

SARA reference: 2311-38006 SRA

Applicant reference: F22/31 Council reference: MCU/23/0012

16 January 2024

Two Rivers Community School C/- Freshwater Planning Pty Ltd, 17 Barron View Drive Freshwater QLD 4870 freshwaterplanning@outlook.com

Attention: Matthew Andrejic

Dear Sir/Madam

SARA information request - Educational Establishment

(Given under section 12 of the Development Assessment Rules)

This notice has been issued because the State Assessment and Referral Agency (SARA) has identified that information necessary to assess your application against the relevant provisions of the State Development Assessment Provisions has not been provided.

Railway level crossing safety

1. <u>Issue:</u>

Vehicle access to the development is proposed from Chewko Road via an existing occupational crossing of the Mungana Branch Railway corridor. The Transport Impact Assessment (TIA) submitted with the application (prepared by Rytenskild, dated 13/09/2023, report number 23281, version 1) does not adequately demonstrate that traffic generated by the development will not adversely impact the railway level crossing. In particular, the report does not provide sufficient information about the existing road traffic volume over the level crossing (including seasonal volumes, vehicle type and length) or clarify the maximum design vehicle proposed for the development to enable a full safety assessment to be conducted by the railway manager.

Action:

The applicant is therefore requested to provide a revised Transport Impact Assessment to demonstrate compliance with PO6 – PO13 of *State Code 6: Development in a Railway Environment* of the State Development Assessment Provisions (SDAP).

Far North Queensland regional office Ground Floor, Cnr Grafton and Hartley Street, Cairns PO Box 2358, Cairns QLD 4870 In particular, the Transport Impact Assessment will be required to address the following:

- Australian Level Crossing Assessment Model (ALCAM) input data
 - Existing traffic flows (expressed as vehicles per day) over the impacted railway level crossing/s, including the number and percentage of heavy vehicles and buses and seasonal volumes, vehicle type and length.
 - The expected background traffic growth (expressed as vehicles per day) over the
 impacted railway level crossing/s, including the number and percentage of heavy
 vehicles and buses. This should include background traffic growth from the
 anticipated commencement of construction and commencement of use of each
 development stage to a ten year horizon.
 - The expected development generated traffic (expressed as vehicles per day), including the percentage of heavy vehicles and percentage of buses, that will pass over the impacted railway level crossing/s from the commencement of construction and the commencement of use of each development stage to a ten year design horizon.
 - The maximum size and type of vehicle (including length, width, height and weight) anticipated over the impacted railway level crossing/s as a result of the development during construction and on-going operation (including any stages).
 - The following data table is required to be populated for the impacted railway level crossing:

AADT over railway level crossing				
Year	Without development (background growth)	With development	No. and dimensions/type of heavy vehicles	No. and dimensions/type of buses
2023 (current scenario)				
Commencement of Construction (prepare for each stage)				
Commencement of the use (prepare for each stage)				
Ten year design horizon (prepare for each stage)				

Short stacking

• Demonstrate how the development generated traffic will not worsen vehicular queuing (short stacking) issues over the impacted railway level crossings. In particular, demonstrate that there is sufficient clearance between the railway level crossing and relevant intersections to allow the maximum size of vehicle used in the operation to queue. The minimum clearance should be 5m from the edge running rail (of the closest railway track) as per Section 5.4 – Short Stacking and Figure 3.2 – Yellow Box Marking of AS1742.7:2016 Manual of Uniform Traffic Control Devices, Part 7: Railway plus the length of the maximum design vehicle. It is recommended that the available clearances are confirmed by a registered surveyor.

Stormwater impacts on the railway corridor

2. Issue:

The referral material has not included adequate information to demonstrate that the stormwater impacts of the proposed development will not adversely impact on the railway corridor. In particular, the site appears to both discharge towards the railway corridor and accept stormwater from the railway corridor. The development will increase the impervious area on the site and may therefore alter stormwater impacts in the railway corridor.

Action:

The applicant is therefore requested to provide a Stormwater Management Plan to demonstrate compliance with PO12 – PO14 and PO16 of *State Code 2: Development in a Railway Environment* of the SDAP.

The Stormwater Management Plan should demonstrate that the management of stormwater post development can achieve a no worsening impact (on the pre-development condition) for all flood and stormwater events that exist prior to development and up to a 1% Annual Exceedance Probability (AEP). This should include at least the following flood and stormwater events: 63.2%, 50%, 20%, 10%, 5%, 2% and 1% AEP. Stormwater management for the proposed development must ensure no worsening or actionable nuisance to the railway corridor, including rail transport infrastructure, caused by peak discharges, flow velocities, water quality, sedimentation and scour effects.

In particular, the following should be addressed:

- (i) Pre-development condition. Provide information to verify the existing drainage characteristics of the site, particularly in relation to the railway corridor. All legal points of discharge for the development site should be identified.
- (ii) Earthworks Plan. Provide a concept earthworks plan, including cross sections/elevations, and any required supporting technical details clearly showing the location and extent of proposed excavation and filling (earthworks). The difference between existing site levels and finished/design levels should be clearly shown.
- (iii) Catchment Analysis. Provide pre-development and post-development catchment plans that clearly identify all internal catchments on the site, external catchments draining into the site, the flow paths (direction of flow) within each catchment, the size of each catchment and the legal point of discharge for each catchment.
- (iv) Maintain the pre-development condition. The pre-development flow scenario will need to be replicated in the post development condition. The proposed development should not impede or interfere with any drainage, stormwater or floodwater flows, including sheet flows, from the railway corridor or vice versa. Retaining structures, filling/excavation, landscaping, buildings and structures or any other works to the land should be designed to include provision for drainage so as not to adversely impact on the railway corridor. The development design will need to address any concentration of flows, potential for back-up/ponding and scour/erosion which may undermine the railway corridor.
- (v) Water quantity assessment. The peak discharge analysis should provide adequate details of the pre and post development impervious area of the site and detail analysis of the pre and post development volumes and velocities at each legal point of discharge. Where mitigation is proposed the design flood peak discharges should be shown for the mitigated case to demonstrate there is no worsening impact on the railway corridor.
- (vi) Conceptual drainage layout. Provide a conceptual stormwater drainage layout

plan showing the proposed internal stormwater network on the site, including roof-water connections, pit and pipe network, field inlets, any detention basins/tanks, swales/open drains and demonstrate how all roof and surface water flows will be collected and conveyed to the legal points of discharge.

Mitigation measures. include details of the mitigation measures proposed to address any potential stormwater and flooding impacts of the proposed development. All mitigation measures must be located on the site and not in the railway corridor.

Bus layby parking

3. <u>Issue:</u>

The Final Plan – Parking and Drop-off, prepared by Life Design, dated 24/07/2023, drawing number 162/A162, issue 3 shows a drop-off area which can accommodate 3x 49 seat (14.5m) bus, and a layby parking area which can accommodate a 1x 49 seat (14.5m) bus. Layby parking is required to store buses when they are not in use (for example between AM and PM drop-off/pick-up times). The layby area is not of a sufficient scale to accommodate all of the buses utilising the drop-off area.

Action:

The applicant is therefore requested to provide further information to demonstrate how the proposed development will comply with PO26 – PO29, Table 6.3 of *State Code 6 – Protection of State Transport Networks* of the Development Assessment Provisions.

- (i) In particular, the applicant should provide revised proposal plans and traffic engineering information demonstrating that provision will be made for bus lay-by parking commensurate with demand. The location of bus lay-by parking should allow for the convenient circulation of buses to and from the bus set-down facility.
- (ii) The maximum design vehicle for a private/chartered coach/bus should be a single unit rigid bus of 14.5m in length.
- (iii) Detail any proposed staging of these parking spaces.

How to respond

You have three months to respond to this request and the due date to SARA is 16 April 2024.

You may respond by providing either: (a) all of the information requested; (b) part of the information requested; or (c) a notice that none of the information will be provided. Further guidance on responding to an information request is provided in section 13 of the <u>Development Assessment Rules</u> (DA Rules).

It is recommended that you provide all the information requested above. If you decide not to provide all the information requested, your application will be assessed and decided based on the information provided to date.

You are requested to upload your response and complete the relevant tasks in MyDAS2.

As SARA is a referral agency for this application, a copy of this information request will be provided to the assessment manager in accordance with section 12.4 of the DA Rules.

If you require further information or have any questions about the above, please contact Isley Peacey, Senior Planning Officer, on 4037 3202 or via email CairnsSARA@dsdilgp.qld.gov.au who will be pleased to assist.

State Assessment and Referral Agency

Page 4 of 5

Yours sincerely

Signature placeholder

Brett Nancarrow Manager (Planning)

cc Mareeba Shire Council, planning@msc.qld.gov.au

Development details			
Description:	Development permit Material change of use for Educational Establishment		
SARA role:	Referral agency		
SARA trigger:	Schedule 10, Part 3, Division 4, Table 3, Item 1 (10.3.4.3.1) - Clearing native vegetation Schedule 10, Part 9, Division 4, Subdivision 1, Table 1, Item 1 (10.9.4.1.1.1) - State transport infrastructure thresholds		
SARA reference:	2311-38006 SRA		
Assessment criteria:	SDAP State code 6: Protection of state transport networks and State code 16: Native vegetation clearing		