

PRELIMINARY  
NOT FOR CONSTRUCTION

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NOTES:

N

0      100      200 m

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GDA94 / MGA zone 55

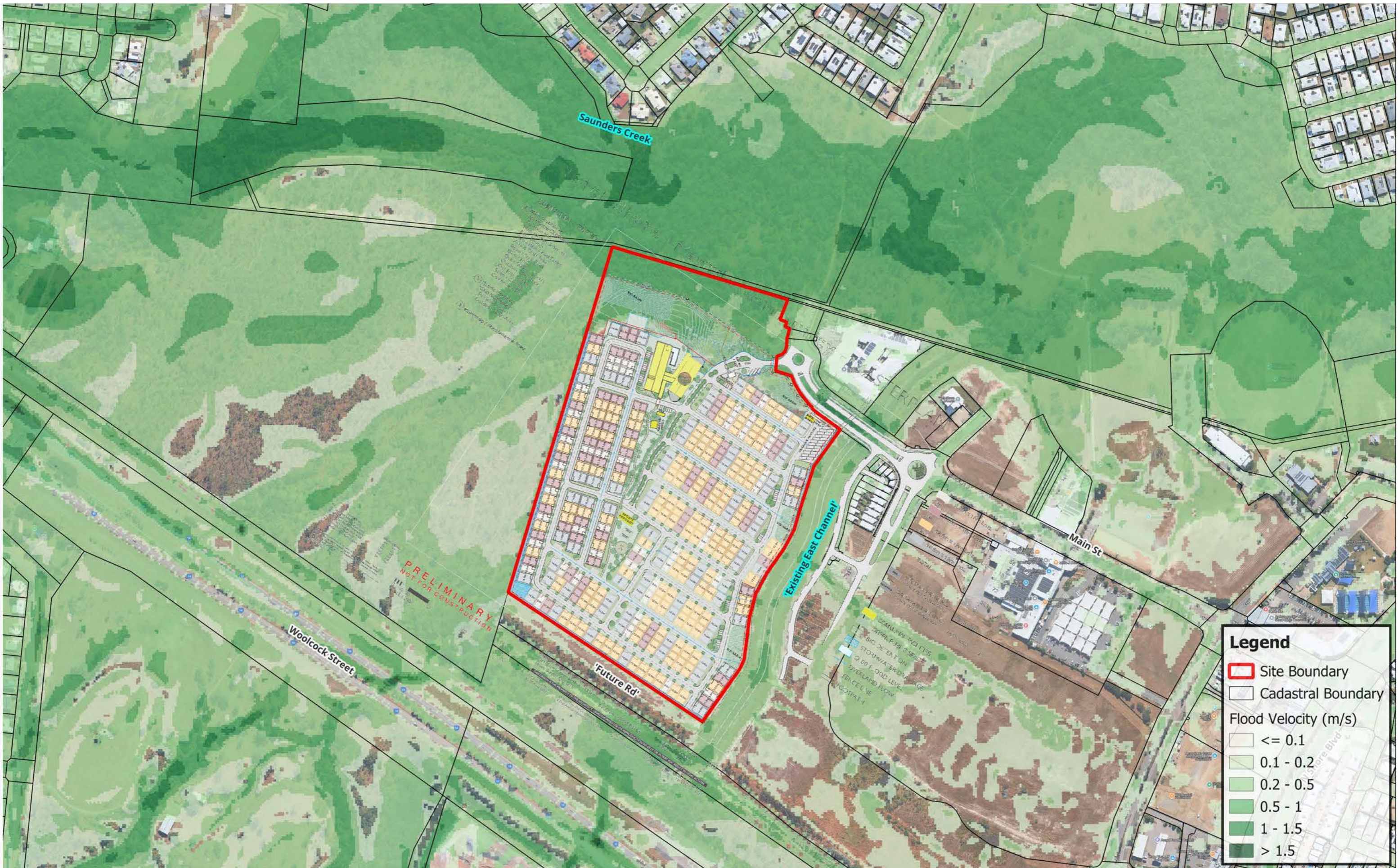
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**Appendix C.8**

Premise  
Ingenia Lifestyle Community HIA  
Developed Scenario Flood Mapping  
10% AEP Flood Velocity



**Legend**

- Site Boundary
- Cadastral Boundary

Flood Velocity (m/s)

- $\le 0.1$
- 0.1 - 0.2
- 0.2 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5

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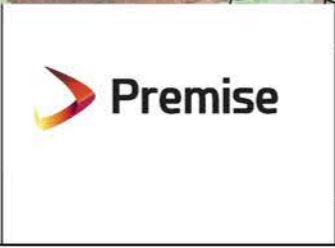
N

0      100      200 m

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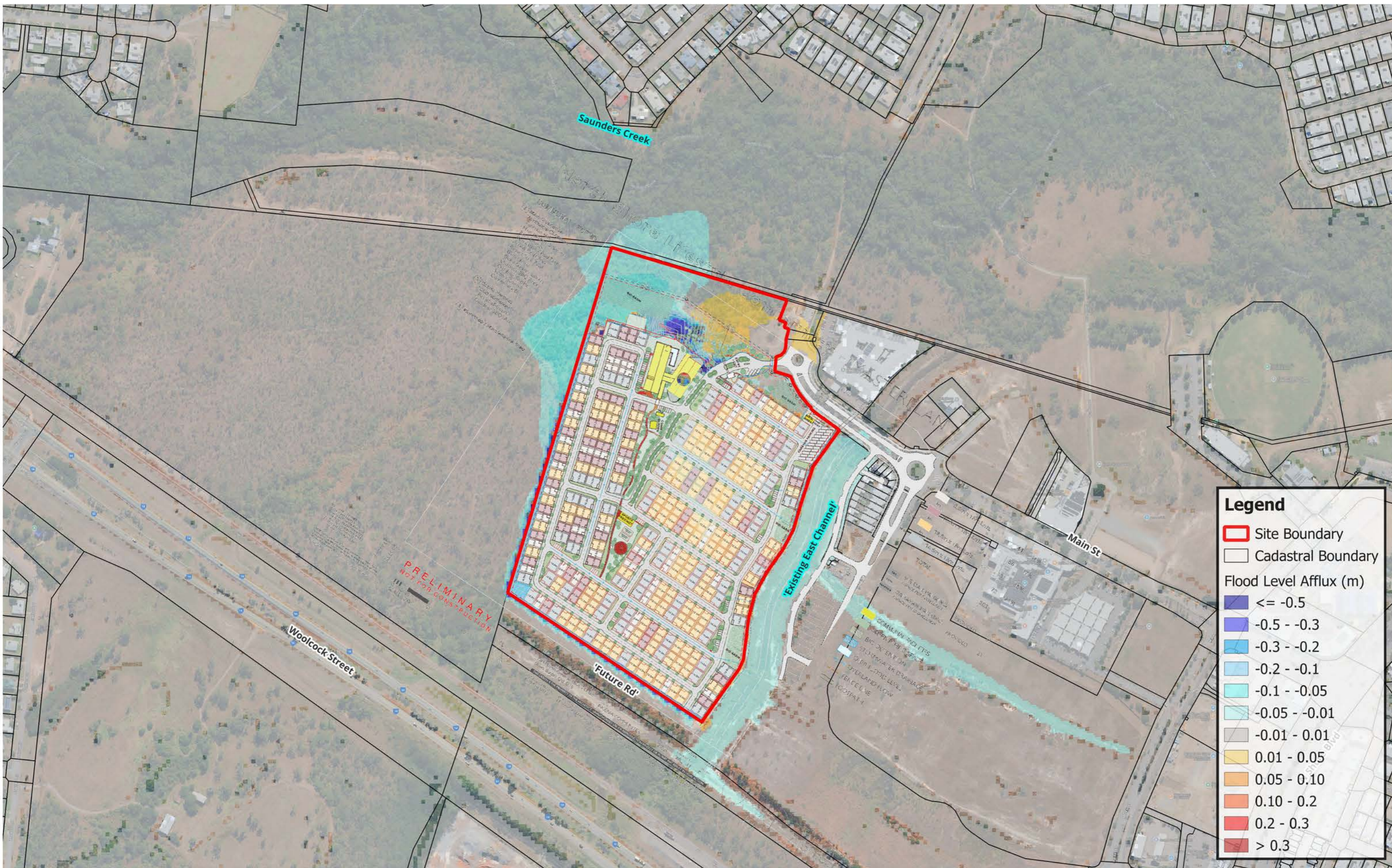


**Appendix C.9**

Premise  
Ingenia Lifestyle Community HIA  
Developed Scenario Flood Mapping  
1% AEP Flood Velocity

---

# APPENDIX D: FLOOD IMPACT MAPPING



**Legend**

- Site Boundary
- Cadastral Boundary

Flood Level Afflux (m)

- $\le -0.5$
- 0.5 - -0.3
- 0.3 - -0.2
- 0.2 - -0.1
- 0.1 - -0.05
- 0.05 - -0.01
- 0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.10
- 0.10 - 0.2
- 0.2 - 0.3
- > 0.3


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NOTES:



0 100 200 m

SCALE @ A3 - 1:4,200  
GDA94 / MGA zone 55

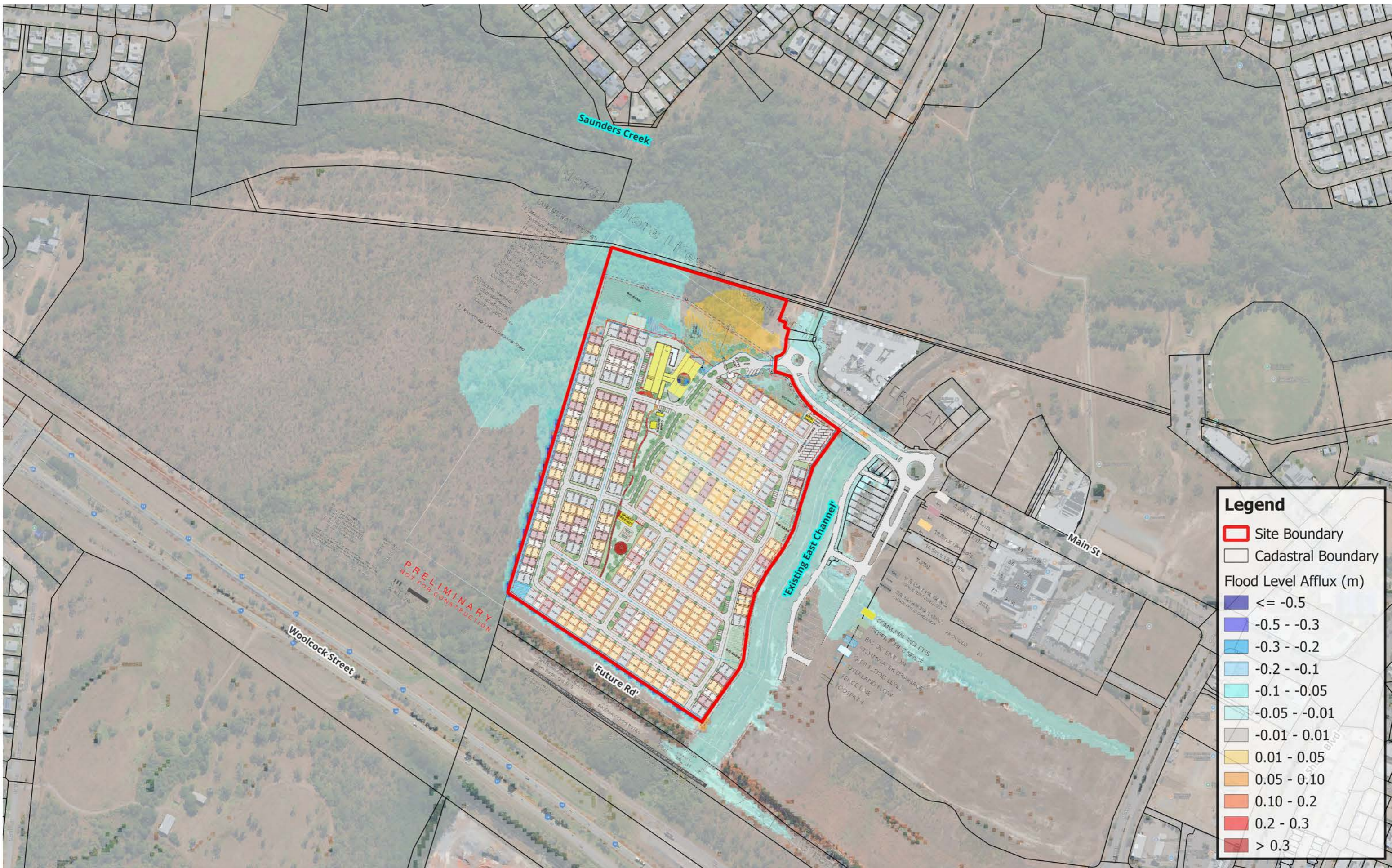
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**Appendix D.1**

Premise  
Ingénia Lifestyle Community HIA  
Flood Impact Mapping  
50% AEP Flood Level Difference



**Legend**

- Site Boundary
- Cadastral Boundary

Flood Level Afflux (m)

- $\le -0.5$
- 0.5 - -0.3
- 0.3 - -0.2
- 0.2 - -0.1
- 0.1 - -0.05
- 0.05 - -0.01
- 0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.10
- 0.10 - 0.2
- 0.2 - 0.3
- > 0.3


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NOTES:



0 100 200 m

SCALE @ A3 - 1:4,200  
GDA94 / MGA zone 55

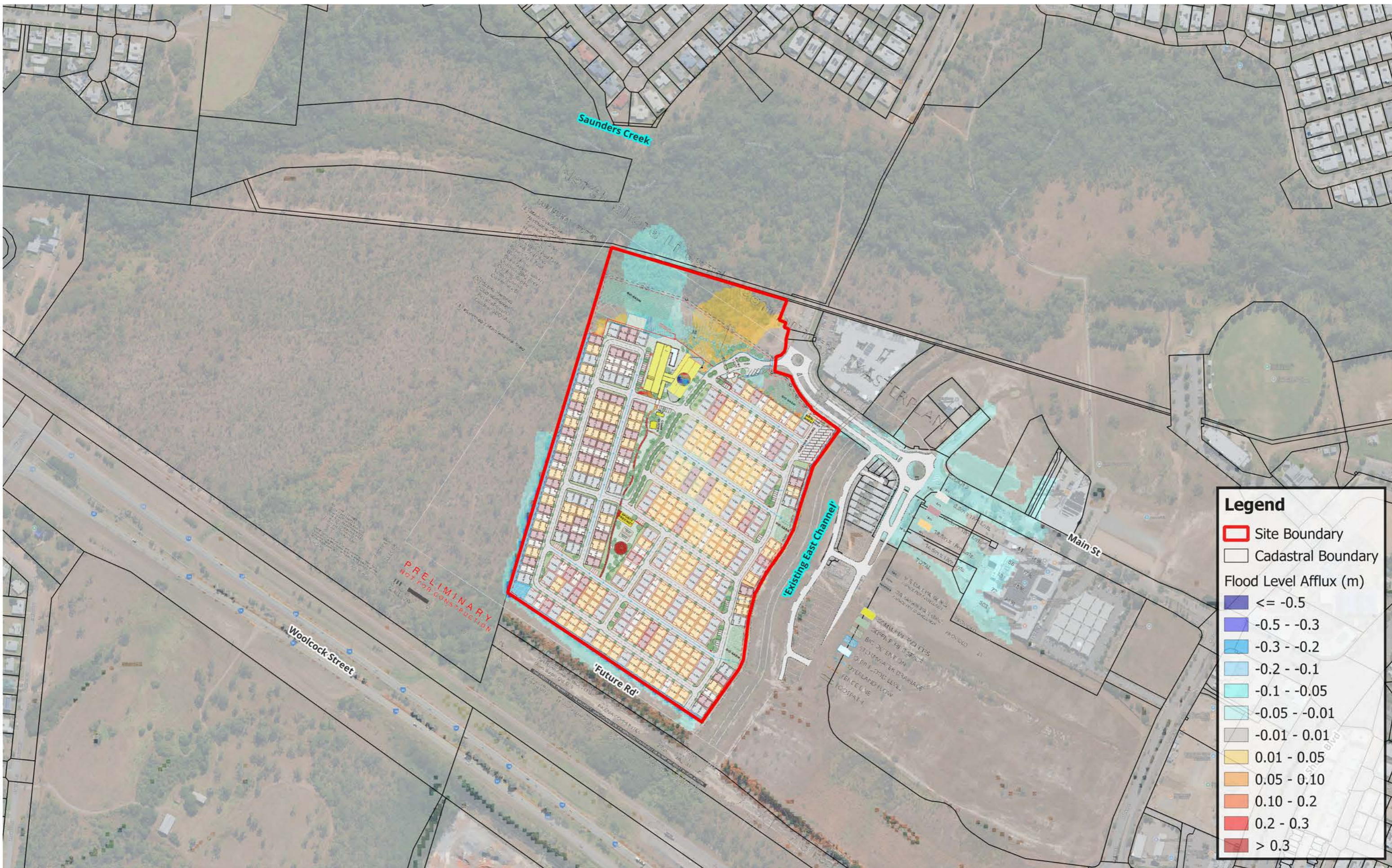
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**Appendix D.2**

Premise  
Ingénia Lifestyle Community HIA  
Flood Impact Mapping  
10% AEP Flood Level Difference



**Legend**

- Site Boundary
- Cadastral Boundary

Flood Level Afflux (m)

- <= -0.5
- 0.5 - -0.3
- 0.3 - -0.2
- 0.2 - -0.1
- 0.1 - -0.05
- 0.05 - -0.01
- 0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.10
- 0.10 - 0.2
- 0.2 - 0.3
- > 0.3


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NOTES:



0 100 200 m

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**Appendix D.3**

Premise  
Ingénia Lifestyle Community HIA  
Flood Impact Mapping  
1% AEP Flood Level Difference

# APPENDIX J

Transport Noise Intrusion Impact Assessment prepared by SLR

brazier motti





# North Shore Lifestyle Community

## Transport Noise Intrusion Assessment

### INA Operations Pty

PO Box 2454  
Chermside Centre QLD 4032

Prepared by:

### SLR Consulting Australia

Level 16, 175 Eagle Street, Brisbane QLD 4000,  
Australia

SLR Project No.: 623.030633.00001

Client Reference No.: NA

23 January 2026

Revision: 3.0

## Revision Record

| Revision | Date             | Prepared By       | Checked By      | Authorised By     |
|----------|------------------|-------------------|-----------------|-------------------|
| 3.0      | 23 January 2026  | Rodrigo Olavarria | Jennifer Walker | Rodrigo Olavarria |
| 2.0      | 17 December 2025 | Rodrigo Olavarria | Jennifer Walker | Rodrigo Olavarria |
| 1.0      | 10 December 2025 | Rodrigo Olavarria | Jennifer Walker | Rodrigo Olavarria |
|          |                  |                   |                 |                   |
|          |                  |                   |                 |                   |

## Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with INA Operations Pty (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.



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## 1.0 Introduction

SLR Consulting Australia Pty Ltd (SLR) was commissioned by INA Operations Pty (Ingenia) to prepare a transportation noise intrusion assessment for the proposed North Shore Lifestyle Community in Townsville, QLD (referred hereto as 'the Project').

This report addresses the transportation (i.e. railway and road traffic) noise intrusion onto the Project, to be located at 33 and 74 Main Street, Burdell QLD.

The purpose of this assessment is to present a set of noise prediction results and applicable Queensland Development Code Mandatory Part 4.4 (QDC MP4.4) Noise Categories for the lots, following detailed noise modelling of road traffic and railway noise intrusion.

The assessment was conducted broadly as follows:

1. Ambient noise monitoring was conducted on site to establish current road and railway intrusion on site.
2. A road and railway computational noise model was developed for the current year (2025) and was verified against the ambient noise monitoring data.
3. The verified noise model was used to predict future transportation noise levels using future traffic forecasts for the 10-year after Project completion (2046) traffic scenario.
4. The future noise predictions were used to determine QDC MP4.4 Noise Categories applicable to the individual sites within the Project.

The objective of this report is to support the development application for the Project by informing the effectiveness of the implementation of noise mitigation if required to reduce the QDC MP4.4 Noise Categories applicable to the construction of the dwellings, to provide a suitable internal noise amenity.

The following Codes are relevant to this assessment:

- Department of Transport and Main Roads (TMR) Transport Management Code of Practice Volume 1: Road traffic noise (CoP Vol 1).
- Department of Transport and Main Roads (TMR) Transport Management Code of Practice Volume 3: Operational railway noise and vibration (CoP Vol 3) (Interim Guideline).
- Queensland Development Code Mandatory Part 4.4 (QDC MP4.4).

Supporting material:

- UK Department of Transport Welsh Office Calculation of Road Traffic Noise 1988 (CoRTN)
- Ringheim, M 1984, 'Background Material for the Nordic Rail Traffic Noise Prediction Method', Kilde Report 130, KILDE, Norway (Kilde)

The noise predictions were based on the latest digital elevation model available publicly and transportation volumes available at the time of preparing this report, including traffic volume forecasts for the Bruce Highway and railway corridor 10 years after the estimated project completion year.

This assessment is presented as a preliminary assessment, as it is based on early-stage designs, including the Masterplan, and lacks the inputs to predict noise levels using design elevation models from a civil consultant. Thus, the outcomes presented in this report are subject to change as the project progresses.

A glossary of terms used in this report are detailed in **Appendix A**.



## 2.0 Noise Assessment Criteria

### 2.1 State Planning Policy Review

The location and general Project layout is shown in **Figure 1**. A Masterplan drawing is presented in **Appendix B**.

A subdivision plan has been approved by City of Townsville Council for the Project to be located on Lot 857 on 2506SP333142, which is reproduced in **Figure 2**.

According to the SDAP Supporting Guideline v1.0 (2023):

*“Development with the potential to impact an existing or future state transport corridor and/or state transport infrastructure requires referral to SARA for assessment in accordance with the Planning Regulation 2017. State transport corridor referrals for development in proximity to a state-controlled road can be summarised as development:*

- *located within 25m of a state-controlled road*
- *located on a future state-controlled road*
- *located adjacent to a road and within 100m of a state-controlled road intersection.*

*SARA will assess referred applications against the relevant SDAP state codes. As part of this assessment, SARA will circulate referred applications to TMR for technical advice.*

Similarly, according to the *QLD Guide to Development in a Transport Environment: Rail* (2015):

*“Assessment as per Sustainable Planning Regulation 2009 referral triggers is conducted generally within 25m of a railway or future railway land, or on future railway land; or on a state-controlled transport tunnel, future state-controlled transport tunnel, or within 50m of a state-controlled transport tunnel or future state-controlled transport tunnel. Applicants should consult the Sustainable Planning Regulation referral triggers to determine whether their development is triggered for state assessment.”*

A review of the Queensland Development Assessment Mapping System (DAMS) (**Figure 3**) has shown that the Project site will be located beyond 25m from a State-controlled road or railway corridor. As such, the requirements from the SDAP are understood to not apply.

A review of the Queensland State Planning Policy Mapping System, SPPIMS (**Figure 4** and **Figure 5**) reveals the following outcomes for the Project site on 2506SP333142:

- The Project site is currently located outside a Transport Road Noise corridor and is located within a QDC MP4.4 Noise Category 0.
- The Project site is currently located within a Transport Railway Noise corridor, within QDC MP 4.4 Noise Category 2 and Noise Category 3.

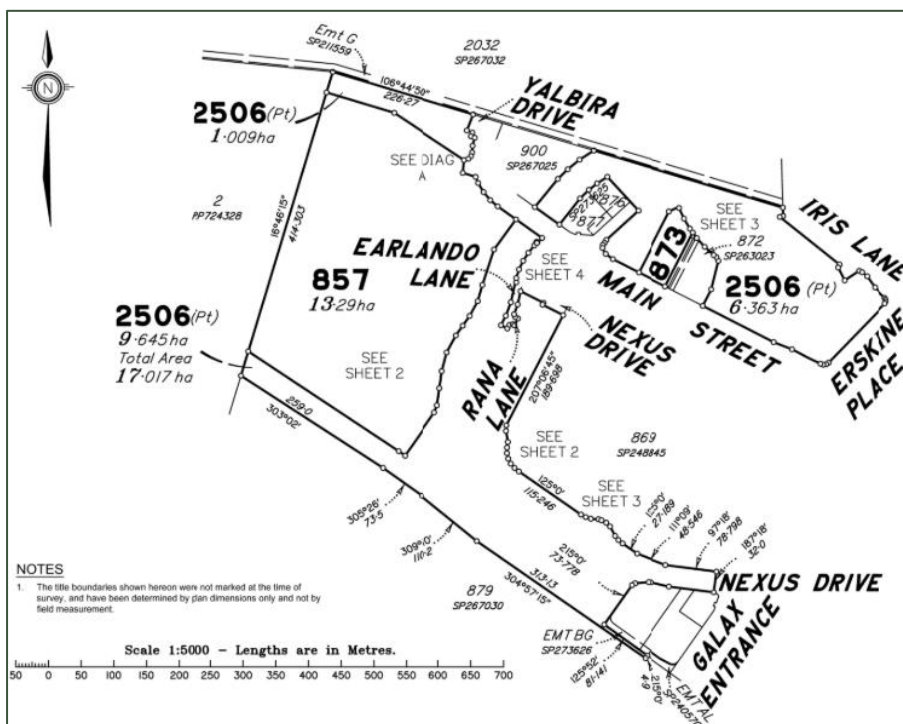
This assessment further seeks to confirm the QDC MP4.4 Noise Categories applicable to the individual sites within the Project Lot for the future (10-year after construction) road noise levels for Bruce Highway, as well as the maximum railway noise levels (maximum railway levels being independent of the year of assessment). This is performed via noise modelling validated by on site noise monitoring.



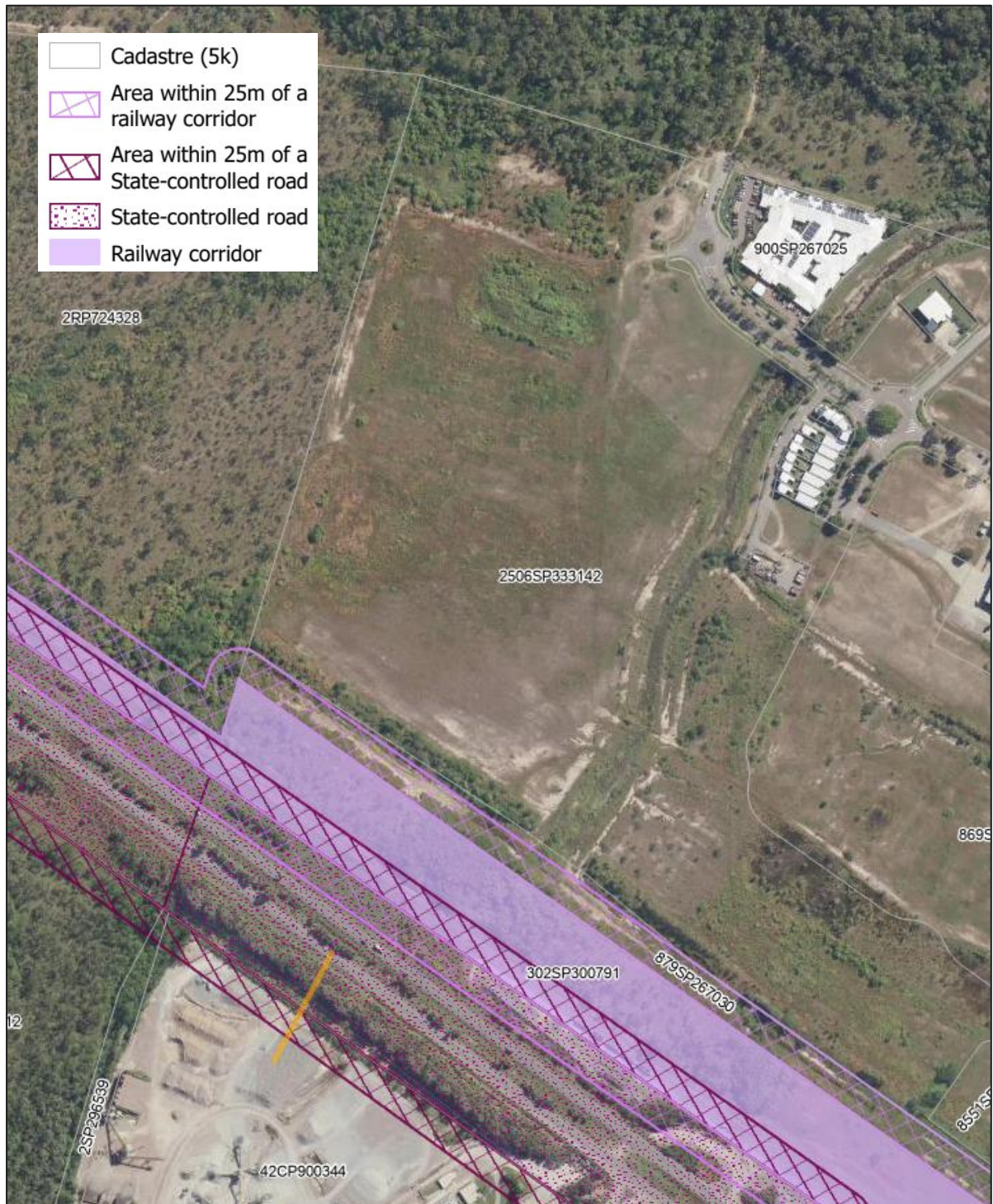
**Figure 1 Project Location (outlined)**



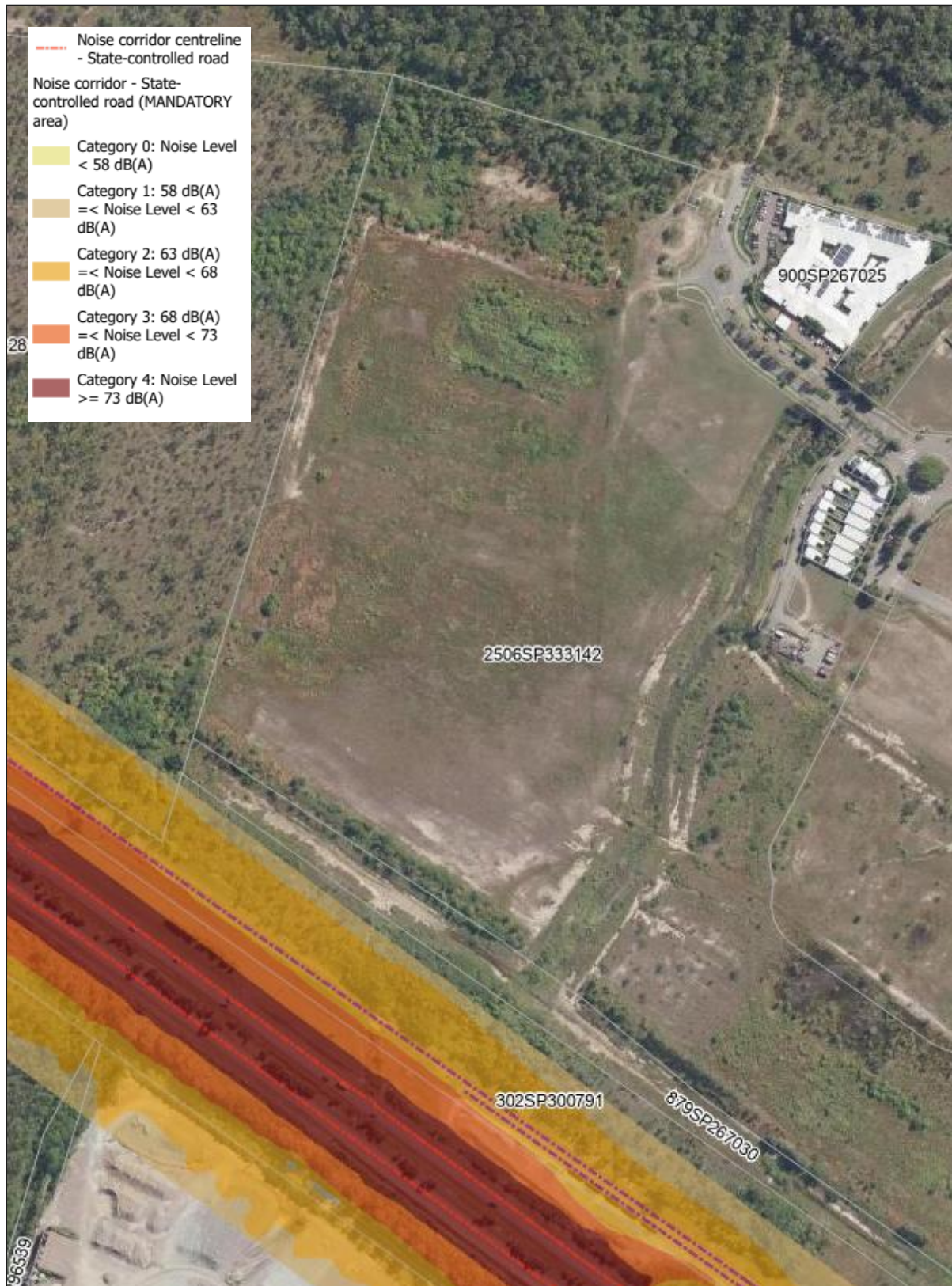
**Figure 2 Approved Subdivision**



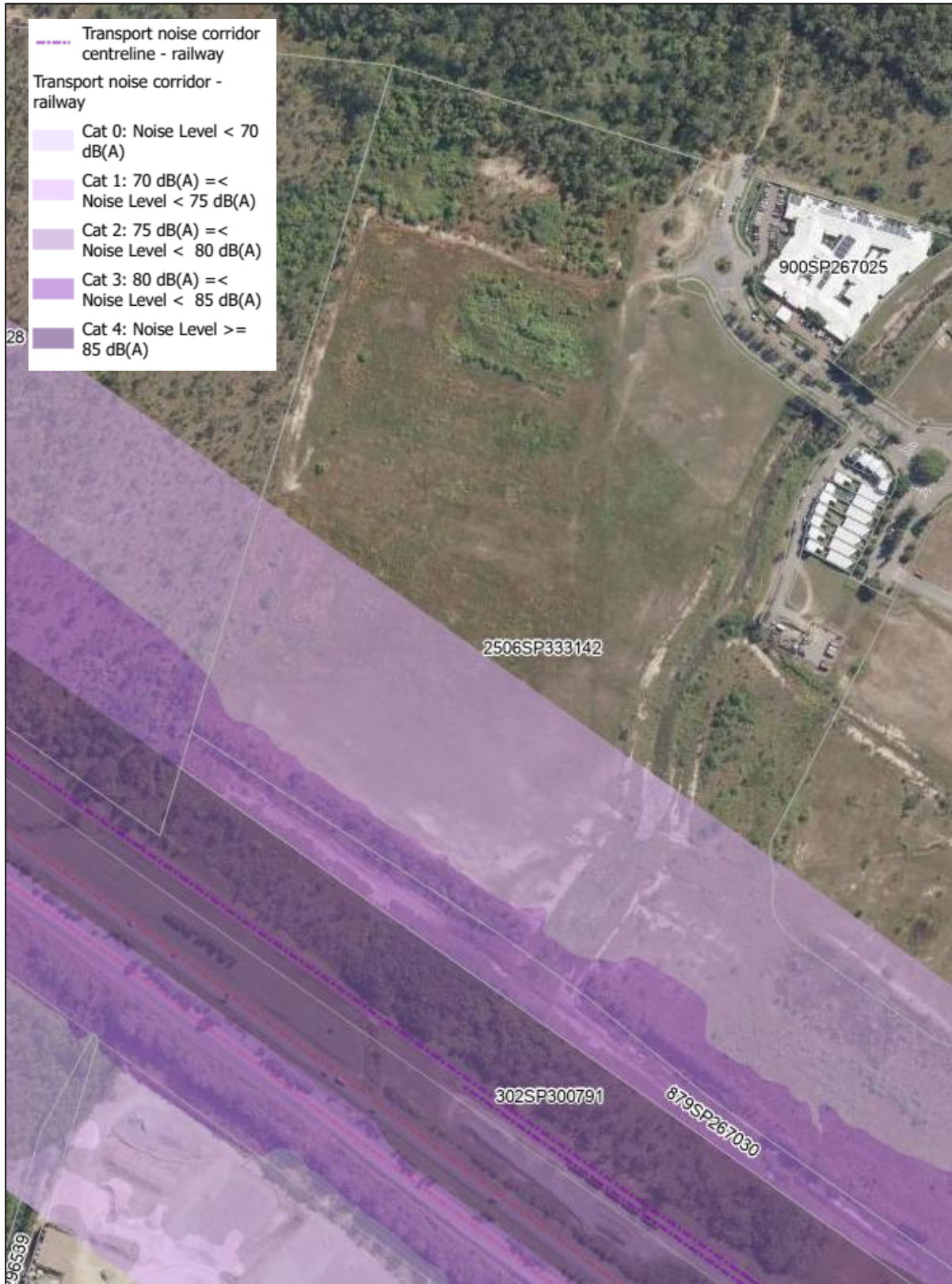
**Figure 3 DAMS Site Assessment**



**Figure 4 SPPIMS Transport Noise (Road) Corridor**



**Figure 5 SPPIMS Transport Noise (Rail) Corridor**



## 2.2 QDC MP4.4

QDC MP4.4 applies to residential buildings that are constructed within designated Transport Noise Corridors.

Under the QDC MP4.4, when within a Transport Noise Corridor, the residential building needs to achieve certain levels of noise reduction, dependent upon the highest Noise Category in which all or any part of the building sits. The noise reduction can be achieved through incorporating appropriate building materials to the building envelope to achieve the required noise reduction in habitable rooms.

Reproduced from QDC MP4.4, the Noise Categories and associated minimum noise reduction requirements and minimum Weighted Sound Reduction Index (Rw) for facade building elements are shown in **Table 1**. The Rw is a measure of the sound insulation properties of a specific building material element.

QDC MP4.4 also provides acceptable forms of construction for the external elements of the building to assist in achieving a building design and construction which meets the required noise reduction for each Noise Category. These are reproduced in **Appendix C**, noting that other forms of construction are acceptable where they achieve the required Rw rating.

**Table 1 QDC MP4.4 Noise Categories and Minimum Noise Reduction for Road Transport Noise**

| Noise Category | Transport Noise Level, Facade Corrected  | Minimum Transport Noise Reduction for Habitable Rooms | Building External Envelope Component | Minimum Rw Required for Each Component |   |
|----------------|--|---|--------------------------------------|--|---|
| 4              | Road traffic noise $\geq 73$ dBA LA10(18hour)<br>Rail traffic noise $\geq 85$ dBA SEM <sup>1</sup> | 40 dBA  | Glazing                              | 43                                     |   |
|                |  |   | External Walls                       | 52                                     |   |
|                |  |   | Roof                                 | 45                                     |   |
|                |  |   | Floors                               | 51                                     |   |
|                |  |   | Entry doors                          | 35                                     |   |
| 3              | Road traffic noise 68 – 72 dBA LA10(18hour)<br>Rail traffic noise 80 – 84 dBA SEM                  | 35 dBA  | Glazing                              | 38                                     | where total area of glazing for a habitable room is greater than 1.8 m <sup>2</sup>               |
|                |  |   |                                      | 35                                     | where total area of glazing for a habitable room is less than or equal to than 1.8 m <sup>2</sup> |
|                |  |   | External walls                       | 47                                     |   |
|                |  |   | Roof                                 | 41                                     |   |
|                |  |   | Floors                               | 45                                     |   |
|                |  |   | Entry doors                          | 33                                     |   |
| 2              | Road traffic noise 63 – 67 dBA LA10(18hour)  | 30 dBA  | Glazing                              | 35                                     | where total area of glazing for a habitable room is greater than 1.8 m <sup>2</sup>               |

<sup>1</sup> SEM: Single Event Maximum, defined in **Section 4.2**.



| Noise Category | Transport Noise Level, Facade Corrected  | Minimum Transport Noise Reduction for Habitable Rooms                                      | Building External Envelope Component | Minimum Rw Required for Each Component |   |
|----------------|--|--|--------------------------------------|--|---|
|                | Rail traffic noise<br>75 – 79 dBA SEM  |  |                                      | 32                                     | where total area of glazing for a habitable room is less than or equal to than 1.8 m <sup>2</sup> |
|                |  |  | External walls                       | 41                                     |   |
|                |  |  | Roof                                 | 38                                     |   |
|                |  |  | Floors                               | 45                                     |   |
|                |  |  | Entry doors                          | 33                                     |   |
| 1              | Road traffic noise<br>58 – 62 dBA<br>LA10(18hour)<br>Rail traffic noise<br>70 – 74 dBA SEM | 25 dBA   | Glazing                              | 27                                     | where total area of glazing for a habitable room is greater than 1.8 m <sup>2</sup>               |
|                |  |  |                                      | 24                                     | where total area of glazing for a habitable room is less than or equal to than 1.8 m <sup>2</sup> |
|                |  |  | External walls                       | 35                                     |   |
|                |  |  | Roof                                 | 35                                     |   |
|                |  |  | Entry doors                          | 28                                     |   |
| 0              | Road traffic noise<br>≤57 dBA LA10(18hour)<br>Rail traffic noise<br>≤69 dBA SEM            | No additional acoustic treatment required – standard building assessment provisions apply. |                                      |  |   |

According to the code, “the predicted levels of transport noise reduction will be achieved only when doors, windows and other openings in the relevant parts of the building’s external envelope are closed”. In this instance, advice from a mechanical consultant may be required to confirm how the ventilation requirements will meet the ventilation requirements under the BCA and AS 1668.2:2024<sup>2</sup>.

<sup>2</sup> AS 1668.2:2024 - The use of ventilation and air conditioning in buildings, Part 2: Mechanical ventilation in buildings.

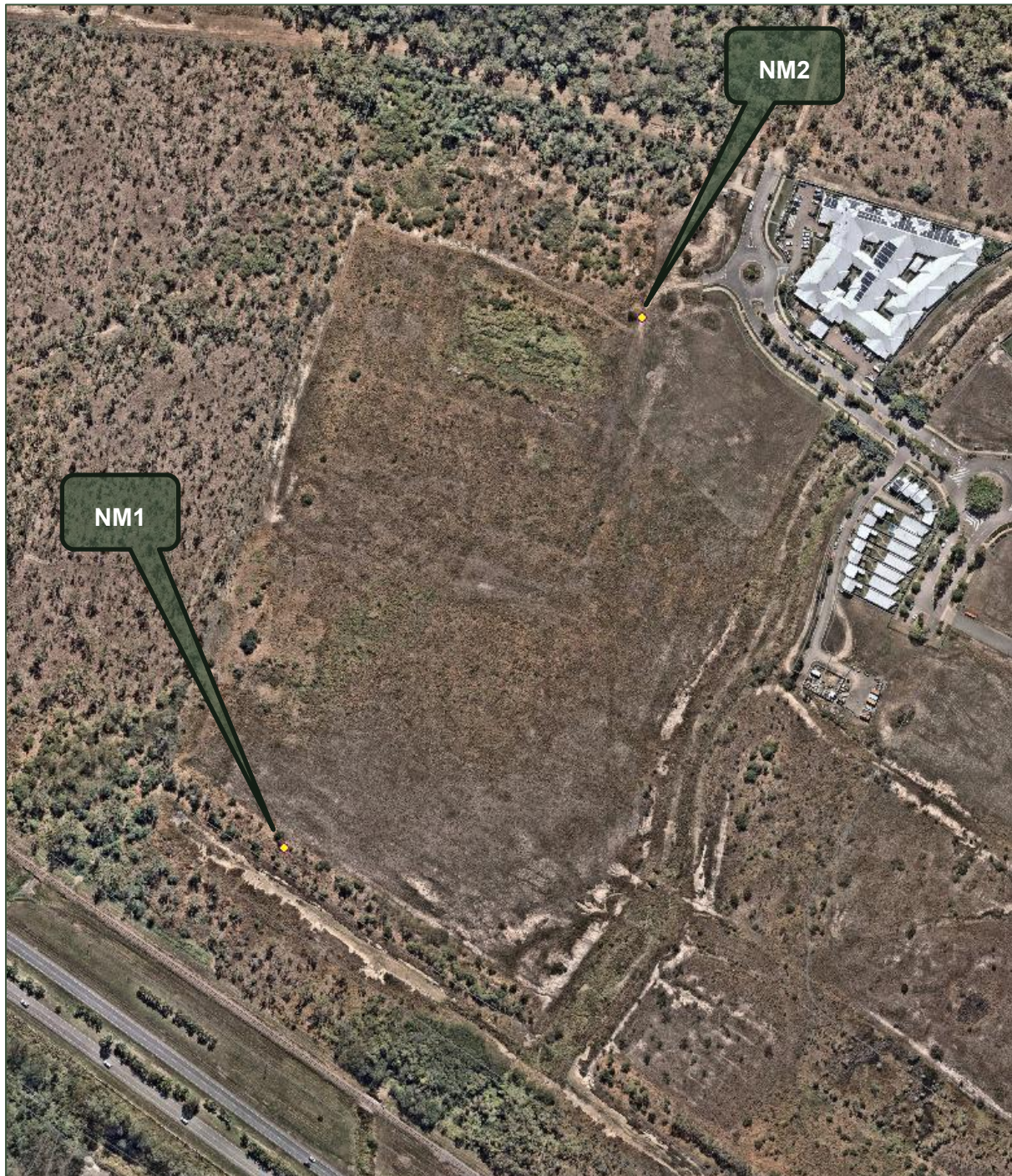


### 3.0 Ambient Noise Monitoring

Ambient noise monitoring was conducted with the purpose of quantifying the existing environments on site to verify a computer model developed to predict existing noise levels and future noise levels from the Bruce Highway and the railway.

Monitoring was conducted between 16th September and 24th September 2025 at the locations shown **Figure 6**.

**Figure 6 Noise Monitoring Locations**



The instrumentation used is detailed in **Table 2**. At the time of measurement, all the instrumentation used held a current calibration certificate issued by a National Association of Testing Authorities (NATA) accredited laboratory.

**Table 2 Noise Monitoring Equipment**

| Equipment           | Manufacturer & Type | Serial Number |
|---------------------|---------------------|---------------|
| Noise Logger NM1    | SVAN 977            | 98069         |
| Noise Logger NM2    | ARL Ngara           | 8781CD        |
| Acoustic calibrator | Svan SV30A          | 24513         |

Noise measurements were conducted in accordance with CoP Vol 1 with the instruments setup as follows:

- A-weighting frequency response.
- “Fast” time response.
- 1-minute and 1-hour intervals.
- Microphone height 1.8m above the ground, aimed vertically upwards in the free-field.

The instruments were programmed to record a range of statistical noise levels, including the LA10 noise descriptor, and LAmax noise descriptors, amongst others.

The loggers were checked for calibration before and after the monitoring, with no drift in calibration exceeding 1.0 dBA. This is within the 1 dB tolerance allowed for in AS 2702; therefore, the measurements are considered valid.

The results obtained from NM1 (closest to the Bruce Highway and railway) were processed to derive the following noise descriptors suitable for road and railway assessments:

- The LA10,18hr was derived from the data captured on weekdays between 17<sup>th</sup> and 19<sup>th</sup> September (inclusive), before commencement of the QLD school holiday period.
- Single Exposure Maximum (SEM), derived from the 15 loudest events during the full monitoring period, were applied as opposed to the arithmetic average of all the events, due to the low volume of railway movements within a 24 hour period. This is conservative.

The results of the noise monitoring are summarised in **Table 3**. Notably, the LA10,18hr was derived from data measured outside school holidays, and was used for road traffic verification purposes.

Additionally, the audio recordings for NM1 were analysed and correlated with railway data from a Vizirail report (Nightjar) provided by Queensland Rail. The Single Event Maximum (SEM) noise level derived from this analysis for NM1 is 77 dBA was used for the railway model verification.

Full monitoring results and plots for NM1 and NM2 are provided in **Appendix D**.

It is noteworthy that the noise monitoring was unaffected by adverse weather, as observed in the summary from the closest Bureau of Meteorology weather station (**Appendix D**).

**Table 3 Unattended Noise Logging Results (rounded)**

| Location        | Latitude    | Longitude   | LA10,18hr | SEM |
|-----------------|-------------|-------------|-----------|-----|
| Noise Monitor 1 | -19.254295° | 146.694292° | 55        | 77  |
| Noise Monitor 2 | -19.251469° | 146.696785° | 48        | -   |



## 4.0 Noise Modelling

A three-dimensional noise model of the Project and surrounding areas was developed within SoundPLAN v8.2 acoustic software to represent the future noise intrusion, including the following inputs:

- Calculation algorithms - SoundPLAN implementation of the following standards and methodologies:
  - UK Department of Transport Welsh Office Calculation of Road Traffic Noise 1988 (CoRTN). CoRTN is widely accepted in Australia for the calculation of road traffic noise and its use is recommended in the CoP Vol 1.
  - Ringheim, M 1984, 'Background Material for the Nordic Rail Traffic Noise Prediction Method', Kilde Report 130, KILDE, Norway (Kilde). KILDE is widely accepted in Australia for the calculation of road traffic noise and its use is recommended in the CoP Vol 3.
- Masterplan layout - 25026 - NORTHSHORE TOWNSVILLE - DA ISSUE (C) - 2026.01.21. DWG/PDF received from OGE Group Architects.
- Terrain elevation - Digital Elevation Model (DEM) built from:
  - 2018 3D LiDAR file representing existing contours outside the study area, as the latest available from a QLD Government website at the time of preparing this report.
  - A detailed earthworks model by the civil consultant for the Project site was not available at this stage. Therefore, the Lidar data above was used to generate the DEM for the Project site.
- Ground surface corrections – areas of soft (absorptive) and hard (reflective) ground.
- Sensitive receptors – locations where the transportation noise levels are to be assessed.

### 4.1 Road Traffic Noise Modelling

#### 4.1.1 Road Traffic Noise Model Methodology

Road traffic noise levels from Bruce Highway (North Townsville Road) were modelled following general guidance from the TMR CoP Vol 1.

Road traffic volumes for the current year (**Table 4**) have been obtained from the QLD State Planning Policy Interactive Mapping System and have been used in the verification of the noise model.

Road traffic volumes for the future scenario (**Table 5**) have been provided by Premise Consultants. This data was sourced from the Townsville City Council Townsville Aimsun Integrated Model (TAIMS).

The 18-hour traffic volume has been estimated by SLR from the Annual Average Daily Traffic (AADT) provided, assuming 94% of traffic occurs between 6am and 12am (midnight). The future North and South bound traffic volumes were each assumed to be 50% of the total volume.

The estimated project completion is understood to be between 2033-2035. The 10-year after project completion is thus 2043-2045. Thus, the 2046 traffic forecast was used in this assessment and is expected to result in slightly conservative results, compared to a 2045 design year noise prediction.



All road surfaces were observed from the SPPIMS website as Dense Graded Asphalt (DGA). On this basis, a road surface correction factor of 0 dBA was applied for all road traffic noise predictions, in accordance with CoP Vol 1.

A -0.7 dBA (free field) or -1.7 dBA (1m from facade) road traffic calibration factor was applied in accordance with the CoP Vol 1, along with a +2.5 dB facade correction factor (where applicable) in accordance with the CoRTN.

The QDC MP4.4 Noise Categories were determined from the noise contour maps calculated at 1.8 m and 4.6 m above ground level as per the DEM, for the ground floor and first floor of two storey dwellings assumed for the development, respectively. Conservatively, the highest Noise Category predicted onto the lot at ground floor and first floor has been reported.

Road traffic noise contours were generated from noise predictions using a grid spacing of 1.0 m.

**Table 4 Bruce Highway 2025 Road Traffic Volumes (Data source: SPPIMS)**

| Road                    | Road Surface | AADT (Total) | 18hr Traffic Volume | % Heavy Vehicles | Posted Speed, km/h |
|-------------------------|--------------|--------------|---------------------|------------------|--------------------|
| Bruce Highway Westbound | PMB DGA      | 12,308       | 11,570              | 7.61             | 80                 |
| Bruce Highway Eastbound | PMB DGA      | 13,303       | 12,505              | 8.11             | 80                 |

**Table 5 Future Bruce Highway Road Traffic Volumes (Data source: Premise)**

| Road               | Road Surface | AADT (Total) | 18hr Traffic Volume | % Heavy Vehicles | Posted Speed, km/h |
|--------------------|--------------|--------------|---------------------|------------------|--------------------|
| Bruce Highway 2041 | PMB DGA      | 50,324       | 47,305              | 8.52             | 80                 |
| Bruce Highway 2046 | PMB DGA      | 60,704       | 57,062              | 8.06             | 80                 |

#### 4.1.2 Road Traffic Noise Model Verification

According to the CoP Vol 1, a road traffic noise model is deemed to be verified if the average difference between the measured and calculated values of the noise descriptors is no more than  $\pm 2.0$  dBA. Further, this document states that:

*“If the average difference between existing measured and calculated noise descriptors values is positive (i.e. average measured values exceed the calculated values), then the calculated values shall be adjusted upwards by this average difference before determining the predicted values.”*

*“If the average difference between existing measured and calculated noise descriptors values is negative (i.e. average calculated values exceed the measured values), then no adjustment shall be made to the calculated values before determining the predicted values.”*

Results of the road traffic model verification at the noise monitor are presented in **Table 6**. The average difference (calculated minus measured value) is -0.2 dBA. Since the average difference is a negative value (i.e. the noise model calculated level is higher than the measured noise level), a +0.2 dB correction is required (in accordance with CoP Vol 1), noting that based on the verification results, the road noise model is conservative at the first row receptors fronting the Bruce Highway.



**Table 6 Road Traffic Noise Model Verification**

| Road               | L <sub>A10,18hr</sub> dBA |            | Verification (Measured - Calculated),<br>dBA |
|--------------------|---------------------------|------------|--|
|                    | Measured                  | Calculated |  |
| Noise monitor 1    | 54.8                      | 57.1       | -2.3   |
| Noise monitor 2    | 46.6                      | 48.5       | 1.9  |
| Average difference |                           |            | <b>-0.2</b>                                  |

## 4.2 Railway Noise Modelling

The Kilde railway noise prediction methodology was applied to calculate railway noise levels. The methodology was used to predict the Single Event Maximum (SEM) rail noise levels<sup>3</sup> for daily railway traffic and referenced noise emissions specific for Queensland's rolling stock. The noise modelling also referenced guidelines on the prediction of railway noise from TMR.

The SEM is defined as the arithmetic average of maximum levels from the highest 15 single events over a given 24-hour period.

The QDC MP4.4 Noise Categories were determined from the noise contour maps calculated at 1.8 m and 4.6 m, representing the ground floor and first floor of two storey dwellings assumed for the development, respectively. Conservatively, the highest Noise Category predicted onto the lot at ground floor and first floor has been reported.

Rail noise contours were generated from noise predictions calculated using a grid spacing of 1.0 m.

The noise predictions by Kilde are free field predictions. Therefore, the calculated railway noise levels were adjusted by +2.5 dBA to account for the reflected sound at 1 m from a building facade, in accordance with the CoP Vol 3.

### 4.2.1 Railway Model Verification

Railway noise levels measured in 2025 (detailed in **Appendix D** and **Section 3.0**) were referenced to calibrate the railway noise prediction model. The daily railway movements used to validate the model are detailed in **Table 7**.

**Table 7 Daily Railway Movements**

| Train Type  | Noise Emission                  | Modelled Speed | Train per 24-hour |
|---|---------------------------------|----------------|-------------------|
| Locomotive (notch 8)  | 87 dBA L <sub>Amax</sub> at 25m | 80 km/h        | 1 <sup>1</sup>    |
| Note 1: The predicted L <sub>Amax</sub> noise level is independent of the daily train volume, therefore the model has been simplified as one train per day. |                                 |                |                   |

The Kilde algorithm L<sub>Aeq(24hour)</sub> parameter was excluded from the verification (and subsequent modelling) because the existing and future L<sub>Aeq(24hour)</sub> noise levels are not assessable against any criteria applicable to this project.

Only the rollingstock type with the highest reference L<sub>Amax</sub> noise level has been modelled, as other train types will generate lower L<sub>Amax</sub> noise levels.

<sup>3</sup> Kilde also predicts the L<sub>Aeq(24hour)</sub>. However, only the SEM is relevant to this noise assessment.



The noise model verification results are detailed in **Table 8**, which shows the predicted rail noise levels are within  $\pm 2$  dBA of the measured rail noise levels; therefore, the model is considered validated in accordance with CoP Vol 3.

**Table 8 Verification of Railway Noise Model at NM1**

| Measured SEM Rail Noise Levels, dBA | Calculated SEM Rail Noise Level, dBA | Verification (Measured – Calculated), dBA |
|-------------------------------------|--------------------------------------|---|
| 76.9                                | 76.9                                 | 0.0                                       |

Railway noise levels were measured in the free-field at 1.5 m above ground and 100 m from a straight section of track with no signals, cross overs or other acoustically-significant features.

#### 4.2.2 Future Railway Operations

The QDC MP4.4 assessment for railway noise is based on the prediction of the SEM noise descriptor, which is derived from the highest 15  $L_{Amax}$  noise levels. Whilst the number of trains may change in the future, the  $L_{Amax}$  noise level generated by these will not change, so long as the fleet (type) of trains remains unchanged. This assumption forms the basis of the railway assessment.



## 5.0 Noise Assessment Results

The QDC MP4.4 Categories applicable to all the residential sites of North Shore are presented in **Appendix E (Table E-1)**. The results present the lot number, stage, modelled ground elevation at the (approximate) centre of the lot and the QDC MP4.4 Noise Category for Ground Floor and First Floor noise levels (read from the noise maps as the highest Noise Category within the lot), without noise barriers.

**The QDC MP4.4 noise category to be applied to the design of the dwelling inside the lots is the highest of the road and railway (last column in Table E-1).**

Noise contours are provided in **Figure 7** and **Figure 8** to present the predicted future (2046) LA<sub>10,18hour</sub> road traffic noise levels and applicable QDC MP4.4 Noise Categories without noise barriers.

Noise contours are provided in **Figure 9** and **Figure 10** to present the predicted railway SEM noise levels and applicable QDC MP4.4 Noise Categories without noise barriers.

Note the Lot labelling convention from Lot 1 to Lot 303 has been adopted in the absence of Lot numbers in the drawings and it is applicable to this report only.

The following is observed from the noise maps:

- **Road Traffic Noise**
  - QDC MP4.4 Noise Categories on Ground Floor range between Noise Category 0 and Noise Category 1.
  - QDC MP4.4 Noise Categories on First Floor range between Noise Category 0 and Noise Category 2.
- **Railway Noise**
  - QDC MP4.4 Noise Categories on Ground Floor range between Noise Category 0 and Noise Category 2.
  - QDC MP4.4 Noise Categories on First Floor range between Noise Category 0 and Noise Category 2.

The applicable QDC MP4.4 Noise Categories are predicted to be dominated by railway noise.



**Figure 7 - Northshore LLC - 2046 Road Traffic Noise Levels - Facade Corrected  $L_{A10,18hr}$   
Ground Floor Noise Contour Map at 1.8m Above the Ground Without Noise Barriers**



| $L_{A10,18hr}$                                       | QDC MP4.4  |
|--|------------|
| <span style="color: green;">■</span> $\leq 57$       | Category 0 |
| <span style="color: yellow;">■</span> $57 < \leq 62$ | Category 1 |
| <span style="color: orange;">■</span> $62 < \leq 67$ | Category 2 |
| <span style="color: red;">■</span> $67 < \leq 72$    | Category 3 |
| <span style="color: darkred;">■</span> $72 <$        | Category 4 |

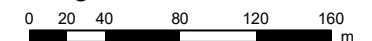
**Signs and symbols**

- Roads
- Existing Buildings



Date 23/01/2026

Length Scale 1:4000



**Figure 8 - Northshore LLC - 2046 Road Traffic Noise Levels - Facade Corrected  $L_{A10,18hr}$  First Floor Noise Contour Map at 4.6m Above the Ground Without Noise Barriers**



| $L_{A10,18hr}$                                   | QDC MP4.4  |
|--|------------|
| <span style="color: green;">■</span> <= 57       | Category 0 |
| <span style="color: yellow;">■</span> 57 < <= 62 | Category 1 |
| <span style="color: orange;">■</span> 62 < <= 67 | Category 2 |
| <span style="color: red;">■</span> 67 < <= 72    | Category 3 |
| <span style="color: darkred;">■</span> 72 <      | Category 4 |

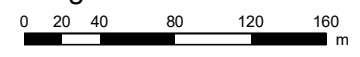
**Signs and symbols**

- Roads
- Existing Buildings



Date 23/01/2026



Length Scale 1:4000



**Figure 9 - Northshore LLC - Railway Noise Levels - Ground Floor Facade Corrected SEM Noise Contour Map at 1.8m Above the Ground Without Noise Barriers**



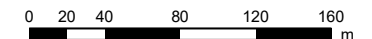
| SEM   | QDC MP4.4        |
|-------|------------------|
| <= 69 | Category 0       |
| 69 <  | <= 74 Category 1 |
| 74 <  | <= 79 Category 2 |
| 79 <  | <= 84 Category 3 |
| 84 <  | Category 4       |

- Signs and symbols**
-  Railway
  -  Existing Buildings



Date 23/01/2026



Length Scale 1:4000



**Figure 10 - Northshore LLC - Railway Noise Levels - First Floor Facade Corrected SEM Noise Contour Map at 4.6m Above the Ground Without Noise Barriers**



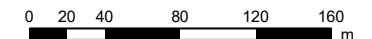
| SEM   | QDC MP4.4        |
|-------|------------------|
| <= 69 | Category 0       |
| 69 <  | <= 74 Category 1 |
| 74 <  | <= 79 Category 2 |
| 79 <  | <= 84 Category 3 |
| 84 <  | Category 4       |

- Signs and symbols**
-  Railway
  -  Existing Buildings



Date 23/01/2026

Length Scale 1:4000



## 6.0 Recommendations

### 6.1 Noise Barriers

The highest QDC MP4.4 Noise Category predicted within the development is Noise Category 2 on the lower and upper floor levels. The noise levels for this Noise Category are manageable by the implementation of facade configurations of reasonable acoustic performance. Thus, the implementation of noise barriers is not considered required.

However, the noise model incorporates an existing earth mound of approximately 270m in length, shown in **Figure 11**. The modelled ground elevation is approximately 10m at the top of the mound. At the first row of receptors behind it, the modelled ground elevation is approximately between 7.6m and 8.6m. Thus, the earth mound provides acoustic screening to reduce the transportation noise levels, particularly at ground level receptors.

For the QDC MP4.4 Noise Categories presented in this report to be valid, the earth mound must be retained. If removed, a noise barrier up to approximately 2.4m in height will be required in its place, the length and height of which would need to be confirmed in an updated assessment.

**Figure 11 Existing Earth Mound (as captured in the noise model)**



## 6.2 QDC MP4.4 Noise Category requirements

The QDC MP4.4 Categories applicable to all the residential sites of North Shore are presented in **Appendix E (Table E-1)**.

**The highest Noise Category for road and railway (last column in Table E-1) applies when determining the dwelling design requirements.**

The Rw rating applicable to the dwelling facade elements for each of QDC MP4.4 Noise Category are presented in **Table 1**. Acceptable forms of construction are reproduced from Schedule 2 of QDC MP4.4 in **Appendix C**, noting that other forms of construction are acceptable where they meet the required Rw rating.

According to the code, *“the predicted levels of transport noise reduction will be achieved only when doors, windows and other openings in the relevant parts of the building’s external envelope are closed”*. In this instance, advice from a mechanical consultant may be required to confirm how the ventilation requirements will meet the ventilation requirements under the BCA and AS 1668.2:2024<sup>4</sup>.

The noise attenuation provided by the dwelling facade will be largely controlled by the window elements; therefore, it is recommended that facade glazing systems (window + frame + seals) required to achieve a minimum Rw performance are supplied with an acoustic test report conducted in Australia by a qualified consultant who is a member of the Australian Acoustical Society (AAS), or an acoustic consultant who works for a member firm of the Association of Australasian Acoustical Consultants (AAAC). The acoustic test report should address the requirements in the following standards:

- AS 1191-2002 *Acoustics - Method for laboratory measurement of airborne sound transmission insulation of building elements*
- ISO 717-1:2013 *Acoustics - Rating of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation*

A lower Noise Category should be acceptable at specific facades of the future dwellings depending on the layout of these within the lots, subject to demonstration of the road and railway noise levels onto specific habitable spaces within a dwelling via a lot specific noise assessment based on architectural drawings presented by the proponent.

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<sup>4</sup> AS 1668.2:2024 - The use of ventilation and air conditioning in buildings, Part 2: Mechanical ventilation in buildings.



## 7.0 Conclusion

SLR Consulting Pty Ltd (SLR) have completed a preliminary road and railway traffic noise intrusion assessment of the proposed North Shore Lifestyle Community in Townsville, QLD.

The assessment was conducted following guidance from the Queensland Department of Transport and Main Roads (DTMR) – Transport Noise Management: Code of Practice Volume 1 - Road Traffic Noise, dated November 2013 (CoP Vol 1) and the Code of Practice Volume 3 - Operational railway noise and vibration (CoP Vol 3) (Interim Guideline).

A computational noise model was used to predict future road traffic noise levels from the Bruce Highway, as well as maximum noise levels from the railway adjoining the Project site.

Noise monitoring previously conducted in September 2025 was used to verify the road and railway noise model.

The following QDC MP4.4 Noise Categories were identified from the noise predictions:

- **Road Traffic Noise**
  - QDC MP4.4 Noise Categories on Ground Floor range between Noise Category 0 and Noise Category 1.
  - QDC MP4.4 Noise Categories on First Floor range between Noise Category 0 and Noise Category 2.
- **Railway Noise**
  - QDC MP4.4 Noise Categories on Ground Floor range between Noise Category 0 and Noise Category 2.
  - QDC MP4.4 Noise Categories on First Floor range between Noise Category 0 and Noise Category 2.

The QDC MP4.4 noise category to be applied to the design of the dwelling inside the lots is the highest of the road and railway (last column in **Table E-1**). The QDC MP4.4 acceptable forms of construction for the external elements of the building to assist in achieving a building design and construction which meets the required noise reduction for each Noise Category are reproduced in **Appendix C**, noting that other forms of construction are acceptable where they achieve the required Rw rating.

According to the code, *“the predicted levels of transport noise reduction will be achieved only when doors, windows and other openings in the relevant parts of the building’s external envelope are closed”*. In this instance, advice from a mechanical consultant may be required to confirm how the ventilation requirements will meet the ventilation requirements under the BCA and AS 1668.2:2024<sup>5</sup>.

The noise attenuation provided by the dwelling facade will be largely controlled by the window elements; therefore, it is recommended that facade glazing systems (window + frame + seals) required to achieve a minimum Rw performance are supplied with an acoustic test report conducted in Australia by a qualified consultant who is a member of the Australian Acoustical Society (AAS), or an acoustic consultant who works for a member firm of the Association of Australasian Acoustical Consultants (AAAC). The acoustic test report should address the requirements in the following standards:

---

<sup>5</sup> AS 1668.2:2024 - The use of ventilation and air conditioning in buildings, Part 2: Mechanical ventilation in buildings.



- AS 1191-2002 *Acoustics - Method for laboratory measurement of airborne sound transmission insulation of building elements*
- ISO 717-1:2013 *Acoustics - Rating of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation*

A lower Noise Category should be acceptable at specific facades of the future dwellings depending on the layout of these within the lots, subject to demonstration of the road and railway noise levels onto specific habitable spaces within a dwelling via a lot specific noise assessment based on architectural drawings presented by the proponent.

The highest QDC MP4.4 Noise Category predicted within the development is Noise Category 2 on the lower and upper floor levels. The noise levels for this Noise Category are manageable by the implementation of facade configurations of reasonable acoustic performance. Thus, the implementation of noise barriers is not considered required.

However, the noise model incorporates an existing earth mound of approximately 270m in length, which provides acoustic screening to reduce the transportation noise levels, particularly at ground level receptors. Thus, for the QDC MP4.4 Noise Categories presented in this report to be valid, the earth mound must be retained. If removed, a noise barrier up to approximately 2.4m in height will be required in its place, the length and height of which would need to be confirmed in an updated assessment.





# Appendix A Glossary of Terms

## North Shore Lifestyle Community

### Transport Noise Intrusion Assessment

INA Operations Pty

SLR Project No.: 623.030633.00001

23 January 2026



## Sound Level (or Noise Level)

The terms sound and noise are almost interchangeable, except that in common usage noise is often used to refer to unwanted sound.

Sound (or noise) consists of minute fluctuations in atmospheric pressure capable of evoking the sense of hearing. The human ear (and those of other species) responds to changes in sound pressure over a very wide range. The loudest sound pressure to which the human ear responds is ten million times greater than the softest. The decibel (dB or dBL) scale reduces this ratio to a more manageable size by the use of logarithms.

### A-weighted Sound Pressure Level

The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an 'A-weighting' filter. This is an electronic filter having a frequency response corresponding approximately to human hearing.

### Change in Sound Pressure Levels

For human perception, a change of 1 dBA or 2 dBA in the level of a sound is considered to be indiscernible, while a 3 dBA to 5 dBA change corresponds to a small but noticeable change in loudness. A 10 dBA change corresponds to an approximate doubling or halving in loudness. As noted in Section 2.4 of the TMR CoP Vol 1, while the above noted changes in sound pressure level are *not precisely verifiable for road traffic noise, it is useful in understanding the significance of change in environmental noise exposure.*

Additional facts about road traffic noise as stated in Section 2.4 of the TMR CoP Vol 1:

- A 3 dBA change in noise level is equivalent to halving or doubling the traffic volumes.
- A 10 dBA change in noise level is equivalent to halving or doubling the subjective or perceived loudness or a tenfold increase or decrease in traffic volume.
- A 10 km/h increase in speed will increase the noise level by approximately 1 dBA.
- A 3.5% compound annual growth rate in traffic will increase the noise level by approximately 1.5 dBA over a 10-year horizon.
- An 8% compound annual growth rate in traffic will increase the noise level by approximately 3.0 dBA over a 10-year horizon.

### Typical Sound Pressure Levels

The table below lists examples of typical sound pressure levels.

**Table A-1 Examples of Perceived Sound Pressure Levels**

| Sound pressure level (dBA) | Typical Example                                       |
|----------------------------|---|
| 130                        | Threshold of pain                                     |
| 120                        | Metal hammering                                       |
| 110                        | Grinding on steel                                     |
| 100                        | Loud car horn at 3 metres (m)                         |
| 90                         | Dog bark at 1 m                                       |
| 80                         | Cicadas at 1 m  |
| 70                         | Noise level directly adjacent to a busy main road     |
| 60                         | Ambient noise level in urban area close to main roads |



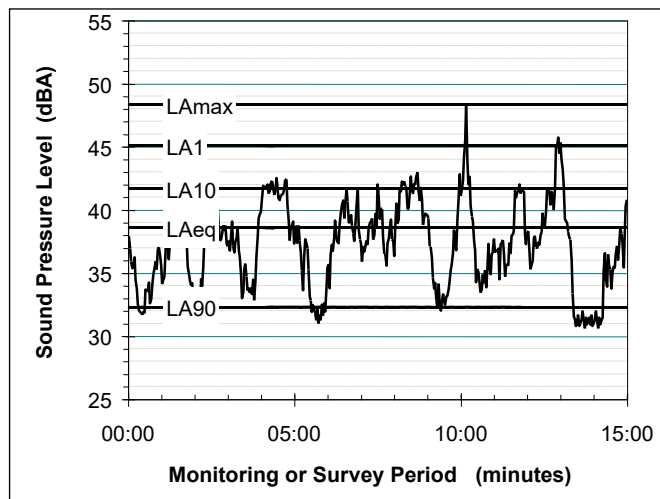
| Sound pressure level (dBA) | Typical Example   |
|----------------------------|---|
| 50                         | Day time in a quiet suburban environment with background or distant road traffic noise  |
| 40                         | Night-time in a quiet suburban environment with background or distant road traffic noise<br>Ambient noise level in rural to semi-rural environments with light breezes and some noise from insects, birds and distant traffic |
| 30                         | Ambient noise level in a typical rural noise environment in the absence of insect noise and wind.<br>Inside bedroom   |
| 20                         | Ambient noise level in remote rural environment away from main roads with no wind and no insect noise   |

### Statistical Noise Levels

Sounds that vary in level over time, such as road traffic noise and most community noise, are commonly described in terms of the statistical exceedance levels (LAN), where LAN is the A-weighted sound pressure level exceeded for N% of a given measurement period. For example, the LA1 is the noise level exceeded for 1% of the time and LA10 the noise exceeded for 10% of the time.

**Figure A-1** below presents a hypothetical 15-minute noise measurement, illustrating various common statistical indices of interest.

**Figure A-1 Hypothetical 15-minute Noise Measurement**



Of particular relevance to this study, are:

- LA10: The A-weighted noise level exceeded for 10% during any given measurement period. This is commonly referred to as the average maximum noise level.

Additionally;

- LA10(18hour) Road Traffic Noise Level: the level exceeded for 10% of any measurement period; the usual period of measurement is 1 hour. The hourly LA10 level, therefore, is the traffic noise level exceeded for 6 minutes in the hour. The 18-hour LA10 level



(LA<sub>10(18hour)</sub>) is the arithmetic average of 18, hourly LA<sub>10</sub> traffic noise levels measured in consecutive hours between 6:00 am and 12:00 midnight.

- LA<sub>10(12hour)</sub> Road Traffic Noise Level – is the arithmetic average of 12 hourly LA<sub>10</sub> traffic noise levels measured in consecutive hours between 6:00 am and 6:00 pm.
- LA<sub>1(1hour)</sub> Road Traffic Noise Level – the level exceeded for n% of a 1-hour period.

### **Noise Propagation**

Provided the receptor is in the far-field of the noise source, noise levels will reduce as a receptor moves further away from the source. This is due to spreading of the noise source energy over distance. For a simple point source (for example, a motor) the theoretical reduction in noise levels is 6 dBA per doubling of distance. For a line source (for example, a busy road) the theoretical reduction is 3 dBA per doubling of distance. In reality however other factors affect noise propagation. These include ground absorption, air absorption, acoustic screening, and meteorological effects.

### **Facade Corrected versus Free field**

A 'facade corrected' measurement/monitoring location is a location which is influenced by facade reflections. Measurements at facades are typically taken at a distance of 1 m away and the measured noise level generally regarded as being +2.5 dB higher than in the 'free field'.

A 'free field' measurement/monitoring location is a location where the microphone is positioned sufficiently far from nearby surfaces for the measured data to not be influenced by reflected noise. This is typically regarded as a position 3.5 m or greater from a reflective surface.





# Appendix B Masterplan Concept Layout

## North Shore Lifestyle Community

### Transport Noise Intrusion Assessment

INA Operations Pty

SLR Project No.: 623.030633.00001

23 January 2026



# North Shore Lifestyle Community - MASTERPLAN

## COMMUNAL LEGEND

- ① **Main Clubhouse**  
"Northshore Clubhouse"  
- Function Hall  
- Main Kitchen & Servery  
- Bar / Lounge  
- Recreation / Pool Tables  
- Arts & Craft Area  
- Resort Style Pool  
- Gym / Yoga  
- Quiet Game / Library  
- Outdoor BBQ Area  
- Outdoor Seating  
- Salon / Consult  
- Community Bus
- ② **Sports Precinct**  
"Club Northshore"  
- Pickleball Court  
- Outdoor BBQ Area
- ③ **Workshop / Maintenance Shed**



## LEGEND

| Lot Size    | Count | Percentage |
|-------------|-------|------------|
| 9.6m x 18m  | 44    | 14%        |
| 11.3m x 18m | 56    | 17%        |
| 12.5m x 18m | 131   | 45%        |
| 14.5m x 18m | 72    | 24%        |

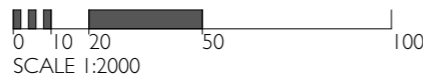
**TOTAL 303**

| Facility   | Provided | Count |
|--|----------|-------|
| <b>VIS CAR PARKING</b><br>1 SPACE PER 5 DWELLINGS  | PROVIDED | 65    |
| <b>CARAVAN PARKING</b><br>1 SPACE PER 10 DWELLINGS | PROVIDED | 23    |

- COMMUNAL FACILITIES
- GREEN PUBLIC SPACE
- BIO DETENTION
- STORMWATER DRAINAGE
- Q 100 FLOOD LEVEL
- OVERLAND FLOW
- FENCE LINE
- FOOTPATH

| REV | DATE       | DESCRIPTION        | DRAWN | CHECKED |
|-----|------------|--------------------|-------|---------|
| A   | 31/10/2025 | DRAFT DA ISSUE     | JRY   | LH      |
| B   | 28/11/2025 | COORDINATION ISSUE | DH    | LH      |
| C   | 28/11/2025 | PRODUCT MIX UPDATE | DH    | OGE     |
| D   | 18/12/2025 | COORDINATION ISSUE | DH    | OGE     |
| E   | 18/12/2025 | DRAFT DA ISSUE     | DH    | OGE     |
| F   | 18/1/2026  | COORDINATION ISSUE | DH    | DH      |
| G   | 22/1/2026  | DA ISSUE           | DH    | OGE     |

NOTE: Figured dimensions to be taken in preference to scaled. Verify all dimensions on site before commencing work or making shop drawings. When printing from electronic files it is the responsibility of the operator to ensure the required scale is achieved.



PROJECT  
North Shore Lifestyle Community  
Part Majors Creek Junction, 74 Main  
Street, Burdell, Qld 4818

DRAWING TITLE  
MASTERPLAN  
CLIENT  
INGENIA COMMUNITIES

DATE  
22/1/2026  
SCALE @ A3  
1:2000  
PROJECT No.  
25026  
DRAWING No.  
DA\_1.11  
ISSUE No.  
G

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OGE Group  
Architects



# **Appendix C    Schedule 2 of QDC MP4.4**

## **North Shore Lifestyle Community**

### **Transport Noise Intrusion Assessment**

**INA Operations Pty**

SLR Project No.: 623.030633.00001

23 January 2026



**Table C-1 Schedule 2 of QDC MP4.4**

| Component of Building's External Envelope | Minimum $R_w$ | Acceptable Forms of Construction  |
|---|---------------|---|
| Glazing                                   | 43            | Double glazing consisting of two panes of minimum 5mm thick glass with at least 100mm air gap and full perimeter <i>acoustically rated seals</i> .  |
|   | 38            | Minimum 14.38mm thick laminated glass, with full perimeter <i>acoustically rated seals</i> ;<br>or<br>Double glazing consisting of one pane of minimum 5mm thick glass and one pane of minimum 6mm thick glass with at least 44mm air gap, and full perimeter <i>acoustically rated seals</i>   |
|   | 35            | Minimum 10.38mm thick laminated glass, with full perimeter <i>acoustically rated seals</i> .  |
|   | 32            | Minimum 6.38mm thick laminated glass with full perimeter <i>acoustically rated seals</i> .  |
|   | 27            | Minimum 4mm thick glass with full perimeter <i>acoustically rated seals</i>   |
|   | 24            | Minimum 4mm thick glass with standard weather seals   |
| External Walls                            | 52            | Two leaves of clay brick masonry, at least 270mm in total, with subfloor vents fitted with noise attenuators.   |
|   | 47            | Two leaves of clay brick masonry at least 110mm thick with:<br>(i) cavity not less than 50mm between leaves; and<br>(ii) 50mm thick mineral insulation or 50mm thick glass wool insulation with a density of 11kg/m <sup>3</sup> or 50mm thick polyester insulation with a density of 20kg/m <sup>3</sup> in the cavity.<br>or<br>Two leaves of clay brick masonry at last 110mm thick with:<br>(i) cavity not less than 50mm between leaves; and<br>(ii) at least 13mm thick cement render on each face<br>or<br>Single leaf of clay brick masonry at least 110mm thick with:<br>(i) a row of at least 70mm x 35mm timber studs or 64mm steel studs at 600mm centres, spaced at least 20mm from the masonry wall; and<br>(ii) Mineral insulation or glass wool insulation at least 50mm thick with a density of at least 11 kg/m <sup>3</sup> positioned between studs; and<br>(iii) One layer of plasterboard at least 13mm thick fixed to outside face of studs.<br>or<br>Single leaf of minimum 150mm thick masonry of hollow, dense concrete blocks, with mortar joints laid to prevent moisture bridging. |
|   | 41            | Two leaves of clay brick masonry at least 110mm thick with cavity not less than 50mm between leaves   |



| Component of Building's External Envelope | Minimum $R_w$ | Acceptable Forms of Construction  |
|---|---------------|---|
|   |               | <p>or</p> <p>Single leaf of clay brick masonry at least 110mm thick with:</p> <p>(i) a row of at least 70mm x 35mm timber studs or 64mm steel studs at 600mm centres, spaced at least 20mm from the masonry wall; and</p> <p>(ii) mineral insulation or glass wool insulation at least 50mm thick with a density of at least 11 kg/m<sup>3</sup> positioned between studs; and</p> <p>(iii) One layer of plasterboard at least 10mm thick fixed to outside face of studs</p> <p>or</p> <p>Single leaf of brick masonry at least 110mm thick with at least 13mm thick render on each face</p> <p>or</p> <p>Concrete brickwork at least 110mm thick</p> <p>or</p> <p>In-situ concrete at least 100mm thick</p> <p>or</p> <p>Precast concrete at least 100mm thick and without joints.</p> |
|   | 35            | <p>Single leaf of clay brick masonry at least 110mm thick with:</p> <p>(i) a row of at least 70mm x 35mm timber studs or 64mm steel studs at 600mm centres, spaced at least 20mm from the masonry wall; and</p> <p>(ii) One layer of plasterboard at least 10mm thick fixed to outside face of studs</p> <p>or</p> <p>Minimum 6mm thick fibre cement sheeting or weatherboards or plank cladding externally, minimum 90mm deep timber stud or 92mm metal stud, standard plasterboard at least 13mm thick internally.</p>  |
| Roof                                      | 45            | <p>Concrete or terracotta tile or sheet metal roof with sarking, <i>acoustically rated plasterboard</i> ceiling at least 13mm thick fixed to ceiling joists, cellulose fibre insulation at least 100mm thick with a density of at least 45kg/m<sup>3</sup> in the cavity.</p> <p>or</p> <p>Concrete or terracotta tile or sheet metal roof with sarking, 2 layers of <i>acoustically rated plasterboard</i> at least 16mm thick fixed to ceiling joists, glass wool insulation at least 50mm thick with a density of at least 11kg/m<sup>3</sup> or polyester insulation at least 50mm thick with a density of at least 20kg/m<sup>3</sup> in the cavity.</p>   |
|   | 41            | <p>Concrete or terracotta tile or metal sheet roof with sarking, plasterboard ceiling at least 10mm thick fixed to ceiling joists, glass wool insulation at least 50mm thick with a density of at least 11kg/m<sup>3</sup> or polyester insulation at least 50mm thick with a density of at least 20kg/m<sup>3</sup> in the cavity.</p> <p>or</p> <p>Concrete suspended slab at least 100mm thick.</p>  |



| Component of Building's External Envelope | Minimum $R_w$ | Acceptable Forms of Construction   |
|---|---------------|--|
|   | 38            | Concrete or terracotta tile or metal sheet roof with sarking, plasterboard ceiling at least 10mm thick fixed to ceiling cavity, mineral insulation or glass wool insulation at least 50mm thick with a density of at least 11 kg/m <sup>3</sup> .  |
|   | 35            | Concrete or terracotta tile or metal sheet roof with sarking, plasterboard ceiling at least 10mm thick fixed to ceiling cavity.  |
| Floors                                    | 51            | Concrete slab at least 150mm thick.  |
|   | 45            | Concrete slab at least 100mm thick<br>or<br>Tongued and grooved boards at least 19mm thick with:<br>(i) timber joists not less than 175mm x 50mm; and<br>(ii) mineral insulation or glass wool insulation at least 75mm thick with a density of at least 11kg/m <sup>3</sup> positioned between joists and laid on plasterboard at least 10mm thick fixed to underside of joists; and<br>(iii) mineral insulation or glass wool insulation at least 25mm thick with a density of at least 11kg/m <sup>3</sup> laid over entire floor, including tops of joists before flooring is laid; and<br>(iv) secured to battens at least 75mm x 50mm; and<br>(v) the assembled flooring laid over the joists, but not fixed to them, with battens lying between the joists. |
| Entry Doors                               | 35            | Solid core timber not less than 45mm thick, fixed so as to overlap the frame or rebate of the frame by not less than 10mm, with full perimeter acoustically rated seals.   |
|   | 33            | Fixed so as to overlap the frame or rebate of the frame by not less than 10mm, fitted with full perimeter acoustically rated seals and constructed of -<br>(i) solid core, wood, particleboard or blockboard not less than 45mm thick; and/or<br>(ii) acoustically laminated glass not less than 10.38mm thick.  |
|   | 28            | Fixed so as to overlap the frame or rebate of the frame, constructed of -<br>(i) Wood, particleboard or blockboard not less than 33mm thick; or<br>(ii) Compressed fibre reinforced sheeting not less than 9mm thick; or<br>(iii) Other suitable material with a mass per unit area not less than 24.4kg/m <sup>2</sup> ; or<br>(iv) Solid core timber door not less than 35mm thick fitted with full perimeter <i>acoustically rated seals</i> .  |





# Appendix D Noise Monitoring Results

## North Shore Lifestyle Community

### Transport Noise Intrusion Assessment

#### INA Operations Pty

SLR Project No.: 623.030633.00001

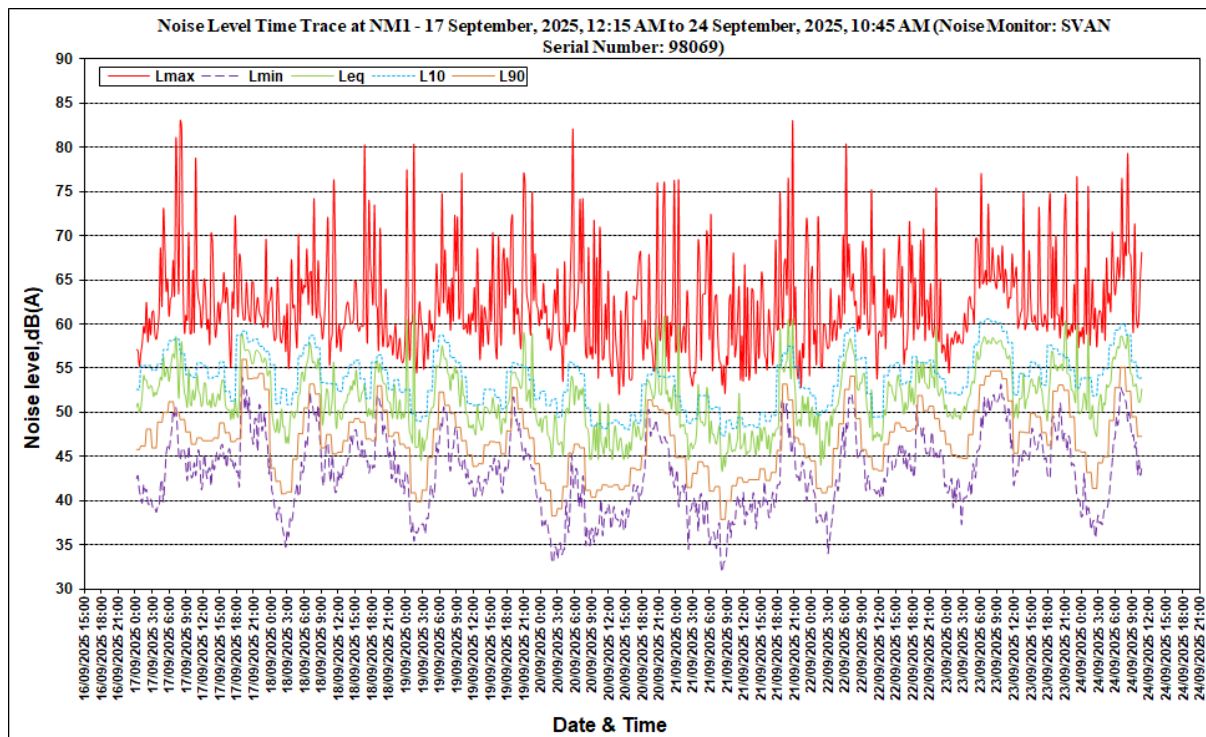
23 January 2026



**Table D-1 Summary of Environmental Noise Levels at NM1**

| Descriptor                 | Wed 17 Sep 2025 | Thu 18 Sep 2025 | Fri 19 Sep 2025 | Sat 20 Sep 2025 | Sun 21 Sep 2025 | Mon 22 Sep 2025 | Tue 23 Sep 2025 |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| LA10(18hour)               | 56              | 55              | 54              | 51              | 51              | 55              | 57              |
| LAeq,Day(7am-6pm)          | 53              | 53              | 52              | 48              | 47              | 53              | 55              |
| LAeq,Evening(6pm-10pm)     | 56              | 53              | 54              | 54              | 56              | 54              | 56              |
| LAeq,Night (10pm-7am)      | 53              | 53              | 51              | 52              | 52              | 54              | 54              |
| Max LAeq(1hour)(7am-6pm)   | 56              | 57              | 55              | 52              | 49              | 57              | 58              |
| Max LAeq(1hour)(6pm-10pm)  | 58              | 55              | 56              | 56              | 59              | 54              | 58              |
| Max LAeq(1hour)(10pam-7am) | 56              | 56              | 55              | 56              | 57              | 58              | 57              |
| LA90,Day(7am-6pm)          | 48              | 48              | 47              | 42              | 42              | 47              | 51              |
| LA90,Evening(6pm-10pm)     | 53              | 49              | 50              | 49              | 49              | 50              | 51              |
| LA90,Night (10pm-7am)      | 46              | 45              | 43              | 45              | 45              | 48              | 46              |
| RBL,Day(7am to 6pm)        | 47              | 46              | 44              | 41              | 40              | 44              | 48              |
| RBL,Evening(6pm to 10pm)   | 47              | 47              | 48              | 45              | 46              | 48              | 46              |
| RBL,Night (10pm to 7am)    | 41              | 40              | 39              | 41              | 41              | 45              | 42              |

**Figure D-1 Noise Level Time Traces at NM1**



**Table D-2 Correlated Railway Events at NM1**

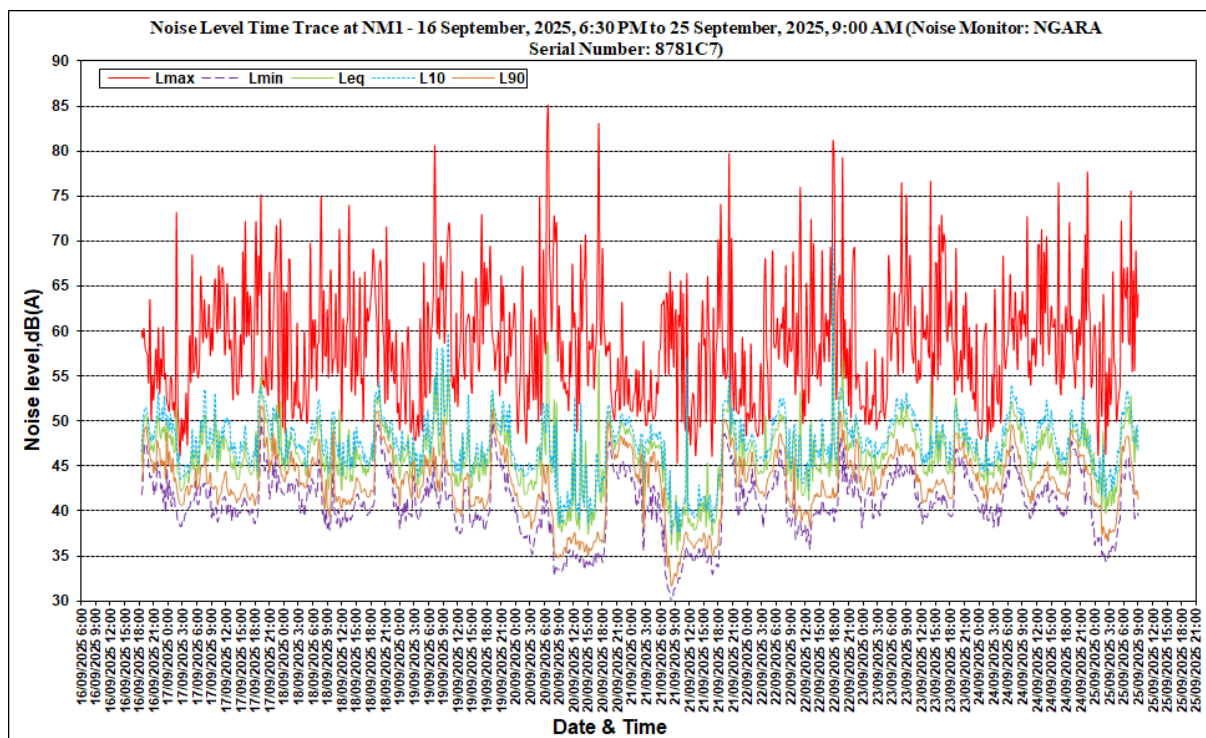
| Service ID | Service Date | Unique Train       | Train Status | Train Group    | Scheduled Arrive Time  | Actual Arrive Time     | Scheduled Departure Time | Actual Departure Time  | Date Time              | Day of Week | LAm <sub>ax</sub> (dBA) |
|------------|--------------|--------------------|--------------|----------------|------------------------|------------------------|--------------------------|------------------------|------------------------|-------------|-------------------------|
| CP1R       | 20/09/2025   | CP1R<br>20/09/2025 | Arrived      | Freight        | 21/09/2025<br>20:55:00 | 21/09/2025<br>20:49:00 | 21/09/2025<br>20:55:00   | 21/09/2025<br>20:49:00 | 21/09/2025<br>20:55:00 | Sun         | 83                      |
| 798X       | 18/09/2025   | 798X<br>18/09/2025 | Arrived      | Freight        | 18/09/2025<br>23:36:00 | 19/09/2025<br>01:41:00 | 18/09/2025<br>23:36:00   | 19/09/2025<br>01:41:00 | 18/09/2025<br>23:36:00 | Thu         | 80                      |
|            |              |                    |              | SLR identified | 25/09/2025<br>01:30:00 |                        |                          |                        |                        |             | 79                      |
| 7P2R       | 18/09/2025   | 7P2R<br>18/09/2025 | Arrived      | Freight        | 18/09/2025<br>21:14:00 | 19/09/2025<br>00:22:00 | 18/09/2025<br>21:14:00   | 19/09/2025<br>00:22:00 | 18/09/2025<br>21:14:00 | Thu         | 77                      |
| C49X       | 22/09/2025   | C49X<br>22/09/2025 | Running      | Freight        | 23/09/2025<br>21:59:00 | 23/09/2025<br>23:17:00 | 23/09/2025<br>21:59:00   | 23/09/2025<br>23:17:00 | 23/09/2025<br>21:59:00 | Tue         | 77                      |
| 7P2R       | 19/09/2025   | 7P2R<br>19/09/2025 | Arrived      | Freight        | 19/09/2025<br>21:14:00 | 19/09/2025<br>21:05:00 | 19/09/2025<br>21:14:00   | 19/09/2025<br>21:05:00 | 19/09/2025<br>21:14:00 | Fri         | 77                      |
| 7P2R       | 21/09/2025   | 7P2R<br>21/09/2025 | Arrived      | Freight        | 21/09/2025<br>23:39:00 | 21/09/2025<br>20:04:00 | 21/09/2025<br>23:39:00   | 21/09/2025<br>20:04:00 | 21/09/2025<br>23:39:00 | Sun         | 77                      |
| 798X       | 20/09/2025   | 798X<br>20/09/2025 | Arrived      | Freight        | 20/09/2025<br>22:51:00 | 21/09/2025<br>00:48:00 | 20/09/2025<br>22:51:00   | 21/09/2025<br>00:48:00 | 20/09/2025<br>22:51:00 | Sat         | 76                      |
| CP1R       | 19/09/2025   | CP1R<br>19/09/2025 | Arrived      | Freight        | 20/09/2025<br>21:05:00 | 20/09/2025<br>20:56:00 | 20/09/2025<br>21:05:00   | 20/09/2025<br>20:56:00 | 20/09/2025<br>21:05:00 | Sat         | 76                      |
| 7P2R       | 20/09/2025   | 7P2R<br>20/09/2025 | Arrived      | Freight        | 20/09/2025<br>21:14:00 | 20/09/2025<br>22:14:00 | 20/09/2025<br>21:14:00   | 20/09/2025<br>22:14:00 | 20/09/2025<br>21:14:00 | Sat         | 76                      |
|            |              |                    |              | SLR identified | 24/09/2025<br>01:27:00 |                        |                          |                        |                        |             | 76                      |
| 7P2R       | 22/09/2025   | 7P2R<br>22/09/2025 | Running      | Freight        | 22/09/2025<br>21:14:00 | 22/09/2025<br>22:24:00 | 22/09/2025<br>21:14:00   | 22/09/2025<br>22:24:00 | 22/09/2025<br>21:14:00 | Mon         | 75                      |
| CP1R       | 23/09/2025   | CP1R<br>23/09/2025 | Running      | Freight        | 24/09/2025<br>21:00:00 |                        | 24/09/2025<br>21:05:00   |                        | 24/09/2025<br>21:05:00 | Wed         | 75                      |
| C49X       | 18/09/2025   | C49X<br>18/09/2025 | Arrived      | Freight        | 19/09/2025<br>22:38:00 | 19/09/2025<br>22:30:00 | 19/09/2025<br>22:38:00   | 19/09/2025<br>22:30:00 | 19/09/2025<br>22:38:00 | Fri         | 75                      |
| CP3R       | 20/09/2025   | CP3R<br>20/09/2025 | Arrived      | Freight        | 21/09/2025<br>18:29:00 | 21/09/2025<br>18:38:00 | 21/09/2025<br>18:29:00   | 21/09/2025<br>18:38:00 | 21/09/2025<br>18:29:00 | Sun         | 75                      |



**Table D-2 Summary of Environmental Noise Levels at NM2**

| Descriptor                 | Tue 16 Sep 2025 | Wed 17 Sep 2025 | Thu 18 Sep 2025 | Fri 19 Sep 2025 | Sat 20 Sep 2025 | Sun 21 Sep 2025 | Mon 22 Sep 2025 | Tue 23 Sep 2025 | Wed 24 Sep 2025 |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| LA10(18hour)               | -               | 49              | 48              | 49              | 45              | 44              | 48              | 49              | 49              |
| LAeq,Day(7am-6pm)          | -               | 47              | 46              | 49              | 46              | 41              | 51              | 48              | 48              |
| LAeq,Evening(6pm-10pm)     | -               | 50              | 50              | 49              | 48              | 50              | 50              | 48              | 48              |
| LAeq,Night (10pm-7am)      | 47              | 48              | 46              | 49              | 47              | 47              | 47              | 47              | 46              |
| Max LAeq(1hour)(7am-6pm)   | -               | 49              | 50              | 53              | 52              | 46              | 59              | 51              | 51              |
| Max LAeq(1hour)(6pm-10pm)  | -               | 53              | 53              | 52              | 50              | 51              | 54              | 51              | 50              |
| Max LAeq(1hour)(10pam-7am) | 49              | 50              | 48              | 56              | 49              | 50              | 49              | 50              | 51              |
| LA90,Day(7am-6pm)          | -               | 43              | 42              | 43              | 37              | 36              | 42              | 44              | 44              |
| LA90,Evening(6pm-10pm)     | -               | 46              | 47              | 47              | 45              | 46              | 46              | 46              | 46              |
| LA90,Night (10pm-7am)      | 44              | 45              | 44              | 42              | 45              | 44              | 44              | 44              | 41              |
| RBL,Day(7am to 6pm)        | -               | 41              | 40              | 40              | 35              | 33              | 39              | 42              | 42              |
| RBL,Evening(6pm to 10pm)   | -               | 42              | 42              | 42              | 38              | 39              | 42              | 41              | 43              |
| RBL,Night (10pm to 7am)    | 41              | 43              | 42              | 39              | 42              | 42              | 42              | 42              | 38              |

**Figure D-2 Noise Level Time Traces at NM2**



**Table D-3 BoM Observations During Monitoring (September 2025 – days monitored outlined)**

Townsville, Queensland  
September 2025 Daily Weather Observations



| Date                          | Day  | Temps     |           | Rain<br>mm | Evap<br>mm | Sun<br>hours | Max wind gust |             |               | 9am        |         |                |      |             |             | 3pm        |         |                |      |             |             |  |
|-------------------------------|------|-----------|-----------|------------|------------|--------------|---------------|-------------|---------------|------------|---------|----------------|------|-------------|-------------|------------|---------|----------------|------|-------------|-------------|--|
|                               |      | Min<br>°C | Max<br>°C |            |            |              | Dirn          | Spd<br>km/h | Time<br>local | Temp<br>°C | RH<br>% | Cld<br>eighths | Dirn | Spd<br>km/h | MSLP<br>hPa | Temp<br>°C | RH<br>% | Cld<br>eighths | Dirn | Spd<br>km/h | MSLP<br>hPa |  |
| 1                             | Mo   | 15.3      | 26.5      | 0          |            |              | NE            | 35          | 14:05         | 22.1       | 60      |                | SE   | 17          | 1019.3      | 24.7       | 60      |                | ENE  | 26          | 1015.1      |  |
| 2                             | Tu   | 16.5      | 27.2      | 0          |            |              | ENE           | 35          | 14:27         | 24.3       | 62      |                | SE   | 19          | 1019.6      | 24.0       | 67      | 3              | ENE  | 28          | 1016.5      |  |
| 3                             | We   | 16.3      | 27.4      | 0          |            |              | ENE           | 43          | 14:37         | 23.6       | 68      | 1              | SE   | 19          | 1020.3      | 25.0       | 65      |                | ENE  | 30          | 1016.1      |  |
| 4                             | Th   | 15.5      | 28.1      | 0          |            |              | ENE           | 35          | 14:03         | 24.3       | 63      |                | SE   | 17          | 1019.1      | 26.1       | 61      |                | ENE  | 26          | 1015.4      |  |
| 5                             | Fr   | 20.2      | 28.1      | 0          |            |              | ENE           | 35          | 15:38         | 24.9       | 71      | 6              | ESE  | 17          | 1020.1      | 24.5       | 78      | 7              | NE   | 28          | 1017.4      |  |
| 6                             | Sa   | 18.6      | 28.5      | 0.4        |            |              | E             | 54          | 15:56         | 25.1       | 62      | 1              | ESE  | 20          | 1022.3      | 27.4       | 53      |                | ENE  | 33          | 1018.7      |  |
| 7                             | Su   | 21.3      | 28.3      | 0          |            |              | E             | 54          | 12:40         | 25.2       | 59      | 7              | ESE  | 31          | 1022.9      | 26.8       | 51      |                | E    | 37          | 1019.1      |  |
| 8                             | Mo   | 18.5      | 28.2      | 0          |            |              | E             | 52          | 12:10         | 23.0       | 75      | 8              | ESE  | 30          | 1021.7      | 26.7       | 46      |                | ENE  | 33          | 1017.8      |  |
| 9                             | Tu   | 17.8      | 28.9      | 0          |            |              | E             | 43          | 10:34         | 24.7       | 65      | 8              | SE   | 15          | 1019.7      | 27.5       | 54      |                | ENE  | 30          | 1014.6      |  |
| 10                            | We   | 19.9      | 28.6      | 0          |            |              | NE            | 31          | 13:08         | 26.3       | 64      | 7              | ESE  | 9           | 1016.2      | 28.4       | 45      |                | ENE  | 19          | 1012.2      |  |
| 11                            | Th   | 17.9      | 32.3      | 0          |            |              | SW            | 31          | 08:50         | 25.7       | 48      |                | SSW  | 24          | 1014.9      | 30.3       | 41      | N              | 13   | 1010.7      |             |  |
| 12                            | Fr   | 15.4      | 28.9      | 0          |            |              | ENE           | 43          | 15:07         | 25.3       | 40      |                | SE   | 9           | 1017.4      | 26.7       | 62      |                | ENE  | 35          | 1014.9      |  |
| 13                            | Sa   | 19.1      | 28.3      | 0.2        |            |              | ESE           | 43          | 09:45         | 26.1       | 51      | 1              | ESE  | 28          | 1020.3      | 24.9       | 60      | 7              | ENE  | 28          | 1018.0      |  |
| 14                            | Su   | 18.9      | 29.3      | 0          |            |              | ENE           | 50          | 12:20         | 25.1       | 58      | 8              | ESE  | 24          | 1020.6      | 26.7       | 54      |                | ENE  | 33          | 1017.0      |  |
| 15                            | Mo   | 20.9      | 27.5      | 0.2        |            |              | E             | 50          | 08:51         | 25.6       | 62      | 8              | ESE  | 30          | 1019.7      | 26.1       | 54      | 8              | E    | 31          | 1016.8      |  |
| 16                            | Tu   | 21.7      | 29.9      | 0          |            |              | E             | 48          | 13:25         | 25.2       | 63      | 8              | ESE  | 28          | 1019.2      | 27.0       | 59      | 8              | ENE  | 31          | 1015.3      |  |
| 17                            | We   | 22.4      | 29.4      | 0          |            |              | NE            | 43          | 15:25         | 27.0       | 65      | 3              | ESE  | 24          | 1019.7      | 27.0       | 69      | 7              | ENE  | 28          | 1016.5      |  |
| 18                            | Th   | 22.5      | 30.3      | 0          |            |              | NE            | 41          | 15:05         | 26.0       | 69      | 8              | ESE  | 13          | 1020.7      | 28.0       | 69      |                | ENE  | 31          | 1017.3      |  |
| 19                            | Fr   | 21.3      | 29.4      | 0          |            |              | ESE           | 35          | 09:20         | 27.1       | 67      | 3              | ESE  | 24          | 1020.3      | 27.1       | 58      |                | ENE  | 22          | 1016.0      |  |
| 20                            | Sa   | 19.3      | 29.1      | 0          |            |              | ENE           | 33          | 12:21         | 26.0       | 66      |                | ENE  | 19          | 1015.2      | 27.0       | 62      |                | ENE  | 24          | 1011.1      |  |
| 21                            | Su   | 22.4      | 30.1      | 0          |            |              | NE            | 33          | 13:41         | 27.3       | 66      |                | NE   | 15          | 1015.4      | 27.5       | 62      | 6              | ENE  | 24          | 1012.2      |  |
| 22                            | Mo   | 22.8      | 29.7      | 0          |            |              | ENE           | 43          | 13:38         | 27.7       | 66      | 8              | ESE  | 20          | 1015.9      | 28.2       | 66      |                | ENE  | 33          | 1013.3      |  |
| 23                            | Tu   | 23.0      | 30.4      | 0          |            |              | NE            | 43          | 14:53         | 26.1       | 65      | 8              | SE   | 20          | 1017.6      | 28.2       | 58      | 2              | ENE  | 35          | 1014.6      |  |
| 24                            | We   | 18.7      | 29.1      | 0          |            |              | ENE           | 46          | 13:09         | 26.3       | 43      |                | ESE  | 22          | 1018.9      | 27.1       | 54      |                | ENE  | 33          | 1015.7      |  |
| 25                            | Th   | 17.9      | 27.9      | 0          |            |              | NE            | 41          | 13:11         | 25.3       | 57      | 1              | ESE  | 19          | 1019.0      | 26.8       | 48      |                | ENE  | 31          | 1015.4      |  |
| 26                            | Fr   | 15.6      | 30.0      | 0          |            |              | E             | 44          | 11:19         | 25.8       | 54      |                | ESE  | 13          | 1019.5      | 27.3       | 45      | 1              | ENE  | 30          | 1017.1      |  |
| 27                            | Sa   | 18.6      | 29.3      | 0          |            |              | ENE           | 39          | 13:12         | 26.7       | 48      | 3              | ESE  | 26          | 1018.7      | 27.5       | 50      |                | ENE  | 30          | 1015.5      |  |
| 28                            | Su   | 22.9      | 29.3      | 0          |            |              | ENE           | 39          | 14:51         | 27.0       | 64      | 8              | NNW  | 7           | 1017.2      | 28.0       | 70      |                | ENE  | 33          | 1012.6      |  |
| 29                            | Mo   | 18.2      | 31.7      | 0          |            |              | ENE           | 31          | 14:48         | 26.9       | 63      |                | ESE  | 6           | 1016.1      | 28.7       | 57      | 1              | ENE  | 24          | 1012.2      |  |
| 30                            | Tu   | 15.5      | 30.8      | 0          |            |              | E             | 39          | 15:53         | 28.3       | 42      |                | NNE  | 6           | 1014.2      | 27.9       | 62      |                | ENE  | 30          | 1011.1      |  |
| Statistics for September 2025 |      |           |           |            |            |              |               |             |               |            |         |                |      |             |             |            |         |                |      |             |             |  |
| Mean                          | 19.2 | 29.1      |           |            |            |              |               |             |               | 25.7       | 60      | 5              |      | 19          | 1018.7      | 27.0       | 58      | 5              |      | 28          | 1015.2      |  |
| Lowest                        | 15.3 | 26.5      |           |            |            |              |               |             |               | 22.1       | 40      | 1              | #    | 6           | 1014.2      | 24.0       | 41      | 1              | N    | 13          | 1010.7      |  |
| Highest                       | 23.0 | 32.3      | 0.4       |            |            |              | E             | 54          |               | 28.3       | 75      | 8              | ESE  | 31          | 1022.9      | 30.3       | 78      | 8              | E    | 37          | 1019.1      |  |
| Total                         |      |           | 0.8       |            |            |              |               |             |               |            |         |                |      |             |             |            |         |                |      |             |             |  |

Observations were drawn from Townsville Aero (station 032040)

IDCJDW4128.202509 Prepared at 13:02 UTC on 3 Dec 2025  
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# **Appendix E Predicted QDC MP4.4 Noise Categories**

## **North Shore Lifestyle Community**

### **Transport Noise Intrusion Assessment**

**INA Operations Pty**

SLR Project No.: 623.030633.00001

23 January 2026



**Table E-1 QDC MP4.4 Noise Categories**

| Lot | Floor | Coordinates and Ground Elevation at Centre of Lot, m |            |                     | QDC MP4.4 Road Traffic Noise Category | QDC MP4.4 Railway Traffic Noise Category | Applicable QDC MP4.4 Noise Category (Highest of Road and Railway) |
|-----|-------|--|------------|---------------------|---------------------------------------|--|---|
|     |       | Easting  | Northing   | Ground Elevation, m | Without Noise Barriers                | Without Noise Barriers                   | Without Noise Barriers  |
| 1   | GF    | 467836.81  | 7871075.27 | 8.4                 | 1                                     | 2  | 2   |
| 1   | FF    | 467836.81  | 7871075.27 | 8.4                 | 2                                     | 2  | 2   |
| 2   | GF    | 467846.68  | 7871068.32 | 8.5                 | 1                                     | 2  | 2   |
| 2   | FF    | 467846.68  | 7871068.32 | 8.5                 | 2                                     | 2  | 2   |
| 3   | GF    | 467855.1   | 7871062.73 | 8.6                 | 1                                     | 2  | 2   |
| 3   | FF    | 467855.1   | 7871062.73 | 8.6                 | 2                                     | 2  | 2   |
| 4   | GF    | 467865.78  | 7871055.24 | 8.6                 | 1                                     | 2  | 2   |
| 4   | FF    | 467865.78  | 7871055.24 | 8.6                 | 2                                     | 2  | 2   |
| 5   | GF    | 467876.91  | 7871047.84 | 8.5                 | 1                                     | 2  | 2   |
| 5   | FF    | 467876.91  | 7871047.84 | 8.5                 | 2                                     | 2  | 2   |
| 6   | GF    | 467887.96  | 7871040.89 | 8.4                 | 1                                     | 2  | 2   |
| 6   | FF    | 467887.96  | 7871040.89 | 8.4                 | 2                                     | 2  | 2   |
| 7   | GF    | 467898.28  | 7871034.03 | 8.3                 | 1                                     | 2  | 2   |
| 7   | FF    | 467898.28  | 7871034.03 | 8.3                 | 2                                     | 2  | 2   |
| 8   | GF    | 467909.23  | 7871027.54 | 8.1                 | 1                                     | 2  | 2   |
| 8   | FF    | 467909.23  | 7871027.54 | 8.1                 | 2                                     | 2  | 2   |
| 9   | GF    | 467919.82  | 7871020.5  | 8.0                 | 1                                     | 2  | 2   |
| 9   | FF    | 467919.82  | 7871020.5  | 8.0                 | 1                                     | 2  | 2   |
| 10  | GF    | 467929.5   | 7871013.28 | 8.0                 | 1                                     | 2  | 2   |
| 10  | FF    | 467929.5   | 7871013.28 | 8.0                 | 1                                     | 2  | 2   |
| 11  | GF    | 467940.73  | 7871005.42 | 8.0                 | 1                                     | 2  | 2   |
| 11  | FF    | 467940.73  | 7871005.42 | 8.0                 | 1                                     | 2  | 2   |
| 12  | GF    | 467951.77  | 7870998.48 | 8.0                 | 1                                     | 2  | 2   |
| 12  | FF    | 467951.77  | 7870998.48 | 8.0                 | 1                                     | 2  | 2   |
| 13  | GF    | 467962.81  | 7870991.53 | 8.0                 | 1                                     | 2  | 2   |
| 13  | FF    | 467962.81  | 7870991.53 | 8.0                 | 1                                     | 2  | 2   |
| 14  | GF    | 467973.04  | 7870985.12 | 8.0                 | 1                                     | 2  | 2   |
| 14  | FF    | 467973.04  | 7870985.12 | 8.0                 | 1                                     | 2  | 2   |
| 15  | GF    | 467983.63  | 7870978.09 | 7.9                 | 1                                     | 2  | 2   |
| 15  | FF    | 467983.63  | 7870978.09 | 7.9                 | 1                                     | 2  | 2   |
| 16  | GF    | 467993.41  | 7870970.41 | 7.8                 | 1                                     | 2  | 2   |
| 16  | FF    | 467993.41  | 7870970.41 | 7.8                 | 1                                     | 2  | 2   |
| 17  | GF    | 468002.82  | 7870964.55 | 7.7                 | 1                                     | 2  | 2   |
| 17  | FF    | 468002.82  | 7870964.55 | 7.7                 | 1                                     | 2  | 2   |
| 18  | GF    | 468011.69  | 7870959.04 | 7.6                 | 1                                     | 2  | 2   |
| 18  | FF    | 468011.69  | 7870959.04 | 7.6                 | 1                                     | 2  | 2   |
| 19  | GF    | 468023.1   | 7870951.46 | 7.6                 | 1                                     | 2  | 2   |
| 19  | FF    | 468023.1   | 7870951.46 | 7.6                 | 1                                     | 2  | 2   |
| 20  | GF    | 468043.38  | 7870934.85 | 7.6                 | 1                                     | 2  | 2   |
| 20  | FF    | 468043.38  | 7870934.85 | 7.6                 | 1                                     | 2  | 2   |
| 21  | GF    | 468051.59  | 7870945.45 | 7.4                 | 1                                     | 2  | 2   |
| 21  | FF    | 468051.59  | 7870945.45 | 7.4                 | 1                                     | 2  | 2   |
| 22  | GF    | 468057.46  | 7870953.68 | 7.3                 | 1                                     | 2  | 2   |
| 22  | FF    | 468057.46  | 7870953.68 | 7.3                 | 1                                     | 2  | 2   |
| 23  | GF    | 468064.95  | 7870963.19 | 7.1                 | 1                                     | 2  | 2   |
| 23  | FF    | 468064.95  | 7870963.19 | 7.1                 | 1                                     | 2  | 2   |



| Lot | Floor | Coordinates and Ground Elevation at Centre of Lot, m |            |                     | QDC MP4.4 Road Traffic Noise Category | QDC MP4.4 Railway Traffic Noise Category | Applicable QDC MP4.4 Noise Category (Highest of Road and Railway) |
|-----|-------|--|------------|---------------------|---------------------------------------|--|---|
|     |       | Easting  | Northing   | Ground Elevation, m | Without Noise Barriers                | Without Noise Barriers                   | Without Noise Barriers  |
| 24  | GF    | 468070.09  | 7870972.69 | 7.0                 | 1                                     | 1  | 1   |
| 24  | FF    | 468070.09  | 7870972.69 | 7.0                 | 1                                     | 1  | 1   |
| 25  | GF    | 468078.22  | 7870982.56 | 7.0                 | 1                                     | 1  | 1   |
| 25  | FF    | 468078.22  | 7870982.56 | 7.0                 | 1                                     | 1  | 1   |
| 26  | GF    | 467858.21  | 7871097.46 | 8.0                 | 1                                     | 2  | 2   |
| 26  | FF    | 467858.21  | 7871097.46 | 8.0                 | 1                                     | 2  | 2   |
| 27  | GF    | 467868.62  | 7871090.15 | 8.2                 | 1                                     | 2  | 2   |
| 27  | FF    | 467868.62  | 7871090.15 | 8.2                 | 1                                     | 2  | 2   |
| 28  | GF    | 467879.94  | 7871083.02 | 8.2                 | 1                                     | 2  | 2   |
| 28  | FF    | 467879.94  | 7871083.02 | 8.2                 | 1                                     | 2  | 2   |
| 29  | GF    | 467891.25  | 7871075.89 | 8.1                 | 1                                     | 2  | 2   |
| 29  | FF    | 467891.25  | 7871075.89 | 8.1                 | 1                                     | 2  | 2   |
| 30  | GF    | 467900.76  | 7871069.57 | 8.0                 | 1                                     | 2  | 2   |
| 30  | FF    | 467900.76  | 7871069.57 | 8.0                 | 1                                     | 2  | 2   |
| 31  | GF    | 467912.07  | 7871062.45 | 8.0                 | 1                                     | 2  | 2   |
| 31  | FF    | 467912.07  | 7871062.45 | 8.0                 | 1                                     | 2  | 2   |
| 32  | GF    | 467921.12  | 7871056.04 | 8.0                 | 1                                     | 2  | 2   |
| 32  | FF    | 467921.12  | 7871056.04 | 8.0                 | 1                                     | 2  | 2   |
| 33  | GF    | 467931.96  | 7871068.8  | 8.0                 | 1                                     | 1  | 1   |
| 33  | FF    | 467931.96  | 7871068.8  | 8.0                 | 1                                     | 2  | 2   |
| 34  | GF    | 467920.73  | 7871076.66 | 8.0                 | 1                                     | 1  | 1   |
| 34  | FF    | 467920.73  | 7871076.66 | 8.0                 | 1                                     | 2  | 2   |
| 35  | GF    | 467910.32  | 7871083.97 | 8.0                 | 1                                     | 1  | 1   |
| 35  | FF    | 467910.32  | 7871083.97 | 8.0                 | 1                                     | 2  | 2   |
| 36  | GF    | 467900.55  | 7871090.46 | 8.0                 | 1                                     | 1  | 1   |
| 36  | FF    | 467900.55  | 7871090.46 | 8.0                 | 1                                     | 2  | 2   |
| 37  | GF    | 467891.68  | 7871095.97 | 8.0                 | 1                                     | 1  | 1   |
| 37  | FF    | 467891.68  | 7871095.97 | 8.0                 | 1                                     | 2  | 2   |
| 38  | GF    | 467882.9   | 7871102.19 | 8.0                 | 1                                     | 1  | 1   |
| 38  | FF    | 467882.9   | 7871102.19 | 8.0                 | 1                                     | 2  | 2   |
| 39  | GF    | 467874.03  | 7871107.7  | 8.0                 | 1                                     | 1  | 1   |
| 39  | FF    | 467874.03  | 7871107.7  | 8.0                 | 1                                     | 2  | 2   |
| 40  | GF    | 467865.23  | 7871113.05 | 8.0                 | 1                                     | 1  | 1   |
| 40  | FF    | 467865.23  | 7871113.05 | 8.0                 | 1                                     | 2  | 2   |
| 41  | GF    | 467946.65  | 7871037.9  | 8.0                 | 1                                     | 2  | 2   |
| 41  | FF    | 467946.65  | 7871037.9  | 8.0                 | 1                                     | 2  | 2   |
| 42  | GF    | 467956.7   | 7871032.4  | 8.0                 | 1                                     | 2  | 2   |
| 42  | FF    | 467956.7   | 7871032.4  | 8.0                 | 1                                     | 2  | 2   |
| 43  | GF    | 467966.38  | 7871026.35 | 8.0                 | 1                                     | 2  | 2   |
| 43  | FF    | 467966.38  | 7871026.35 | 8.0                 | 1                                     | 2  | 2   |
| 44  | GF    | 467976.25  | 7871019.4  | 8.0                 | 1                                     | 2  | 2   |
| 44  | FF    | 467976.25  | 7871019.4  | 8.0                 | 1                                     | 2  | 2   |
| 45  | GF    | 467986.02  | 7871012.9  | 7.9                 | 1                                     | 2  | 2   |
| 45  | FF    | 467986.02  | 7871012.9  | 7.9                 | 1                                     | 2  | 2   |
| 46  | GF    | 467996.98  | 7871006.41 | 7.8                 | 1                                     | 2  | 2   |
| 46  | FF    | 467996.98  | 7871006.41 | 7.8                 | 1                                     | 2  | 2   |
| 47  | GF    | 468008.2   | 7870998.56 | 7.7                 | 1                                     | 2  | 2   |



| Lot | Floor | Coordinates and Ground Elevation at Centre of Lot, m |            |                     | QDC MP4.4 Road Traffic Noise Category | QDC MP4.4 Railway Traffic Noise Category | Applicable QDC MP4.4 Noise Category (Highest of Road and Railway) |
|-----|-------|--|------------|---------------------|---------------------------------------|--|---|
|     |       | Easting  | Northing   | Ground Elevation, m | Without Noise Barriers                | Without Noise Barriers                   | Without Noise Barriers  |
| 47  | FF    | 468008.2   | 7870998.56 | 7.7                 | 1                                     | 2  | 2   |
| 48  | GF    | 468017.44  | 7870991.25 | 7.6                 | 1                                     | 2  | 2   |
| 48  | FF    | 468017.44  | 7870991.25 | 7.6                 | 1                                     | 2  | 2   |
| 49  | GF    | 468028.48  | 7870984.3  | 7.5                 | 1                                     | 2  | 2   |
| 49  | FF    | 468028.48  | 7870984.3  | 7.5                 | 1                                     | 2  | 2   |
| 50  | GF    | 468038.8   | 7870977.44 | 7.4                 | 1                                     | 2  | 2   |
| 50  | FF    | 468038.8   | 7870977.44 | 7.4                 | 1                                     | 2  | 2   |
| 51  | GF    | 468048.45  | 7870991.38 | 7.3                 | 1                                     | 1  | 1   |
| 51  | FF    | 468048.45  | 7870991.38 | 7.3                 | 1                                     | 1  | 1   |
| 52  | GF    | 468037.68  | 7870998.15 | 7.4                 | 1                                     | 1  | 1   |
| 52  | FF    | 468037.68  | 7870998.15 | 7.4                 | 1                                     | 1  | 1   |
| 53  | GF    | 468026.82  | 7871005.37 | 7.5                 | 1                                     | 1  | 1   |
| 53  | FF    | 468026.82  | 7871005.37 | 7.5                 | 1                                     | 1  | 1   |
| 54  | GF    | 468016.5   | 7871012.22 | 7.6                 | 1                                     | 1  | 1   |
| 54  | FF    | 468016.5   | 7871012.22 | 7.6                 | 1                                     | 1  | 1   |
| 55  | GF    | 468005.55  | 7871019.9  | 7.7                 | 1                                     | 1  | 1   |
| 55  | FF    | 468005.55  | 7871019.9  | 7.7                 | 1                                     | 1  | 1   |
| 56  | GF    | 467994.51  | 7871026.84 | 7.8                 | 1                                     | 1  | 1   |
| 56  | FF    | 467994.51  | 7871026.84 | 7.8                 | 1                                     | 1  | 1   |
| 57  | GF    | 467984.09  | 7871034.15 | 8.0                 | 1                                     | 1  | 1   |
| 57  | FF    | 467984.09  | 7871034.15 | 8.0                 | 1                                     | 2  | 2   |
| 58  | GF    | 467974.95  | 7871039.84 | 8.0                 | 1                                     | 1  | 1   |
| 58  | FF    | 467974.95  | 7871039.84 | 8.0                 | 1                                     | 2  | 2   |
| 59  | GF    | 467966.08  | 7871046.52 | 8.0                 | 1                                     | 1  | 1   |
| 59  | FF    | 467966.08  | 7871046.52 | 8.0                 | 1                                     | 2  | 2   |
| 60  | GF    | 467955.49  | 7871052.38 | 8.0                 | 1                                     | 1  | 1   |
| 60  | FF    | 467955.49  | 7871052.38 | 8.0                 | 1                                     | 2  | 2   |
| 61  | GF    | 467827.22  | 7871097.25 | 8.0                 | 1                                     | 2  | 2   |
| 61  | FF    | 467827.22  | 7871097.25 | 8.0                 | 1                                     | 2  | 2   |
| 62  | GF    | 467831.67  | 7871107.47 | 8.1                 | 1                                     | 2  | 2   |
| 62  | FF    | 467831.67  | 7871107.47 | 8.1                 | 1                                     | 2  | 2   |
| 63  | GF    | 467834.42  | 7871118.28 | 8.8                 | 1                                     | 2  | 2   |
| 63  | FF    | 467834.42  | 7871118.28 | 8.8                 | 1                                     | 2  | 2   |
| 64  | GF    | 467837.63  | 7871129.58 | 8.7                 | 1                                     | 1  | 1   |
| 64  | FF    | 467837.63  | 7871129.58 | 8.7                 | 1                                     | 2  | 2   |
| 65  | GF    | 467841.58  | 7871140.89 | 8.8                 | 1                                     | 1  | 1   |
| 65  | FF    | 467841.58  | 7871140.89 | 8.8                 | 1                                     | 1  | 1   |
| 66  | GF    | 467845.54  | 7871150.12 | 8.9                 | 1                                     | 1  | 1   |
| 66  | FF    | 467845.54  | 7871150.12 | 8.9                 | 1                                     | 1  | 1   |
| 67  | GF    | 467848.18  | 7871162.37 | 8.9                 | 1                                     | 1  | 1   |
| 67  | FF    | 467848.18  | 7871162.37 | 8.9                 | 1                                     | 1  | 1   |
| 68  | GF    | 467851.19  | 7871171.98 | 8.7                 | 1                                     | 1  | 1   |
| 68  | FF    | 467851.19  | 7871171.98 | 8.7                 | 1                                     | 1  | 1   |
| 69  | GF    | 467854.59  | 7871181.96 | 8.4                 | 1                                     | 1  | 1   |
| 69  | FF    | 467854.59  | 7871181.96 | 8.4                 | 1                                     | 1  | 1   |
| 70  | GF    | 467857.98  | 7871194.78 | 8.0                 | 1                                     | 1  | 1   |
| 70  | FF    | 467857.98  | 7871194.78 | 8.0                 | 1                                     | 1  | 1   |



| Lot | Floor | Coordinates and Ground Elevation at Centre of Lot, m |            |                     | QDC MP4.4 Road Traffic Noise Category | QDC MP4.4 Railway Traffic Noise Category | Applicable QDC MP4.4 Noise Category (Highest of Road and Railway) |
|-----|-------|--|------------|---------------------|---------------------------------------|--|---|
|     |       | Easting  | Northing   | Ground Elevation, m | Without Noise Barriers                | Without Noise Barriers                   | Without Noise Barriers  |
| 71  | GF    | 467860.99  | 7871203.63 | 8.0                 | 1                                     | 1  | 1   |
| 71  | FF    | 467860.99  | 7871203.63 | 8.0                 | 1                                     | 1  | 1   |
| 72  | GF    | 467863.44  | 7871213.05 | 8.0                 | 0                                     | 1  | 1   |
| 72  | FF    | 467863.44  | 7871213.05 | 8.0                 | 1                                     | 1  | 1   |
| 73  | GF    | 467866.83  | 7871225.11 | 8.0                 | 0                                     | 1  | 1   |
| 73  | FF    | 467866.83  | 7871225.11 | 8.0                 | 1                                     | 1  | 1   |
| 74  | GF    | 467870.51  | 7871236.24 | 8.0                 | 0                                     | 1  | 1   |
| 74  | FF    | 467870.51  | 7871236.24 | 8.0                 | 1                                     | 1  | 1   |
| 75  | GF    | 467873.71  | 7871247.52 | 8.0                 | 0                                     | 1  | 1   |
| 75  | FF    | 467873.71  | 7871247.52 | 8.0                 | 1                                     | 1  | 1   |
| 76  | GF    | 467876.35  | 7871256.72 | 8.0                 | 0                                     | 0  | 0   |
| 76  | FF    | 467876.35  | 7871256.72 | 8.0                 | 1                                     | 1  | 1   |
| 77  | GF    | 467879.93  | 7871267.74 | 8.0                 | 0                                     | 0  | 0   |
| 77  | FF    | 467879.93  | 7871267.74 | 8.0                 | 1                                     | 1  | 1   |
| 78  | GF    | 467882.5   | 7871277.82 | 8.0                 | 0                                     | 0  | 0   |
| 78  | FF    | 467882.5   | 7871277.82 | 8.0                 | 1                                     | 0  | 1   |
| 79  | GF    | 467885.83  | 7871288.47 | 8.0                 | 0                                     | 0  | 0   |
| 79  | FF    | 467885.83  | 7871288.47 | 8.0                 | 0                                     | 0  | 0   |
| 80  | GF    | 467889.41  | 7871299.18 | 8.0                 | 0                                     | 0  | 0   |
| 80  | FF    | 467889.41  | 7871299.18 | 8.0                 | 0                                     | 0  | 0   |
| 81  | GF    | 467892.86  | 7871310.82 | 8.0                 | 0                                     | 0  | 0   |
| 81  | FF    | 467892.86  | 7871310.82 | 8.0                 | 0                                     | 0  | 0   |
| 82  | GF    | 467896.39  | 7871321.66 | 8.0                 | 0                                     | 0  | 0   |
| 82  | FF    | 467896.39  | 7871321.66 | 8.0                 | 0                                     | 0  | 0   |
| 83  | GF    | 467899.76  | 7871331.36 | 8.0                 | 0                                     | 0  | 0   |
| 83  | FF    | 467899.76  | 7871331.36 | 8.0                 | 0                                     | 0  | 0   |
| 84  | GF    | 467902.42  | 7871342.98 | 7.6                 | 0                                     | 0  | 0   |
| 84  | FF    | 467902.42  | 7871342.98 | 7.6                 | 0                                     | 0  | 0   |
| 85  | GF    | 467906.98  | 7871356.37 | 7.8                 | 0                                     | 0  | 0   |
| 85  | FF    | 467906.98  | 7871356.37 | 7.8                 | 0                                     | 0  | 0   |
| 86  | GF    | 467909.79  | 7871368.87 | 7.6                 | 0                                     | 0  | 0   |
| 86  | FF    | 467909.79  | 7871368.87 | 7.6                 | 0                                     | 0  | 0   |
| 87  | GF    | 467914.13  | 7871382.63 | 7.4                 | 0                                     | 0  | 0   |
| 87  | FF    | 467914.13  | 7871382.63 | 7.4                 | 0                                     | 0  | 0   |
| 88  | GF    | 467917.71  | 7871393.18 | 7.4                 | 0                                     | 0  | 0   |
| 88  | FF    | 467917.71  | 7871393.18 | 7.4                 | 0                                     | 0  | 0   |
| 89  | GF    | 467872.96  | 7871147.61 | 8.0                 | 1                                     | 1  | 1   |
| 89  | FF    | 467872.96  | 7871147.61 | 8.0                 | 1                                     | 1  | 1   |
| 90  | GF    | 467878.37  | 7871160.46 | 8.0                 | 1                                     | 1  | 1   |
| 90  | FF    | 467878.37  | 7871160.46 | 8.0                 | 1                                     | 1  | 1   |
| 91  | GF    | 467881.52  | 7871171.68 | 8.0                 | 1                                     | 1  | 1   |
| 91  | FF    | 467881.52  | 7871171.68 | 8.0                 | 1                                     | 1  | 1   |
| 92  | GF    | 467884.3   | 7871184.7  | 8.0                 | 1                                     | 1  | 1   |
| 92  | FF    | 467884.3   | 7871184.7  | 8.0                 | 1                                     | 1  | 1   |
| 93  | GF    | 467888.54  | 7871196.38 | 8.0                 | 0                                     | 1  | 1   |
| 93  | FF    | 467888.54  | 7871196.38 | 8.0                 | 1                                     | 1  | 1   |
| 94  | GF    | 467905   | 7871190.52 | 8.0                 | 0                                     | 1  | 1   |



| Lot | Floor | Coordinates and Ground Elevation at Centre of Lot, m |            |                     | QDC MP4.4 Road Traffic Noise Category | QDC MP4.4 Railway Traffic Noise Category | Applicable QDC MP4.4 Noise Category (Highest of Road and Railway) |
|-----|-------|--|------------|---------------------|---------------------------------------|--|---|
|     |       | Easting  | Northing   | Ground Elevation, m | Without Noise Barriers                | Without Noise Barriers                   | Without Noise Barriers  |
| 94  | FF    | 467905   | 7871190.52 | 8.0                 | 1                                     | 1  | 1   |
| 95  | GF    | 467902.58  | 7871178.04 | 8.0                 | 1                                     | 1  | 1   |
| 95  | FF    | 467902.58  | 7871178.04 | 8.0                 | 1                                     | 1  | 1   |
| 96  | GF    | 467898.98  | 7871166.73 | 8.0                 | 1                                     | 1  | 1   |
| 96  | FF    | 467898.98  | 7871166.73 | 8.0                 | 1                                     | 1  | 1   |
| 97  | GF    | 467896.01  | 7871156.96 | 8.0                 | 1                                     | 1  | 1   |
| 97  | FF    | 467896.01  | 7871156.96 | 8.0                 | 1                                     | 1  | 1   |
| 98  | GF    | 467891.32  | 7871147.55 | 8.0                 | 1                                     | 1  | 1   |
| 98  | FF    | 467891.32  | 7871147.55 | 8.0                 | 1                                     | 1  | 1   |
| 99  | GF    | 467887.99  | 7871136.06 | 8.0                 | 1                                     | 1  | 1   |
| 99  | FF    | 467887.99  | 7871136.06 | 8.0                 | 1                                     | 1  | 1   |
| 100 | GF    | 467933.82  | 7871182.45 | 8.0                 | 0                                     | 1  | 1   |
| 100 | FF    | 467933.82  | 7871182.45 | 8.0                 | 1                                     | 1  | 1   |
| 101 | GF    | 467929.04  | 7871169.96 | 8.0                 | 0                                     | 1  | 1   |
| 101 | FF    | 467929.04  | 7871169.96 | 8.0                 | 1                                     | 1  | 1   |
| 102 | GF    | 467926.7   | 7871159.38 | 8.0                 | 1                                     | 1  | 1   |
| 102 | FF    | 467926.7   | 7871159.38 | 8.0                 | 1                                     | 1  | 1   |
| 103 | GF    | 467923.64  | 7871148.88 | 8.0                 | 1                                     | 1  | 1   |
| 103 | FF    | 467923.64  | 7871148.88 | 8.0                 | 1                                     | 1  | 1   |
| 104 | GF    | 467920.04  | 7871138.75 | 8.0                 | 1                                     | 1  | 1   |
| 104 | FF    | 467920.04  | 7871138.75 | 8.0                 | 1                                     | 1  | 1   |
| 105 | GF    | 467917.16  | 7871127.35 | 8.0                 | 1                                     | 1  | 1   |
| 105 | FF    | 467917.16  | 7871127.35 | 8.0                 | 1                                     | 1  | 1   |
| 106 | GF    | 467913.74  | 7871117.49 | 8.0                 | 1                                     | 1  | 1   |
| 106 | FF    | 467913.74  | 7871117.49 | 8.0                 | 1                                     | 1  | 1   |
| 107 | GF    | 467985.01  | 7871150.99 | 8.0                 | 0                                     | 1  | 1   |
| 107 | FF    | 467985.01  | 7871150.99 | 8.0                 | 1                                     | 1  | 1   |
| 108 | GF    | 467976.44  | 7871139.86 | 8.0                 | 0                                     | 1  | 1   |
| 108 | FF    | 467976.44  | 7871139.86 | 8.0                 | 1                                     | 1  | 1   |
| 109 | GF    | 467970.48  | 7871130.9  | 8.0                 | 1                                     | 1  | 1   |
| 109 | FF    | 467970.48  | 7871130.9  | 8.0                 | 1                                     | 1  | 1   |
| 110 | GF    | 467965.58  | 7871121.59 | 8.0                 | 1                                     | 1  | 1   |
| 110 | FF    | 467965.58  | 7871121.59 | 8.0                 | 1                                     | 1  | 1   |
| 111 | GF    | 467958.93  | 7871113.52 | 8.0                 | 1                                     | 1  | 1   |
| 111 | FF    | 467958.93  | 7871113.52 | 8.0                 | 1                                     | 1  | 1   |
| 112 | GF    | 467953.43  | 7871104.65 | 8.0                 | 1                                     | 1  | 1   |
| 112 | FF    | 467953.43  | 7871104.65 | 8.0                 | 1                                     | 1  | 1   |
| 113 | GF    | 467946.03  | 7871092.34 | 8.0                 | 1                                     | 1  | 1   |
| 113 | FF    | 467946.03  | 7871092.34 | 8.0                 | 1                                     | 1  | 1   |
| 114 | GF    | 467979.13  | 7871093.83 | 8.0                 | 1                                     | 1  | 1   |
| 114 | FF    | 467979.13  | 7871093.83 | 8.0                 | 1                                     | 1  | 1   |
| 115 | GF    | 467988.99  | 7871088.06 | 8.0                 | 1                                     | 1  | 1   |
| 115 | FF    | 467988.99  | 7871088.06 | 8.0                 | 1                                     | 1  | 1   |
| 116 | GF    | 467998.22  | 7871081.92 | 8.0                 | 1                                     | 1  | 1   |
| 116 | FF    | 467998.22  | 7871081.92 | 8.0                 | 1                                     | 1  | 1   |
| 117 | GF    | 468008.54  | 7871075.06 | 7.9                 | 1                                     | 1  | 1   |
| 117 | FF    | 468008.54  | 7871075.06 | 7.9                 | 1                                     | 1  | 1   |



| Lot | Floor | Coordinates and Ground Elevation at Centre of Lot, m |            |                     | QDC MP4.4 Road Traffic Noise Category | QDC MP4.4 Railway Traffic Noise Category | Applicable QDC MP4.4 Noise Category (Highest of Road and Railway) |
|-----|-------|--|------------|---------------------|---------------------------------------|--|---|
|     |       | Easting  | Northing   | Ground Elevation, m | Without Noise Barriers                | Without Noise Barriers                   | Without Noise Barriers  |
| 118 | GF    | 468019.68  | 7871067.66 | 7.8                 | 1                                     | 1  | 1   |
| 118 | FF    | 468019.68  | 7871067.66 | 7.8                 | 1                                     | 1  | 1   |
| 119 | GF    | 468030.9   | 7871059.81 | 7.7                 | 1                                     | 1  | 1   |
| 119 | FF    | 468030.9   | 7871059.81 | 7.7                 | 1                                     | 1  | 1   |
| 120 | GF    | 468040.04  | 7871054.13 | 7.6                 | 1                                     | 1  | 1   |
| 120 | FF    | 468040.04  | 7871054.13 | 7.6                 | 1                                     | 1  | 1   |
| 121 | GF    | 468051.27  | 7871046.28 | 7.5                 | 1                                     | 1  | 1   |
| 121 | FF    | 468051.27  | 7871046.28 | 7.5                 | 1                                     | 1  | 1   |
| 122 | GF    | 468062.76  | 7871039.42 | 7.4                 | 1                                     | 1  | 1   |
| 122 | FF    | 468062.76  | 7871039.42 | 7.4                 | 1                                     | 1  | 1   |
| 123 | GF    | 468053.92  | 7871024.94 | 7.4                 | 1                                     | 1  | 1   |
| 123 | FF    | 468053.92  | 7871024.94 | 7.4                 | 1                                     | 1  | 1   |
| 124 | GF    | 468042.52  | 7871032.52 | 7.5                 | 1                                     | 1  | 1   |
| 124 | FF    | 468042.52  | 7871032.52 | 7.5                 | 1                                     | 1  | 1   |
| 125 | GF    | 468031.38  | 7871038.74 | 7.6                 | 1                                     | 1  | 1   |
| 125 | FF    | 468031.38  | 7871038.74 | 7.6                 | 1                                     | 1  | 1   |
| 126 | GF    | 468020.43  | 7871045.24 | 7.8                 | 1                                     | 1  | 1   |
| 126 | FF    | 468020.43  | 7871045.24 | 7.8                 | 1                                     | 1  | 1   |
| 127 | GF    | 468009.39  | 7871052.19 | 7.9                 | 1                                     | 1  | 1   |
| 127 | FF    | 468009.39  | 7871052.19 | 7.9                 | 1                                     | 1  | 1   |
| 128 | GF    | 467998.25  | 7871060.76 | 8.0                 | 1                                     | 1  | 1   |
| 128 | FF    | 467998.25  | 7871060.76 | 8.0                 | 1                                     | 1  | 1   |
| 129 | GF    | 467988.39  | 7871067.71 | 8.0                 | 1                                     | 1  | 1   |
| 129 | FF    | 467988.39  | 7871067.71 | 8.0                 | 1                                     | 1  | 1   |
| 130 | GF    | 467979.34  | 7871072.94 | 8.0                 | 1                                     | 1  | 1   |
| 130 | FF    | 467979.34  | 7871072.94 | 8.0                 | 1                                     | 1  | 1   |
| 131 | GF    | 467969.65  | 7871080.16 | 8.0                 | 1                                     | 1  | 1   |
| 131 | FF    | 467969.65  | 7871080.16 | 8.0                 | 1                                     | 1  | 1   |
| 132 | GF    | 468005.66  | 7871133.75 | 8.0                 | 0                                     | 1  | 1   |
| 132 | FF    | 468005.66  | 7871133.75 | 8.0                 | 1                                     | 1  | 1   |
| 133 | GF    | 468016.16  | 7871127.16 | 8.0                 | 0                                     | 1  | 1   |
| 133 | FF    | 468016.16  | 7871127.16 | 8.0                 | 1                                     | 1  | 1   |
| 134 | GF    | 468025.12  | 7871121.21 | 8.0                 | 0                                     | 1  | 1   |
| 134 | FF    | 468025.12  | 7871121.21 | 8.0                 | 1                                     | 1  | 1   |
| 135 | GF    | 468034.98  | 7871114.26 | 8.0                 | 0                                     | 1  | 1   |
| 135 | FF    | 468034.98  | 7871114.26 | 8.0                 | 1                                     | 1  | 1   |
| 136 | GF    | 468045.39  | 7871106.95 | 7.8                 | 0                                     | 1  | 1   |
| 136 | FF    | 468045.39  | 7871106.95 | 7.8                 | 1                                     | 1  | 1   |
| 137 | GF    | 468056.26  | 7871099.73 | 7.7                 | 0                                     | 1  | 1   |
| 137 | FF    | 468056.26  | 7871099.73 | 7.7                 | 1                                     | 1  | 1   |
| 138 | GF    | 468065.67  | 7871093.86 | 7.6                 | 0                                     | 1  | 1   |
| 138 | FF    | 468065.67  | 7871093.86 | 7.6                 | 1                                     | 1  | 1   |
| 139 | GF    | 468075.17  | 7871087.55 | 7.4                 | 0                                     | 1  | 1   |
| 139 | FF    | 468075.17  | 7871087.55 | 7.4                 | 1                                     | 1  | 1   |
| 140 | GF    | 468068.6   | 7871069.99 | 7.4                 | 0                                     | 1  | 1   |
| 140 | FF    | 468068.6   | 7871069.99 | 7.4                 | 1                                     | 1  | 1   |
| 141 | GF    | 468056.83  | 7871078.21 | 7.5                 | 0                                     | 1  | 1   |



| Lot | Floor | Coordinates and Ground Elevation at Centre of Lot, m |            |                     | QDC MP4.4 Road Traffic Noise Category | QDC MP4.4 Railway Traffic Noise Category | Applicable QDC MP4.4 Noise Category (Highest of Road and Railway) |
|-----|-------|--|------------|---------------------|---------------------------------------|--|---|
|     |       | Easting  | Northing   | Ground Elevation, m | Without Noise Barriers                | Without Noise Barriers                   | Without Noise Barriers  |
| 141 | FF    | 468056.83  | 7871078.21 | 7.5                 | 1                                     | 1  | 1   |
| 142 | GF    | 468047.33  | 7871084.52 | 7.6                 | 0                                     | 1  | 1   |
| 142 | FF    | 468047.33  | 7871084.52 | 7.6                 | 1                                     | 1  | 1   |
| 143 | GF    | 468036.1   | 7871092.38 | 7.8                 | 0                                     | 1  | 1   |
| 143 | FF    | 468036.1   | 7871092.38 | 7.8                 | 1                                     | 1  | 1   |
| 144 | GF    | 468024.79  | 7871099.5  | 7.9                 | 1                                     | 1  | 1   |
| 144 | FF    | 468024.79  | 7871099.5  | 7.9                 | 1                                     | 1  | 1   |
| 145 | GF    | 468014.02  | 7871106.27 | 8.0                 | 1                                     | 1  | 1   |
| 145 | FF    | 468014.02  | 7871106.27 | 8.0                 | 1                                     | 1  | 1   |
| 146 | GF    | 468005.96  | 7871112.41 | 8.0                 | 1                                     | 1  | 1   |
| 146 | FF    | 468005.96  | 7871112.41 | 8.0                 | 1                                     | 1  | 1   |
| 147 | GF    | 467995.55  | 7871118.54 | 8.0                 | 1                                     | 1  | 1   |
| 147 | FF    | 467995.55  | 7871118.54 | 8.0                 | 1                                     | 1  | 1   |
| 148 | GF    | 467989.28  | 7871202.18 | 8.0                 | 0                                     | 0  | 0   |
| 148 | FF    | 467989.28  | 7871202.18 | 8.0                 | 1                                     | 0  | 1   |
| 149 | GF    | 468000.05  | 7871195.42 | 8.0                 | 0                                     | 0  | 0   |
| 149 | FF    | 468000.05  | 7871195.42 | 8.0                 | 1                                     | 0  | 1   |
| 150 | GF    | 468009.38  | 7871188.83 | 8.0                 | 0                                     | 0  | 0   |
| 150 | FF    | 468009.38  | 7871188.83 | 8.0                 | 1                                     | 0  | 1   |
| 151 | GF    | 468021.32  | 7871180.89 | 8.0                 | 0                                     | 0  | 0   |
| 151 | FF    | 468021.32  | 7871180.89 | 8.0                 | 1                                     | 0  | 1   |
| 152 | GF    | 468029.47  | 7871175.47 | 8.0                 | 0                                     | 0  | 0   |
| 152 | FF    | 468029.47  | 7871175.47 | 8.0                 | 1                                     | 0  | 1   |
| 153 | GF    | 468038.89  | 7871168.43 | 8.0                 | 0                                     | 0  | 0   |
| 153 | FF    | 468038.89  | 7871168.43 | 8.0                 | 1                                     | 0  | 1   |
| 154 | GF    | 468050.65  | 7871161.4  | 8.0                 | 0                                     | 0  | 0   |
| 154 | FF    | 468050.65  | 7871161.4  | 8.0                 | 1                                     | 0  | 1   |
| 155 | GF    | 468059.61  | 7871156.62 | 7.9                 | 0                                     | 0  | 0   |
| 155 | FF    | 468059.61  | 7871156.62 | 7.9                 | 1                                     | 0  | 1   |
| 156 | GF    | 468068.48  | 7871148.76 | 7.8                 | 0                                     | 0  | 0   |
| 156 | FF    | 468068.48  | 7871148.76 | 7.8                 | 1                                     | 0  | 1   |
| 157 | GF    | 468079.44  | 7871142.26 | 7.7                 | 0                                     | 0  | 0   |
| 157 | FF    | 468079.44  | 7871142.26 | 7.7                 | 1                                     | 0  | 1   |
| 158 | GF    | 468089.39  | 7871134.86 | 7.6                 | 0                                     | 0  | 0   |
| 158 | FF    | 468089.39  | 7871134.86 | 7.6                 | 1                                     | 0  | 1   |
| 159 | GF    | 468100.62  | 7871128.19 | 7.4                 | 0                                     | 0  | 0   |
| 159 | FF    | 468100.62  | 7871128.19 | 7.4                 | 0                                     | 0  | 0   |
| 160 | GF    | 468092.77  | 7871115.79 | 7.4                 | 0                                     | 0  | 0   |
| 160 | FF    | 468092.77  | 7871115.79 | 7.4                 | 1                                     | 1  | 1   |
| 161 | GF    | 468080.46  | 7871122.01 | 7.6                 | 0                                     | 0  | 0   |
| 161 | FF    | 468080.46  | 7871122.01 | 7.6                 | 1                                     | 1  | 1   |
| 162 | GF    | 468069.87  | 7871127.87 | 7.7                 | 0                                     | 0  | 0   |
| 162 | FF    | 468069.87  | 7871127.87 | 7.7                 | 1                                     | 1  | 1   |
| 163 | GF    | 468060.19  | 7871133.92 | 7.8                 | 0                                     | 0  | 0   |
| 163 | FF    | 468060.19  | 7871133.92 | 7.8                 | 1                                     | 1  | 1   |
| 164 | GF    | 468049.78  | 7871141.23 | 8.0                 | 0                                     | 0  | 0   |
| 164 | FF    | 468049.78  | 7871141.23 | 8.0                 | 1                                     | 1  | 1   |



| Lot | Floor | Coordinates and Ground Elevation at Centre of Lot, m |            |                     | QDC MP4.4 Road Traffic Noise Category | QDC MP4.4 Railway Traffic Noise Category | Applicable QDC MP4.4 Noise Category (Highest of Road and Railway) |
|-----|-------|--|------------|---------------------|---------------------------------------|--|---|
|     |       | Easting  | Northing   | Ground Elevation, m | Without Noise Barriers                | Without Noise Barriers                   | Without Noise Barriers  |
| 165 | GF    | 468041.09  | 7871147    | 8.0                 | 0                                     | 0  | 0   |
| 165 | FF    | 468041.09  | 7871147    | 8.0                 | 1                                     | 1  | 1   |
| 166 | GF    | 468030.5   | 7871154.04 | 8.0                 | 0                                     | 0  | 0   |
| 166 | FF    | 468030.5   | 7871154.04 | 8.0                 | 1                                     | 1  | 1   |
| 167 | GF    | 468020.45  | 7871160.72 | 8.0                 | 0                                     | 0  | 0   |
| 167 | FF    | 468020.45  | 7871160.72 | 8.0                 | 1                                     | 1  | 1   |
| 168 | GF    | 468011.22  | 7871166.86 | 8.0                 | 0                                     | 0  | 0   |
| 168 | FF    | 468011.22  | 7871166.86 | 8.0                 | 1                                     | 1  | 1   |
| 169 | GF    | 467999.54  | 7871174.62 | 8.0                 | 0                                     | 0  | 0   |
| 169 | FF    | 467999.54  | 7871174.62 | 8.0                 | 1                                     | 1  | 1   |
| 170 | GF    | 467988.86  | 7871180.93 | 8.0                 | 0                                     | 0  | 0   |
| 170 | FF    | 467988.86  | 7871180.93 | 8.0                 | 1                                     | 1  | 1   |
| 171 | GF    | 467978.63  | 7871188.51 | 8.0                 | 0                                     | 0  | 0   |
| 171 | FF    | 467978.63  | 7871188.51 | 8.0                 | 1                                     | 1  | 1   |
| 172 | GF    | 468171.46  | 7871227.13 | 7.0                 | 0                                     | 0  | 0   |
| 172 | FF    | 468171.46  | 7871227.13 | 7.0                 | 0                                     | 0  | 0   |
| 173 | GF    | 468166.99  | 7871215.83 | 7.1                 | 0                                     | 0  | 0   |
| 173 | FF    | 468166.99  | 7871215.83 | 7.1                 | 0                                     | 0  | 0   |
| 174 | GF    | 468163.3   | 7871203.8  | 7.1                 | 0                                     | 0  | 0   |
| 174 | FF    | 468163.3   | 7871203.8  | 7.1                 | 0                                     | 0  | 0   |
| 175 | GF    | 468159.25  | 7871191.22 | 7.1                 | 0                                     | 0  | 0   |
| 175 | FF    | 468159.25  | 7871191.22 | 7.1                 | 0                                     | 0  | 0   |
| 176 | GF    | 468137.95  | 7871137.83 | 7.1                 | 0                                     | 0  | 0   |
| 176 | FF    | 468137.95  | 7871137.83 | 7.1                 | 0                                     | 0  | 0   |
| 177 | GF    | 468132.77  | 7871127.07 | 7.1                 | 0                                     | 0  | 0   |
| 177 | FF    | 468132.77  | 7871127.07 | 7.1                 | 0                                     | 0  | 0   |
| 178 | GF    | 468125.52  | 7871117.09 | 7.1                 | 0                                     | 0  | 0   |
| 178 | FF    | 468125.52  | 7871117.09 | 7.1                 | 0                                     | 1  | 1   |
| 179 | GF    | 468118.34  | 7871105.83 | 7.1                 | 0                                     | 1  | 1   |
| 179 | FF    | 468118.34  | 7871105.83 | 7.1                 | 0                                     | 1  | 1   |
| 180 | GF    | 468110.81  | 7871094.49 | 7.1                 | 0                                     | 1  | 1   |
| 180 | FF    | 468110.81  | 7871094.49 | 7.1                 | 1                                     | 1  | 1   |
| 181 | GF    | 468104.84  | 7871081.8  | 7.1                 | 0                                     | 1  | 1   |
| 181 | FF    | 468104.84  | 7871081.8  | 7.1                 | 1                                     | 1  | 1   |
| 182 | GF    | 468101.23  | 7871068.48 | 7.1                 | 0                                     | 1  | 1   |
| 182 | FF    | 468101.23  | 7871068.48 | 7.1                 | 1                                     | 1  | 1   |
| 183 | GF    | 468098.26  | 7871056.58 | 7.1                 | 0                                     | 1  | 1   |
| 183 | FF    | 468098.26  | 7871056.58 | 7.1                 | 1                                     | 1  | 1   |
| 184 | GF    | 468095.49  | 7871043.9  | 7.1                 | 0                                     | 1  | 1   |
| 184 | FF    | 468095.49  | 7871043.9  | 7.1                 | 1                                     | 1  | 1   |
| 185 | GF    | 468008.57  | 7871246.53 | 8.0                 | 0                                     | 0  | 0   |
| 185 | FF    | 468008.57  | 7871246.53 | 8.0                 | 0                                     | 0  | 0   |
| 186 | GF    | 468019.34  | 7871239.77 | 8.0                 | 0                                     | 0  | 0   |
| 186 | FF    | 468019.34  | 7871239.77 | 8.0                 | 0                                     | 0  | 0   |
| 187 | GF    | 468029.84  | 7871233.18 | 8.0                 | 0                                     | 0  | 0   |
| 187 | FF    | 468029.84  | 7871233.18 | 8.0                 | 0                                     | 0  | 0   |
| 188 | GF    | 468039.34  | 7871225.69 | 8.0                 | 0                                     | 0  | 0   |



| Lot | Floor | Coordinates and Ground Elevation at Centre of Lot, m |            |                     | QDC MP4.4 Road Traffic Noise Category | QDC MP4.4 Railway Traffic Noise Category | Applicable QDC MP4.4 Noise Category (Highest of Road and Railway) |
|-----|-------|--|------------|---------------------|---------------------------------------|--|---|
|     |       | Easting  | Northing   | Ground Elevation, m | Without Noise Barriers                | Without Noise Barriers                   | Without Noise Barriers  |
| 188 | FF    | 468039.34  | 7871225.69 | 8.0                 | 0                                     | 0  | 0   |
| 189 | GF    | 468049.3   | 7871219.46 | 8.0                 | 0                                     | 0  | 0   |
| 189 | FF    | 468049.3   | 7871219.46 | 8.0                 | 0                                     | 0  | 0   |
| 190 | GF    | 468059.35  | 7871211.61 | 7.9                 | 0                                     | 0  | 0   |
| 190 | FF    | 468059.35  | 7871211.61 | 7.9                 | 0                                     | 0  | 0   |
| 191 | GF    | 468069.3   | 7871205.38 | 7.8                 | 0                                     | 0  | 0   |
| 191 | FF    | 468069.3   | 7871205.38 | 7.8                 | 0                                     | 0  | 0   |
| 192 | GF    | 468079.17  | 7871199.61 | 7.8                 | 0                                     | 0  | 0   |
| 192 | FF    | 468079.17  | 7871199.61 | 7.8                 | 0                                     | 0  | 0   |
| 193 | GF    | 468090.85  | 7871191.85 | 7.7                 | 0                                     | 0  | 0   |
| 193 | FF    | 468090.85  | 7871191.85 | 7.7                 | 0                                     | 0  | 0   |
| 194 | GF    | 468101.62  | 7871183.91 | 7.6                 | 0                                     | 0  | 0   |
| 194 | FF    | 468101.62  | 7871183.91 | 7.6                 | 0                                     | 0  | 0   |
| 195 | GF    | 468112.03  | 7871177.77 | 7.5                 | 0                                     | 0  | 0   |
| 195 | FF    | 468112.03  | 7871177.77 | 7.5                 | 0                                     | 0  | 0   |
| 196 | GF    | 468121.44  | 7871170.73 | 7.4                 | 0                                     | 0  | 0   |
| 196 | FF    | 468121.44  | 7871170.73 | 7.4                 | 0                                     | 0  | 0   |
| 197 | GF    | 468113.05  | 7871157.52 | 7.4                 | 0                                     | 0  | 0   |
| 197 | FF    | 468113.05  | 7871157.52 | 7.4                 | 0                                     | 0  | 0   |
| 198 | GF    | 468102.91  | 7871163.47 | 7.5                 | 0                                     | 0  | 0   |
| 198 | FF    | 468102.91  | 7871163.47 | 7.5                 | 0                                     | 0  | 0   |
| 199 | GF    | 468092.23  | 7871169.79 | 7.6                 | 0                                     | 0  | 0   |
| 199 | FF    | 468092.23  | 7871169.79 | 7.6                 | 0                                     | 0  | 0   |
| 200 | GF    | 468080.74  | 7871176.64 | 7.7                 | 0                                     | 0  | 0   |
| 200 | FF    | 468080.74  | 7871176.64 | 7.7                 | 0                                     | 0  | 0   |
| 201 | GF    | 468071.05  | 7871183.86 | 7.8                 | 0                                     | 0  | 0   |
| 201 | FF    | 468071.05  | 7871183.86 | 7.8                 | 0                                     | 0  | 0   |
| 202 | GF    | 468059.92  | 7871191.26 | 7.9                 | 0                                     | 0  | 0   |
| 202 | FF    | 468059.92  | 7871191.26 | 7.9                 | 0                                     | 0  | 0   |
| 203 | GF    | 468050.05  | 7871198.21 | 8.0                 | 0                                     | 0  | 0   |
| 203 | FF    | 468050.05  | 7871198.21 | 8.0                 | 0                                     | 0  | 0   |
| 204 | GF    | 468040.01  | 7871204.89 | 8.0                 | 0                                     | 0  | 0   |
| 204 | FF    | 468040.01  | 7871204.89 | 8.0                 | 0                                     | 0  | 0   |
| 205 | GF    | 468030.32  | 7871210.94 | 8.0                 | 0                                     | 0  | 0   |
| 205 | FF    | 468030.32  | 7871210.94 | 8.0                 | 0                                     | 0  | 0   |
| 206 | GF    | 468020.36  | 7871218.34 | 8.0                 | 0                                     | 0  | 0   |
| 206 | FF    | 468020.36  | 7871218.34 | 8.0                 | 0                                     | 0  | 0   |
| 207 | GF    | 468010.13  | 7871224.74 | 8.0                 | 0                                     | 0  | 0   |
| 207 | FF    | 468010.13  | 7871224.74 | 8.0                 | 0                                     | 0  | 0   |
| 208 | GF    | 467999.36  | 7871231.51 | 8.0                 | 0                                     | 0  | 0   |
| 208 | FF    | 467999.36  | 7871231.51 | 8.0                 | 0                                     | 0  | 0   |
| 209 | GF    | 468033.42  | 7871285.36 | 8.0                 | 0                                     | 0  | 0   |
| 209 | FF    | 468033.42  | 7871285.36 | 8.0                 | 0                                     | 0  | 0   |
| 210 | GF    | 468044.29  | 7871278.14 | 8.0                 | 0                                     | 0  | 0   |
| 210 | FF    | 468044.29  | 7871278.14 | 8.0                 | 0                                     | 0  | 0   |
| 211 | GF    | 468054.52  | 7871270.56 | 8.0                 | 0                                     | 0  | 0   |
| 211 | FF    | 468054.52  | 7871270.56 | 8.0                 | 0                                     | 0  | 0   |



| Lot | Floor | Coordinates and Ground Elevation at Centre of Lot, m |            |                     | QDC MP4.4 Road Traffic Noise Category | QDC MP4.4 Railway Traffic Noise Category | Applicable QDC MP4.4 Noise Category (Highest of Road and Railway) |
|-----|-------|--|------------|---------------------|---------------------------------------|--|---|
|     |       | Easting  | Northing   | Ground Elevation, m | Without Noise Barriers                | Without Noise Barriers                   | Without Noise Barriers  |
| 212 | GF    | 468064.02  | 7871264.24 | 8.0                 | 0                                     | 0  | 0   |
| 212 | FF    | 468064.02  | 7871264.24 | 8.0                 | 0                                     | 0  | 0   |
| 213 | GF    | 468075.52  | 7871257.38 | 7.9                 | 0                                     | 0  | 0   |
| 213 | FF    | 468075.52  | 7871257.38 | 7.9                 | 0                                     | 0  | 0   |
| 214 | GF    | 468085.74  | 7871250.98 | 7.8                 | 0                                     | 0  | 0   |
| 214 | FF    | 468085.74  | 7871250.98 | 7.8                 | 0                                     | 0  | 0   |
| 215 | GF    | 468096.24  | 7871243.21 | 7.7                 | 0                                     | 0  | 0   |
| 215 | FF    | 468096.24  | 7871243.21 | 7.7                 | 0                                     | 0  | 0   |
| 216 | GF    | 468106.11  | 7871236.27 | 7.6                 | 0                                     | 0  | 0   |
| 216 | FF    | 468106.11  | 7871236.27 | 7.6                 | 0                                     | 0  | 0   |
| 217 | GF    | 468117.43  | 7871229.14 | 7.5                 | 0                                     | 0  | 0   |
| 217 | FF    | 468117.43  | 7871229.14 | 7.5                 | 0                                     | 0  | 0   |
| 218 | GF    | 468126.03  | 7871222.64 | 7.4                 | 0                                     | 0  | 0   |
| 218 | FF    | 468126.03  | 7871222.64 | 7.4                 | 0                                     | 0  | 0   |
| 219 | GF    | 468136.52  | 7871217.23 | 7.3                 | 0                                     | 0  | 0   |
| 219 | FF    | 468136.52  | 7871217.23 | 7.3                 | 0                                     | 0  | 0   |
| 220 | GF    | 468128.68  | 7871202.48 | 7.4                 | 0                                     | 0  | 0   |
| 220 | FF    | 468128.68  | 7871202.48 | 7.4                 | 0                                     | 0  | 0   |
| 221 | GF    | 468117.45  | 7871209.15 | 7.5                 | 0                                     | 0  | 0   |
| 221 | FF    | 468117.45  | 7871209.15 | 7.5                 | 0                                     | 0  | 0   |
| 222 | GF    | 468107.5   | 7871215.38 | 7.5                 | 0                                     | 0  | 0   |
| 222 | FF    | 468107.5   | 7871215.38 | 7.5                 | 0                                     | 0  | 0   |
| 223 | GF    | 468097.54  | 7871221.6  | 7.6                 | 0                                     | 0  | 0   |
| 223 | FF    | 468097.54  | 7871221.6  | 7.6                 | 0                                     | 0  | 0   |
| 224 | GF    | 468087.49  | 7871228.28 | 7.7                 | 0                                     | 0  | 0   |
| 224 | FF    | 468087.49  | 7871228.28 | 7.7                 | 0                                     | 0  | 0   |
| 225 | GF    | 468075.45  | 7871236.67 | 7.8                 | 0                                     | 0  | 0   |
| 225 | FF    | 468075.45  | 7871236.67 | 7.8                 | 0                                     | 0  | 0   |
| 226 | GF    | 468065.32  | 7871242.63 | 7.9                 | 0                                     | 0  | 0   |
| 226 | FF    | 468065.32  | 7871242.63 | 7.9                 | 0                                     | 0  | 0   |
| 227 | GF    | 468055   | 7871249.49 | 8.0                 | 0                                     | 0  | 0   |
| 227 | FF    | 468055   | 7871249.49 | 8.0                 | 0                                     | 0  | 0   |
| 228 | GF    | 468045.04  | 7871256.89 | 8.0                 | 0                                     | 0  | 0   |
| 228 | FF    | 468045.04  | 7871256.89 | 8.0                 | 0                                     | 0  | 0   |
| 229 | GF    | 468035.63  | 7871262.75 | 8.0                 | 0                                     | 0  | 0   |
| 229 | FF    | 468035.63  | 7871262.75 | 8.0                 | 0                                     | 0  | 0   |
| 230 | GF    | 468023.41  | 7871270.87 | 8.0                 | 0                                     | 0  | 0   |
| 230 | FF    | 468023.41  | 7871270.87 | 8.0                 | 0                                     | 0  | 0   |
| 231 | GF    | 467970.74  | 7871308.47 | 8.0                 | 0                                     | 0  | 0   |
| 231 | FF    | 467970.74  | 7871308.47 | 8.0                 | 0                                     | 0  | 0   |
| 232 | GF    | 467968.13  | 7871296.89 | 8.0                 | 0                                     | 0  | 0   |
| 232 | FF    | 467968.13  | 7871296.89 | 8.0                 | 0                                     | 0  | 0   |
| 233 | GF    | 467964.89  | 7871284.95 | 8.0                 | 0                                     | 0  | 0   |
| 233 | FF    | 467964.89  | 7871284.95 | 8.0                 | 0                                     | 0  | 0   |
| 234 | GF    | 467960.29  | 7871273.91 | 8.0                 | 0                                     | 0  | 0   |
| 234 | FF    | 467960.29  | 7871273.91 | 8.0                 | 0                                     | 0  | 0   |
| 235 | GF    | 467957.6   | 7871263.96 | 8.0                 | 0                                     | 0  | 0   |



| Lot | Floor | Coordinates and Ground Elevation at Centre of Lot, m |            |                     | QDC MP4.4 Road Traffic Noise Category | QDC MP4.4 Railway Traffic Noise Category | Applicable QDC MP4.4 Noise Category (Highest of Road and Railway) |
|-----|-------|--|------------|---------------------|---------------------------------------|--|---|
|     |       | Easting  | Northing   | Ground Elevation, m | Without Noise Barriers                | Without Noise Barriers                   | Without Noise Barriers  |
| 235 | FF    | 467957.6   | 7871263.96 | 8.0                 | 0                                     | 0  | 0   |
| 236 | GF    | 467953.97  | 7871252.71 | 8.0                 | 0                                     | 0  | 0   |
| 236 | FF    | 467953.97  | 7871252.71 | 8.0                 | 0                                     | 0  | 0   |
| 237 | GF    | 467951.1   | 7871242.49 | 8.0                 | 0                                     | 0  | 0   |
| 237 | FF    | 467951.1   | 7871242.49 | 8.0                 | 0                                     | 0  | 0   |
| 238 | GF    | 467947.67  | 7871231.45 | 8.0                 | 0                                     | 0  | 0   |
| 238 | FF    | 467947.67  | 7871231.45 | 8.0                 | 1                                     | 0  | 1   |
| 239 | GF    | 467944.43  | 7871221.86 | 8.0                 | 0                                     | 0  | 0   |
| 239 | FF    | 467944.43  | 7871221.86 | 8.0                 | 1                                     | 1  | 1   |
| 240 | GF    | 467940.65  | 7871209.11 | 8.0                 | 0                                     | 1  | 1   |
| 240 | FF    | 467940.65  | 7871209.11 | 8.0                 | 1                                     | 1  | 1   |
| 241 | GF    | 467951.09  | 7871342.17 | 8.0                 | 0                                     | 0  | 0   |
| 241 | FF    | 467951.09  | 7871342.17 | 8.0                 | 0                                     | 0  | 0   |
| 242 | GF    | 467943.33  | 7871317.24 | 8.0                 | 0                                     | 0  | 0   |
| 242 | FF    | 467943.33  | 7871317.24 | 8.0                 | 0                                     | 0  | 0   |
| 243 | GF    | 467941.9   | 7871305.6  | 8.0                 | 0                                     | 0  | 0   |
| 243 | FF    | 467941.9   | 7871305.6  | 8.0                 | 0                                     | 0  | 0   |
| 244 | GF    | 467935.34  | 7871294.8  | 8.0                 | 0                                     | 0  | 0   |
| 244 | FF    | 467935.34  | 7871294.8  | 8.0                 | 0                                     | 0  | 0   |
| 245 | GF    | 467933.74  | 7871282.55 | 8.0                 | 0                                     | 0  | 0   |
| 245 | FF    | 467933.74  | 7871282.55 | 8.0                 | 0                                     | 0  | 0   |
| 246 | GF    | 467928.5   | 7871271.55 | 8.0                 | 0                                     | 0  | 0   |
| 246 | FF    | 467928.5   | 7871271.55 | 8.0                 | 0                                     | 0  | 0   |
| 247 | GF    | 467924.81  | 7871260.69 | 8.0                 | 0                                     | 0  | 0   |
| 247 | FF    | 467924.81  | 7871260.69 | 8.0                 | 0                                     | 0  | 0   |
| 248 | GF    | 467921.39  | 7871250.83 | 8.0                 | 0                                     | 0  | 0   |
| 248 | FF    | 467921.39  | 7871250.83 | 8.0                 | 1                                     | 0  | 1   |
| 249 | GF    | 467919.23  | 7871240.52 | 8.0                 | 0                                     | 0  | 0   |
| 249 | FF    | 467919.23  | 7871240.52 | 8.0                 | 1                                     | 1  | 1   |
| 250 | GF    | 467915.72  | 7871228.75 | 8.0                 | 0                                     | 0  | 0   |
| 250 | FF    | 467915.72  | 7871228.75 | 8.0                 | 1                                     | 1  | 1   |
| 251 | GF    | 467912.12  | 7871216.27 | 8.0                 | 0                                     | 1  | 1   |
| 251 | FF    | 467912.12  | 7871216.27 | 8.0                 | 1                                     | 1  | 1   |
| 252 | GF    | 467894.39  | 7871222.58 | 8.0                 | 0                                     | 1  | 1   |
| 252 | FF    | 467894.39  | 7871222.58 | 8.0                 | 1                                     | 1  | 1   |
| 253 | GF    | 467898.53  | 7871234.7  | 8.0                 | 0                                     | 1  | 1   |
| 253 | FF    | 467898.53  | 7871234.7  | 8.0                 | 1                                     | 1  | 1   |
| 254 | GF    | 467901.95  | 7871246.91 | 8.0                 | 0                                     | 0  | 0   |
| 254 | FF    | 467901.95  | 7871246.91 | 8.0                 | 1                                     | 1  | 1   |
| 255 | GF    | 467905.01  | 7871256.23 | 8.0                 | 0                                     | 0  | 0   |
| 255 | FF    | 467905.01  | 7871256.23 | 8.0                 | 1                                     | 0  | 1   |
| 256 | GF    | 467908.45  | 7871265.2  | 8.0                 | 0                                     | 0  | 0   |
| 256 | FF    | 467908.45  | 7871265.2  | 8.0                 | 1                                     | 0  | 1   |
| 257 | GF    | 467911.31  | 7871277.49 | 8.0                 | 0                                     | 0  | 0   |
| 257 | FF    | 467911.31  | 7871277.49 | 8.0                 | 0                                     | 0  | 0   |
| 258 | GF    | 467916.39  | 7871287.84 | 8.0                 | 0                                     | 0  | 0   |
| 258 | FF    | 467916.39  | 7871287.84 | 8.0                 | 0                                     | 0  | 0   |

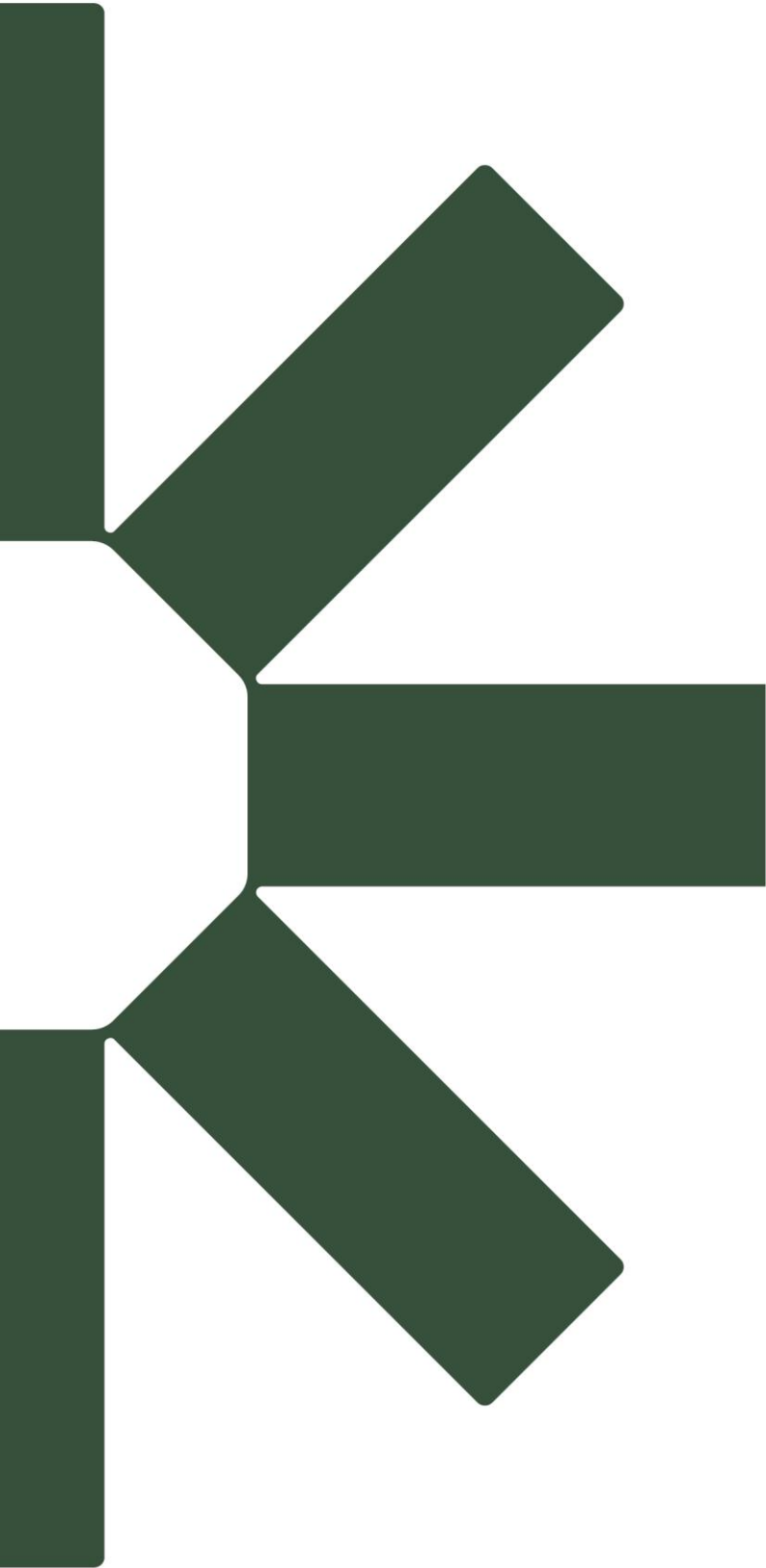


| Lot | Floor | Coordinates and Ground Elevation at Centre of Lot, m |            |                     | QDC MP4.4 Road Traffic Noise Category | QDC MP4.4 Railway Traffic Noise Category | Applicable QDC MP4.4 Noise Category (Highest of Road and Railway) |
|-----|-------|--|------------|---------------------|---------------------------------------|--|---|
|     |       | Easting  | Northing   | Ground Elevation, m | Without Noise Barriers                | Without Noise Barriers                   | Without Noise Barriers  |
| 259 | GF    | 467920.07  | 7871299.02 | 8.0                 | 0                                     | 0  | 0   |
| 259 | FF    | 467920.07  | 7871299.02 | 8.0                 | 0                                     | 0  | 0   |
| 260 | GF    | 467923.53  | 7871311.55 | 8.0                 | 0                                     | 0  | 0   |
| 260 | FF    | 467923.53  | 7871311.55 | 8.0                 | 0                                     | 0  | 0   |
| 261 | GF    | 467927.68  | 7871322.55 | 8.0                 | 0                                     | 0  | 0   |
| 261 | FF    | 467927.68  | 7871322.55 | 8.0                 | 0                                     | 0  | 0   |
| 262 | GF    | 467935.26  | 7871347.21 | 8.0                 | 0                                     | 0  | 0   |
| 262 | FF    | 467935.26  | 7871347.21 | 8.0                 | 0                                     | 0  | 0   |
| 263 | GF    | 467938.12  | 7871358.45 | 8.0                 | 0                                     | 0  | 0   |
| 263 | FF    | 467938.12  | 7871358.45 | 8.0                 | 0                                     | 0  | 0   |
| 264 | GF    | 467940.45  | 7871367.46 | 7.9                 | 0                                     | 0  | 0   |
| 264 | FF    | 467940.45  | 7871367.46 | 7.9                 | 0                                     | 0  | 0   |
| 265 | GF    | 467942.7   | 7871377.35 | 7.6                 | 0                                     | 0  | 0   |
| 265 | FF    | 467942.7   | 7871377.35 | 7.6                 | 0                                     | 0  | 0   |
| 266 | GF    | 467960.78  | 7871372.21 | 7.8                 | 0                                     | 0  | 0   |
| 266 | FF    | 467960.78  | 7871372.21 | 7.8                 | 0                                     | 0  | 0   |
| 267 | GF    | 467957.21  | 7871362.44 | 8.0                 | 0                                     | 0  | 0   |
| 267 | FF    | 467957.21  | 7871362.44 | 8.0                 | 0                                     | 0  | 0   |
| 268 | GF    | 467954.4   | 7871353.5  | 8.0                 | 0                                     | 0  | 0   |
| 268 | FF    | 467954.4   | 7871353.5  | 8.0                 | 0                                     | 0  | 0   |
| 269 | GF    | 467940.72  | 7871405.59 | 7.1                 | 0                                     | 0  | 0   |
| 269 | FF    | 467940.72  | 7871405.59 | 7.1                 | 0                                     | 0  | 0   |
| 270 | GF    | 467952.2   | 7871401.63 | 7.1                 | 0                                     | 0  | 0   |
| 270 | FF    | 467952.2   | 7871401.63 | 7.1                 | 0                                     | 0  | 0   |
| 271 | GF    | 467963.55  | 7871398.73 | 7.1                 | 0                                     | 0  | 0   |
| 271 | FF    | 467963.55  | 7871398.73 | 7.1                 | 0                                     | 0  | 0   |
| 272 | GF    | 467976.08  | 7871395.7  | 7.0                 | 0                                     | 0  | 0   |
| 272 | FF    | 467976.08  | 7871395.7  | 7.0                 | 0                                     | 0  | 0   |
| 273 | GF    | 468063.26  | 7871322.92 | 8.2                 | 0                                     | 0  | 0   |
| 273 | FF    | 468063.26  | 7871322.92 | 8.2                 | 0                                     | 0  | 0   |
| 274 | GF    | 468072.31  | 7871316.52 | 8.0                 | 0                                     | 0  | 0   |
| 274 | FF    | 468072.31  | 7871316.52 | 8.0                 | 0                                     | 0  | 0   |
| 275 | GF    | 468083   | 7871309.03 | 8.0                 | 0                                     | 0  | 0   |
| 275 | FF    | 468083   | 7871309.03 | 8.0                 | 0                                     | 0  | 0   |
| 276 | GF    | 468092.05  | 7871303.79 | 8.0                 | 0                                     | 0  | 0   |
| 276 | FF    | 468092.05  | 7871303.79 | 8.0                 | 0                                     | 0  | 0   |
| 277 | GF    | 468101.19  | 7871296.93 | 7.9                 | 0                                     | 0  | 0   |
| 277 | FF    | 468101.19  | 7871296.93 | 7.9                 | 0                                     | 0  | 0   |
| 278 | GF    | 468110.88  | 7871290.89 | 7.8                 | 0                                     | 0  | 0   |
| 278 | FF    | 468110.88  | 7871290.89 | 7.8                 | 0                                     | 0  | 0   |
| 279 | GF    | 468118.84  | 7871285.2  | 7.7                 | 0                                     | 0  | 0   |
| 279 | FF    | 468118.84  | 7871285.2  | 7.7                 | 0                                     | 0  | 0   |
| 280 | GF    | 468129.88  | 7871278.26 | 7.6                 | 0                                     | 0  | 0   |
| 280 | FF    | 468129.88  | 7871278.26 | 7.6                 | 0                                     | 0  | 0   |
| 281 | GF    | 468139.39  | 7871271.94 | 7.5                 | 0                                     | 0  | 0   |
| 281 | FF    | 468139.39  | 7871271.94 | 7.5                 | 0                                     | 0  | 0   |
| 282 | GF    | 468147.9   | 7871265.89 | 7.4                 | 0                                     | 0  | 0   |



| Lot | Floor | Coordinates and Ground Elevation at Centre of Lot, m |            |                     | QDC MP4.4 Road Traffic Noise Category | QDC MP4.4 Railway Traffic Noise Category | Applicable QDC MP4.4 Noise Category (Highest of Road and Railway) |
|-----|-------|--|------------|---------------------|---------------------------------------|--|---|
|     |       | Easting  | Northing   | Ground Elevation, m | Without Noise Barriers                | Without Noise Barriers                   | Without Noise Barriers  |
| 282 | FF    | 468147.9   | 7871265.89 | 7.4                 | 0                                     | 0  | 0   |
| 283 | GF    | 468158.58  | 7871259.58 | 7.3                 | 0                                     | 0  | 0   |
| 283 | FF    | 468158.58  | 7871259.58 | 7.3                 | 0                                     | 0  | 0   |
| 284 | GF    | 468148.38  | 7871244.82 | 7.3                 | 0                                     | 0  | 0   |
| 284 | FF    | 468148.38  | 7871244.82 | 7.3                 | 0                                     | 0  | 0   |
| 285 | GF    | 468138.15  | 7871251.23 | 7.4                 | 0                                     | 0  | 0   |
| 285 | FF    | 468138.15  | 7871251.23 | 7.4                 | 0                                     | 0  | 0   |
| 286 | GF    | 468128.56  | 7871256.82 | 7.5                 | 0                                     | 0  | 0   |
| 286 | FF    | 468128.56  | 7871256.82 | 7.5                 | 0                                     | 0  | 0   |
| 287 | GF    | 468119.41  | 7871263.68 | 7.6                 | 0                                     | 0  | 0   |
| 287 | FF    | 468119.41  | 7871263.68 | 7.6                 | 0                                     | 0  | 0   |
| 288 | GF    | 468109.82  | 7871269.27 | 7.7                 | 0                                     | 0  | 0   |
| 288 | FF    | 468109.82  | 7871269.27 | 7.7                 | 0                                     | 0  | 0   |
| 289 | GF    | 468100.41  | 7871276.31 | 7.8                 | 0                                     | 0  | 0   |
| 289 | FF    | 468100.41  | 7871276.31 | 7.8                 | 0                                     | 0  | 0   |
| 290 | GF    | 468091.35  | 7871282.72 | 7.9                 | 0                                     | 0  | 0   |
| 290 | FF    | 468091.35  | 7871282.72 | 7.9                 | 0                                     | 0  | 0   |
| 291 | GF    | 468082.21  | 7871288.41 | 7.9                 | 0                                     | 0  | 0   |
| 291 | FF    | 468082.21  | 7871288.41 | 7.9                 | 0                                     | 0  | 0   |
| 292 | GF    | 468072.35  | 7871294.18 | 8.0                 | 0                                     | 0  | 0   |
| 292 | FF    | 468072.35  | 7871294.18 | 8.0                 | 0                                     | 0  | 0   |
| 293 | GF    | 468062.48  | 7871301.13 | 9.0                 | 0                                     | 0  | 0   |
| 293 | FF    | 468062.48  | 7871301.13 | 9.0                 | 0                                     | 0  | 0   |
| 294 | GF    | 468051.89  | 7871308.17 | 9.0                 | 0                                     | 0  | 0   |
| 294 | FF    | 468051.89  | 7871308.17 | 9.0                 | 0                                     | 0  | 0   |
| 295 | GF    | 468096.8   | 7871335.09 | 7.7                 | 0                                     | 0  | 0   |
| 295 | FF    | 468096.8   | 7871335.09 | 7.7                 | 0                                     | 0  | 0   |
| 296 | GF    | 468107.84  | 7871328.14 | 8.0                 | 0                                     | 0  | 0   |
| 296 | FF    | 468107.84  | 7871328.14 | 8.0                 | 0                                     | 0  | 0   |
| 297 | GF    | 468118.07  | 7871321.74 | 7.9                 | 0                                     | 0  | 0   |
| 297 | FF    | 468118.07  | 7871321.74 | 7.9                 | 0                                     | 0  | 0   |
| 298 | GF    | 468127.03  | 7871315.78 | 7.8                 | 0                                     | 0  | 0   |
| 298 | FF    | 468127.03  | 7871315.78 | 7.8                 | 0                                     | 0  | 0   |
| 299 | GF    | 468135.72  | 7871310.01 | 7.8                 | 0                                     | 0  | 0   |
| 299 | FF    | 468135.72  | 7871310.01 | 7.8                 | 0                                     | 0  | 0   |
| 300 | GF    | 468146.04  | 7871303.15 | 7.7                 | 0                                     | 0  | 0   |
| 300 | FF    | 468146.04  | 7871303.15 | 7.7                 | 0                                     | 0  | 0   |
| 301 | GF    | 468154.73  | 7871296.2  | 7.6                 | 0                                     | 0  | 0   |
| 301 | FF    | 468154.73  | 7871296.2  | 7.6                 | 0                                     | 0  | 0   |
| 302 | GF    | 468164.95  | 7871289.79 | 7.5                 | 0                                     | 0  | 0   |
| 302 | FF    | 468164.95  | 7871289.79 | 7.5                 | 0                                     | 0  | 0   |
| 303 | GF    | 468175.18  | 7871283.38 | 7.3                 | 0                                     | 0  | 0   |
| 303 | FF    | 468175.18  | 7871283.38 | 7.3                 | 0                                     | 0  | 0   |





Making Sustainability Happen

# APPENDIX K

State Code 1 and 6

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# State code 6: Protection of state transport networks

**Table 6.2 Development in general**

| Performance outcomes   | Acceptable outcomes                         | Response   |
|--|---|--|
| <b>Network impacts</b>   |   |  |
| <p><b>PO1</b> Development does not compromise the safety of users of the <b>state-controlled road</b> network.</p> | <p>No acceptable outcome is prescribed.</p> | <p><b>Complies</b></p> <p>Access to the development is proposed to be via an existing single lane, four (4) leg roundabout where the south leg is Main Street, the north leg is Yalbira Drive, the east leg is access for Arcare Aged Care North Shore, and the west leg is the proposed development's access. An additional emergency access is proposed at the north-east corner of the site on Main Street between Earlando Lane and Yalbira Drive. This additional access is intended for emergency use, and for direct access to the allocated caravan parking bays. This additional access will be controlled by a gate and managed by the onsite management team, with appropriate signage in place directing visitors to the main entrance.</p> <p>It is further noted that a traffic assessment was prepared by Premise. Refer to <b>Appendix G</b>.</p> <p>The traffic impact assessment outlines the expected impacts of the proposed development on the surrounding transport network as follows:-</p> <ul style="list-style-type: none"> <li>- The existing roundabouts on Main Street, including the roundabout at the proposed site entrance and the Main Street / Nexus Drive roundabout can accommodate forecast development traffic, with</li> </ul> |

| Performance outcomes  | Acceptable outcomes                         | Response  |
|---|---|---|
|   |   | <p>acceptable delays and queues allowing for conservative forecasts of ultimate traffic.</p> <ul style="list-style-type: none"> <li>- A road safety risk assessment was undertaken using 16 years of crash data to establish the existing safety profile. The proposed development is not expected to increase the overall risk above its current medium risk level, resulting in no adverse road safety impact and no further mitigation is required.</li> <li>- A road environment safety assessment found that a road safety audit was not required for Main Street.</li> </ul> <p>However, a road safety assessment is required and can be conducted by either an accredited road safety auditor or a Registered Professional Engineer of Queensland (RPEQ). This requirement would be satisfied by</p> |
| <p><b>PO2</b> Development does not adversely impact the structural integrity or physical condition of a <b>state-controlled road</b> or <b>road transport infrastructure</b>.</p> | <p>No acceptable outcome is prescribed.</p> | <p><b>Complies</b><br/>As per above</p>   |
| <p><b>PO3</b> Development ensures <b>no net worsening</b> of the operating performance the <b>state-controlled road</b> network.</p>  | <p>No acceptable outcome is prescribed.</p> | <p><b>Complies</b><br/>As per above</p>   |
| <p><b>PO4</b> Traffic movements are not directed onto a <b>state-controlled road</b> where they can be accommodated on the <b>local road</b> network.</p>                         | <p>No acceptable outcome is prescribed.</p> | <p><b>Complies</b><br/>Access to the development is proposed to be via an existing single lane, four (4) leg roundabout where the south leg is Main Street, the north leg is Yalbira Drive, the east leg is access for Arcare Aged Care North Shore, and the west leg is the proposed development's access. An additional emergency access is proposed at the north-east corner of the site on Main Street between Earlando Lane and Yalbira Drive.</p>   |

| Performance outcomes   | Acceptable outcomes                  | Response  |
|--|--------------------------------------|---|
| <b>PO5</b> Development involving haulage exceeding 10,000 tonnes per year does not damage the pavement of a <b>state-controlled road</b> .   | No acceptable outcome is prescribed. | <b>Not applicable</b>   |
| <b>PO6</b> Development does not require a new <b>railway</b> level crossing.   | No acceptable outcome is prescribed. | <b>Not applicable</b>   |
| <b>PO7</b> Development does not adversely impact the operating performance of an existing <b>railway crossing</b> .  | No acceptable outcome is prescribed. | <b>Not applicable</b>   |
| <b>PO8</b> Development does not adversely impact on the safety of an existing <b>railway crossing</b> .  | No acceptable outcome is prescribed. | <b>Not applicable</b>   |
| <b>PO9</b> Development is designed and constructed to allow for on-site circulation to ensure vehicles do not queue in a <b>railway crossing</b> .   | No acceptable outcome is prescribed. | <b>Not applicable</b>   |
| <b>PO10</b> Development does not create a safety hazard within the <b>railway corridor</b> .   | No acceptable outcome is prescribed. | <b>Not applicable</b>   |
| <b>PO11</b> Development does not adversely impact the operating performance of the <b>railway corridor</b> .   | No acceptable outcome is prescribed. | <b>Not applicable</b>   |
| <b>PO12</b> Development does not interfere with or obstruct the <b>railway transport infrastructure</b> or <b>other rail infrastructure</b> .  | No acceptable outcome is prescribed. | <b>Not applicable</b>   |
| <b>PO13</b> Development does not adversely impact the structural integrity or physical condition of a <b>railway corridor</b> or <b>rail transport infrastructure</b> .  | No acceptable outcome is prescribed. | <b>Not applicable</b>   |
| <b>Stormwater and overland flow</b>  |                                      |   |
| <b>PO14</b> Stormwater run-off or overland flow from the development site does not create or exacerbate a safety hazard for users of a <b>state transport corridor</b> or <b>state transport infrastructure</b> .          | No acceptable outcome is prescribed. | <b>Complies</b><br>The subject site is well removed from the State controlled road. Further, there will be no impact on the Rail corridor outlined in the engineering assessment. |
| <b>PO15</b> Stormwater run-off or overland flow from the development site does not result in a material worsening of operating performance of a <b>state transport corridor</b> or <b>state transport infrastructure</b> . | No acceptable outcome is prescribed. | <b>Complies</b><br>The subject site is well removed from the State controlled road. Further, there will be no impact on the Rail corridor outlined in the engineering assessment. |

| Performance outcomes   | Acceptable outcomes   | Response  |
|--|---|---|
| <p><b>PO16</b> Stormwater run-off or overland flow from the development site does not interfere with the structural integrity or physical condition of the <b>state transport corridor</b> or <b>state transport infrastructure</b>.</p> | <p>No acceptable outcome is prescribed.</p>   |   |
| <p><b>PO17</b> Development associated with a <b>state-controlled road</b> or <b>road transport infrastructure</b> ensures that stormwater is lawfully discharged.</p>  | <p><b>AO17.1</b> Development does not create any new points of discharge to a <b>state transport corridor</b> or <b>state transport infrastructure</b>.</p> <p>AND</p> <p><b>AO17.2</b> Development does not concentrate flows to a <b>state transport corridor</b>.</p> <p>AND</p> <p><b>AO17.3</b> Stormwater run-off is discharged to a <b>lawful point of discharge</b>.</p> <p>AND</p> <p><b>AO17.4</b> Development does not worsen the condition of an existing <b>lawful point of discharge</b> to a <b>state transport corridor</b> or <b>state transport infrastructure</b>.</p> | <p><b>Complies</b><br/>The subject site is well removed from the State controlled road. Further, there will be no impact on the Rail corridor outlined in the engineering assessment.</p>                                   |
| <b>Flooding</b>  |   |   |
| <p><b>PO18</b> Development does not result in a material worsening of flooding impacts within a <b>state transport corridor</b> or <b>state transport infrastructure</b></p>   | <p><i>For a <b>state-controlled road</b> or <b>road transport infrastructure</b>, all of the following apply:</i></p> <p><b>AO18.1</b> For all flood events up to 1% <b>annual exceedance probability</b>, development ensures there are negligible impacts (within +/- 10mm) to existing flood levels within a <b>state transport corridor</b>.</p> <p>AND</p>   | <p><b>Complies</b><br/>A flood impact assessment has been undertaken by Engeny and is provided in Appendix I in the application material. It demonstrates that there will be no impact of the State transport corridor.</p> |

| Performance outcomes   | Acceptable outcomes   | Response               |
|--|---|------------------------|
|  | <p><b>AO18.2</b> For all flood events up to 1% <b>annual exceedance probability</b>, development ensures there are negligible impacts (up to a 10% increase) to existing peak velocities within a <b>state transport corridor</b>.</p> <p>AND</p> <p><b>AO18.3</b> For all flood events up to 1% annual exceedance probability, development ensures there are negligible impacts (up to a 10% increase) to existing time of submergence of a <b>state transport corridor</b>.</p> <p><i>No acceptable outcome is prescribed for a <b>railway corridor</b> or <b>rail transport infrastructure</b>.</i></p>                          |                        |
| <b>Drainage infrastructure</b>   |   |                        |
| <p><b>PO19</b> Drainage infrastructure does not create a safety hazard in a <b>state transport corridor</b>.</p> | <p><i>For a <b>state-controlled road</b> environment, both of the following apply:</i></p> <p><b>AO19.1</b> Drainage infrastructure associated with, or in a <b>state-controlled road</b> is wholly contained within the development site, except at the <b>lawful point of discharge</b>.</p> <p>AND</p> <p><b>AO19.2</b> Drainage infrastructure can be maintained without requiring access to a <b>state transport corridor</b>.</p> <p><i>For a <b>railway</b> environment both of the following apply:</i></p> <p><b>AO19.3</b> Drainage infrastructure associated with a <b>railway corridor</b> or <b>rail transport</b></p> | <p><b>Complies</b></p> |

| Performance outcomes  | Acceptable outcomes  | Response              |
|---|--|-----------------------|
|   | <p><b>infrastructure</b> is wholly contained within the development site.</p> <p>AND</p> <p><b>AO19.4</b> Drainage infrastructure can be maintained without requiring access to a <b>state transport corridor</b>.</p> |                       |
| <b>PO20</b> Drainage infrastructure associated with, or in a <b>state-controlled road</b> or <b>road transport infrastructure</b> is constructed and designed to ensure the structural integrity and physical condition of existing drainage infrastructure and the surrounding drainage network is maintained. | No acceptable outcome is prescribed.   |                       |
| <b>Planned upgrades</b>   |  |                       |
| <b>PO21</b> Development does not impede delivery of <b>planned upgrades of state transport infrastructure</b> .   | No acceptable outcome is prescribed.   | <b>Not applicable</b> |

**Table 6.3 Public passenger transport infrastructure and active transport**

| Performance outcomes   | Acceptable outcomes                  | Response              |
|--|--------------------------------------|-----------------------|
| <b>PO22</b> Development does not damage or interfere with <b>public passenger transport infrastructure, active transport infrastructure</b> or <b>public passenger services</b> .  | No acceptable outcome is prescribed. | <b>Not applicable</b> |
| <b>PO23</b> Development does not compromise the safety of <b>public passenger transport infrastructure, public passenger services</b> and <b>active transport infrastructure</b> . | No acceptable outcome is prescribed. | <b>Not applicable</b> |

| Performance outcomes  | Acceptable outcomes  | Response              |
|---|--|-----------------------|
| <b>PO24</b> Development does not adversely impact the operating performance of <b>public passenger transport infrastructure, public passenger services</b> and <b>active transport infrastructure</b> .   | No acceptable outcome is prescribed.   | <b>Not applicable</b> |
| <b>PO25</b> Development does not adversely impact the structural integrity or physical condition of <b>public passenger transport infrastructure</b> and <b>active transport infrastructure</b> .   | No acceptable outcome is prescribed.   | <b>Not applicable</b> |
| <b>PO26</b> Upgraded or new <b>public passenger transport infrastructure</b> and <b>active transport infrastructure</b> is provided to accommodate the demand for <b>public passenger transport</b> and <b>active transport</b> generated by the development.                                     | No acceptable outcome is prescribed.   | <b>Not applicable</b> |
| <b>PO27</b> Development is designed to ensure the location of <b>public passenger transport infrastructure</b> prioritises and enables efficient <b>public passenger services</b> .   | No acceptable outcome is prescribed.   | <b>Not applicable</b> |
| <b>PO28</b> Development enables the provision or extension of <b>public passenger services, public passenger transport infrastructure</b> and <b>active transport infrastructure</b> to the development and avoids creating indirect or inefficient routes for <b>public passenger services</b> . | No acceptable outcome is prescribed.   | <b>Not applicable</b> |
| <b>PO29</b> New or modified road networks are designed to enable development to be serviced by <b>public passenger services</b> .   | <p><b>AO29.1</b> Roads catering for buses are arterial or <b>sub-arterial roads</b>, collector or their equivalent.</p> <p>AND</p> <p><b>AO29.2</b> Roads intended to accommodate buses are designed and constructed in accordance with:</p> <ol style="list-style-type: none"> <li>1. Road Planning and Design Manual, 2nd Edition, Volume 3 – Guide to Road Design; Department of Transport and Main Roads;</li> <li>2. Supplement to Austroads Guide to Road Design (Parts 3, 4-4C and 6), Department of Transport and Main Roads;</li> </ol> | <b>Not applicable</b> |

| Performance outcomes  | Acceptable outcomes   | Response              |
|---|---|-----------------------|
|   | 3. Austroads Guide to Road Design (Parts 3, 4-4C and 6);<br>4. Austroads Design Vehicles and Turning Path Templates;<br>5. Queensland Manual of Uniform Traffic Control Devices, Part 13: Local Area Traffic Management and AS 1742.13-2009 Manual of Uniform Traffic Control Devices – Local Area Traffic Management;<br><br>AND<br><br><b>AO29.3</b> Traffic calming devices are not installed on roads used for buses in accordance with section 2.3.2 Bus Route Infrastructure, Public Transport Infrastructure Manual, Department of Transport and Main Roads, 2015. |                       |
| <b>PO30</b> Development provides safe, direct and convenient access to existing and future <b>public passenger transport infrastructure</b> and <b>active transport infrastructure</b> .                    | No acceptable outcome is prescribed.  | <b>Not applicable</b> |
| <b>PO31</b> On-site vehicular circulation ensures the safety of both <b>public passenger transport services</b> and pedestrians.  | No acceptable outcome is prescribed.  | <b>Not applicable</b> |
| <b>PO32</b> <b>Taxi facilities</b> are provided to accommodate the demand generated by the development.   | No acceptable outcome is prescribed.  | <b>Not applicable</b> |
| <b>PO33</b> Facilities are provided to accommodate the demand generated by the development for community transport services, courtesy transport services, and <b>booked hire services</b> other than taxis. | No acceptable outcome is prescribed.  | <b>Not applicable</b> |

| Performance outcomes   | Acceptable outcomes   | Response                     |
|--|---|------------------------------|
| <p><b>PO34 Taxi facilities</b> are located and designed to provide convenient, safe and equitable access for passengers.</p>   | <p><b>AO34.1 A taxi facility</b> is provided parallel to the kerb and adjacent to the main entrance.</p> <p>AND</p> <p><b>AO34.2 Taxi facilities</b> are designed in accordance with:</p> <ol style="list-style-type: none"> <li>1. AS2890.5–1993 Parking facilities – on-street parking and AS1428.1–2009 Design for access and mobility – general requirements for access – new building work;</li> <li>2. AS1742.11–1999 Parking controls – manual of uniform traffic control devices</li> <li>3. AS/NZS 2890.6–2009 Parking facilities –off street parking for people with disabilities;</li> <li>4. Disability standards for accessible public transport 2002 made under section 31(1) of the Disability Discrimination Act 1992;</li> <li>6. AS/NZS 1158.3.1 – Lighting for roads and public spaces, Part 3.1: Pedestrian area (category P) lighting – Performance and design requirements;</li> <li>7. Chapter 7 Taxi Facilities, Public Transport Infrastructure Manual, Department of Transport and Main Roads, 2015.</li> </ol> |                              |
| <p><b>PO35</b> Educational establishments are designed to ensure the safe and efficient operation of <b>public passenger services</b>, pedestrian and cyclist access and <b>active transport infrastructure</b>.</p> | <p><b>AO35.1</b> Educational establishments are designed in accordance with the provisions of the Planning for Safe Transport Infrastructure at Schools, Department of Transport and Main Roads, 2011.</p>  | <p><b>Not applicable</b></p> |