

Cross River Rail Environmental Impact Statement

Request for Project Change 10

Response to matters raised during
consultation

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Executive Summary

The Cross River Rail Delivery Authority (CRRDA) established by *the Cross River Rail Delivery Authority Act 2016* is the proponent for the Cross River Rail Project (CRR Project).

The CRR Project is a coordinated Project for which an Environmental Impact Statement (EIS) is required under the *State Development and Public Works Organisation Act 1971* (SDPWO Act). The CRR EIS was evaluated by the Coordinator-General, who recommended the Project proceed, subject to Imposed Conditions and recommendations. Since the evaluation of the EIS, nine (9) Requests for Project Change (RfPCs) have been evaluated by the Coordinator-General, and a further two RfPCs (RfPC-10 and RfPC-11) have been lodged with the Coordinator-General.

RfPC-10 requests a change to the Imposed Conditions of the CRR Project to permit spoil haulage on Sundays from the Albert Street Railway station and the Roma Street Railway station worksites.

The significant progress of the tunnel boring machines (TBMs), the time that has elapsed since RfPC-10 was lodged, and consideration of matters raised by Brisbane City Council (BCC) during consultation, has resulted in changes to the sequencing of excavation of the Albert Street Railway station worksite and Roma Street Railway station worksite caverns. As a result:

- a) excavation of the Roma Street Railway station worksite cavern is being prioritised for completion prior to the arrival of the TBMs, with the request to change the imposed conditions in RfPC-10 now time critical in relation to Roma Street Railway station; and
- b) full production excavation for the Albert Street Railway station worksite cavern is required to be paused until after the TBMs have passed through the station cavern, resulting in the need to postpone the Sunday haulage condition for Albert Street Railway station worksite taking effect.

It is therefore requested that the Imposed Conditions be changed to include new conditions to permit Sunday spoil haulage for the Roma Street Railway station worksite and the Albert Street Railway station worksite.

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1. Introduction

RfPC-10 requests a change to the Imposed Conditions of the CRR Project to permit spoil haulage on Sundays from 9.00am to 6.30pm from the Albert Street Railway station and Roma Street Railway station worksites, to support excavation works at the underground caverns at these worksites (Proposed Change).

The Proposed Change was initially requested in relation to the Albert Street Railway station and Roma Street Railway station worksites to allow the completion of the cavern excavation to support preparation for the breakthrough of the TBMs at these worksites.

Following consultation with BCC, the Coordinator-General has received a submission from BCC opposing the Proposed Change and requesting further detailed information about the potential impacts of the Proposed Change. In CRRDA's view, the issues raised by BCC are adequately addressed by the technical information provided as part of the RfPC, and additional mitigation measures proposed in the requested changes to the Imposed Conditions to manage BCC's concerns. However, further detailed information has been provided in section 2 in response to the request.

The significant progress of the TBMs, the time that has elapsed since RfPC-10 was lodged and having regard to matters raised by BCC during consultation has resulted in changes to the sequencing of excavation of the Albert Street Railway station worksite and Roma Street Railway station worksite caverns. As a result:

- a) excavation of the Roma Street Railway station worksite cavern is being prioritised for completion prior to the arrival of the TBMs. This activity is now time-critical; and
- b) full production excavation for the Albert Street Railway station worksite cavern will be paused until after the TBMs have passed through the station cavern. To maintain the program for delivery of the Cross River Rail Project however, Sunday spoil haulage will be required from Albert Street at a later point in time.

Consequently, this RfPC-10 now requests that a new Condition 10A and 10B be included as part of the Imposed Conditions that:

- c) permits haulage of spoil from the Roma Street Railway station worksite on Sundays from 9:00am - 6:30pm until the later of the extraction of the TBMs from the northern portal, or a notice from the Coordinator-General; and
- d) permits haulage of spoil from the Albert Street Railway station worksite on Sundays from 9:00am - 6:30pm at a future time, subject to the receipt of advice from the Environmental Monitor regarding the effectiveness of the mitigation and management measures that have been implemented for Sunday haulage from the Roma Street Railway station worksite.

The proposed change to the Imposed Conditions to include new Imposed Conditions 10A and 10B is set out at section 0.

2. Response to the Coordinator-General's information request

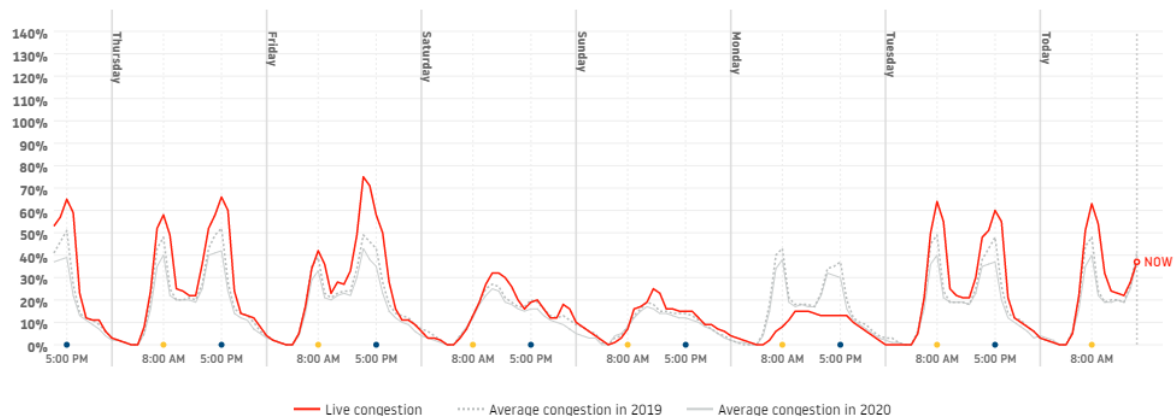
On 13 April 2021, the Coordinator-General requested the provision of the following further information in relation to the Proposed Change:

- data and analysis to confirm how the change in post COVID-19 traffic conditions (volume and capacity) is currently impacting spoil haulage cycle times (hours and minutes) and spoil throughput from the Roma Street Railway station and Albert Street Railway station worksites;
- details of current measures to reduce the impact of peak hour traffic delays on spoil haulage;
- confirmation of the number of haulage tasks not required to occur (e.g. on Monday and Tuesday peak hours) should Sunday haulage be allowed to occur;
- reasons demonstrating that the November 2020 data is appropriate for the Traffic and Transport and the Construction Traffic Noise Assessment for each worksite; and
- revisions to the 'Request for Project Change 10 Consultation Report' (the RfPC-10 Consultation Report) incorporating any further community or stakeholder enquiries or concerns to the relevant works notices or confirm no further enquiries or concerns have been raised.

In relation to (a) above, the CRRDA refers to the "RACQ Red Spot Congestion Survey 2021" (dated March 2021), which lists the top ten (10) most nominated roads in Queensland in relation to congestion as being: Bruce Highway; Centenary Highway; Pacific Motorway; Gateway Motorway; Gympie Road; Caloundra Road; Moggill Road; South Pine Road; Sunshine Motorway; and Logan Road. Routes to and from key spoil disposal sites located to the north, south, east and west of the central business district railway station worksites utilise some of the most congested roads in Queensland, including the Centenary Highway (New Chum), Pacific Motorway (Larapinta), Gympie Road (Brendale), South Pine Road (Brendale) and Logan Road (Larapinta).

The data in Table 1 below from TomTom.com, an independent traffic index which rates congestion world-wide, shows increases in the levels of Brisbane congestion experienced throughout the day in 2021 compared to the average levels recorded in 2019 and 2020.

Table 1 - Congestion levels for the period 28 April to 5 May 2021 (noting that Monday, 3 May 2021 was a public holiday)



This increase in congestion on the road network has resulted in unreliable and increased spoil haulage cycle times, with impacts on the efficiency of the spoil haulage task within the current hours.

Table 2 below summarises the Google Maps travel time data recorded for a typical weekday (i.e. Thursday) from the Roma Street Railway station worksite to four (4) spoil disposal sites and vice versa.

Table 2 - Google Maps travel time data recorded for a typical weekday – off peak

Typical Weekday						
From	To	Roma Street	Tradecoast Central	Neilsens Brendale	Cleanaway New Chum	BMI Larapinta
Roma Street		-	28 minutes to 35 minutes	45 minutes to 1 hour 5 minutes	45 minutes to 1 hour 5 minutes	40 minutes to 50 minutes
Tradecoast Central		24 minutes to 35 minutes	-	-	-	-
Neilsens Brendale		45 minutes to 1 hour 5 minutes	-	-	-	-
Cleanaway New Chum		45 minutes to 1 hour 10 minutes	-	-	-	-
BMI Larapinta		35 minutes to 1 hour	-	-	-	-

Table 3 summarises the Google Maps travel time data recorded for a typical Sunday from the Roma Street Railway station worksite to four (4) spoil disposal sites and vice versa.

Table 3 - Google Maps travel time data recorded for a typical Sunday

Typical Sunday						
From	To	Roma Street	Tradecoast Central	Neilsens Brendale	Cleanaway New Chum	BMI Larapinta
Roma Street		-	26 minutes	45 minutes	40 minutes	35 minutes
Tradecoast Central		22 minutes	-	-	-	-
Neilsens Brendale		50 minutes	-	-	-	-
Cleanaway New Chum		45 minutes	-	-	-	-
BMI Larapinta		35 minutes	-	-	-	-

Table 4 below summarises the differences between the Google Maps travel time data recorded for a typical weekday and recorded for a typical Sunday. As shown by Table 4, reductions in cycle times of up to 50 minutes are expected on a Sunday when compared to a typical weekday.

Table 4 - Differences between the Google Maps travel time data for a typical weekday (off peak) and a typical Sunday

Spoil haulage cycle times	Tradecoast Central	Neilsens Brendale	Cleanaway New Chum	BMI Larapinta
Cycle time – Monday to Friday	70 minutes	2 hours 10 minutes	2 hours 15 minutes	1 hour 50 minutes
Cycle time – Sunday	48 minutes	1 hour 35 minutes	1 hour 25 minutes	1 hour 10 minutes
Difference	22 minutes	35 minutes	50 minutes	40 minutes

In relation to (b) above, consistent with the current Coordinator-General Imposed Conditions for the CRR Project, spoil haulage vehicles at the Roma Street Railway station worksite do not operate Monday to Friday between the hours of 7.30am to 9.00am and 4.30pm to 6.30pm. Management

measures that have been implemented during spoil haulage activities to reduce the impact on the road network include:

- where practicable, utilising higher order roads
- utilising multiple spoil disposal sites
- planning truck movements to occur at times throughout the day where lower traffic volumes are typically observed, as far as reasonably practical.

Request item (c) above seeks confirmation regarding the number of haulage tasks not required to occur (e.g. on Monday and Tuesday peak hours) should Sunday haulage be permitted. Because the overall spoil extraction task does not change, the proposed Sunday haulage task allows the removal of a peak of spoil haulage activities on a Monday and Tuesday, by removing the need for spoil haulage to deal with stockpiled spoil from Sunday excavations. In effect, this will reduce the overall spoil haulage vehicle movement curve during the early part of each week of excavation. A precise number of haulage tasks cannot be given, as it will be variable and dependant on the combination of disposal sites utilised on any given Sunday.

Table 5 provides an indication of how many trips to each spoil disposal site a spoil haulage vehicle will be able to undertake on a Monday to Friday compared to a Sunday, based on the cycle time for that spoil haulage task.

- Monday to Friday: 6:30am – 7:30am, 9:00am – 4:00pm, 6:30pm – 10pm,

Table 5 - Maximum number of trips per spoil haulage vehicle

	Tradecoast Central	Neilsens Brendale	Cleanaway New Chum	BMI Larapinta
Trips per spoil haulage vehicle – Monday to Friday	9	5	5	6
Trips per spoil haulage vehicle – Sunday	14	7	8	9

With reference to the maximum number of trips a spoil haulage vehicle can make in a day outlined in Table 5 and transport it to any one of the four (4) spoil disposal sites, an estimate of the total number of trucks in a spoil haulage cycle has been estimated and is shown in Table 6 below, using the Roma Street Railway station as an example. It should be noted that the total spoil vehicle movements per day will be variable, depending on the spoil placement locations being utilised on any given day.

Table 6 - Total number of spoil haulage vehicles estimated to operate in a cycle, per spoil placement location

	Tradecoast Central	Neilsens Brendale	Cleanaway New Chum	BMI Larapinta
Number of trucks – Monday to Friday	8	13	13	11
Number of trucks – Sunday	5	10	9	8

In relation to (d) above, a re-assessment of the Traffic Noise Assessment for the Roma Street Railway station worksite with revised traffic volumes was completed on 5 May 2021 (the revised Traffic Noise Assessment). The revised Traffic Noise Assessment adopted the updated traffic volume provided by BCC of 6,649 vehicles and estimated the heavy vehicle composition to be 261 (as this was not provided by BCC as part of the data set).

A copy of the revised Traffic Noise Assessment is provided in **Attachment 1a**. In summary, based on the updated traffic volume data provided by BCC, the revised Traffic Noise Assessment indicates that the increase in traffic noise is predicted to be +0.7dBA. The CRRDA notes that this is less than the predictions in January 2021, which was a +1dBA increase.

Consistent with RfPC-10, Table 2.4 of the Transport Management Code of Practice states that an increase over an existing noise level of <3dBA is insignificant. A change in noise level of +0.7dBA is likely to be difficult for most people to detect.

A re-assessment of the Traffic Noise Assessment for the Albert Street Railway station worksite with revised traffic volumes was completed on 19 May 2021 (the revised Traffic Noise Assessment). The revised Traffic Noise Assessment adopted the updated traffic volume provided by BCC of 13,118 vehicles and estimated the heavy vehicle composition to be 72 (as this was not provided by BCC as part of the data set).

A copy of the revised Traffic Noise Assessment is provided in **Attachment 1b**. In summary, based on the updated traffic volume data provided by BCC, the revised Traffic Noise Assessment indicates that the maximum increase in traffic noise is predicted to be +1.3dBA. The CRRDA notes that this is less than the predictions in January 2021, which was a +2dBA increase.

Consistent with RfPC-10, Table 2.4 of the Transport Management Code of Practice states that an increase over an existing noise level of <3dBA is insignificant. A change in noise level of +1.3dBA is likely to be difficult for most people to detect.

In relation to (e) above, the updated RfPC-10 Consultation Report is provided at **Attachment 2**. At the time the RfPC-10 Consultation Report was presented, it contained a note stating that “Matisse Tower (110 Mary Street) meeting pending stakeholder availability”.

The CRRDA can confirm that consultation with Matisse Tower occurred and they have not raised any objections or concerns relating to Sunday haulage.

3. Proposed changes to Imposed Conditions

The requested change to the Imposed Conditions has been modified to reflect the proposed Sunday spoil haulage to take place:

- a) for the Roma Street Railway station worksite - from the time of the change report until the extraction of the TBMs at the northern portal; and
- b) for the Albert Street Railway station works – following a notice from the Coordinator-General issued after considering the effectiveness of the mitigation and management measures implemented for Sunday haulage for the Roma Street Railway station worksite and after a specific construction environmental management plan including a construction traffic management sub-plan for Sunday spoil haulage is endorsed by the Environmental Monitor.

The proposed changes to the Imposed Conditions are set out below:

Condition 10A Sunday haulage for Roma Street Railway station worksite

- (a) *In addition to the hours of work set out in Condition 10 (Hours of work), spoil haulage may be undertaken within the hours set out in Table 1A below (the **Roma Street authorised works**), provided that:*

- (i) *a specific Construction Environmental Management Plan (CEMP) for the Roma Street authorised works has been prepared in accordance with Condition 4 and endorsed by the Environmental Monitor prior to the commencement of the Roma Street authorised works; and*
 - (i) *the endorsed CEMP includes a Construction Traffic Management Sub-Plan for the Roma Street authorised works that specifically provides for construction traffic management arrangements developed in consultation with Brisbane City Council, in particular for major events; and*
 - (ii) *local communities near the Roma Street authorised works must be notified about the works at least two (2) business days prior to those works commencing including notification of timeframes, potential impacts, mitigation measures, project contact information through letterbox drop, project website updates and social media updates.*
- (b) *Condition 10A ceases to have effect on the latest of the following:*
- (i) *the TBMs reaching the Northern Portal; or*
 - (ii) *a date stated by the Coordinator-General in writing to the proponent*

Table 1A Construction hours

Worksite	Spoil haulage
Roma Street Railway station	Sunday: 9:00am - 6:30pm

Condition 10B Sunday haulage for Albert Street Railway station worksite

- a) *In addition to the hours of work set out in Condition 10 (Hours of work), spoil haulage may be undertaken within the hours set out in Table 1B below (the **Albert Street authorised works**), provided that:*
- (i) *the Proponent has requested that the Coordinator-General issue a notice allowing the Albert Street authorised works to proceed, with that request including the following information:*
 - a. *proposed commencement and completion date of Albert Street authorised works;*
 - b. *details of any complaints received in relation to Roma Street authorised works;*
 - c. *advice received from the environmental monitor regarding the effectiveness of implementing the endorsed CEMP for the Roma Street works, inclusive of advice from the community relations monitor in relation to complaints received as a result of the Roma Street authorised works; and*
 - (ii) *the Coordinator-General has issued a notice to the Proponent that allows the Albert Street authorised works to proceed; and*
 - (iii) *a specific Construction Environmental Management Plan (CEMP) for the authorised works has been prepared in accordance with Condition 4 and endorsed by the Environmental Monitor prior to the commencement of the Albert Street authorised works; and*

- (iv) *the endorsed CEMP includes a Construction Traffic Management Sub-Plan for the Albert Street authorised works that specifically provides for construction traffic management arrangements developed in consultation with Brisbane City Council, in particular for major events; and*
 - (v) *local communities near the Albert Street authorised works must be notified about the works at least two (2) business days prior to those works commencing including notification of timeframes, potential impacts, mitigation measures, project contact information through letterbox drop, project website updates and social media updates;*
- b) *Condition 10B ceases to have effect on the date stated by the Coordinator-General in writing to the Proponent.*

Table 1B Construction hours

Worksite	Spoil haulage
Albert Street Railway station	Sunday: 9:00am - 6:30pm

Attachment 1:

Attachment 2: