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8 March 2021

Attention: The Coordinator-General c/- EIS Project Manager, Inland Rail - Calvert to Kagaru project Office of the Coordinator-General PO Box 15517 CITY EAST QLD 4002

Email only sent to: inlandrailc2k@coordinatorgeneral.qld.gov.au

Dear Ms Power

Response to Draft Environmental Impact Statement for the Calvert to Kagaru Inland Rail Project

I refer to your letter of 16th December 2020 and thank you for your invitation for Scenic Rim Regional Council to provide feedback on the draft environmental impact statement report (EIS) for the Inland Rail – Calvert to Kagaru (C2K) project. Please find attached a report of Council's feedback.

The Scenic Rim region is set in the foothills of the Great Dividing Range and surrounded by World Heritage listed national parks. The region's primary businesses are agricultural / horticultural production, the equine industry and tourism / ecotourism and our population values the county lifestyle, natural environment and vibrant community.

This project will forever change the amenity and character of the areas where the rail will be built. Council is committed to preserving the region's natural assets and prime agricultural land while encouraging future growth, innovation, economic development and employment opportunities. Council holds a particular interest in the Inland Rail project to ensure we maintain a balance between promoting sustainable farms, businesses and industries that are compatible with our environment and lifestyle and providing rewarding employment and prosperity for residents.

While the full report attached details issues in many sections of the EIS, Council has strong concerns in four particular areas:

Level Crossings

Council and residents have strongly advocated for the use of bridges or road network realignments instead of level crossings. The EIS does not meet the Queensland Level Crossing Safety Strategy to 'add no further open level crossings to the network.' Only four of the eight crossings are bridges imposing increased risk of accidents including fatal accidents, unacceptable delays, risk of isolation to residents properties where crossing is the sole access. The long-term nature of this project requires a future proofed solution to allow for predicted future growth over 100 years.

Noise Mitigation

Council and residents remain concerned that the project will adversely affect their quality of lifestyle and that no allowances have been made to mitigate adverse impacts such as noise and air pollution. Community perceptions are that the EIS does not appropriately plan to

mitigate against the negative impacts such as noise, air and visual amenity in residential and tourist sensitive areas, in particular the omission of acoustic profiling including the effects of topography and meteorology, and resultant mitigation requirements.

Construction Traffic

The assessment of the impacts of construction traffic has not appropriately assessed the impacts of construction traffic on the correct routes. A more thorough, onsite assessment of local roads is required to understand the impacts on local road network, road users and local residents and businesses. Multiplying traffic volumes, particularly heavy vehicles, on narrow, winding, hilly local roads requires infrastructure upgrades and other mitigations to avoid significant safety, efficiency and amenity impacts on residents and businesses. The proponent must gain Council's approval and accept the conditions imposed on use of local roads.

Flooding

The Scenic Rim region has been subject to seven major flood events in the last ten years, as well as numerous minor events. Characteristic of this region is localised, intense rainfall which results in high volume and speed flows, and significant downstream impacts. The Queensland and Australian Governments established the independent Flood Panel, and the proponent must incorporate the conclusions of the Flood Panel in the Project.

Thank you for the opportunity to provide a submission on the draft Environmental Impact Statement for this project. Should you require any further information, please contact Council.

Yours faithfully

Jon Gibbons

CHIEF EXECUTIVE OFFICER

Encl.







Inland Rail – Calvert to Kagaru

Scenic Rim Regional Council Response to Draft Environmental Impact Statement

8 March 2021

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Document Control

Version	Prepared By	Approved By	Date
1	Richard Hancock	Chris Gray	08/03/2021

Flora and Fauna

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
Chapter 14	Survey Effort	
Chapter 14	a. Ecological surveys undertaken for the EIS throughout the project area were not sufficient in size and / or scope to quantify the baseline conditions of environmental values: i. Flora surveys were not sufficient in size (i.e. only covered 2.4% of the total ecology study area) or scope (e.g. not sufficiently comprehensive or compliant with the Qld NCA Flora Survey Guidelines – Protected Plants). ii. Aquatic surveys were undertaken using the AUSRIVAS Physical Assessment Protocol for defined watercourses that are intersected by the project alignment. A total of only 16 waterway crossing sites were surveyed, despite the fact that the alignment intersects 34 waterways, seven of which will be crossed multiple times. Higher order / spring fed waterways were not surveyed. iii. Targeted survey effort for Phascolarctos cinereus (Koala) were deficient in size and scope, being limited to active searches at terrestrial sampling sites located in areas with existing vegetation cover. iv. Survey effort for Glossy black cockatoo (Calyptorhynchus lathami ssp. lathami) was limited and given this species highly specific feed tree preferences – feed tree mapping is required to quantify impacts	 a. Prior to approval the proponent must undertake additional baseline ecological surveys consistent with the below requirements. Results of these surveys must be considered and quantified in the final impact assessment and also be used to verify suitable locations for fauna crossings. i. Additional flora surveys that sufficiently cover the project area and are compliant with the QLD NCA Flora Survey Guidelines – Protected Plants. Survey efforts should have particular focus on regrowth and remnant areas of 12.9-10.7, given that this RE is known to harbour the endangered Melaleuca irbyana. Additional survey effort for groundwater dependent ecosystems is also required in areas where groundwater drawdown may occur (e.g. Teviot Range Tunnel). ii. Additional flora, fauna and AUSRIVAS Physical Assessment Protocol surveys are required at all waterway crossings within the disturbance footprint to accurately assess baseline conditions and potential impacts. iii. Further detailed Koala activity surveys (e.g. Spot Assessment Technique, Philips and Callaghan 2011, koala movement tracking (eg RFID) and / or thermal drone imaging), including in areas without contiguous vegetation cover, is required to provide a more comprehensive assessment of activity levels and movements of this species throughout the project alignment. iv. Additional targeted Glossy black cockatoo (Calyptorhynchus lathami) spe. lathami) feed tree

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
	and prescribe appropriate mitigation measures. v. Targeted surveys for <i>Ornithorhynchus anatinus</i> (Platypus), listed as Special Least Concern under the Qld NCA, were not undertaken within the fauna surveys based on the lack of historical records in the project area. Platypus are generally underrepresented in historical record databases due to their cryptic nature, and their presence within the project area should not be discounted on this basis.	surveys and mapping should be undertaken to verify baseline conditions and impacts for this species. v. Targeted Platypus surveys utilising the eDNA technique are to be undertaken in areas of high quality platypus habitat at the larger waterway crossings along the alignment.
Section 11.5.2	Matters of Local Environmental Significance b. A number of MLES (as defined in the Scenic Rim Planning Scheme 2020) are mapped as occurring within the C2K disturbance corridor, specifically 4B Biodiversity (Core Corridor Areas) and 4E Local Watercourses. Although ARTC committed to the consideration of impacts on MLES, this commitment does not appear to have been carried through in the Draft EIS.	b. The proponent is required to assess impacts on MLES in the C2K corridor within the final Environmental Impact Statement to quantify any Significant Residual Impacts. Mitigation measures for impacts on MLES, consistent with the provisions of the Qld Environmental Offsets Policy, must also be described.
Chapter 11	Koalas and Wildlife Corridors c. Chapter 11 of the EIS identifies that the project will result in a total unmitigated potential impact of 598ha of Koala habitat, as well as permanent severance of movement corridors for the Koala. The C2K project currently only proposes six (6) fauna crossings along the alignment, five (5) of which will be dedicated koala crossing structures. Fauna crossings do not generally align with existing areas or tracts of vegetation	c. The Qld Government Koala-sensitive Design Guideline (DES, 2019) recommends crossing structures be provided along transport infrastructure corridors at a maximum distance of 2km between crossings. Crossing design, locations and frequency should be re-assessed following further survey effort and should consider the disconnect to climate refuges and long-term species viability with restricted landscape movement.

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
	acting as ecological corridors and don't seem to consider fauna movement through periods of stress, i.e. flood, drought, fire etc with the rail alignment trapping populations in such scenarios. Restriction of fauna access to climate refuges in the region has not seemingly been considered.	
Section 11.9.2	Impacts on other MSES d. Feeding activity for the Vulnerable Glossy black cockatoo (<i>Calyptorhynchus lathami</i> ssp. <i>lathami</i>) was detected on the western slopes of the Teviot Range and the EIS predicts that approximately 50ha of habitat for this species will be impacted by the project. This species is known to be highly specific with feed tree selection with birds only preferring certain trees with the determinants for tree selection still unknown. They also have an isolated foraging range and slow breeding rates. The EIS fails to prescribe species-specific mitigation measures for the Glossy black cockatoo in Section 11.9.2. Mapping of preferred feed trees within the disturbance footprint is critical to mitigating impacts on this species.	d. The final EIS should include surveys to inform Glossy black cockatoo (<i>Calyptorhynchus lathami</i> ssp. <i>lathami</i>) feed tree mapping in the project disturbance footprint. Appropriate species-specific mitigation measures should be included in Section 11.9.2. Mitigation measures for this species typically include translocation of feed trees through harvesting of propagules and revegetation in protected areas.
Appendix K	 SRI Mitigation – Offsets e. The Environmental Offset Delivery Strategy (Appendix K part 4) is a high-level strategic document for the Inland Rail project in Qld and does not provide specific offset delivery details for the C2K project. It does state that the project will offset significant residual impacts on MNES, MSES and MLES as determined through the impact assessment process however, no further 	e. The further studies recommended in the EIS to inform offset delivery requirements for MNES, MSES and MLES should be undertaken prior to finalising the EIS.

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
Observation 00	discussion or detail is provided on offset delivery mechanisms or commitments. Commitments are made to further project-specific studies to inform offset delivery requirements for MNES, MSES and MLES – however this assessment should be undertaken as part of the EIS to adequately quantify the SRI and Offset liabilities.	
Chapter 23	f. A high-level Draft Outline Environmental Management Plan (DOEMP) has been prepared in support of the EIS. Additional guidance within the document is required in regard to appropriate selection of species and planting objectives for the revegetation works. Additionally, the term 'endemic' is used erroneously within this document.	f. The proponent must include additional guidance within the DOEMP in regard to rehabilitation, specifically: i. Plan showing location of rehabilitation works, in particular for areas where revegetation is required to enhance corridor function and connectivity; ii. Species specific revegetation for example Glossy black cockatoo (<i>Calyptorhynchus lathami</i> ssp. <i>lathami</i>) feed tree translocation; iii. Works are undertaken in accordance with the SEQ Ecological Restoration Framework; iv. Works consider the preclearing regional ecosystem for reinstatement palettes; and v. The use of the term 'endemic' is replaced with 'local native' or other more scientifically correct term. g. Additional guidance regarding location, extent and design of fauna fencing, particularly around crossings, should be included in the DOEMP for construction and operational stages.

Air Quality

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
1.	Dust Deposition a. The construction impacts on the air quality have been assessed only in terms of risk, with a medium risk of dust deposition impacts. The medium risk of dust deposition warrants more detailed quantitative assessment of the likely dust fallout in areas where sensitive receptors (e.g. dwellings with tank water supply) are located (e.g. Ivory's Rock Conference Facility).	a. Prior to any construction works being undertaken, the proponent must undertake a more detailed quantitative assessment of the likely dust fallout in areas proximate to sensitive receptors. Intensive dust suppression programmes must be developed in areas where the quantified risk of dust deposition is greatest.
	 b. The modelling of the fugitive emissions from the coal laden wagons have been carried out with consideration of as much as 75% reduction of coal dust emissions due to veneering applied at the loading point. In practice the coal wagons have extensive depositions of fine coal dust which tend to be released through other fugitive ways (e.g. through doors of loaded wagons and coal deposits on wagon bodies), including on empty returning wagons. 	b. The proponent must confirm that their assessments have considered the reduced effectiveness of the veneering due to residual coal dust deposits on the wagons and associated fugitive emissions, as well as outline any additional specific mitigation measures that may be required.
	C. The mitigations measures for prevention of impacts on air quality tend to be generic and rely on number of management measures which depend on specific activities to be carried out by the companies which are actively involved in the construction or operational activities on the project.	c. Reporting and management plans completed by the proponent must acknowledge SRRC's intended involvement and confirmation in the process of establishment of air quality monitoring stations and in the auditing of the complaints to dust and other emissions to air during construction and operation of the C2K Inland Rail.

Surface Water Quality

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
1.	Ongoing Monitoring During Operation a. The methodology proposed relies upon monitoring water quality in the receiving waters throughout the project construction but does not discuss ongoing water quality issues during the operational phase of the project.	 a. Prior to construction, the proponent must revise reporting and management plans to specify how impacts on the water quality will be monitoring and managed during the operational phase of the project. At a minimum this must include best-practice stormwater management principles, such as: i. Basic treatment of runoff from the track ballast via a vegetated or grassed swale; ii. Any concentrated flows resulting from the construction should pass through a rock filter before entering receiving waters; iii. Any major increase in peak discharge to drainage features be mitigated by detention basins; and iv. Compliance with QDTMR guidelines for stormwater management.
	Mitigation Measures During Construction b. The EIS fails to identify what action is to be taken in the event that monitoring during construction indicates deterioration of water quality in the receiving waters via sediment runoff. Staging c. The EIS provides limited discussion on staging of works and in particular how the proposal can achieve IECA standards.	 b. Prior to construction, the proponent must revise reporting and management plans to provide details of proposed remedial measures in the event that water quality monitoring data is non-compliant with given standards. c. Prior to construction the proponent must revise reporting and management plans to provide a breakdown of staging considering erosion risk potential for the duration, time and season the works to occur.
		The project staging plans and controls must be CPESC certified.

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
	Erosion Risk d. Erosion risk and location are generally not considered within the EIS	d. Prior to construction, the proponent must consider submission and inclusion of soil type geology mapping and erosion potential for areas along the C2K alignment. Appropriate techniques for the reduction and mitigation of erosion should be tabled.
	 Water Reliability e. Considerable amounts of variable grade water are presented to be required during the project. Reliability of this water for the project, landscape, rural productivity and ecological functions (e.g. flora and fauna) has not been considered. 	e. Within the EIS, the proponent must include a discussion tabling the impacts on the project, landscape, rural productivity and ecological functions should be better detailed with applicable standards and / or thresholds considered. Impacts of weather patterns, drought conditions and local water security are to be included within this discussion.

Hydrology and Flooding

a. The draft Expert Panel Report a. The draft Expert Panel Report was critical of the hydrology and flooding studies done to date, noting that: i. The flood study lacks detail, specifically regarding acceptable impacts and justification for acceptable outcomes during the design process (including increased flood levels); ii. The assessment lacks detail regarding verification of model parameters and calibration of the model; iii. The flood study fails to assess the impacts of local flood changes and confuses regional and local flooding; iv. The flood models prepared for the EIS lack the required detail to be utilised in the detail design phase of the rail track; v. The hydrology for some of the catchment is unreasonable and the flows at Purga Creek appear to be underestimated; vi. The method for the setup of the models is not to an acceptable standard; vii. The hydraulic impact risks have not been classified viii. The hydraulic models prepared for the EIS are not suitable for assessing impacts on specific local infrastructure	SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
	SECTION	a. The draft Expert Panel Report was critical of the hydrology and flooding studies done to date, noting that: i. The flood study lacks detail, specifically regarding acceptable impacts and justification for acceptable outcomes during the design process (including increased flood levels); ii. The assessment lacks detail regarding verification of model parameters and calibration of the model; iii. The flood study fails to assess the impacts of local flood changes and confuses regional and local flooding; iv. The flood models prepared for the EIS lack the required detail to be utilised in the detail design phase of the rail track; v. The hydrology for some of the catchment is unreasonable and the flows at Purga Creek appear to be underestimated; vi. The method for the setup of the models is not to an acceptable standard; viii. The hydraulic impact risks have not been classified viiii. The hydraulic models prepared for the EIS are not suitable for assessing	a. The proponent must address all the concerns raised in the Expert Panel Report within reports and / or management plans prior to proceeding to the final design. In addition it is reasonable to request the authority to complete works generally in accordance with the Queensland Urban Drainage Manual Guidelines. (QUDM).

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
	b. There is a significant mismatch between the flood immunity of the proposed rail embankment (1% AEP) and the local roads which are likely to have a much lower flood immunity (possibly as low as 50% AEP). Council-owned infrastructure may not be adequately assessed in terms of change hydraulic condition. There has also been little consideration of the impacts in more frequent local flash flood events with low tailwater which will produce higher stream velocity, scour and potentially affect Council bridges culverts and cross-road flows.	b. The proponent must revise reporting to identify the existing infrastructure features that are potentially affected by the alignment of the rail embankment. Local catchment modelling must be utilised to address the impacts on existing Council infrastructure with the predevelopment and post-development catchments mapped precisely. The proponent must also test for more frequent flood events with lower tailwater conditions which will yield higher velocities and scouring (i.e. local flood events). Post-development flood velocity at Council infrastructure must not increase by more than 20%. Where infrastructure is impacted, a risk and mitigation strategy must be prepared. Any adverse changes to the hydraulic condition at local infrastructure external to the C2K must be mitigated with appropriate design in accordance with QUDM.
	c. The flood modelling does not appear to have included calibration against the 2017 flood event in the Scenic Rim, which was a significant event in the catchments where this project is located.	c. The proponent must incorporate calibration against the 2017 flood data in its modelling.

Groundwater

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
Section 14.6.2.1 & 14.6.2.2	Groundwater Drawdown a. The EIS discusses that within the study area there are potentially 65 boreholes that will be impacted by groundwater drawdown. It is proposed to monitor these boreholes during the operation of the C2K, however monitoring of these boreholes will fail to prevent adverse impacts and will merely quantify the groundwater changes during the project operation. Loss/damage to existing landholder bores and water resources from decreased water quality (notably salinity movement and local concentration in the landscape) is not clearly articulated.	a. Prior to construction the proponent must clearly identify which existing bores will be impacted by surface loading and groundwater levels and or quality will be affected.
Section 14.6	 Salinity b. The Groundwater Monitoring and Management Plan (GMMP) fails to adequately describe the mechanisms and mitigation measures for managing groundwater impacts throughout the salinity prone areas. c. Detail of the significance of figure 13.4 (salinity hazard rating) to the GMMP and groundwater management may be limited. 	 b. The proponent must complete detailed geotechnical investigations at key salinity prone areas to ensure minimal impacts to mobility of salt in the groundwater landscape include salinity. Salinity must be documented as a clear topic and form part of GMMP in terms of affecting groundwater, mobilization or concentration of salt. c. Assess the appropriateness to include Salinity Hazard (chapter 13) in Groundwater as an element to the EIS (chapter 14).

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
	d. The GMMP scope details that sufficient lead time is required prior to construction. Given the fluctuations in data and water parameters within the groundwater assessment, further details of what an appropriate study time is should be better described.	d. The proponent must provide details of appropriate pre- construction study periods to establish base line data for GMMP. Frequency of sampling needs to be considered as local groundwater quality and levels are anecdotally seasonal in natural and affected by weather/climatic conditions. Reporting annually is generally considered sufficient.

Noise and Vibration

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
Chapter 15	a. Monitoring Location No. 10 appears to have very low background noise levels that may be invalid.	a. The proponent must provide additional details within their reporting justifying the particularly low background noise at Monitoring Location no. 10, including a description of the noise measurement equipment and photographs of the location of the noise loggers during the noise measurements.
	b. There are errors in the identification of road names and intersections.	b. The proponent must ensure correct road names and intersections are used.
	High Existing Noise Amenity c. Because of the very low background noise levels (i.e. high existing noise amenity) it is recommended to extend the study area for the C2K EIS beyond the 2km buffer either side of the rail that was allowed for within the EIS. This is particularly relevant in the areas between Peak Crossing and Woolooman, where background noise levels are the lowest.	c. The proponent must provide revised reporting extending the study area beyond the 2km buffer either side of the railway line.
	d. The assessment does not appear to consider that this rural area does not feature any heavy agricultural uses which would generate a level of background noise. Typical uses are cattle grazing and specialist crop production. The background noise level is very low as a result, and features only minimal large vehicle noise, and very rarely at night.	d. The proponent must appropriately account for the very low existing noise levels in the assessment.

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
	Sensitive Receptors	
	e. It is important to consider all sensitive receptors, including outdoor conference and camping facilities because these land uses are sensitive to railway noise emissions and rely on the high quality of its visual and acoustic amenity for its business viability	e. The proponent must provide a detailed construction and operational noise assessment that considers all sensitive receptors and the change in acoustic amenity caused by the project. This assessment must be able to demonstrate, under conservative assumptions about the construction and operational noise sources, that this important regional tourist centre is not affected negatively by both construction and operational noise.
	f. Establishment of sensitive land uses within at least 500m from the centreline of the rail track will be constrained due to noise and vibration constraints.	f. The proponent must consider both individual existing receptors and potential future zoning of land proximate to the rail alignment within noise and vibration impact assessments.
	Operational Noise – Diesel Electric Locomotives g. The EIS acknowledges prominence of low- frequency noise from diesel-electric locomotives, although additional assessment is required.	g. The proponent must extend the zone of potential noise impact by at least 1km in areas of low background noise to account for the intrusiveness of low frequency noises, particularly during night-time.
	h. The assessment does not appear to include operational train noise such as the impact of long trains stopping and starting at the passing loops, horn noise or the additional noise caused when wagons experience wear.	h. The proponent must include assessment of all noise generators.
	Operational Noise – Fixed Infrastructure i. The operational noise associated with the fixed infrastructure has not been sufficiently considered in the EIS.	 i. The proponent must provide assessment of the sound pressure levels and characteristics of the noise emissions associated with the fixed infrastructure (i.e. jet fans, banana fans, pumps and generators) required for the operation of Teviot Tunnel.

Social

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
Table 16.2	Liveable Communities a. Local residents and those who have moved to the Scenic Rim value the social amenity, spectacular scenery and rural aspects of the region which could be compromised, particularly with Rail/Road crossings at Peak Crossing and Washpool and possibly the tunnel crossing through the Teviot range. There is a need to preserve the region's rural elements and point of difference to other LGAs in Southeast Queensland	a. The proponent must consult with the community to create legacy projects that celebrate the local community. Invest in local projects that improve liveability, such as improve infrastructure at Peak Mountain View Park (eg skatepark/youth space for local youth or story board projects) to improve local and visitor experiences.
Section 16.2	Stakeholder Impacts Property Acquisition and Values b. The EIS proposes compensation for landholders next to the line for noise and inconvenience. Significant concerns exist regarding property values put forward by the EIS, and that landholders not directly impacted by the line may not be appropriately compensated	b. The proponent must ensure that all impacted landholders are considered, not just those directly on the line. The proponent must undertake community consultation and extend the scope to acknowledge real community concerns than those perceived.
Section 16.7.6.5 & 16.7.2.1	Community Services and Facilities / Amenity and Lifestyle c. The EIS is vague on the implementation of recreational projects that would be a subproject of the C2K.	c. The proponent must ensure that recreational proposals such as the Boonah to Ipswich Trail are implemented as a celebration of the C2K.

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
Section 16.9.4	Health and Wellbeing d. The EIS states that it working in partnership with the Darling Downs, West Moreton and South Brisbane Primary Health Networks to help support residence who are subjected to stress and anxiety associated with the introduction of the C2K.	 d. The proponent must provide additional details involvement of Primary Health Networks including: Residents access to these networks; Local General Practitioners awareness of the Health and Wellbeing measures; and The Fassifern Community Centre Awareness of the Health and Wellbeing measures.
Section 16.7.4	Flinders-Karawatha Corridor e. The C2K will impact on access and ultimately useability of the Flinders-Karawatha Corridor.	e. The proponent must detail specifically how the useability of the corridor will be maintained during the operation of the C2K.
Section 16.7.6.1	Primary and Secondary Education f. The EIS has identified the early education centres within the Scenic Rim LGA, but has failed to identify any educational outcomes for the education of students associated with the C2K.	f. The proponent must work with Peak Crossing State School and Early Years Centre to identify key projects that will improve educational outcomes for Scenic Rim.

Economics

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
Section 17.3	Importance of Local Content in Tenders a. The Scenic Rim Regional Prosperity Strategy 2020-2025 sets a clear direction and roadmap for the Scenic Rim's future economic growth and sustainability. The EIS fails to include the Scenic Rim Regional Prosperity Strategy 2020-2025 in its assessment.	a. The proponent is required to update the economic assessment with reference to the Scenic Rim Regional Prosperity Strategy 2020-2025 and ensure that the economic strategy is in accordance with the Scenic Rim Strategy.
Section 17.6.2.1, 17.6.2.2	b. The EIS fails to identify local employment opportunities and does not mention how it will draw upon the local for workforce.	b. The proponent is to re-iterate the importance of local content to be included in tenders for project to ensure local employment outcomes. Additionally, the proponent must commit to promoting opportunities regarding training programs for upskilling individuals and preparing businesses to potentially tender for this work, maximising the benefits during the construction phase and also longer-term benefits.
	c. The EIS fails to identify opportunities for local business and secondary service and supply industries associated with the construction and operation of the C2K.	c. The proponent is to ensure that local content is included in the Sustainable Procurement Policy and ensure that businesses are aware of the opportunities, with programs run to increase their capability to maximise the opportunities presented to them in relation to this project, but also other projects of State / National significance.
Section 17.6.2.2	d. Inland Rail has the potential to impact upon farm operations, with respect to access to water and transport routes as well as necessary acquisition of agricultural land. Isolated small lots may be created where the alignment cuts through lots.	d. The proponent must commit to the provision of appropriate planning, control measures and support to local producers to limit the impact on farm operations with respect to access to water and transport routes. In addition to this, remaining lots must be amalgamated to ensure the requirements of

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Section 17.5.2.5	e. This section has not identified the Beaudesert Enterprise Precinct. The Inland Rail will transform opportunities for light-to-medium industry by creating new, greenfield expansion opportunities. Providing alternative options to urban centres such as Brisbane or Gold Coast, it will also provide industrial support for Bromelton heavy industry. Scenic Rim Regional Council is currently developing the land, aided by a grant from the Queensland Government's Building Our Regions Fund, with a target completion date of	the SRRC Planning Scheme are met, as well as creating viable agricultural lots. e. The proponent is to include details of the Beaudesert Enterprise Precinct within the EIS.
Chapter 22	June 2020. The expansion of the Beaudesert Enterprise Precinct provides new investment opportunities for businesses, ensuring that the region can accommodate a range of business and industries, thereby creating valuable employment for residents. Cumulative Impacts	
	f. Cumulative Impacts associated with economic development and social constraints have not been adequately addressed within this section.	f. The proponent is to ensure that programs are in place to ensure local labour force and businesses are aware of the opportunities in regard to the project to maximise their involvement during construction to supply goods and / or services. The proponent must also ensure that acquisition of agricultural land still allows for economically viable farming operations, with not significant impacts on access to required infrastructure (i.e. water and road transport). The proponent is to ensure changes to landscape and visual amenity does not significantly impact visitor experience when visiting the region for its natural beauty. As it has been identified the workforce will be sourced locally, if this expectation

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
		is met, it is not anticipated that there will be significant impact on availability of accommodation to visitors coming to the region. If this is not the case, the proponent must pay consideration to managing this will need to be addressed, due to the existing shortage of tourism accommodation in the region.
Chapter 23	g. Mitigation measures to limit impact on visitor experiences may result in negative impacts on tourism industry and / or local businesses who capitalise on the region's natural beauty as part of their operations if not managed properly.	g. The proponent must outline how these mitigation measures will be managed to ensure that the tourism industry and local businesses are not negatively impacted.

Traffic, Transport and Access

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
2.	a. No consideration to increased traffic volumes, heavy vehicles along existing narrow roads and introduction of hours of operation outside daylight hours (i.e. 24/7 operations). There is only a requirement to determine where road Safety Audits are required, not to perform the Audit and implement recommendations.	a. The proponent must include an assessment of increased traffic volumes and heavy vehicles along existing roads within the EIS. Road Safety Audits to be performed where traffic volumes increase by 5% including recommendations on mitigation measures such as road corridor improvements including geometric improvements, guardrail installation, lane widening, lane duplication and foliage removal. Detail design of all mitigation measures to be prepared before construction. The reporting must also address increased nuisance to community road users and residents due to 24/7 operations.
	b. The analysis of the impacts of haulage vehicles includes roads that are identified as no-through roads and roads that have been prohibited for construction traffic as follows: i. Undullah Road at Woolooman Creek. Closure will result in additional traffic on Kilmoylar Road and Wyatt Road. ii. Brabazon Road closure at the railway line resulting in additional traffic on Beaudesert Boonah Road, Beaudesert Bypass, Mount Lindesay Highway and Allan Creek Road. Roads prohibited to construction traffic include: i. Bromelton House Road, between Boonah-Beaudesert Road and Allen Creek Road. This road is signed as no heavy vehicles except for local access.	b. The proponent must re-assess all impacts that will be incurred on the available road network by considering only and all roads that are available and re assigning the volumes to the remaining roads. Also the volume impacts of the construction traffic and workforce traffic must accurately reflect the number of trips including adopting the peak number of workforce as the worst case and allowance for the higher percentage of heavy vehicles in the construction traffic to determine the roads where the 5% increase occurs. Mitigation measures include increasing capacity of existing roads, pavement widening, shoulders widening or contributions to road widening or new roads.

- ii. Thiedeke Road
- iii. II-bogan Road

This has resulted in roads which will be required to be accessed such as the Mount Lindesay Highway between Beaudesert Boonah Road and Allan Creek Road not being included in the assessment

The current assessment also underestimates the impacts from the increased traffic and haulage vehicle volumes on the road network. Comparing the workforce trips with the projects site work force, a constant number of trips has been adopted that does not correlate either with the peak site workforce or the average workforce throughout the construction period. The assessment does not allow for the increased composition of heavy vehicles estimated at 33% for the construction and workforce traffic compared to the existing 4-6% HV on the local roads.

Intersection Performance

- c. The proponent has proposed traffic management plans and temporary roadwork arrangements as traffic mitigation measures throughout the construction of the inland rail. A LOS E is proposed for the intersection capacity performance which is not in accordance with standards. As the project will be constructed over several years, temporary roadworks and traffic management plans are not considered acceptable solutions for intersection safety and performance. Heavy vehicle turn movements at intersections will also result in wider swept paths. Estimated light and higher heavy vehicle
- c. Prior to commencement of construction, the proponent must undertake permanent construction works incorporating intersections upgrades such as right or left turn auxiliary lanes, lane widening for heavy vehicles, increased auxiliary lane lengths, longer tapers, new or sealed shoulders or new intersections.

volumes including specific turning movements at intersections to accurately reflect the increase in traffic and turning movements

Damage to Road Network

d. Infrastructure based strategies are required for pavement structural capacity impacts on existing sealed and unsealed roads due to increased light and heavy vehicle volumes and axle loads. Standard Axle Repetitions for haulage to adopt one way fully laden vehicles instead of average values considering trips in both directions.

Inland Rail Level Crossings

- e. The proponent does not appear to have satisfied the requirement of the Terms of Reference to comply with the Queensland Level Crossing Safety Strategy 2012-2021 for new road/rail interfaces. In particular, Strategy 9. "Eliminate level crossings where appropriate Explore opportunities for grade separation or closing level crossings and seek to minimise any proposals to construct a public level crossing on a greenfield site, with a clear objective to add no further open level crossings to the network." Only four of the eight crossings are grade separated imposing increased risk of accidents including fatal accidents, unacceptable delays due to projected 45 trains per day 1.8 km long by 2040, risk of isolation to residents properties where crossing is the sole access. The long-
- d. Prior to the commencement of construction, pre and post conditions surveys, including video and laser roughness rating, Falling Weight Deflectometer (FWD) analysis, gravel depth sampling and Dynamic Cone Penetrometer testing are required. The proponent to calculate monetary contributions for all affected SRRC roads or construction upgrades such as pavement reconstruction or rehabilitation required to maintain existing sealed and unsealed roads, along with ongoing monitoring and maintenance requirements or design and construct new roads prior to construction commencement at no cost to Council.
- e. The proponent must provide grade separated crossings at all crossing locations, either through construction of bridges or road network realignments.

term nature of this project requires a future proofed solution to allow for predicted future growth over 100 years

Oversize and overmass vehicles

f. Appendix U Section 5.9 states: "At this stage, no oversize vehicles are anticipated to be used during construction." This is clearly incorrect as Super-T girders have been specified for the bridges which are up to 32m long, and over standard mass. One 700m long bridge at Allenview will require over 20 of these girders. The girders will normally need to be moved at night to avoid impacts to road users. In addition cranes and pile drivers will be over mass, and also the tunnel boring equipment. Impacts will include disturbance to residents by noise and lights at night, as well as damage to the road pavement.

f. The proponent must assess the impact of movements of overmass and oversize vehicles and include mitigation measures.

Impact assessment

g. The existing road network assessment has used the DTMR Guide to Traffic Impact Analysis, which is designed for State Controlled Roads, and is not appropriate to use as an assessment tool for local roads. The use of Level of Service models which focuses on queue length at intersections as a measure of efficiency is not valid on local roads, particularly rural roads where the volumes are low. The use of previous crash data as an analogue for safety is also not valid where the crash history is very low or zero. The baseline assessment has not identified that many of the roads are narrow, winding and hilly and are not designed to modern engineering

g. The proponent must assess the existing road network from first principles including site visits to assess the existing road geometry and condition. Safety must be assessed on site by a Road Safety Auditor, experienced in local road conditions. standards. Many local roads require vehicles passing to pull off the sealed road on each side.

- h. Further the level of service assessment appears to classify local roads in the same category as highways, for example, Wild Pig Creek Road is a mountainous, winding, hilly, narrow, gravel road which is classified as a 'Level' 'Two lane highway' in the Link Analysis, the same as the State Controlled Beaudesert-Boonah Road, both with an Ultimate Link Capacity of 2,280 pc/h/ln.
- i. The assessment of the impact of increases in traffic does not appear to consider that the majority of the increase in vehicles during the construction phase will be heavy vehicles, which will have an impact on road safety, network operation and on resident amenity.
- j. The Conclusion to Chapter 19 states: "37 local government roads have been identified that are expected to see construction traffic exceed 5 per cent of the background traffic; however, the impact to many of these roads is expected to be minimal as the high percentage of construction traffic is function of low existing traffic volumes."

Some roads show increases of up to 7 times the baseline traffic. in Scenic Rim, five roads show a doubling of traffic (Undullah Road 742.5%, Washpool Road 320.9%, Wild Pig Creek Road 306.4%). These roads are maintained by Council within a highly constrained budget to manage the existing traffic load. Any increase

h. The proponent must assess the impact of increased traffic volumes, particularly increases in heavy vehicles, using a methodology appropriate to local roads, including rural and unsealed roads.

- The proponent must assess the increase in heavy vehicles specifically to identify impacts associated with heavy vehicles and provide appropriate mitigation measures.
- j. The proponent must assess the full impact of increases of traffic, particularly of heavy vehicles, and identify mitigation measures which will avoid the impacts on the safety and operation of the local road network. This must include only using local roads which meet the Austroads standard for heavy vehicle routes (minimum 7m sealed pavement) as well as an onsite Road Safety Audit to identify and propose mitigation for hazards such as crests and curves. If local roads which do not meet these standards are to be used, the roads must be upgraded to meet the standard.

above the existing will have significant impacts on:

- i. Road safety narrow roads, blind bends and crests, increase in need for vehicles passing
- ii. Network operation increase in slow moving vehicles on grades, curves and intersections will reduce the efficiency of the road network, impacting on residents and businesses
- iii. Resident amenity residents choose to live in the region for its quiet rural environment. For the duration of the project, an increase in heavy vehicles 24 hours per day will significantly impact their ability to peacefully enjoy their homes.
- k. Councils are the Road Managers for local roads under the Transport Operations (Road Use Management) Act 1995 and carry the responsibility for managing the local road network for the use of all road users. Councils also hold the local knowledge of the areas serviced by the roads including business operations, traffic flow patterns, seasonal use and hazards such as flooding.

k. The proponent must apply to the Council to use a local road as a construction traffic route in order that Council can manage its local road network safely and efficiently for all road users. Council may approve use of a road as a construction traffic route and may impose conditions on use of the local road including infrastructure upgrades, vehicle monitoring and maintenance requirements.

Hazard and Risk

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
Chapter 20	Document Development a. Throughout Chapter 20, there has been mention of what will be undertaken, such as document development and Consolation, but no timeline has been provided.	The proponent is to revise reporting committing to specific timelines / hold points when the documentation will be provided. When documentation is available, it is to be submitted to Council for review.
Section 10.9.4.2	b. The Scenic Rim LDMG activates to significant emergencies and disasters within the region, although the reporting does not define what incident level the Scenic Rim LDMG will be consulted with. It is acknowledged that LDMPs specify that response to 'Rail Accidents' is led by QPS, although this doesn't address accidents that may occur during construction and commission phases that may require communications with LDMGs.	b. The proponent is to revise reporting to describe what incident level the Scenic Rim LDMG will be consulted with.
Section 20.9.4.4	Consultation c. The consolation report does not include Boonah Hospital and LDMGs	c. The proponent is to include Boonah Hospital and LDMGs within the consolation report and consult with these organisations as applicable.
Section 20.11	Risk Assessment d. A Preliminary Risk Assessment has been undertaken by the proponent, but no plans for a Detailed Risk Assessment have been issued.	d. The proponent is to indicate whether or not there are plans for a detailed risk assessment to be undertaken and when during the project timeline this may occur.

Waste and Resource Management

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
Table 21.2 Figure 21.1	Recycling and Waste Reduction Act a. No reference to the Recycling and Waste Reduction Act is made Bromelton Waste Facility	Although not directly applicable, the proponent should made reference to the Act and should consider end markets for waste, particularly packaging.
Figure 21.1	b. No reference is made to the SRRC Bromelton Waste Facility or Peak Crossing or Boonah Waste Transfer Stations	b. Proponent is to add Bromelton Waste Facility within the reporting and review other SRRC Waste Transfer Facilities and identify if these are relevant.
Section 21.5.1	 Waste Information c. Table 21.4 should include information at a local government and / or operator level as this would be more relevant to the impacts of the project given the location, i.e. a large portion of the waste accounted for in SEQ is generated in Brisbane. 	c. The proponent is to use for more relevant data for this assessment. Waste levy reporting information provided to DES would be a more effective basis for understanding the impacts on the project study area.
Table 21.4	Existing Waste Generation d. Table 21.6 residual as a proportion of existing waste generation is an unreasonable assessment as per the advice given above, i.e. this 'existing waste generation basis is flawed'.	d. The proponent is to use more relevant data for this assessment. Waste levy reporting information provided to DES would be a more effective basis for understanding the impacts on the project study area.
Table 21.6	Reuse of Timber e. It is unclear why the assumption is made that sleepers are treated and regulated waste. Unclear why, if not treated, this material could not be reused within the project, e.g. grind / mulch and use for landscaping. Unclear why ballast is not considered possible to reuse within project, e.g. screen and grind for use in access roads, pads, etc.	e. The proponent is to re-assess the potential re-use of timber, ballast and other C&D wastes for construction purposes. Reporting and / or management plans are to be revised to reflect this.

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
Table 21.6	f. The reporting does not account for construction material packaging waste.	f. The proponent is to provide clear consideration of packaging waste from construction materials.
	Goncrete/Spent Pavement Reuse g. It is unclear why a portion of concrete / spent pavement etc. couldn't be reused on the project.	g. The proponent is to re-assess the potential re-use of concrete/spent pavement for construction purposes. Reporting and / or management plans are to be revised to reflect this.
	h. Green waste management outlined throughout the reporting does not account for the potential need to manage / dispose of weeds of significance.	h. The proponent is to provide details outlining how environmental weeds will be controlled and managed throughout construction and operation of the inland rail.
	Fire Ants i. No consideration of how to management fire ants has been provided.	i. The proponent is to include details fire ant management measures that will be employed and refer to coverage in Spoil Strategy, noting that restrictions will apply to green waste as well as spoil. Measures should include management of spoil, cleaning of all site vehicles and induction programs on recognition of fire ants, prevention of spread of fire ants and actions required on discovery of fire ants.
	j. Additional linkage to contaminated land preliminary outcomes is required.	j. The proponent is to include details of further linkage to contaminated land preliminary outcomes, i.e. if there are specific locations that are expected to generate contaminated spoil.
	Proponent's Commitments	

SECTION	DESCRIBE THE ISSUE	SUGGESTED SOLUTION
Appendix E	k. Does not include reference to the waste hierarchy and spoil management plan/framework.	k. The proponent is to commit to waste management in accordance with waste hierarchy.
Appendix V	Reuse Locations I. There is no inclusion of assessing whether there is a suitable location to reuse the material, this is a significant barrier to onsite and offsite reuse. While it may not be possible to identify suitable reuse locations at this point in the assessment is will be possible to identify a range of unsuitable locations.	The proponent is to include consideration of environmental constraints around reuse of materials.
	Land Form Suitability m. Table 2.3 references area IDs, however this information does not relate to anything further in the section, therefore it's not possible to relate the reuse considerations to the current design, e.g. does not allow for consideration of land form suitability in the reuse options provided.	m. The proponent is to include a visual diagram of the cut and fill and include a similar table of the fill volumes.