

Community Agreement Plan for a 3 Week Road Closure at a section of Road South of Glenmore Parkway Intersection

1.1 Proposal

As part of the Northern Road Upgrade Project, CPB Contractors (CPB) proposes to undertake construction activities from Glenmore Parkway intersection to approximately 400m to the South on the Northern Road as shown in Map 1 below.



Map 1. Main work locations

The works would involve consecutive days, evenings and nights of construction work from the 20th October – 5th November 2021 shown below in Table 1.

| Indicative Dates | Scope of works | Noise prediction summary |
|--|---|---|
| Kerb construction | | |
| 20 th October | Concrete kerb machine pours | Greater than 5db above RBL for residents. Noise impacts detailed in Appendix A |
| 21 st October | Concrete kerb machine pours | |
| Median island infill works | | |
| 22 th October | Place densely graded road base | Greater than 5db above RBL for residents (except for respite nights). Noise impacts detailed in Appendix A |
| 23 rd October | Respite | |
| 24 th October | Respite | |
| 25 th October | Install steel reo bars and joints | |
| 26 th October | Pour concrete within the median island / install road signs | |
| 27 th October | Saw cut the median island | |
| Asphalt Works | | |
| 28 th October | Northbound asphaltting | Greater than 5db above RBL for residents. Noise impacts detailed in Appendix A |
| 29 th October | Southbound asphaltting | |
| Line marking & Traffic Control System (TCS) Works | | |
| 30 th October | Respite | Greater than 5db above RBL for residents (except for respite nights). Noise impacts detailed in Appendix A |
| 31 st October | Respite | |
| 1 st November | Clean area and install temporary line marking | |
| 2 nd November | Install traffic control signal final configuration | |
| 3 rd November | Respite | |
| 4 th November | Respite | |
| 5 th November | Permanent Line Marking | |

Table 1. Planned activities list

CPB has made offers of alternate accommodation to specific residences based on impacts determined by predictive noise modelling. This is detailed in Appendix B of this document. This work requires gaining consensus from potentially affected noise sensitive receivers to undertake works over consecutive days, evenings, and nights.

1.2 Justification

The completion of these works is a critical milestone for project completion. This work once complete will upgrade the road surface structure and improve the experience for motorists. Motorists would experience a smoother, more frictionless road surface. Completing the works allows CPB to demobilise construction equipment, remove temporary construction barriers and return the full width of the road to motorists and pedestrians ahead of schedule without the need for ongoing night work. Therefore, CPB can reduce the overall impact these works would have if undertaken during standard construction hours.

Additional benefits include reduced duration of impact to traffic due to works carried out over consecutive day, evening and night shifts. Travel convenience for motorists would be returned in a more efficient manner by completing the work ahead of schedule.

These works require full and partial closure of traffic lanes on the Northbound and Southbound lanes of The Northern Road under a Road Occupancy Licence. The work will be undertaken on traffic lanes that are typically busy during the daytime.

These works primarily involve construction of road pavement and laying asphalt which will ensure restoration of the roadway and provide improved access to private property for the public.

In summary, the proposal is designed to minimise overall impacts at residences and reduce impacts to regional traffic and business by completing these works ahead of schedule over consecutive shifts.

CPB has approached potentially affected local receivers to inform them of the proposed scope of work and gained their agreement to carry out the works. The CPB Community Team approached 12 residential households and details are provided in Appendix B.

1. Activities

2.1 Scheduled duration of the works and activities list.

The works are combined over a 3 week period from the 20th October – 5th November 2021. Sensitive receivers potentially noise impacted by these works are also likely to be impacted by planned project out-of-hours activities in the area on Friday 15th and Saturday 16th October under a separate EPL Community Agreement approved by the NSW EPA on the 8th October 2021. This information has been communicated with potentially noise sensitive receivers. Appendix B demonstrates the consultation and feedback from all potentially noise impacted residents.

Should circumstances such as if weather impacts construction planning, or, if unforeseen critical enabling works are required, then additional out-of-hours works may need to be undertaken. Potentially impacted sensitive receivers will be consulted with regards to changes

in programmed dates due to weather or other reasons. This proviso has been delivered to potentially noise affected sensitive receivers as part of Appendix C Script for the Community Agreement.

CPB will inform the EPA of external utility or service providers known to be operating in both major locations such that they may cause impacts to sensitive receivers already identified as part of this community agreement.

General Works and Activities List

Activities will consist of the following:

- a) Kerb construction
- b) Median island infill works
- c) Signage installation
- d) Asphaltting works
- e) Line marking and TCS

Equipment would consist of:

- a) Lighting plant
- b) Road saw-cutting
- c) Concrete Agitator truck
- d) Light vehicles
- e) Bogie trucks
- f) Excavators
- g) Vibratory roller
- h) Flatbed truck
- i) Asphalt Paver
- j) Semitrailer tip trucks
- k) Line marking vehicle

There is the possibility of further refinement of the construction programme as further detailed planning takes place.

The predicted noise impacts associated with these activities are conservatively assessed and presented in Appendix A.

2. Impacts and Mitigation

3.1 Construction noise and vibration impact statement (CNVIS)

Detailed noise modelling has been undertaken using the RMS Noise Calculator tool for all the nights in this program. A vibration assessment is shown in Appendix A.

3.2 Mitigation and Management Measures

The following mitigation measures will be implemented:

- Community notification of the works
- Potentially affected receivers will be notified of works in accordance with the requirements of the EPL, and community consultation program.
- Noise-emitting plant to be directed away from sensitive receivers where possible.
- Shielding by acoustic noise blankets will be considered on a case-by-case basis and utilised whenever reasonable and feasible to do so.
- Providing pre-start tool-boxing to field crews about reducing noise at night. Also, to inform workers of this community agreement and to ensure mitigation measures are well understood.
- Positioning stationary plant such as lighting towers behind noise screens or other structures.
- Switching off all plant and equipment not to be used for 15 minutes or more.
- Non-tonal reverse alarms on plant.

With COVID-19 orders, community impacts of extending construction hours and how these might be mitigated have been considered for this package of works, and include:

1. Offers of alternative accommodation have been provided to residential receivers consistent with the Project OOHW protocol. A summary is provided in Appendix B.
2. Special consideration arrangement in cases where alternative accommodation is not a preferred option. At present, this includes offering sound machines that assist by facilitating sleep.
3. Reviewing construction progress with the objective of scheduling evening and nighttime respite for the community where there is the opportunity.
4. CPB contractors will keep the local community apprised of the works proposed to be undertaken.

5. Communications with potentially noise impacted residents have been undertaken to explain the benefits of the extended hours for this package of works including how CPB will minimise impacts of the works. Refer to Appendix C.

3. Community Consultation

4.1 The Agreement

The CPB Community Relations team have approached sensitive receivers via letter box drop and phone to ensure that residents had the opportunity to be informed about expected impacts based on noise modelling and provide feedback on this proposed work. Under condition E1.2 of the project EPL if CPB is unable to contact a noise sensitive receiver after three attempts, including leaving "sorry I missed you" cards explaining the reason for the visit and requesting a return phone call, then CPB will note that the receiver could not be contacted, and the receiver will not be considered to have either agreed or disagreed. Results of consultation are detailed in Appendix B.

Offers of alternative accommodation were provided in consultation with COVID best practice to those noise sensitive receivers. This measure was undertaken even though impacts from the construction noise were not predicted to exceed 25 dBA above the Project Noise Management Level consistent with the project OOHW protocol.

The wider community will be advised of the road work through the RMS communication protocols, which include notification either by letterbox drop or email in accordance with EPL condition L4.8, an email blast of the notification to the wider community, uploading the notification to the RMS project webpage and advertising through print. RMS will support this by use of their social media communication.

Road users will be advised of the works through traffic management communications, which will include mobile VMS displays, information on 'livetraffic.com', the weekly traffic email blast and the project website.

4.2 The results

The detailed results of the consultation are provided in Appendix B and summarised below.

The total number of residents approached = 12

Number agreed = 9

Number disagree = 1

Non contactable residents despite 3 attempts i.e. phone call, door knock, letterbox drop "sorry we missed you" card = 1

Number of contactable residents that are undecided = 1

Percentage agreement is $9/10 = 90\%$

4. Inspections, monitoring and compliance reporting

5.1 Monitoring

Environmental field inspections including noise and vibration monitoring would be conducted under the package of works and in accordance with EPL condition E1.6 and work practices modified in accordance with condition E1.7 and with the NSW Government's Interim Construction Noise Guideline (DECCW, July 2009) where reasonable and feasible.

As indicated in Appendix D - Noise Monitoring Plan, monitoring will be undertaken during high noise activities being predominantly asphaltting work.

The objective of noise monitoring is to target the highest impact works, determine the nature of any noise impacts, to check against predictions in noise modelling, and to refine construction methods or techniques to minimise noise.

Noise monitoring will be undertaken at representative locations in proximity to sensitive receiver properties. Specific locations of monitoring will be shown in a follow-up validation report of the out of hours works and will be submitted in accordance with EPL condition E1.9.

Noise monitoring will predominantly target those properties where impacts are predicted to exceed 20 decibels above the Noise Management Level (NML). However, monitoring would also be conducted at opportunistic locations where noise impacts are predicted to be lower.

Noise monitoring will be undertaken over 15-minute periods to confirm the 15min Laeq(dB) predictions identified in the table above.

Works within the safe working distance for cosmetic damage will be monitored to confirm safe vibration levels for sensitive receivers.

Where complaints are received, additional noise monitoring may be undertaken at sensitive receiver locations to determine the nature of the noise impacts, and to check against predictions in the model.

In the event of any exceedance of predicted noise levels, CPB will make attempts to modify activities and implement all reasonable and feasible measures on site to prevent a recurrence of the exceedance. Secondly, CPB will comply with section R4.1 Annexure B of the project Noise and Vibration Management Plan to investigate and report any exceedances of predicted noise levels.

5.2 Complaint Reporting

The project will complete and submit to the EPA details of complaints received and actions taken for resolution consistent with M4.5 of the EPL.

5. Project EPL Requirements

According to the project Environment Protection License works outside of the standard construction hours are permitted if an agreement is reached between the licensee and a substantial majority of potentially noise sensitive receivers, (EPL 21189 condition L4.12).

The EPL also requires any agreement reached between the licensee and potentially affected noise sensitive receivers must be:

Submitted to the EPA for approval prior to any works that are the subject of the agreement being undertaken; and

Prepared in writing and a copy of the agreement(s) kept on the premises by the licensee for the duration of this licence; and

- (a) Kept on the licensee's project website or the RMS project website for the duration of the agreement (personal details of residents must be omitted); and.
- (b) Prepared and implemented in accordance with Condition E1.

6. The Planning Requirements

The Ministers Planning Approval Condition E25 (administered by DPE) states that:

- The Proponent must identify and consult with receivers identified as being subject to levels that exceed the Highly Noise Affected criteria with the objective of determining appropriate hours of respite unless an agreement is reached with those receivers.

7. Appendix

Appendix A

Noise modelling and vibration Assessment

Appendix B

Results of Community Agreement

Appendix C

Script for Community Agreement

Appendix D

Noise Monitoring Plan

Attachment A – Noise & Vibration Assessment (OOHW time period 2)

Road Closure South of Glenmore Parkway Intersection

Table 1. Noise Assessment.

Impact classification guide

| Category – Impact Level | 1 | 2 | 3 | 4 | 5 |
|---|-----|------|-------|-------|-----|
| Exceedance of background level in dB for OOHW | 0-5 | 6-10 | 11-20 | 21-25 | >25 |

Table 2. Plant and Equipment Assessed

Plant & equipment assessed: Road saw-cutting machine, light vehicles and people talking at the same time.

| | | | | |
|---------------------------------------|--------------------------|----------------|----------------|-----------------|
| Modelled plant | Road saw-cutting machine | Light vehicles | People talking | Truck movements |
| Modelled Sound Power Level LAeq dB(A) | 117 | 103 | 76 | 106 |

Table 3. Noise Assessment.

Total number of residential properties affected: 12

| Address | Stakeholder | Notes | Loudest activity | Approx. distance from works (m) | Predictive Noise Modelling | | | | | | Vibration Assessment In accordance with Project NVMP Annexure B Construction Noise and Vibration Monitoring Program Table 3-7 | |
|-----------------------------|------------------------------|----------------------|--|---------------------------------|----------------------------|-------------------------------|------------------------------|---|-----------------------|--|--|---|
| | | | | | Noise Catchment Area (NCA) | Rating Background Level (RBL) | Noise Management Level (NML) | Predicted Laeq, 15-minute noise level, dB | Exceedance of NML, dB | Impact Classification (Refer to Impact classification guide below) | Within Safe Working Distance for Cosmetic Damage? | Within Safe Working Distance for Human Response |
| 2019 The Northern Road | Cherie Yott | Property uninhabited | Road saw-cutting, Light vehicles, People talking | 56 | 1 | 44 | 49 | 68 | 19 | 3 | No | Yes |
| 2021 The Northern Road | Robert and Louise Brookfield | | Road saw-cutting, Light vehicles, People talking | 125 | 1 | 44 | 49 | 60 | 11 | 3 | No | No |
| 2023-2025 The Northern Road | Tom and Vicki Hope | | Road saw-cutting, Light vehicles, People talking | 72 | 1 | 44 | 49 | 66 | 17 | 3 | No | Yes |

| | | | | | | | | | | | | |
|-----------------------------|-------------------------|--|--|-----|---|----|----|----|---|---|----|----|
| 2029-2031 The Northern Road | David and Laura Auddino | | Road saw-cutting, Light vehicles, People talking | 206 | 1 | 44 | 49 | 54 | 5 | 1 | No | No |
| 2035-2037 The Northern Road | Andrew Steele | | Road saw-cutting, Light vehicles, People talking | 220 | 1 | 44 | 49 | 53 | 4 | 1 | No | No |
| 2032 The Northern Road | Joe Carbone | | Road saw-cutting, Light vehicles, People talking | 167 | 1 | 44 | 49 | 57 | 8 | 2 | No | No |
| 2014 The Northern Road | Ken Hope | | Road saw-cutting, Light vehicles, People talking | 189 | 1 | 44 | 49 | 55 | 6 | 2 | No | No |
| 2033 The Northern Road | | | Road saw-cutting, Light vehicles, People talking | 328 | 1 | 44 | 49 | 54 | 5 | 1 | No | No |
| 2039 The Northern Road | | | Road saw-cutting, Light vehicles, People talking | 326 | 1 | 44 | 49 | 54 | 5 | 1 | No | No |
| 2051-2053 The Northern Road | Carlo and Lucia Ranieri | | Truck movements | 75 | 1 | 44 | 49 | 53 | 4 | 1 | No | No |
| 2057 The Northern Road | House behind Carlo's | | Truck movements | 181 | 1 | 44 | 49 | 49 | 0 | 1 | No | No |
| 2063 The Northern Road | Yvonne Baccan | | Trucks movements | 85 | 1 | 44 | 49 | 52 | 3 | 1 | No | No |

Appendix B. Results of Community Agreement – Road Closure South of Glenmore Parkway Intersection

Table 1. Overall Consultation Summary

| Residents who agreed | Residents who disagreed | Neither agreed nor disagreed | Vacant / uninhabited properties | Summary of Results |
|----------------------|-------------------------|------------------------------|---------------------------------|--|
| 9 | 1 | 1 | 1 | 90% of residents that could be contacted and responded were agreeable for works to be undertaken |

Table 2. Impact Classification Guide

| Category – Impact Level | 1 | 2 | 3 | 4 | 5 |
|---|-----|------|-------|-------|-----|
| Exceedance of background level in dB for OOHW | 0-5 | 6-10 | 11-20 | 21-25 | >25 |

Table 3. Details of consultation

| Address | First contact attempt between 6 th -7 th October Email and/or phone | Notes | Agreement | Impact classification guide as relevant to stakeholder (Refer to table page 2 above) & Corresponding most impactful works |
|-----------------------------|---|--|--------------------------------|---|
| 2019 The Northern Road | X | Known to be a vacant property. | No response despite 3 attempts | 3 – Saw cutting |
| 2021 The Northern Road | Email & phone ✓ | Resident declined AA offer, but wanted to ensure access for his son who works various hours. CPB CM Mgr advised that access would be unrestricted for duration of works and also advised AA offer would be available at any time should they wish to take it up. | Yes – agreed to CA | 3 – Saw cutting |
| 2023-2025 The Northern Road | Phone ✓ | Agreed to the works and has taken up AA offer | Yes – agreed to CA | 3 – Saw cutting |

| Address | First contact attempt between 6 th -7 th October Email and/or phone | Notes | Agreement | Impact classification guide as relevant to stakeholder (Refer to table page 2 above) & Corresponding most impactful works |
|-----------------------------|---|---|---------------------------------|---|
| 2029-2031 The Northern Road | Email & phone ✓ | Not agreed or disagreed to the works. Has a current disagreement with TfNSW and as such withholds a response to this community agreement proposal | Neither agreed nor disagreed | 1 – Saw cutting |
| 2035-2037 The Northern Road | Phone ✓ | | Yes – agreed to CA | 1 – Saw cutting |
| 2032 The Northern Road | Email ✓ | | Yes – agreed to CA | 2 – Saw cutting |
| 2014 The Northern Road | X | Is well understood to not to agree to such proposals offered by the project | Not agreeable to shutdown works | 2 – Saw cutting |
| 2033 The Northern Road | Phone ✓ | | Yes – agreed to CA | 1 – Saw cutting |
| 2039 The Northern Road | Phone ✓ | | Yes – agreed to CA | 1 – Saw cutting |
| 2051-2053 The Northern Road | Email ✓ | | Yes – agreed to CA | 1 – Truck movements |
| 2057 The Northern Road | Phone ✓ | | Yes – agreed to CA | 1 – Truck movements |
| 2063 The Northern Road | Email & phone ✓ | | Yes – agreed to CA | 1 – Truck movements |

COMMUNITY AGREEMENT SCRIPT

ROAD CLOSURE AT A SECTION OF ROAD SOUTH OF GLENMORE PARKWAY INTERSECTION

Dear valued stakeholder,

I am calling to let you know we would like to undertake road re-surfacing works for consecutive days, evenings and nights on The Northern Road between Glenmore Parkway to Littlefields Road from 20th October – 5th November 2021 in your area, weather permitting.

High noise emitting plant is likely to generate some impulsive, intermittent or tonal frequencies that are known to cause sleep disturbance for some people. The high noise activities undertaken for these works include the use of a road saw-cutting machine and vibratory roller for compaction of road base and asphalt.

The work taking place includes:

- Road saw-cutting
- Concreting works
- Import of asphalt using trucks
- Asphaltting works
- Vibratory compaction of the new asphalt
- Line marking and traffic signage installation
- Implement final traffic light configuration

We will further consult with you should additional impactful out-of-hours activities be required that are outside the scope of this community agreement. CPB will coordinate the timing of out-of-hours works between its works and the works undertaken by third parties licensed by the EPA, to achieve respite periods in locations where residents are likely to be impacted by the same concurrent construction works. In this regard, CPB will schedule these out-of-hours activities such that all potential impacts can be minimised as much as possible.

CPB will consult with you regarding any unexpected changes to the works schedule, such as from forecast rain.

We intend to undertake asphaltting on the Friday and Saturday nights 15th-16th October in the week prior to the works. We have sought your agreement to undertake these works on the 15th-16th October.

Should circumstances such as if weather impacts construction planning, or, if unforeseen critical enabling works be required, then you will be informed of any additional out-of-hours works may need to be undertaken.

We would like to offer alternative accommodation for certain residents identified as being eligible as per CPB's predictive noise modelling and in accordance with our Construction Noise and Vibration Management Plan. You will be made aware that you are eligible for this during our consultation with you. Offers of alternative accommodation will also be considered on a case-by-case basis.

Reasonable and feasible measures to mitigate noise will be considered on a case-by-case basis and include examples such as acoustic noise shielding, non-tonal reverse alarms, switching off noise emitting plant that is not in use, and directing plant away from properties.

These works have the benefit of the following:

- Finishing the project more quickly
- Reducing the duration of impact to traffic
- Improving safety for motorists by completing the work more quickly



Are you agreeable for this work to go ahead?

If you change your mind before the work begins or during the work, you realise that you would like to accept the offer of alternative accommodation or a sleep machine please call me on 1800 703 457 press 1 and 5 and we can discuss what arrangements can be made for you”

Kind regards

The Community Team - CPB The Northern Road Upgrade

22-40 Gates Road, Luddenham, NSW 2745, Australia

M 1800 703 457

E thenorthernroad@cpbcon.com.au

Attachment D – Noise Monitoring Plan & Locations Map

Monitoring dates: Monitoring would be performed at each of the locations on at least the first two nights where the OOHW will be undertaken below to confirm noise predictions. CPB would also make reasonable attempts to target works predicted to be the noisiest for sensitive receivers shown in the table below.

Time period: Evening and night time periods.

Impact classification guide

| Category – Impact Level | 1 | 2 | 3 | 4 | 5 |
|---|-----|------|-------|-------|-----|
| Exceedance of background level in dB for OOHW | 0-5 | 6-10 | 11-20 | 21-25 | >25 |

| Monitoring Point no. Refer to maps below this table | Address | Coordinates | Approx. distance from works (m) | Noise Catchment Area (NCA) | Rating Background Level (RBL) | Noise Management Level (NML) | Predicted Laeq, 15 minute noise level, dB for saw-cutting works, LVs, people talking, truck movements | Exceedance of NML, dB | Impact Classification (Refer to Impact classification guide above) |
|---|-----------------------------|--------------------|---------------------------------|----------------------------|-------------------------------|------------------------------|---|-----------------------|--|
| Point 1 | 2023-2025 The Northern Rd | -33.7954, 150.6984 | 72 | 1 | 44 | 49 | 66 | 17 | 3 |
| Point 2 | 2019 The Northern Rd | -33.7948, 150.6985 | 56 | 1 | 44 | 49 | 68 | 19 | 3 |
| Point 3 | 2032 The Northern Road | -33.7963, 150.6987 | 167 | 1 | 44 | 49 | 57 | 8 | 2 |
| Point 4 | 2051-2053 The Northern Road | -33.7976, 150.6972 | 75 | 1 | 44 | 49 | 53 | 4 | 1 |

Attachment D – Noise Monitoring Plan & Locations Map

Monitoring dates: Monitoring would be performed at each of the locations on at least the first two nights where the OOHW will be undertaken below to confirm noise predictions. CPB would also make reasonable attempts to target works predicted to be the noisiest for sensitive receivers shown in the table below.

Time period: Evening and night time periods.

