easements. The possibility of the gas pipeline being constructed prior to the railway should also be considered in light of the provisions listed.	This is noted in the SEIS.	4.3.3.1
	9.13	Sections 807 and 808 of the P&G Act require that construction or changes in surface level within the pipeline easement can only be carried out with the consent of the holder of the pipeline licence. Sections 426, 427, 429 and 430 also require consultation.	This is noted in the SEIS.	4.3.3.1
	9.14	On page 129 of the EIS it is noted that the pipeline easement aligns with and crosses the decommissioned railway easement to the northeast of Mooloolah township and that the above requirement of the P and G Act will continue to apply to future uses of the easement. A possible error in Fig 3.3b on Page 109 has been noted. Under the P and G Act the only gas pipeline licence in the Project areas is that held by Allgas Pipelines Operations P/L. The map also shows an Energex Gas pipeline.	This is noted in the SEIS.	4.3.3.1
	9.15	Avoidance or minimisation of cumulative impacts resulting from the close proximity of the proposed railway crossing and the future pipeline would require consideration of the width of access tracks required for pipeline constructional and the impact that any railway structure would have on such access. The provision of Secs 426, 427, 429, 430, 807, and 808 of the P & G Act reg pipeline construction on public roads (or vice versa) should be considered during the design of the relocation of Neill Rd (refer Drawings SK003A ad SK103A of EIS).	This is noted in the SEIS.	4.3.3.1
Community Group 10	10.1	Note that the proposed route passes through the Dularcha National Park, already split in two by the current alignment, it is intended to use the existing rail corridor as much as possible, to mitigate further adverse effects on the high conservation value.	This is a general statement, no response required.	NA
	10.2	The submitter supports the mitigation measures proposed to minimise environmental harm, particularly where it passes through areas of high ecological significance. The rehabilitation of the disused parts of the track should compensate for vegetation removal associated with the new track. Weed eradication is recommended to be incorporated into all areas of rehabilitation over the length of the rail corridor.	This is noted in the SEIS.	4.10.2

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	10.3	We note that there will be two tunnels for the rail upgrade in the Dularcha National Park area. We understand this will avoid disturbance to the ridgeline and its vegetation which forms a bioregional wildlife corridor, and is protected under the VMA Act. Although the relocation of the railway line will entail clearing of some vegetation, we hope that the extra length of tunnel and consequent undisturbed and rehabilitated vegetation will maintain habitat and corridors.	This is noted in the SEIS.	This is noted in the EIS.
	10.4	It is recommended that old tunnels used for construction access be rehabilitated and converted into fauna underpasses.	This is discussed in the SEIS.	4.11.2
	10.5	Culverts should be monitored to identify train strikes on fauna. If high levels of train strikes are identified in a particular area they should be fenced off from the rail line with fauna friendly fencing.	This is discussed in the SEIS.	4.11.3
	10.6	Addlington Creek should be spanned by a bridge rather than a culvert due to fauna located in area.	This is discussed in the EIS and SEIS.	4.11.1.2
	10.7	The submitted supports the proposed approach to construction of any waterway crossings during the non-breeding season of the Giant Barred Frog.	NA	This is noted in the EIS and EMP.
	10.8	Take action to avoid clearing old growth habitat trees, trees with nesting hollows and significant vegetation before route is finalised.	This is noted in the EIS, SEIS and EMP.	4.10.4, and EMP
	10.9	Lopping and pruning of tree branches should be undertaken rather than removal of tree where possible.	This is noted in the SEIS, however may not always be feasible.	This is noted in the EIS and EMP.
	10.1	Construction should be timed to not take place during nesting season. A fauna expert should be employed during any clearing activities.	This is noted in the SEIS.	4.11.4
	10.11	Areas used in the construction process that are not being used for railway operational needs should be revegetated immediately.	This is noted in the SEIS.	4.10.5
	10.12	Land to be offset under the Qld Government Environmental Offsets Policy should contain similar vegetation and in close proximity to original land to provide linkages.	This is noted in the SEIS.	4.10.6
private 11	11.1	The submitter notes the importance of the Federation Walk to the community, and does not want to see it affected by the proposed parking area or access to the station.	The Federation Walk area is discussed in the SEIS. This is a difficult issue, as there is little opportunity to provide the necessary access without having an impact. The community values of this area are recognised.	4.20.3.3
	11.2	Removal of vegetation from the Federation Walk will provide disruption for walkers as area is flood prone.	This is discussed in the SEIS.	4.20.3.3
	11.3	Removing trees to increase visibility between the proposed Eudlo rail station and the town is not necessary due to the distance.	This is discussed in the SEIS.	4.20.3.3
	11.4	Construction of an elevated wheelchair friendly walkway would provide adequate pedestrian access from Eudlo township.	This is discussed in the SEIS.	4.20.3.3
private 12	12.1	Recommended to construct elevated walkway to provide pedestrian access.	This is discussed in the SEIS.	4.20.3.3

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	12.2	Car access to proposed parking to be via Highlands Rd.	This is where the access is planned. This is discussed in the SEIS.	4.20.3.1
private 13	13.1	Proponent commended project.	General statement- no change to SEIS.	NA
	13.2	Submitter is pleased to see the advanced planning and corridor protection for the Landsborough to Nambour duplication. Urges the Government to move into corridor protection and see if actual work can be completed well before 2026.	General statement- no change to SEIS.	NA
	13.3	In addition to the above, there is a need to find funds to complete the corresponding work for Beerburrum to Landsborough section. North of Nambour is another section in need to expedite planning and corridor protection for further rail deviations including future rail bridges.	General statement- no change to SEIS.	NA
	13.4	The Project will allow for appreciable savings in diesel use for freight trains and the Sunlander, and savings in energy use by electric trains. In turn, this will result in less air pollution and lower greenhouse gas emissions.	General statement- no change to SEIS.	NA
	13.5	The Project benefits will be widespread. Not only will people who live in or near the Sunshine Coast get improved urban public transport, but also the many people who use Travel Train to access points north of Nambour will benefit. It will also help maintain and improve the standard of living of people in Central and Far North Queensland (including keeping supermarket prices in line with those in Brisbane).	General statement- no change to SEIS.	NA
	13.6	Summary provided on the history of the North Coast Line, upgrades that have been made over the years to the different sections.	General statement- no change to SEIS.	NA
private 14	14.1	Pegging out of resumption boundary on propagation/mother block has not occurred. This is required so that compensation can be calculated.	This is not noted in the SEIS as it relates to property processes and discussions between TMR and the landowners.	NA- subject to a separate process
	14.2	The submitter requests more detailed information regarding the exact boundaries so their compensation calculation can be worked out.	This is not noted in the SEIS as it relates to property processes and discussions between TMR and the landowners.	NA- subject to a separate process
	14.3	The EIS has failed to identify commencement dates for planned construction.	The EIS notes the possible approach to construction- staging- however it is too early to provide a firm commitment as to when.	4.1.3
private 15	15.1	The EIS has used information and techniques that do not accurately identify what is truly occurring on ground in relation to flora and fauna.	The SEIS discusses the field survey methods used for this Project.	4.10.7
	15.2	Realignment of Paskins Rd is in contradiction with SEQ Regional Plan 2005-2026, SEQ Regional Plan 2009-2031, Maroochy Plan 2000 and Maroochy Local Growth Management Strategy.	This is addressed in the SEIS.	4.3.6
	15.3	Realignment of Paskins Rd has not been given adequate consideration of impacts in the EIS.	This is addressed in the SEIS.	4.3.6
	15.4	Realignment of Paskins Rd will cause 'moderate to high' impacts on wildlife such as increased road kills.	This is addressed in the SEIS	4.3.6, 4.10.8, 4.10.9

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	15.5	Invasive weed species may have adverse impact on Eudlo National Park as a result of possible upgrade to Paskins Rd.	This is addressed in the SEIS.	4.10.8
	15.6	Construct access road from Paskins Rd to Eudlo Rd.	This is addressed in the SEIS.	4.3.6
	15.7	Stop construction plans for bridge over Leeons Rd, traffic would then access Palmwoods through Paskins Rd onto Eudlo Rd.	This is addressed in the SEIS.	4.3.6
	15.8	Inaccurate identification of flora East of 12 Leeons Rd; also on south side of Leeons Rd.	This is addressed in the SEIS.	4.10.9
	15.9	Field surveys must be undertaken at all areas of 'high biodiversity' and National Parks, to ensure information is reflective of what is occurring on-ground.	This is addressed in the SEIS.	4.10.7
Community group 16	16.1	Use best practice methods for construction to protect Paynter and Petrie Creek.	This is addressed in the EIS and SEIS.	4.20.4
	16.2	The intersection of Palmwoods-Woombye Rd, Chevallum Rd, Jubilee Drv and Margaret St will require redesign post decommissioning of old track.	This is noted in the EIS and SEIS, but is outside the scope of the Project. To be addressed by Council and TMR as a result of the decommissioning activities.	4.20.6.1
	16.3	In order to limit environmental impacts of bridge construction, implement mandatory use of "Bridge Launching System" or "Top Down Construction" on all bridge constructions on the Project.	This is noted in the SEIS however bridge construction methods will be determined in future stages of the Project design.	4.20.6.5
	16.4	All due care to be taken to Kolora Park precinct at Palmwoods	Noted in the EIS and SEIS.	4.20.6
	16.5	In order to relieve traffic congestion and segregation, removal of QR infrastructure such as bridges and embankments should be carried out urgently.	This is noted, however it cannot occur until decommissioning is completed for this area.	4.20.6.1
	16.6	Improve connectivity through town by redesigning street network, increasing cycle & walkways alongside decommissioned track and upgrading road network below new bridge structure.	The potential for this is noted in the EIS and SEIS, however this is not within the scope of this Project.	4.20.6.1
	16.7	Investigate the reuse of Palmwoods station buildings for future community purposes.	This is noted in the SEIS.	4.20.6, 4.9.1
	16.8	Minimise disturbance of aquatic environment when implementing support pylons used on bridge structures.	This is noted in the SEIS.	4.20.6.5
	16.8	The process of clearing contaminated QR land is of concern to the community, and needs to comply with guidelines and legislation.	This is noted in the SEIS.	4.4.1
	16.9	Best practise used in construction of structures.	This is noted in the SEIS.	4.20.6.5
	16.10	The reuse of materials from the existing rail line is encouraged but adherence to contaminated lands requirements is necessary.	This is noted in the SEIS.	4.4.1
	16.11	Widespread community concern over the visual impacts of the proposed bridge in Palmwoods, particularly in the Spackman Lane and Kolora Park areas. All mitigation measures should be explored to lessen the effects.	This is discussed in the SEIS.	4.20.6
		Removal of Piccabeen Palm from the banks of 'Duck Pond' at Kolora Park should be avoided.	This is discussed in the SEIS.	4.20.6.3

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	16.12	The submitter group intend to work with SCRC on the communities behalf in addressing issues raised by the community.	This is discussed in the SEIS.	4.20.6
	16.13	Existing rail bridge at Palmwoods must be removed once line is decommissioned to make way for new road that is required for safety reasons.	Noted, however as mentioned above the potential for this has been identified, and is not part of the project scope.	4.20.6
	16.14	Note that Chevallum Road is also the primary access route from Palmwoods to Eudlo and Mooloolah via Eudlo Rd. The submitter supports opportunity to change existing road network to better integrate east and west part of town.	This is noted in the SEIS.	4.20.6.1
	16.15	All efforts should be made to reduce impacts on residents and existing businesses. This could achieved through planning preparation works well in advance of major works.	This is noted.	4.20.6, 4.20.6.1
	16.16	EIS states that Project does not include the removal or upgrade or road or rail bridges on current railway.	This is correct. As noted above, the potential for the removal of this constraint as a result of decommissioning is identified. Subsequent road upgrades are not included in the scope of this Project.	4.20.6.1
	16.17	Plan preparation works to commence along the corridor well in advance of the major works.	This is noted and intended.	NA
	16.18	In order to not limit user-ship of Kolora Park, pylons used for construction should be placed alongside the Park not within.	Bridge design will be determined at a later stage of design- the impact of bridge design on amenity, access and usage of the park will be a major consideration.	4.20.6.2
	16.19	Buderim to Palmwoods Tramway Needs to be of high priority for preservation as it is of State heritage significance.	Noted. This was identified in the EIS, and is also discussed in the SEIS.	4.9.2
	16.20	Ensure the preservation of significant archaeological sites, of note, the old locomotive 'Shay' & complete a full archaeological evaluation.	This is noted in the SEIS.	4.9.2
	16.21	Further investigation of Aboriginal cultural heritage sites located at 24 Leeons Rd and Kolora Park, Palmwoods.	This requirement is noted in the SEIS. Note that a CHMP is currently being prepared.	Addressed in EIS
	16.22	Ensure design changes to Kolora Park and Duck Pond are designed to incorporate existing cultural heritage values.	This is addressed in the EIS and also an additional note has been included in the SEIS.	4.9.8
	16.23	Project must address the flooding issue primarily on the main arterial road Palmwoods-Woombye Road to prevent road closures due to flooding.	This road network issue is not part of the Project. The potential to address this road network issue is noted in the EIS and SEIS.	4.20.6, 4.20.6.1
	16.24	Strict guidelines for noise and vibration need to be enforced.	This is noted in the EIS and SEIS.	4.14
	16.25	Noise and vibration caused by the operation of the new railway should not adversely impact upon residents, businesses and wildlife in and along the corridor.	This is noted in the EIS and SEIS.	4.14
	16.26	Noise and vibration caused by the decommissioning of old railway infrastructure will not adversely impact upon residents, businesses and wildlife in and along the corridor.	This is noted in the EIS and SEIS.	4.14
	16.27	Comply with relevant Commonwealth, State and Local legislation.	This is noted in the EIS and SEIS.	4.1

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	16.28	Adherence to all relevant local, state and commonwealth legislation in regards to any environmental work carried out in any phases of the Project.	This is noted in the EIS and SEIS.	4.1
	16.29	The Project should adhere to all relevant local, state and commonwealth legislation in regards to hazard and risk management during construction, while rail line is in operation and when decommissioning.	This is noted in the EIS and SEIS.	4.1
	16.30	Palmwoods district will suffer several impacts such as disturbance, visual, cultural, noise, air quality, loss of Heritage listen items, degradation to waterways, loss of habitat and ecosystems but have identified some benefits.	This is noted in the EIS and SEIS.	4.20.6
	16.31	Special Management Areas are to be preserved as much as possible.	This is noted in the EIS and SEIS.	NA
	16.32	Project managers must develop Environmental Management Plans in accordance with all relevant Comm, State and Local legislation.	This is noted in the EIS and SEIS.	4.1, 4.21
	16.32	As a result of redundant rail land being made available, the Project will allow for the development of a new town master plan that may take advantage of this land.	This is noted in the EIS and SEIS.	4.3.3
		Green space to be included in decommissioned rail corridor.	The potential future land uses associated with decommissioned areas is discussed in the SEIS. These areas will be the subject of future council planning activities.	4.3.2
		Emphasis should be placed on selection of correct construction materials to limit noise of bridge.	This is noted in the SEIS.	4.14.1
		Concrete to be used on bridge to limit noise of rail line during day.	The bridge construction materials will be determined in future stages of design. These would be selected in terms of amenity and durability.	
private 17	17.1	Government need to value mature stands of trees or reserves such as Federation Walk and to preserve them as an example to society	The community and cultural value of this area is recognised, however the Project constraints mean that impacts to this area will be difficult to avoid. This issue is addressed in both the EIS and SEIS. Further consultation with the community during the development of access and decommissioning plans will be necessary.	4.20.3.3
	17.2	Need for visibility is not warranted due to levee obstructing view to platform	This is discussed in the SEIS.	4.20.3.3
	17.3	Distance from town to railway platform is 150-200m. This distance does not allow for a detailed view.	This is discussed in the SEIS.	4.20.3.3
	17.4	For safety reasons, construct railway platform and pedestrian access as close to Highlands Road as possible.	This is discussed in the SEIS.	4.20.3.3
	17.5	Confusion over wether the platform will have pedestrian lift access or tunnels.	There was an error in the sketches provided in the EIS, access via lifts will be from below the platforms, not overhead.	4.20.3.3
		If pedestrian access is deemed to be required, an elevated walking platform that passes through the trees (Federation Walk) should be constructed.	This possible outcome is discussed in the SEIS.	4.20.3.3
		Breaking of the canopy will cause weed infestations and compromise the education capabilities of the walk as well as the flora and fauna values.	This is addressed in the SEIS	4.20.3.3

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		Submitter questions need for visibility at Eudlo when Woombye is not required to have a direct sightline from town to railway.	This is addressed in the SEIS.	4.20.3.3
		Pedestrian access to railway is not required as all commuters will use Highlands Rd or use car.	This is addressed in the SEIS	4.20.3.3
private 18	18.1	The proposed railway station for Eudlo should be constructed in the vicinity of Highlands Rd.	This is addressed in the SEIS.	4.20.3.3
	18.2	Vehicular and pedestrian access should be provided to Eudlo centre via Highlands Rd.	This is addressed in the SEIS.	4.20.3.3
		Construct an elevated walkway through Federation Walkway approximately 2m above ground.	This is addressed in the SEIS.	4.20.3.3
private 19	19.1	Discontinue the Project and leave track as is, and replace the Project with a new project to the east, for both high speed passenger and freight services.	This is addressed in the SEIS and is inconsistent with SEQRP.	4.1.1
	19.2	Substitute existing Project with a high speed passenger and freight corridor following the Bruce Highway.	This is addressed in the SEIS and is inconsistent with SEQRP.	4.1.1
	19.3	Restructure CAMCOS rail line to take advantage of new route. Construct interchange at or near Beerwah.	This is addressed in the SEIS.	4.1.1
	19.4	Consideration should be made to a new rail interchange between Nambour, Coolum and Yandina to serve Nambour and northern sunshine coast.	This is addressed in the SEIS.	4.1.1
	19.5	Reduce service on existing track between Landsborough to Nambour to 2 or 3 car local service, linking with the new line at or around Nambour.	This is addressed in the SEIS.	4.1.1
	19.6	Consideration should be given to leasing the local service along the track to a private operator.	This is discussed in the SEIS.	4.1.1
	19.7	Consideration should be given to using the existing track for a community run steam train located at Landsborough.	This is discussed in the SEIS.	4.1.1
	19.8	Country between Landsborough to Nambour is without doubt the prettiest countryside in southeast Queensland. We owe it to future generation to preserve this section of country.	This is noted, however it cannot occur until decommissioning is completed for this area.	4.1.1
	19.9	Engineering problems of building a straight, 160k/hr railway through hilly country are profound. End result is substantial modification of the environment with the assoc destruction and risk to watercourse and hillsides.	This is the purpose of the EIS, to assess these impacts. The Route selection process considered the constraints to development, and identified the preferred route.	This is addressed in the EIS
	19.10	Potential damage at Dularcha is severe. Potential damage to rivers and watercourses is likely to be severe with the Mooloolah River vulnerable.	This is assessed in the EIS.	This is addressed in the EIS
	19.11	The submitter is concerned that the scale of development to the east of the Bruce Highway will lead to increased congestion and parking issues in the small railway townships.	The Project is part of a number of Translink/ QG strategies for strengthening the public transport network across the Sunshine Coast region. This concern is valid, and should be addressed by future traffic and patronage modelling to address parking issues. The delivery of the CAMCOS project should address this concern, but the timing of both projects is unknown.	4.1.1

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	19.12	Abandon existing route. Advantages of proposed solution are: - Land is flatter and easier to construct a straight and level railway - Land is underdeveloped - 10% longer but may be cheaper to construct - Route not environmentally and culturally sensitive - Environmental damage much less - Route closer to current and future centres - Route can be shared by proposed CAMCOS rail route - Opportunity to construct new and modern rail interchanges - Constructability issues are less problematic.	This comment is a re-statement of the call to build a route closer to the coast- closer to the Bruce highway. This question has been raised by a small number of community members throughout the delivery of the Project, this does not achieve project objectives.	4.1.1
Community group 20	20.1	The submitter is concerned about the impacts of the tunnel south of Mooloolah on Dularcha National Park, and requests that the bored section of the tunnel is extended by 35m to the north, to reduce the extent of cut and cover tunnelling .	This is something that has been noted, however tunnel design will be dependent on future geotechnical investigations. Minimising environmental impacts in these areas needs to be a key driver for design, therefore this request should be considered.	4.4.3
	20.2	The submitter questions the reasoning behind the three track design through Mooloolah, and suggests that the length of passing loop should be reduced, so that it terminates to the north of the Station.	The design in this area has been progressed through consultation with this group, and the three track solution reduces the overall footprint of the corridor. This reduces the impact to surrounding properties. Passing loop lengths have been established through discussions between TMR and QR.	4.20.2.3
	20.3	The submitter notes that residents of Mooloolah want to retain the open level crossing. They are concerned that the EIS does not show any drawings or artists impressions showing the level crossing in use.	Noted. This issue has been highlighted in the SEIS, and revised drawings prepared to show this working solution. The grade separation proposed in the EIS is still a possible outcome for this area.	4.20.2.1
	20.4	Any form of grade separation would split Mooloolah village in two.	This has been assessed in the SEIS, and will be the subject of future planning activities led by the Sunshine Coast Regional Council for the township. The preservation of the grade separation option, along with appropriate development forms should in the longer term address this concern.	4.20.2.1
	20.5	Many shops and services occur in pairs therefore people walk across the crossing to other shops.	Noted in SEIS.	4.20.2.1
	20.7	The Mooloolah crossing is one of the lowest risk and the one where grade separation would be environmentally the most damaging.	The proposed grade separation option has been included so as to preserve the option until it is needed.	4.20.2.1
	20.8	Figures quoted in the EIS document in relation to traffic modelling are incorrect, the submitter requests further consultation with their experts is undertaken.	This is discussed in the SEIS.	4.20.2.2
	20.9	The submitter notes that the line through Mooloolah is already two tracks, and straight so no work needs to be done. They note the EIS contains contradictory statements regarding laying new track alongside the old one and retaining the existing two tracks.	This has been clarified in the SEIS. A new track to be built on the east of the two existing tracks (one of which is a passing loop), the existing western track becomes the central through running track, and the eastern track will need to be replaced and rebuilt.	4.20.2.3

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Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	20.10	Does duplicated railway on Page 229 mean a double track line or a new track separate from the old one?	This means a double track line in a new corridor- possibly confusing wording previously as it is duplicating the existing single track (but in a new corridor).	1.1
	20.11	Plenty of local alternative access across the railway lines.	Noted in SEIS.	4.20.2.1
	20.12	The submitter suggests that instead of the costly solution of the grade separated overpass, other level crossing and barrier technologies could be investigated.	This is noted in the SEIS. Standards that apply at the time of construction will be applied. However the application of newer/improved technologies will not rule out the future need for grade separation.	4.20.2.1
	20.13	It is recommended to implement 'one way barriers', at a lesser cost, as opposed to the overpass.	As above.	4.20.2.1
	20.14	Investigation into more red-amber-green traffic lights, red light cameras and general intrusion detection is required.	This is noted, and would be considered in future stages of the design process.	4.20.2.1
	20.15	QR, QT and Main Roads to consult with Mooloolah River Waterwatch & Landcare Inc during all phases of construction in regards to vegetation management and incorporate Sunshine Coast Regional Council's Siltation and Sediment control guide eco-system.	This is noted.	4.21.1
	20.16	How weed control will take place is not identified in EIS - who will monitor wash down of vehicles?	Further detail on weed control and construction management is included in the SEIS. This will be a significant issue for future management.	4.10.2, 4.21, EMP
	20.17	Offset should be considered at the EIS assessment stage. Offsets for environmental damage to various areas have not yet been identified.	TMR is working on this in association with Ecofund, this is discussed in the EIS and SEIS. This will be an ongoing action.	4.10.6
	20.18	The submitter identifies two properties it recommends for securing of environmental offsets.	This is noted. TMR are conducting further investigations into the feasibility of this, in association with Ecofund.	4.10.6
	20.19	The two existing tracks through the precincts of Mooloolah Railway Station, once connected to the proposed dual north and south alignments would satisfy all the Projects objectives for operating and service.	This is discussed in the SEIS. It had been considered during earlier stages of the Project, but was not suitable.	4.20.2.3
	20.20	Conflict between zoning map of Mooloolah (fig 3.2b pg 82) and (fig 3.5a - sheet 1 page 114) - these areas should be utilised as per EIS page 695. Object to skate park of sealed car parking area within this surplus land.	This error is noted in the SEIS, and objection to possible future land uses noted.	3.5
	20.21	Insufficient information provided in EIS about four track policy.	This is discussed in the SEIS.	4.2.2.2
	20.22	The submitter states the importance of Mooloolah Connection Road acting as the gateway to Mooloolah. They note that should the level crossing be removed, the level of visual impact would be high adverse.	This is discussed in the SEIS.	4.20.2
		The EIS has failed to address TOR in relation to 1.5 Socio-economic cost & benefit of the Project: No reference to socio-economic benefit of four track system.	The EIS states the premise on which the Project has been assessed, that is - two tracks for operational issues, four tracks for spatial/ environmental issues.	4.2.2.2
		The EIS has failed to address TOR in relation to 1.6 Alternatives to the Project: Alternatives are not addressed. Only the 'do nothing' scenario and alternative routes in relation to construction for the double track are addressed.	This is discussed in the SEIS.	4.1.1

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
		The EIS has failed to address TOR in relation to 1.8.2 Objectives of the EIS: In regards to the four track configuration of the Project, the EIS document has not addressed its objectives.	This is discussed in the SEIS.	4.2.2.2
		Implement Sunshine Coast Regional Councils Siltation and Sediment control guidelines.	This is noted in the SEIS.	4.21.1
		Any soils removed from rail alignment sites are to be tested contamination prior to dumping.	This is noted in the SEIS.	4.4.1
		Soil dump sites are not to be on floodplains.	This is noted in the SEIS.	4.2.2.6
		EIS to be reviewed when rail alignment becomes valid.	Noted in SEIS.	4.1.4
		There is no requirement to remove the existing historical waiting shed and pedestrian overpass once line is connected to proposed North South alignments.	The Mooloolah Station pedestrian rail bridge and waiting shed do not meet current design standards, and it is likely they cannot be retained in situ. The pedestrian rail bridge is not long enough to go over the additional track, and the waiting shed is not of sufficient size to cater for future demands.	4.9.1
		Submitter disputes 2% population rise. More accurate prediction should be 1% per annum.	This is discussed in the SEIS.	4.20.2.1
		Clarification is sought over the statement, “ideally the grade separations should be constructed prior to the construction of the duplicated railway”.	This is noted in the SEIS.	4.20.2.1
		Prior construction of an overpass at Mooloolah is not required for the purposes of access for construction vehicles.	This is noted in the SEIS.	4.20.2.1
		EIS failed to identify the main benefits of not having four track corridor. Submitter states this was a statutory requirement.	This was not an objective of the EIS.	4.2.2.2
private 21	21.1	Re-use infrastructure from current Mooloolah river bridge in the future Neil Rd river crossing.	This has been discussed in the SEIS.	4.2.2.9
	21.2	The commencement of the overpass should be moved to the east and connect with Paget St.	This is discussed in the SEIS.	4.20.2.1
	21.3	Extend commercial area to the south. Specifically land bounded by Jones St, Hatten St and Paget St.	This is discussed in the SEIS.	3.5, 4.3.3
private 22	22.1	Any properties that receive damage as a result of ground vibrations and geological disturbances should be fully compensated by the appropriate government department.	This is discussed in the SEIS, and will be addressed in future stages of design and consultation.	4.14.2
	22.2	Any properties that require occupants to vacate their premises due to it being rendered dangerous to live in should be relocated immediately. Government should cover all moving and living expenses whilst the problem is being rectified.	This is discussed in the SEIS, however it is a matter for future stages of the Project to address, based on policy and project decisions at the time.	4.14.2
	22.3	Property owners within a one kilometre radius of the proposed corridor that require to sell their property should be fully compensated for the devaluing that the Project will cause.	This is discussed in the SEIS.	4.7.2
	22.4	Submitter states that being forced to wait until closer to the start date of construction for their specific questions to be answered is not acceptable as residents cannot plan for future.	This is noted, and commitment to future consultation will be necessary.	4.1.3, 4.1.4

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Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
private 23	23.1	The close proximity of the proposed Palmwoods railway station to the club will increase noise levels and will have a deleterious affect on the club.	This is discussed in the SEIS.	4.14.2
	23.2	Submitter would like reassurances that vibration associated with the railway will not damage the clubs building and foundations.	This is discussed in the SEIS.	4.14.2
	23.3	Construction activities are not 'typical' and therefore desk top noise assessment is not accurate and will have larger impacts than thought.	This is discussed in the SEIS.	4.14.2
	23.4	Unclear what impacts the construction activity will have on the clubs overflow car park area and the official car park area.	This is discussed in the SEIS.	4.6.8
	23.5	During road alignment activities (realignment of Chevallum Rd), access to the club is required for all members and patrons at all times.	This is discussed in the SEIS.	4.6.8
	23.6	The submitter expresses concern of the effects that dust will have on the clubs cleaning expenses and lawn up keep.	This is discussed in the SEIS.	4.15.3
	23.7	Concern over damage or injury to club infrastructure, patrons vehicles or customers as a result of derailment or roll over.	This is discussed in the SEIS.	4.18.5
	23.8	Concern over damage or injury to club infrastructure, patrons vehicles or customers as a result of construction works.	This is discussed in the SEIS.	4.18.5
		Concern is expressed over waste products from rail staff and patrons ending up on club land.	This is discussed in the SEIS.	4.17.1
		Concern is expressed over excrement waste from animals as a result of animal trains passing through the station.	This is discussed in the SEIS.	4.17.1
	23.9	Submitter states that there will be large visual amenity impacts on the club as a result of the rail infrastructure	This is discussed in the SEIS.	4.5.1, 4.20.6.6
	23.10	Submitter expresses concern for club patrons safety given the close proximity to the proposed railway station, especially at night.	This is discussed in the SEIS.	4..18.5, 4.20.6.6
	23.11	The submitter expressed concern over the viability of the club during the construction.	Construction impacts and management are discussed in SEIS.	4.6.8
private 24	24.1	Insufficient information regarding access to properties for test drilling.	This is discussed in the SEIS. Statutory processes for access would apply.	4.10.10
	24.2	Insufficient information regarding rehabilitation of damaged vegetation caused by access to private properties for test drilling purposes.	This is discussed in the SEIS.	4.10.10
	24.3	Submitter requests further information regarding whether weeds management practices that are being carried out on the wider project will be extended to private properties that are accessed during the course of the Project.	This is discussed in the SEIS.	4.10.2
		Submitter would like clarification over what time frame the proposed program to re-establish vegetation and manage weeds will run.	This is discussed in the SEIS.	4.10.2
	24.4	Submitter expresses concern over land acquisition process and appropriate compensation.	This is discussed in the SEIS.	4.7.2
	24.5	Submitter strongly opposes any plans to open the decommissioned corridor to walking/horse trails etc.	This is discussed in the SEIS.	4.3.2

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
community group 25	25.1	The EIS has failed to properly assess the future visual and landscape impacts of the proposed corridor on the church.	This is discussed in the SEIS.	4.5.2
	25.3	Further information is sought on what measures will be used to secure access to the church property once road construction works on Back Woombye Rd are completed.	This is discussed in the SEIS.	4.9.3.1
	25.3	The EIS does not take into consideration or make assessment of the short or long term adverse impacts of the corridor on the church social environment. Church is concerned about the loss of their existing congregation once church is removed.	This is discussed in the SEIS.	4.9.3.1
	25.4	The EIS has failed to take into account the Church in their cultural heritage assessments, this should be rectified.	This is discussed in the SEIS.	4.9.3.1
	25.5	Further consideration is requested to be given to the noise and vibration impacts of the proposed corridor on the Church grounds and buildings.	This is discussed in the SEIS.	4.14.2, 4.3.4
	25.6	The close proximity of buildings to the corridor increases the risk of damage to church properties from rail incidents and compromises the health & safety of the congregation. Further consideration is required on this matter.	This is discussed in the SEIS.	4.1.8.4
	25.7	The submitter believes insufficient weight has been given to the risks associated with the increase in rail volume and increase in rail speed that will result from the new rail lines.	This is discussed in the SEIS, a hazard and risk assessment has been carried out.	Addressed in EIS
private 26	26.1	In order to avoid future traffic problems in the Landsborough area as a result of a future increase in population it is recommended to complete all necessary road works immediately. The submitter sees the proposed urban growth needs to be supported by a free flowing traffic system (road and rail).	A number of the issues at Landsborough are outside the scope of the study, and TMR has indicated that a separate study needs to be undertaken for the area. This requirement is documented in the SEIS.	4.2.1.3
		In order to avoid future traffic problems in the Landsborough area as a result of a future increase in population it is recommended to increase car parking capacity at Landsborough railway station. Existing parking is limited. In wet weather area is boggy. Translink has no current plans for long overdue upgrade.	As above.	4.2.1.3
	26.2	Increase commuter shelter facilities to cater for larger number of people using public transport in the future.	This is noted, and needs to be addressed through the development of station design.	4.3.1.2
	26.3	Retain the pathway alongside railway station from Leach Av to station platform and retain lifts.	This is noted, likely to be achieved with the two track corridor, but may be affected by the third and fourth track.	4.2.3
	26.4	Further information is requested as to where the lost car park spaces at Landsborough State School will be replaced.	This is noted in the SEIS. (note that this section is subject to review with TMR as the proposed arrangements are yet to be agreed with the school and Education Qld).	4.20.1.2
	26.5	Need to ensure there is open consultation on this level crossing as there is a lot at stake involving the decision.	Noted.	4.2.1.3
	26.6	More caution must be undertaken by all concerned in regard the protection of environment, including all wildlife and habitat.	Noted.	Addressed in EIS and EMP

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Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
community group 27	27.1	Realignment of Old School Rd must be completed through a cut and cover method.	The SEIS explains the reason for the changes in design. There may be a requirement for further consultation with council and community when the Project moves into future stages of design.	3.5.1.1
	27.2	Preserve where ever possible the existing re-vegetated area, west of the station.	This is noted in the SEIS, however there are some access issues that are yet to be resolved.	4.20.3.3
	27.3	Construct an elevated walkway through Federation Walk that provides access from Rosebed St. the structure must also avoid flooding, have wheel chair access and not allow the dumping of rubbish from it.	This recommendation is noted in the SEIS.	4.20.3.3
	27.4	Vehicular access to the railway station and proposed car park must be flood free.	This recommendation is noted in the SEIS.	4.20.3.3
	27.5	Allow entry and exit to the station from both Highlands Rd and Old School Rd.	This is noted in the SEIS. It has not been pursued at this point in time but has been recorded for future consideration.	4.20.3.1
	27.6	The proposed new station must be old heritage style.	This is noted in the SEIS - consultation with the community will be required in the establishment of appropriate station design guidelines.	4.9.1
private 28	28.1	Removal of the canopy in Federation Walk will cause large weed problems.	This is discussed in the SEIS.	4.20.3.3
		An elevated walkway is the best solution for pedestrian access.	This suggestion is noted in the SEIS.	4.20.3.3
		The need to increase visibility is not a valid argument to remove trees.	This is discussed in the SEIS.	4.20.3.3
		Vehicular access to car park must be via Highlands Rd.	This is discussed in the SEIS.	4.20.3.3
private 29	29.1	Removal of the canopy in Federation Walk will cause large weed problems.	This is discussed in the SEIS.	4.20.3.3
		An elevated walkway is the best solution for pedestrian access.	This suggestion is noted in the SEIS.	4.20.3.3
		The need to increase visibility is not a valid argument to remove trees.	This is discussed in the SEIS.	4.20.3.3
		Vehicular access to car park must be via Highlands Rd.	This is discussed in the SEIS.	4.20.3.3
private 30	30.1	Removal of the canopy in Federation Walk will cause large weed problems.	This is discussed in the SEIS.	4.20.3.3
		An elevated walkway is the best solution for pedestrian access.	This suggestion is noted in the SEIS.	4.20.3.3
		The need to increase visibility is not a valid argument to remove trees.	This is discussed in the SEIS.	4.20.3.3
		Vehicular access to car park must be via Highlands Rd.	This is discussed in the SEIS.	4.20.3.3
private 31	31.1	Removal of the canopy in Federation Walk will cause large weed problems.	This is discussed in the SEIS.	4.20.3.3
		An elevated walkway is the best solution for pedestrian access.	This suggestion is noted in the SEIS.	4.20.3.3
		The need to increase visibility is not a valid argument to remove trees.	This is discussed in the SEIS.	4.20.3.3
		Vehicular access to car park must be via Highlands Rd.	This is discussed in the SEIS.	4.20.3.3
private 32	32.1	Removal of the canopy in Federation Walk will cause large weed problems.	This is discussed in the SEIS.	4.20.3.3
		An elevated walkway is the best solution for pedestrian access.	This suggestion is noted in the SEIS.	4.20.3.3
		The need to increase visibility is not a valid argument to remove trees.	This is discussed in the SEIS.	4.20.3.3

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
		Vehicular access to car park must be via Highlands Rd.	This is discussed in the SEIS.	4.20.3.3
private 33	33.1	Removal of the canopy in Federation Walk will cause large weed problems.	This is discussed in the SEIS.	4.20.3.3
		An elevated walkway is the best solution for pedestrian access.	This suggestion is noted in the SEIS.	4.20.3.3
		The need to increase visibility is not a valid argument to remove trees.	This is discussed in the SEIS.	4.20.3.3
		Vehicular access to car park must be via Highlands Rd.	This is discussed in the SEIS.	4.20.3.3
private 34	34.1	Removal of the canopy in Federation Walk will cause large weed problems.	This is discussed in the SEIS.	4.20.3.3
		An elevated walkway is the best solution for pedestrian access.	This suggestion is noted in the SEIS.	4.20.3.3
		The need to increase visibility is not a valid argument to remove trees.	This is discussed in the SEIS.	4.20.3.3
		Vehicular access to car park must be via Highlands Rd.	This is discussed in the SEIS.	4.20.3.3
private 35	35.1	Removal of the canopy in Federation Walk will cause large weed problems.	This is discussed in the SEIS.	4.20.3.3
		An elevated walkway is the best solution for pedestrian access.	This suggestion is noted in the SEIS.	4.20.3.3
		The need to increase visibility is not a valid argument to remove trees.	This is discussed in the SEIS.	4.20.3.3
		Vehicular access to car park must be via Highlands Rd.	This is discussed in the SEIS.	4.20.3.3
private 36	36.1	Removal of the canopy in Federation Walk will cause large weed problems.	This is discussed in the SEIS.	4.20.3.3
		An elevated walkway is the best solution for pedestrian access.	This suggestion is noted in the SEIS.	4.20.3.3
		The need to increase visibility is not a valid argument to remove trees.	This is discussed in the SEIS.	4.20.3.3
		Vehicular access to car park must be via Highlands Rd.	This is discussed in the SEIS.	4.20.3.3
private 37	37.1	Removal of the canopy in Federation Walk will cause large weed problems.	This is discussed in the SEIS.	4.20.3.3
		An elevated walkway is the best solution for pedestrian access.	This suggestion is noted in the SEIS.	4.20.3.3
		The need to increase visibility is not a valid argument to remove trees.	This is discussed in the SEIS.	4.20.3.3
		Vehicular access to car park must be via Highlands Rd.	This is discussed in the SEIS.	4.20.3.3
community group 38	38.1	Inadequate increase of car parking spaces at Nambour Railway Station, given the Project construction dates and the overall intent to encourage use of public transport.	This is an issue that was of considerable concern during the Nambour consultation sessions. The number of car parks established are consistent with the translink requirements advised. However there is a broader issue at stake here with regard to encouraging public transport use, and existing parking issues in the township. This is discussed in the SEIS.	4.20.9.1
	38.2	Suspend track and platform on the Western side of existing line to allow for underneath parking.	This suggestion is noted in the SEIS.	4.20.9.1
		Provide additional car parks spaces through resuming properties (35-39, 41, 43) on Price St.	This suggestion is noted in the SEIS, however it can't be carried out as part of the Project as the need can't be directly demonstrated.	4.20.9.1

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Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	38.3	Submitter strongly opposes any stabling of trains within the town area.	This is noted in the SEIS. Stabling was removed from the scope of the EIS as a broader examination is underway.	4.2.1.2
private 39	39.1	The Queensland Environmental Offsets Policy should be extended to include Wetlands that will be affected by the rail corridor.	Noted in the SEIS.	4.10.6.1
private 40	40.1	New development has already impacted on the duck pond water quality.	Noted in the EIS and SEIS.	4.10.6
	40.2	The rail alignment should avoid further disturbance to this wetland and a strand of Piccabeen Palms near the bowls club due to ecological and cultural values.	Noted in the SEIS.	4.20.6.3
	40.3	The wetland area from Palmwoods Road to Spackman lane is a significant corridor that supports many species, including locally endangered Tusk Frog and disturbance should be avoided. It is suggested alignment be moved to the east of the current proposal.	This is discussed in the SEIS.	4.10.6
community group 41	41.1	In each of the three communities of Palmwoods, Woombye and Nambour, the rail and road corridor are a part of the uniqueness of life, business, tourism and access to the rest of the state that make these communities the vibrant centres they are today. The issue of increasing noise pollution for private homes, aged care facilities, schools, places of worship, community venues etc that inevitably arises with the increase in the capacity and frequency of rail services is a great concern. We ask that everything possible be done to reduce the impact of noise on both the users and neighbours to the rail track.	This is addressed in the EIS and also the SEIS.	4.14
	41.2	The mitigation of noise impact on rural communities and adjacent land owners should be a high priority.	This is noted.	4.14
	41.3	The station designs should imitate the architectural style of surrounding local community.	This is noted in the SEIS.	4.3.1.3, 4.9.1
	41.4	We recognise the proposed work will improve safety for road users and pedestrians, particularly in and around the road and rail network in Palmwoods. And note the extremely poor interface of traffic and pedestrians currently. We welcome the improved flow of traffic under and around an elevated track with a lower speed through Palmwoods shopping area or an appropriate alternative route. The improvement of rail services for the towns along the rail corridor should also have a flow on effect of more residents availing themselves of the rail services for their travel requirements.	Noted.	NA
		The provision of an elevated track as proposed at Palmwoods is supported s it will improve safety. There is currently a poor interference between pedestrians and traffic around the existing rail line. The improvement in rail services will also allow for greater use of rail services for the community.	Noted.	NA

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	41.5	Compensation should be provided to properties that will be negatively impacted by the Project, including those whose properties are not directly affected. Adequate provision/replacement should be made for public facilities that are lost e.g. Woombye.	Current policy/law does not provide for compensation unless directly impacted. The reprovision of public facilities is discussed in the SEIS and will form part of the ongoing preparatory works for the Project in the lead up to construction.	4.7.2
		Proposed upgrades to rail and road network, particularly in Palmwoods and Mooloolah should be completed urgently to avoid the uncertainty created for those affected.	This is discussed in the SEIS. Note that some works in Palmwoods are dependent on the decommissioning of the existing railway.	4.20.2.2, 4.20.6.1
QR Network 42		The Project will result in significant level of improvement in the rail corridor and operations that are required to ensure future requirements meet the DRO's of SEQ Regional Plan	Noted.	NA
	42.1	Overall property requirements and corridor footprint is adequate.	Noted.	NA
	42.2	Mechanisms for taking into account of continuous improvement in terms of technical standards should be put in place given the lengthy project timeframe.	This is included in the SEIS.	4.3.3
	42.3	QR Network would appreciate the opportunity of involvement through consultation at various stages of detail design such as engineering requirements, changes to track alignment, clearances.	This is included in the SEIS.	include in Proponents commitments and 4.1.4
	42.4	It is noted that the EIS sets out a number of EMP requirements with respect to noise, sediment, vegetation, complaints management, control and monitoring of all project stages including construction and decommissioning.	Noted.	NA
	42.5	The distinction between operational requirements/ongoing railway corridor management and construction/decommissioning should be made clear	This is noted in the SEIS.	4.21
private 43	43.1	Reference should be made to the *alyxia magnifolia* located on Lot 21, RP881327, and Phiaus australis in Pinch Lane.	This is included in the SEIS.	4.10.11
	43.2	Tunnel proposals with rehabilitation is supported, including use for micro-bat habitat; tunnels should be as long as possible RE vegetation is recommended for existing alignment, and efforts should be maximised to provide opportunities for wildlife movement	This is discussed in the SEIS.	4.11.2
	43.3	Provide further detail on how decommissioned line with be rehabilitated e.g. will landform remain the same?	This is discussed in the SEIS.	4.10.12
	43.5	Tunnelling is considered to be preferable option to cutting and covering. Cut and cover with habitat rehabilitation on cover is supported but only in sections where tunnelling is not viable.	This is noted in the SEIS.	4.4.3
	43.6	Not enough details in terms of how restoration of existing/decommissioned line will occur - will landform remain same or will natural contours be restored prior to replanting.	This is noted in the SEIS.	4.11.1
	43.7	Any changes to existing hydrology will not be without impact on adjacent drainage niche vegetation communities e.g. Piccabeen palm.	This is noted in the SEIS.	4.20.6.3
	43.8	No reference found regarding occurrence of EPBC listed endangered Phiaus australis.	This is noted in the SEIS.	4.10.11

Appendix A - Summary of Submissions

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	43.1	Greater detail on methodology required on rehabilitating decommissioned line.	This is discussed in the SEIS but will be dependent on the various future uses of the decommissioned line. For further investigation in future stages of the Project.	4.11.2
	43.11	Revegetation recommended on existing alignment and efforts to maximise opportunities for wildlife movement inc arboreal mammal bridges over Eudlo-Palmwoods Rd.	This is noted in the SEIS.	4.20.7, 4.11.1
	43.12	Compounding ecological impacts of powerlines at Culgoa Road should be considered.	This is discussed in the SEIS, and was also identified in the EIS.	4.10.13
	43.13	Increased scrutiny given to monitoring and compliance of the Proponents performance in terms of the EMP through construction phase.	This is noted in the SEIS.	4.21
	43.14	Strong monitoring and compliance requirements for construction and ongoing maintenance/ rehabilitation are required so there is no disparity between EMP and ground works.	This is noted in the SEIS.	4.21
	43.15	Recommended that the CG instigate a process of ongoing independent compliance to ensure that all construction activities are undertaken in accordance with both the state EMP and relevant environmental legislation and any EPA/DERM issued permits.	This is noted in the SEIS.	4.21
	43.17	Re-establishment of vegetation can take a number of years to be established and free of maintenance requirements.	This is noted in the SEIS.	4.10.5
private 44	44.1	The Submitter has concerns regarding noise and vibration impacts to their property and requires clarification on impacts and mitigation measures, including perceptible level of ground born vibration, potential noise barriers and impacts to property values.	This is noted in the SEIS.	4.14
	44.2	Noise - do new generation locomotives exist now - how noisy are they. Braking noise? Noise barriers mitigating single residences has not been sufficiently addressed.	This is discussed in the SEIS.	4.14
	44.3	Vibration - This issue in EIS has not been sufficiently addressed regarding ground borne vibration impacts.	This is discussed in the SEIS.	4.14
	44.4	Clarification of the impact of the proposed Freight Refuge within the vicinity of Mooloolah is required.	This is discussed in the SEIS.	4.20.2.3
	44.5	The open level crossing should be retained to provide connection of town centre. The overpass is not preferred due to impacts on recreation, safety, town access and visual impact.	This is discussed in the SEIS.	4.20.2.1
	44.6	Prefer Jones Road not to be used to get around town and suggests Karanne Drive almost links to Neil Road.	This is discussed in the SEIS.	4.20.2.2
	44.7	An option to realign the rail with the Bruce Highway should be considered to reduce impact on hinterland townships.	This is discussed in the SEIS.	4.1.1
community group 45	45.1	Measures to protect flora, fauna and water quality must be enforced for bridge crossings at Mooloolah and South Mooloolah Rivers. The offer to work with local Landcare groups is supported.	This is discussed in the SEIS.	4.13.1

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	45.2	Incorporate mitigation measures in the SCRC Erosion and Sediment Control Manual (V1.2).	This is discussed in the SEIS, but more importantly, the commitment to standards at the time may override this reference to this particular document.	4.5.2
	45.3	The proliferation of weed species along existing rail corridors should be controlled. Clearly define responsibility for the control of weed species along the existing and future rail corridor, including movement and reuse of spoil. Soil must be free of contamination and not dumped on floodplains. Management measures to be location appropriate- i.e. no runoff to waterways or aquatic fauna habitats.	Weeds within operational weed corridors will be managed by QR as custodians of the rail. Once the old rail is decommissioned, parts of it may be rehabilitated or utilised as part of a Rail Trail network. QR will be responsible for the rehabilitation of the decommissioned line and will be expected to undertake monitoring and maintenance upon all areas of rehabilitation to ensure weeds are under control and rehabilitation efforts are largely successful. Weed management strategy forms part of the EMP.	4.11.12
	45.4	Soil Removal - who is responsible for decided where surplus soil is taken. Soil must be free of contamination and weeds and not be dumped on floodplains.	This is discussed in the SEIS.	4.2.2.6
	45.5	The implementation of mitigation measures should be enforced through regular audits and reporting.	This is discussed in the SEIS and the EMP.	4.22.1
	45.6	The submitter identifies two properties it recommends for securing of environmental offsets.	This is noted, however it is not appropriate to identify which lots these are at present. TMR are conducting further investigations into the feasibility of this, in association with Ecofund.	4.11.6
	45.7	The submitted identifies a property with significant environmental values that should be used for conservation purposes.	This property is not required for the Project, and as such was not assessed in the EIS. (relates to comment above). TMR are currently in the process of determining offset potentials, including this property.	4.10.6
	45.8	Extend the length of the southern and northern approaches to the bored tunnel to minimise impacts of cut-and-cover construction.	This is discussed in the SEIS.	4.4.3
	45.9	The bored tunnel should be extended at least 100m to the south to reduce the impact on the National Park.	This is discussed in the SEIS.	4.4.3
	45.10	Bored tunnel to be extended by 35m to the north.	This is discussed in the SEIS.	4.4.3
Department of Transport and Main Roads - Integrated Transport Planning 46		The submitter is supportive of the overall EIS, with some additional clarification in relation to road matters.	No commentary required.	NA
	46.1	Clarify and describe how appropriate assessment will be addressed in future stages of the Project development as planning documents/programs change over time. Further consultation regarding state-controlled roads is undertaken.	This is noted in the SEIS.	4.1.4, 4.3.3
	46.2	Provide details regarding how impacts and mitigation measures will be determined for southern approach to Landsborough (tight bends at southern approach and grade separation at Landsborough-Maleny Road) which is outside the boundaries of this Project.	This is outside the scope of this Project, but the issue is noted in the SEIS.	4.2.1

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	46.3	If Gympie St Nth warrants future grade separation then the existing OLC also warrants such provisions. Alternative route via Thytheleigh Ave to Gympie St Nth no practical alternative to the L/M Rd in regard to ongoing safety and efficiently of road network.	This is discussed in the SEIS, though the upgrade of the existing Landsborough OLC is outside the scope of this Project.	4.2.1.3
	46.4	Clarify and list relevant state-controlled roads by gazetted State-controlled name first. Clarify how mitigation measures will ensure the function hierarchy of the road network is maintained.	This is now included in the SEIS.	4.6.2
	46.5	Consider an alternative solution for road realignment at Neil Road that provides a direct link from Mooloolah connection Road to Palmwoods-Mooloolah road on the east side of the rail line. This would enable lowering and possible shortening of Mooloolah River bridge.	This is mentioned in the SEIS.	4.20.2.2
	46.6	Illustrate consideration of current safety investigations at the Nambour Connection Road/Blackall Street intersection and Nambour Connection Road south of Nambour.	This is noted in the SEIS. It is anticipated that in the lead up to construction, there will be other upgrades to the state controlled (and local) road network in the region that will need to be taken into consideration during future stages of design.	4.20.8
Department of Environment and Resource Management 47		The Project accords with the intent and outcomes of the SEQ regional Plan and complementary Infrastructure Plan and Program. There are no major impediments to the Project.	No comment.	NA
	47.1	Biodiversity assessment is based on a out of date version of DERM's Biodiversity Planning Assessment and should be updated. This may impact on current mitigation measures proposed for fauna crossings and rehabilitation; detailed design and monitoring/maintenance recommendations are provided (refer to comments on drawings and Comment 3b of submission regarding individual locations).	This has been updated and the proposed mitigation measures reviewed in the SEIS.	4.10.14

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	47.2	Bridging is preferable over culverts because the crossing area is increased. Ideally culverts should be installed perpendicular to the rail alignment to minimise the crossing distance. More fauna crossing needed as single crossing structures provide limited movement opportunities. Rehabilitation of areas of existing corridor in large patches of remnant vegetation and in the major conservation estate areas particularly the nthn section of Eudlo Creek National Park will create long term functional connectivity in areas currently dissected by the rail corridor. Need to commit to monitoring and maintenance of revegetation areas to the point where new vegetation communities are self sustaining . It is requested that all culverts within Dularcha National Park provide fauna friendly passage. The need for fauna overpasses should also be further investigated. The area of 'Of Concern' regional ecosystem impacts by track realignment needs to be reassessed to ensure impact area is kept to a minimum. An assessment of fauna overpass locations should be provided and be specific to the fauna concerned.	This has been discussed in the SEIS.	4.11.1
	47.3	SEQ Regional Plan and Coastal Management Act 1995 should be referenced due to mapped wetlands affected by the Project, particularly at Petrie Creek.	This is now included and discussed in the SEIS.	4.12.2
	47.5	Any works in the area should avoid or mitigate impacts on the riparian/significant coastal wetland area noted on Drawing C027.	These have been reviewed and noted on the engineering drawings. We do not propose at this point in time to include this review with the SEIS, but it should form part of the staging and implementation report.	4.12.2
	47.6	Submitter notes a number of impacts to significant vegetation that will require rehabilitation/offsetting including: large patch of 'of concern' on drawing C025, endangered RE on Drawing C024 and C023, culvert between 92700 and 92699, between 89700 and 989100, Drawing C008, Drawing C007, culvert on drawing C006, land bridge on drawing C005, old corridor in the vicinity of fauna crossings on Drawing C004 and C003.	As above.	4.10.6
	47.7	Drawing C024 and C023 - the change in alignment through the Woombye area results in disruption; there are impacts on an endangered RE at the 99200 to 99000 marks and several landowners are affected.	As above.	4.10.6
	47.8	Rehabilitation of the old alignment in national park should be undertaken in consultation with QPWS officers. Rehab should occur around the culvert between 92700 and 92600 marks.	This is noted in the SEIS.	4.10.6
	47.09	Large patch of 'of concern' remnant vegetation needs fauna crossing. It will be fragmented and partially isolated by road and rail corridors.	This is noted in the SEIS.	4.11.8
	47.10	The significant connectivity provided by the tunnel/land bridge in the vicinity of The Pinch Lane should be augmented by rehabilitation of the old rail corridor between 89700 and 989100 marks.	This is noted in the SEIS.	4.10.6

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	47.11	rehabilitation at the culvert at 88400 mark is not required as land of little or no significance.	This is noted in the SEIS.	noted.
	47.12	Vegetation offsets for the whole Project could involve some rehabilitation of this endangered riparian vegetation community where land tenure allows.	This is noted in the SEIS.	4.10.6
	47.13	Rehabilitation of vegetation in conjunction with bridging will improve connectivity.	This is noted in the SEIS.	4.10.5
	47.14	If topography allows, the construction of a short bridging structure over this drainage line would improve the habitat connectivity outcome, particularly if the old corridor is replanted.	This is noted in the SEIS.	4.10.5
	47.15	Maximise connectivity outcomes by rehabilitating the old corridor around the land bridge created by the tunnel.	This is noted in the SEIS.	4.10.5
	47.16	Rehabilitation of the old corridor should occur in the vicinity of fauna crossings. See QPWS comments.	This is noted in the SEIS.	4.10.5
	47.17	Dularcha National Park - the areas Of Concern Regional Ecosystem that is to be impacted by track realignment needs to be reassessed to ensure the impacted area is kept to an absolute minimum.	This is noted in the SEIS.	4.4.3
	47.18	5 fauna-exclusive culverts exist under the current rail line in Dularcha Nat Park of which 3 are intended to be upgraded to fauna-friendly underpasses.	This is noted in the SEIS.	4.11.6
	47.19	Assess impact tunnelling at Rose Road will have on cultural heritage values and bat colony of existing tunnel.	This is noted in the SEIS.	4.9.4
	47.20	Consideration to be given to adding the decommissioned rail corridor to the national park following its rehabilitation.	This is noted in the SEIS.	4.3.2
	47.21	EIS mentions faunal overpasses as an option but provides no assessment of their locations.	This is noted in the SEIS.	4.11.1.1
	47.22	EIS states there are two alternative alignments of the rail corridor in land south of the creek. To maintain vegetation connectivity and to buffer the National Park, the tunnel option would provide a preferable option.	This is noted in the SEIS.	4.10.16
	47.23	To consolidate protected area estate to the east of the new line it is preferable that the decommissioned area be added to the park estate after rehab and reveg works are complete.	This is noted in the SEIS.	4.3.2
	47.24	Consideration should be given to adding the decommissioned rail corridor to the national park following rehabilitation. A rail trail is not preferred. (at Eudlo Creek NP).	This is noted in the SEIS.	4.3.2
	47.25	Tunnel option for parcel of land directly to the south of Eudlo NP is preferred. The decommissioned line should not be dedicated as a rail trail and should be incorporated into the park estate. A single span crossing of the waterway within the park is preferred.	This is noted in the SEIS.	4.10.16
	47.26	Compensatory protected land of equal or greater conservation value to that removed is sought in lieu of cleared areas.	This is noted.	

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	47.27	Impacts on rare and threatened flora and fauna are only discussed in general terms - more site specific details are required.	This is noted in the SEIS.	4.10.7
	47.28	Where required, evidence of Resource entitlement must be obtained prior to lodging an application for operational works for clearing native vegetation.	Noted.	
		A vegetation offset must be provided to ensure that the clearing of assessable vegetation undertaken as part of the Project meets relevant sections in Part S of the Regional Vegetation Management Code for Southeast Queensland Bioregion, 20 November 2006.	This is noted in the SEIS.	4.10.6
		DERM request that vegetation offsetting be provided in accordance with regional vegetation management code for southeast Queensland Bioregion, Nov, 2008 and Policy for Vegetation Management Offsets.	This is noted in the SEIS.	4.10.6
		The vegetation offset must be legally secured in accordance with the Policy for Vegetation Management Offsets, 28 September 2007 prior to development approval being issued and an offset consistent with this policy secured within 12 months.	This is noted in the SEIS.	4.10.6
		Any clearing of assessable vegetation undertaken must be limited to the extent that is necessary. This relates to any clearing of assessable vegetation undertaken prior to construction, during construction, and in the operational phase of the Project.	This is noted.	
		Site specific Sediment and Erosion Control Plans must be implemented prior to the commencement of clearing of assessable vegetation and remain in place during the construction phase and operational phase if sections of the Project area are still susceptible.	This is noted in the SEIS.	
		Any clearing or activities associated with clearing within the operational area must not adversely impact on assessable vegetation outside the operational area.	This is noted in the SEIS.	
	47.29	native title must be addressed for the Project in accordance with the Native Title Act and in some cases may involve the provision of procedural rights to the relevant native title parties before the approval can be granted.	This is noted in the SEIS.	
	47.30	For the purposes of making an application for a development approval under the *Integrated Planning Act 1997* DERM will provide Department of Transport and Main Roads with the required resource entitlement or owners consent.	Noted. Process will comply with legislation current at the time.	
		Compensation will be assessed of the diminution of value of the land taken. The land value is taken from the DERM asset register, then our contract valuers assess compensation. Department of Transport and Main Roads would be required to pay costs of survey, registration, title correction.	Noted.	

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Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	47.31	If excavations below 5m AHD are required, ASS investigations should be carried out, consistent with SPP2/02 and supporting guidelines.	This is noted in the SEIS.	EMP, Appendix C.
	47.32	Although Proponent is exempt from obtaining Riverine Protection Permit, they may still require permits to interfere with flow, take water from a watercourse or stream diversion.	This is noted in the SEIS.	4.1.5.2
	47.33	The submitter outlines the process for sourcing water from watercourses within the Project area	Noted.	
	47.34	The new railway alignment will presumably encroach on and through a number of existing parcels of land. Some parcels of land may be land attached to water licences to take water issued under the *Water Act 2000* (e.g. irrigation licences). The resumption and / or purchase of land and subsequent subdivision and disposal of land in the railway corridor may trigger the provisions of section 229 of the *Water Act 2000*, resulting in the expiry of affected water licences to take water.	Noted, but also part of Proponents commitments.	4.1.5.2
	47.35	Clearing must be undertaken in accordance with the *Forestry Act 1959* in relation to the clearing of remnant and non-remnant vegetation on State Land. Before clearing of vegetation on State Land occurs, the Forest Products business unit of DERM must be contacted to determine if any valuable mill-able timber is present.	Noted, but as no areas protected for state forest areas are affected, this does not apply. However, the process of revocation of the National Park may need to consider the sale of such state owned timber resources. The process is not clear, and will require further definition in future stages of the Project.	4.1.5.1
	47.36	Development must comply with Part 7 of the *Aboriginal Cultural Heritage Act 2003*.	Noted. A CHMP is being prepared.	Addressed in EIS and Proponents commitments
	47.37	Certified Regional Ecosystem and Essential Habitat Mapping amendment Errors discovered in the certified Regional Ecosystem Mapping and Essential Habitat Mapping should be corrected through a Regional Ecosystem map amendment to the QLD Herbarium prior to lodging any Operational Works Vegetation Clearing application with DERM.	Noted in SEIS.	4.10.18
	47.38	Reference to *Water Resources Act 2000* should be replaced with *Water Act 2000*.	This is corrected in the SEIS.	3.5
	47.39	*Forestry Act 1959* and *Vegetation Management Act Moratorium* should be added to legislative summary.	Noted. Added to SEIS, though relevance to Forestry Act not clear.	4.1.5.1
	47.40	Groundwater is not always close to the surface in Acid Sulfate Soils (ASS) nor are ASS always at the surface. ASS can often be buried below several metres of alluvial materials that have a low water table.	This is noted in the EMP.	EMP, Appendix C
		DERM's ASS maps are more accurately 'probability' rather than 'risk' maps.	Noted. Procedures for identifying and managing ASS are outlined in the EMP.	Addressed in the EMP
		DERM's ASS mapping does not intersect the proposed alignment. However alluvium is present which could contact ASS.	Noted. Procedures for identifying and managing ASS are outlined in the EMP.	Addressed in the EMP

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		If excavations are to occur below 5m AHD where the natural ground surface is less than 20m AHD or filling below 5m AHD, ASS investigations should be carried out consistent with SPP 2/02 and supporting guidelines.	Noted in EMP.	Addressed in the EMP
community group 48	48.1	The submitter notes that there is the potential for adverse impacts from the Bridge Structure through Palmwoods. They suggest that the use of appropriate materials, the negative impact could be turned into a positive, becoming a tourist drawcard.	This is something that the future design team for this Project must be acutely aware of. This is referred to in the EIS, and the importance of an aesthetic bridge design in this location is also highlighted in the staging and implementation report.	NA
	48.2	The frequency of train trips by 2026 and beyond may have a negative impact on noise quality for Palmwoods.	This is noted. Further assessment would be required prior to the implementation of the 3rd and 4th tracks.	4.14
	48.3	Duration of construction in Palmwoods should be shortened to minimise community impacts.	This is noted in the SEIS.	4.20.6.5
	48.3	EIS needs to identify how integrated transport system would come into Palmwoods. Many intersections travelling north could cause traffic blockages. The new rail corridor should be used as an opportunity to fix intersection congestion issues at Jubilee Drive.	This is discussed in the SEIS, but as previously mentioned, the Project does not include the upgrade to the road network made possible once the railway is decommissioned. This will need to be progressed between TMR and the SCRC.	4.20.6
private 49	49.1	Clearing of any vegetation in Federation Walk for access purposes should be avoided. An elevated walkway is the preferred option to provide safe access. The car access should be via Highlands Road.	This is discussed in the SEIS.	4.20.3.3
community group 50	50.1	Submitter commends efforts to avoid damage to Petrie Creek. It is recommended that a platypus burrow survey is undertaken prior to commencement of construction and that it be undertake outside of breeding season. Rehabilitation should be undertaken using plants sourced locally from their Bushcare nursery.	This is discussed in the SEIS	4.12.2, 4.20.4
	50.2	The submitter suggests local sources with established involvement in the area be used for rehabilitation works.	This is noted in the SEIS. Also needs to be considered as part of staging and implementation/ Proponents commitments.	4.20.4
private 51	51.1	An alternative route along the coast should be considered where access to population centres and infrastructure (e.g. Bruce Highway) are located. The present alignment has adverse impacts on rural communities. Submitter asks what happens when an large interchange is required at Nambour and suggests this would be better located at Bli Bli.	This is discussed in the SEIS.	4.1.1
	51.2	What happens in Nambour when a large bus/ rail/car interchange is required? Where do you locate that?	This is discussed in the SEIS.	4.1.1
	51.3	Leave current line as a spur-line for benefit of passengers to connect with the main line at either Nambour or Beerburrum.	This is discussed in the SEIS.	4.1.1
	51.4	The submitter has concerns the new alignment will have an increased noise impact on their property. Further information on the extent of impact and mitigation is required. Particularly concerned that an elevated track would amplify noise.	This is assessed in the EIS and discussed again in the SEIS.	4.14

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Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	51.6	The submitter requests consideration of a lower rail crossing through the Logwoods Road area, built on solid ground instead of bridge, to reduce noise.	This is discussed in the SEIS, however at this point in time the design levels have been established on the basis of minimising flood risk.	4.14
	51.7	Submitter does not believe they were adequately consulted regarding impacts to their property.	This is discussed in the SEIS.	1.4
		Fauna survey was completed in too short a timeframe.	This is discussed in the SEIS.	4.10.7
Department of Community Safety 52	52.1	In addition to designing with a flood immunity of ARI100, the Project should avoid reductions of on-site flood storage capacity OR not change the flood characteristics of the DFE outside the subject site.	This is discussed in the SEIS.	4.13.2
	52.4	Keep QFRS informed of access to and from sites where hazardous substances are stored.	This is noted in the SEIS.	4.18.3
	52.5	QAS Nth Coast Region - Track work at crossings in Landsborough at Landsborough/Maleny Rd and Gympie St Sth may be an issue during construction phase but can be bypassed if needed. Main crossing in Mooloolah on Mooloolah Rd and Eudlo could affect QAS response times if access is not maintained for emergency vehicles to the western side of town. Should both these crossing be closed, access can only be gained via Beerwah or Mooloolah. Will have negative impact on response times extending response by 10 minutes.	Project does not address crossing south of Landsborough station, however acknowledges network issues that will need to be addressed at time of construction. Access requirements are noted in the SEIS.	4.6.9
	52.6	Project will resume land occupied by Glasshouse Mountains State Emergency Services Group which is the subject of ongoing discussions to locate an alternative site.	This is not relevant to this Project.	NA
Sunshine Coast Regional Council 53	53.1	Proponent should estimate the likely timing and triggers related to going beyond a dual track arrangement. It may be beneficial to delay direct impacts on ecology.	It is not possible to estimate the triggers for going beyond 2 tracks at this point in time. The potential benefits to delay direct impacts to ecology are discussed in the SEIS.	4.2.2.2
	53.2	Identify and assess impacts of train stabling.	Stabling is now excluded from the scope of the EIS, as Translink are conducting a wider investigation into stabling opportunities on the north coast line.	4.2.1.2
	53.3	This submission attempts to highlight where the TOR have not been met, the impacts are not properly identified or where the mitigation strategies.	Noted.	Purpose of this SEIS
	53.4	SCRC should be identified as a level 1 stakeholder. Coordinator General should identify a format for a long term partnership between State Government and Council.	This is addressed in the SEIS.	3.5, Proponents commitments
	53.5	EIS should identify proposed new assets that are likely to be transferred to SCRC.	This is addressed in the SEIS.	4.3.7
	53.6	Preferred approval pathway should be updated to address *Sustainable Planning Act 2009*.	This is updated in the SEIS, note that IPA was still in place when the EIS was released.	3.1.1
	53.7	EIS should require that detailed design be undertaken using updated standards relevant at the time.	This is addressed in the SEIS.	4.3.3
		Climate change should be considered in the longevity of the asset, particularly flooding and drainage.	This is addressed in the SEIS.	4.13.2

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	53.8	Timelines identified do not reflect true scope of the Project. It is recommended a Project program is prepared, including Early Works Packages.	This is addressed in the SEIS.	4.1.3, 4.6.2, 4.6.8
	53.9	The time delay until project commencement creates uncertainty for property owners, business and community groups until detailed design is completed.	This is addressed in the SEIS.	4.1.3
	53.10	EIS should acknowledge the upcoming SCRC planning scheme.	This is noted in the SEIS.	4.3.3
	53.11	Infrastructure replacement and relocation should regard future community needs, asset life and maintenance costs.	This is noted in the SEIS.	4.3.7
	53.12	Community concern regarding town segregation should be acknowledged and further impacts and mitigation strategies detailed.	This is noted in the SEIS, however ongoing working with the councils during township master planning (or whatever it will be called) will be essential to planning connected, legible town centres.	4.8.1
	53.13	Further details regarding the impact on existing businesses should be provided (particularly Price st precinct) regarding availability of industrial land.	This is noted in the SEIS.	4.20.9.2
	53.14	Confirm that infrastructure mitigation works will be carried out by the Proponent. Supplementary work to identify impact on critical infrastructure should be undertaken. Opportunities to undertake early works should be explored.	This is noted in the SEIS, and is the purpose of the staging and implementation report.	4.1.3, 4.6.2, 4.6.8
	53.15		This is noted in the SEIS.	4.19.1
	53.16	Conduct a landslide risk assessment for cut and cover tunnel constructions.	This is noted in the SEIS.	4.18.6
	53.17	Confirm that surplus land in the rail corridor will be cleared of contamination by the Proponent.	This is noted in the SEIS.	4.4.1, Proponents committments
	53.18	Further visual analysis is required to appreciate likely impacts and mitigation measures, including elevations and sections.		TBC
	53.19	The proposed project works will result in Rose Road at viewpoint 4 and 5 being visually degraded. The views from Rose Road take in the Dularcha National Park from the crest of a ridge. The proposed clearing and the longitudinal angle of the view will result in reduction in visual amenity from this viewpoint. This view is a high quality, important visual amenity. Impacts are identified but site specific mitigation not listed.	This is noted in the SEIS.	4.5.3
	53.20	The proposed project works will result in this viewpoint being visually degraded. The proposed structure and its height will result in an adverse impact on visual amenity. Impacts are identified but site specific mitigation not listed. Minimise visual impacts by implementing sensitive architectural bridge design and not apply standard bridge construction as suggested in the Bridge Summary Appendix.	This is noted in the SEIS.	4.5.3

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	53.21	The existing vehicle road network is discussed in the EIS however no mention of the bicycle or pedestrian network and the impact and mitigation. Pedestrian and cycle movement has been referred to in some instances but has not been considered in a consistent manner. The EIS focuses on describing the existing road network then discusses the impact and mitigation of the Project in discreet townships and special management areas. There is limited discussion of the connectivity within centres for all modes of transport including walking and cycling and no investigation of the issues and opportunities for connectivity between centres. The development of a rail trail for the length of the corridor is supported as a valuable recreational and tourism asset. Details of options where the new rail alignment coincides with or crosses the existing alignment need to be further developed to ensure the feasibility of the rail trail. End-of-trip facilities should be included in the design of all new stations. Responsibility for infrastructure funding and construction is not detailed in the EIS.	This is noted in the SEIS.	4.6.6
		Rail station design should include end of trip facilities.	This is noted in the SEIS.	4.6.6, 4.3.1.4
	53.22	Confirm responsibilities for funding of transport infrastructure such as bridges, underpasses required for realignment. Council will require a 12 month maintenance period before acceptance of works.	This is noted in the SEIS	4.3.7, Proponents committments
		Undertake a detailed investigation of opportunities afforded by decommissioning of the existing rail to maximise transport network improvements.	This is noted in the SEIS, however future use of the decommissioned line is yet to be determined. The various suggestions and concepts considering during the EIS and EIS consultation have been documented.	4.3.2
	53.23	Remove reference to Council 'agreement' for any parts of the EIS, as Council has not formally considered the Project.	This is corrected in the SEIS.	3.5
	53.24	Stabling is assumed to be located to the north of Nambour and not in the Project area.	The stabling issue is discussed in the SEIS, as noted above no decision on it's location is known at the time of writing.	4.2.1.2
	53.25	Effort should be made to maintain two road/ bridge lanes in each direction or reduction to single lane for short periods during construction (particularly at Arundell Av).	This is noted in the SEIS.	4.6.9
	53.26	Identify and assess impact on the existing business in Nambour (Price Street. Include considerations of broader transit precinct.	This is discussed in the SEIS, but will require further consideration between TMR and Council as planning for the area progresses.	4.20.9.2
	53.27	SCRC do not wish to take ownership of additional road reserve dedicated to parking at Landsborough State School.	This is noted.	4.20.1.1
	53.28	Investigate impact the construction of an overpass at Old Gympie Road North will have on amenity of school and surrounds.	This is discussed in the SEIS.	4.20.1.1

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.29	The replacement of OLCs at Landsborough and Mooloolah is justified, though timing is unclear.	This is discussed in the SEIS, again, the Landsborough OLC is outside the scope of this Project, but will be the focus of a separate project.	4.2.1.3, 4.20.2.1
	53.30	Neil Road overpass and realignment should address 20 year flood immunity, min. clearance of 5.5m, intersection safety issues and current road standards.	This is discussed in the SEIS. Understood that these standards are achieved.	4.20.2.2
	53.31	Consider the integration of public transport into existing and proposed transport networks at stations.	This is discussed in the SEIS, and ultimately is consistent with the Translink Network plan.	4.3.1.4
	53.32	Traffic impacts on the local community and Council road infrastructure need to be effectively managed through contracts and traffic management plans approved by Council. Council approval needed before giving access onto council roads, haul routes etc.	This is noted in the SEIS.	4.6.9
	53.33	Implications of construction traffic on local road network. Recent issues with the pipeline and railway upgrade works have created many community impact issues and it is considered that these issues were poorly dealt with by the Sate and their contractors and project managers.	This is noted in the SEIS.	4.6.9
	53.34	Overdimension Loads Council as a key stakeholder in this Project needs to be informed of any overdimension loads and due consideration needs to be given to protecting Council's roads infrastructure from damage by overdimension loads.	This is noted in the SEIS.	Proponents commitments
	53.35	Council approval needs to be sought before accesses are built onto Council roads. Any construction site access needs to conform to Austroads standards for visibility and appropriate standard for pavement depth and type.	This is noted in the SEIS.	Proponents commitments
		Appropriate parking areas need to be provided by the State to cater for the workforce for this Project. The State needs to ensure that impacts on parking, particularly in commercial areas, does not affect adjacent businesses and residents	This is noted in the SEIS.	4.6.9
	53.36	Second para. P295 refers to a current unapproved development application, which should be deleted. The importance of this site should be recognised in the EIS.	This is corrected in the SEIS.	3.5

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.37	The former Mill site should be discussed in this section. Former Mill site provides significant opportunity as a catalyst project being centrally located in the major service centre for the hinterland with improved access to Brisbane's and other centre. The site provides opportunity for diversity of housing choice, community, employment and business functions. Future development on the site could involve partnerships with existing govt, education and health industries; cultural facilities, open spaces and shops, cafes, restaurants.	This is noted in the SEIS.	4.20.3.3
	53.38	It is expected that any commercial enterprise displaced by the acquisition of land will be compensated for with the introduction of new commercial floor space opportunities.	This is outside the scope of the EIS, the government processes and statutory powers for compensation do not extend to this.	NA
		A funded program should be provided to help businesses relocate.	This is outside the scope of the EIS, the government processes and statutory powers for compensation do not extend to this.	NA
	53.39	References to the draft Nambour structure plan should be deleted as it is subject to change and may raise unrealistic expectations	Noted.	3.5
	53.40	Further consideration of the alternatives available for Price street car park reconfiguration. Also encourage alteration of street alignment to encourage development of land for mixed use outcomes.	This is discussed in the SEIS, though Proponent powers in this area limited to what the Act allows.	4.20.9.1
	53.41	The EIS does not adequately meet section 3.10 of the TOR in regards to fully identifying and mitigating community impact in line with Council planning schemes.	Explanation of the purpose and scale of social impact assessment included in SEIS. Commitment to ongoing working with council in the planning for the railway township areas and surrounds to address the changes likely to occur in these areas in the lead up to the Projects construction. To be noted that these areas will be subject to changes with or without the Project.	4.8.2
	53.42	The SIA prepared in isolation of site inspections, reference to proper planning or community values. Assessments take a macro approach and the individual social, amenity and liveability values for each township require further consideration. Particularly relevant for mitigation measures of short term adverse social impacts during and immediately following construction. The EIS fails to properly address concept of "Park and Ride" particularly re sufficient parking in Nambour CBD. Does not consider social impacts on major parking infrastructure in smaller towns and capacity of current road networks to deal with increased demand and lacks certainty to the community.	The parking issue at Nambour has been discussed in the SEIS, however what is proposed is consistent with Translink requirements. This issue is likely to require further discussion with Council, particularly with the Project growth in the region, and the existing parking constraints in the Nambour area.	4.20.9.1

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.43	The EIS does not adequately address section 3.2, 3.6 and 3.10 of the TOR, this being the adverse short term social impacts and adequate mitigation strategies in relation to: - the impact of the proposed rail and road infrastructure on the function, character and visual amenity of Palmwoods township, Chevallum Road Residential Precinct and the Bowls Club (page 720); and - the loss of function, dissection and amenity of Kolora Park and incorporated water body. (page 329,331 and 720) The EIS does not adequately address section 3.6 of the terms of reference, this being the mitigation of noise in relation to the noise barriers proposed for the Palmwoods township. A noise impact assessment should be included to ensure noise impact is fully understood and adequately mitigated. The consideration of future re-use opportunities for surplus rail corridor land and the proposed changes to land uses will require a multi-faceted planning response from Council in order to inform the Proponents suggested management actions and Council's own capital planning projects.	This is noted in the SEIS.	4.20.6
	53.44	Incompatibilities with Council's Planning Schemes exist and Council require structure and master planning processes in response to the significant township changes and growth forecasted to ensure community has adequate support structures. Funding is required to conduct planning responses. EIS has limitations including - fails to incorporate ongoing operational and planning issues relevant to council and further consideration required to impacts that population growth and increased and focused car travel and parking requirements around peak times to train stations will have on rural townships.	This is noted in the SEIS. TMR are committed to working with the SCRC in the lead up to the Project's implementation.	4.20.1.2, 4.3.4
	53.45	Fails to properly address concept of "Park and Ride" particularly re sufficient parking in Nambour CBD. Does not consider social impacts on major parking infrastructure in smaller towns and capacity of current road networks to deal with increased demand and lacks certainty to the community. The EIS fails to mitigate the loss of public space, school activity areas, reduced amenity, construction noise and dust.	This is discussed in the SEIS.	4.20.9.1, 4.20.1.1, 4.14. 4.15, and EMP
	53.46	Reference to Maroochy and Caloundra shire should be prefaced with 'former'.	This is noted in the SEIS.	3.5
		ESD, CEPTED and WSUD should be incorporated into station design.	These design concepts are a given, and were considerations during the EIS. These are now noted in the SEIS for future stages of design.	4.3.1.2
	53.47	EIS should be referred to DERM in regards to Indigenous Cultural Heritage.	This process is already underway.	NA
	53.48	Include Lot 711, CG6392 (Mellum Creek Cemetery) and Lot 2, RP8476 in the heritage assessment.	Noted in SEIS. Local government registers were reviewed during preparation of EIS, included in section 10.5.3 of EIS.	4.9.5,

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.49	Also Lot 2, RP8476 (Murphy's House, Mooloolaba) is identified on the cultural landscape register. Mitigation for all heritage sites should be specified in greater detail, TOR not currently met. Adequate consideration and specific mitigation measures are required for the following: - Timber beam bridge, Paget Road Mooloolah – indirect impacts - The Old E.S & A Bank Paget Street , Mooloolah - impacts require identification - Martin Rungert Park, Mooloolah – direct impacts via loss of road reserve used for car parking - Residences Neil Road, Mooloolah – direct impacts requires further information and mitigation strategy - Former North Coast Railway Alignment – Dularcha National direct impacts.	This is discussed in the SEIS. Procedures for developing site specific conservation and mitigation plans outlined in EIS. Also noted in SEIS.	4.9.6, 4.9.7
	53.50	Adequate consideration and specific mitigation measures are required for the following: - Eudlo Heritage Trail - impacts require identification - Eudlo Creek National Park – direct impact - Eudlo township character – character and visual amenity impacts - Timber plank road bridge – potential effects on the setting and demands of the bridge - Residences on Eudlo School Road Eudlo – direct impact - farm dissected is identified. - Eudlo Creek Timber Mill – indirect impacts - Eudlo Rail Tunnel – indirect impacts - Rosebud Street Precinct – visual and amenity impacts.	Procedures for developing site specific conservation and mitigation plans outlined in EIS. Also noted in SEIS.	4.9.7

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.51	Adequate consideration and specific mitigation measures are required for the following: - Palmwoods Railway Station and goods shed direct impact dissects existing station and alienates existing buildings, with a visual and amenity impact. - Railway workers cottages – visual and contextual impacts - Produce Sheds, Main Street - visual and contextual impacts - Palmwoods CW Hall - visual and contextual impacts - Flooded Gum – Palmwoods Railway Station - Medical Centre, former shop, cnr Briggs and Margaret Street - visual and contextual impacts - Palmwoods Bowls Club – corridor bridges the western extent of the club, social impact study required. - Residences identified on Railway Street and Palmwoods Mooloolah Road, Paskins Road and Main Street Palmwoods – visual and contextual impacts - 8-10 Chevallum Road – resumption of properties - 4 Railway Street – direct impact, resumption of land, may have cultural significance further investigation required. - General Store, Main Street – visual, use and contextual impacts - Palmwoods – Buderim tramway route – direct impact to on remnant fabric. - Kolora Park, freshwater lagoon, walking trail and mature plantings – direct impact loss of open space, amenity, visual character - Group of Trees – Kolora Park Vicinity Palmwoods – direct impact with bridge 11m over the top - Blackbutt Tree - Chevallum Road Palmwoods – direct impact with bridge 11m over the top - Heritage group of trees - Palmwoods Footpath and Shelter Area, Chevallum Road, Palmwoods - direct impact, project over the top, 11m above ground level.- Remnant Forest Group – Paskins Road, Palmwoods – direct impact, loss of remnant forest - Nicklin Road/Chevallum Road Tree Precinct - impacts require identification. - Chevallum Road Residential Precinct – direct impact to residences alignment moves closer, reduced visual and contextual impacts. - Main Street Precinct – adverse amenity and visual impacts.	Procedures for developing site specific conservation and mitigation plans outlined in EIS. Also noted in SEIS.	4.9.7

Appendix A - Summary of Submissions

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.52	Adequate consideration and specific mitigation measures are required for the following: - Woombye Railway Station – visual and contextual impacts - Memorial Drill Hall, Park Street - visual and contextual impacts - Culturally significant vegetation – direct - CWA Park – direct impacts, proposed road upgrades along Keil Street impact directly on park. - Scout Hall – direct impact complete loss of built form. - Soccer Club and Showgrounds – partial resumption of site restricting access and limiting use for current purpose. - Church, Back Woombye Road - Blackall Range Road, timber road bridge – replacement of bridge - Former Woombye Timber Mill - Timber and Metal Road Bridge, Blackall Range Road – direct impacts, bridge replacement required. - Blackall Street Precinct - indirect.	Procedures for developing site specific conservation and mitigation plans outlined in EIS. Also noted in SEIS.	4.9.7
	53.53	Adequate consideration and specific mitigation measures are required for the following: - Nambour Railway Station site – direct impacts - Railway Bridge, Currie Street - contextual impacts - Historic houses on Staines residence and Vernon Street – contextual impacts - Price Street Community Hall – indirect impacts - Early 20th century timber shop , cnr Price Street and Hospital Road - Bungalow, 43 Price Street – indirect impacts - Former Station Masters House 47 Price Street, Nambour - Moreton Central Sugar Mill Workers Housing - visual and contextual impacts - Moreton Central Sugar Mill – visual and contextual impacts - Mill Street Precinct – indirect use and contextual - Vernon Street and Washington Street Precinct –Indirect impacts.	Procedures for developing site specific conservation and mitigation plans outlined in EIS. Also noted in SEIS.	4.3.1.2, 4.9.1 also note that section 10.5.3 of the EIS specifically addresses local government registers
	53.54	Explore further opportunities for relocation/ reuse of Mooloolah Station crossing bridge and waiting shed, Palmwoods station and Goods shed, Woombye Scout hall and Woombye Station.	This is discussed in the SEIS but will need to happen as part of future pre-construction works, in association with future land use planning around stations.	4.9.1

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.55	Identify sites where the precautionary principal has been used.	This principle has been applied to the ecological assessments undertaken for the EIS. For example, if a particular species was not observed on the day of field survey, that does not mean it doesn't occur in that location, where assessments identify that habitat is suitable, and other records indicate its presence.	1.5
	53.56	Incorporate Moratorium regrowth into assessment.	This has been carried out.	3.1.2
	53.57	Outline how unmapped RE's will be managed, including endangered RE's along creeks	This is discussed in the SEIS.	4.10.17
	53.58	It is recognised that surveys found 'Endangered' RE 12.3.1 and 'Of Concern' RE 12.3.2 at most of the creek sites.	This is noted in the SEIS.	4.10.17
	53.59	Dularcha National Park and the 'Pinch Lane' area have particularly high biodiversity value including many threatened flora and fauna species, high species richness and large tract of vegetation in high quality natural condition. Biodiversity Values Within Dularcha National Park and 'Pinch Lane' areas will be directly and indirectly adversely impacted. Recognition and mitigation measure are supported in the EMP and Section 21 Special Management Areas, however further detail is required. Identify further mitigation measures in the EMP and Special Management Areas section regarding Dularcha National Park and Pinch Lane. Also confirm mitigation measures that will be implemented for the loss of trail connections within the park.	This is discussed in the SEIS.	4.20.7
	53.60	Large trees, old growth trees and culturally significant trees were observed by the Project team along the alignment. Large trees and old growth trees play an important role in ecosystem services and also cultural value for the surrounding community.	This is discussed in the SEIS.	4.10.4
	53.61	Duckponds at Palmwoods have aquatic weeds - management of this should be addressed in the EMP.	This is discussed in the SEIS.	4.10.2, 4.20.6.4
	53.62	Show areas of buffer planting in EMP and construction drawings.	This will be addressed at future stages of the design process.	Proponents commitments
	53.63	Work with Council to improve ecological benefits of offsets and further reduce clearing within riparian zones.	This is noted in the SEIS. TMR are committed to working with SCRC in the lead up to the Project's implementation.	Proponents commitments
	53.64	Reconsider fauna-sensitive design at Addlington Creek crossing and South Mooloolah River to minimise impact on Giant Barred Frog. Further detailed design, alignment refinement and mitigation measures are required.	This is discussed in the SEIS. The least intrusive design and construction method for this area has been proposed in the EIS. This will require further review in future stages of the Project design.	4.11.1.2
	53.65	Modelling should be consistent with SPP1/03 and include allowance for climate change. No increase in flooding should occur with mitigation.	This is discussed in the SEIS.	4.13.2
	53.66	Flood modelling must also take into account a climate change component. The design should show that no increase in flood levels occur with mitigation measures.	This is discussed in the SEIS- looks similar to comment above.	4.13.2

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.67	Impact of noise, air and visual amenity on Palmwoods is high and should be further investigated. Further visual assessment of potential noise barriers should be undertaken.	This is discussed in the SEIS.	4.14, 4.20.6
	53.68	Alternative solutions to noise barriers should be pursued as they can act as barriers and separate town.	This is discussed in the SEIS.	4.14, 4.20.6
	53.69	Undertake flood modelling taking into consideration climate change as per the requirements of SPP 1/03. Reference should be made to IPCC, CSIRO, other State/Industry guidelines and SCRC flood reports. Include results in relevant sections of the EIS and on all Drawings.	This is discussed in the SEIS. Guidelines for future modelling should be based on these sources.	4.13.2
	53.70	Further investigate localised historical and current weather data as well as future climate projections.	This is discussed in the SEIS.	4.15.1, 4.16.2
	53.71	The assessment of climate and natural disaster risks appears to place a contextually large emphasis on climate change and extreme weather risks rather than noting normal Severe Weather experienced in the Project area.	This is discussed in the SEIS, but no additional modelling or analysis was undertaken.	4.15.1, 4.16.2
	53.72	Expand research for historical data of the weather in the region to include the Beerburrum Weather Station and the rainfall gauge readings available from the Mooloolah River, Eudlo and Paynter Creek systems. Particularly this research should note that the timings of Severe Weather experienced in the Sunshine Coast hinterland can occur throughout the year.	This has not been carried out- this should be a consideration in any future flood modelling undertaken for the Project. The potential for severe weather events to occur at any time of the year is noted in the SEIS.	4.15.1, 4.16.2, 4.8.18
	53.73	This is the same as the comment above.	This is the same as the comment above.	4.15.1, 4.16.2
	53.74	Conduct landslide risk assessments for cut and cover tunnel constructions. Impact of road obstruction from landslides should also be addressed. The EIS has not captured all council documents - draft Caloundra city landslide risk assessment is available.	This is discussed in the SEIS, and will be part of the considerations for the geotechnical investigations.	4.18.6
	53.75	Undertake liaison with Dept. of Community Safety regarding incident response strategies. Other council documents should be incorporated e.g. bushfire risk management studies and natural disaster risk management strategy.	The department has responded as part of the EIS process and this information has been incorporated into the SEIS.	4.18.1
	53.76	Determine risks to QFRS and QAS service levels if Mooloolah open level crossing were to be retained.	This is discussed in the SEIS.	4.18.3
	53.77	The Terms of Reference states that the EIS should address details of any emergency response plans and bushfire mitigation plans under the State Planning Policy 1/03 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide.	This is discussed in the SEIS,	4.18.1, 4.18.3
	53.78	The EIS requires an assessment of risks including bushfire, landslide and floods to people, property, economic activity and the environment.	This is included in the EIS. The SEIS includes further information.	4.18.1, 4.18.3

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.79	The Terms of Reference states that the EIS should address details of any emergency response plans and bushfire mitigation plans under the State Planning Policy 1/03 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide. The EIS has not captured all available Council documents. Information related to the preparation of a draft Caloundra City Landslide Risk Assessment is available for the Project's reference.	This document was reviewed during the preparation of the EIS.	4.18.1, 4.18.3
	53.80	The Terms of Reference states that the EIS should address details of any emergency response plans and bushfire mitigation plans under the State Planning Policy 1/03 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide. The EIS has not captured all available Council documents. The EIS note the Council adopted documents for Natural Disaster Risk Management - Bushfire Risk Management Studies. A Sunshine Coast Region wide Natural Disaster Risk Management Study is to be undertaken to provide information to the new Sunshine Coast Regional Planning Scheme during the next five years.	To be noted for consideration during future stages of the Project. This is noted in the EMP.	4.18.1, 4.18.3
	53.81	Risk Assessment Table Potential Risk Scenario of Landslide should also include as a Consequence - Road Obstruction.	This is noted. To be informed during future geotechnical investigations.	4.18.1, 4.18.3
	53.82	EIS should address cumulative impacts associated with SCRC five Year Capital works program.	This is noted in the SEIS.	4.19.1
	53.83	The summary and conclusions section does not evolve into appropriate mitigation measures to minimise cumulative impacts on the regional biodiversity.	This is a wider issue, however the offset process should take this into consideration. This is discussed in the SEIS.	4.10.6
	53.84	It is more appropriate to reference the planning scheme review than 'current master planning' in relation to future use of lands. It is premature to use maps showing possible land uses at this point in time until the new planning scheme is finalised. All references to potential future land uses should be removed and reference should be to existing planning scheme.	This is discussed in the SEIS.	3.5
	53.85	These maps for the townships of Mooloolah, Eudlo, and Palmwoods show "possible commercial" or "possible mixed use" (commercial/residential) or "possible town square park". These are premature comments and potentially lead to community expectations and could even influence natural property and business decisions. Land use decisions should not be made through this EIS process and should only be made as part of a more detailed review of each town, taking into consideration potential growth, community needs, infrastructure provision etc. This will occur through the preparation of the new planning scheme for the Sunshine Coast.	Noted and corrected.	3.5
	53.86	Extent of screening / landscaping adjacent to Landsborough Sports Fields not considered.	Discussed in SEIS.	4.20.1.2

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.87	Confirm the likely impacts on the 6 households to the west of Tytherleigh Avenue in terms of noise. Also, confirm benefit of barriers to houses on Cribb Street and leach Avenue.	Discussed in SEIS. Modelling shows that noise barriers in these areas not triggered.	assessment showed that no barriers required in this location. To be revisited in future stages of design.
	53.88	South Mooloolah River - It is commended that the Proponent surveyed for EPBC listed species, Giant barred frog. There is concern about the appropriateness of culverts, as opposed to a bridge, given presence of the Giant barred frog and the likely disturbance to stream banks and beds.	This is discussed in the SEIS. The proposed solution at Addlington Creek is the result of assessment and careful consideration of the impacts of retrofitting a bridge to this area.	4.11.1.2
	53.89	The EIS does not adequately address section 3.10 of the terms of reference, this being the adverse impacts of land resumption to the Dularcha National Park. Further information is required to inform Council of the impacts and mitigation measures that will be implemented in relation to the Dularcha Rail Trail and loss of trail connections during and post construction. Loss of Environmental Reserve Lot 101, RP881340 off Paget Street is not addressed.	This is discussed in the SEIS.	4.3.4 - also note does this mean lot 8, RP881340 There is no record of lot 101RP881340
	53.90	Restore decommissioned line near Rose Road, which has a population of Alyxia magnifolia. Generally supportive of nature conservation mitigation in this area and Pinch Lane. A full description of the restoration process, particularly regarding landform reinstatement should be provided.	This is discussed in the SEIS.	4.3.2
	53.91	Supportive of efforts to maximise opportunities for wildlife movement.	Noted.	NA
	53.92	Cuttings have been mentioned but no process for restoration in these areas is described. Also, will the landforms remain the same or will natural contours be restored prior to planting?	This is discussed in the SEIS. Will need to be considered once geotechnical information is known.	4.10.12
	53.93	Provide a clear statement in relation to OLC closure timing and provide criteria for applying closure.	This is discussed, however the triggers for this are currently unknown.	4.20.2.1
	53.94	Figure 21.7e is difficult to read and legend is incorrect.	This has been corrected in the SEIS.	3.5
	53.95	A number of suggestions are made including clarification of connection and their impacts on Price Street, Paget Street, Jones Street, connection to active transport networks and creation of new public spaces.	This is discussed in the SEIS.	4.20.2
	53.96	Options do not show connection from overpass to Paget Street for residents of Paget Street.	This is discussed in the SEIS.	4.20.2
	53.97	It's difficult to assess the actual way the proposed overpass will connect with and impact on Jones Street.	This is discussed in the SEIS.	4.20.2

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.98	The proposed road underpass seems a fair way to the north of the town centre, and from the proposed vehicular overpass. There is concern that with the only means of pedestrians crossing the rail within this distance (approximately 600m apart) being the new bridge the small town is affectively divided. Safe and convenient access for cyclists, mobility scooters, wheelchairs, horses etc must all be provided.	This is discussed in the SEIS.	4.20.2.2
	53.99	There isn't enough acknowledgement of the real opportunity to create vibrant and attractive public spaces to the south of the post office on the eastern side of the railway and to the north of the café to the west of the railway. With the proposed closure of the level crossing, existing pavement on both sides of the railway could presumably be replaced with a more attractive public space. Care will need to be taken to ensure fencing/wall treatment to the railway prevents unsafe access to the railway line but does not visually divorce one side of town from the other. Obviously signage will be very important to point out the alternative safe access routes.	This is discussed in the SEIS.	4.3.3
	53.100	Show screening of rail structure.	This is discussed in the SEIS.	future design requirements. Show in Proponent commitments? Also referred to in 4.20.1.2
	53.101	Reference to possible mixed use or commercial to the east of childcare centre on figure 21.7f should be removed and the existing planning scheme recognised. All existing commercial uses should also be included.	This is discussed in the SEIS.	3.5
	53.102	While there may be merit in either an additional commercial or community function to the south of the existing café on the eastern side of Jones Street, (and it may be that a manager's residence is incorporated within such a building) it is still premature and not helpful to suggest it might include shop top housing. Realistically there is not a great deal of space to suggest much housing could be incorporated.	This is discussed in the SEIS.	3.5
	53.103	Clarify intentions for existing pedestrian bridge.	This is discussed in the SEIS.	4.9.1
	53.104	The Proponent is commended for current proposed mitigation measures at the Mooloolah River crossing. However, more detailed design, alignment refinement and mitigation measures are required.	This is discussed in the SEIS.	3.5

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.105	The Village Centre Zone at Eudlo takes in quite a large area. Figure 21.11b shows 4 existing commercial buildings (including the hall) however there is substantial scope within the planning scheme for further business and community uses, should they be necessary or viable. Current planning does not allow for substantial growth in Eudlo. The urban footprint essentially reflects the existing settlement, the village does not have reticulated water supply or sewerage, and a large portion of it is subject to flood hazard. In the longer term, improved accessibility may increase pressure on the village for people working in Nambour or Beerwah or other larger centres. These matters are likely to be considered as part of the upcoming planning scheme review. In the meantime it does not seem appropriate to suggest a sizable mixed use commercial and residential area to the west of the primary school.	This is discussed in the SEIS.	3.5
	53.106	Clearly show car park access and pedestrian access arrangements for Eudlo Station. Also show likely extent of clearing to Federation Walk. In regards to Olsen Mill Park suggest future uses are under investigation.	This is discussed in the SEIS. Access to the car park will need to be considered in future stages of the design process.	4.20.3.3
	53.107	Given the local significance of the Federation Walk, and the obvious need for safe access to the station and clear sightlines to avoid concealment, it would help if further details were provided about where access between the station and the school and town centre might be achieved so that there is a better understanding of the extent of clearing necessary. Figure 21.11b could be seen as confusing because the air photo shows the vegetation whereas quite obviously a large portion of it will need to be cleared.	This is discussed in the SEIS. Access to the car park will need to be considered in future stages of the design process.	40.20.3.3
	53.108	Future uses for the old mill site are being considered and decisions will be made following extensive planning, community engagement, and subject to resources. It is probably best not to suggest any particular uses at this stage. Further, given some local residents are specifically seeking the relocation of the tennis courts to the old mill site, the words “maintain tennis court and facilities” may be more contentious than just acknowledging that that is where they are and avoid discussion of their future.	This is discussed in the SEIS.	40.20.3.2
	53.109	Suggest providing an arboreal bridge over Eudlo-Palmwoods Road.	This is discussed in the SEIS.	4.11.1.1
	53.110	The potential environmental impact of the proposed project in Palmwoods, in terms of visual impact, noise and air quality associated with trains, is quite high and the EIS does not adequately cover this. Acknowledgement that noise barriers will be necessary.	This is discussed in the SEIS.	4.14, 4.20.6

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.111	Clarify the extent of clearing and earthworks needed through Kolora Park to allow for bridge construction. Show pedestrian and cycle links through the town centre under the viaduct.	This is discussed in the SEIS.	4.20.6
	53.112	The notion of creating a town square around the existing town hall and closing part of Main street to vehicular traffic seems to have very little to do with the railway realignment so it makes little sense to pre-empt such an idea at this stage.	This is discussed in the SEIS.	4.20.6
	53.113	Similarly the point that other suggested suitable uses like commercial / industrial, mixed use, multiple housing, light industry etc have not been tested and are just initial ideas, should be made quite clearly. The suitability of the land for any residential development may for instance be dependent on the level of noise. Council does not agree with proposed land uses as shown on Figure 21.13.b	This is discussed in the SEIS, with a strong statement regarding the responsibilities for planning in the townships, and the status of the suggested land uses in the EIS.	4.20.6
	53.114	Pedestrian and cyclist links under the overpass are not well defined.	This is discussed in the SEIS.	4.20.6
	53.115	There are potentially many different considerations for the surplus railway land as well as other adjoining properties to the southwest of the hotel. Further investigations are required without pre-empting the outcome. Woombye does have the potential to grow further but is at risk of being considered a suburb of Nambour if it does not retain a very strong local identity and vibrant town centre. There is already a fairly large area covered by the Village Centre Zone with capacity for further commercial and retail development within this centre. Even if it is not possible to relocate the whole soccer field there may be another sport/active recreation use that is needed in the community.	This is discussed in the SEIS.	3.5
	53.116	There is an existing church to the west of the proposed railway – not clear of the future of the property given part of it is directly affected by the ultimate corridor. Seemingly the current access arrangements will be lost and alternatives are yet to be investigated. Presumably it will be impacted by increased railway noise. Drawing number C123 is indicating noise barriers on the church property itself. Again if this is proposed to be 6m high as suggested elsewhere it may be quite imposing.	This is discussed in the SEIS.	4.5.2, 4.9.3.1
	53.117	Acknowledge alternative potential uses for the surplus railway land. Provide further information regarding impacts on existing church, visual impact of Keil Street overpass.	This is discussed in the SEIS.	4.3.3, 4.20.8

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.118	It is recommended that a new station be provided in preference to an upgrade to reflect its importance to Nambour. In regards to connectivity, provide an overpass to feed into the civic centre courtyard, provide pedestrian connection to Hospital Road and into town and to rail, bus and future parking facilities. Connectivity to the proposed development of the former Mill site should be encouraged through Centenary Square to reduce friction between road, public transport and pedestrians at the end of Mill Street. This in turn reinforces the proposed town centre pedestrian connectivity concept.	This is discussed in the SEIS, though many of these requests will require further consideration and discussion between council and TMR.	4.20.9
	53.119	suggested parking at Nambour not adequate. Suggest multi-deck car park.	This is discussed in the SEIS.	4.20.9.1
	53.120	Although lifts and pedestrian overbridges are to be provided, the design for the future station may also include an underpass.	This is noted in the SEIS.	4.20.9.1
	53.121	Noise barrier specifications will be developed during future stages of design - council will need to be involved in this process.		3.5
	53.122	Identify 'No Go Zones' with the EMP and construction drawings. Increased monitoring and construction compliance criteria should be undertaken to minimise impacts.		Proponents commitments, 4.21
	53.123	Given Councils recent experience with other major infrastructure projects it is recommended that increased scrutiny is given to monitoring & compliance of EMP through construction phase - recent experience has shown a significant disparity between EMP (what's in writing) and what happens on the ground.	This is noted in the SEIS.	4.21
		The EIS states "the SCRC agreed on the road layout for Eudlo School Road, Beech Lane and Ash Lane". This needs to be succinctly clarified. Council has not formally considered any part of this Project and so has not 'agreed' to any element in the EIS.	This has been noted in the SEIS.	
	53.124	Long term uncertainties in regards to a) geotechnical information and impact on width of corridor and land impacts and b) hydraulic modelling and hydraulic analysis and land impacts.	This has been noted in the SEIS, however the level of detail prepared is consistent with a project at this stage of the design process.	4.1.3, 4.4.3
		This could therefore be interpreted as the EIS failing to meet its objectives and is incomplete. If the time delay from preliminary design to detailed design was virtually sequential from a time perspective this could be tolerated. However, given the up to 10 year delay it is suggested this uncertainty is unacceptable. It will also make it very difficult for DTMR to deal with hardship land acquisition applications.	This is a continuation of the comment above.	4.1.3, 4.4.3

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
		The basis of concern related to hydrologic and hydraulic analysis of all drainage paths is again related to land impacts and acceptability concerns for rail over road situations or relocated road alignments to achieve required immunity from inundation. The new rail corridor alignment is substantially different which is likely to: i) alter the surface drainage pattern of the area, ii) changes available storage volumes affecting flood characteristics; and iii) sub catchment drainage connectivity. This could change flow paths, alter water levels and cause impacts to properties.	The SEIS notes that further modelling will be required. The design standards applied on this Project were set at appropriate levels, given the level of information available to base the design on.	4.1.3, 4.4.3
		Further, no climate change component has been included but is now relevant due to the rail asset life.	This is discussed in the SEIS.	4.1.3, 4.4.3
	53.125	Difficult to comment on the proposed road over rail proposal on these drawings without additional information such as:- • Long section to check road gradients. • Long section to see if Disability Discrimination Act can be next met for proposed footpath gradients. • Will there be pedestrian connection from overpass footpaths to proposed western underpass? If so then this can only occur through school property so it is not available to general public use. • Could an intersection ever be formed with Mia Lane to allow vehicle, pedestrian and cycle movements in the future? • The western underpass of the bridge section stage may become a long term community problem without further consideration of its lighting, monitoring and CPTED issues. • Spacing of intersection onto Tytherleigh Avenue for the new cul-de-sac adjacent Gympie Street North can and should be moved further south as it is too close to Gympie Street North. • Need to show cross section of the overpass to ensure appropriate widths and barriers are provided.	These comments are annotated on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. Committment to work with council, school and Dept Education requested.	

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	53.126	Council would require written confirmation from the Department of Education and the School Principal they are in full agreement with the Projects proposal and require no future works by Council to deal with vehicle, bicycle, pedestrian or security issues arising from this Projects proposal. Councils Technical Officers have been excluded from the development of any proposal to deal with school issues despite repeated offers to be involved and contribute. The inability to provide input has resulted in numerous outstanding technical and operational issues. This overpass proposal take no account of the long term overall needs for Landsborough. An open level crossing remains at Caloundra Road on the south side of the station. While it is just outside the direct scope of this Project it plays a crucial role with the Gympie Street North Crossing and should have been considered as a whole. The Caloundra Road open level crossing is on a state controlled road and will remain the only unresolved open level crossing on the entire North Coast Rail from Beerburrum to Nambour on an overall project on which the State will eventually spend in the order of $3 billion. To have one remaining open level crossing which can cause continuing operational problems and not enable the desired efficiencies to be achieved is considered a major flow to the States planning process.	As above. Committment to work with council, school and Dept Education requested.	
	53.127	Cross drainage structure not shown in either the long section or plan or both at the following chainages: - 82760 - 85750 - 88710 - 92520 - 100080 - 83780 - 86525 - 88940 - 93410 - 100180 - 83900 - 87280 - 89870 - 93950 - 100300 - 84050 - 87400 - 90300 - 96820 - 100520 - 84550 - 87600 - 91750 - 97430 - 101600 - 85520 - 87750 - 92020 - 97740 - 85590 - 88020 - 92410 - 99300.	Comments annotated on drawings which . Council requests pipe shown at proposed level to show positive drainage for areas upstream of the corridor. For land owner certainty. To be resolved in future stages of design.	
	53.128	The fauna crossings shown at Ch 82600 appear to be the only ones proposed. Should these occur at other creek crossings where bridges are not proposed and through the National Park sections? Truncation of Tunnel Ridge Road reserve at Ch 83000 causes an unacceptable 'pinch point'. Insufficient clearance to provide vehicle traffic, drainage, clearance zones, other utility alignments and travel modes as necessary. Has Q100 flood study occurred for Addlington Creek using contemporary methods? Need to ensure current hydrology standards including a climate change component can be accommodated by any proposed drainage structure to ensure private property vulnerability is not deteriorated.	Comments annotated on drawings which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. Figure 12.5 of the EIS shows all proposed fauna crossing structures. Also shown on drawings, but not annotated beyond C002. Refer to legend on sheet C000. Noted. For progression in future stages of design, in consultation with council. Designed based on existing data and levels. For refinement in future stages. Need to consider flood issue in association with habitat significance for Giant Barred Frog.	

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.129	Need to show the extent of land affected by the cut and cover operation particularly on the west side from Ch 85000 to 85180. The temporary cut top of batter will be well beyond the final shown resumption boundary and likely to impact adjacent properties if soil strata are unfavourable for stability of a 40m high cut batter. Looking at the batter extent at Ch 85000 (west side) begins to give an indication of the minimum impacts. One structure at Ch 85180 may be in such an area of concern. The combination of the temporary side batter and the batter above the tunnel entry may give rise to concerns of proximity and stability of nearby structures.	Comments annotated on drawings which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. . Will be subject to future design refinements once geotech undertaken. Area of possible temporary works not shown in corridor requirements.	
	53.130	Extend cut and cover proposal south from Ch 85000 to Ch 84940 to prevent drainage from top of vertical curve to drain through the tunnel keeping it dry.	Annotated on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. Note will be subject to future design and geotech investigations. Will need to be considered in context of community and env requests to also extend length of bored tunnel sections.	
	53.131	Need elevation (Ch 86350 to Ch 8700) looking east from residences along full extent of Jones Street to show extent of impact and visual amenity before and after the Project. Cross sections at 30m centres are required through Mooloolah to enable evaluation. Cross section of proposed road overpass is required but as it is a State controlled road it is presumed that those standards would apply. Council would recommend that 'desirable' rather'minimum' standards be used in the design and incorporate vehicle, bicycle and pedestrian alignments. Need to show and provide for pedestrian and cycle connections to station from east and west of community and continuation out into the Mooloolah community. Project only currently caters for cars in a park and ride situation. Need to accommodate passengers/patrons who walk and cycle as well.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design.	

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.132	Need to show indicative position of cycling end of trip facilities. Need to show pedestrians and cyclists can be accommodated along Jones Street. Demonstrate that large rigid commercial vehicles (moving truck etc) can manoeuvre into driveways through current access locations at the front boundary. Unclear how long the open level crossing will remain with new tracks. The draft EIS is contradictory in its comments related to this. Clearance between the edge of new Neill Road to the resumption boundary and the edge of formation may prevent placement and maintenance of longitudinal drainage from Ch 86780 to Ch 86940. Where is drainage flow path from discharge of pipe from the park and ride at Ch 86525? Also where is western side table drain between Neill Road and track formation aligned and directed to discharge? If directed past the station, how and where will patrons/pedestrians cross it? This arrangement does not provide for a kiss and go or any level of park and ride on the west side. It forces everyone to travel the overpass to present passengers who travel by vehicle to the station. This will promote illegal and unsafe practices on the west side of the station. The staggered bridge arrangement for the four track alignment at Ch 86300 causes significant hydraulic losses and inefficiency as well as high potential for erosion damage leading to instability. All new road overpass and structures are to remain a State asset.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. End of trip facilities discussed in the EIS and SEIS, but not designed as this will be determined as part of future station planning. Footpaths indicated on one side of bridge, this will be refined in future stages of design and in association with council through land use planning activities. Council requests that the new overpass and structures remains state asset.	
	53.133	C008 – C108 Neill Road under new rail bridge at Ch 86970 must have a 50 yr ARI to suit State road criteria. Does this comply? Also a 5.5m clearance is required. Need to show extent of longitudinal drainage. 009 – C109 The drawings do not show longitudinal drainage generally and at top of cut batters all the way to discharge points. The protrusion of the currently proposed abutments to each end of the new Neill Road bridge cause construction difficulty and long term safety, stability and maintenance issues. How is legal access to remnant properties on the east side from Ch 87870 to Ch 88000 and at Ch 88200. How is legal access provided to remnant property on west side at Ch 88270 to Ch 88400.	Annotated on drawings which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. Note that Neill Road underpass achieves 5.5m clearance, and at least 20 year ARI. Geotech investigations will further inform bridge design. Where legal access can't be reinstated, TMR will consider alternative outcomes for balance of property affected.	

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.134	Batter instability may result in the long term on the eastern side from Ch 88570 to Ch 88630 and from Ch 88770 to Ch 88820. Need to show the extent of land affected by the cut and cover operation particularly on the west side from Ch 89120 to 89370. The temporary cut top of batter will be well beyond the final shown resumption boundary and likely to impact adjacent properties if soil strata are unfavourable for stability of a 40m high cut batter. Looking at the batter extent at Ch 89120 (west side) begins to give an indication of the minimum impacts. Need to show the extent of land affected by the cut and cover operation (even temporarily) particularly on the west side from Ch 89680 to 89730. The temporary cut top of batter will be well beyond the final shown resumption boundary and likely to impact adjacent properties if soil strata are unfavourable for stability of a 40m high cut batter. Looking at the batter extent at Ch 89680 (west side) begins to give an indication of the minimum impacts What happens to the remnant land east of the resumption line from Ch 89270 to Ch 89860 as no legal access is provided for some parts.	Annotated on drawings which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. . Note will be subject to future design and geotech investigations. Will need to be considered in context of community and env requests to also extend length of bored tunnel sections.	
	53.135	What is the flood immunity of Logwoods Road and what clearance to underside of structure is provided? The 100 yr flood level is 'estimated' in the Bridge Summary Information and no clearance is provided. Show 100yr ARI flood level and inundation of upstream and downstream properties to enable determination of impacts and set out of mitigation strategy to be stated.	Clearance is noted in EIS as 5m (p57). Flood modelling to be completed in future stages of Project. Note no realignment or changes proposed to Logwoods Road.	
	53.136	Flood immunity of Highlands Road is not indicated and clearance to underside of structure is not able to be determined. Connectivity of station with the township is not indicated. Need to show how pedestrian and cyclists will approach from the community to the station and consider CPTED issues.	Clearance is noted in EIS as 5.5m (p57). Connectivity to township to be resolved in future stages of Project. Options for consideration include elevated walkway through Federation Walk, vehicle and ped access through Federation Walk, however these would only function once the existing railway has been decommissioned. Township planning activities led by council should inform these decisions.	
	53.137	New bridge at Eudlo School Rd requires significant residential property acquisition and continues to use a link to the town with poor alignment and low flood immunity.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. Note that this is also an area of concern to community, may require further refinement through future stages of design process.	
	53.138	Need to show the extent of land affected by the cut and cover operation (even temporarily) particularly on the west side from Ch 92080 to Ch 92300. The temporary cut top of batter will be well beyond the final shown resumption boundary and likely to impact adjacent properties if soil strata are unfavourable for stability of a 40m high cut batter. Looking at the batter extent at Ch 92080 (west side) begins to give an indication of the minimum impacts.	Annotated on drawings which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. Note will be subject to future design and geotech investigations.	

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.139	The protrusion of the currently proposed eastern abutment of Eudlo School Road Bridge causes a construction difficulty and long term safety, stability and maintenance issues. It is noted that the western side has been extended. It may require adjustment of the intersection location. Visibility from Beech Lane to Eudlo School Road may be below standard given bridge abutments and barriers at or above drivers eyeline.	Noted on drawings which will be incorporated into TMR project documentation so that they can be followed up during future stages of design.	
	53.140	Rail trail alignment appears to cross from east of the new rail alignment to west of the alignment at the southern approach to Palmwoods without grade separation (CO17). There is severance of the connection to Main St for an area off Paskins Rd which is currently in the SEQRP urban footprint (SK007). This would require residents to make an extended and convoluted trip south along Paskins Rd through rural zoning to Leeons Rd then bridging across the new rail alignment before returning north again along the relocated Paskins Rd. The bridge at Leeons Rd across the new alignment would appear to suggest that there is a logical connection to be made from Leeons Rd to Eudlo Rd to increase connectivity. This connection is shown as a possible construction access (7.6.5) and there may be future pressure from some residents to maintain this access. There is an opportunity for greatly improved community connection and cohesion by relocating the link across the new alignment from Leeons Rd to a location within the town boundary. The layout of the connection of station parking to Main St following the decommissioning of the existing alignment is not shown. The preliminary parking layout shown for Palmwoods station is impractical and inefficient and includes a bus zone which would not function.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. Grade separation of the old and new alignment not required- levels have been designed to match. This provides a possible staging point. Noted. There is the potential for future road network improvements once decommissioning of the old railway has occurred. This must take into consideration rehabilitation in areas adjacent to National Park. Noted. May be possible subject to decommisioning outcomes. Project objective is to maintain access for residents, however this may be considered through future discussions with council around land use planning.	
	53.141	There are remnant parcels of land on the west side of corridor. Clearance between bottom of batter, edge of realigned Paskins Road and requirement for longitudinal drainage and possible fence along the corridor is a significant performance and maintenance problem on the east side from Ch 92480 to Ch 92730. Flood immunity of Property Access Road is not indicated and the clearance to underside of structure is not able to be determined.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design.	

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.142	It is noted that the intersection of Leeons Road and Toby Court is within the rail corridor and subject to maintenance by DTMR. The protrusion of the currently proposed abutments to each end of the new Leeons Road bridge cause construction difficulty and long term safety, stability and maintenance issues. Review long term stability of remaining material between Proposed Paskins Road and four track rail final batter.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. Responsibilities of road network infrastructure to be discussed with Council, taking into consideration location of intersection within corridor. Future geotech investigations to confirm bridge and batter details through these areas.	
	53.143	How is longitudinal drainage of Proposed Paskins Road dealt with? There is uncertainty relating to batters etc between the new track alignment cut batters and the west side batters for Proposed Eudlo Road from Ch 94440 to Ch 94640. Isolated property between existing rail and new rail from Ch 94400 to Ch 94700.	noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design.	
	53.144	The level difference of 8m between the bus zone and the station level is not conducive to an integrated transport system allowing easy interchange between modes. Does not properly support Disability Discrimination Act compliance. The proposed station access is away from the bulk of the township and is not accurately reflected in Artists impression 5. The Project should include the demolition of the existing rail bridge across Woombye – Palmwoods Road. Visual amenity of proposed bridge is a major concern. It will look like a 'picket fence' due to the 11m height and the 25m spacing of piers.	This area will be subject to further design and development, through station planning and the township masterplanning. Artist impression 5 is indicative of future land use and design of the railway and associated infrastructure. The demolition of the existing rail bridge across Woombye-Palmwoods Road is not included in the Project. decisions regarding decommissing uses are yet to be made. The potential benefits of the removal of this bridge are discussed in the SEIS. Bridge design guidelines to be developed in consultation with council and the community. Visual amenity to be a key driver.	
	53.145	The curvilinear alignment of Realigned Spackman Lane appears too 'tight'. Must meet required radius for an appropriate design speed. Flood immunity of Realigned Spackman Lane is not indicated and clearance to the underside of structure is not able to be determined. There appears to be remnant parcels of land on west side of corridor from Ch 96640 to Ch 97000	Noted on drawings, which will be incorporated into TMR Project documentation so that they can be followed up during future stages of design. Designed according to selected standards. Clearance noted in the EIS of at least 5.5m. Flood immunity not noted.	
	53.146	Flood immunity and clearance of the possible property access location at Ch 97400 must be dealt with in the EIS to confirm that suitable legal access can be provided. Uncertain how many remnant properties are to be supported by this possible property access.	Not addressed, cannot until further design information available from geotech and flooding investigations. Possible access is for a single property, as separate possible property accesses for adjoining properties also shown.	

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.147	Access needs to be retained to the remaining portion of sports fields based on the existing road alignment passing under the old and new rail bridges north of the station at Paynter Creek. The bridge from Blackall St to Back Woombye Rd creates severance for some residents of Park St and Keil St. There is an opportunity to address this issue and provide improved community connectivity and road network by using a short section of existing rail alignment south of the Woombye station.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design.	
	53.148	Flood immunity and clearance of the possible property access location at Ch 97770 and Ch 98220 must be dealt with in the EIS to confirm that suitable legal access can be provided. Uncertain how many remnant properties are to be supported by this possible property access.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. Additional consultation has occurred with these landowners, this information will be used during future stages of design.	
	53.149	The possible property access at top left of plan must be dealt with now to remove uncertainty for property owners. Uncertain of the benefit that the section of retained embankment for Proposed Back Woombye Road. In fact it would impede flood flows of Paynter Creek. Proposed Back Woombye Road cross section needs to allow for vehicles, cyclists and pedestrian. Unclear how the station links to the Woombye community apart for vehicles. Need to cater for pedestrian and cyclists to the station.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design.	
	53.150	Not possible to add an extra span under traffic. Must realign road and bridge of Blackall Range Road. The protrusion of the currently proposed abutments to each end of the proposed Blackall Range Road bridge cause construction difficulty and long term safety, stability and maintenance issues.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design.	
	53.151	Encroachment to school can be minimised over this small area. Ensure long term hydraulic efficiency across the existing corridor. Why is the noise barrier discontinuous?	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. . Noise barrier requirements established through modelling, to be refined in future stages.	

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	53.152	Why does the retaining wall turn at right angles at Ch 101770? Could continue to Ch 101720. How is existing track on west side of the corridor Ch 101450 to Ch 101730? The proximity of the retaining wall, resumption boundary and proposed fenceline with the various banks of Petrie Creek is a concern. Extend Arundell Avenue so abutments are at top of cut batter alignment either side of road. Cost of extra bridge length offset by saving in removal of two 10m high vertical retaining walls with construction intruding on track construction. The width of the rail bridging at Arundell Av must allow for the proposed future widening of Arundell Av to four lanes. It is understood that the existing bridge structure allows for the widening to the northern side of the existing road reserve.	Noted. For review during future design. It is on east. Assume this is a reference to text? This area is identified in the Special Management areas for stringent design and construction managmeent. Noted. Noted.	
	53.153	The road network may benefit from a link road from Mitchell Street to Bury Street to Mill Street as well as provide an alternative access to the new transit interchange at the Nambour Station. The station appears to have been designed in isolation to the other transport networks which connect to rail at the transport hub of the Nambour MAC. The drawings show approximately 174 car parking spaces being provided for commuter parking as part of the redeveloped Nambour station. This appears to significantly underestimate the parking demand for a station that services a Major Activity Centre with a significant urban residential catchment, a hinterland catchment and townships to the north. Providing a Park and Ride facility to meet this demand at either Woombye or stations further to the south is not realistic or appropriate as the road network does not cater for access from the townships and areas to the north and northwest (there is ongoing concerns with access to Woombye from Nambour Connection Rd). Trips to a Park and Ride facility should not be required to traverse the length of Nambour to access station parking.	Noted. This is an issue for future planning around stations and Nambour in general. Noted. As above. PT interchange a significant issue for this location. Station design to date utilises existing infrastructure. Therefore nothing additional shown. Noted. this issue is addressed in the SEIS. Noted. for consideration with council and TMR in future stages of design. Park and Ride facilities apart from carparks shown in drawings not considered in EIS.	

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.154	The Project is on a substantially different alignment which will result in a different flood flow pattern, changes in available flood storage volumes and collection and discharge of concentrated water through bridges and culverts. Need to ensure these consequential changed flow paths do not cause nuisance. No mitigation proposals are yet included. The drawings do not show longitudinal drainage generally and at top of cut batters all the way to discharge points. Need to investigate the extent and cross section of table drains at top of batters to capture and divert flow rather than down batter face and cause instability. Given some of the steep gradients consideration of control of water due to velocity and energy dissipation consideration to ensure no erosion potential. Treatments to drainage discharge points to be specified. This concern also applies to berms forming slope stability set backs. Need to understand relative levels of different elements. Cross sections would assist. Road package long sections and cross sections are not in EIS.	Drainage design undertaken based on information available. Flood modelling to determine mitigation requirements. Noted. This would be included in future stages of design. Noted. This would be included in future stages of design. Noted.	
	53.155	Note 3 indicates that batter gradients are 'assumed only'. How can they validly be used to set resumption boundaries from land impacts on this basis? More geotechnical work is required. It is noted that a typical batter and berm arrangement (without maintenance track) is not indicated in the EIS drawings. Note 6 requires top of track formation to be a minimum of 600mm above flood immunity of Q100 given no contemporary flood modelling has occurred?. How has this been set? Some of the information available to Council is incomplete and not performed using contemporary methods. Given the proposed longevity of this Project (>100 yrs) this is a critical element.	As noted, geotechnical investigations will be undertaken in future stages of the Project. Batter gradients based on standards, and best information available. Risk based design undertaken. This is addressed in the SEIS. Future flood modelling (taking into consideration climate resilence) will need to be carried out in future design stages.	
	53.156	See notes for drawing C001/C101 also. The placement and size of the culvert under Gympie Street North road is to be further discussed in terms of performance requirements. Need to determine what extent of the assets related to any new structure and retained segment would remain with DTMR for maintenance and which would be handed to Council. This will allow more focussed comment on life cycle issues.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design. The issue of asset ownership and ongoing maintenance will need to be discussed and agreed with council for the various individual elements.	

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.157	Visibility to the right from the Pony Club access is unacceptable and deficient if fencelines are placed on property and resumption lines. No indication how 'existing' car park can operate or whether it is required for park and ride, kiss and go or needed to support adjacent commercial/retail operation. This will assist to determine the better Hatten Street configuration. Need to show all pedestrian and cycling options available to cross the corridor and their further connections into the community. See notes for drawing C007/C107 also. What is meant by the 'proposed' in SK003B road control line along the west edge of Jones Street. Why does it change for the Hatten Street arrangement in SK003B?	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design.	
	53.158	Possible future extensions of Beech Lane and Ash Lane are shown on the plan. Council is interested in obtaining road reserve extensions across the existing rail corridor to connect to the road reserve of Eudlo Road for future proofing purposes and the realignment of the Eudlo School Road reserve at the end of Rosebed Street.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design.	
	53.159	See notes for Drawings C015 and C115 for comment.	As above.	
	53.160	See notes for Drawings C016 and C116 for comment.	As above.	
	53.161	See notes for Drawings C017 and C117 for comment.	As above.	
	53.162	See notes for Drawings C018 and C118 for comment.	As above.	
	53.163	See notes for Drawings C019 and C119 for comment. Concerns exist for visibility deficiencies to the right side from Nicklin Road onto Realigned Chevallum Road purely for distance but also due to bridge pier locations causing obstruction.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design.	
	53.164	See notes from Drawings C020 & C120 for comment. Why does the Realigned Spackman Lane terminate where it does?	Spackman Lane terminates as shown as it exists to provide property access. Access to this property is currently gained via the adjoining property.	
	53.165	See notes for drawings C023 and C123 for comment. Significant erosion potential for southern batter of the western bridge abutment due to alignment and termination of retaining structure. Confirm that pedestrian and cycling connectivity is maintained.	Noted on drawings, which will be incorporated into TMR project documentation so that they can be followed up during future stages of design.	
	53.166	See notes for drawings C024 and C124 for comment.	As above.	
	53.167	Refer to comments made under section C000 – C028– four track road realignment drawings	As above.	
	53.168	SK101 – SK112 – two track road realignment drawings	As above.	

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	53.169	This section calls to asses the impacts of climate change on increased risk and severity of flood. The EIS has not adequately addressed this issue as flood modelling has not been undertaken.	Flood modelling to occur during future stages of design process. Climate risk has been considered.	4.13.2
	53.170	This section calls for existing surface drainage patterns, flows, history of flooding including extent, levels and frequency and present water uses. The EIS has not adequately addressed this issue as flood modelling has not been undertaken as noted in Para 4 of Cl 1.8.1 of the EIS.	These aspects are described in the SEIS, with reference to existing information. Flood modelling to occur in future stages of the design process.	4.13.2
	53.171	Park and ride has not been dealt with explicitly and this has resulted with the model incorrectly indicating only minor growth at the stations.	Parking requirements are consistent with TransLink advice, though there should be a review as part of the next stage of design.	addressed in SEIS in section 4.20.9.1
	53.172	The newly adopted Sunshine Coast Regional Plan 2009 was not used in the preparation of the EPBC Act referral. Also, the Caloundra Biodiversity Strategy 2006, Background Paper and Appendices 2006 (adopted by Council) are not used.	This is retrospective as the EPBC referral was submitted in 2008.	NA
Department of Communities 54	54.1	Roads and Road Network – future road developments and re-alignments should be developed and constructed to ensure adequate access for cyclists on road cycle lanes.	This is discussed in the SEIS, and will require future working between TMR and council	4.6.6
	54.2	Pedestrian and Cycle Movements – need to be considered in a consistent manner across all affected townships. Consider further work into ensuring integration of pedestrians and cyclists in a connected network both within townships and along the entire rail corridor.	This is discussed in the SEIS, and will require future working between TMR and SCRC.	4.6.6
	54.3	It is recommended that alternative land identified for the relocation of sporting clubs and open space is not on land below Q100 flood lines as this prevents the development of built infrastructure (e.g.. Player amenities).	This is noted.	4.13.2
	54.4	Cultural heritage management Plan should include preparation of a photographic record of significant sites before construction commences, to be used for educational purposes; draft maps of the area incorp significant Indigenous places incl items such as 3D presentations, signage on tracks and trails; maps of the area identifying prominent places with signs explaining Aboriginal cultural significance; and consider employing Indigenous rangers or guides.	This is noted in the SEIS. A CHMP is currently in progress.	4.9.8 and also EMP
	54.5	Consider these places of significance in the design of recreational trails as attractions and/ or re-use opportunities (for instance, railway stations and shelters) as information booths for tourists and users of recreational trails.	This is noted in the SEIS.	4.3.2, 4.9.8
	54.6	EIS needs to identify source, commitment and timing of funds for the relocation, management and maintenance costs of sport, recreation and open space impacts resulting from the Project.	It is not possible to identify this at present, though there should be a Proponent's commitment to this process.	See Proponents commitments (Appendix A)

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	54.7	Consideration of the economic and community benefits include: - to broadly examine the potential costs and benefits in terms of local businesses and the Landsborough to Nambour broader regional community/economy and - to broadly consider the community and economic impacts of the proposed facilities on similar facilities/services located in the Landsborough to Nambour broader regional community/economy.	This is noted in the SEIS, however as above.	4.7.6
	54.8	The Engagement of Sunshine Coast Regional Council in the relocation and establishment of these facilities is important. Dept Communities are willing to facilitate Council's involvement. Consultation strategy needs to be prepared with DERM and sporting groups.	This is noted in the SEIS.	4.1.4, 4.7.6
	54.9	Recommend an Active Trails Strategy and detailed Master Plan for Outdoor Recreation, Sport and Rec to be developed in collaboration with Sunshine Coast Regional Council. Study to incorporate planning principles of accessibly, connectivity, sustainable recreation, regionally significant open space, recreational setting diversity, natural landscapes, cultural and heritage features, significant and endangered ecosystems.	This is noted in the SEIS. This should also become part of the Proponents commitments.	4.3.2
	54.10	EIS should make clear that contaminated land will be decontaminated before being used for alternative purposes, particularly the existing rail track.	This is noted in the SEIS.	4.4.1
	54.11	Stockpiles of good quality soil could be used for local sport and recreation fields to improve playing surfaces.	This is noted in the SEIS.	4.2.2.6
Qld Police 55	55	Submission notes to say no issues, but will continue to monitor traffic throughout the planning and construction of the Project.	Noted.	NA
DIP 56	56	Submitter has no concerns or comments regarding the EIS.	Noted.	NA
Qld Health 57	57.1	Submitter confirms that the environmental measures outlined in the EIS will ensure potential health impacts are appropriately managed.	Noted.	NA
	57.2	Queensland Health supports mitigation measures from minimising public health risks from arsenic and contaminated land	Noted.	NA
	57.3	Advise how drinking water will be stored to meet water quality standards and confirm recycled water activities comply with guidelines. Where will recycled water be supplied from?	This is discussed in the SEIS.	4.13.3

Submitter	Sub Ref.	Comment Summary	Response Summary	Location in Supplementary EIS
	57.4	TMR state in EMP that recycled water or rainwater would be used for dust suppression during the construction phase. No further details are provided on the source of recycled water or treatment processes. Recycled water activities must comply with the Australian Guidelines for Water Recycling - managing health and environmental risks (Phase 1) (2006) released by the National Environmental Protection Council, which provides guidance on water quality and management planning for recycled water. This document is available from: http://www.nepc.gov.au/taxonomy/term/39.	At this stage no source of recycled water for non-potable purpose, has been determined. In the area it is not readily available. Is to be determined prior to construction commencing. Documented in SEIS and EMP.	
	57.5	Noise - Proponent states that noise levels will exceed the planning level guidelines if no mitigation is applied at Eudlo. However mitigation measures have not been described at Eudlo. Proponent states that with appropriate mitigation applied, it is expected noise levels may continue to exceed QR Limited planning limits.	This is discussed in the SEIS.	4.14
	57.6	Qld Health recommends that the Proponent monitor airblast overpressure and low-frequency noise to assess potential health impacts and outline mitigation measures to meet the ecoaccess noise and Vibration from Blasting Guideline (2006) and the ecoaccess Assessment of Low Frequency Noise Guideline (Draft).	This is noted in the SEIS.	4.3.3, 4.14
	57.7	Qld Health recommends that Proponent ensures that PM10 dust levels meet the EPP and NEPM criteria of 50 ug/m3 (24 hrs) and appropriate mitigation measures are implemented to achieve this goal and annual level of 20 ug/m3 (WHO air quality guidelines for particular matter 2005).	This is noted in the SEIS, for inclusion in the EMP.	EMP
	57.8	Develop a Mosquito Management Plan, in line with current state guidelines.	This is noted in the SEIS and EMP.	

Appendix B - EIS Contributors

B Appendix B - EIS Contributors

Scope of Work	Team member	Qualifications	Company
EIS Coordinators	Rachel Brazier	B Sc (Australian Environmental Studies); M Urban and Regional Planning	Arup
	Alice Reis	BEng (Hons) MIEAust RPEQ DIP PM	Arup
Noise and Vibration Assessment	Simon Ham	BSc Audiotechnology	Arup
Geology & Soils Assessment	Anthony Bowden	Honours Degree in Applied Earth Science – Kingston Polytechnic Chartered Geologist Fellow of the Geological Society	Arup
Land Use Assessment, approvals	Andrew Batts	B Regional and Town Planning (Hons)	Arup
Visual Assessment	Peter Rand	B Applied Science	Arup
Air Quality Assessment	Nicole Rogers	BSc (Hons) Geology and Geography MSc Air Pollution Management and Control,	Arup
Transport Assessment	Philip Hardwick	HNC Civil Engineering BSc(Hons) Civil Engineering	Arup
Rail Advisor	Neal Mumford	BSc (Hons) Civil Engineering	Arup
Water Resources Assessment	Ed Beling	MSc. BEng. Civil (Hons)	Arup
Ecology	Melody Stoneham	Bachelor of Science (Ecology and Environmental Planning) with 1st Class Honours in Ecology	Arup
Terrestrial Fauna Assessment	Mark Sanders	Bachelor of Advanced Science (Zoology) with First Class Honours	(Formerly) Biodiversity Assessment and Management
	Terry Reis	Bachelor of Science with 1st Class Honours in Australian Environmental Studies	Biodiversity Assessment and Management
Stakeholder Consultation	Marissa Powell	B Business (Human Resource Management) Master of Business (Public Relations)	Bayly Willey Holt
Aquatic Biology Assessment	Beth Hastie	Doctor of Philosophy (PhD) - Bachelor of Science (First Class Honours)	BMT WBM
	Chris Pietsch	Bachelor of Applied Science – Coastal Management Major	
Cultural Heritage Assessment	Ben Gall	Bachelor of Arts, (History and Communication)	Converge Heritage Consultants
Economic Environment Assessment	Ross Larsen	BBE (URP) (Dist), Grad. Dip. (URP)	SGS Economics and Planning
Social Environment Assessment	Kate Morioka	M.Soc PD (Professional), B Soc Sci (International Development), BA	SGS Economics and Planning
Travel Time Energy Consumption	Mischa Nugent	Bachelor of Business Engineering, Master of Business Administration, Swiss Certified Master in Organisation	Systemwide
Capacity Analysis	Matthew Pattison	Bachelor of Engineering with Honours, (Software), Master of Information Systems,	Systemwide
Terrestrial Vegetation Assessment	Derek Johnson	M.Phil, Grad. Dip (Natural Resources)	QTree

Appendix C - Environmental Management Plan

Appendix C - Environmental Management Plan

1 Introduction and Purpose

The following Environmental Management Plan (EMP) replaces the EMP contained in the EIS. The EMP contained in this SEIS will be used for future development of environmental management processes in the lead up to implementation of the Project.

The Project is the Landsborough to Nambour rail upgrade. It will involve the construction of approximately 22 km of rail between the existing train stations of Landsborough and Nambour. The upgrade will follow the Project, as detailed in the EIS and result in a new two-track rail with much higher efficiency than the existing single track rail. The rail upgrade will provide an effective passenger and freight service to the region.

This Environmental Management Plan (EMP) sets out the environmental issues that will be encountered by the Project and contains clear commitments to manage these issues. It is a written description of proposed measures to be implemented to help achieve and maintain acceptable levels of the environmental impacts identified in the EIS and a tool to help meet the requirements of relevant legislation and best practice environmental management.

The purpose of this EMP is to identify all potential environmental impacts and mitigation measures together with corrective action if an undesirable impact or unforeseen level of impact occurs. The aims of the EMP are to:

- provide auditable Proponent commitments to practical and achievable plans for the management of the Project such that environmental requirements are complied with
- produce an integrated planning framework, which provides for comprehensive monitoring and control of construction and operational impacts
- provide local, State and Commonwealth authorities and the scheme Proponent with a framework to confirm compliance with their policies and requirements
- provide the community with evidence of the management of the Project in an environmentally acceptable manner.

It is anticipated that the primary users of this EMP will be the Principal, the design consultant, the construction contractors and maintenance contractors. All the requirements for the construction and maintenance contractors stemming from the EIS, the EMP and the detailed design process will be incorporated within the drawings and contract specifications produced by the Principal and the design consultant.

This EMP is intended to address design, construction and operation (maintenance) phases, in response to submissions received during consultation on the Environmental Impact Statement. It is important to note that many of the issues and requirements stated for the construction phase of the Project will not apply during the Project's operational period. Separate environmental management plans would be required for the decommissioning of the existing corridor, this will be dependent on the chosen future use for all or parts of the decommissioned corridor.

Both the Construction and Maintenance EMPs would be prepared by the appropriate entity and submitted to the Principal who may in turn distribute them to the relevant government bodies i.e. the Department of Environment and Resource Management, the Sunshine Coast Regional Council, and other relevant government departments for comment and approval where required. The contractors would not be permitted to begin works until the comments from the government bodies have been incorporated into the EMPs to the satisfaction of the Principal, and all associated permits and approvals obtained.

As noted in the EIS, the Project may be constructed in stages, and there is the possibility of early works to occur. Therefore it is important to note that this EMP shall apply to any activity undertaken as part of this Project, or to enable later construction of this Project. Individual EMPS will be prepared, based on this EMP, for each individual element as required.

1.1 Relevent legislation

The Principal is required to give due consideration to the likely environmental impacts of new Projects under the applicable Commonwealth, State and local government legislation, guidelines and policies. The *Environment Protection and Biodiversity Conservation Act 1999* is also of particular relevance to a number of design and construction management requirements. The Supplementary EIS lists legislation relevant at the time of preparation, and notes that is it likely that changes in legislation will occur before the Project is constructed. Therefore prior to any future project activities, a review of legislation listed in the Supplementary EIS must be undertaken. The relevant legislation listed in each individual management plan is current at the time of writing, and would also be subject to this review.

1.1.1 Approvals list

Table 3.1.5 in the Supplementary EIS provides a summary of the current relevant approvals and permits, taking into consideration changes in legislation since the release of the EIS. It will be necessary for this table to be maintained and updated where required, in response to future legislative changes and amendments.

1.2 Project Phases

Five phases have been associated with the life of the Project. These are design, construction, post construction, operation and decommissioning.

1.2.1 Design

As the Project may be designed and constructed in stages, preliminary design processes will include the definition of project staging, so that sections of the Project may be constructed and commissioned.

The design process will need to take into account land use planning activities undertaken by council, and other relevant infrastructure projects and changes in the Project area.

The design of the Project is expected to include the following activities:

- geotechnical investigations (including contaminated land investigations and acid sulfate soils investigations, where required)
- flood modelling
- resumption planning
- detailed design of the railway and associated rail infrastructure, including bridges and signalling design
- detailed design of road realignments
- station planning and design
- logistics and construction management planning
- construction traffic analysis and management.

1.2.2 Construction

The construction phase is generally regarded as the most disruptive and destructive stage of the Project, hence the EMP plays an important role in managing disruption and impacts. Expected construction elements are described below. It should be noted that the order of these activities might change in some locations, due to the logistics of keeping the road and rail network functional.

- survey of rail alignment
- construction barriers and exclusion fencing to be erected
- installation of new public service utilities / services diversions
- sediment and erosion control
- construction of temporary access roads
- clearing and removal of vegetation on rail alignment
- earthworks (including tunnels and drainage for road and rail works)
- building of bridges and structures for road and rail works
- road works (for roads being realigned)
- railway formation construction (embankment and cut)
- overhead mast foundation construction
- ballast and sleeper construction
- building of station facilities
- laying of two tracks, overhead wiring, signal and communications systems
- finalisation of remaining areas of road works and asphalt
- commissioning of railway.

1.2.3 Post Construction

Post construction activities will include ongoing monitoring prior to sign off of the Project, and hand over of agreed assets to the relevant authorities. The responsibility for these assets will be determined in consultation with Queensland Rail, TMR, the Sunshine Coast Regional Council and other relevant government authorities.

The post construction monitoring phase will be of particular relevance for the landscaping, weed management, and vegetation rehabilitation components of the Project.

1.2.4 Operation

Operation of the railway will essentially involve the running of passenger and freight services between Landsborough and Nambour (and beyond). The operation of the railway is associated with maintenance of the tracks and railway stations, which may include activities such as:

- sleeper or rail replacement
- maintenance of drainage structures
- maintenance of retaining walls, bridges and tunnels
- maintenance of overhead wiring
- fence maintenance
- weed, pest and grass management
- maintenance of signalling equipment
- repair, maintenance and cleaning of platform areas (including lifts, staircase, waste facilities)
- repair, maintenance and cleaning of station building (ticketing office and bathrooms)
- maintenance of landscaping
- management of security.

It is understood that Queensland Rail Limited has existing environmental management procedures and plans in place for the management of their network. This EMP is not intended to replace these procedures. The operational elements of this EMP are intended to provide guidance in the development of specific management measures relevant to the delivery of this Project.

1.2.5 Decommissioning

Decommissioning of the existing railway will occur once the new rail has been constructed and is operational. It will basically involve the removal of the existing railway and dedication of land to alternative uses. The alternative land uses will largely depend on the location of the existing rail and will be decided by the local government authority, which is responsible for the planning of the area.

For example, in areas of conservation significance (e.g. national parks) the existing rail will be removed and the land rehabilitated. Allowance may be made in some areas for the provision of a 'rail trail'. Pedestrians, bikes and horse riders typically use these trails for recreational purposes. Alternatively, in railway towns the land may be redeveloped. In most cases, the subsequent land use will require treatment of rail land for contamination and removal of formation prior to redevelopment.

1.3 Types of Environmental Management Plans

Each of the phases of the Project is associated with activities that may impact on the environment. Management plans have been prepared for the following key environmental issues. These include:

- greenhouse gas and climate change
- landscape and visual management
- erosion and sediment control
- acid sulphate soils and contaminated land
- vegetation management
- weed management
- fauna management
- hydrology and water quality
- air quality and dust
- noise and vibration
- waste management
- traffic and transport
- cultural heritage and conservation
- social disruption
- hazard and risk.

1.4 Structure of the EMP

The structure of the individual issues management plans in this EMP has been prepared in accordance with the former EPA (now Department of Environment and Resource Management) guidelines as follows:

- element - aspect of environmental issue
- policy - the operational policy that applies to the element
- performance criteria - a performance requirement for each element of the operation
- implementation strategy - the things that would be implemented to achieve the performance requirement
- monitoring - the monitoring requirements which would measure actual performance
- reporting - format, timing and responsibility for reporting and auditing of monitoring results
- corrective action - the action to be implemented in case a performance requirement is not reached
- responsibility - the person(s) responsible for action
- timing - when certain actions should been undertaken.

A discussion of the potential impacts and relevant legislation and / or policies is also included within the introduction to each of the EMP elements.

Each management plan is split into design, construction, operational and decommissioning aspects.

1.5 Environmental management processes and responsibilities

1.5.1 Implementation

All personnel involved in the Project have an obligation to show due diligence with respect to all aspects of environmental management. The parties responsible for the environmental management of the Project are defined as follows:

- the Principal - the Department of Transport and Main Roads or its agents in delivering the Project
- the design consultant - anyone engaged by the Principal to undertake any aspects of the design of the transport system and includes sub-consultants and the Department of Transport and Main Roads staff
- the construction contractor - anyone engaged by the Principal to undertake any aspects of construction of the transport system and includes private contractors and public workforce
- the maintenance contractor - anyone engaged by the Principal to undertake any aspect of maintenance of the transport system and includes private contractors and public workforce (including QR Limited)
- the decommissioning contractor- anyone engaged by the Principal to undertake any aspects of decommissioning works of the existing railway system and includes private contractors and public workforce. This aspect may also be further divided into those involved and responsible for rehabilitation works along the decommissioned corridor, and those involved in the construction of and maintenance of other infrastructure within the decommissioned corridor. A separate management plan would be required for each of these aspects.

All parties involved in the Project are required to undertake their work in accordance with all relevant Acts, Policies and Regulations. In particular, all parties are referred to the *Environmental Protection Act 1994* which states that individuals and organisations must take '...all reasonable and practicable measures to prevent or minimise environmental harm'. In addition to legislative compliance the appointed design consultant, construction and maintenance contractors will be aware of the content and intent of relevant environmental guidelines and Australian Standard.

The responsibilities of the various parties are shown below in Table 1.5.

Table 1.5: Responsibilities of parties with regards to implementation of EMP

Parties	Responsibilities
The Principal	The primary responsibility for environmental performance and for implementing the EMP for the rail upgrade rests with the Principal. Specific responsibilities with regard to environmental management include: ▪ Review of the relevance of the EMP and its effectiveness in helping meeting the Project's environmental responsibilities. ▪ Minimisation of the potential environmental impacts associated with the Project. ▪ Addressing issues raised by the community. ▪ Coordinating acquisition requirements and processes, compensation arrangements, likely timetable and notification to affected property owners. ▪ Management of the tender documents for design, construction and maintenance and incorporating the requirements for complying with the EMP. ▪ Obtaining various permits and licenses required by any relevant legislation.
The design consultant	The design consultant has the responsibility of ensuring that the requirements of the EMP are reflected in their designs and in the contract documentation including specifications and drawings. This may also include pre-construction activities associated with the design process, including geotechnical investigations, dilapidation surveys, and other on the ground activities.
The construction contractor (and contractor/s responsible for decommissioning works)	Notwithstanding any other conditions that may be required by the Principal or a government authority, the construction contractor will be responsible for: ▪ Developing, implementing and complying with a Construction EMP, which is consistent with the content of this EMP. ▪ Complying with all the environmental provisions of the Construction Contract. ▪ Obtaining any and all licences and approvals under the *Environmental Protection Act 1994*. ▪ Complying with all licences and approvals under the *Environmental Protection Act 1994* and any other relevant legislation as described in Section 23.1.3.
The maintenance contractor/ operator	Notwithstanding any other conditions that may be required by the Principal or a government authority, the maintenance contractor will be responsible for: ▪ Developing, implementing and complying with a Maintenance EMP, which is consistent with the content of this EMP, or in the case that this EMP is superseded, the relevant document. ▪ Complying with all the environmental provisions of the Maintenance Contract. ▪ Obtaining any and all licences and approvals under the *Environmental Protection Act 1994*. ▪ Complying with all licences and approvals under the *Environmental Protection Act 1994* and any other relevant legislation as described in Section 23.1.3. ▪ Documentation of all monitoring and maintenance procedures undertaken. It is noted that as the intention is for the railway to become part of the QR network, QR standards and procedures at the time will be applicable.

1.5.2 Reporting

This EMP will be controlled by the Principal and provided to the design consultant and the construction contractor at the relevant stages of the Project.

A copy of the EMP will be kept on-site and be easily obtainable at all times during construction and operation. During the construction works, the Project manager would hold an additional copy. A copy of this EMP should be kept by the Principal and issued as standard information to any consultants or contractors employed on the Project.

The EMP will also be integrated into the overall management procedures held by Queensland Rail Limited for this section of the rail network.

1.5.3 Review and update

The EMP will be reviewed and periodically updated to reflect knowledge gained during the course of operations and to reflect new knowledge and changed community standards (values). Changes to the EMP may be developed and implemented in consultation with relevant authorities and stakeholders.

Due to the expected time delay before the construction phase, it is recommended that this EMP be reviewed and updated before the commencement of works. The Principal will be responsible for undertaking this review and update and any changes to the EMP should be agreed with the relevant authorities.

1.5.4 Training

The EMP outlines the required measures to be undertaken to prevent harm to the environment during project works. In order for these measures to be implemented effectively staff, contractors and subcontractors will need to be made aware of the existence of the EMP and its requirements. This applies to personnel involved in the design, construction and maintenance / operation phases of the Project.

Prior to the commencement of works on the site, staff will be required to undergo induction training outlining all aspects of:

- safety and security
- responsibilities on-site
- housekeeping in relation to the construction compound
- equipment operation
- first aid
- work procedures
- awareness of the EMP and its importance
- content of the EMP and the benefits of compliance
- the role of personnel in the implementation of the EMP and consequences for non-compliance
- emergency responses for environmental management issues.

2 Greenhouse gas and climate change

The Project area is located within the coastal lowlands of the South East Queensland region and is classified as having a subtropical climate with no dry season. This is characterised by warm summers and relatively dry winters. Mean annual rainfall is around 1578 mm with the majority received in the summer months (December-April). Mean daily temperatures range between 25-27 °C in summer and 10-14 °C in winter. Surface winds generally reflect the diurnal pattern of land and sea breezes. The Climate Change in Queensland 2008 Report (CCQ 2008) issued by the Queensland Office of Climate Change notes a rise in average temperature since 1910 across Queensland and an even faster rate of temperature rise since 1950, with the rate of temperature increase ranging from 0.07 °C / decade in the far north to 0.32 °C / decade in the south west of the State. By 2030 annual average temperatures in Queensland's coastal areas are projected to increase by about 0.9 °C (range of 0.7–1.2 °C) relative to the climate of recent decades (CCQ 2008).

Relevant policy: Climate Change Impact Statements (CCIS) (2008), Climate Smart 2050 (2007), ClimateSmart Adaptation 2007-2012 (2007)

Table 2: Greenhouse gas and climate change plan

	Greenhouse gas and climate change
Policy	To ensure that the Project is managed in a way that it is adaptable to conditions that may arise as a result of climate change.
Performance Criteria	1. To recognised the exacerbated risk of extreme weather conditions, for example heat waves, storms, floods, bushfire and windstorms. 2. To integrate mitigation measures into the Project that reduce the risk of damage to construction from the extreme weather events. 3. To integrate mitigation measures into the Project that reduce the risk of harm to people or property caused by extreme weather events during construction and operation. 4. To recognise the association between the Project and its potential contribution to climate change and comply with the Air Quality EMP to reduce the impact of the Project on climate change.
Implementation Strategy	**Design:** ▪ Undertake flood modelling to confirm climate change resilience of proposed infrastructure.

	Greenhouse gas and climate change
Implementation Strategy	**Construction:** ▪ Siting of key infrastructure above flood levels and on structure. ▪ Constructions at flood sensitive sites during dry periods wherever possible. ▪ Control of dust at all times, but particularly during windy periods. ▪ The use of erosion and sediment control measures during construction to prevent increased erosion and sedimentation during rainfall events. ▪ Implementation of health and safety procedures to reduce the risk of dehydration, heat stroke or sunburn that may affect project personnel during construction, particularly during heatwaves. ▪ Schedule work hours to start earlier and finish earlier to avoid the afternoon heat. ▪ Modify work hours during heatwaves so as to limit number of hours construction personnel are exposed to high temperatures. ▪ Postpone construction work during periods of cyclones, severe storms and other extreme climatic events. ▪ Health and Safety Management Systems to ensure appropriate procedures are in place to prevent health and safety incidents arising as a result of extreme climatic events. ▪ A disaster / emergency management plan for the Project during construction incorporating an early warning system, response strategy to protect the construction works from flooding, storm and heatwave, protective measures for personnel and an evacuation plan. **Operation:** ▪ Rainfall and temperature monitoring. ▪ Health and Safety Management Systems to ensure appropriate procedures are in place to prevent health and safety incidents arising as a result of extreme climatic events. ▪ A disaster / emergency management plan for the Project during operation incorporating an early warning system, response strategy to reduce / cease / modify operations during extreme events and evacuation plans. ▪ The condition of the rail to be monitored regularly, in particular during heat waves, to prevent any damage to the tracks. ▪ Repair and maintenance of the rail to keep it in good working order and reduce the risk of incident during extreme weather events. ▪ Appropriate rail speed restrictions when air temperature rises over 38°C. **Decommissioning:** ▪ The decommissioning stage will involve removal of the redundant railway line, rehabilitation and construction of a rail trail (in some areas). The mitigation measures for the decommissioning stage will be the same as those for the construction stage of the Project.
Monitoring	**Design:** ▪ NA **Construction:** ▪ Monitoring both long and short term weather forecasts during the construction period to enable prediction of extreme weather events and appropriate actions to prevent damage to the Project and/or harm to personnel. **Operation:** ▪ In accordance with the QR operating standards at the time, as a minimum, the condition of the rail will be monitored regularly, especially during heat waves and flood, to prevent damage to the tracks. **Decommissioning:** ▪ As for construction.

	Greenhouse gas and climate change
Auditing	**Design:** ▪ TMR and Council review to confirm adequate climate resilience factors integrated into design, or design components (particularly where design is staged). **Construction:** ▪ Visual inspection of construction zones several times during construction to ensure performance criteria are being met. **Operation:** ▪ Visual inspection of rail to ensure that it is in good working order and any requirements for repair or maintenance reported appropriately. **Decommissioning:** ▪ As for construction.
Reporting	**Design:** ▪ Prepare input to environmental design report. **Construction:** ▪ Monthly reports during construction to indicate monitoring results, audits, training and incidents. ▪ Reporting any environmental incident that results in damage to construction works or operational rail and / or harm to personnel. ▪ Report any non-compliance with EMP or significant harm to the environment to the on-site construction manager, the Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required. **Operation:** ▪ Report any non-compliance with EMP or significant harm to the environment to the on-site operation manager (QRL), the Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required. **Decommissioning:** ▪ As for construction.
Corrective Action	Following a reportable incident, the restoration and repair of the environment to its natural state or as directed by the regulatory authority. Construction project Manager can request cessation of works if there is a breach in performance criteria of EMP or a risk of it occurring.
Responsibility	**Design:** ▪ The design consultant **Construction:** ▪ The environmental officer is to conduct monitoring of long and short term weather forecasts and liaise with the on-site construction manager and / or the Department of Transport and Main Roads as appropriate. ▪ The on-site construction manager is responsible for compliance with the EMP and implementing the disaster / emergency management plan during construction. **Operation:** ▪ The maintenance contractor is responsible for monitoring the condition of the rail. **Decommissioning:** ▪ As for construction.

3 Landscape and visual management

The Project area lies within the Sunshine Coast Regional Councils Local Government Area. Large sections within the Project area are considered to have a high scenic amenity profile. These areas are generally located in the areas between the railway townships along the existing rail corridor. Key characteristics that describe the existing landscape and visual context include:

- a distinctive topographic mix of high, steep undulating land and lower floodplain areas
- the Blackall Range running parallel to the Project area to the west
- east-west running ridges bisecting the Project area at a number of points, most noticeably between Landsborough and Mooloolah, and between Mooloolah and Eudlo. Numerous smaller ridges and steep slopes also traverse the Project area
- settlement areas of Landsborough, Mooloolah, Eudlo, Palmwoods, Woombye and Nambour around the existing railway corridor stations
- National Parks, forested and other vegetated areas
- floodplains linked to Addlington Creek, South Mooloolah River, Mooloolah River, Eudlo Creek, Acrobat Creek, Paynter Creek and Petrie Creek bisecting the landscape with dense riparian vegetation
- agricultural small holdings comprising cropping and grazing activities generally clear of vegetation with perimeter fences that pattern the landscape and are lined with rows of established trees
- scattered individual rural dwellings and rural residential subdivisions.

Relevant policy: *South East Queensland Regional Scenic Amenity Study* 2004.

Table 3: Landscape and visual management plan

	Landscape and visual
Policy	To recognise the visual impact that the rail corridor will have on the existing environment and reduce this impact through sensitive design and landscape screening.
Performance Criteria	1. minimise impact of the Project on the landscape character and visual environment of the area through which it passes. 2. minimise the earthwork footprint to reduce visual, landscape and ecological impacts. 3. retain existing vegetation where possible and provide buffer zones and planting that contribute to ecological and landscape value. 4. minimise the requirement for lighting in areas outside of townships.
Implementation Strategy	**Design:** ▪ Apply design guidelines for stations, structures and other elements as developed as the Project progresses ▪ Design in accordance with the performance criteria, responding to impacts and management requirements identified in the EIS. In particular, this should apply to those areas identified as special management areas, viewpoints, or in proximity to residences. **Construction:** ▪ Staged construction to limit visual impact to several small areas at any one time. ▪ Ensure appropriate screening of construction activities with sensitive receptors, such as nearby residences and businesses. ▪ Ensure site is kept tidy and clean at all times. ▪ Avoid construction outside of daylight hours in areas that are environmentally sensitive, i.e. National Parks and vegetated ridgelines to prevent the requirement for lighting. ▪ Rail lighting during night time works to be placed to minimise light intrusion to nearby sensitive receptors, i.e. residences and operating businesses. ▪ Minimise the construction footprint as far as possible and implement the Vegetation Management Plan to rehabilitate areas no longer required for construction. ▪ Consideration of visual impacts in the choice of electrification mast structures, pole structures being generally favoured from a visual point of view over gantry structures. ▪ Consideration of colour scheme and general appearance of townships in the final design for the rail stations.

	Landscape and visual
Implementation Strategy	**Operation:** ▪ Consider visual impacts in the choice of electrification mast structures, generally favouring pole structures over gantry structures. ▪ Consider colour scheme and architectural relationship to existing town centres in the design of the rail stations. ▪ Undertake landscape planting within the railway reserve to screen the Project from external views. ▪ Undertake landscape planting in strategic locations outside the railway reserve to provide additional screening. ▪ Design lighting to minimise light intrusion to nearby residences. ▪ Limit operating hours of lighting to minimise light intrusion to nearby residences and use timers and motion sensors as appropriate. ▪ Maintain station buildings and other structures (such as fences) in good condition. ▪ Keep stations clean and tidy. ▪ Maintain landscape in the railway reserve including regular weed and litter removal. **Decommissioning:** ▪ Careful urban design and landscape treatment of modified spaces in town centres created by the relocation of the railway and the decommissioning of existing rail infrastructure. ▪ Implementation of Vegetation Management Plan to rehabilitate areas no longer required for the rail service. ▪ As for construction.
Monitoring	**Design:** ▪ NA **Construction:** ▪ Regular monitoring of construction works to ensure only prescribed clearing is occurring (including before and after photographs). ▪ Inspections to be undertaken post construction to ensure appropriate maintenance of revegetated and landscaped areas, successful stabilisation of plants and minimal weed invasion. **Operation:** ▪ Periodic monitoring of rehabilitation zones to assess threatening processes (e.g. flood, erosion etc) that may affect the success of rehabilitation. Note- this needs to be tied to the responsible party for the rehabilitation works, for the period of their contract. **Decommissioning:** ▪ As for Construction. ▪ In areas where rehabilitation is planned, as for operation.
Auditing	**Design:** ▪ TMR and other relevant agencies to review landscaping plans to confirm compliance with vegetation management plans, and other design and management planning requirement. **Construction:** ▪ Monthly reviews (or appropriate frequency) to review compliance with planned outcomes. **Operation:** ▪ Two years after works, site management team (QR or otherwise identified) to determine if objectives of this management plan have been achieved. A report is to be prepared and if not achieved management requirements be defined to ensure that a self sustaining population is established within regeneration areas. **Decommissioning:** ▪ As for construction.

	Landscape and visual
Reporting	**Design:** ▪ Prepare inputs to environmental design report documenting landscape outcomes, and relationships between landscape plan, vegetation plan, weed management plan and fauna plans. **Construction:** ▪ Monthly reports during construction to indicate monitoring results, audits, training and incidents. ▪ During construction, report any non-compliance with EMP to the on-site construction/operations manager, the Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required. **Operation:** ▪ During operation, report any non-compliance with EMP to the on-site construction/operations manager, the Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required. **Decommissioning:** ▪ As for construction.
Corrective Action	**Construction, Operation, Decommissioning** Following a reportable incident, the restoration and repair of the environment to its natural state or as directed by the regulatory authority. The construction manager can request cessation of works if there is a breach in performance criteria of EMP or a risk of it occurring.
Responsibility	**Design:** ▪ The design consultant. **Construction:** ▪ The on-site construction manager is responsible for compliance with the EMP and implementing the disaster / emergency management plan during construction. **Operation:** ▪ The maintenance contractor is responsible for monitoring the condition of the landscaping and rehabilitation works, subject to the handover conditions once construction is complete. **Decommissioning:** ▪ As for construction.

4 Erosion and sediment control

Much of the area between Landsborough and Mooloolah and Mooloolah and Eudlo is steep. North of Eudlo the terrain flattens as it is affected by floodplains. The predominant geological formations encountered in the Project area are: Landsborough Sandstone, Tertiary / Quaternary Alluvium, Tertiary / Quaternary Residual Deposits and Nambour Formation. The published geological map identifies an area of residual deposits and possible hill wash soils. Although no clear indications of ongoing slope movement were observed from the aerial photographs, zones of ongoing instability and the potential presence of low strength materials is likely in areas affected by residual deposits and alluvium. It is in these areas where the biggest risk of erosion and sedimentation occurs.

Relevant legislation/policy: **Relevant legislation**: *Environmental Protection Act 1994*; *Water Act 2000*, Environmental Protection (Water) Policy 1997; Soil Erosion and Sediment Control – Engineering Guidelines for Queensland Construction Sites (Queensland Division of the Institute Engineers 1996); Erosion and Sediment Control Guidelines for Queensland Construction Sites (Witheridge and Walker, 1996).

Appendix C - Environmental Management Plan

Table 4: Erosion and sediment control plan

	Erosion and sediment
Policy	To minimise the likelihood and extent of erosion occurring during the Project life and manage sedimentation issues arising from erosion that does occur, such that environmental impacts are reduced.
Performance Criteria	1. To minimise impact to surface water, groundwater quality, vegetation and fauna species. 2. Maintain existing water quality conditions within waterways and adjoining tributaries. 3. Erosion to be controlled at all sites disturbed by construction activities. 4. Sediment control devices used to treat all site discharges with the potential for particle export.
Implementation Strategy	**Design:** ▪ Integrate findings of geotechnical investigations into Project design. ▪ Use performance criteria as guidance for design. **Construction:** ▪ Clearing to be undertaken in stages and occur only as necessary to reduce potential sediment loads at any one time during the construction period. ▪ Undertake extension of existing major culverts or new culverts during dry conditions, where possible, to minimise erosion and sediment transport. ▪ Contractor to submit design for erosion control measures for sections prior to disturbance of natural surface. ▪ Construct temporary treatment measures (silt fences, rock checks, diversion drains, silt socks, coir logs etc) at specified locations prior to commencement of works. ▪ Ensure temporary erosion and sediment controls are in place and operational at the beginning of each work day. ▪ Soil erosion from areas with diffuse drainage to be controlled using silt fencing to control transport of coarse sediments; fencing to be placed at toe of batters; Check Dams to be used along tow of batters to control flow velocities along steeper sections of rail. ▪ Temporary drainage from all batter slopes to be conveyed in a controlled manner down slope by use of protective plastic or geo-fabric liners. ▪ Drainage structures to be inspected and maintained to ensure they are effective and remain stable. Sedimentary build up to be removed from control structures to ensure maximum capacity at all times. ▪ Remove loose surplus excavated sand, gravel or clay (where possible), to minimise excessive erosion. ▪ Roughen disturbed areas to reduce velocity flowing into nearby drains and watercourses; minimise timeframes areas are left exposed. ▪ Topsoil to be keyed into batter slopes (e.g. through roughened lines). ▪ During the construction phase, scour protection to be provided for all drainage outlets to reduce the water discharge velocity and the potential for bed and bank scour. ▪ Vehicle routes within works sites to be maintained to minimise loss of sediments by construction traffic. ▪ Minimise sediment taken off site by vehicles by using designated wash down bays, where appropriate. ▪ Stormwater to be collected where possible from construction areas and diverted into settlement ponds for treatment and reuse. ▪ Use sedimentation basins (where required) to enable settlement of sediments prior to discharge; maintain regularly; sediment removed from basins to be dewatered on site when possible and used as construction fill material. ▪ Stockpiles to be no less than 50 m from a watercourse (where possible). ▪ Consideration to be given to covering of stockpiles where they are in place for greater than a month, such as using plastic sheeting. ▪ Sediment fences to be installed down slope of stockpiles and maintained. ▪ In regards to the timing of construction activities, the Contractor to consider seasonal conditions and also obtain Bureau of Meteorology weather forecasts for the site and to take appropriate action based on such forecasts. ▪ Progressive installation of drainage structures (i.e. bioretention systems) depending on stage of works; consideration given to using erosion control matting and blankets, pending soil condition and topography. ▪ Immediate revegetation / landscaping of areas once construction has been finalised.

	Erosion and sediment
Implementation Strategy	**Operation:** ▪ Restricting access to rehabilitated or landscaped areas. ▪ Regular monitoring of the stormwater control devices (e.g. bioretention basins, culverts, drains etc). ▪ Removal of control measures when on-site erosion is controlled and significant permanent vegetation coverage is obtained. ▪ A sediment and erosion control plan (for the operational phase) to be kept on site at all times for review and update. ▪ Regular maintenance of sediment and erosion controls on the site. **Post-construction:** ▪ Areas required for construction, but not needed for operation of the railway should be stabilised immediately after construction has ceased. Stabilisation will be in the form of vegetative rehabilitation, landscaping or constructed stabilisation depending on the location. ▪ In the event that permanent stabilisation cannot be implemented immediately, temporary stabilisation is required in the form of geo-fabrics or similar. **Decommissioning:** ▪ The decommissioning stage will involve removal of the redundant railway line, rehabilitation and construction of a rail trail (in some areas). The mitigation measures for the decommissioning stage will there be the same as those for the construction stage of the Project.
Monitoring	**Design:** ▪ NA **Construction:** ▪ Monitoring of the erosion and sediment control devices at the beginning of each work day during construction. ▪ Monitoring after major rainfall events during construction where there is more than 25 mm within a 24 hour period. **Operation:** ▪ Regular monitoring of drainage and erosion control measures in place during the operational phase of the Project, in accordance with the relevant QR or other operational guidelines for the railway. **Decommissioning:** ▪ As for Construction
Auditing	**Design:** ▪ TMR and other relevant agencies to review plans to confirm compliance with erosion and sediment control plans, and other design and management planning requirements. **Construction:** ▪ The contractor will periodically submit an inspection inventory of erosion and sediment control devices established at each of the separate stages of the construction contract. For each device, the contractor will include the following information in the inventory: inspection date, condition report, restoration actions required and date of restoration.
Reporting	**Design:** ▪ Prepare inputs to environmental design report documenting landscape outcomes, and relationships between landscape plan, vegetation plan, weed management plan and fauna plans. **Construction:** ▪ Monthly reports during construction to indicate monitoring results, audits, training and incidents. ▪ During construction, report any non compliance with EMP to the on-site construction/operation manager, the Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required. **Operation:** ▪ During operation, report any non compliance with EMP to the on-site construction/operation manager, the Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required. **Decommissioning:** ▪ As for construction

	Erosion and sediment
Corrective Action	**Construction, operation, decommissioning** ▪ Immediate replacement or repair of stormwater control device or sediment / erosion control device upon first notification of failure. ▪ Following a reportable incident, the restoration and repair of the environment to its natural state or as directed by the regulatory authority. ▪ The on-site construction manager can request cessation of works if there is a breach in performance criteria of EMP or a risk of it occurring.
Responsibility	**Design:** ▪ The design consultant **Construction:** ▪ Monitoring of the erosion and sediment control devices during construction will be the responsibility of the on-site construction manager. ▪ The on-site construction manager is responsible for compliance with the EMP and implementing the disaster / emergency management plan during construction. **Operation:** ▪ The maintenance contractor will be responsible for monitoring the condition of erosion and sediment devices during the operational phase. **Decommissioning:** ▪ As for construction

5 Acid sulfate soils and contaminated land

Although not all rail land is listed on the Environmental Management Register or the Contaminated Land Register, it is considered potentially contaminated. The potential contamination is a result of the majority of the rail corridor being historically (1940s and 1950s) treated with the herbicide sodium arsenite, which was sprayed via boom arrangement onto the track. The resulting sodium arsenite has a low mobility and thus has a continued presence in the substrate. Consequently, Queensland Rail has adopted a policy whereby all soils excavated for track work are treated as contaminated. Due to the mechanics of the spraying method used, most of the contamination occurs within 5 m of the track formation, and to a depth of 0.5 m. Beyond this, the levels are expected to be much lower.

The majority of the Project is elevated above 20 m AHD and therefore not identified as Potential Acid Sulfate Soils (PASS) areas. However, there are some lower lying areas in the north of the Project between Palmwoods and Nambour. These areas are on the floodplains of Paynter Creek and Petrie Creek.

Relevant legislation: *Environmental Protection Act 1994;* Environmental Protection (Waste Management) Regulation 2000; State Planning Policy 2/02: Planning and Managing Development Involving Acid Sulfate Soils; Environmental Protection (Waste Management) Policy 2000;Guidelines for Sampling and Analysis of Lowland Acid Sulphate Soils (ASS) in Queensland 1998 (QASSIT); AS4482 .1, 1997, Guide to the sampling and investigation of potentially contaminated soil; Draft Guidelines for assessment and management of Contaminated Land in Queensland (1998).

Table 5: Acid sulfate soils and contaminated land plan

	Acid sulfate soils and contaminated land
Policy	To identify and treat areas of contaminated / acid sulphate soils within the Project area, in order to prevent adverse environmental impacts as a result of toxic leachate.
Performance Criteria	1. All fill brought to site or exported from site to be inert and free of contaminants and waste. 2. All spills or materials capable of causing environmental harm to be contained. 3. No residual land contamination to remain following the completion of construction.
Implementation Strategy	**Design:** ▪ Integrate findings of geotechnical investigations into project design. ▪ Use performance criteria as guidance for design. ▪ Integration findings of acid sulfate soils investigations into project design. ▪ Identify appropriate processes for treatment of confirmed contaminated areas, consistent with their proposed use.

	Acid sulfate soils and contaminated land

Implementation Strategy	**Construction:**
	▪ Any excavated material can be kept in the corridor either in the location of origin or within the near vicinity.
	▪ Details of fill providers will include date of arrival, quantity, source of fill and all documentation.
	▪ The Department of Environment and Resource Management permit Queensland Rail to move excavated material by road, provided it is returned to the rail corridor (near the place of origin). Excavated material is to be kept away from watercourses and boundary fences, due to the potential for erosion to mobilise the contaminants in the soils.
	▪ Ground waters and surface waters that leach or flow into any excavation of a disturbed ASS or contamination site will be contained (where possible) and monitored for water quality parameters. Detained water must satisfy ANZECC water quality parameters before being released off-site.
	▪ On-site storage of fuel and other contaminants will be limited.
	▪ Spills will be cleaned up and treated as appropriate.
	
	Contaminated land:
	▪ If contaminated land is confirmed during design or located during works, it is to be managed through one or more of the following options:
	Option 1 – do nothing – site left as is with no management put in place.
	Option 2 – decommissioning underground storage tanks.
	Option 3 – removal of underground storage tanks.
	Option 4 – capping of contaminated sites.
	Option 5 – excavation of off-site entombment to a suitable location, management of Project area.
	Option 6 – excavation and on-site entombment to suitable location and management of Project area.
	▪ Approval and disposal permit from the Department of Environment and Resource Management will be sought for any removal of contaminated soil.
	▪ Soil will be removed in accordance with a Remediation Action Plan approved by the Department of Environment and Resource Management.
	▪ Procedures for handling (loading and unloading), storage, disposal and emergency response for hazardous waste will be described within an Emergency Management Plan.
	▪ For large spills, management and remediation will be undertaken in accordance with the *Environment Protection Act 1994* and Draft Guidelines for the Assessment and Management of Contaminated Land (former EPA now Department of Environment and Resource Management).
	
	Acid Sulfate Soils:
	▪ Further ground investigations will be required to identify the extent of acid sulfate soils. Should it be discovered during works, mitigation may include:
	  ▪ Blending neutralising agents with acid sulphate soil (ASS) to neutralise the Total Potential Acidity (TPA) present.
	  ▪ Disposing of untreated ASS to site or a registered landfill licensed to accept it approved by the Department of Environment and Resource Management.
	  ▪ disposal of untreated ASS under water to prevent possible oxidation and production of acids.
	▪ The treatment of ASS will depend on the method chosen and the results of the TPA testing. If the soil is nominated to be neutralised, then the neutralising agent rate will be 1.5 times the theoretical amount to neutralise the acid generating potential. Excavated ASS material should be treated on-site within designated neutralising pad areas.
	▪ The Department of Environment and Resource Management have no restrictions on the transportation of ASS, as it is not considered a contaminated soil unless heavy metals or other contaminants are present. ASS exposure to air should be limited.
	
	Operation:
	▪ The disturbance of contaminated or acid sulphate soils during operational phases is unlikely, given the majority of activities with the potential to disturb these areas will be undertaken during the construction phase. However, if maintenance or repair works requires excavation in previously identified risk areas, then the management plan as described for 'Construction' will be applicable.
	
	Decommissioning:
	▪ The decommissioning stage will involve removal of the redundant railway line, rehabilitation and construction of a rail trail (in some areas). The mitigation measures for the decommissioning stage will therefore be the same as those for the construction stage of the Project, dependent on the outcomes of the contaminated land investigations and proposed future use.

	Acid sulfate soils and contaminated land
Monitoring	**Construction:** ▪ Monitoring of a contaminated site as required by the Department of Environment and Resource Management under a Remediation Action Plan. ▪ Any ponded waters on disturbed ASS or contaminated sites will be monitored on a daily basis. ▪ All treated ASS will be tested at the rate of one sample per 500 m3 of treated material to validate the effectiveness of treatment. **Operation:** ▪ Implement appropriate monitoring strategy in potential risk areas identified, to maintain aquatic ecosystem health.
Auditing	**Design:** ▪ During the design process, additional geotechnical and acid sulfate soils investigations will be carried out, which will inform the procedures for auditing during design and construction. Consultation with DERM and council will assist in determining these requirements. **Construction:** ▪ At the completion of the construction phase, a final ASS and contaminated site status report will be prepared and submitted to the Principal and any relevant agencies.
Reporting	**Construction:** ▪ A register of each ASS and contaminated site will be maintained on site to record all of the strategy actions, including inspection dates, sampling dates, results of testing, treatment and any corrective actions.
Corrective Action	**Construction:** ▪ If an area of ASS or contamination is encountered, additional to the sites identified and tested prior to construction, works will cease while an investigation as to the extent and type of contamination / ASS will be undertaken. ▪ The ASS or contamination will be treated appropriately prior to the resumption of works. ▪ Following a reportable incident, the restoration and repair of the environment to its natural state or as directed by the regulatory authority.
Responsibility	**Design:** ▪ The design consultant. **Construction:** ▪ Monitoring of the contaminated land, acid sulfate and erosion and sediment control devices during construction will be the responsibility of the on-site construction manager. ▪ All routine test results will be forwarded to the environmental officer and the on-site construction manager. ▪ The on-site construction manager is responsible for compliance with the EMP and implementing the disaster / emergency management plan during construction. ▪ The environmental officer will investigate all valid complaints and implement remedial action. **Operation:** ▪ The maintenance contractor will be responsible for monitoring the condition of erosion and sediment devices during the operational phase. **Decommissioning:** ▪ As for construction.

6 Vegetation management

Whilst the Project has endeavoured to avoid significant areas of mapped remnant vegetation, there are several sections where such values could not be avoided due to existing development, topography and the nature of the rail as linear transport infrastructure. The Project will result in the removal of approximately 30 ha of mapped remnant vegetation representing a variety of regional ecosystems. Whilst there were no significant species located during the field investigations conducted for the Project, precautionary measures need to be put in place in case they are encountered in pre-construction investigations.

Relevant legislation/policy: *Environment Protection and Biodiversity Conservation Act 1999*; *Nature Conservation Act 1992; Vegetation Management Act 1999; Environmental Protection Act 1994; Water Act 2000;* Nature Conservation (Wildlife) Regulation 2006; Queensland Policy for Vegetation Management Offsets 2006; Australian Standard AS 4373-2007 – *Pruning of Amenity Trees, Vegetation Management (Regrowth Clearing Moratorium) Act 2009,* Regional Vegetation Management Code for Southeast Queensland Bioregion, 20 November 2006, Policy for Vegetation Management Offsets, 28 September 2007

Table 6: Vegetation management plan

	Vegetation management
Policy	To minimise remnant vegetation clearing and achieve vegetation offsets in compliance with Policy for Vegetation Management Offsets 2006.
Performance Criteria	1. No unnecessary removal of remnant vegetation. 2. no clearing of threatened species and old growth trees, where possible. 3. Clearing within designated areas only. 4. Ensure compliance with licenses and approvals. 5. Rehabilitation of areas required only for construction. 6. Management of rehabilitation areas to a point where limited maintenance is required. 7. Offset remnant vegetation clearance in accordance with the Policy for Vegetation Management Offsets 2006.
Implementation Strategy	**Construction:** ▪ A Vegetation Clearing Permit/s will be obtained from the Department of Environment and Resource Management as required under the *Vegetation Management Act 1999*. ▪ Compliance with the relevant permits and offset policies as directed by the Department of Environment and Resource Management. ▪ Surveyors will be instructed to notify the environmental officer if remnant vegetation requires clearing for line-of-site, location of pegs etc. The environmental officer will conduct an inspection to ensure that the vegetation to be removed does not consist of threatened species. ▪ Clearing along the proposed rail corridor should be limited to the amount necessary to undertake earthworks and should aim to minimise the construction corridor where possible. Clearing should also be consistent with the safe operation requirements under the *Transport Infrastructure Act 1994* and the *Electrical Safety Act 2002*. ▪ The construction contract should contain penalty clauses relating to unauthorised vegetation clearance. This is in addition to statutory fines that may apply for breaches of legislation. ▪ In remnant areas, an environmental officer should traverse the area by foot immediately prior to clearing (in conjunction with a fauna spotter-catcher) to check for any threatened plant species or old-growth trees on or directly adjacent to the corridor. ▪ Areas of vegetation containing threatened species or old-growth trees that could be affected by the construction of the rail corridor will be flagged. ▪ Areas of vegetation that have the lowest diversity of native species and / or are weed infested should be selected for clearing where options exist, i.e. for construction zones. ▪ Installation of vegetation clearance markers (e.g. flagging tape, marker paint, high visibility poly-web fencing) prior to the commencement of vegetation clearance. Vegetation clearing will be limited to the construction footprint. Construction equipment and personnel will not be permitted outside the construction footprint. ▪ An exclusion fence will be placed around culturally significant trees being retained (e.g. adjacent to Eudlo station) to prevent damage to trees and root systems. The exclusion fencing shall be placed at a distance of 10 x DBH (Diameter at Breast Height) from the tree.

	Vegetation management
Implementation Strategy	▪ Areas of vegetation containing threatened species or old-growth trees directly adjacent to the construction zone will be defined with exclusion fencing prior to construction works. Access will not be permitted to these areas. ▪ Where rare or threatened species are encountered within the construction footprint, work in that immediate area must stop and arrangements be made for the translocation of that (or those) plant(s) using recognised landscaping techniques, and undertaken by appropriately skilled staff. Plants should be removed keeping the root ball intact, and stored ready for replanting using accepted nursery practices. When works in that area have finished, they should then be planted as near as practicable to the original location, where they will not be disturbed in future (e.g. by future activity on the corridor). Watering in should occur immediately after planting. The ground around the plant in its new location should be mulched during watering. ▪ Where possible, lopping or pruning of trees within the clearing zone is preferable to completely removing them. Pruning should be undertaken in accordance with Australian Standard AS 4373-2007 – Pruning of Amenity Trees. ▪ Within areas where clearing must occur for construction purposes (but is outside of the actual footprint of the track and safety zones), clearing to ground level will be minimised. If possible, slashing of existing vegetation layers or clearing with minimal ground disturbance (e.g. chain saw) should be undertaken so that the soil seed bank is retained. ▪ Felled vegetation should be economically salvaged as appropriate, such as mulching of smaller stems and branches, and sale of larger timber to contractors. ▪ Hollow logs, rocks and large debris can be salvaged for use for habitat enhancement within areas for rehabilitation. ▪ Limiting any necessary slashing to a minimum height of 200 mm, to allow for the retention of ground layer and understorey vegetation in all areas not directly utilised for infrastructure construction or access track purposes. ▪ Access tracks should be located in conjunction with the environmental officer to avoid mature, remnant trees as much as possible. ▪ Intended vehicle access tracks to and along the infrastructure route should be identified and marked at the commencement of the construction phase, to prevent the development of multiple access tracks. ▪ Restriction of access to rail corridor, construction zones and access tracks to prevent trampling and minimise the chances of weed infestation. ▪ Locating features such as fill stockpiles, access tracks, site facilities etc. within the construction zone or in areas of existing disturbance. ▪ Storage of all materials and waste (including general human waste) should be restricted to designated areas that are at least 50 m away from waterway corridors. These should be designed to ensure no off-site impacts occur (e.g. bunding should be placed around fuel and chemical storage areas). ▪ Soil stability should be maintained in all disturbed areas, by means of erosion control mechanisms, including sediment barriers, berms, batters, fabric covers and / or mulching, temporary and permanent drains, etc. ▪ Financial penalties should be imposed on the contractor for unauthorised clearing of defined protected vegetation. ▪ Location and securing of areas required for offsetting remnant vegetation as per VM Act.

	Vegetation management
Implementation Strategy	**Operation:** ▪ Vegetation offsets will be established to replace areas of remnant regional ecosystems removed by the proposed railway development. Offsets will be in line with the policy of the Department of Environment and Resource Management for Vegetation Management Offsets, which is triggered under the *Vegetation Management Act* 1999. ▪ Control and/or removal of any weeds in the corridor that have been introduced or exacerbated as a result of the works will aim to leave the site in equivalent condition (or better, in terms of weeds) to prior to construction. ▪ Weed establishment on bare ground and in areas of revegetation will be prevented. ▪ Areas necessary for construction, but not required for the operational phase of the railway, will be rehabilitated. For example, areas disturbed by construction of the bridges. Rehabilitation will aim to re-establish the original regional ecosystems present prior to disturbance and will be staged where necessary. ▪ The rehabilitation program should incorporate a wide variety of species endemic to the area and typical of the regional ecosystem being rehabilitated. ▪ The rehabilitation program should incorporate threatened species endemic to the area and typical of the regional ecosystem being rehabilitated, where possible. ▪ Plant stock should be locally sourced, where possible, to maintain genetic identity of local communities. ▪ Due to the large number of plants likely to be required for the revegetation program, if local plant nurseries do not have the capacity to cater for the Project, it is recommended that a native plant nursery be established to supply the Project. **Post-construction:** ▪ Areas required for construction, but not needed for operation of the railway should be stabilised immediately after construction has ceased. Stabilisation will be in the form of vegetative rehabilitation, landscaping or constructed stabilisation depending on the location. ▪ In the event that permanent stabilisation cannot be implemented immediately, temporary stabilisation is required in the form of geo-fabrics or similar. **Decommissioning:** ▪ Identification of areas to be rehabilitated for conservation purposes. ▪ Removal of decommissioned rail infrastructure and associated facilities. ▪ Treatment of contaminated land. ▪ Restoration of terrain and site preparation (top soil and mulching). ▪ Planting (tubestock, seeding and / or hydro-mulching as appropriate). ▪ Aquatic Habitat Management (construction, operation and decommissioning). ▪ Vegetation clearing and bank / bed disturbance to be minimised where possible. ▪ Appropriate management to contain disturbed sediments. ▪ Not removing sediment or other substrate material from a stream or stream channel. ▪ Not adding or releasing sediment, debris or material into the stream or stream channel. ▪ Monitoring and controlling the encroachment of weeds in areas where vegetation has been removed. ▪ Undertaking any in-channel works during winter and early spring, when rainfall is lowest, and avoiding the late spring to late summer period, which is a critical spawning and migration period for most native fish species. ▪ Where possible (e.g. riparian areas cleared for construction of temporary access tracks), replanting vegetation after construction completion, which would be a beneficial impact to the long-term stability of stream banks. ▪ Restoration of the worksite after the completion of works. ▪ Reporting any environmental incident that results in physio-chemical changes to water quality of physical habitat structure of riparian, littoral and in-stream environment. ▪ Following a reportable incident, the restoration and repair of the habitat to its natural state or as directed by the regulatory authority.
Monitoring	▪ Regular monitoring of construction works to ensure only prescribed clearing is occurring (including before and after photographs). ▪ Periodic monitoring of weed density within rehabilitation and offset zones. ▪ Periodic monitoring of native plant stock to ensure survival and growth. ▪ Periodic monitoring of rehabilitation zones to assess threatening processes (e.g. flood, erosion etc) that may affect the success of rehabilitation. ▪ Any translocated specimens to become an integral part of the monitoring element of the rehabilitation program. ▪ Monitoring of water quality as per Section 23.3.8.

	Vegetation management
Auditing	**Design:** ▪ The Commonwealth Department of Environment, Heritage Water and the Arts may audit the Project as part of the provisions of the decision under the EPBC Act. Therefore an auditable path of decisions around fauna management structures and procedures must be maintained for the life of the Project. **Construction:** ▪ Visual inspection of construction zones pre-clearing, several times during construction and post-construction to ensure performance criteria are being met. **Operation / Decommissioning:** ▪ Visual inspection of rehabilitation zones monthly for 12 months and then quarterly until the vegetation is self-managing (i.e. maintaining low weed density and continued growth of native vegetation).
Reporting	**Design:** ▪ Input to environmental design report, documenting habitat protection and connectivity measures incorporated into design. These must follow those identified in the EIS, and discussed in the Supplementary EIS. **Construction:** ▪ Monthly reports during construction to indicate monitoring results, audits, training and incidents. ▪ Reporting any environmental incident that results in physio-chemical changes to water quality of physical habitat structure of riparian, littoral and in-stream environment. ▪ During construction and operation, report any non-compliance with EMP to the on-site construction/operation manager, the Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required. ▪ Report any incidents of significant environmental harm to the on-site construction/operation manager, the Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required. **Operation:** ▪ During operation, report any non-compliance with EMP to the on-site construction/operation manager, the Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required. ▪ Report any incidents of significant environmental harm to the on-site operation manager, the Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required. **Decommissioning:** ▪ As for construction.
Corrective Action	▪ Following a reportable incident, the restoration and repair of the environment to its natural state or as directed by the regulatory authority. ▪ Construction project manager can request cessation of works if there is a breach in performance criteria of EMP or a risk of it occurring. ▪ Any excessive clearing will be offset with rehabilitation.
Responsibility	▪ Construction, Post construction, Operation and decommissioning. ▪ Environmental officer is to oversee clearing activities and liaise with the on-site construction manager. ▪ Environmental officer should periodically monitor weed cover, replanting success, and report necessary maintenance to the maintenance contractor.

7 Weed management

Weed management will be essential to prevent the incursion of highly competitive weed species into establishing areas of rehabilitation and to prevent weed establishment under areas after construction. A targeted approach to individual weed species is possible given the limited number of weed species, and this should prove to be more effective than a broad-based approach (e.g. for herbicide selection). Lantana (*Lantana camara*) is the most significant weed along the preferred corridor, and a focus on this species by weed control contractors should control the majority of weed biomass. The other weed species encountered (particularly silver-leaf desmodium – *Desmodium uncinatum* and mother of millions – *Bryophyllum spp.*) on the corridor will need to be controlled, but they are not considered as destructive as lantana.

The following weed management plan will apply to those species identified in the EIS, and any subsequent species identified through State and local government studies, policies and guidelines.

Relevant legislation: *Land Protection (Pest and Stock Route Management) Act 2002*, Land Protection (Pest and Stock Route Management) Regulation 2003

Table 7: Weed management plan

	Weed management
Policy	To prevent the spread of weeds into areas affected by the Project during construction and to minimise weed invasion during the operational phase.
Performance Criteria	1. No increase in weed invasion (terrestrial and aquatic) within the Project area. 2. Removal of major weed infestations within the Project area. 3. Minimise use of herbicides. 4. To adhere to the Vegetation Management Plan in Section 22.3.5, which will ensure weed invasion is reduced and rehabilitated areas achieve self-managing status.
Implementation Strategy	**Construction:** ▪ Prior to construction, specific site surveys should be done by the environmental officer in areas before construction teams enter the site. A weed report should be provided to the site manager and access prohibited to infested areas not essential for access. If infested areas need to be cleared, then appropriate weed control or containment measures should be implemented by the environmental officer. Depending on the type of weeds, this could entail slashing, burning, poisoning, landfill etc. ▪ The risk of in-stream and riparian weeds should be minimised through the implementation of vegetation clearing and revegetation management strategies as outlined in Section 22.3.5. ▪ Any weeds in the corridor that have been introduced or exacerbated as a result of the works should be controlled and/or removed, with the aim being to leave the site in equivalent condition (or better, in terms of weeds) to prior to construction. ▪ Staff/operator education programs run by the environmental officer should be implemented as part of the general site induction process, including distribution of fact-sheets to staff (e.g. colour photos, precautions, procedures). ▪ During construction, certification should be required to identify of the origin of construction materials, machinery and equipment. Vehicles and machinery should be subject to inspection, and if necessary, wash-down before entering sites. Vehicles and machinery must also be subject to wash-down immediately off-site when departing from areas known to be infested with weed species. Wash-down facilities should be situated so as not to allow mud to adhere to vehicles and machinery on exit from key weed-affected sites. ▪ Weeds should not mulched for use on site, but disposed of in the appropriate facility off-site.

	Weed management
Implementation Strategy	**Operation:** ▪ On-going weed management will be essential around and under bridge crossings, especially in *M. iteratus* habitat. ▪ On-going weed management will be undertaken within areas of rehabilitation and offsets. ▪ Chemical control of weeds should only be done where the site is at least 50 m from a waterway and it is carried out by trained and/or qualified operators, approved by the environmental officer and is preferable prior to mechanical clearing to reduce seed set. ▪ Herbicide will be applied according to the recommended rate. ▪ If possible, spraying should occur when surface water levels are low, generally in early winter after germination has occurred, but stream levels have not risen appreciably. ▪ Weeds should be sprayed at the correct time, usually when they are growing strongly, and before seed set. ▪ Damage to frogs should be minimised by determining the species present, and ensuring that as far as possible herbicide is not applied during egg laying, tadpole development or at the point where the juvenile frogs emerge from the water. ▪ Herbicide should be mixed in a coloured dye to accurately see which areas have been sprayed, and whether areas have been missed. ▪ Adequate follow-up of weed treatment will ensure that repeat treatment is minimised. ▪ Where possible, weeds will be wiped or injected with herbicide instead of spraying, to avoid spray drift. ▪ Do not spray if plants are under stress, such as on very hot days or in very dry or dusty conditions, as uptake of herbicide through leaves will be minimal. ▪ No spraying should be undertaken on windy days, or if it is likely to rain soon after application; before the herbicide has been adequately absorbed through the leaf surface. ▪ Surfactants will be avoided, as many of these are more toxic to wetland fauna than the actual herbicide. ▪ If contractors are to be used for herbicide application, ensure they are familiar with the above principles. ▪ It is also extremely important for the safety of the operator that all proper precautions are followed when using herbicides, including the use of correct clothing and disposal procedures. ▪ Buffer plantings will be implemented along the newly exposed forest edges. These plantings will be of appropriate native understorey species such as those present within the remaining forest itself, and will be planted at the forest edges at a level of density that will provide adequate protection to the forest in terms of shading, weed inhibition and microclimate control in general. **Decommissioning:** ▪ Removing weed invasions along the existing alignment and preventing further spread. ▪ Preventing weed establishment on bare ground and in areas of revegetation. ▪ Rehabilitation and management of vegetation to a stage where it is resilient to weed invasion. ▪ Implementing buffer plantings along the newly exposed forest edges. These plantings to be of appropriate native understorey species such as those present within the remaining forest itself, and to be planted at the forest edges at a level of density that will provide adequate protection to the forest in terms of shading, weed inhibition and microclimate control in general.
Monitoring	**Post construction:** ▪ Periodic monitoring of weed density within rehabilitation and offset areas. ▪ Monitoring of 'edge plantings' to ensure they achieve appropriate densities and are not penetrated by weed species.
Auditing	**Construction:** ▪ Visual inspection of construction zones pre-clearing, several times during construction and post-construction to ensure performance criteria are being met. **Operation:** ▪ Visual inspection of rehabilitation zones monthly for 12 months and then quarterly until the vegetation is self-managing (i.e. maintaining low weed density and continued growth of native vegetation). **Decommissioning:** ▪ As for construction.

	Weed management
Reporting	**Construction and post construction:** ▪ Monthly reports during construction to indicate monitoring results, audits, training and incidents. ▪ During construction and operation, report any non-compliance with EMP to the on-site construction/operation manager, the Department of Transport and Main Roads and regulatory body, such as the Department of Environment and Resource Management, as required. ▪ Report any incidents of significant environmental harm to the on-site construction manager, the Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required.
Corrective Action	**Construction and operation:** ▪ Following a reportable incident, the restoration and repair of the environment to its natural state or as directed by the regulatory authority. ▪ Construction project manager can request cessation of works if there is a breach in performance criteria of EMP or a risk of it occurring.
Responsibility	**Construction and post construction:** ▪ Environmental officer is to liaise with the maintenance contractor with respect to the status of weeds within the Project area. ▪ Environmental officer should periodically monitor weed cover, replanting success, and report necessary maintenance to the maintenance contractor. **Operation:** ▪ The maintenance contractor is responsible for complying with the Weed Management Plan. ▪ Decommissioning. ▪ As for construction.

8 Fauna management

The area affected by the alignment is relatively large and supports a diversity of habitats, including eucalypt open forest, eucalypt woodlands, wet sclerophyll forest, riparian rainforest, Melaleuca sp. wetlands, swamps and notophyll vine forest (as described in **Chapter 7, Terrestrial Flora**). With such a diversity of habitats and a large area of remnant vegetation, the Project area supports a high diversity of terrestrial fauna, including some species of conservation significance. Fauna habitat is concentrated around the southern portion of the Project area where there are several valuable areas, including: Dularcha National Park, Eudlo Creek National Park and two Bioregional Wildlife Corridors (Rose Road and The Pinch Lane). There are also several major waterways that support remnant riparian rainforest, namely: Addlington Creek, South Mooloolah River, Mooloolah River and Eudlo Creek. The areas of valuable habitat in the northern portion of the Project area are limited to Paynter Creek and Petrie Creek.

Relevant legislation/policy: *Environment Protection and Biodiversity Conservation Act 1999; Vegetation Management Act 1999* (with reference to Essential Habitat); *Environmental Protection Act 1994; Nature Conservation Act 1992;* Nature Conservation (Wildlife) Regulation 2006, , Queensland Policy for Vegetation Management Offsets 2006 (with reference to Essential Habitat),.

Table 8: Fauna management plan

	Fauna management
Policy	To minimise destruction of valuable fauna habitat, particularly with reference to the EPBC Act listed Giant Barred Frog (*Mixophyes iteratus*) and achieve essential habitat offsets in compliance with Policy for Vegetation Management Offsets 2006.
Performance Criteria	1. No unnecessary clearing of threatened species habitat. 2. To adhere to the Vegetation Management Plan, this will ensure protection of fauna habitat and rehabilitation of disturbed areas. 3. Ensure compliance with licenses and approvals, particularly the referral to DEWHA under EPBC Act. 4. No death or serious injury to native fauna during clearing.

	Fauna management
Implementation Strategy	**Construction:** ▪ Clearing along the alignment to be limited to 60 m (or less); in areas identified as containing features of ecological significance, the construction corridor to be minimised further if possible. ▪ Removal and/or damage to existing native vegetation, particularly large trees, to be minimised wherever possible. ▪ Minimise clearing of large trees in riparian areas to protect potential nesting trees of raptors. ▪ Logs and large rocks to be placed in nearby vegetation or adjacent to such vegetation to create shelter habitat for terrestrial fauna species. ▪ An experienced spotter catcher to be engaged to check vegetation for the presence of fauna immediately prior to its clearing. ▪ Any injured or abandoned offspring of native wildlife to be taken to the nearest vet or wildlife carer (which ever is appropriate) for treatment at the expense of the Principal. ▪ The location of nests / dens or fauna to be clearly marked with flagging tape and these areas will be buffered by 10m and retained until the fauna has moved on of its own volition. ▪ Financial penalties to be imposed on contractor for unauthorised clearing of defined protected vegetation or clearing of remnant vegetation without the direction of a fauna spotter-catcher. ▪ Development and implementation of protocols for any displaced fauna to be relocated to more suitable similar habitat within the surrounding area. ▪ Fauna exclusion fences to prevent fauna re-entering the construction site. ▪ Where possible, the timing of vegetation clearance (particularly remnant vegetation associated with waterways) to be selected in order to minimise impacts (direct and indirect disturbances) to affected fauna habitats during optimum breeding periods. ▪ Strict litter control throughout the construction site to be supported by: site-wide signage; an adequate number of litter bins (which by design exclude birds and vermin); bin clearance on a regular basis; daily maintenance of crib rooms to ensure cleanliness; educational signage within crib rooms on the linkage between poor waste management practices, increases in pest animal populations and subsequent impacts to native fauna. ▪ Establishment of habitat enhancements to retained remnant habitat within the preferred alignment corridor (e.g. artificial roost boxes for microbats). **Operation:** ▪ Revegetation will prioritise plant species used by locally known EVR species such as *Allocasuarina*, fruiting trees, Koala feed trees, *P.praevenosa* and *E.tereticornis*. ▪ The incorporation of native grasses, herbs and shrubs for those areas where canopy species should not be planted (e.g. around bridges). ▪ Fauna underpasses, guide fencing and verge treatments require regular monitoring and maintenance to ensure their effectiveness and to allow remedial actions to be taken if trouble spots are recorded. ▪ At underpass locations, regular weed control, slashing of grasses, and removal of silt that may cause water to pond, is necessary. All *A.elegans* identified during revegetation and construction should be removed to assist in the conservation of Richmond Birdwing Butterfly (*Ornithoptera richmondia*). ▪ Where appropriate vegetation is not already in place, a rehabilitation program should ensure that the preferred conditions are provided and maintained. ▪ An ongoing trapping and eradication program that targets pest animals will be designed and implemented. Trapping procedures will be undertaken by suitably trained personnel. ▪ An ongoing systematic monitoring program will be designed and implemented to detect the occurrence of feral animals and to assess the success of the trapping and eradication program. ▪ Fauna exclusion fences and guide fences will be repaired as required. **Overhead wires are to be fauna-proofed to reduce the risk of electrocution. This may include the following measures:** ▪ The provision of barriers on electricity poles to reduce the likelihood of fauna climbing onto the wires. ▪ Insulation of wires. ▪ Spacing of wires to reduce electrocution risk.

	Fauna management
Implementation Strategy	**Decommissioning:** ▪ Areas recommended for rehabilitation are: Addlington Creek (north), Dularcha NP, North of Dularcha NP – Rose Road and surrounds, Mooloolah River, The Pinch Lane and surrounds (bioregional corridor) and Eudlo Creek NP. **EPBC Act specific:** ▪ Bridge footings should be set back at least 20 m from the low bank with a bridge height that will allow retention of rainforest understorey at the site or treatment of the area under the bridge to convey frog movement. It will be advantageous to separate tracks in some locations to maximise light penetration under the bridge. This will reduce habitat disturbance and allow native vegetation and flood debris to accumulate in which the species may shelter. ▪ Placement of footings / abutments / piers within the water channel should be avoided where possible. If this is not possible due to structural constraints, then footings / abutments / piers within the waterway should be designed to minimise impacts on the natural flow. ▪ Construction should avoid peak breeding times around November to February. ▪ Soft-construction methods are recommended for bridges, where footings are put in place with minimal clearing and pre-fabricated spans are then installed. ▪ Spotter-catchers should conduct pre-clearing surveys for *M. iteratus* and relocate individuals where possible. If relocation is not possible, areas of high frog activity should be flagged and avoided until activity has decreased. ▪ Hydrocarbons should not be stored within 100 m of creeklines and waterways. ▪ All areas where soil, chemicals and hydrocarbons are stored should be bunded to avoid surface flow into creek lines. ▪ Sediment control structures should be established during construction to reduce sediment loads entering waterways. ▪ Soil disturbance should be minimised to avoid excess surface flow carrying sediments into waterways. ▪ Areas under bridges within known *M. iteratus* habitat will be mulched with leaf litter prior to rehabilitation. Disturbed banks should be stabilised and revegetated as soon as possible and habitat enrichment with logs and other large debris undertaken. ▪ On-going weed management will be essential around and under bridge crossings, especially in *M. iteratus* habitat.
Monitoring	**Post construction:** ▪ Monitoring of rehabilitation areas as per Vegetation Management Plan. **Operation:** ▪ Regular monitoring of constructed fauna underpasses to ensure appropriate water levels and maintenance of vegetation at entrances. ▪ Monitoring of the condition of fence lines will be required to ensure that there has been no damage to the fence and that guide fences and exclusion fences are operational. ▪ Monitoring of fauna strike incidents, so that any 'hot spot' areas can be identified and measures put in place to ameliorate the problem.
Auditing	**Design:** ▪ The Commonwealth Department of Environment, Heritage Water and the Arts may audit the Project as part of the provisions of the decision under the EPBC Act. Therefore an auditable path of decisions around fauna management structures and procedures must be maintained for the life of the Project. **Construction:** ▪ Visual inspection of construction zones pre-clearing, several times during construction and post-construction to ensure performance criteria are being met. **Operation / Decommissioning:** ▪ Visual inspection of fauna underpasses and fence lines (exclusion and guide fencing) to ensure they are functional.

	Fauna management
Reporting	**Design:** ▪ Input to environmental design report, documenting habitat protection and connectivity measures incorporated into design. These must follow those identified in the EIS, and discussed in the Supplementary EIS. **Construction, operation, decommissioning:** ▪ Monthly reports during construction to indicate monitoring results, audits, training and incidents. ▪ During construction and operation, report any non-compliance with EMP to the on-site construction/operation manager, Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required. ▪ Report any incidents of significant environmental harm to the on-site construction manager, Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required.
Corrective Action	▪ Following a reportable incident, the restoration and repair of the environment to its natural state or as directed by the regulatory authority. ▪ Construction project manager can request cessation of works if there is a breach in performance criteria of EMP or a risk of it occurring. ▪ Any excessive clearing will be offset with rehabilitation.
Responsibility	**Construction:** ▪ The on-site construction manager is responsible for ensuring presence of a spotter-catcher during clearing works and reporting any incidents involving native fauna to the appropriate regulatory body. **Operation:** ▪ The maintenance contractor is responsible for the monitoring and maintenance of fauna underpasses.

9 Hydrology and water quality

The Project area traverses the mid and upper reaches of three Southeast Queensland catchments, namely, the Pumicestone, Mooloolah and Maroochy catchments. The total area of each catchment within the Project area was 2.88, 22.09 and 41.37 km^2, respectively. Based on the SEQ catchment digital terrain model and stream order mapping (WBM 2005), a total of 163.4 km of stream length has been mapped within the Project area, most of which are minor drainages (stream orders one and two). Five main drainage systems traverse the Project area, including Petrie Creek, Paynter Creek, Eudlo Creek, Mooloolah River and minor drainages of Ewen Maddock Dam. The Project also traverses a number of aquifers, some of which are associated with groundwater bores.

A mosquito management plan will be developed for both the construction and operation phases of the Project.

Relevant legislation/policy: *Environment Protection and Biodiversity Conservation Act 1999*; *Nature Conservation Act 1992; Vegetation Management Act 1999; Environmental Protection Act 1994; Water Act 2000;* Nature Conservation (Wildlife) Regulation 2006; Queensland Policy for Vegetation Management Offsets 2006, Queensland Health *Guidelines to Minimise Mosquito and Biting Midge Problems in New Development Areas*

Table 9: Hydrology and water quality plan

	Hydrology and water quality
Policy	To minimise destruction of aquatic habitat, avoid impacts on flood hydrology and achieve no worsening of water quality within the riparian and groundwater systems and no significant lessening of yield from groundwater resources affected by the Project.
Performance Criteria	1. No decrease in water quality (surface or groundwater) as a result of the Project. 2. No worsening of flooding scenarios as a result of the Project. 3. No significant lessening of yield from groundwater resources. 4. To adhere to the Vegetation Management Plan in Section 22.3.5, which will ensure protection of aquatic habitat and rehabilitation of disturbed areas. 5. No ponding of water or creation of mosquito breeding habitats. 6. Ensure compliance with licenses and approvals, particularly the under *Water Act 2000* and *Fisheries Act 1994*. 7. To ensure continued movement of aquatic fauna during construction.

	Hydrology and water quality
Implementation Strategy	**Design:** ▪ Incorporate findings of flood study into Project design. ▪ Utilise the Queensland Health *Guidelines to Minimise Mosquito and Biting Midge Problems in New Development Areas*. **Construction:** ▪ Relocation of extraction points associated with groundwater bores where applicable. ▪ Minimisation of removal of riparian vegetation. ▪ Prior to the commencement of works, establishment of appropriate sediment and erosion mitigation measures for the impact zone. ▪ Site access to follow the natural contour of the terrain, where possible; avoid steep slopes, wet or rocky areas and highly erosive soils. ▪ Access ways to be delineated with sediment and erosion control fencing and incorporate earthen bunds every 5 – 10 m where slope is an issue. ▪ Silt fences to be placed on the down-slope boundary of the construction zone; silt fences to be placed along the contour and not across it to avoid heavy sediment loading. ▪ Bank stabilisation (i.e. hydro-mulching, planting or structural stabilisation where required) to be undertaken immediately after construction activities for areas no longer required for construction works. ▪ A mobile spill kit to be available on site. ▪ Topsoil stripped from the site to be stockpiled and protected from erosion until re-use during site remediation. ▪ Stockpiles to be located on the up-slope side of any excavation and as far as possible from the waterway. ▪ Any sediment material that is spilled to be cleaned up. ▪ Earthen bunds or sediment fences to delineate the toe of any stockpiles. ▪ Catch-drains to be used to intercept and divert run-off around the area of impact. ▪ Avoid earthworks during wet weather. ▪ Construction activities to be conducted in a manner, to minimise disturbance to stream banks and beds. ▪ No operation outside of construction zone. ▪ No clearing, operation of machinery or personnel access within 3 m of the high bank. ▪ Re-fuelling of machinery not be undertaken less than 30 m from the waterway and fuel be stored at least 50 m from the waterway. ▪ Implementation and maintenance of control measures for the storage and handling of chemicals (e.g. fuels, oils etc.) to ensure potential contaminants are prevented from surface or subsurface leakage from the construction site. ▪ Storage of chemicals to be at least 50 m from the waterway and within a bunded area. ▪ Water leaving the work sites to be monitored and to be of similar quality to that of the receiving waters and efforts will be made to ensure contaminants do not leave the site. ▪ Minimising the risk of in-stream and riparian weeds through the implementation of vegetation clearing and revegetation management strategies. ▪ Minimising in-stream habitat disturbance, including in-stream barriers and the creation of shallow ponded waters. ▪ Implementation of management strategies for in-stream barriers.

	Hydrology and water quality
Implementation Strategy	**Operation:** ▪ Drainage provided along the railway to collect run-off which may contain leached chemicals and metals. ▪ Implementation of sedimentation management practices (Queensland Rail actively seeks to identify sites where sedimentation problems may occur as a result their activities and implement appropriate management activities to minimise these impacts). ▪ Emergency response (Queensland Rail has emergency response plans and training that are to be utilised when required). ▪ The surface level of a causeway to be the same, or lower than the natural level of the stream bed to reduce interference with flow. ▪ Habitat within a culvert to be as natural as possible (e.g. allow rocks and bed materials to infill the culvert base). ▪ Light penetration to be as great as possible. ▪ Maintain the natural stream flow and velocity to be maintained or mimicked as closely as possible. **Decommissioning:** ▪ The most effective mitigation measure regarding conservation of aquatic ecosystems will be the protection and rehabilitation of native vegetation cover associated with waterways. ▪ As for construction.
Monitoring	**Construction and Operation:** ▪ Regular water quality monitoring during construction and when required during operation or maintenance works. ▪ Regular monitoring during construction to ensure that the natural stream flow and velocity will be maintained or mimicked as closely as possible. ▪ Monitoring to identify potential breeding habitat of mosquitoes and biting midges before it becomes an issue. ▪ Monitoring of water extraction locations, i.e. water levels and quality. ▪ Monitoring of the condition of the railway so as to avoid leaching of contaminants.
Auditing	**Construction:** ▪ Visual inspection and water quality sampling of construction zones pre-clearing, several times during construction and post-construction to ensure performance criteria are being met. **Operation / Decommissioning:** ▪ Visual inspection and water quality sampling of waterways affected by the Project, i.e. at crossing points.
Reporting	**Design:** ▪ Prepare input to environmental design report. **Construction:** ▪ Monthly reports during construction to indicate monitoring results, audits, training and incidents. ▪ During construction report any non compliance with EMP to the on-site construction manager, Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required. **Operation:** ▪ During operation report any non compliance with EMP to the operation manager, Department of Transport and Main Roads and the regulatory body, such as the Department of Environment and Resource Management, as required.
Corrective Action	**Construction and operation:** ▪ Following a reportable incident, the restoration and repair of the environment to its natural state or as directed by the regulatory authority. ▪ Construction project manager can request cessation of works if there is a breach in performance criteria of EMP or a risk of it occurring. ▪ Any excessive clearing of aquatic habitats will be offset with rehabilitation.

	Hydrology and water quality
Responsibility	**Design:** ▪ Design consultant responsible for integrating the flooding information into design, and responding to the requirements of various EMP plans. **Construction:** ▪ The on-site construction manager is responsible for ensuring adherence to the Hydrology and Water Quality Plan. **Operation:** ▪ The maintenance contractor is responsible for the monitoring and maintenance of aquatic environments affected by the Project.

10 Air quality and dust

The closest air quality monitoring station is located approximately 13 km to the north of the Project area at Mountain Creek (Mountain Creek Primary School, Maroochy Shire) which records ozone, PM10 (Particulates), nitrogen oxides and meteorological conditions. A review of the air quality monitoring data on 6 October 2008 showed that all indicators were classified as 'good to very good'.

Data from industrial facilities and diffuse sources for the 2005-2006 NPI reporting year identified motor vehicles as the top source of emissions followed by solid fuel burning (domestic), architectural surface coatings, domestic/commercial solvents/aerosols, lawn mowing and others.

The most significant potential impact during construction will be dust from wind erosion of exposed areas, earthworks and road haulage. Implications of this on water tank and private water supply has been raised through the submission process, and the measures outlined below are intended to manage this risk. Impacts during the operational phase will largely relate to emissions and are likely to be beneficial as the rail is intended to reduce road traffic.

Relevant legislation: *Environmental Protection Act 1994*; Environmental Protection Regulation 2008; Environmental Protection (Air) Policy (EPP Air) and National Environment Protection Measures (NEPM's) are a broad framework-setting statutory instruments defined in the *National Environment Protection Council (NEPC) Act 1994*.

Table 10: Air quality and dust plan

	Air quality and dust
Policy	To manage and control the effects of construction activities and operational activities on air quality by reducing the effects of dust generation, exhaust emissions and any other functions causing an impact on the existing air quality.
Performance Criteria	1. Minimise air pollution caused by dust and vehicle emissions. 2. Maintain air quality within acceptable and legal limits. 3. Aim to achieve PM10 = 50 (ug/m3), not exceed PM10 (24hr average) – 150 (ug/m3), PM10 (annual average) – 50 (ug/m3), Dust Deposition – 120 (ug/m2/day), with reference to World Health Organisation Standards applicable at the time of construction. 4. Minimise the number of complaints received from nearby sensitive receptors regarding air quality issues.

	Air quality and dust
Implementation Strategy	**Construction:** **Dust:** ▪ Community/sensitive receptors to be informed of construction activities and hours of work. ▪ Review of construction activities and modification during periods of high-winds. ▪ Identify adjoining and nearby residents dependent on tank storage for water supply, conduct a risk based review of the potential for contamination from construction dust. ▪ Potential use of timber hoardings around work areas near sensitive receptors. ▪ Contractor to implement Erosion and Sedimentary Control Management Plan measures. ▪ Minimised vegetation removal as per the Vegetation Management Plan; cleared areas to be reshaped and rehabilitated as soon as practical after the completion of works. ▪ Mulching of timber and cleared vegetation on site to avoid transportation. ▪ Compact unsurfaced roads and verges. ▪ Speed limits on unsealed roads to be minimised (20- 40 km/hr); rumble strips or gravel pads to be provided at site entry/exit points to assist in removal of debris; roads to be swept if soil is tracked onto them. ▪ Any dust, soil or mud deposited on public roads caused by construction vehicles to be removed immediately and disposed of appropriately. ▪ Equipment to be fitted with dust collection/suppression devices. ▪ Excavation and stripping works to be undertaken outside of dusty/windy conditions, where possible. ▪ Use of water as a dust suppressant, the water used to be rainwater harvested on site or recycled water from another source; potable town water not to be used for this purpose. ▪ If conditions allow, water to be used as a dust suppressant on material stockpiles and unsealed access tracks to reduce the risk of airborne dust; consideration to be given to establishing rain water storage on site. ▪ Inclusion and retention of vegetated buffers or windscreens at the nearest surrounding sensitive receptors. ▪ Minimised soil and fill stockpile heights. ▪ Locate stockpiles away from sensitive receptors. ▪ For material stockpiles that are not to be used in less than six months, a cover crop or other suitable capping to be established to minimise aeolian dust generation. ▪ Haul truck loads to be covered. ▪ Installation of temporary wheel washers at construction exists for haul trucks leaving the site (as per Institutions of Engineers of Australia (IEA) Soil Erosion and Sediment Control Guidelines). **Emissions:** ▪ There is to be no burning of material on site. ▪ The maintenance of machinery will be carried out on site to reduce emissions caused by transporting machinery for maintenance off site. ▪ Emissions from all construction vehicles will comply with the appropriate standards and regulations. ▪ Machinery should be switched off during prolonged periods of inactivity. ▪ Vehicle kilometres during construction will be reduced where possible by encouraging car sharing etc. ▪ Queuing of construction vehicles will be avoided. ▪ On-site power usage will be limited where possible. **Operation:** ▪ A negative impact on local air quality during the operational phases is highly unlikely. However, if maintenance or repair works requires excavation or additional construction, then the management plan as described for 'Construction' will be applicable. **Decommissioning:** ▪ The decommissioning stage will involve removal of the redundant railway line, rehabilitation and construction of a rail trail (in some areas). The mitigation measures for the decommissioning stage will there be the same as those for the construction stage of the Project.

	Air quality and dust
Monitoring	**Construction:** Ongoing surveillance by site workers, particularly the environmental officer and on-site construction manager. In the event of a complaint, and when requested by the administering authority, the Principal or its Contractors will: ▪ In the first instance alter procedures to reduce the nuisance issue. ▪ Liaise with the administering authority and/or complainant over remedial action. Where the above actions do not resolve the nuisance dust issue and where appropriate, dust and particulate monitoring will be undertaken to investigate any complaint of environmental nuisance caused by dust and/or particulate matter, and the results notified within 14 days to the administering authority following completion of monitoring. Monitoring must be carried out at a place(s) relevant to the potentially affected dust sensitive place and at upwind control sites and must include: a) For a complaint alleging dust nuisance, dust deposition. b) fFor a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere over a 24hr averaging time. In relation to coal dust complaints, dust and particulate matter must not exceed the following levels when measured at any nuisance sensitive place: a) Dust deposition of 3 grams per square metre per month, when monitored in accordance with Australian Standard AS 3580.10.1 of 2003 (or more recent editions). b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere of 130 micrograms per cubic metre over a 24 hour averaging time, when measured using AS 3580.9.6 – 2003 (or more recent editions) 'Ambient air - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet -Gravimetric method'.
Auditing	Monthly reports to be provided to the Department of Transport and Main Roads detailing air quality results, audits, training and complaints.
Reporting	Complaints and environmental incidents of significant environmental harm to be reported to the construction project manager and the regulatory bodies, such as the Department of Environment and Resource Management.
Corrective Action	Modify work practices as required. Following a reportable incident, the restoration and repair of the environment to its natural state or as directed by the regulatory authority. The on-site construction manager can request cessation of works if there is a breach in performance criteria of EMP or a risk of it occurring.
Responsibility	The environmental officer reporting to the on-site construction manager will have the primary responsibility for identifying problems with dust and significant emissions that are able to be detected via sight or smell.

11 Noise and vibration

Noise and vibration arise during construction and operation of a railway. Operating railways generate airborne noise due to the rolling associated with the railway car wheels on the track, engine and exhaust noise of locomotives and impacts between cars during shunting. Airborne noise may also be generated by fixed railway equipment such as substations, tunnel ventilation plant and station PA systems.

Relevant legislation: *Environmental Protection Act 1994*, Environmental Protection (Noise) Policy 2008, Environmental Protection Regulation 2008. Note: These legislative provisions may be subject to change.

Relevant guidelines: Queensland Rail Code of Practice, Railway Noise Management November 2007, Noise and Vibration from Blasting Guideline former EPA (now Department of Environment and Resource Management) 2006, Department of Transport and Main Roads Interest in Planning Schemes 3 – Planning for Rail Noise, *Workplace Health and Safety Act 1995*, Noise Management Manual, former Environment Protection Agency (now Department of Environment and Resource Management) 2000. Note: These guidelines may be subject to change.

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Relevant Standards: AS2436-1981: Guide to Noise Control on Construction, Maintenance and Demolition sites, AS2012 – 1990: Acoustics – Measurement of airborne noise emitted by earth-moving machinery and agricultural tractors – Stationary test condition. Part 1: Determination of compliance with limits for exterior noise, AS2670-1990: Evaluation of Human Exposure to Whole Body Vibration, BS6472-1992: Evaluation of Human Exposure to Vibration in Buildings and AS1055.1 – 1997: Acoustics – Description and measurement of environmental noise. Note: These standards may be subject to change.

The assessment of low Frequency Noise will be assessed against the applicable guidelines at the time of design.

Table 11: Noise and vibration plan

	Noise and vibration
Policy	To ensure that noise and vibration is maintained within acceptable and legal limits during construction and operation.
Performance Criteria	1. To ensure there is minimal impact to sensitive receptors. 2. Operational noise from the railway not to exceed acceptable levels (as per established Queensland Rail planning noise guidelines) of 65 dBLAeq, 24 hr or 87 dBLAmax by more than 5 dB(A) during the day. 3. Construction noise to have minimum impact on local community, outside working hours noise limits to be met where practical, to be agreed with QR and the construction manager. Suggested that these not to exceed background noise levels by more than 10 dB(A) in the evening, and night time internal noise criteria of 40 $L_{A1,adj,1hr}$. 4. Vibration to not exceed 5 mm/sec or 2 mm per second for any sensitive receptors (e.g. historical buildings, monuments etc) during construction and operation. 5. To respond proactively to noise issues.
Implementation Strategy	**Design/ Pre-construction:** ▪ A Building Condition (Dilapidation) Survey of buildings located close to activities producing potentially high levels of vibration will be undertaken prior to works commencing. ▪ The noise levels of all items of plant will be measured prior to commencing works on site to assess the impact on the community. ▪ Predictive modelling of the proposed construction techniques and monitoring of existing noise levels will be undertaken. Construction techniques are to be designed having regard to the goals for noise and vibration performance criteria outlined above. ▪ Design of noise treatments to respond to outcomes of future monitoring and modelling, and be undertaken in consultation with the SCRC council and local community ▪ Community/sensitive noise receptors, including critical premises such as hospitals, nursing homes and schools will be informed of haulage routes on local roads through residential areas, construction activities and hours of work. ▪ When works need to occur outside of the 'standard hours' and when noise levels are likely to exceed acceptable levels, the affected noise receptors will be consulted.

	Noise and vibration
Implementation Strategy	Construction: ▪ Noise generating activities should be restricted to work hours as agreed with the Department of Transport and Main Roads. Work hours will usually be between 7.00 am – 6:00 pm Monday to Friday and between 7.00 am and 1.00 pm on Saturday, unless advised otherwise. No activities to occur that generate noise impacts on Sunday or public holidays. Any changes in work hours to be communicated with the community and agreed with the Department of Transport and Main Roads. ▪ Machinery will be fitted with high efficiency mufflers to conform to National Standard for Occupational Noise (NOHSC: 1007 (2000)). ▪ Site compounds and equipment storage sites will be 100 metres or greater from noise sensitive receptors. ▪ Consideration will be given to the use of silencers / dampening, servicing or replacement of plant or machinery, bunding, enclosures or screening and staging of works. ▪ Where possible and practical, mobile equipment will be fitted with warning lights rather than audible sirens or beepers. Other alternatives may include 'smart alarms' (which adjust volume depending on ambient noise level), 'quaker' low frequency alarms, spotters, CCTV. ▪ Vehicle fleet will be maintained to control engine noise emissions in compliance with Australian Design Rule 28/01 (External Noise and Motor Vehicles) and tested with National Road Transport Commission document Station Exhaust Noise Test Procedures. ▪ Use of vehicle horns will be reduced. ▪ Tailgates should be secured to minimise 'clanging' noise on empty trucks. ▪ Minimise speed limits on unsealed roads (20-40 km/hr). ▪ Appropriate traffic management of trucks entering and exiting site shall minimise congestion and delays and additional noise near sensitive receptors. ▪ Access tracks will be maintained to minimise additional noise of trucks travelling on these roads. ▪ When using bored piles for bridges, those cast in-situ or screen drop hammers will be used to minimise noise disturbance. ▪ The construction contractor is to calculate the number of properties within the risk radius from the works. Any structure within a radius of three times the calculated safe distance from the expected activity (zone of influence), should be nominated for condition surveys. ▪ When noise levels are predicted to exceed acceptable levels, affected noise receptors will be consulted and appropriate mitigation measures will be proposed. Measures could include temporary noise barriers where required. To maximise the effectiveness of the barriers, they should be positioned as close to the noise source as possible. Other measures could include careful scheduling of work, treatments to building facades and, as a last resort, temporary relocation of affected receptors. ▪ If specific construction activities are predicted to result in a significant noise impact and are to occur often during the construction phase, scheduled regular occurrence may be implemented in consultation with affected receptors. **Operation:** ▪ Design all new bridges near residential areas with ballasted or vibration isolated track. ▪ Construct new corridor track with continuously welded rail wherever feasible. ▪ Track lubrication / greasing on tight radius curves. ▪ Employ new or retrofitted rolling stock that is quieter than existing rolling stock. ▪ Implement noise barriers in areas exceeding acceptable noise levels. ▪ Maintenance of noise barriers. **Decommissioning:** ▪ The decommissioning stage will involve removal of the redundant railway line, rehabilitation and construction of a rail trail (in some areas). The mitigation measures for the decommissioning stage will there be the same as those for the construction stage of the Project.

	Noise and vibration
Monitoring	**Construction:** ▪ Where corrective actions do not resolve a nuisance noise issue and where appropriate, noise monitoring will be undertaken to investigate any complaint of environmental nuisance noise. When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results, once received by the Principal, notified within 7 days to the administering authority. Monitoring must include: (a) LAmax, adj T. (b) LAN, T (where N equals statistical levels of 1, 10, and 90). (c) The level and frequency of occurrence of impulsive or tonal noise. (d) Atmospheric conditions including temperature, relative humidity and wind speed and direction. (e) Effects due to extraneous factors such as traffic noise. ▪ The method of measurement and reporting of noise levels must comply with the latest edition of the Department of Environment and Resource Management Noise Measurement Manual.
Auditing	**Design:** ▪ Review of Project design and compliance with established standards wrt noise treatment. Construction and decommissioning: ▪ Monthly monitoring reports will be submitted to the project Manager and will be made available to a complainant and / or regulatory body upon request. **Operation:** ▪ QR standard procedures to apply
Reporting	**Construction and decommissioning:** ▪ Reporting during construction to generally provide information, such as time, location, construction activity, other extraneous noise sources, weather conditions. LAmax, LA10, LA1, LA90, LAeq and construction noise levels compared with criteria of Project noise levels. ▪ A noise complaint register to be maintained during construction. Where possible, a site activity log book to record the construction activity and times to assist with investigation of community complaints.
Corrective Action	**Construction and decommissioning:** ▪ In the event of a complaint, and when requested by the administering authority, the Principal (or Contractor) will: ▪ In the first instance alter procedures to reduce the noise nuisance. ▪ Liaise with the administering authority and/or complainant over remedial action. ▪ Where corrective actions do not resolve a nuisance noise issue and where appropriate, noise monitoring will be undertaken to investigate any complaint of environmental nuisance noise (as outlined above in Monitoring section). ▪ Where source noise and vibration controls are not possible or ineffective, further controls will be investigated at the receptor end. ▪ Complaints will be responded to promptly with the information and action required. When necessary, the complaint process will allow for special procedures such as face-to-face meetings and on-going communications with affected parties to respond to validated complaints. **Operation:** ▪ QR standard procedures to apply
Responsibility	**Construction and decommissioning:** ▪ The Noise monitoring contractor will be responsible for carrying out the noise investigations and monitoring program during construction and operational phases of the Project. ▪ The community relation representative will be responsible for investigating noise complaints. ▪ The on-site construction manager will be responsible for implementing this EMP.

12 Waste management

Waste management for this Project follows the waste management hierarchy as a guiding principle. The waste management hierarchy is a framework for prioritising waste management practices to achieve the best environmental outcome. The preferred order of adoption is as follows:

1. avoid waste by optimising construction, operation and decommissioning methods
2. re-use waste by identifying sources that can utilise the waste
3. recycle waste by identifying facilities that are able to recycle waste
4. energy recovery from waste
5. disposal of waste at an appropriate facility

Relevant legislation/policy: *Environmental Protection Act 1994;* Environmental Protection (Waste Management) Regulation 2000; Environmental Protection (Waste) Management Policy 2000;AS 1940 the Storage and Handling of Flammable and Combustible Liquids

Table 12: Waste management plan

	Waste management
Policy	To prevent any adverse impacts to the local social and environmental conditions from any construction and operation activities that generate waste by the implementation of waste management principles and best practice disposal strategies.
Performance Criteria	1. To minimise waste generation in line with the principles of the waste hierarchy described above. 2. To minimise the volumes, as far as possible, of hazardous and non-hazardous waste generated. 3. To minimise the use of hazardous substances. 4. To reuse or recycle a significant proportion of waste. 5. To comply with relevant regulations and / or policies.
Implementation Strategy	**Construction:** ▪ Construction material quantities accurately estimated to reduce over-ordering and on-site stockpiling of materials. ▪ Choice of suppliers that have a working waste minimisation policy in place. ▪ Where possible, position construction sites and or buildings on previously cleared land. ▪ Re-use of mulch from cleared vegetation on site; the leafy branches of weed species not to be mulched. ▪ Building materials, timber, metals and plastics from construction and demolition to be reused where possible. ▪ Where appropriate, leftover concrete formed into materials suitable for alternative projects or crushed for road base and bedding material. ▪ The environmental officer to investigate the recycling of any particular waste stream generated by the Project, and to contact the respective organisation to arrange for containers for waste collection and removal. ▪ Bins or skips to be provided for temporary storage of all waste (other than natural earth, rocks or vegetation) and the frequent collection of these bins or skips. ▪ All waste to be appropriately segregated and stored in suitable on-site storage facilities. ▪ All regulated waste sealed, correctly labelled and contained within bunded areas prior to collection / removal; Movement of regulated waste tracked. ▪ All hazardous materials and dangerous goods waste to be stored appropriately and containers appropriately labelled and collected by licensed contractors. ▪ Movement of vehicles containing hazardous material to occur during off-peak traffic times to minimise risks. ▪ All collectable recyclable materials taken to recycling centres. ▪ All putrescible waste to be stored in a manner not to attract vermin. ▪ Fill generated from earthworks activities reused as backfill, bunds or embankment on the site. ▪ Any solid waste that cannot be reused or recycled in a practicable and feasible manner to be disposed of in off-site licensed landfill sites. ▪ No waste materials left on site post construction. ▪ Spill and emergency response plans for hazardous materials or dangerous goods.

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	Waste management
Implementation Strategy	**Site office:** ▪ The site office to implement a paper reduction office system and recycle used goods as far as possible. ▪ Separate and recycle paper, cardboard, wood, timber, glass plastic, aluminium and steel on site. ▪ Buy goods made of recycled materials or buy goods that are of a quality that will last. ▪ Choose products with minimal packaging and bulk buy, where possible. ▪ Maximise thermal performance to minimise use of heating and air conditioners for site office. ▪ Reduce energy and water use. ▪ Implement staff training regarding waste management. ▪ Use of a mobile composting facility (e.g. Bokashi Bin) for food scraps. ▪ Collection and transportation of waste by a licensed contractor with disposal at a suitable landfill facility. ▪ All sewage and waste-water to be treated before release. **Operation:** ▪ Spill and emergency response plans for hazardous materials or dangerous goods. ▪ Appropriately placed litterbins to avoid the dispersal of litter and regular site maintenance duties at stations. ▪ Sealable litter bins at stations to minimise the attraction of vermin, insect and pests. ▪ Waste sorting, composting and recycling. **Decommissioning:** The decommissioning stage will involve removal of the redundant railway line, rehabilitation and construction of a rail trail (in some areas). The mitigation measures for the decommissioning stage will there be the same as those for the construction stage of the Project. In addition: ▪ Materials from demolished structures should be retained and reused on site, i.e. aggregate, sleepers and rail. ▪ Materials that cannot be reused on site should be transported to sites where they can be reused.
Monitoring	**Construction:** ▪ A regular site inspection by the environmental officer during construction to ensure that reuse and recycling of materials is occurring on site as per the EMP and hazardous waste is being disposed of appropriately. ▪ A register of waste to be prepared during construction that details type and quantity of waste, when and where waste was reused, disposed, recycled and waste transportation details (company, licensed operation name and license number).

Auditing	**Construction and decommissioning:**
	▪ A monthly waste disposal report shall contain the following:
	  ▪ Copies of all waste dockets and manifests.
	  ▪ The location of waste storage areas.
	  ▪ Dates and times of inspections.
	  ▪ Details of procedures.
	  ▪ Results of any monitoring.
	  ▪ Assessment and evaluation of results.
	  ▪ Summary of complaints and corrective actions.

Reporting	**Construction and decommissioning:** ▪ The Department of Environment and Resource Management and the client will be notified if any regulated waste, as defined in Environmental Protection (Waste) Regulation 2000, or any other materials causing land contamination have been disposed of or accidently spilt or leaked on-site.
Corrective Action	**Construction and decommissioning:** ▪ In the event that monitoring identifies practices inconsistent with the Waste Management Plan, action will be undertaken to remedy the situation. ▪ Non-conformance notices and corrective action notices will be prepared and actioned. ▪ Construction project manager can request cessation of works if there is a breach in performance criteria of EMP or a risk of it occurring.
Responsibility	**Construction and decommissioning:** ▪ The environment officer will be responsible for producing the monthly waste disposal report during construction. ▪ The on-site construction manager is responsible for ensuring adherence to the Waste Management Plan.

13 Traffic and transport

Relevant legislation/policy: *Transport Infrastructure Act 1994; Transport Planning and Coordination Act 1994; Transport Operations (Road Use Management) Act 1995;* Transport Infrastructure (Rail) Regulation 2006; Guidelines for Assessment of Road Impacts of Development (2006).

The traffic and transport management plan will be progressed through consultation with the Department of Transport and Main Roads, the Sunshine Coast Regional Council, and emergency services authorities.

Table 13: Traffic and transport management plan

	Traffic and transport management
Policy	To minimise the duration and extent of delays and disruption to users of the road network (drivers, bus services, pedestrians, cyclists and others). To manage the impacts of planned station closures or access alterations to rail passengers. To provide safe working and travelling environment for the duration of construction and operation of the Project.
Performance Criteria	1. Minimise delay to traffic during construction. 2. Minimise delay to passenger and freight rail services. 3. Preparation of a Road Use Management Plan for construction vehicles.
Implementation Strategy	**Design:** ▪ Identify the extent, capacity and condition of the existing road network required for construction traffic, and identify upgrade requirements and responsibilities prior to commencement of construction. **Construction and decommissioning:** ▪ Site traffic will use site haul roads within the Project area, or as close to the site as possible. ▪ Working hours for construction on the existing operational rail line will be restricted as much as possible, to minimise disruption to rail services. ▪ Replacement bus services may be required for passengers for connection between stations. ▪ Alternate station access will be required for some stations during construction. ▪ Temporary roads or alternative routes will be provided. ▪ Lane closures will allow one lane to open. ▪ Temporary access will be allowed on the side of the road with wide road reserves. ▪ Safety barriers, appropriate signage and traffic control will be used during construction. **Operation:** ▪ A negative impact on local traffic and transport during the operational phases is highly unlikely. However, if maintenance or repair works requires excavation or additional construction, then the management plan as described for 'Construction' will be applicable.
Monitoring	**Construction:** ▪ Ongoing surveillance by site workers, particularly the on-site construction manager.
Auditing	**Construction:** ▪ Visual inspection of areas used by construction traffic, several times during construction and post-construction to ensure performance criteria are being met. It is anticipated that TMR and the Sunshine Coast Regional Council will take a role in this process.
Reporting	**Construction:** ▪ During construction report any non compliance with EMP to the on-site construction manager and the Department of Transport and Main Roads, as required.
Corrective Action	**Construction:** ▪ In the event that monitoring identifies practices inconsistent with this plan, action will be undertaken to remedy the situation. ▪ Non-conformance notices and corrective action notices will be prepared and actioned. ▪ Construction project manager can request cessation of works if there is a breach in performance criteria of EMP or a risk of it occurring.
Responsibility	**Construction:** ▪ The on-site construction manager will have the primary responsibility for identifying problems with site traffic on local roads.

14 Cultural heritage and conservation

A cultural heritage management plan is being progressed in accordance with the *Aboriginal Cultural Heritage Act 2003*. This document is to be referred to in the future preparation of any site activities, including geotechnical investigations.

Relevant legislation includes the *Aboriginal Cultural Heritage Act 2003* and the *Queensland Heritage Act 1992*.

Table 14: Cultural heritage and conservation management plan

	Cultural heritage
Policy	To avoid where reasonably possible all cultural heritage, or where this is not possible, to minimize and manage the potential for harm to cultural heritage.
Performance Criteria	1. Ensure management (including protection and preservation) of Aboriginal and non-indigenous cultural heritage values. 2. Comply with Cultural Heritage Duty of Care to Aboriginal cultural heritage. 3. Comply with the Projects' Cultural Heritage Management Plan (CHMP) and agreement.
Implementation Strategy	**Design/ Pre-construction:** ▪ A Cultural Heritage Management plan and agreement is in preparation. This will encompass all management measures and requirements for Aboriginal cultural heritage. This will apply to any works undertaken in the Project area, including preliminary geotechnical survey, preparatory road works, and any other activities with the potential for disturbance of the surface or sub-surface. ▪ A site specific Conservation Management Plan is to be prepared for the potentially impacted historic sites of national or State importance and the relevant approvals under the Queensland Heritage Act 1992 will be sought. This will include documentation of all sites directly or indirectly impacted by the Project, through photographic records. This will involve significant consultation with the Sunshine Coast Regional Council, DERM and local heritage and historic groups. ▪ Cultural heritage training will be conducted for all on-site personnel prior to construction, in accordance with the requirements of the CHMP. **Construction:** ▪ All works are to be undertaking in accordance with the Cultural Heritage Management Plan (CHMP). ▪ The CHMP is likely to require monitoring by representatives of the Aboriginal Parties, will occur in those parts of the corridor that were defined by the cultural heritage survey as having potential for sub-surface cultural heritage. **Operation:** ▪ The disturbance of cultural heritage during operational phases is highly unlikely. However, if maintenance or repair works require excavation in previously identified risk areas, then the cultural heritage management plan as described for 'Construction' will be applicable. **Decommissioning:** ▪ As for construction.
Monitoring	**Pre-construction, Construction and decommissioning:** ▪ Monitoring will be ongoing throughout the pre-construction and construction phase pursuant to the CHMP, i.e. an Aboriginal representative is required to be present during pre-construction surveys and excavation of potentially significant areas during construction.
Auditing	▪ The treatment of all culturally significant areas (known and discovered) will be managed through the CHMP for all phases of the Project.
Reporting	▪ Report any findings of archaeological items to on-site construction manager, cultural heritage representative, the cultural heritage project officer of the Department of Transport and Main Roads and the Department of Environment and Resource Management.
Corrective Action	▪ Action In the event that any heritage items are uncovered during works, work in that area must cease immediately and finds be reported to the Department of Transport and Main Roads cultural heritage project officer. Appropriate barriers would be placed around exclusion zones and all site personnel notified. Works can recommence once the item has been removed or an agreement for treatment of the site made.
Responsibility	**Pre-construction, Construction and decommissioning:** ▪ All personnel are responsible for reporting potential finds to the appropriate people, i.e. cultural heritage representative or on-site construction manager. ▪ The on-site construction manager will be responsible for compliance with the CHMP. ▪ The cultural heritage representative will be responsible for documentation of culturally significant areas their treatment for auditing.

15 Hazard and risk

This section of the Planning EMP provides control plans for the following elements relevant to hazard and risk:

- handling and storage of hazardous (including dangerous) goods
- health and safety
- emergency response procedures.

The Management Plans are outlined below in **Tables 15, 16 and 17**.

During construction, the responsible construction authority will integrate pre-existing systems to manage occupational health and safety, hazardous goods storage and handling and emergencies.

As Queensland Rail is anticipated to be the operator of the Project upon commissioning, their operational systems (including their occupational health and safety, hazardous good management and emergency management processes and systems) will be implemented across the Project during operations.

Queensland Rail has a suite of Emergency Management Plans for the operations of railways; the following general requirements have been identified through a review of other rail studies[1] :

- emergency management – general requirements
- a signal passed at danger
- collision
- dangerous goods emergency
- defective rolling stock and unsafe loads
- derailment
- emergency management – requirements for train crew
- environmental emergency
- evacuation of trains
- fires
- level crossing emergency
- onsite management procedures
- overhead line equipment emergency
- passenger door emergency
- person hit by train
- serious injury or illness on trains
- threats
- track obstructions
- wrong side signal failure.

Relevant legislation/policy: *Environmental Protection Act 1994 (Qld), AS 1940 The Storage and Handling of Flammable and Combustible Liquids, Workplace Health and Safety Act 1995 (Qld)* and Workplace Health and Safety Regulation 1995 (Qld*), Transport Infrastructure Act 1994 (Qld),* Transport Infrastructure Dangerous Goods by Rail Regulation 2002 (Qld), *Dangerous Goods Safety Management Act 2001 (Qld)* and Dangerous Goods Safety Management Regulation 2001 (Qld), *Explosives Act 1999 (Qld) and Explosives Regulation 2003 (Qld), Fire and Rescue Services Act 1990 (Qld)* and Fire and Rescue Service Regulation 2001 (Qld), *Disaster Management Act 2003 (Qld)*

1 Source: http://www.networkaccess.qr.com.au/Images/Ch_4.11_Risk_Hazard_tcm10-11314.pdf

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Table 15: Hazardous goods handling and storage management plan

	Handling and storage of hazardous goods
Policy	To manage the purchase, handling, storage and disposal of hazardous (including dangerous) goods on site in a manner that does not cause harm to the environment, project personnel or the public.
Performance Criteria	1. Target of no contamination of the environment and no injuries to personnel or the public from the storage or handling of hazardous goods. 2. Compliance with relevant legislation and Australian standards listed in **Table 19.1.2.** 3. Preparation of a Hazardous Goods Handling and Storage Management Plan.

Implementation Strategy	**Construction:**
	▪ All site personnel will receive an induction prior to commencing work on the site in the handling and storage of hazardous goods and in spill containment procedures.
	▪ A hazard identification and risk assessment process will be undertaken for the storage of hazardous goods in the construction corridor.
	▪ The Material Safety Data Sheets (MSDS) for all dangerous goods will be kept on site.
	▪ Licenses or permits will be obtained from the relevant local governments if required for flammable and combustible liquids.
	▪ Risks posed by hazardous goods stored or handled during construction will be minimised where reasonably practicable through:
	  ▪ Minimisation of the quantities kept on site.
	  ▪ Compliance with MSDS instructions.
	  ▪ Segregation of incompatible hazardous goods.
	  ▪ Appropriate separation of hazardous goods storage areas from people and property.
	  ▪ Storage of flammable or combustible dangerous goods away from ignition sources.
	  ▪ Liquid dangerous goods stored in bunded containers with sufficient capacity to contain the potential spillage.
	  ▪ Personal protective equipment provided to personnel required to work with hazardous goods.
	  ▪ Spill kits available at all construction sites along the Project area and any spills will be cleaned up immediately.
	  ▪ Where practicable, any refuelling undertaken at site in a designated refuelling area to reduce the risk of contamination to the environment.
	  ▪ Portable fire extinguishers available if required at the site.
	  ▪ Hazardous goods waste transported by a licensed contractor to a designated site approved by the local authority.
	  ▪ Explosives stored in accordance with AS:2187 for the storage, transport and use of explosives and will be handled by a licensed explosives expert.
	Operation:
	▪ Handling, storage, signage and transport of hazardous/dangerous goods to be consistent with Queensland Rail management systems and as per AS1940 and relevant legislation.

Monitoring	▪ Routine daily visual observance by all personnel during construction and operations for possible incidents related to dangerous goods.
	▪ Environmental site checks undertaken by the environmental officer to include the following:
	  ▪ An inspection of the hazardous goods storage area(s).
	  ▪ A record of any spills occurring at the Project site and corrective actions.

Auditing	**Construction and decommissioning:** ▪ Monthly monitoring reports will be submitted to the project Manager and will be made available to a complainant and / or regulatory body upon request. **Operation:** ▪ QR standard procedures to apply.

	Handling and storage of hazardous goods
Reporting	**Construction and decommissioning:** ▪ Inventory of hazardous goods at the site during construction and operation including their storage requirements, locations and MSDS. ▪ Environmental checklists during construction. ▪ Non- conformance reporting if required. **Operation:** ▪ QR standard procedures to apply.
Corrective Action	**Construction and decommissioning:** ▪ In the event that monitoring identifies practices inconsistent with this plan, action will be undertaken to remedy the situation. ▪ Non-conformance notices and corrective action notices will be prepared and actioned. ▪ Construction project manager can request cessation of works if there is a breach in performance criteria of EMP or a risk of it occurring. **Operation:** ▪ QR standard procedures to apply
Responsibility	**Construction and decommissioning:** ▪ The on-site construction manager is responsible for ensuring adherence to the Hazardous Goods Handling and Storage Management Plan. **Operation:** ▪ The maintenance contractor is responsible for the handling, storage, monitoring and maintenance of hazardous goods. ▪ Queensland Rail is responsible for ensuring any dangerous goods that are transported via the railway conform to the Transport Infrastructure Dangerous Goods by Rail Regulation 2002 (Qld).

Table 16: Health and safety management plan

	Health and safety management
Policy	To manage the construction and operation of the Project in a manner that prevents adverse effects to the health and safety of project personnel and the general public.
Performance Criteria	1. Compliance with relevant legislation and regulations. 2. Integration into the construction contractor's and Queensland Rail's respective Health and Safety Management Systems for construction and operation. 3. Creation and implementation of a Construction Safety Plan, Work Method Statements and a Job Hazard Analysis (JHA) for the Project.
Implementation Strategy	**Design:** ▪ Safety in Design has been a key consideration during the development of the Project and preparation of the Preliminary Design documentation. ▪ A Safety in Design assessment will need to be undertaken as part of the detailed design of the Project to provide information regarding existing and future health and safety risks to designers, constructors and operators.

	Health and safety management
Implementation Strategy	**Construction:** ▪ The Construction Safety Plan that will be developed and implemented for the Project will be compliant with overarching health and safety management systems and will include the following: ▪ The workplace address. ▪ Name and address of the Principal contractor. ▪ Principal contractor's ABN. ▪ WHS committee. ▪ WHS officer appointed. ▪ Expected start date and duration of the work. ▪ Induction training and consultation procedures for all personnel with regard to their health and safety obligations on the Project. ▪ Type of construction. ▪ Plant provided for common use. ▪ Site rules. ▪ Site hazards and risks and proposed control measures. ▪ How the controls will be implemented. ▪ Identification of major hazards and corresponding Work Method Statements. ▪ Personal protective equipment. ▪ First aid. ▪ Contractor management. ▪ Monitor and review procedures. ▪ Emergency procedures. ▪ Public safety strategies. ▪ Site housekeeping. ▪ Site security and access. ▪ Responsibilities for health and safety management on the Project including a nominated health and safety representative(s). **Operation:** ▪ Health and Safety plans will be developed for the Project and will be consistent with Queensland Rail's Occupational Health and Safety Management System, Zero Harm Strategy and relevant legislation. The minimum contents of the Health and Safety Plan are detailed above under Construction. ▪ QR standard procedures to apply.
Monitoring	**Construction and Decommissioning:** ▪ The health and safety representative will carry out regular workplace health and safety inspections during construction. **Operation:** ▪ QR standard procedures to apply
Auditing	**Construction and Decommissioning:** ▪ The health and safety representative will report to the construction and operation managers and these reports will be made available to a complainant and / or regulatory body upon request. ▪ Audits will be undertaken against the health and safety management plans and systems that apply to construction and operation. **Operation:** ▪ QR standard procedures to apply

	Health and safety management
Reporting	**Construction and Decommissioning:** An incident register will be in place prior to the commencement of construction and will be used to record the following information: ▪ Date and time incident occurred. ▪ Date and time incident reported. ▪ Type of the incident Level of incident. ▪ Type of injury (if applicable). ▪ Injury classification (if applicable). ▪ Name of any person involved or person reporting incident. ▪ Details of any equipment involved (if applicable). ▪ Brief description of incident. ▪ The person responsible for investigating/addressing the incident. ▪ Records of all incidents, audits and inspections will be kept and reviewed. **Operation:** ▪ QR standard procedures to apply.
Corrective Action	**Construction and Decommissioning:** ▪ If an incident occurs during construction, the Department of Transport and Main Roads and Queensland Rail will be notified and the following corrective actions should be carried out subject to approval by the Department of Transport and Main Roads and Queensland Rail: ▪ An investigation as to why the incident occurred should be undertaken and corrective actions implemented to reduce the risk of a recurrence. ▪ The health and safety information that is being provided to employees will be reviewed for relevance. ▪ All personnel working or entering the site should be informed of the health and safety policies and procedures in place and improvements to training should be made where deficiencies are identified. ▪ Non-conformances with the relevant health and safety management system or safety plan will be rectified immediately. **Operation:** ▪ QR standard procedures to apply
Responsibility	**Construction and decommissioning:** ▪ Reporting on health and safety issues will be the responsibility of the nominated health and safety representative for the construction and operational phases of the Project. **Operation:** ▪ QR standard procedures to apply.

Table 17: Emergency management plan

	Emergency management
Policy	▪ To ensure that emergencies during construction or operation of the Project are managed efficiently ▪ To minimise the risk to personnel, property or the public that may arise from emergencies
Performance Criteria	1. Development of an emergency management plan for the construction of the Project. 2. Development of a bush fire management plan for the operation of the Project. 3. Adequate training for Project personnel with respect to emergency management planning and procedures.

Appendix C - Environmental Management Plan

	Emergency management
Implementation Strategy	**Construction:** The emergency management plan will be developed prior to as part of the construction planning. The emergency management plan will be implemented during pre-construction and construction and will include the following: ▪ Emergency response procedures to be followed in an accident situation - including chain of command and evacuation routes. ▪ Emergency contact details of local SES branches, Fire and Rescue Service and Police. ▪ Allocation of tasks and responsibilities including an emergency management team. ▪ Training requirements. ▪ The role of the first aid provider. ▪ Emergency transportation arrangements. ▪ Location of first aid equipment and facilities at the workplace. ▪ Site emergency response equipment locations. ▪ Monitoring and review procedures. The emergency management plan for the construction phase will include an emergency response procedure, example contents of which are outlined below: ▪ Emergency contacts and chain of command. ▪ Responsibilities. ▪ Alert systems. ▪ Identification and control of emergency sources. ▪ Access routes and transport methods. ▪ Reporting and review requirements. ▪ Involvement of State agencies. **Operation:** QR standard procedures to apply. The following is suggested: ▪ A bushfire management plan to be developed for the Project, specifying appropriate clearance distances, and emergency service access requirements during construction. ▪ Emergency management planning to be undertaken for the Project prior to operations and the results will be integrated into Queensland Rail's emergency management plans. The emergency management planning for the operations phase to include a site-specific emergency response procedure, example contents of which are outlined below: ▪ Emergency contacts and chain of command. ▪ Responsibilities. ▪ Alert systems. ▪ Identification and control of emergency sources. ▪ Access routes. ▪ Reporting and review requirements. ▪ Involvement of State Agencies.
Monitoring	**Construction and Decommissioning:** ▪ A record of all emergency incidents will be maintained and reviewed for possible procedural improvements. **Operation:** ▪ QR standard procedures to apply.
Auditing	**Construction and Decommissioning:** ▪ The emergency incident and response process will be audited and tested on a regular basis. **Operation:** ▪ QR standard procedures to apply.

	Emergency management
Reporting	**Construction and Decommissioning:** ▪ All emergency incidents will be reported to the construction manager. **Operation:** ▪ QR standard procedures to apply.
Corrective Action	**Construction and Decommissioning:** ▪ In the event that monitoring identifies practices inconsistent with this plan, action will be undertaken to remedy the situation. ▪ Non-conformance notices and corrective action notices will be prepared and actioned. ▪ Construction project Manager can request cessation of works if there is a breach in performance criteria of EMP or a risk of it occurring. ▪ Following an emergency incident an investigation will be undertaken as to the cause of the incident and corrective action undertaken to minimise the risk of a recurrence. ▪ Non-conformances with the emergency response procedure or emergency management plans or emergency action plans will be identified and rectified. **Operation:** ▪ QR standard procedures to apply.
Responsibility	**Construction and Decommissioning:** ▪ The construction contractor. **Operation:** ▪ Queensland Rail and the corridor manager.

16 Complaints and incidents

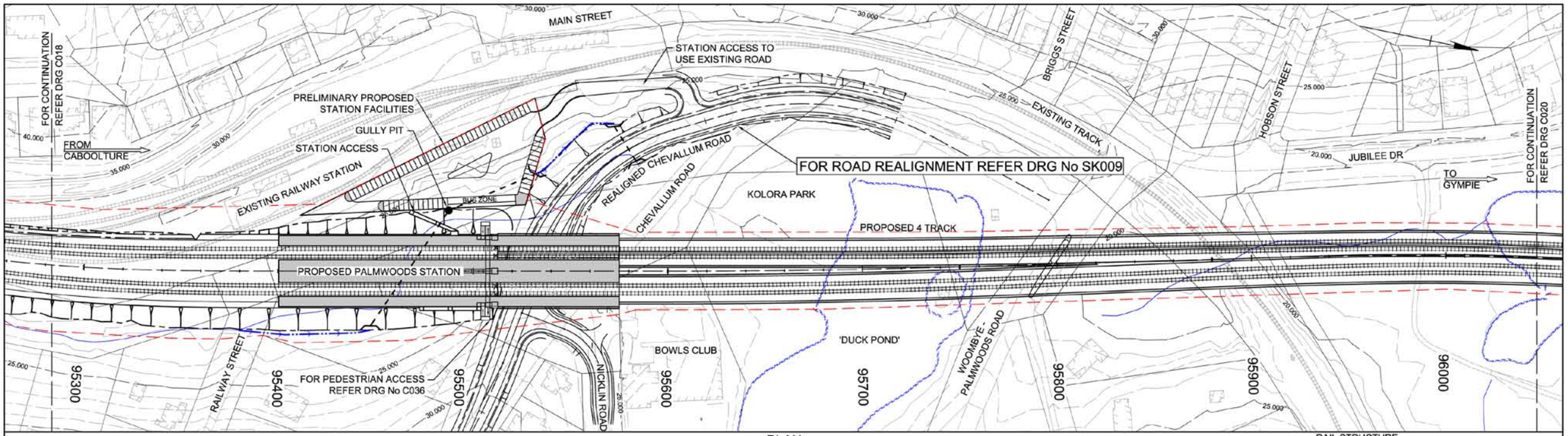
It is important to the construction and operational phases of the Project that complaints be addressed as a matter of urgency and that measures be undertaken to rectifying the offending issue. Adhering to the objectives and implementation strategies outlined in previous sections will help minimise the potential for complaints.

Specific details of the responding and reporting requirements should complaints be received are outlined below:

- respond quickly and effectively to public complaints / enquiries
- site manager to be made aware of any complaints received
- information regarding construction activities to be regularly provided in an accessible manner to maximise awareness in the community of construction activities
- during business hours, any complaints to be referred to the on-site construction manager.
- investigate nature and extent of problem by site inspection and contacting complainant
- all complaints are investigated and replied to within acceptable timeframes
- implement corrective actions if appropriate otherwise instigate more detailed investigation
- works site manager to allocate necessary resources or assistance if required
- special procedures when necessary, such as face-to-face meetings and on-going communications with affected parties to respond to validated complaints.
- maintain a complaints register, which can record name and address of the stakeholder, date of feedback, reason for feedback, action required, responsibility, action undertaken and outcome.

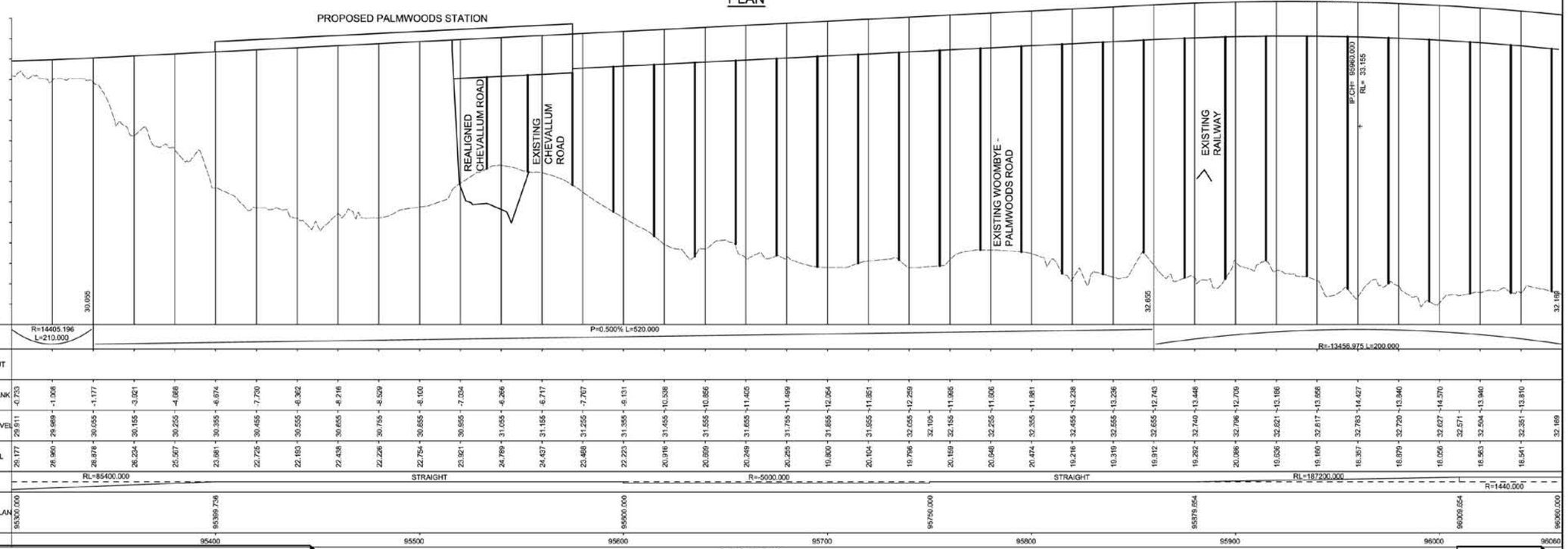
It may be appropriate to establish an on-site community engagement specialist, for the duration of the Project's design and construction. This will assist with proactively delivering project information to the surrounding community , and enable direct responses to complaints and incidents.

Appendix D - Updated Engineering Drawings



PLAN

RAIL STRUCTURE



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FOR NOTES AND LEGEND REFER DRAWING NO. C001

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A	EIS ISSUE	KNC	–	
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Associated Job Nos

Auxiliary Drg Nos

Survey Data: Horiz. Datum; Azimuth Datum; Height Datum; Survey Books

Scales: 0 10 20 30 40 50 60 HORIZ.; 0 1 2 3 4 5 6 VERT.

Dimensions shown in meters

SUNSHINE COAST REGIONAL COUNCIL

LANDSBOROUGH TO NAMBOUR RAIL PROJECT

82 000 m – 102 700 m

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

NORTH COAST LINE: CABOOLTURE TO GYMPIE

FOUR TRACK: WORKING PLAN AND SECTION

95 300 m – 96 060 m

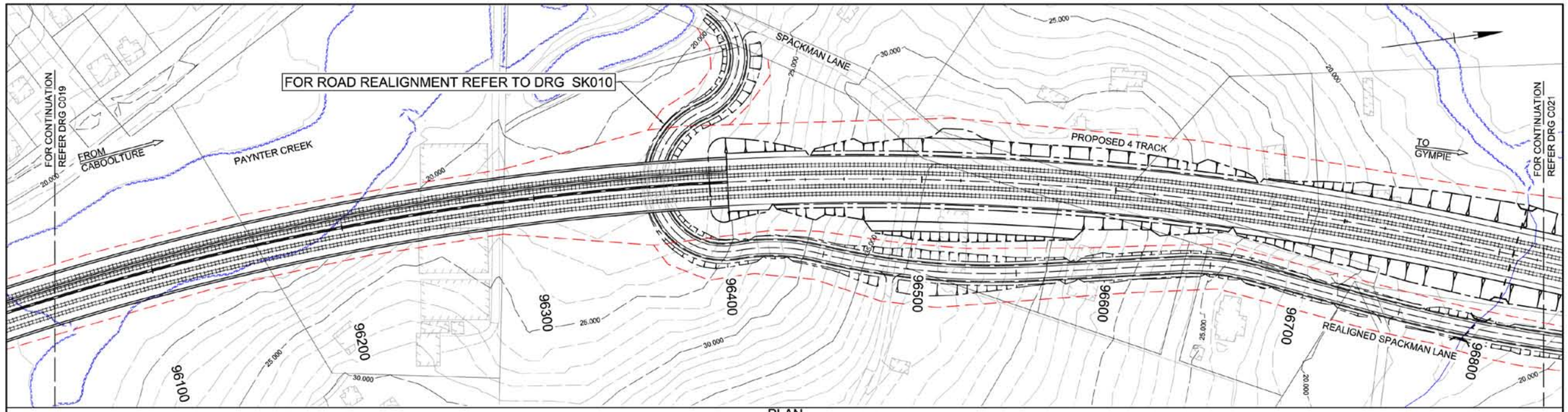
SHEET 19 OF 28

Drawn	Designed	Design Review	Engineering Certification
DL	LM	NM	
Checked KC	Verified KC		RPEQ No. 8192

Queensland Government

Drawing No. C019 B

Series Number 19 of 36



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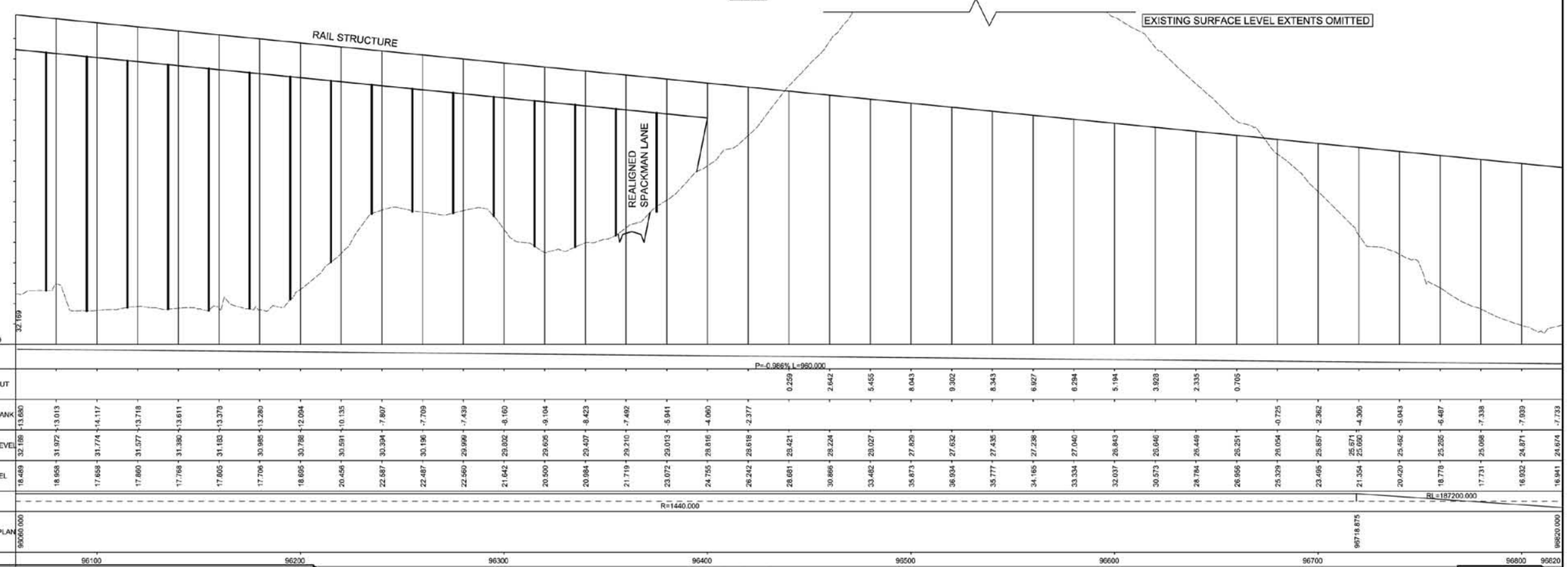

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Associated Job Nos

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Dimensions shown in meters

SUNSHINE COAST REGIONAL COUNCIL

LANDSBOROUGH TO NAMBOUR RAIL PROJECT

82 000 m – 102 700 m

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

NORTH COAST LINE: CABOOLTURE TO GYMPIE

FOUR TRACK: WORKING PLAN AND SECTION

96.060 m – 96 820 m

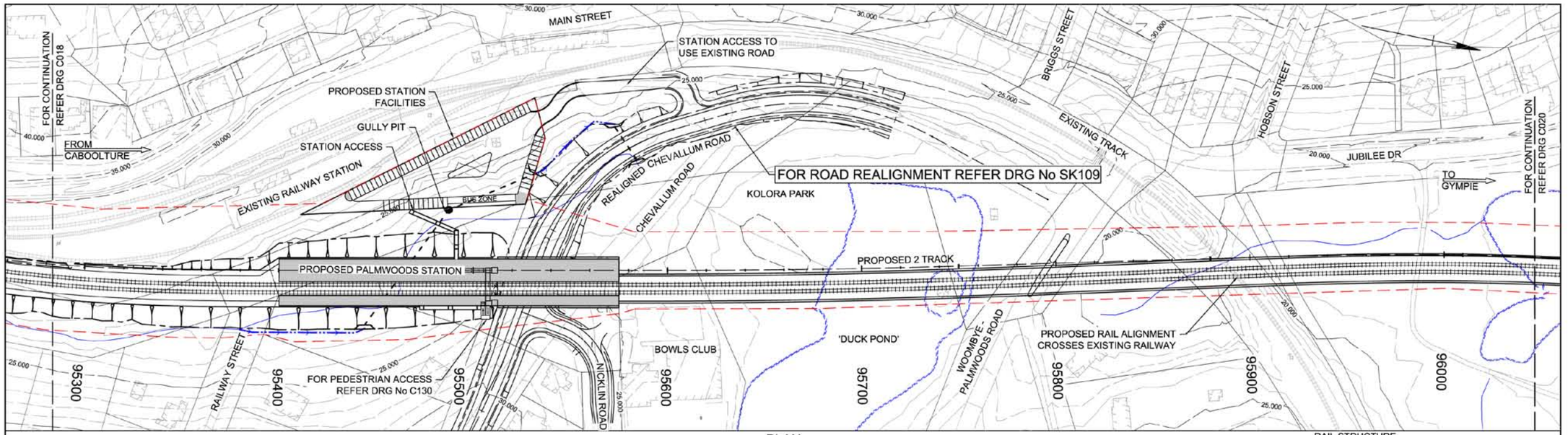
SHEET 20 OF 28

Drawn	Designed	Design Review	Engineering Certification
DL	LM	NM	
Checked KC	Verified KC		RPEQ No. 8192

Queensland Government

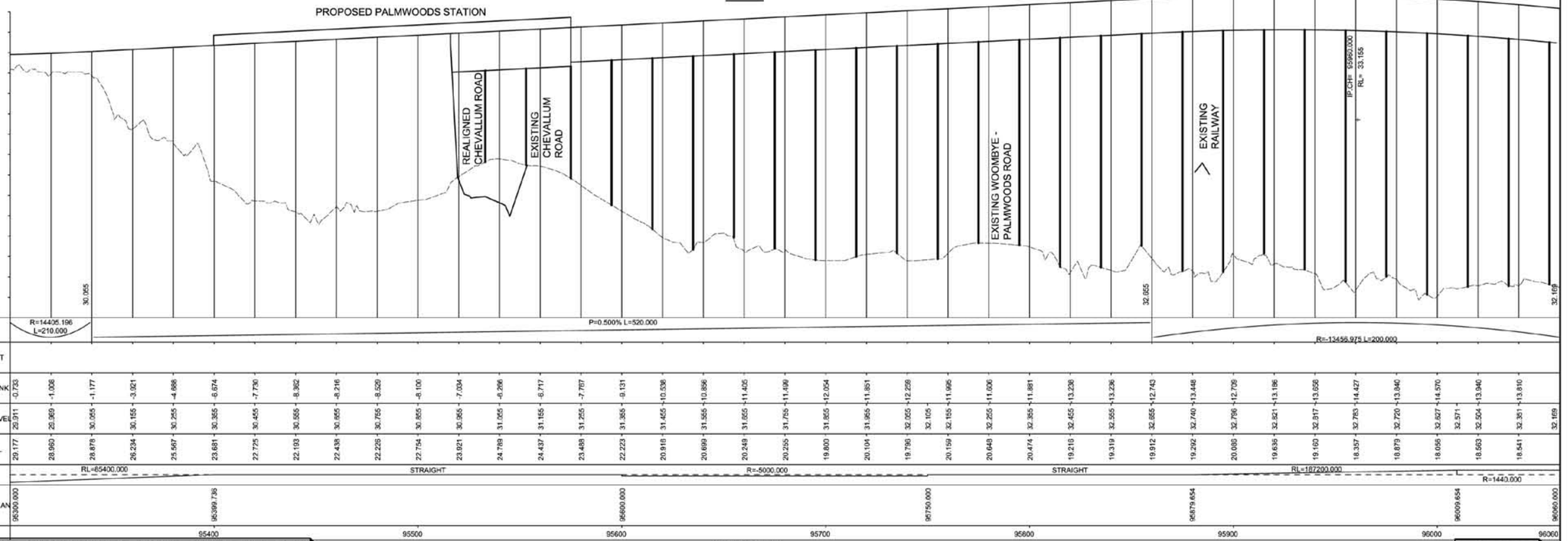
Drawing No. C020 B

Series Number 20 of 36



PLAN

RAIL STRUCTURE



SECTION

FOR NOTES AND LEGEND REFER DRAWING NO. C101

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Associated Job Nos

Auxiliary Drg Nos

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Dimensions shown in meters

SUNSHINE COAST REGIONAL COUNCIL

LANDSBOROUGH TO NAMBOUR RAIL PROJECT

82 000 m – 102 700 m

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

NORTH COAST LINE: CABOOLTURE TO GYMPIE

TWO TRACK: WORKING PLAN AND SECTION

95 300 m – 96 060 m

SHEET 19 OF 28

Drawn DL | Designed LM | Design Review NM | Checked KC | Verified KC

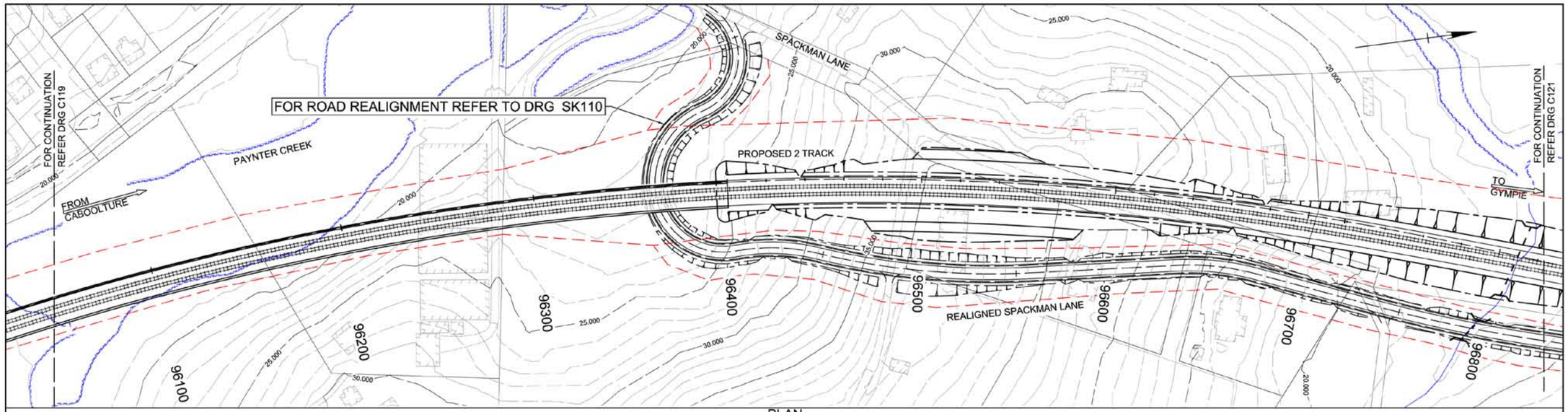
Engineering Certification

RPEQ No. 8192

Queensland Government

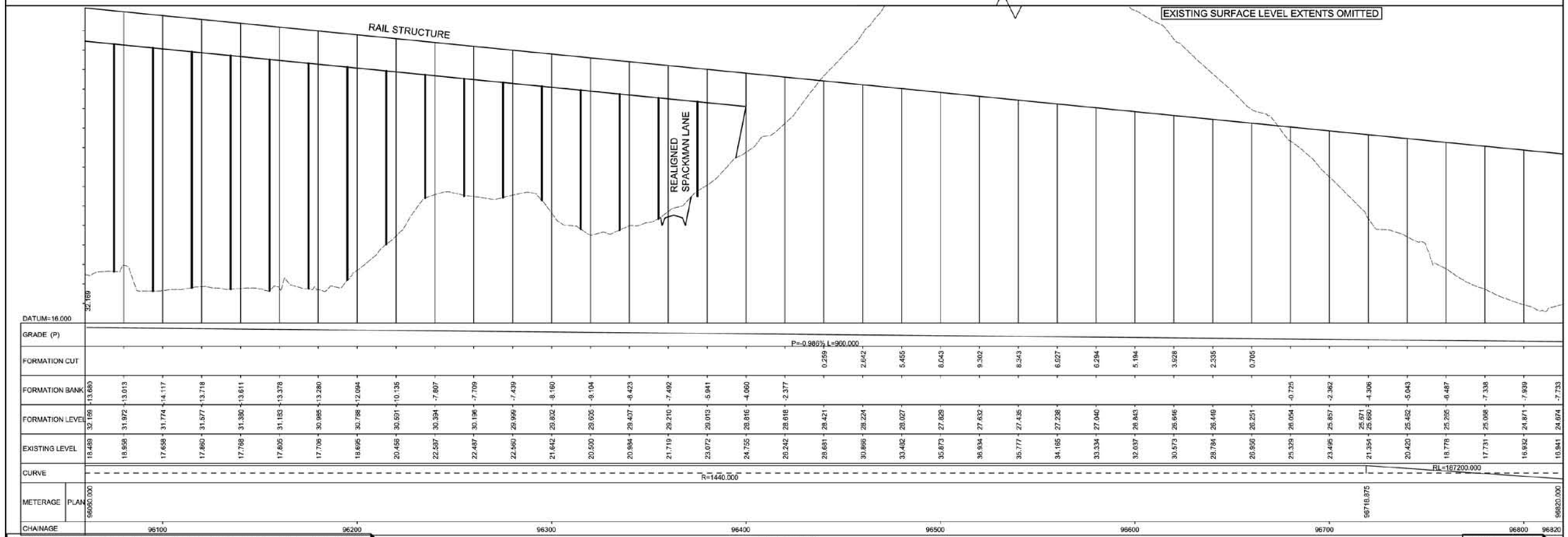
Drawing No. C119 B

Series Number 19 of 36



PLAN

EXISTING SURFACE LEVEL EXTENTS OMITTED



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SUNSHINE COAST REGIONAL COUNCIL

LANDSBOROUGH TO NAMBOUR RAIL PROJECT

82 000 m – 102 700 m

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

NORTH COAST LINE: CABOOLTURE TO GYMPIE

TWO TRACK: WORKING PLAN AND SECTION

96.060 m – 96 820 m

SHEET 20 OF 28

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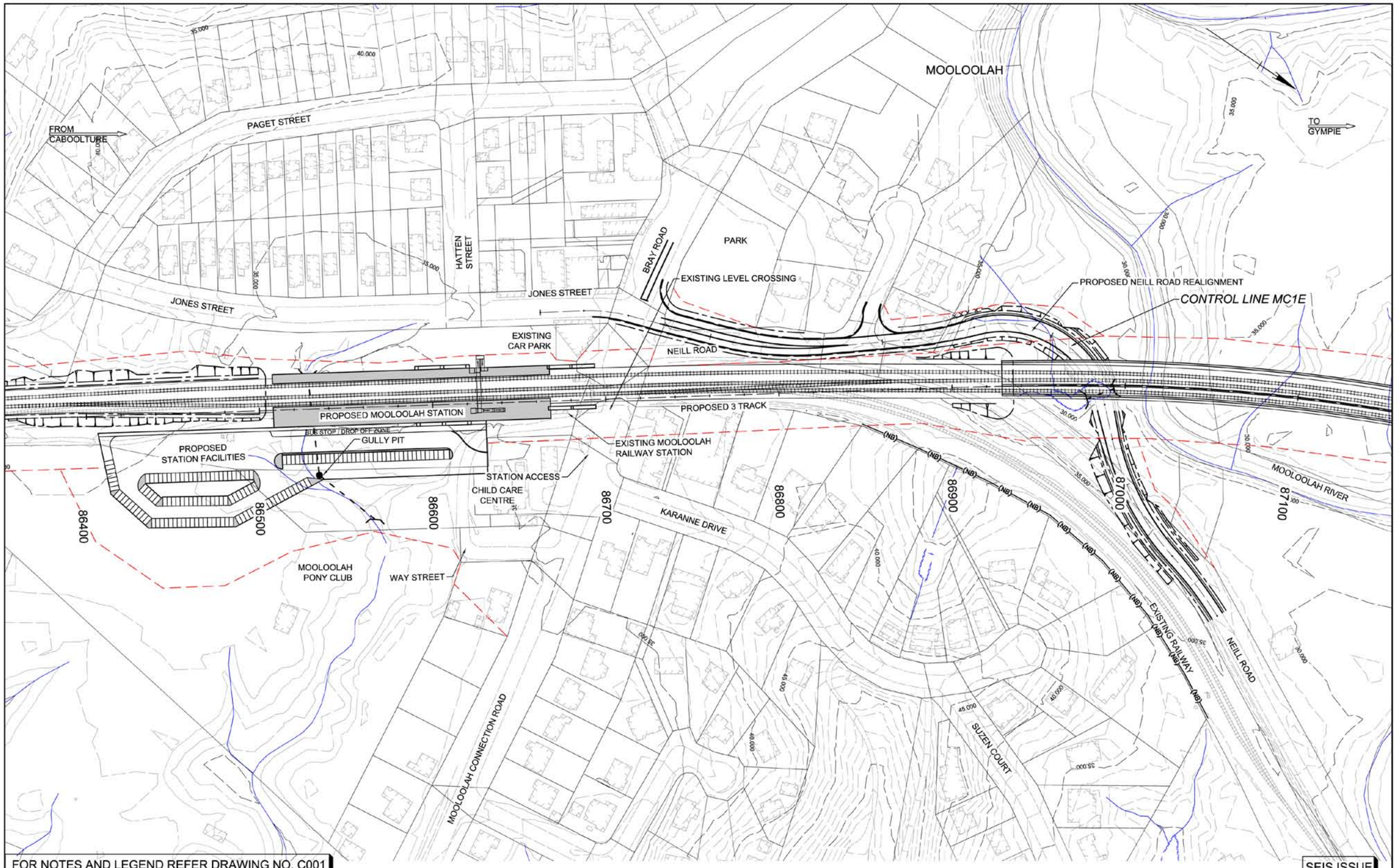
Checked KC	Verified KC		RPEQ No. 8192

Queensland Government

Drawing No. C120 B

Series Number 20 of 36



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Dimensions shown in meters

SUNSHINE COAST REGIONAL COUNCIL
LANDSBOROUGH TO NAMBOUR RAIL PROJECT
82 000 m – 102 700 m

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

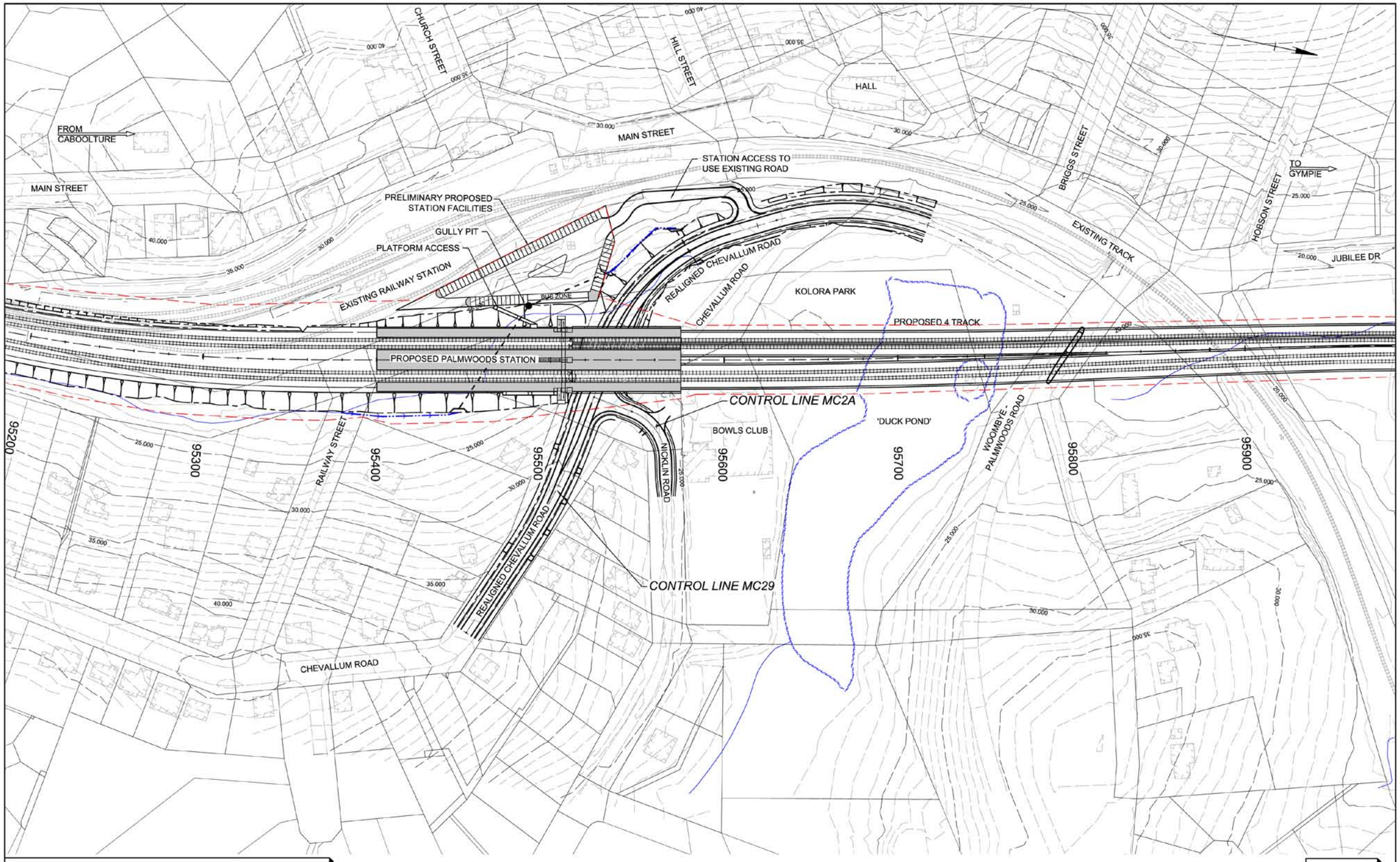
NORTH COAST LINE: CABOOLTURE TO GYMPIE
MOOLOOLAH ROAD ALIGNMENT
TWO TRACK ARRANGEMENT
NO GRADE SEPARATION OPTION

Drawn DL | Checked KC | Designed LM | Verified KC | Design Review NM | Engineering Certification RPEQ No. 8192

Queensland Government

Drawing No. SK103C | A

Series Number 3 of 12



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SEIS ISSUE

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A	EIS ISSUE	KNC	–	

Associated Job Nos

Auxiliary Drg Nos

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Dimensions shown in meters

SUNSHINE COAST REGIONAL COUNCIL

LANDSBOROUGH TO NAMBOUR RAIL PROJECT

82 000 m – 102 700 m

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

NORTH COAST LINE: CABOOLTURE TO GYMPIE

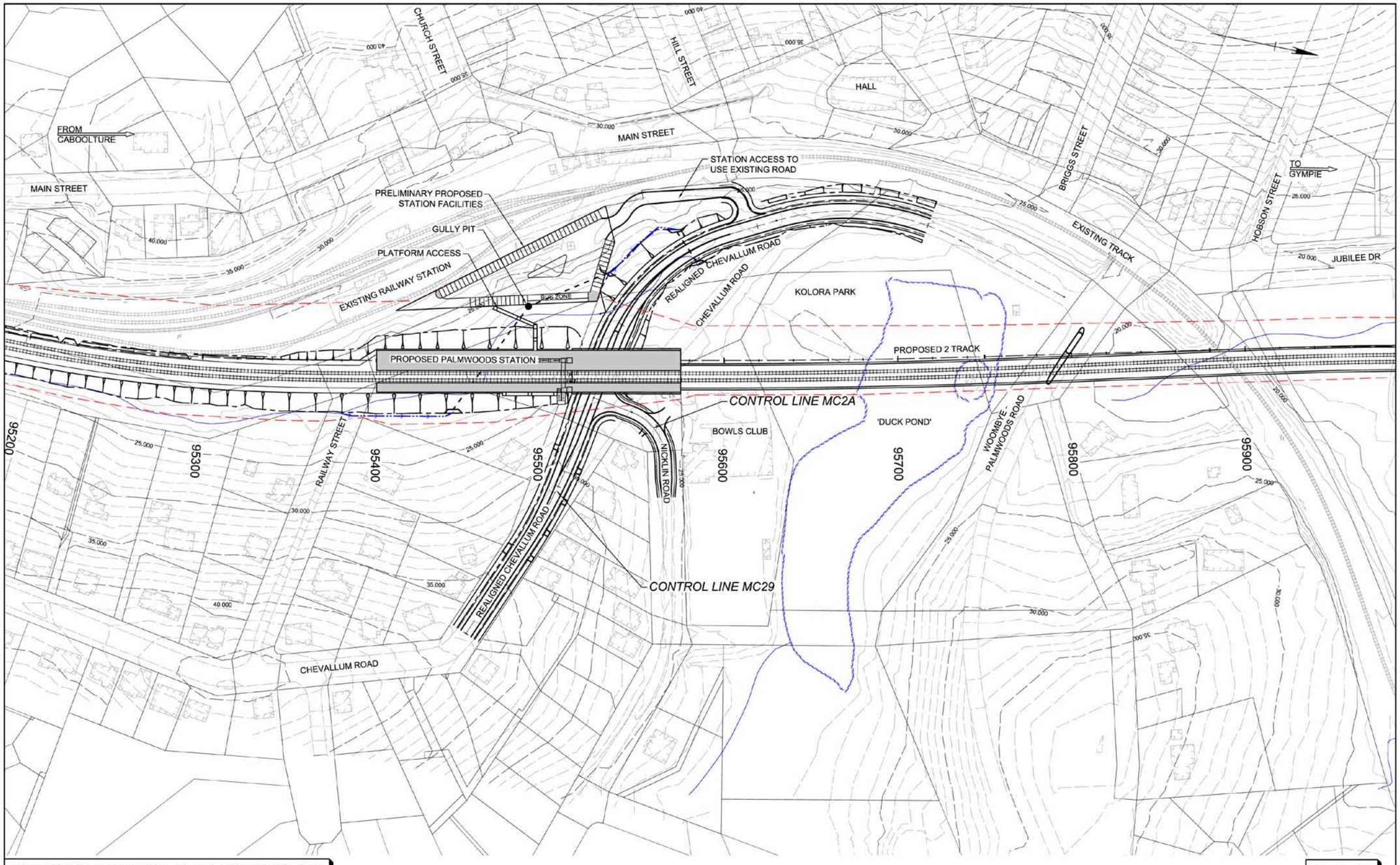
REALIGNED CHEVALLUM ROAD FOUR TRACK ARRANGEMENT

Drawn	Designed	Design Review	Engineering Certification
DL	VN	NM	
Checked KC	Verified KC		RPEQ No. 8192

Queensland Government

Drawing No. SK009 B

Series Number 9 of 12



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SEIS ISSUE

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A	EIS ISSUE	KNC	–	

Associated Job Nos

Auxiliary Drg Nos

Survey Data: Horiz. Datum; Azimuth Datum; Height Datum; Survey Books

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Dimensions shown in meters

SUNSHINE COAST REGIONAL COUNCIL
LANDSBOROUGH TO NAMBOUR RAIL PROJECT
82 000 m – 102 700 m

Reference Points				
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NORTH COAST LINE: CABOOLTURE TO GYMPIE
REALIGNED CHEVALLUM ROAD
TWO TRACK ARRANGEMENT

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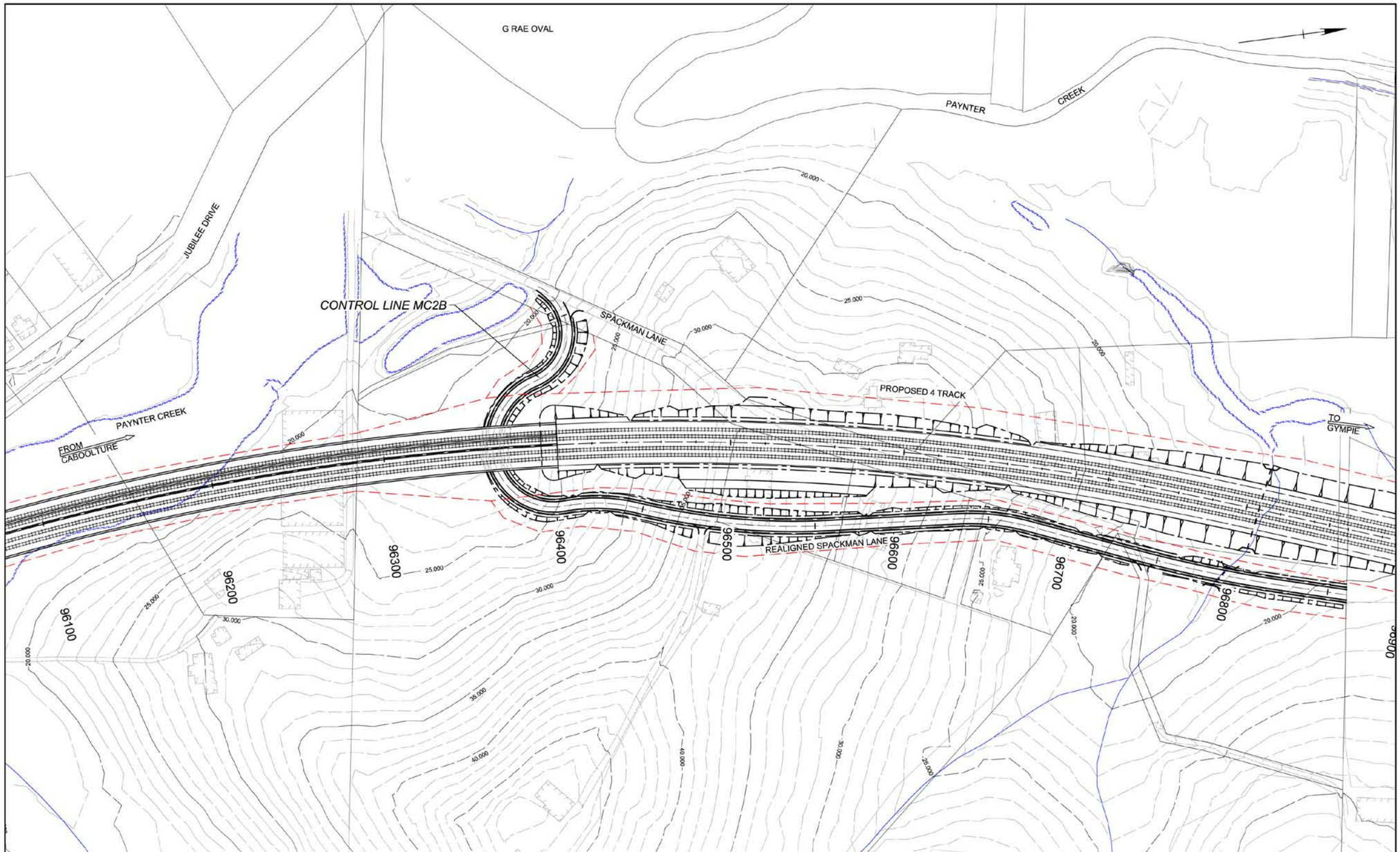
Queensland Government

Drawing No. SK109 B

Series Number 9 of 12



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A	EIS ISSUE	KNC	–	

Associated Job Nos

Auxiliary Drg Nos

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Scales: 0 10 20 30 40 50 60

Dimensions shown in meters

SUNSHINE COAST REGIONAL COUNCIL
LANDSBOROUGH TO NAMBOUR RAIL PROJECT
82 000 m – 102 700 m

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

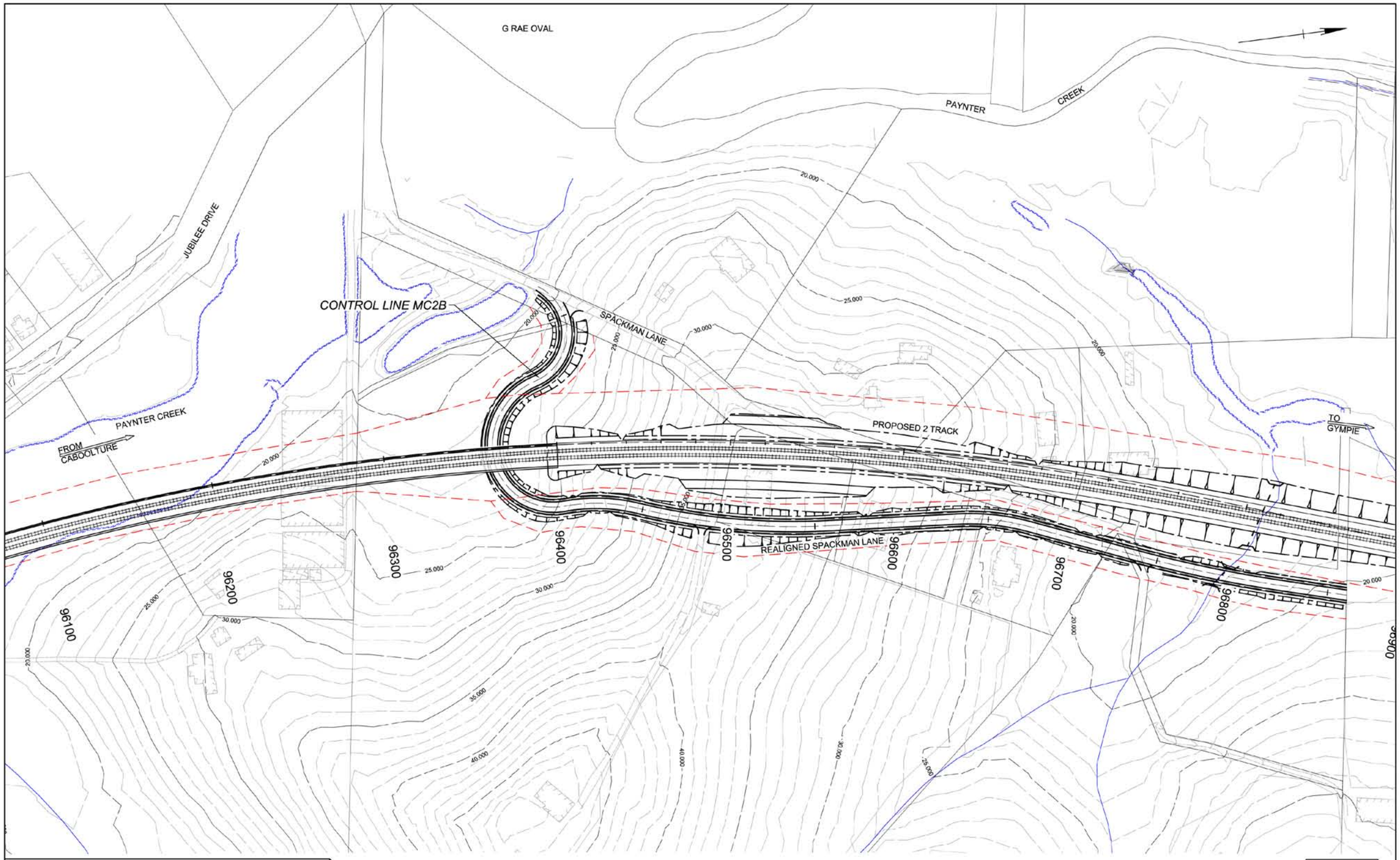
NORTH COAST LINE: CABOOLTURE TO GYMPIE
REALIGNED SPACKMAN LANE
FOUR TRACK ARRANGEMENT

Drawn	Designed	Design Review	Engineering Certification
DL	LM	NM	RPEQ No. 8192
Checked KC	Verified KC		

Queensland Government

Drawing No. SK010 B

Series Number 10 of 12



FOR NOTES AND LEGEND REFER DRAWING NO. C001

SEIS ISSUE

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A	EIS ISSUE	KNC	–	
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Associated Job Nos

Auxiliary Drg Nos

Survey Data

Horiz. Datum	
Azimuth Datum	
Height Datum	
Survey Books	

Scales

0 10 20 30 40 50 60

Dimensions shown in meters

SUNSHINE COAST REGIONAL COUNCIL

LANDSBOROUGH TO NAMBOUR RAIL PROJECT

82 000 m – 102 700 m

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

NORTH COAST LINE: CABOOLTURE TO GYMPIE

REALIGNED SPACKMAN LANE

TWO TRACK ARRANGEMENT

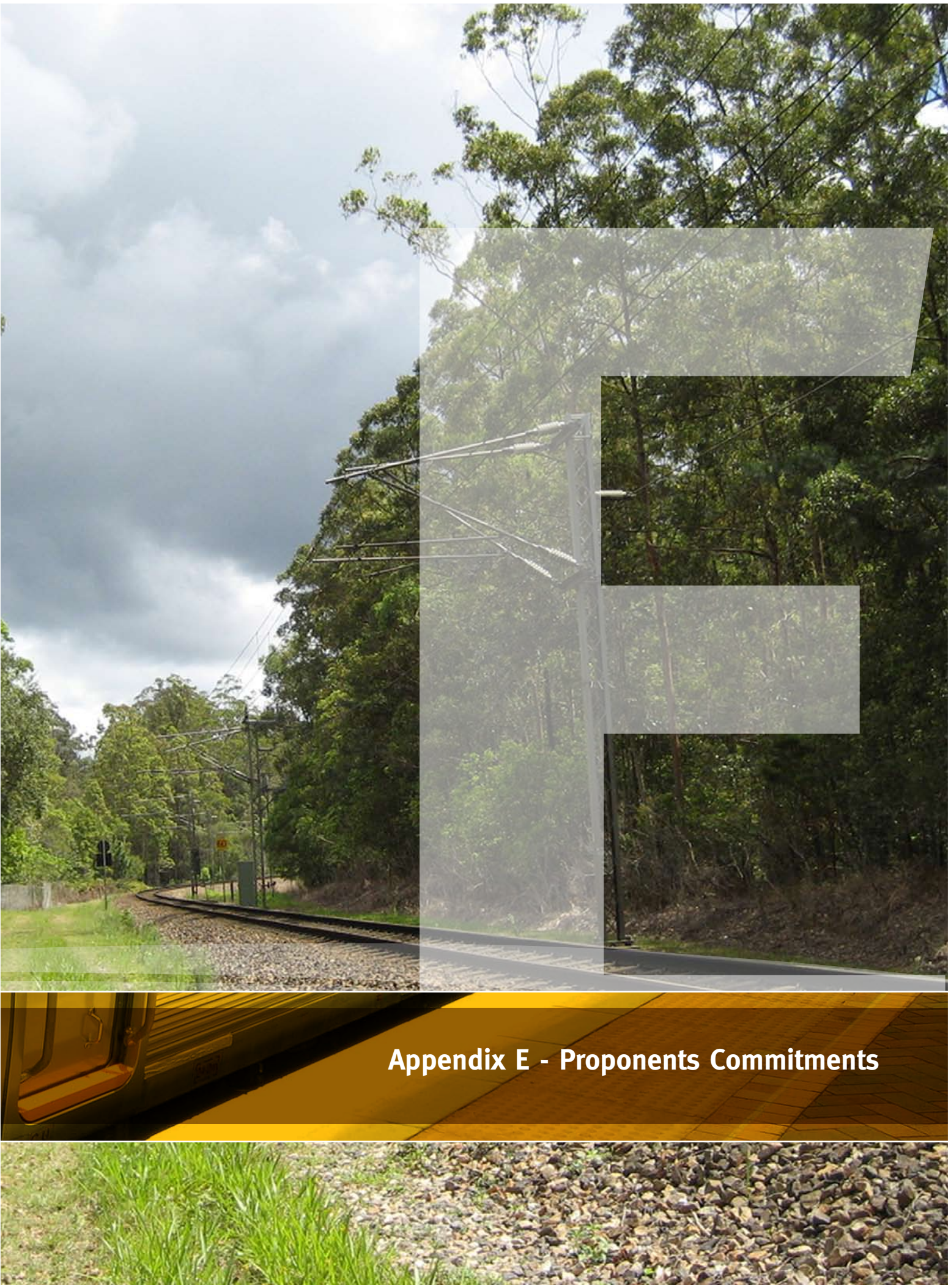
Drawn	Designed	Design Review	Engineering Certification
DL	LM	NM	
Checked KC	Verified KC		RPEQ No. 8192

Queensland Government

Drawing No. SK110 B

Series Number 10 of 12

Appendix D - Updated Engineering Drawings



Appendix E - Proponents Commitments

Appendix E - Proponents Commitments

This section summarises the key Proponent commitments outlined in the EIS and the Supplementry Report. The Proponent for the purpose of this document is the Department of Transport and Main Roads (TMR).

1.1 General

As the Project progresses, TMR will update information gathered for the EIS, and any key changes will be identified. This may result in a need for further investigations into specific matters in the future. In addition, all current and relevant design standards will be used at the time of detailed design.

Should there be a substantial change to the Project's current design, TMR will notify the Coordinator-General and an evaluation of the proposed change will be undertaken under Section 35c of the *State Development and Public Works Organisation Act 1971*, and will be subject to further community consultation. Any resultant changes would be documented in subsequent supplementary documentation.

TMR will establish a regular review process, and communicate outcomes with the Department of Infrastructure and Planning (DIP).

Should any changes to the design or surrounding environmental conditions affect the nature of the environmental impacts and proposed management regime, TMR will consult with the Department of Environment, Heritage Water and the Arts (DEWHA) to determine where there is a need to re-evaluate the referral under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

1.2 Project staging

TMR will develop clearer definition of construction timing and staging details and this is expected to be defined in future State Government planning documents and updates such as South East Queensland Infrastructure Plan and Program (SEQIPP).

TMR will continue to work collaboratively with the Sunshine Coast Regional Council (SCRC) in identifying potential benefits from bringing forward elements of the Project (such as road upgrades). This will be further defined through discussions between the Proponent and the SCRC.

Construction may be undertaken in stages, based on funding and land use decisions which may be made in future. These will require application of the environmental, social, and cultural heritage management and protection measures based in the EIS and this SEIS, and subsequent management documentation.

TMR will work with relevant agencies to identify any opportunities for early works packages that could minimise disruption to the road network.

1.3 Legislation, Policy, Plans and Design Standards

TMR will comply with all relevant legislation (including future acts that may come into force prior to future project phases) and has controls in place to ensure all legislation is adhered to. Further legislative approvals will be required beyond the EIS approval, as documented in 3.1.5 of the SEIS.

TMR will design for flood immunity and vehicle clearance consistent with road design standards current at the time of detailed design.

1.4 Stakeholder engagement

TMR will continue to work with relevant stakeholders (current and emerging) during future planning and detailed design phases of the Project. These stakeholder and their issues of interest include:

- SCRC – issues related to land use, traffic management and changes to local road networks (temporary and permanent), reuse of surplus rail land, station design, end of trip facilities and integration with other transport modes, impact to the Landsborough Sports Ground and Recreational Reserve, reprovision of impacted community and sports facilities and open space, future operation and maintenance of infrastructure elements (such as drainage, fencing etc.), securing and rehabilitation of offset areas, relocation of council infrastructure, including integration with capital works programs and plans.
- QR Limited– current and future rail operations, design standards.
- TransLink - end of trip facilities, park and ride, and integration with other transport modes.
- Department of Environment and Resource Management (DERM)– rehabilitation of sections of surplus rail land for incorporation into adjoining areas of National Park.
- Department of Communities – reuse of surplus rail land for recreational purposes and relocation of community facilities.
- Landsborough Primary School – impact and reinstatement of access to sports fields and car parking.
- Mooloolah Pony Club – impacts to Pony Club operations.
- Palmwoods Blows Club – maintaining access to car parks during construction, dust, noise and amenity issues during construction and operation.
- Sports and community groups throughout the Project area where facilities or access to facilities is impacted by the Project
- Utility providers (i.e. water, power, gas) – relocation of services that will be impacted by the Project.
- Landowners (private and government owners) – full or part

property acquisition (through hardship applications or the eventual formal resumption process), severance issues, plans for the minimisation of visual and noise impacts, surveys including noise and vibration assessments.

- Adjacent/ adjoining landowners –issues including landscaping, fencing, access, noise treatments and other design measures

1.4.1 Ongoing Community engagement

- TMR will prepare future plans and materials to communicate with the broader community regarding project progress.
- TMR will consult with landowners from whose property there is a potential land requirement, adjacent landowners and the broader community regarding designs for stations, relevant bridges (i.e. Palmwoods) and relevant noise barriers.
- When construction timing/ staging is known, this information will be provided to the community. This will include updates to individual landowners once the resumption timing and process details are determined.

1.5 Environmental Management

The EMP provided in Section 22.0 of the EIS, and updated in Appendix C of the SEIS, outlines measures to be implemented during construction and operation to manage and comply with legislative requirements. Future stages of the Project's design and construction will be conducted under appropriate contractual conditions, incorporating the requirements of the Coordinator-General's report and other agreements and statutory obligations.

It is acknowledged that there are a number of future investigations and studies that will need to be completed prior to developing a comprehensive approach to environmental management for this Project. TMR is committed to the ongoing implementation of these activities in the lead up to the design and construction of the Project.

TMR is committed to the appropriate treatment of contaminated land to prevent impacts to the environment or public as a result of the use of the decommissioned rail corridor.

1.5.1 Aboriginal cultural heritage

A Cultural Heritage Management Plan (CHMP) will be prepared by the Proponent in accordance with the *Aboriginal Cultural Heritage Act 2003* prior to the commencement of construction.

1.5.2 Historical cultural heritage

TMR will prepare detailed Conservation Management Plans for sites of historical cultural heritage significance where impacts cannot be avoided, as listed in the EIS, and where identified through additional investigations.

TMR will consult with DERM regarding management plans for sites of State significance and SCRC for sites of local significance.

TMR will consider suitable design, re-use and interpretation of heritage elements in the design of the new stations (especially Mooloolah and Palmwoods), bridge structures (especially in Palmwoods) and related areas.

Detailed heritage survey of the Old Mellum Cemetery will be undertaken to confirm the exact location of this memorial site, and to ascertain whether the Project will have a direct impact on any heritage aspect associated with this site.

Other key locations requiring further investigation to determine detailed management measures include:

- Buderim to Palmwoods tramway
- Murphys House
- Heritage features in Kolora Park.

Procedures for future consideration of these sites are identified in the EIS. This includes specialist assessments, site specific conservation management plans, and the appointment of archaeologists for the construction period. The specialist assessments and site specific management plans will require consultation with the Council, local community and any other stakeholders regarding mitigation and management of impacts.

There is also the potential for the incorporation of heritage features and places into interpretive signage within and between the townships, particularly if rail trails are developed along part or all of the decommissioned rail line.

1.6 Environmental Offsets

The requirement for offsets is discussed in Section 11.6 of the EIS. Offsets are governed by the Policy for vegetation management offsets (DERM, October 2009) and they operate on the basis of ecological equivalence. This means that they are required to be the same broad vegetation type and within the same bioregion. DERM (Queensland Parks and Wildlife Service) has requested compensatory land of equal or greater conservation value in lieu of cleared areas. An area twice that of the protected area impacted is requested. During the detailed design phase of the Project, there will be an opportunity for consultation between DERM, TMR and SCRC to achieve the best outcomes for the Project. This would include consideration of compensatory habitat provisions.

TMR will conduct investigations into the suitability of land already owned by them as part of the offsets package provided for the Project. During detailed design, the amount of remnant vegetation to be cleared will be refined to the exact areas required for the construction of the rail. Clearing will be minimised where possible through the minimisation of the construction zone, use of retaining walls and steepening of batters and cuttings where possible. The extent of offsets required under the VMA, will be further refined and identified during this stage. The methodology for locating and securing these offset areas will be subject to consultation with Ecofund Queensland Pty Ltd. Several submissions suggest particular sites or properties which could be secured for offsets purposes, this information will be considered during consultation with EcoFund.

The cumulative impacts of the Project, and other projects and development across the region should be considered in the identification and securing of offsets.

TMR will also comply with the relevant offset and mitigation requirements under other policies relevant at the time of design and construction, including requirements for koala habitat protection.

1.7 Relocation of affected community and recreational facilities

TMR will work closely with the SCRC, relevant community groups and affected organisations to identify suitable solutions where facility relocation or impact mitigation is required. This will be an ongoing process that can run independently of the Project, but should be resolved prior to construction or any preliminary works associated with the Project. Flood immunity and access will need to be considered in the identification of suitable alternate sites for these community facilities.

TMR will contribute to the development of strategies for relocation or re-establishment of impacted facilities which should be developed prior to the Project's design or construction.

These strategies should include:

- definition of the impact to the facility, and extent of mitigation required
- assessment of re-use/ redevelopment potential at the existing location
- identification of potential future sites
- assessment of impacts to local businesses/community resulting from the loss of the facility from its present location
- assessment of impacts/ benefits to local community resulting from the relocation of the facilities
- economic analysis
- funding options
- timeframe for re-establishment
- guidance for engaging with the affected community groups/ users
- process and protocols for liaison between TMR and the SCRC.

1.8 Further investigations

1.8.1 General

TMR will review and respond to the detailed comments on the EIS design provided by SCRC and DERM during the detailed design phase.

Stakeholder and community feedback will be constructively sought and taken into consideration during the detailed design phase.

1.8.2 Acid sulfate soils

TMR will conduct a detailed acid sulphate soils sampling and management plan prior to commencing detailed design.

1.8.3 Geotechnical Investigation

TMR will conduct geotechnical testing (bore holes and test pits) prior to the commencement of detailed design, at an appropriate level of investigation to inform the detailed design process.

1.8.4 Hydraulic modelling

Additional hydraulic (flood and drainage) modelling will be undertaken by TMR at the detailed design stage. This modelling will include an allowance for climate change, based on the latest available projections (currently provided by the State Government in ClimateQ: Toward a Greener Queensland) at the time of design. This will also inform any further remediation or reprovisioning of local dams and catchments in the Project area as well as:

- confirm sizing of bridge spans and conveyance areas
- confirm that no property will be adversely affected by flooding as a result of the Project
- confirm the implications of decommissioning the existing rail corridor (e.g. removal or replacement of bridges, restoration of natural terrain where embankments are currently located
- determine location of any additional flood mitigation/ storage requirements resulting from changes to the design
- determine spatial requirements for stormwater treatment and spill containment.

1.8.5 Noise assessments

During future stages of design, the noise modelling undertaken at the EIS phase will be reviewed against standards current at that time, to determine appropriate noise treatments, which could typically include measures such as resilient rail systems and low level noise barriers. Detailed construction noise predictions will be undertaken once contractors have been appointed and a detailed construction methodology determined to ensure that construction is undertaken appropriately.

1.8.6 Environmental studies

TMR will conduct additional environmental studies as identified in the EIS and SEIS.

During future phases of the design process, TMR will review the Addlington Creek crossing, and consult with DEWHIA should there be a significant departure to the management measures outlined in the EPBC Act referral documentation (2008) and EIS.

1.8.7 Source of Hard Rock

TMR will review the sources and supply of hard rock resources suitable for the Project's construction. This will also include evaluation of in-situ resources, subject to the outcome of future geotechnical investigations.

1.8.8 Construction movements

An assessment of the capacity and suitability of the local road network will be undertaken by TMR, to identify deficiencies, for construction purposes, in the existing road network. Any works required to enable use of the local road network for construction purposes would need to be considered as part of the Project.

As each stage of the Project is designed and construction planning commences, vehicle movements, sources of fill and spoil re-use will need to be determined and the impacts to local traffic managed. Movement of spoil/fill to and from the site will need to comply with the environmental standards applicable at the time of construction, which will be included in the construction environmental management plans.

1.8.9 Reuse of existing infrastructure

TMR will review the potential for re-use of existing infrastructure elements, however this will be in the context of:

- structural integrity and suitability of materials
- visual appearance of materials
- timing of the decommissioning, as existing railway components cannot be re-used whilst the corridor is in use, and the replacement infrastructure must be in place before it is decommissioned.

1.9 Design Principles

1.9.1 Noise treatments

The design of noise structures (including methods for noise mitigation on structures such as the Palmwoods bridge) will take into consideration the aesthetics of future urban design within the townships.

1.9.2 Station design

Environmentally Sensitive Design (ESD), Water Sensitive Urban Design (WSUD) and Crime Prevention through Environmental Design (CPTED) principles will be addressed in station design in accordance with the State and Council Guidelines, policy and requirements at the time of design. Climate resilience principles will also be considered in future stages of design.

Station design guidelines will be developed for the Project, to provide a clear and consistent framework for station design. The guidelines should take their cues from the surrounding townscape, and ultimately deliver outcomes like the recently refurbished Landsborough station, which reflects its railway and timber heritage and uses heritage colours. Community input into both the guidelines and the station designs would be sought.

TMR will continue to work with SCRC to further develop re-use plans for surplus rail land, in line with Council's intended planning processes for the area surrounding stations.

1.9.3 Pedestrian and non-vehicular access in towns

TMR will consider pedestrian and community severance issues in the future development of station designs and land use for surplus rail land areas.

TMR will consider the inclusion of the existing pedestrian underpass at Nambour Station in future stages of design, however these will be governed by CPTED principles.

TMR will review pedestrian access requirements in Mooloolah, examining the longer term viability of maintaining an at grade pedestrian crossing. At the time of grade separation, appropriate pedestrian access will be provided, it is envisaged that this would be provided via the station facilities (i.e. lifts, ramps or stairs).

1.9.4 Other rail infrastructure elements

Bridges and other major structures will be designed taking into consideration the scale, form, material, colour and compatibility with nearby architectural and townscape character, taking into account feedback from the community. Future design would respond to the local architectural fabric, giving consideration to materials and form that are compatible with the existing historical buildings.

1.9.5 Vegetation Clearance

Future stages of design will need to clearly define the limits of the Project, and review these against the vegetation clearance areas identified in the EIS. It is important to note that whilst clearing areas and offset requirements identified in the EIS are for the four track corridor, the construction of the two track Project should result in a lesser net requirement.

Future stages of the design process should be based on the two track drawings, that is, only those areas required for the safe construction and operation of the two track corridor should be cleared. This decision will have to weigh up the requirements in terms of maintenance and emergency access, as well as bushfire management.

1.9.6 Landscaping

Future stages of the design will need to incorporate appropriate mitigation measures, such as those described in the EIS, including:

- landscape planting within the railway reserve to screen the Project from views, where feasible. This may also assist with slope stabilisation, erosion control and habitat connectivity
- landscape planting in strategic locations outside the railway reserve to provide additional screening, where possible
- opportunities exist to integrate landscaping with noise barriers to reduce the visual impact of noise mitigation barriers
- mitigation measures developed in the detailed design phase may include opportunities to provide screening to individual properties.

1.10 Tunnels

1.10.1 Tunnel design

Tunnel design parameters will be reviewed during future stages of design, in the event that future design standards for rail in Queensland are revised to accommodate double stack containers. This would also have a flow on effect on the design height of any bridges over the railway in the Project area.

Tunnel ventilation plant will be required for safe operation of the tunnels. The requirements for this will be determined in future stages of the Project's design, and will need to be compliant with the appropriate noise and emissions standards at the time. Avoidance of areas of fauna and habitat significance will be important factors in the selection of appropriate locations and methods for tunnel ventilation.

1.10.2 Existing disused tunnel

The Project will undertake a condition survey of the existing disused tunnel, 400m to the west of the Project, which is listed on the National Trust Register. The condition survey will determine if it would be susceptible to vibration damage from construction of the future tunnel.

Vibration monitoring will also be undertaken during construction to ensure that site construction activities do not exceed vibration levels likely to cause damage. The Project will be responsible for damage attributable to construction vibration and for returning the property to pre-construction condition.

1.10.3 Decommissioned tunnels

The current tunnels which are not required when the proposed scheme is built will be assessed to see if they are structurally sound to continue and the appropriate use/ purpose will be assessed. The heritage significance of these tunnels should also be considered in any future use.

The vibration caused by the drilling of the new tunnels will be monitored, in order to limit disturbance to the existing bat colony in the operational tunnel.

1.10.4 New tunnels

Geotechnical investigations will inform the detailed design process, so that construction footprints and lengths of cut and cover / bored tunnel can be accurately determined. Interface with other infrastructure and infrastructure projects

1.11 Other infrastructure

1.11.1 Powerlines

TMR will consult with Powerlink or the appropriate asset owner at the time of design and construction to confirm design suitability and other arrangements, for this area near Culgoa Road. TMR will confirm through detailed design the feasibility and practicality of extending the tunnel in this location to manage the area under the powerlines or not.

1.11.2 Gas Pipeline Corridor

TMR will consult with the relevant authority in the lead up to and during design to confirm design suitability and other arrangements, for the area where the corridor crosses the gas pipeline route. The design process will need to take into account whether the pipeline has been constructed or is still in planning at the time of railway construction.

1.11.3 Asset relocation

Where infrastructure or assets require relocation as a result of the Project, i.e. roads, bikeways, trails, drainage or water supply, the design of these elements should be undertaken in such a way that the asset life can be maximised. Determination of appropriate infrastructure requirements to service future community needs will be determined by the appropriate stakeholders at the time of construction. TMR will liaise with these stakeholders in the lead up to and during the design process to incorporate reasonable and appropriate requirements into the design.

1.12 Grade separation and road network issues

1.12.1 Grade Separation of Gympie Street North

The timing of this grade separation will be determined through the development of the Project staging. TMR will continue to engage with the community and community representatives to determining timing and need for grade separation.

1.12.2 Mooloolah

The timing of this grade separation will be determined through the development of the Project staging, taking into consideration safety and access requirements. TMR will continue to engage with the community and community representatives when determining timing and need for grade separation.

1.12.3 Road network

Future design stages will further refine the interface between the rail and realigned Paskins Road, in response to detailed geotechnical investigations.

The Project will need to be consistent with the outcome of current safety investigations in the Woombye area, namely the Nambour Connection Road/Blackall Street intersection. The proposed overpass at Keil Street, and other road relocations will need to be considered in the context of current and future State controlled and local road network upgrade proposals.

1.13 Construction

1.13.1 General

TMR will develop a construction management strategy,that considers the various activities that will occur across the entire Project area, and how these can be managed. This can only be developed once the Project's implementation process is determined, but should include penalties/ compensatory triggers for activities occurring outside agreed and scheduled timeframes.

1.13.2 Condition surveys

The Project will undertake condition surveys of properties susceptible to vibration damage prior to construction of the railway. Vibration monitoring will also be undertaken during construction to ensure that site construction activities do not exceed vibration levels likely to cause damage. The Project will be responsible for damage attributable to construction vibration and for returning the property to pre-construction condition.

1.13.3 Traffic Management

TMR will liaise with SCRC, and the Department of Community Safety so that emergency access and response times are not jeopardised during temporary road closures or diversions.

1.13.4 Construction Worker parking and access

Whilst the details of parking arrangements for the construction workforce will be developed in later stages of the Project, the principles for parking arrangements will be to:

- encourage the construction workforce to car pool or use alternative transport to the site
- identify parking areas suitable for the construction workforce that do not reduce the amount of parking available for businesses or residences
- provide temporary car parking where necessary
- strictly enforce parking protocols for the Project to ensure that parking does not occur outside of designated areas.

1.13.5 Recycled water

Prior to construction, TMR will confirm supply and availability of recycled water for non-potable purposes, and undertake a health assessment to determine whether the use of recycled water is suitable on site. Should it be determined that it is safe to use recycled water for construction (non-potable) purposes, a Recycled Water Management Plan will be prepared.

1.14 Decommissioning of the old railway

1.14.1 Contaminated land

TMR is committed to the appropriate treatment of contaminated land to prevent impacts to the environment or public as a result of the use of the decommissioned rail corridor.

1.14.2 Future use determination

The future use of the decommissioned corridor will need to fully consider the potential for environmental impact to adjoining areas (National Parks, wildlife corridors, habitats), and how these can be effectively mitigated. User safety will also need to be considered.

1.14.3 Active trails strategy

The Department of Communities has recommended the development of an 'Active Trails Strategy' and 'Master Plan for Outdoor Recreation' to be developed collaboratively between TMR and the Sunshine Coast Regional Council. This will be dependent on future decisions as to how the decommissioned corridor will be used.

1.14.4 Rehabilitation

Rehabilitation plans will be produced once the existing rail ceases to operate. The rehabilitation plans will deal with different portions of the decommissioned rail. The process of rehabilitation is described in the EIS. It will involve removal of ballast and restoration of topography to suit the existing landscape.

Upon decommissioning of the old railway, the electricity supply over the ridge at The Pinch Lane will be removed. There may be some clearing within the existing electricity easement in order to remove the poles and wires; however, once the old electricity infrastructure is removed the easement can be revegetated.

1.15 Issues external to the Project

1.15.1 Grade separation, Caloundra Street and Maleny Street, Landsborough

TMR has identified grade separation of the railway at Caloundra Street and Maleny Street in Landsborough is outside the scope of this Project. Therefore it will be examined through a separate process, for which the timing and extent of investigation is yet to be determined by TMR.

1.15.2 Road network improvements, Palmwoods-Woombye Road/ Jubilee Road intersection Palmwoods

Whilst the Project will not directly result in the upgrade of this intersection it will deliver the opportunity to consider reconfiguration of the local road network. The timing of the road upgrade can only follow the decommissioning of this section of the track, therefore this will be subject to the overall staging of the design and construction of the Project. TMR will work with the Sunshine Coast Regional Council, to resolve this issue.

Queensland Government