

Cross River Rail project

Coordinator-General's change report – no. 9

April 2021

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Contents

Executive summary	4
1. Introduction.....	6
2. About the project.....	6
3. Change report process	9
4. Evaluation of proposed change.....	12
5. Coordinator-General’s conclusion.....	30
Acronyms and abbreviations	32
Glossary	33

Figures

Figure 2.1 Cross River Rail Project approved environmental management framework	8
Figure 3.1 Southern Portal Area work zones	10
Figure 3.2 Southern Portal Area schedule of works	11
Figure 4.1 Existing heavy vehicle access route	13
Figure 4.2 Noise Catchment Areas and Worksite Zones within the Southern Portal Area worksite zones	19
Figure 4.3 Extent of noise impact for Southern Portal Area works during Stage 2 rail possession period.....	21

Tables

Table 4.1 Existing and proposed peak construction traffic volumes per hour.....	14
Table 4.2 Predicted construction noise levels at sensitive receivers above 20 dB(A)	20
Table 4.3 Requested changes to Imposed Condition 1.....	29

Executive summary

This report provides the Coordinator-General's evaluation of proposed changes to the Cross River Rail project (the project) under Part 4 of the *State Development and Public Works Organisation Act 1971* (SDPWO Act).

The project is a rail link from Dutton Park to Bowen Hills, including a 5.9 km tunnel under the Brisbane River and Central Business District. Construction of the project commenced on 19 September 2019.

On 20 December 2012, the Coordinator-General's evaluation report on the environmental impact statement (EIS) was released which included imposed conditions and established the broader environmental management framework (EMF) for the project. Since then, eight change applications have been evaluated by the Coordinator-General accounting for detailed design refinements to enhance the project outcomes.

On 20 November 2020, the Cross River Rail Delivery Authority (CRR Delivery Authority) applied under section 35C of the SDPWO Act to evaluate a ninth change to the project (change application).

The CRR Delivery Authority's request specifically relates to the Southern Portal Area. The changes proposed include:

- refinements to the track geometry and layout within the existing rail corridor to increase curvature of the rail line and create separation with utilities
- amendment to the construction methodology from 'partially mined/partially cut and cover' to a 'full cut and cover' methodology requiring 24-hour continuous work within approved rail possession periods
- a new heavy vehicle access route to the worksite to enable direct access into Peter Doherty Street off Annerley Road.

To enact these changes, amendment to Imposed Condition 1 of the evaluated project is required to reference updated technical drawings. The CRR Delivery Authority contends that the existing requirements detailed in imposed conditions and the broader EMF for the project remain suitable to regulate potential environmental impacts from the proposed changes.

The change application was publicly notified from 28 November 2020 to 24 December 2020. A total of 18 submissions were received from the community and government agencies who raised concerns with transport safety, traffic congestion, air quality, noise and vibration.

In response to submissions and in consultation with Brisbane City Council, the CRR Delivery Authority is no longer proposing the new heavy vehicle access route via Peter Doherty Street (off Annerley Road). Instead, the existing Boggo Road haul route is proposed to be utilised for the worksite with mitigation measures to enhance pedestrian and cyclist safety.

The potential impacts of the revised haul route proposal compared to the evaluated project have been assessed (refer to section 4.1). Consistent with the evaluated project, the assessment concluded potential impacts to the road network, including pedestrian movements and safety, will continue to be managed as part of the Construction Traffic

Management Plan (CTMP) sub-plan and will be informed by an updated road safety assessment. The CRR Delivery Authority must work closely with Brisbane City Council on the CTMP sub-plan's content and seek Council's endorsement of the plan prior to finalisation.

The potential noise and vibration impacts to nearby residents including the potential for sleep disturbance from night-time works within the rail corridor have been assessed (refer to section 4.2).

The evaluation concluded that although longer duration construction works would occur during the extended rail possessions, the actual scheduled times for these works would not be continuous for the entire rail possession period. The CRR Delivery Authority has advised noisier works would be scheduled primarily during day-time work hours, with less intensive works scheduled at night. Construction works would be undertaken in accordance with detailed site-specific noise management plans informed by proactive noise and vibration modelling.

The potential air quality impacts of the proposed change have been considered (refer section 4.3). The evaluation concluded potential impacts are generally consistent with the evaluated project and compliance with the existing air quality criteria and goals of the evaluated project would continue to be achieved. Implementation of the existing Air Quality Management Plan will continue to address dust levels during construction.

The evaluation concludes that the proposed changes to the project be approved. The evaluation has found that the proposed changes achieve overall acceptable outcomes for the project's delivery whilst ensuring potential impacts are appropriately minimised, mitigated and managed.

As a result, section 4.4 of this change report replaces the previous Imposed Condition 1 of the evaluated project dated December 2020. Appendix 1 of the project wide imposed conditions and recommendations document has also been updated to reflect this change.

All relevant EIS assessment documentation (including the updated project wide imposed conditions and recommendations) are available on the Department of State Development, Infrastructure, Local Government and Planning's website at www.dsdmip.qld.gov.au/crr.

In accordance with section 35L of SDPWO Act, this report will lapse on 31 December 2024.

1. Introduction

This change report has been prepared pursuant to section 35I of the *State Development and Public Works Organisation Act 1971* (Qld) (SDPWO Act) and provides an evaluation of proposed changes to the Cross River Rail project (the project) outlined in the project change application received on 20 November 2020.

This change report does not re-evaluate the project as a whole or revisit all the matters that have already been addressed in its assessment to date. Rather, this report considers the nature of the proposed changes and evaluates potential effects on the project and the environment.

In making the evaluation, the following has been considered in accordance with section 35H of the SDPWO Act:

- the nature of the proposed change and its effects on the project
- the currently evaluated project (including all required impact management and mitigation measures)
- the environmental effects of the proposed change and its effects on the project
- all submissions received on the proposed changes
- the material mentioned in section 34A(1)(a) of the SDPWO Act to the extent it is considered relevant to the proposed change and its effects on the project.

This report, including amendment to Imposed Condition 1 at section 4.4, prevails to the extent of any inconsistencies with the Coordinator-General's Evaluation Report (CGER) dated 20 December 2012 and change reports approved by the Coordinator-General for the project to date.

2. About the project

2.1 The proponent

The proponent for the project is the Cross River Rail Delivery Authority (CRR Delivery Authority), an independent statutory body established under the *Cross River Rail Delivery Authority Act 2016* to facilitate and manage the delivery of the project. The CRR Delivery Authority commenced operation on 14 April 2017.

2.2 The project

The project is a 10.2 kilometre (km) north-south rail line connecting Dutton Park to Bowen Hills with 5.9 km of tunnel under the Brisbane River and Central Business District. The project also includes new underground stations at Boggo Road, Woolloongabba, Albert Street, and Roma Street, with upgrades to the existing Exhibition Railway Station and stations between Fairfield and Salisbury. Construction of the project commenced on 19 September 2019.

The CGER on the EIS was released on 20 December 2012. Since this time, the Coordinator-General has evaluated eight change applications accounting for detailed design refinements to enhance constructability of the project.

Further information on the project and changes that have occurred since the project was originally approved in 2012 are detailed in:

- the Coordinator-General's change report (CGCR) dated 8 June 2017
- the CGCR dated 30 August 2018
- the CGCR dated 13 March 2019
- the CGCR dated 26 June 2019
- the CGCR dated 4 October 2019
- the CGCR dated 7 May 2020
- the CGCR dated 16 July 2020
- the CGCR dated 19 November 2020 (amended 21 December 2020).

Collectively, these reports constitute the 'evaluated project'. These documents, the EIS and all subsequent change requests are available on the department's website at www.dsdmip.qld.gov.au/crr.

2.2.1 Environmental management framework

Imposed conditions set by the Coordinator-General established an environmental management framework (EMF) for the project that the CRR Delivery Authority and their contractors must comply with. The EMF stipulates how potential environmental impacts during project construction, commissioning and operation are to be managed and is supported by a rigorous compliance and reporting regime which includes monitoring and auditing from independent entities.

Initially approved as part of the CGER on the EIS for the project in 2017, the EMF has been successfully implemented since September 2019, when the project commenced construction. An overview of the approved EMF is illustrated at Figure 2.1. The EMF comprises a number of elements, being:

- the Outline Environmental Management Plan (OEMP) which, in accordance with imposed conditions, establishes the overarching outcomes and performance criteria that must be achieved by the CRR Delivery Authority for each environmental element (Imposed Condition 2)
- the Construction Environmental Management Plans (CEMPs) (including sub-plans), which are progressively developed for all project works, and in some cases are required to be specifically developed for particular project works (Imposed Condition 4).

The EMF is supported by:

- a compliance and reporting regime, as set out in Imposed Conditions 5 and 6, and
- two appointed independent entities required by the Imposed Conditions that provide oversight of the project to increase rigour and transparency for the project. Both entities are required to be independent, appropriately skilled and experienced, and

have been approved by the Coordinator-General to provide oversight for the implementation of the project's Imposed Conditions. Those entities are:

- the Independent Environmental Monitor (Imposed Condition 7), and
- the Independent Community Relations Monitor (Imposed Condition 8).

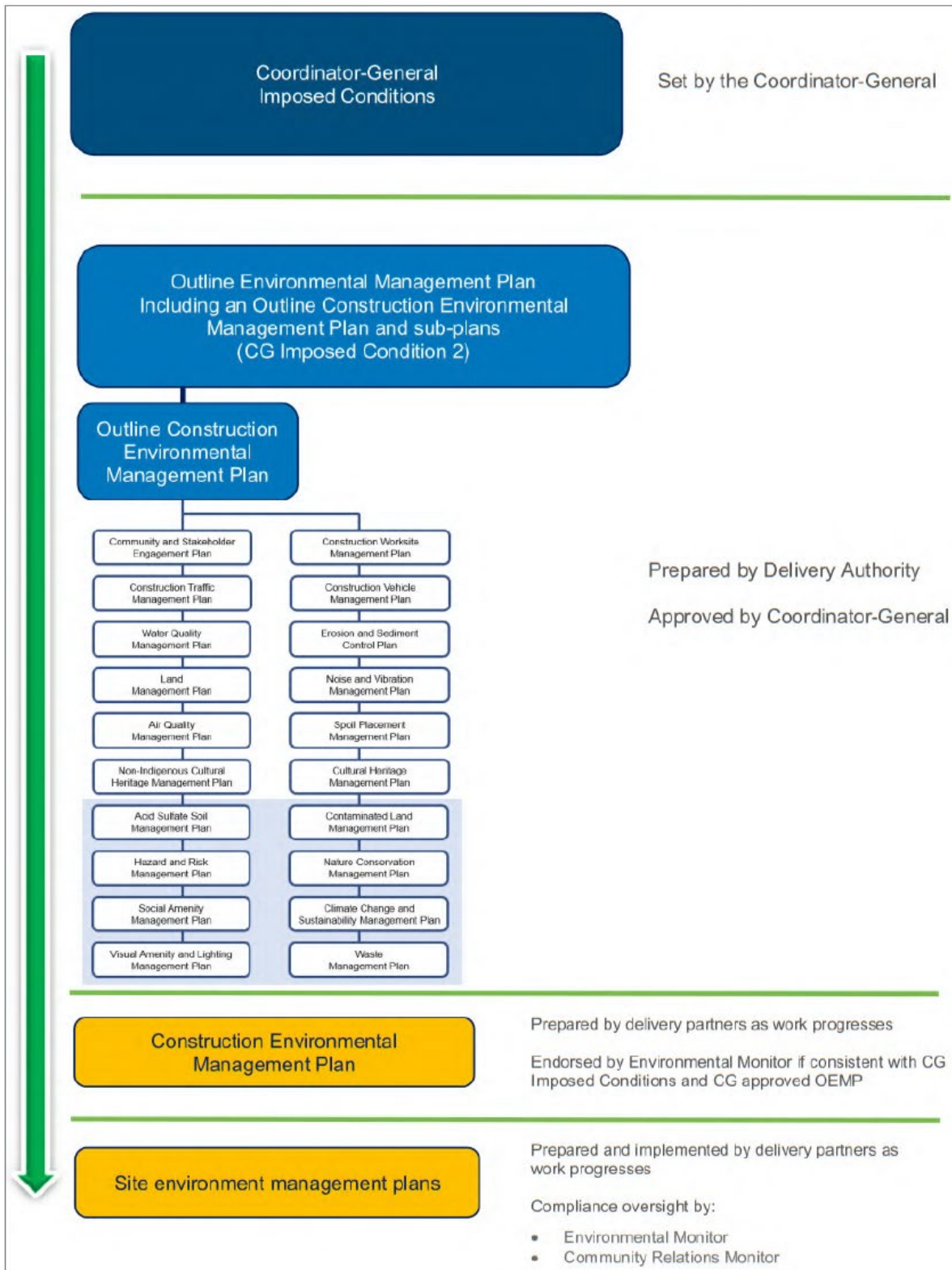


Figure 2.1 Cross River Rail Project approved environmental management framework

CEMPs must be consistent with the OEMP and demonstrate how compliance with Imposed Conditions (construction) will be achieved prior to the commencement of relevant construction works. As outlined in the project's approved OEMP, each CEMP and sub-plan required for the project must include the following components:

- environmental outcome (for each environmental element; the aspect of project implementation to be managed as it affects environmental values e.g. air quality)
- performance criteria
- mitigation measures
- monitoring requirements
- reporting requirements
- corrective actions.

Flexibility is provided in the EMF to enable updates to the OEMP and CEMPs to address unforeseen work programs or refine mitigation measures to better manage project impacts. The EMF has been updated to reflect approved changes to the project since 2017, with the Coordinator-General approving amendments to the OEMP and the Environmental Monitor progressing amendments to CEMPs.

3. Change report process

3.1 Proponent's reason for change and project change details

On 20 November 2020, the CRR Delivery Authority lodged an application for evaluation of the environmental effects of proposed changes to the project under Part 4 of the SDPWO Act (the project change application).

The proposed changes specifically relate to proposed construction works at the Southern Portal Area worksite, located between Dutton Park Station, adjacent to the EcoSciences Building and the Princess Alexandra (PA) Hospital (see Figure 3.1).

The Southern Portal Area provides the southern entrance and exit for the rail tunnels where the project connects to the existing rail lines. It is a complex part of the rail corridor characterised by multiple commuter rail lines servicing the Gold Coast and Cleveland regions, freight lines to the Port of Brisbane and the Boggo Road Busway passing underneath. The project also interacts with various utilities at this location, including high voltage power, sewerage and telecommunications infrastructure.

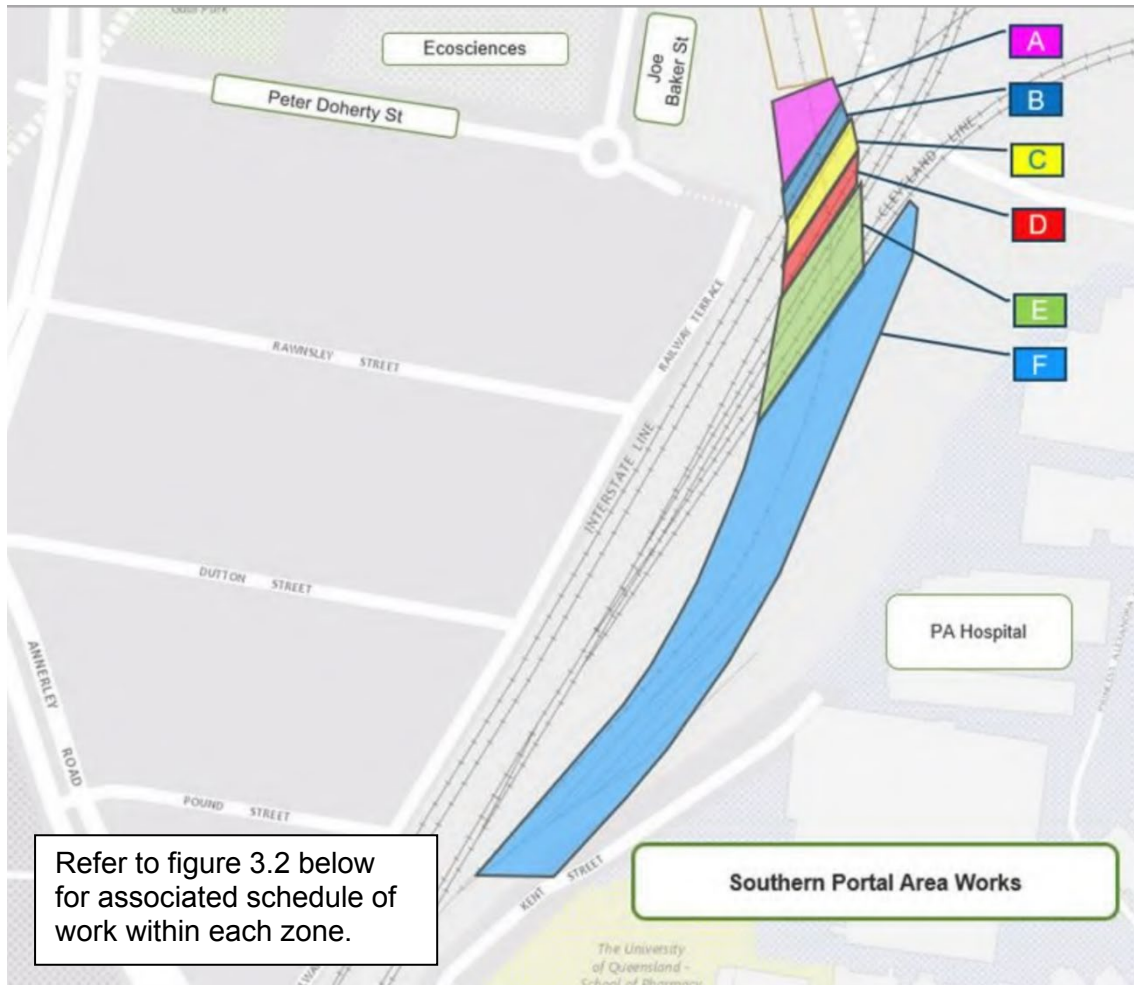


Figure 3.1 Southern Portal Area work zones

To overcome these complex interfaces, and in consideration of construction safety and operational efficiencies, the CRR Delivery Authority has sought changes to the:

- track geometry and layout within the existing rail corridor at the Southern Portal Area (increasing the track curvature within the existing rail corridor)
- construction methodology for part of the Southern Portal Area Works from ‘partially mined-partially cut and cover’ to ‘full cut and cover’ methodology
- heavy vehicle access route to the Southern Portal Area to enable direct access into Peter Doherty Street off Annerley Road.

Construction activities at the Southern Portal Area are regulated by the project’s Imposed Conditions and the broader requirements of the EMF. To enact the proposed changes, amendments to Imposed Condition 1 have been requested. These changes have been considered and are discussed in section 4.4 below.

3.1.1 Rail possessions

Undertaking the Southern Portal Area Works as detailed by the CRR Delivery Authority will require periodic rail possessions causing intermittent suspensions to rail services during construction. The CRR Delivery Authority has indicated that the proposed changes will require longer rail possessions at the Southern Portal Area than previously

envisioned. Across all work zones in the rail corridor, the CRR Delivery Authority estimates that up to 40 days of continuous rail possessions will be required to undertake cut and cover construction activities (see Figure 3.2). To minimise long term impacts on the rail network during this time, 24-hour continuous construction works are proposed to occur in each rail possession period.

Rail possessions (and their duration) are not approved by the Coordinator-General and accordingly, this evaluation does not assess impacts on the broader passenger and freight rail networks. Rather, the CRR Delivery Authority must seek relevant approvals and permits from Queensland Rail (QR), Translink and Department of Transport and Main Roads (DTMR) who will consider the proposal and determine suitable management measures in this instance.

Notwithstanding this, potential environmental impacts caused by the proposed 24-hour continuous construction works at the Southern Portal Area have been considered and evaluated in this report.

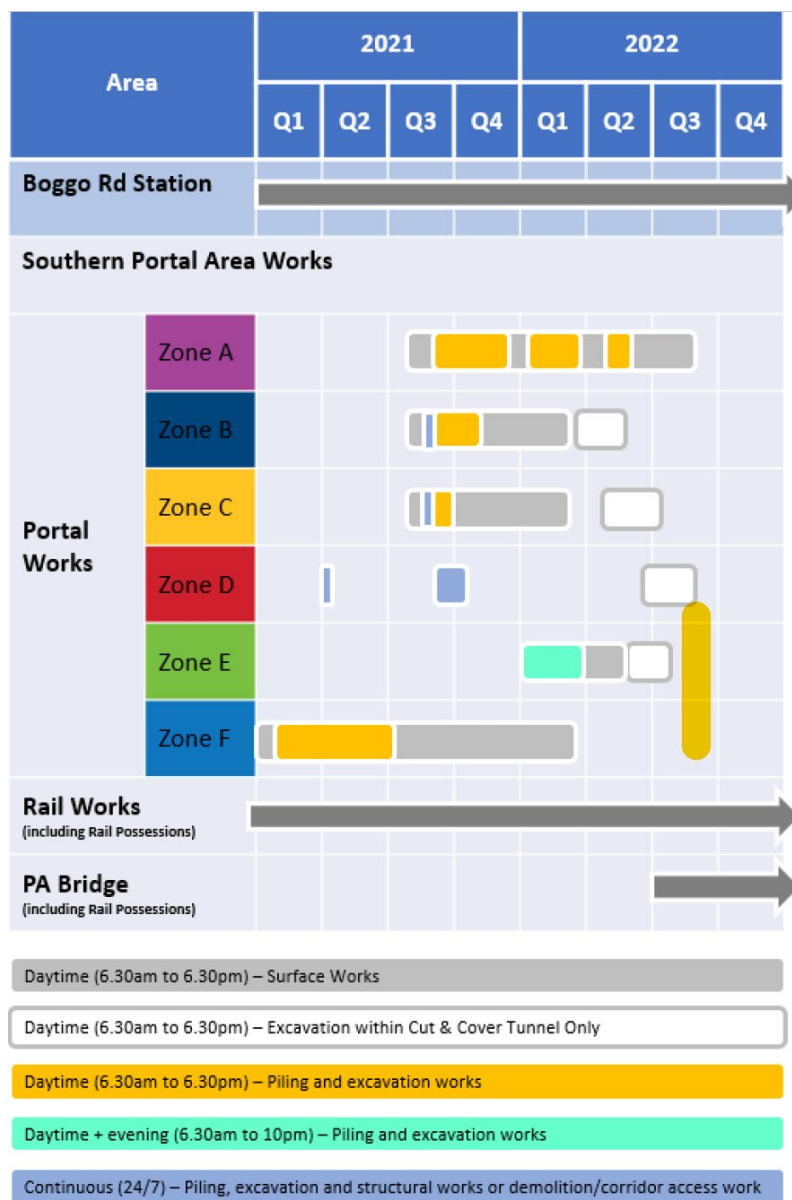


Figure 3.2 Southern Portal Area schedule of works

3.2 Public notification

In accordance with section 35G of the SDPWO Act, the proposed change to the project was publicly notified from 28 November 2020 to 24 December 2020. A total of 18 submissions were received:

- nine private submitters
- five State Government agencies
- one State Member of Parliament
- two local government elected representatives
- Brisbane City Council (BCC).

Key issues raised in submissions on the proposed changes to the project included:

- pedestrian and cyclist safety at the changed heavy vehicle access route
- potential increase in traffic impacts at the Annerley Road and Peter Doherty Street intersection
- potential for increased noise impacts from the changed heavy vehicle access route on local residents
- potential noise and dust impacts from the change of construction methodology requiring 24-hour continuous work within approved rail possession periods
- disruption to the rail network.

The CRR Delivery Authority was requested to respond to matters raised in the submissions and provide further information in support of the application for project change, including responding to submitter concerns.

On 19 March 2021, the CRR Delivery Authority provided a response to submissions and additional information to inform evaluation of the project change which included:

- response to submissions report, including updated technical drawings and consultation report
- traffic impact assessment for the revised heavy vehicle access arrangement.

The CRR Delivery Authority's response has been published as part of additional information for the change application.

4. Evaluation of proposed change

4.1 Traffic and transport

The CRR Delivery Authority requested a new heavy vehicle access route to facilitate construction activities at the Southern Portal Area (see Figure 3.1). The proposed access route was to allow up to ten heavy vehicles per hour to access the site from Peter Doherty Street via a right hand turn movement from Annerley Road. This proposal would require a temporary intersection upgrade at the juncture of Annerley Road and Peter Doherty Street.

Submitters, including BCC, local government elected representatives, a State Member of Parliament and private submitters, raised significant concerns about the proposed heavy vehicle access route citing safety issues for cyclist and pedestrians.

BCC advised that the requested change would result in a significant increase of safety risk to cyclists on Annerley Road and the new heavy vehicle haulage route would not be supported. Submitters also raised concerns regarding:

- the safety of school staff and students within the Boggo Road precinct during school drop off and pick up times
- traffic congestion, particularly on Annerley Road
- potential increase in traffic noise.

4.1.1 Revised spoil haulage route

In response to concerns raised in submissions and in consultation with BCC, the CRR Delivery Authority prepared a Traffic Impact Assessment (TIA) to investigate the feasibility of using the existing Boggo Road haul route for the Boggo Road worksite to facilitate the works in the Southern Portal Area. As a result, the CRR Delivery Authority has since revised the proposal and is no longer seeking establishment of the new haul route entering from Peter Doherty Street. Instead, the existing Boggo Road haul route is proposed to be utilised. The revised approach generally aligns with Option 3 presented in the technical report of the original change application illustrated below at Figure 4.1.



Figure 4.1 Existing heavy vehicle access route

4.1.2 Potential impacts

4.1.2.1 Traffic

The TIA for the revised haulage route was prepared in accordance with DTMR's Guide to Traffic Impact Assessment (GTIA). The TIA considers the proposed increase of construction vehicles on the existing haul road and how this could impact the operation, safety and efficiency of the existing local road network.

The TIA presents that an additional ten heavy vehicles and four construction vehicles would be added to the existing Boggo Road haul route. To help facilitate the increase of vehicles on the existing haul road, added traffic measures have been proposed to enhance safety and operation of the haul route. This includes installation of fencing and line markings to direct pedestrians to dedicated road crossings, staffed by traffic controllers. Temporary removal of on street parking along Joe Baker Street and reconfiguration of the roundabout at the intersection of Joe Baker Street and Peter Doherty Street is also proposed to enhance vehicle swept paths.

Table 4.1 details the estimated peak construction vehicle volumes approved under the evaluated project compared to the proposed increase in construction traffic volumes at the Boggo Road worksite. The CRR Delivery Authority estimates that the peak construction traffic volumes will occur in September 2021.

Table 4.1 Existing and proposed peak construction traffic volumes per hour

	Currently approved	Additional vehicles requested	Total vehicle per hour
Heavy vehicles (excluding concrete)	24	14	38
Concrete trucks ¹	16	7	23
Workforce vehicles	5	5	10
Total	45	26	71

The increase in construction vehicles has the potential to impact on the existing road network around the worksite. In addition, there are pedestrians who utilise the local road network to access local business and schools from Dutton Park Station (train) and Boggo Road Station (bus).

The TIA investigated impacts at three key intersections:

- Annerley Road and Peter Doherty Street signalised intersection
- Annerley Road and Boggo Road signalised intersection
- Boggo Road and Dutton Park State School priority-controlled access.

The TIA estimated that there would be an increase of more than five per cent of the background traffic for 2022 at the:

¹ concrete deliveries are not subject to restrictions applied to construction vehicles undertaking spoil haulage and have therefore been added to the background traffic volumes

- left turn movement from Peter Doherty Street onto Annerley Road (48 per cent increase in AM peak and 31 per cent increase in PM peak)
- right turn movement onto Boggo Road from Annerley Road (20 per cent increase in AM peak and 36 per cent increase in PM peak).

Therefore, the CRR Delivery Authority was required to undertake a detailed traffic analysis in accordance with DTMR's GTIA. The analysis concluded that at the Annerley Road and Boggo Road intersection (entry to the site), traffic delays would increase by 1.1 seconds with que lengths expected to be 5.7 m. At the Annerley Road and Peter Doherty Street intersection (exit from the site), traffic delays would increase by 1.9 seconds and que lengths would increase to 14.3 m during peak hours.

The GTIA indicates that an intersection should be upgraded if there is a delay of 42 seconds or more. Therefore, there is no requirement for the CRR Delivery Authority to upgrade any intersection.

Peak pedestrian and traffic movements in the precinct coincide with the school drop-off and pick-up times of 7:00am - 9:00am and 2:00pm – 4:00pm. The TIA concluded that there is not expected to be any adverse impact on the operation of the Dutton Park State School access during peak periods as a result of the revised proposal, however, there should be a focus on the safety at this intersection. At the nearby pedestrian crossing on Boggo Road, a traffic controller is currently employed during construction hours to facilitate safe pedestrian crossings and efficient vehicle movement through the precinct. The CRR Delivery Authority advises this practice will continue for the duration of the project's construction.

4.1.2.2 Traffic Noise

Due to the CRR Delivery Authority revising its proposal to utilise the existing Boggo Road haul route, the CRR Delivery Authority anticipates that the predicted increase in traffic noise on Peter Doherty Street will be half of the 3 A-weighted decibels (dB(A)) that was originally predicted. This is due to construction traffic travelling along the route in a one-way direction rather than passing each other caused by vehicles entering and exiting from the same road.

Predicted noise emissions from the revised haul route proposal are therefore generally consistent with the traffic noise levels predicted for the evaluated project. These levels comply with DTMR's GTIA which allow for up to a 2 dB(A) increase in noise from existing roads.

4.1.3 Mitigation and management measures

4.1.3.1 Traffic

The proposed changes to the heavy vehicle movements along Annerley Road, Boggo Road, Joe Baker Street and Peter Doherty Street are to be managed in accordance with the EMF. Under the EMF, the CRR Delivery Authority will prepare a site-specific CTMP sub-plan for the Southern Portal Area, that will be endorsed by the Independent Environmental Monitor and BCC prior to works commencing.

The CRR Delivery Authority's TIA reviewed the safety arrangements and traffic calming measures currently employed on the existing Boggo Road haul route to ensure continued

effectiveness. As a result of these investigations, the CRR Delivery Authority is in the process of implementing design upgrades along the haul route including installation of tubular handrail fencing to enforce use of the allocated pedestrian crossing. Tactile Ground Surface Indicators will also be installed to direct pedestrians safely through the Boggo Road precinct.

Although utilisation of the existing Boggo Road haul route will increase wait times at intersections with Annerley Road, these impacts are relatively minor when compared to the potential impacts presented by the access changes initially proposed in the change application.

Following further consultation with Dutton Park State School, the CRR Delivery Authority committed to additional mitigation measures to address the school's concerns including:

- a safety campaign which will include production of communication materials for the school, including signage and flyers designed in collaboration with the parents and citizens committee outlining drop off and pick up rules
- an initiative for students (OzPlays program) focusing on safety.

4.1.3.2 Traffic Noise

The potential traffic noise impacts caused by the increase in heavy vehicle movements at the Boggo Road worksite are generally consistent with the evaluated project and are within the noise goals set in the project's existing conditions.

Measures to reduce potential noise impacts from the operation of the revised haul route will remain consistent with the existing Noise and Vibration Management Plan (NVMP) sub-plan. This includes maintaining plant and machinery in good working order and limiting compression braking to ensure truck noise is kept to a minimum. The CRR Delivery Authority has also advised that real-time tracking of spoil haulage vehicles occurs, allowing for the most efficient use of the haul route and avoiding queues of trucks upon entry to the site.

4.1.3.3 Targeted consultation on revised spoil haulage route

Following further consultation on the revised spoil haulage route with BCC and preparation of the TIA, the CRR Delivery Authority met with Dutton Park State School and Brisbane South State Secondary College to discuss the revised proposal and concerns raised in their submission. This included pedestrian safety and traffic congestion on Boggo Road during school drop-off and pick-up times. The CRR Delivery Authority has advised that Dutton Park State School is generally satisfied with the revised approach of utilising the existing route, with pedestrian safety remaining of concern, in particular for junior students of the school. The CRR Delivery Authority has committed to additional mitigation measures which have been included in section 4.1.3 of this report.

To inform this evaluation, BCC's views were sought on the revised haulage route. On 26 March 2021, BCC advised by letter that they supported the revised approach to use the existing haul route and will continue to work closely with the CRR Delivery Authority on construction traffic management arrangements for the Southern Portal Area work site.

4.1.4 Coordinator-General's conclusions: traffic and transport

The evaluation has found that the CRR Delivery Authority has satisfactorily assessed the potential traffic and transport noise impacts resulting from the proposed changes to the project. As indicated in the change application, the CRR Delivery Authority's assessment findings predict the traffic and transport noise impacts of the proposed changes are not expected to generate any material impacts. It is noted that the existing Imposed Conditions, in particular Imposed Condition 14, establish the appropriate management framework to address the expected impacts, including increase in heavy vehicle movements around the Boggo Road worksite and potential impact on pedestrian and cyclist safety.

The CRR Delivery Authority's revised haulage route proposal addresses submissions received from the community and BCC. The evaluation acknowledges that the revised proposal overall, minimises safety risks for pedestrians and cyclists in the Boggo Road precinct and achieves the desired level of safety and efficiency for the road network whilst maintaining active transport and connectivity in the broader area. The CRR Delivery Authority is expected to fully implement the additional mitigation measures identified to address Dutton Park State School's concerns whilst maintaining the most efficient use of the haul route.

Consistent with the evaluated project, haulage will be managed as part of the finalised CTMP sub-plan and will be informed by a road safety assessment for spoil haulage routes prior to the commencement of relevant Project Works. Imposed Condition 14 requires that the CTMP (and relevant sub-plans) include local traffic management measures developed in consultation with BCC, for key intersections.

The CRR Delivery Authority will continue to manage the traffic noise impacts of the project in accordance with the Imposed Conditions and in accordance with measures described in the NVMP in conjunction with the broader EMF. The project's NVMP contains extensive management and mitigation measures to manage the impacts that may arise through the project.

4.2 Noise and Vibration

Changes to the construction methodology, duration, and location of proposed works at the Southern Portal Area have potential to increase noise and vibration impacts previously evaluated. Construction noise and vibration at the Southern Portal Area has a risk of causing disturbance to nearby sensitive receptors and is the focus of the CRR Delivery Authority's impact assessment and technical reports at Volume 3 of the change application.

Following construction, operational noise and vibration from the project at the Southern Portal Area is expected to be reduced. The proposal seeks to increase the track curvature, thereby reducing railway wheel squeal that may be experienced at this location.

During public notification, seven submissions commented on potential construction noise and vibration impacts related to works in the Southern Portal Area. The key concerns raised included:

- potential for increased construction noise impacts from proposed changes, including 24-hour continuous works, and impacts on the health, well-being and amenity of nearby residents
- lack of detail regarding the negotiated agreement process to be undertaken with impacted residents to mitigate and manage exceedances over 20 dB(A) above the noise criteria
- the need to ensure adequate respite periods are provided for Directly Affected Persons (DAPs) where extended periods of night-time noise generation is expected
- potential noise impacts on people who are in long-stay health rehabilitation facilities (Leukemia ESA Village) from the change to the location of construction activities and increase in heavy vehicle movements.

4.2.1 Construction noise

4.2.1.1 Potential Impacts

The construction noise impact assessment (CNIA) is outlined at Volume 3, Attachment A Technical Report: Construction Noise (Southern Portal) of the Request for project change application. The CNIA predicted the maximum (peak) level of noise at any one time and is representative of a 'worst case' construction scenario, whereby all plant and equipment was assumed to be running simultaneously. Existing site-based mitigations were factored into the modelling and applied where practicable (i.e. natural and purpose-built barriers).

The assessment is therefore conservative, with monitored noise emissions likely to be lower than predicted. Actual construction noise levels to be experienced at any given receptor location are dependent on the following factors:

- construction stage and type of construction activities being undertaken (i.e. excavation, piling and track reinstatement)
- period of works being undertaken
- receiver type and resilience to noise (i.e. typical tin and timber Queenslander vs modern apartment building)
- proximity of the nearest receiver to the works.

Figure 4.2 below, illustrates the proposed location of the Southern Portal Area worksite zones in proximity to the surrounding sensitive receptors grouped into Noise Catchment Areas². Compared to the previously evaluated project, the Southern Portal Area and construction activities will move north by up to approximately 15 m and approximately 30 m to the east. The proposed changes will mean that some previously identified sensitive receptors such as Leukemia ESA Village will be closer to construction activities, while others will be further away.

² Noise Catchment Areas are based on each area's similar acoustic environment prior to the commencement of construction.



Figure 4.2 Noise Catchment Areas and Worksite Zones within the Southern Portal Area worksite zones

Construction noise goals (CNG) for the project are stipulated by Imposed Condition 11. Proposed changes are likely to result in exceedances of these CNGs during both standard construction hours (Monday to Saturday, 6.30am to 6.30pm) and out of hours work (OOHW) (evening (6.30pm to 10.00pm)). As 24-hour continuous works are proposed to occur during rail possessions, night-time noise would also be generated between the hours of 10.00pm and 6.30am.

Table 4 of the request for project change application predicted the construction noise levels which could be experienced at receptor locations located closest to the worksite zones and with the highest potential to experience noise disturbance. Predicted construction noise levels at all sensitive receptor locations can be found at Table C6A-F of Attachment A of the request for project change application.

In the worst-case, the CNIA predicted that construction works may result in CNG exceedances of up to 27 dB(A) in the day and during OOHW at surrounding residential receptors³ (see Table 4.2 below).

³ Predicted construction noise levels for each individual residential receptor (71 in total) is provided at Tables C6A to C6F contained within Appendix C of Volume 3, Attachment A Technical Report: Construction Noise (Southern Portal) of the Request for project change application.

Table 4.2 Predicted construction noise levels at sensitive receivers above 20 dB(A)

Construction stage ⁴	Construction zone	Potential noise levels above noise goals, dB(A)		
		Day (LA _{eq} 15 min)	OOHW (LA _{eq} 15 min)	Night-time (LA _{MAX})
41 Peter Doherty Street (Leukaemia ESA Village) (BOG_01)				
Stage 2	B, C, D and F	20*	13	9
Rawnsley Street (BOG_01)				
Stage 1	F	23	9	-
Stage 2	B, C, D and F	24	18	7
Stage 3	A, B and C	21	11	-
Stage 4 (roof)	A, B, C, D and E	18	21	-
Stage 4 (excavation)	A, B, C, D and E	22	20	2
Railway Terrace (BOG_01)				
Stage 1	F	25	8	-
Stage 2	B, C, D and F	27	22	12
Stage 3	A, B and C	25	13	-
Stage 4 (roof)	A, B, C, D and E	25	27	-
Stage 4 (excavation)	A, B, C, D and E	25	23	4
Railway Terrace (DUT_03)				
Stage 1	F	21	6	-
Stage 2	B, C, D and F	19	13	3

Table note: * bolded figures show exceedances of 20 dB(A) or more than above CNGs. Where an exceedance of 20 dB(A) above the relevant CNG is predicted and monitored, Project Works are only authorised to occur where the requirements outlined in Imposed Condition 11c are met.

Sleep disturbance and hours of construction

To reduce impacts on freight and passenger rail services, construction works within a rail corridor are encouraged to be expedited and undertaken during off peak times. To this end, aspects of construction within the Southern Portal Area are proposed to occur at night. For project work undertaken during an approved rail possession, respite periods do not apply, and the CRR Delivery Authority is able to undertake 24-hour continuous work until those activities are complete.

Due to background noise sources decreasing in the evening, OOHW (evening (6.30pm to 10.00pm) and night-time works (10.00pm to 6.30am)) have a potential to cause sleep disturbance at receiver locations at these times. This evaluation considers that an exceedance of 5 dB(A) above the CNGs during the night-time may lead to sleep disturbance, including intermittent events where only a small number of noise events with a high maximum sound pressure (i.e. piling) occur. This would align with the current

⁴ Further detail on construction stages is provided at Table C1: Construction Timetable/Activities/Equipment – Southern Portal contained within Appendix C of Volume 3, Attachment A Technical Report: Construction Noise (Southern Portal) of the Request for project change application.

World Health Organisation guidance which stipulates sleep disturbance is likely to be caused by levels of 40 dB(A) and above.

The greater extent of cut and cover construction (excavation and piling, formwork, reinforcement, and track reinstatement) is proposed to occur during the rail possession period (Stage 2) within Zone D. In this instance, 24-hour continuous works are predicted to result in noise impacts up to 22 dB(A) above noise goals during OOWH at 60 Railway Terrace. A further seven sensitive receptor locations would potentially experience sleep disturbance with noise levels between 5 dB(A) and 12 dB(A) above the existing CNGs during the night-time. The highest potential to cause sleep disturbance was identified during a five-day period where hydraulic pile rigs and excavators would be required to operate concurrently within the rail corridor to establish the cut and cover caverns.

Figure 4.3 below illustrates the modelled noise impact contours predicted during the Stage 2 rail possession period for night-time construction works. As shown, the extent of predicted noise levels at or above the CNGs is generally confined within the existing rail corridor and along Peter Doherty Street, with a small number of residential receivers impacted where CNGs would be exceeded.

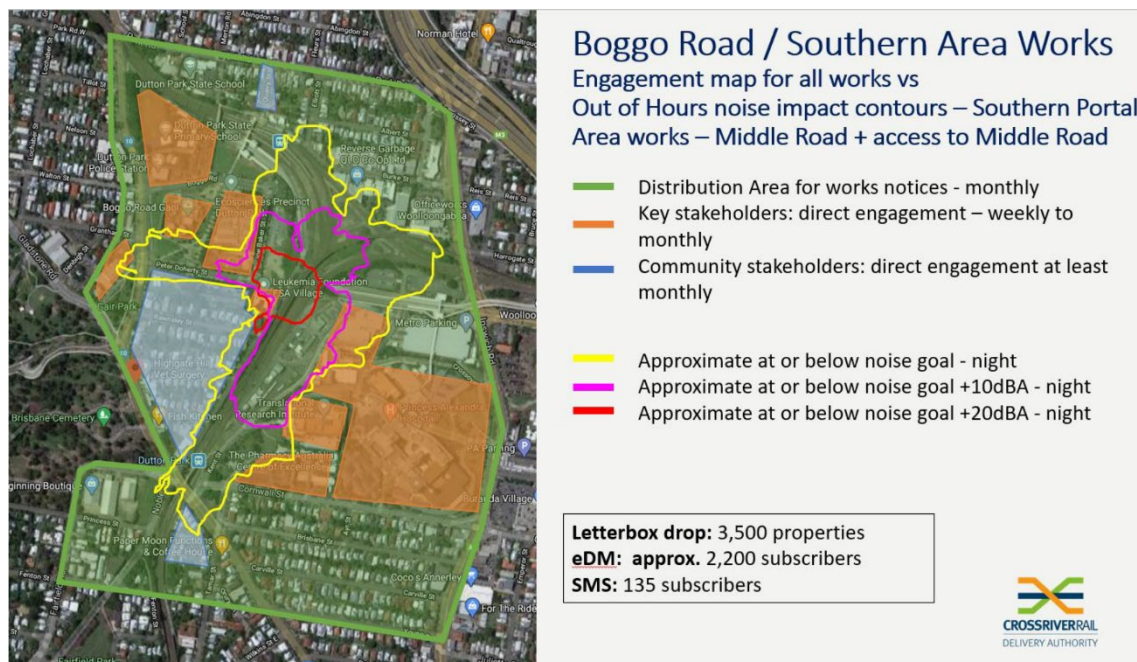


Figure 4.3 Extent of noise impact for Southern Portal Area works during Stage 2 rail possession period

4.2.1.2 Mitigation and management measures

The change application concludes that the establishment of the EMF through the Imposed Conditions provides a robust approach to manage identified noise and vibration impacts of the proposed changes. This includes Imposed Condition 11 which establishes CNGs for Project Works. It is further stated that the implementation of tailored mitigation measures at the Southern Portal Area could further reduce the predicted construction noise levels by 3-25 dB(A). The applicability of these mitigation measures would be established on a case-by-case basis and may include:

- substitution of alternative (quieter) construction methods and equipment

- reduction in the quantity of equipment
- an increase in distance between source and receiver
- the use of acoustic barriers and enclosures.

On 2 March 2021, the CRR Delivery Authority advised that monitored noise levels from construction activities to date have been generally found to be 5 dB(A) less than worst-case predictive levels, demonstrating the effectiveness of tailored mitigations and the broader EMF requirements.

In accordance with the EMF (discussed in section 2.2.1) and as required by Imposed Condition 2, the current OEMP includes outline sub-plans which incorporate the environmental outcomes and performance criteria that must be achieved by the project. The Outline Noise and Vibration Management Plan (Outline NVMP) can be found at Appendix Q of the OEMP which sets out the performance outcomes in relation to noise and vibration. The following is an excerpt from the Outline NVMP:

Environmental Outcomes

The following environmental outcomes in relation to noise...are to be achieved for the Project:

- *Construction activities are designed, planned and implemented to maintain human health and wellbeing, to the extent reasonable and practicable.*
- *Construction activities generally are designed, planned and implemented to maintain daily patterns of activity, and to minimise sleep disturbance at night...*

Performance Criteria

The following performance criteria must be achieved throughout construction of the Project:

Air-borne Noise

- *Project Works are designed, planned and implemented to achieve the noise goals specified in Imposed Condition 11 to the extent reasonable and practicable.*
- *Where predictive modelling conducted prior to the commencement of works in a locality, indicates that the noise goals are likely to be exceeded:*
 - *potentially Directly Affected Persons must be identified and consulted regarding the potential impacts and the mitigation measures proposed to address the impacts;*
 - *mitigation measures must be developed in consultation with potentially Directly Affected Persons on a 'case by case' basis prior to commencement of the works; and*
 - *agreed mitigation measures must be included in a mitigation register and implemented prior to undertaking Project Works.*

- *Project Works occurring underground or within an effective acoustic enclosure, and achieving the goals for human health and wellbeing set out in Imposed Condition 11, may progress continuously while monitoring indicates noise levels remain below the goals..."*

Consequently, in the event noise impacts are modelled to exceed or monitored above the relevant goal (daytime or night-time goals), engagement with potential DAPs is required to occur in advance of those works occurring. All mitigation measures to be implemented are to be included in the site-specific CEMP developed for the scope of works, which is then required to be endorsed by the independent Environmental Monitor as being consistent with the OEMP prior to the commencement of relevant Project Works (under Imposed Conditions 4 and 7).

A NVMP for the Southern Portal and Boggo Road Station Works (Construction NVMP) has also been prepared which forms part of the CEMP. This plan aims to achieve the environmental outcomes stated in the OEMP and includes:

- details of consultation and mitigation measures to be implemented, including specific requirements for notification to DAPs and near neighbours such as the PA Hospital, TRI Building, Leukaemia ESA Village and EcoSciences Facility
- compliance management including training, incidents and emergencies and complaints management
- details of noise and vibration monitoring, auditing and reporting
- documentation and communication protocols.

As the CRR Delivery Authority's CNIA predicted that CNGs during standard construction hours and OOHW would be exceeded, the CRR Delivery Authority will be required to implement new tailored and targeted mitigation and management measures in these instances. To meet the requirements of the project's Imposed Conditions and the approved OEMP, the details of these measures must be incorporated into the Construction NVMP prior to the commencement of those works.

As required by the Imposed Conditions and the OEMP, the CRR Delivery Authority will continue to undertake noise monitoring and reporting of environmental impacts during construction works to demonstrate compliance with the performance criteria and refine management measures as required.

Directly affected persons

As defined in the OEMP and imposed conditions, a DAP is:

'an entity being either the owner or occupant of premises for which predictive modelling indicates or monitoring confirms construction impacts to be above the performance criteria in the imposed conditions.'

In instances when predicted or monitored noise levels are found to be above the relevant CNG (daytime or night-time goals), the CRR Delivery Authority must proactively engage with DAPs and develop tailored mitigation measures on a 'case by case' basis with them. The CRR Delivery Authority must maintain records of engagement with DAPs and add any agreed mitigation measures in the project's mitigation register.

The DAP process is generally triggered through two avenues:

- (1) Where predicted or monitored noise levels are more than 20 dB(A) above the relevant noise goal a number of requirements are triggered as per Imposed Condition 11(c)
- (2) Where a person enquires or complains about noise and the predicted or measured noise level is 1-20 dB(A) above the relevant CNG, the person would be considered a DAP.

Commencement of works cannot occur unless advance notification and consultation has been undertaken with DAPs. If a person is concerned that noise levels are being exceeded at their location, they have the right to lodge a complaint to the CRR Delivery Authority which is required to investigate the matter and seek to remedy the issue/s raised.

Sleep disturbance and hours of construction

As shown in Figure 4.3 above, the extent of stakeholder consultation and engagement to be undertaken is determined by predictive noise modelling. The CRR Delivery Authority reports that sensitive receivers likely to experience sleep disturbance (exceedance of the CNGs by 5 dB(A) or more) will be proactively identified and consulted prior to the commencement of Project Works. It is noted that predicted noise levels in the CNIA are worst-case and are subject to the implementation of the construction program, effectiveness of mitigation measures and actual façade reductions experienced in practice.

The OOHW Protocol, outlined in the Construction NVMP, fulfils the function of a site-specific sub-plan for the Southern Portal Area. The OOHW Protocol details the permitting system that enables OOHW to be assessed and approved by CPB, BAM, Ghella, UGL (CBGU) Joint Venture prior to works occurring.

For any works during an approved rail possession, an OOHW permit must be obtained by the works supervisor. This ensures differences in the construction program are recognised and opportunities for impact minimisation are thoroughly investigated prior to commencement. The permitting system forces consideration of the scope of work to be undertaken, the scheduling of project works across the worksite and the type of plant and equipment to be used.

Further information from the CRR Delivery Authority confirms that the worst-case scenario for OOHW during the 40-day rail possession will not be experienced for the entire period. Despite the rail possession requiring 24-hour continuous works to occur, the CRR Delivery Authority confirmed that in conjunction with the OOHW Protocol and permitting system, high noise generating activities will not occur continuously for the entire duration of the rail possession. Where possible, the CRR Delivery Authority is expected to schedule lower noise generating activities during night-time, particularly after 10.00pm, significantly reducing the potential for sleep disturbance during night-time works. Therefore, construction noise from within the rail corridor is not likely to cause sleep disturbance for the full 40 days.

Community consultation and engagement

The Community Engagement Plan (CEP) for the project works in conjunction with the NVMP and further outlines how the CRR Delivery Authority will undertake communications and engagement with the community and stakeholders relevant to

Project Works. The CEP includes specific communications relating to works at night and engagement with identified potential DAPs. This includes details about the timing, duration, scale and intensity of project works and information about complaints procedures. Consultation undertaken by the CRR Delivery Authority has included regular monthly meetings with key stakeholders (i.e. Dutton Park State School, EcoSciences and the Leukaemia ESA Village), door knocks, works notification letter box drops and community pop-up sessions. Accordingly, this evaluation considers the information to be made available to the community will adequately convey the need for the construction programme and extent of night-time Project Works.

In accordance with Imposed Condition 11, the NVMP and the CEP, the CRR Delivery Authority is expected to continue providing advanced notification and undertake consultation with DAPs and near neighbours to address their concerns. For assessment locations shown in Table 4.2 whereby Project Works are predicted to exceed the noise goals by more than 20 dB(A), the CRR Delivery Authority will undertake consultation with DAPs as a priority and commence negotiation of suitable mitigation measures following issue of this report.

4.2.2 Vibration

4.2.2.1 Impacts

The vibration and re-generated noise impact assessment (VNIA) is outlined at Volume 3, Attachment C Technical Report: Construction Noise (Southern Portal) of the Request for project change application. The VNIA was provided for the peak level of predicted vibration and subsequent re-generated noise however the level generated by a construction activity would vary throughout its operation as it moves towards and recedes away from the sensitive receptor. Vibration emissions are expected to fluctuate with time and location as mobile equipment is expected to only generate peak vibration levels for a period of 10 minutes every hour. As such the assessment is therefore a conservative one, with vibration emissions expected to be lower than the predicted.

Compared to the previously evaluated project, the proposed change may result in additional vibration impacts because of the following changes:

- Re-alignment of the dive structures towards the east by approximately 30 m
- Extension of the entire Southern Portal Area further towards the north.

Accordingly, proposed construction works at the revised Southern Portal Area would be closer to the PA Hospital, TRI building and the Leukemia Foundation ESA Village. In comparison to the evaluated project, the proposed changes do not introduce any new construction methods or techniques that would otherwise produce elevated levels of vibration.

As presented in Table 4 of the VNIA, the CRR Delivery Authority's vibration impact assessment concludes that in comparison to the evaluated project, the modelled vibration levels would increase at the Leukemia Foundation ESA Village during excavation activities for Stages 2, 3 and 4. However, modelling of vibration impacts once mitigations had been applied concluded that additional vibration levels would be insignificant (Vibration PPV maximum 0.5 mm/s) and compliance would continue to be achieved with Condition 11 at all receiver locations, at all times.

As the PA Hospital and TRI building may contain vibration-sensitive equipment, the CRR Delivery Authority has committed to conducting further investigation into the location and sensitivity of this equipment during detailed construction management. The CRR Delivery Authority's modelling indicates that vibration levels are not envisioned to affect the Transmission Electron Microscope at the EcoSciences building, and therefore this report considers potential risk for the project to result in broader vibration impacts in the precinct to be low.

4.2.2.2 Mitigation and management measures

The CRR Delivery Authority has committed to utilise an array of mitigation measures such as management controls (i.e. working hours, respite periods), source controls (i.e. equipment selection) and other relevant site-specific measures to reduce vibration levels at sensitive receptors.

Prior to construction works occurring, the CRR Delivery Authority will undertake further vibration monitoring to:

- inform the construction methodology so as to reduce vibration and re-generated noise impacts on sensitive receptors
- validate the modelling of the request for project change application
- demonstrate compliance with the noise and vibrations set out in Imposed Condition 11.

Should the monitored impact of construction activities be greater than the impact predictively modelled, the CRR Delivery Authority would determine whether changes to the excavation methods or scheduling of works are required and proactively consult with potentially impacted stakeholders.

In accordance with the Outline NVMP, the CRR Delivery Authority will continue to consult directly with the PA Hospital, ESA Village and the EcoSciences facility to advise of potential nuisance impacts and maintain awareness of any unforeseen impacts on their operations, including sensitive equipment.

4.2.3 Coordinator-General's conclusions: noise and vibration

The evaluation identifies that the CRR Delivery Authority has adequately assessed the potential noise and vibration impacts resulting from the proposed changes to the project. As indicated in the change application, the CRR Delivery Authority's assessment is based on a worst-case methodology and therefore noise and vibration impacts are expected to be lower in practice, following the implementation of site-specific management measures where appropriate.

The CRR Delivery Authority is expected to continue managing noise and vibration impacts of the project consistent with the current measures described in the NVMP. Overall, noise levels are expected to remain within the CNG limits set by Imposed Condition 11 and the broader EMF. Should new or additional mitigation measures be required at the Southern Portal Area, the CRR Delivery Authority has indicated that the NVMP and/or related site-specific sub plans will be updated to capture those additional controls as required.

It is noted the existing EMF and Imposed Conditions for the project establish a proactive regime for the identification of DAPs, and to actively engage with DAPs about the appropriate management and mitigation of construction noise and vibration impacts. The assessment concludes that the most appropriate mitigation and management measure/s will be determined by the degree of exceedance of the applicable CNG.

The CRR Delivery Authority must conduct ongoing noise monitoring during construction to validate predictive noise modelling with further investigation of mitigation measures. In the event predictive modelling or monitoring report noise levels above the relevant CNG, the CRR Delivery Authority will engage with potential DAPs and tailor mitigations to address the exceedance.

Noise levels emitted during rail possessions are unlikely to cause sleep disturbance for the full 40 days. The CRR Delivery Authority has advised noisier works would be scheduled primarily during day-time work hours, with less intensive works scheduled at night-time between 10.00pm and 6:30am. The highest potential for construction noise to cause sleep disturbance is during a shorter five-day period where piling and earthworks would occur concurrently.

4.3 Air Quality

4.3.1 Impacts

Proposed changes to the construction methodology and location of construction activities at the Southern Portal Area has potential to increase dust and air quality impacts previously evaluated.

The air quality impact assessment (AQIA) is outlined at Volume 3, Attachment E Technical Report: Vibration (Southern Portal) of the Request for project change application. The AQIA predicted the emissions estimation and dispersion modelling for the worst-case construction scenario, whereby all emitting construction activities at the Southern Portal Area were assumed to be operating simultaneously and continuously all year round. The assessment is conservative, with air emissions expected to be lower than modelled.

The CRR Delivery Authority's AQIA concludes the air quality impacts previously assessed are not likely to result in exceedances of the air quality criteria and goals set out for the project at Imposed Condition 13. The results of the dispersion modelling predicted that concentrations and deposition rates for various particulate matter (TSP, PM10, PM2.5 and dust deposition) emitted from the Southern Portal Area worksite would remain compliant at all assessment locations.

The CRR Delivery Authority's cumulative impact assessment in the AQIA predicted emissions from the Southern Portal Area combined with emissions from neighbouring construction activities (Dutton Park Station and Boggo Road Station) and background air quality levels attained from the DES South Brisbane monitoring station. The AQIA concluded that predicted concentrations and deposition rates would also remain below the applicable air quality criteria and goals at all assessment locations.

The evaluation identifies that the results of the AQIA represent a slight improvement from the air quality impacts previously assessed for the project, with potential exceedance of the air goals at one assessment location no longer expected to occur.

4.3.2 Mitigation and management measures

An Air Quality Management Plan (AQMP) exists for the entire Cross River Rail Project and was last updated in September 2020. The plan operates in conjunction with the broader environmental management framework for the project and includes:

- details of mitigation measures
- compliance management including training, incidents and emergencies (incorporating complaints management)
- details of air quality monitoring and auditing
- reporting including greenhouse gas emissions and incident reporting
- documentation and communication protocols.

In particular, the AQMP stipulates that:

‘Prior to commencement of works and during construction, the proponent will consult with sensitive receivers proximate to the worksites about the scale and duration of works with the potential to impact air quality.... If monitoring shows exceedances during construction, additional mitigation measures will be required, such as reviewing dust generating activities during dry, windy conditions, undertaking additional checks of dust controls, increasing watering rates during dry periods, or undertaking targeted consultations with affected entities (AQMP p 14).’

In the change application the CRR Delivery Authority indicates that there is a higher degree of mitigation measures proposed for the Southern Portal Area than what was previously assumed in the AQIA for RfPC4. These include:

- bulldozers will now operate with a fence/shade cloth, water sprays and operations will generally be under a tunnel roof (from approximately January 2022, operations will be entirely under the cut and cover roof)
- water sprays will be used when loading trucks, on the rock breaker and on the piling rig
- a binding agent will be used on exposed areas (as well as water sprays).

In conjunction with the AQMP, the above measures will further reduce the potential for air quality impacts in the vicinity of the Southern Portal Area, particularly in the event of adverse weather conditions.

4.3.3 Coordinator-General’s conclusions: air quality

The evaluation has found that the CRR Delivery Authority has assessed the potential air quality impacts resulting from the proposed changes to the project. The CRR Delivery Authority’s assessment findings predict potential air quality impacts of the proposed changes are not expected to exceed existing air quality criteria and goals stipulated at Imposed Condition 13.

The CRR Delivery Authority will continue to manage air quality impacts of the project in accordance with the limits set by Imposed Condition 13 and the measures described in

the AQMP within the broader EMF established for the project. The evaluation concludes that additional mitigation measures identified by the CRR Delivery Authority will be implemented where necessary at the Southern Portal Area, and if required, the AQMP and/or related site-specific sub plans will be updated to capture those additional controls.

4.4 Changes to Imposed Conditions

The CRR Delivery Authority has requested changes to Imposed Condition 1(a) to allow works at the Southern Portal Area to be carried out generally in accordance with the updated design drawings. Table 4.3 below presents the details of proposed changes to Imposed Condition 1, which will enact the changes evaluated in this report.

Table 4.3 Requested changes to Imposed Condition 1

Condition 1. General conditions	
(a)	The project must be carried out generally in accordance with: <ul style="list-style-type: none">(i) the Cross River Rail Request for Project Change dated November 2020, as amended by the Response to Submissions Report for the Cross River Rail Request for Project Change dated March 2021;(ii) the drawings provided at Volume 2, Cross River Rail Request for Project Change dated November 2020, as amended by the drawings provided at Attachment D of the Response to Submissions Report for the Cross River Rail Request for Project Change dated March 2021;(iii) (iii) the Cross River Rail Request for Project Change dated August 2020;(ii) the drawings provided at Volume 2, Cross River Rail Request for Project Change dated November 2020;(iv) (iv) the Cross River Rail Request for Project Change dated May 2020;(iv) the drawings provided at Volume 2, Cross River Rail Request for Project Change dated May 2020;(v) amendments to the Project identified in the Cross River Rail Request for Project Change dated June 2018;(vi) amendments to the Project identified in the Cross River Rail Request for Project Change dated November 2018;(vii) the Cross River Rail Request for Project Change dated April 2019.
(b)	The proponent must notify the Coordinator-General and all nominated entities in Schedule 2 in writing of the commencement of Project Works and the commencement of the commissioning and operational phases of each 'construction site' at least 20 business days prior to the relevant commencement date.

Given my evaluation of the proposed changes in section 4 of this report the requested changes to Imposed Condition 1 are found to be acceptable.

5. Coordinator-General's conclusion

This report concludes my evaluation of the proposed project change pursuant to section 35I of the SDPWO Act.

The evaluation has found that the requirements of the SDPWO Act have been satisfactorily met and that sufficient information has been provided to enable the evaluation of the proposed changes to the conditions of approval.

The evaluation confirms the EMF for the evaluated project is sufficient to manage the project's potential environmental impacts, including the changes evaluated as part of this report. The EMF includes requirements for the CRR Delivery Authority to consult and collaborate with stakeholders—including DAPs—in advance of any project works and to ensure the implementation of various site specific mitigations are employed across the project. The complaints management approach required by the EMF was similarly determined to be appropriate. The independent Environmental Monitor and Community Relations Monitor will continue to provide appropriate oversight of the implementation of the EMF to ensure conditions are implemented.

Accordingly, I approve the changes to the conditions for the Cross River Rail project as outlined in this report.

In accordance with section 35K of the SDPWO Act, the Coordinator-General's report on the EIS for the project, and the Coordinator-General's change report, both have effect for the project. However, if the reports conflict, this Coordinator-General's change report prevails to the extent of the inconsistency with earlier reports. The CRR Delivery Authority must implement all conditions in this report.

Section 4.4 of this change report replaces the previous Imposed Condition 1 of the evaluated project dated December 2020. The Cross River Rail: Project Wide Imposed Conditions and Recommendations dated March 2021 for the project has been updated to reflect the changes and can be viewed online at www.dsdmip.qld.gov.au/crr. The document titled 'Cross River Rail: Project Wide Imposed Conditions and Recommendations dated March 2021 gives effect to the change of Imposed Condition 1 and replaces Appendix 1 and Appendix 2 of the change report dated 19 November 2020 as amended on 21 December 2020.

In accordance with section 35L of SDPWO Act, this report will lapse on 31 December 2024.

A copy of this report will be issued to the CRR Delivery Authority.

A copy of this report and all relevant EIS assessment documentation (including the revised project wide imposed conditions and recommendations for the project) are available on the Department of State Development, Infrastructure, Local Government and Planning's website at www.dsdmip.qld.gov.au/crr.



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Toni Power
Coordinator-General

Acronyms and abbreviations

Acronym	Definition
AQMP	Air quality management plan
BCC	Brisbane City Council
CEMP	Construction Environmental Management Plan
CEP	Community Engagement Plan
CGCR	Coordinator-General's change report
CGER	Coordinator-General's evaluation report
CNG	Construction noise goals
CNIA	Construction noise impact assessment
CRR	Cross River Rail
CTMP	Construction Traffic Management Plan
DAP	Directly Affected Person
dB(A)	A-weighted decibels
DES	Department of Environment and Science
DTMR	Department of Transport and Main Roads
EIS	environmental impact statement
EMF	environmental management framework
GTIA	DTMR's Guide to traffic impact assessment
M	Metres
NVMP	Noise and Vibration Management Plan
OEMP	Outline Environmental Management Plan
OOHW	Out of hours work
QR	Queensland Rail
SDPWO Act	<i>State Development and Public Works Organisation Act 1971</i>
TIA	Traffic impact assessment

Glossary

Term	Definition
Construction Environmental Management Plan	the Construction Environmental Management Plan referred to in Condition 4.
coordinated project	A project declared as a 'coordinated project' under section 26 of the SDPWO Act. Formerly referred to as 'significant project'.
Coordinator-General	The corporation sole constituted under section 8A of the SDPWO Act and preserved continued and constituted under section 8 of the SDPWOA Act.
directly affected person	an entity being either the owner or occupant of premises for which predictive modelling or monitoring indicates the project impacts would be above the performance criteria in the Imposed Conditions.
imposed condition	A condition imposed by the Queensland Coordinator-General under section 54B of the SDPWO Act. The Coordinator-General may nominate an entity that is to have jurisdiction for that condition
June 2019 CGCR	The Coordinator-General's change report dated 26 June 2019
significant project	A project declared (prior to December 2012) as a 'significant project' under section 26 of the SDPWO Act. Projects declared after 21 December 2012 are referred to as 'coordinated projects'.
Outline EMP	the Outline EMP approved by the Coordinator-General in Condition 2.
predictive modelling	the use of appropriate analytical scenario testing, whether or not by numerical measurements, undertaken prior to the commencement of Project Works.
project work	any works, including early works, demolition works or site preparation works, for construction of the project. Project Work does not include: <ul style="list-style-type: none">• any works associated with the demolition of buildings and structures on State owned land• works involving the relocation or replacement of public utilities when undertaken by a public utility authority or provider• the placement and management of spoil at spoil placement locations• works associated with the temporary Roma Street Coach Terminal.
managed work	Project Work for which either the predicted or monitored impacts meet the performance criteria at a Sensitive Place.
the project	The project described in the Coordinator-General's Evaluation Report dated 20 December 2012.

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